

Micro Plastics,® Inc.



Do It Online . . .

SHOP AND ORDER:

www.microplastics.com is your complete source to our fastener line. Here you will be able to explore our entire catalog online, get precise facts and dimensions about our parts and materials, learn more about what is happening in our company, and much much more. Once you've found exactly what you need, simply place your order online - 24 hours a day, 7 days a week, from anywhere in the world (registration and login required).



FREE SAMPLES:

We're always happy to provide you with samples of

fasteners you are interested in. Online it's as simple as can be - simply enter the part numbers along with your contact information (sample requests can also be added to a shopping cart as you are browsing the website,) and your request will be processed immediately.



CROSS REFERENCE:

Our online cross reference feature is a fantastic way to locate a comparable item that you would normally order from another source. Just enter the source's item number (or even part of it) and we will tell you if we have a comparable item available. Chances are it will be of higher quality and more reasonably priced. There may be slight variances between our parts and our competitors, and samples are **HIGHLY** recommended before placing an order.

SEARCH:

our online search feature is a fast and simple way to locate the Micro Plastics fastener information you are looking for. Simply enter a complete or partial part number into the search bar and our Micro Plastics search engine will deliver the information to you immediately. We also have a search by dimension feature. Two quick and painless ways to find what you need, when you need it.

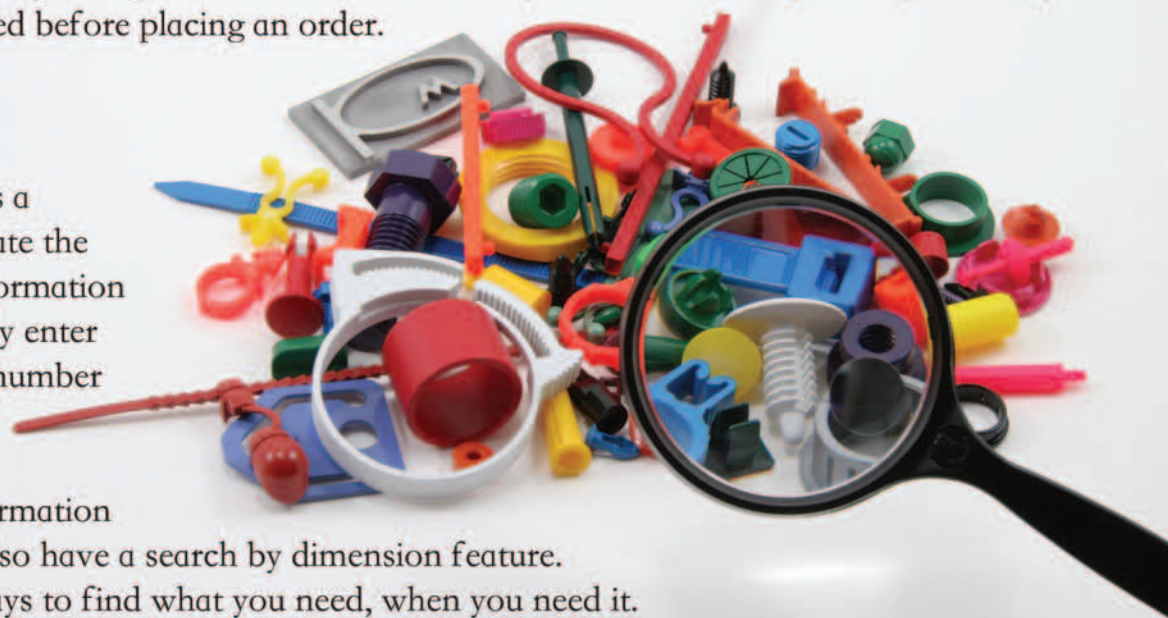


TABLE OF CONTENTS

PREFIX

| | | |
|------------------|--|---------|
| PREFIX | Table of Contents | Page 3 |
| PREFIX | Pictorial Index | 3-14 |
| SEC I | Press-Loc Thumb Screw Knobs | 15-18 |
| SEC II | Screws, Bolts & Threaded Rod | 19-42 |
| SEC III | Universal Nuts | 43-51 |
| SEC IV | Washers, Shoulder Washers & Screw Insulators. | 52-86 |
| SEC V | Spacers. | 87-113 |
| SEC VI | Panel Fasteners & Hole Plugs | 114-146 |
| SEC VII | Wire Handling Hardware & Accessories | 147-183 |
| SEC VIII | Circuit Board Hardware | 184-199 |
| SEC IX | Hose Clamps & Installation Tools | 200-202 |
| SEC X | Cable Tie Mounting Hardware. | 203-206 |
| SEC XI | Miscellaneous Products | 207-214 |
| SEC XII | Fastener Assortment Kits. | 215-220 |
| SEC XIII | Metric Screws, Bolts & Threaded Rod. | 221-234 |
| SEC XIV | Metric Nuts. | 234-236 |
| SEC XV | Metric Washers & Screw Insulators. | 237-238 |
| SEC XVI | Metric Spacers. | 239 |
| SEC XVII | Metric Hole Plugs | 240 |
| SEC XVIII | Metric Wire Handling Hardware. | 240 |
| SEC XIX | Metric Fastener Assortment Kits. | 241 |
| SEC XX | Plastic Material Information TEST DATA, TOLERANCES, PRINCIPAL PROPERTIES CHARTS. | 242-247 |
| SEC XX | Company Information TERMS, MINIMUM ORDER, LINE CHARGE. | 248-249 |
| SEC XX | Alphabetical Index | 250 |

PICTORIAL INDEX

PREFIX

PRESS-LOC THUMB SCREW KNOBS PAGES 15 - 18

I



PAGE 16-17



PAGE 18



PAGE 15



PAGE 18

PICTORIAL INDEX

PREFIX

II

SCREWS, BOLTS, AND THREADED ROD PAGES 19 - 42

XIII - METRIC PAGES 221 - 234



PAGE 30



PAGE 31



PAGE 22



PAGE 23



PAGE 24



PAGE 21



PAGE 25



PAGE 20



PAGE 38



PAGE 39



PAGE 29



PAGE 28



PAGE 38



PAGE 26



PAGE 34



PAGE 35-36



PAGE 37



PAGES 32-33

PICTORIAL INDEX

SCREWS, BOLTS, AND THREADED ROD PAGES 19 - 42

II

PREFIX

XIII - METRIC PAGES 221 - 234



**OVAL HEAD
THUMB SCREW**

PAGE 31



**STANDARD LICENSE
PLATE FASTENERS**

PAGE 35



**DELUXE LICENSE
PLATE FASTENERS**

PAGE 35



**SQUARE ADH. BASE
WITH THREADED STUD**

PAGE 39



**POLYCARBONATE
PHILLIPS & SLOTTED PAN**

PAGE 40



**POLYCARBONATE
SLOTTED FILLISTER
SLOTTED HEX**

PAGE 41



**COMBINATION DRIVE
BINDER HEAD**

PAGE 42



METAL CORE

PAGE 19



**METRIC
PHILLIPS FILLISTER**

PAGE 228



METRIC PHILLIPS FLAT

PAGE 230



METRIC PHILLIPS OVAL

PAGE 224



METRIC CHEESE

PAGE 221

UNIVERSAL NUTS PAGES 43 - 51

III

XIV - METRIC PAGES 234 - 236



**HEX NUTS
NYLON & POLYCARBONATE**

PAGE 48



HEX JAM NUTS

PAGE 47



HEX FLANGE NUT

PAGE 46



**LOCK NUTS
STD. & SELF THREADING**

PAGES 49

PICTORIAL INDEX

PREFIX

III

UNIVERSAL NUTS PAGES 43 - 51

XIV - METRIC PAGES 234 - 236



PAGE 50



PAGE 50



PAGE 51



PAGE 46



PAGE 44



PAGE 45



PAGE 45



PAGE 43

IV WASHERS, SHOULDER WASHERS AND SCREW INSULATORS PAGES 52 - 86

XV - METRIC PAGES 237 - 238



PAGE 52



PAGE 86



PAGE 55



PAGE 52



PAGES 70-84



PAGE 86



PAGE 53



PAGES 54-69

PICTORIAL INDEX

SPACERS PAGES 87 - 113

V

PREFIX

XVI - METRIC PAGE 239



HEX SPACERS

PAGES 110-111



MALE-FEMALE STANDOFFS

PAGE 88



METRIC ROUND SPACERS

PAGE 239



RETAINING SPACERS

PAGES 112-113



PLASTIC DOWELS

PAGE 87



STANDARD ROUND SPACERS

PAGES 89-93



SPECIAL ROUND SPACERS

PAGES 97-107



SNAP-IN STANDOFF

PAGE 87

PANEL FASTENERS AND HOLE PLUGS PAGES 114 - 146

VI

XVII - METRIC PAGE 240



RACHET FASTENERS

PAGE 136



SNAP CLIPS

PAGE 129



ARROW CLIPS

PAGES 142-143



KEY HOLE CLIPS

PAGE 141



EMBLEM CLIPS

PAGE 118



ANCHOR RIVETS, STEEL AND PLASTIC PIN

PAGE 137



PORT COVERS

PAGES 146



SCREW ANCHORS

PAGE 145

PICTORIAL INDEX

PREFIX

VI

PANEL FASTENERS AND HOLE PLUGS PAGES 114 - 146

XVIII - METRIC PAGES 240



PAGE 115



PAGE 116



PAGE 130-131



PAGE 145



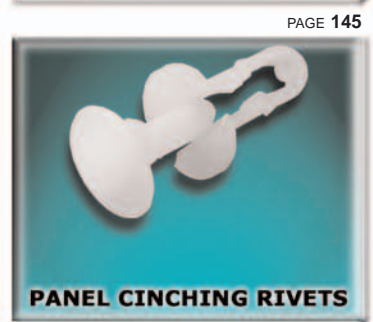
PAGE 139



PAGE 144



PAGE 139



PAGE 115



PAGES 132-133



PAGE 135



PAGE 146



PAGE 114



PAGES 126-128



PAGES 138-140



PAGE 117



PAGES 119-125



PAGE 118



PAGE 136



PAGE 114

PICTORIAL INDEX

WIRE HANDLING HARDWARE AND ACCES. PAGES 147 - 183

VII

PREFIX

XVIII - METRIC PAGE 240



PAGE 150



PAGE 183



PAGE 160



PAGE 162



PAGE 164



PAGE 165



PAGE 164



PAGE 163



PAGE 165



PAGE 162



PAGE 159



PAGE 168



PAGE 175



PAGE 182



PAGE 180



PAGE 161



PAGE 176



PAGE 175



PAGES 158, 159



PAGE 168

PICTORIAL INDEX

PREFIX

VII

WIRE HANDLING HARDWARE AND ACCES. PAGES 147 - 183

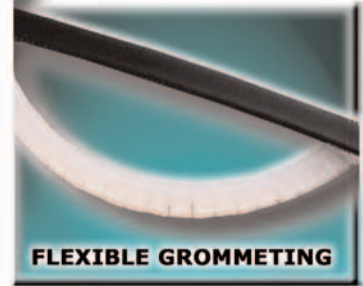
XVIII - METRIC PAGE 240



PAGES 178-179



PAGES 148-149



PAGE 177



PAGE 174



PAGES 169-173



PAGES 166-167



PAGE 181



PAGES 181,183



PAGE 150



PAGE 176



PAGE 154



PAGES 156-157



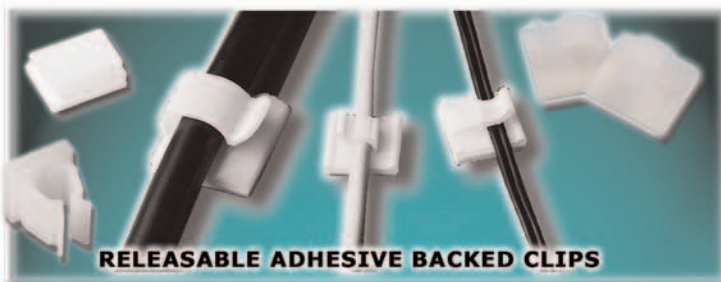
PAGE 155



PAGE 154



PAGE 155



PAGES 152,153



PAGE 162

PICTORIAL INDEX

WIRE HANDLING HARDWARE AND ACCES. PAGES 147 - 183

VII

PREFIX

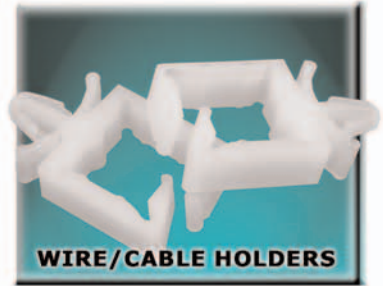
XVIII - METRIC PAGES 240



PAGE 160



PAGE 151



PAGES 147



PAGE 158



PAGE 161



PAGE 154



PAGE 147

CIRCUIT BOARD HARDWARE PAGES 184 - 199

VIII



PAGE 191



PAGE 191



PAGES 186



PAGE 190

PICTORIAL INDEX

PREFIX

VIII

CIRCUIT BOARD HARDWARE PAGES 184 - 199



PAGE 189



PAGES 196-197



PAGE 195



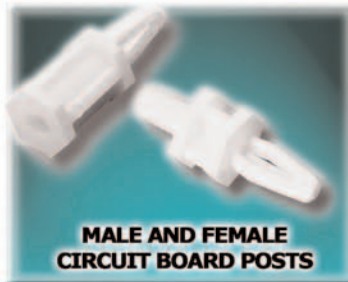
PAGE 184



PAGE 193



PAGE 188



PAGES 187, 190



PAGE 185



PAGE 184



PAGE 193



PAGE 192



PAGE 188



PAGE 198



PAGE 198



PAGE 185



PAGE 199



PAGE 192



PAGE 185



PAGE 184



PAGE 186

PICTORIAL INDEX

HOSE CLAMP AND INSTALLATION TOOLS PAGES 200-202

IX

PREFIX



**STANDARD
HOSE CLAMPS**

PAGE 201



**PREMIUM
HOSE CLAMPS**

PAGE 200



**STD. HOSE CLAMP
ON FIN CLIP BASE**

PAGE 202



**HOSE CLAMP
INSTALLATION TOOL**

PAGE 202

CABLE TIE MOUNTING HARDWARE PAGES 203-206

X



CABLE TIE MOUNT

PAGE 203



CLIP MOUNT

PAGE 206



FIN CLIP PUSH MOUNT

PAGE 203



CRADLE MOUNT ADHESIVE

PAGE 204



SCREW TAB #8

PAGE 205



CABLE TIE HOLDER

PAGE 205



CLIP MOUNT

PAGE 206



CRADLE MOUNT SCREW

PAGE 204

PICTORIAL INDEX

PREFIX

XI

MISCELLANEOUS PAGES 207 - 214



PAGE 207



PAGE 211



PAGE 207



PAGE 212



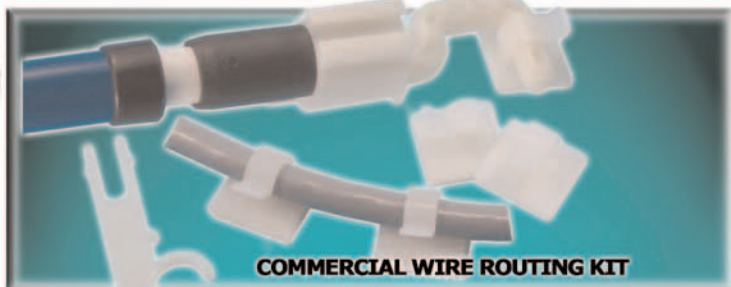
PAGE 213



PAGE 214



PAGE 210



PAGE 208-209



PAGE 214

XII

FASTENER ASSORTMENT KITS PAGES 215 - 220

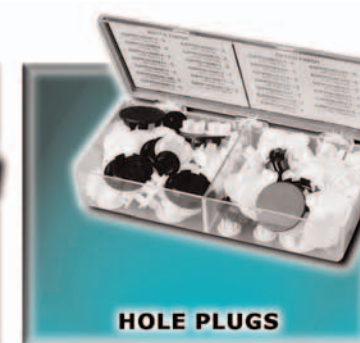
XIX - METRIC PAGE 241



PAGE 220



PAGE 219



PAGE 220



PAGE 217

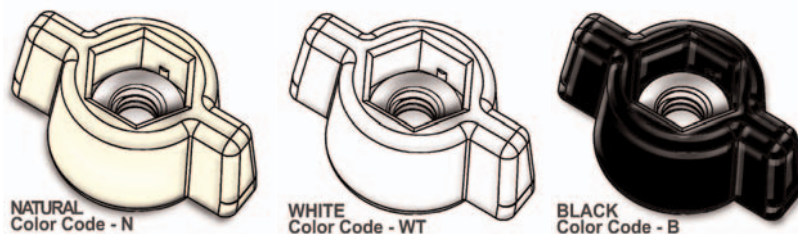
PRESS-LOC THUMB SCREW KNOBS

HEX PRESS-LOC WING THUMB SCREW KNOBS

NOTE: 29RN and WN fit hex nuts and hex head cap screws.
TO IFI TOLERANCES

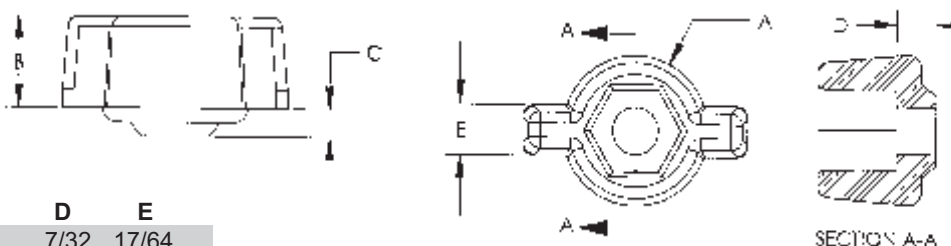
NOTE

IF SCREW OR NUT IS PLATED, PAINTED OR NOT TO IFI STANDARD TOLERANCES, WE STRONGLY RECOMMEND SAMPLES FOR FIT BEFORE ORDERING LARGE QUANTITIES.



DOES NOT INCLUDE STEEL NUT

| PART NUMBER | COLOR |
|-------------|---------|
| 29WN014N | NATURAL |
| 29WN014B | BLACK |
| 29WN014WT | WHITE |



| PART NUMBER | SIZE | A | B | C | D | E |
|-------------|------|-------|-----|------|------|-------|
| 29WN014 | 1/4 | 13/16 | 1/2 | 5/32 | 7/32 | 17/64 |

HEX PRESS-LOC ROUND THUMB SCREW KNOBS

Micro Plastics' nylon Press-Loc Knobs are designed to press onto standard steel hex head cap screws and hex nuts. Knobs are easily assembled by pressing the steel nut or screw into the plastic knob.

NOTE: 29RN and WN fit hex nuts and hex head cap screws.

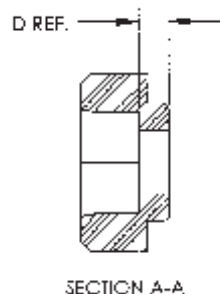
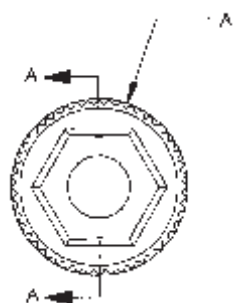
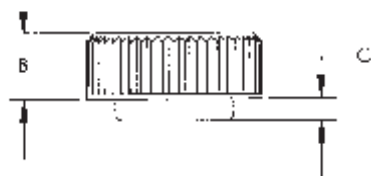
TO IFI TOLERANCES.

NOTE

IF SCREW OR NUT IS PLATED, PAINTED OR NOT TO IFI STANDARD TOLERANCES, WE STRONGLY RECOMMEND SAMPLES FOR FIT BEFORE ORDERING LARGE QUANTITIES

| PART NUMBER | COLOR |
|-------------|---------|
| 29RN147N | NATURAL |
| 29RN147B | BLACK |
| 29RN147WT | WHITE |

| PART NUMBER | SIZE | A | B | C | D |
|-------------|------|-----|------|------|-----|
| 29RN147 | 1/4 | 3/4 | 9/32 | 3/32 | 1/8 |



NATURAL
Color Code - N



BLACK
Color Code - B



WHITE
Color Code - WT

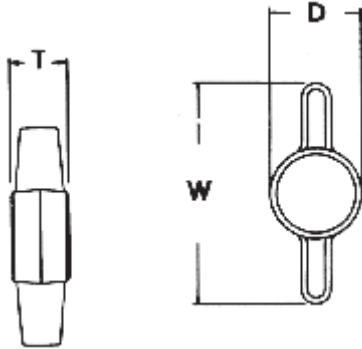
DOES NOT INCLUDE STEEL SCREW

PRESS-LOC THUMB SCREW KNOBS

SECTION

I

PLASTIC HEADS ARE MOLDED ONTO ZINC PLATED STEEL ALLOY SOCKET HEAD CAP SCREWS.



TOLERANCES +/- .031



COLOR CODES MUST BE INCLUDED WITH THE ITEM NUMBER WHEN ORDERING!

B - BLACK **RD** - RED **WT** - WHITE
BL - BLUE **GR** - GREEN

WING HEAD - KNOBS

MATERIAL - ACETAL

| ITEM NUMBER | FITS SCREW | SPECIFICATIONS | | |
|-------------|------------|----------------|--------|--------|
| | | W | T | D |
| 29W010 | #10 | 1" | 1/4" | 7/16" |
| 29W014 | 1/4 | 1-17/64" | 11/32" | 17/32" |
| 29W516 | 5/16 | 1-1/2" | 13/32" | 5/8" |
| 29W038 | 3/8 | 1-25/32" | 31/64" | 47/64" |

WING HEAD - SCREW

MOLDED ONTO ZINC PLATED STEEL ALLOY SOCKET HEAD CAP SCREW.

GENERAL PURPOSE NYLON

| ITEM NUMBER | SCREW SIZE | SCREW LENGTH | HEAD DIA. |
|-------------|------------|--------------|-----------|
| 29W010S037 | 10-32 | 3/8" | 1" |
| 29W010S050 | 10-32 | 1/2" | 1" |
| 29W010S075 | 10-32 | 3/4" | 1" |
| 29W010S100 | 10-32 | 1" | 1" |
| 29W010S150 | 10-32 | 1-1/2" | 1" |
| 29W014S050 | 1/4-20 | 1/2" | 1-17/64" |
| 29W014S075 | 1/4-20 | 3/4" | 1-17/64" |
| 29W014S100 | 1/4-20 | 1" | 1-17/64" |
| 29W014S125 | 1/4-20 | 1-1/4" | 1-17/64" |
| 29W014S150 | 1/4-20 | 1-1/2" | 1-17/64" |
| 29W516S050 | 5/16-18 | 1/2" | 1-1/2" |
| 29W516S075 | 5/16-18 | 3/4" | 1-1/2" |
| 29W516S100 | 5/16-18 | 1" | 1-1/2" |
| 29W516S150 | 5/16-18 | 1-1/2" | 1-1/2" |
| 29W038S075 | 3/8-16 | 3/4" | 1-3/4" |
| 29W038S100 | 3/8-16 | 1" | 1-3/4" |
| 29W038S150 | 3/8-16 | 1-1/2" | 1-3/4" |

ALL PARTS UP TO 1" LONG ARE FULLY THREADED.

TOLERANCES +/- .031

FLOWERETTE - KNOBS

PRESSES ONTO ANY STD. SOCKET HEX CAP SCREW.

MATERIAL - ACETAL

| ITEM NUMBER | FITS SCREW | SPECIFICATIONS | |
|-------------|------------|----------------|--------|
| | | T | D |
| 29F014 | 1/4 | 3/8" | 1/2" |
| 29F516 | 5/16 | 3/8" | 19/32" |
| 29F038 | 3/8 | 3/8" | 45/64" |

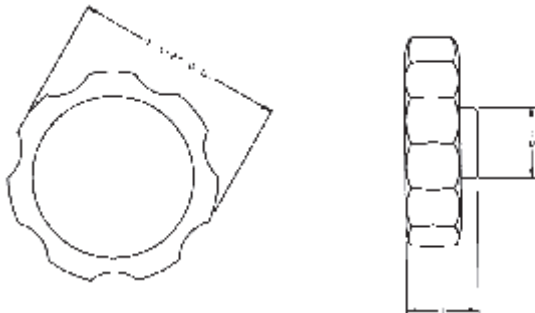
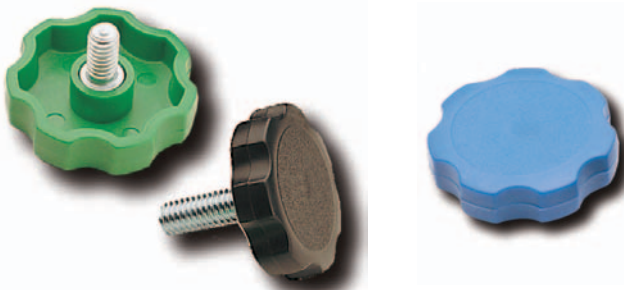
FLOWERETTE - SCREW

MOLDED ONTO ZINC PLATED STEEL ALLOY SOCKET HEAD CAP SCREW.

GENERAL PURPOSE NYLON

| ITEM NUMBER | SCREW SIZE | SCREW LENGTH | HEAD DIA. |
|-------------|------------|--------------|-----------|
| 29F014S050 | 1/4-20 | 1/2" | 1-1/2" |
| 29F014S075 | 1/4-20 | 3/4" | 1-1/2" |
| 29F014S100 | 1/4-20 | 1" | 1-1/2" |
| 29F014S150 | 1/4-20 | 1-1/2" | 1-1/2" |
| 29F516S050 | 5/16-18 | 1/2" | 1-1/2" |
| 29F516S075 | 5/16-18 | 3/4" | 1-1/2" |
| 29F516S100 | 5/16-18 | 1" | 1-1/2" |
| 29F516S150 | 5/16-18 | 1-1/2" | 1-1/2" |
| 29F038S075 | 3/8-16 | 3/4" | 1-1/2" |
| 29F038S100 | 3/8-16 | 1" | 1-1/2" |
| 29F038S150 | 3/8-16 | 1-1/2" | 1-1/2" |

ALL PARTS UP TO 1" LONG ARE FULLY THREADED.



PRESS-LOC THUMB SCREW KNOBS

SECTION
I

STANDARD - ROUND HEAD - KNOB

PRESSES ONTO ANY STD. SOCKET HEX CAP SCREW

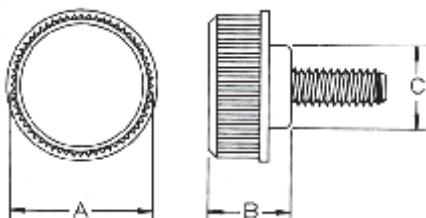
| ITEM NUMBER | Material: ACETAL | | SPECIFICATIONS | | |
|-------------|------------------|--------|----------------|--------|--|
| | FITS SCREW | A | B | C | |
| 29R004 | #4 | 5/16" | 11/64" | 9/32" | |
| 29R006 | #6 | 3/8" | 13/64" | 21/64" | |
| 29R008 | #8 | 1/2" | 7/32" | 3/8" | |
| 29R010 | #10 | 21/32" | 1/4" | 27/64" | |
| 29R147 | 1/4 | 3/4" | 5/16" | 1/2" | |
| 29R141 | 1/4 | 1" | 21/64" | 1/2" | |
| 29R516 | 5/16 | 1" | 25/64" | 19/32" | |

METRIC - ROUND HEAD - KNOB

PRESSES ONTO ANY STD. SOCKET HEX CAP SCREW.

| ITEM NUMBER | Material: ACETAL | | SPECIFICATIONS | | |
|-------------|------------------|-------|----------------|-------|--|
| | FITS SCREW | A | B | C | |
| 29M300R | M 3 | 9,53 | 5,16 | 8,33 | |
| 29M400R | M 4 | 12,70 | 5,56 | 9,53 | |
| 29M500R | M 5 | 16,60 | 6,35 | 10,72 | |
| 29M600R | M 6 | 19,05 | 7,93 | 12,70 | |
| 29M601R | M 6 | 25,40 | 8,33 | 12,70 | |
| 29M801R | M 8 | 25,40 | 9,92 | 15,08 | |

TOLERANCES +/- .031

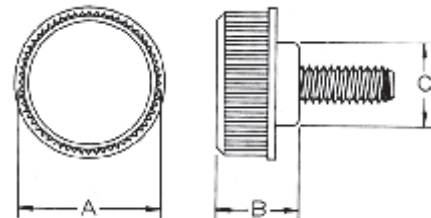


ROUND HEAD DRAWING FOR:
STANDARD HEAD DIA.
5/16" THROUGH 1"

NOTE: PRESS LOC THUMB SCREWS ARE DESIGNED TO BE HAND TIGHTENED.



TOLERANCES +/- .79 mm



ROUND HEAD DRAWING FOR:
METRIC HEAD DIA.
9,53 THROUGH 25,40

ALL PARTS UP TO 1" LONG ARE FULLY THREADED.

STANDARD - ROUND HEAD - SCREW

GENERAL PURPOSE NYLON 6

MOLDED ONTO ZINC PLATED STEEL ALLOY SOCKET HEAD CAP SCREW.

| ITEM NUMBER | SCREW SIZE | SCREW LENGTH | HEAD DIA. |
|-------------|------------|--------------|-----------|
| 29R004S025 | 4-40 | 1/4" | 5/16" |
| 29R004S037 | 4-40 | 3/8" | 5/16" |
| 29R004S050 | 4-40 | 1/2" | 5/16" |
| 29R004S075 | 4-40 | 3/4" | 5/16" |
| 29R006S025 | 6-32 | 1/4" | 3/8" |
| 29R006S037 | 6-32 | 3/8" | 3/8" |
| 29R006S050 | 6-32 | 1/2" | 3/8" |
| 29R006S062 | 6-32 | 5/8" | 3/8" |
| 29R006S075 | 6-32 | 3/4" | 3/8" |
| 29R008S037 | 8-32 | 3/8" | 1/2" |
| 29R008S050 | 8-32 | 1/2" | 1/2" |
| 29R008S075 | 8-32 | 3/4" | 1/2" |
| 29R008S100 | 8-32 | 1" | 1/2" |
| 29R010S037 | 10-32 | 3/8" | 21/32" |
| 29R010S050 | 10-32 | 1/2" | 21/32" |
| 29R010S075 | 10-32 | 3/4" | 21/32" |
| 29R010S100 | 10-32 | 1" | 21/32" |
| 29R010S150 | 10-32 | 1-1/2" | 21/32" |
| 29R147S050 | 1/4-20 | 1/2" | 3/4" |
| 29R147S075 | 1/4-20 | 3/4" | 3/4" |
| 29R147S100 | 1/4-20 | 1" | 3/4" |
| 29R147S125 | 1/4-20 | 1-1/4" | 3/4" |
| 29R147S150 | 1/4-20 | 1-1/2" | 3/4" |
| 29R141S050 | 1/4-20 | 1/2" | 1" |
| 29R141S075 | 1/4-20 | 3/4" | 1" |
| 29R141S100 | 1/4-20 | 1" | 1" |
| 29R141S125 | 1/4-20 | 1-1/4" | 1" |
| 29R141S150 | 1/4-20 | 1-1/2" | 1" |
| 29R516S050 | 5/16-18 | 1/2" | 1" |
| 29R516S075 | 5/16-18 | 3/4" | 1" |
| 29R516S100 | 5/16-18 | 1" | 1" |
| 29R516S150 | 5/16-18 | 1-1/2" | 1" |

METRIC - ROUND HEAD - SCREW

GENERAL PURPOSE NYLON 6

MOLDED ONTO ZINC PLATED STEEL ALLOY SOCKET HEAD CAP SCREW.

| ITEM NUMBER | SCREW SIZE | SCREW LENGTH | HEAD DIA. |
|----------------|------------|--------------|-----------|
| 29M30050R008 | M 3 | M 8 | 9,53 |
| 29M30050R010 | M 3 | M 10 | 9,53 |
| 29M30050R012 | M 3 | M 12 | 9,53 |
| 29M30050R016 | M 3 | M 16 | 9,53 |
| 29M40070R010 | M 4 | M 10 | 12,70 |
| 29M40070R012 | M 4 | M 12 | 12,70 |
| 29M40070R016 | M 4 | M 16 | 12,70 |
| 29M40070R020 | M 4 | M 20 | 12,70 |
| 29M40070R025 | M 4 | M 25 | 12,70 |
| 29M50080R012 | M 5 | M 12 | 16,60 |
| 29M50080R016 | M 5 | M 16 | 16,60 |
| 29M50080R020 | M 5 | M 20 | 16,60 |
| 29M50080R025 | M 5 | M 25 | 16,60 |
| 29M50080R040 | M 5 | M 40 | 16,60 |
| 29M60100R012 | M 6 | M 12 | 19,05 |
| 29M60100R016 | M 6 | M 16 | 19,05 |
| 29M60100R020 | M 6 | M 20 | 19,05 |
| 29M60100R025 | M 6 | M 25 | 19,05 |
| 29M60100R040 | M 6 | M 40 | 19,05 |
| 29M61100R012 | M 6 | M 12 | 25,40 |
| 29M61100R016 | M 6 | M 16 | 25,40 |
| 29M61100R020 | M 6 | M 20 | 25,40 |
| 29M61100R025 | M 6 | M 25 | 25,40 |
| 29M61100R040 | M 6 | M 40 | 25,40 |
| 29M80125R012 | M 8 | M 12 | 25,40 |
| 29M80125R016 | M 8 | M 16 | 25,40 |
| 29M80125R020 | M 8 | M 20 | 25,40 |
| 29M80125R025 | M 8 | M 25 | 25,40 |
| * 29M80125R040 | M 8 | M 40 | 25,40 |

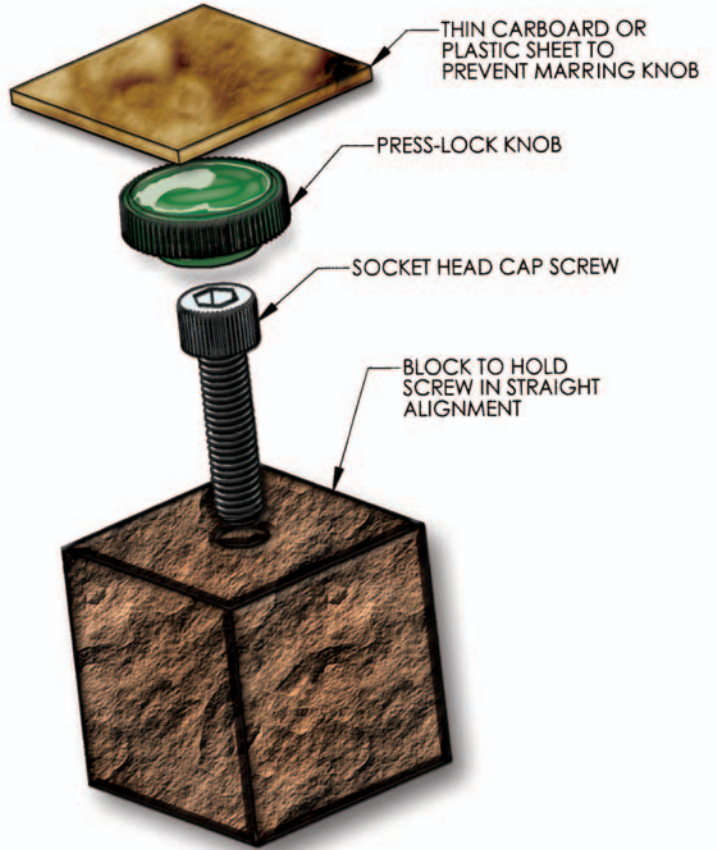
* NOT FULLY THREADED

PRESS-LOC THUMB SCREW KNOBS

SECTION
I

EASY TO ASSEMBLE INSTANT THUMB SCREWS

Micro Plastics' Press-Loc Thumb Screw Knobs can be assembled to the appropriate size hexagon socket head cap screw in various ways. Any device that provides a positive clamping force, such as a bench vise or arbor press will perform the assembly. The socket head cap screw must be aligned with the matching counterbore provided in the Press-Loc knob, place the assembly between the clamping jaws of the assembly device and provide enough force to press the knob completely over the head of the screw. A small section of thin cardboard or smooth plastic placed between the surface of the Press-Loc knob and the clamping jaw is recommended to prevent marring of the knob surface.



PRESS-LOC ASSORTMENT KITS

FLOWERETTE 144 PIECE

ASSORTMENT CONSISTS OF APPROX:
48 - 1/4"
48 - 5/16"
48 - 3/8"

Assorted Colors

O4ASO144FPL

WING 312 PIECE

ASSORTMENT CONSISTS OF APPROX:
72 - 1/4"
78 - 5/16"
72 - 3/8"
90 - #10

Assorted Colors

O4ASO312WPL

ROUND 704 PIECE

ASSORTMENT CONSISTS OF APPROX:
102 - 5/16"
102 - 1/4 X 1"
100 - 1/4 X 3/4"
100 - #10
100 - # 8
100 - # 6
100 - # 4

Assorted Colors

O4ASO704RPL

ROUND 380 PIECE

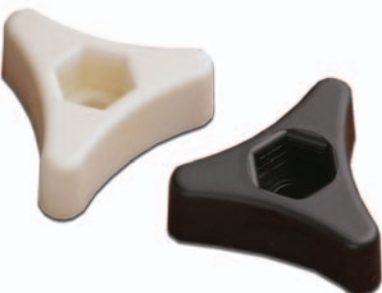
ASSORTMENT CONSISTS OF APPROX:
40 - 5/16"
40 - 1/4 X 1"
75 - 1/4 X 3/4"
75 - #10
50 - # 8
50 - # 6
50 - # 4

Assorted Colors

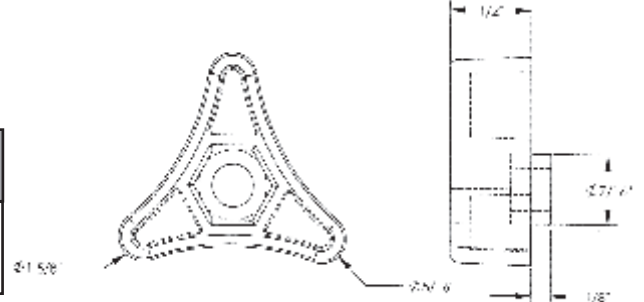
O4ASO380RPL

HEX PRESS-LOC TRI KNOB

Micro Plastics' nylon press-loc tri knobs are designed to press on to 1/4" standard steel hex nuts and 1/4" hex head cap screws. Knobs are easily assembled by pressing the steel nut or screw into the plastic tri knob. Available in natural and black nylon 6/6.



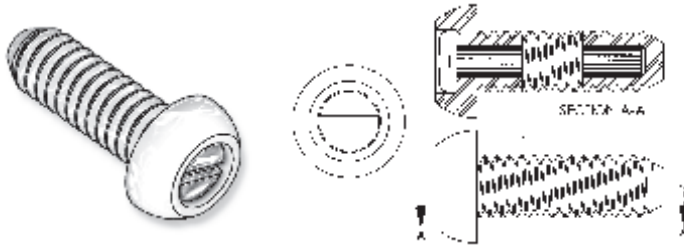
| PART NUMBER | SIZE | COLOR |
|-------------|------|---------|
| 29TL250N | 1/4 | NATURAL |
| 29TL250B | 1/4 | BLACK |
| 29TL250WT | 1/4 | WHITE |



SCREWS, BOLTS, AND THREADED ROD

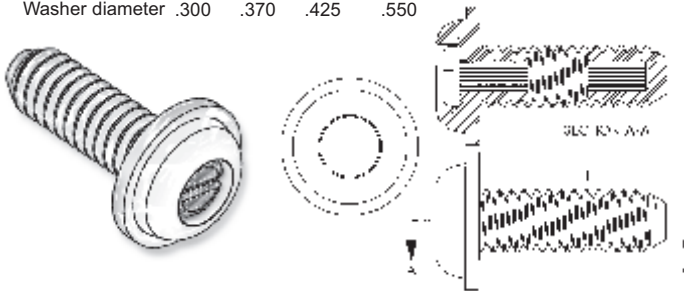
ROUND - CODE "R"

| | | | | |
|---------------|------|------|------|--------|
| Thread Size | 632 | 832 | 1032 | 1/4-20 |
| Head diameter | .255 | .300 | .340 | .450 |
| Head height | .095 | .120 | .130 | .165 |



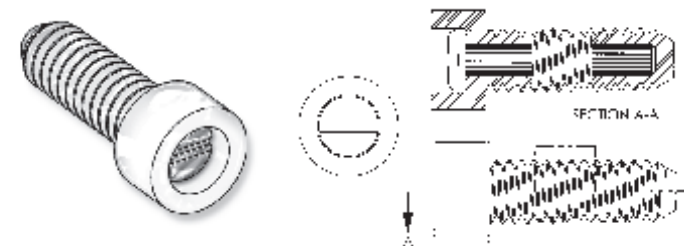
ROUND WASHER - CODE "W"

| | | | | |
|------------------|------|------|------|--------|
| Thread Size | 632 | 832 | 1032 | 1/4-20 |
| Head diameter | .230 | .265 | .315 | .460 |
| Head height | .100 | .110 | .130 | .175 |
| Washer thickness | .025 | .032 | .036 | .056 |
| Washer diameter | .300 | .370 | .425 | .550 |



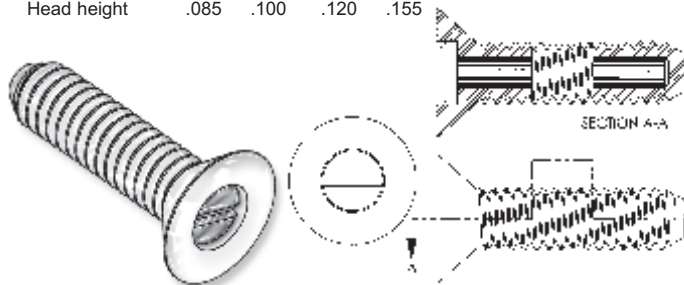
FILLISTER - CODE "F"

| | | | | |
|---------------|------|------|------|--------|
| Thread Size | 632 | 832 | 1032 | 1/4-20 |
| Head diameter | .225 | .260 | .300 | .400 |
| Head height | .135 | .140 | .160 | .220 |



82° FLAT - CODE "A"

| | | | | |
|---------------|------|------|------|--------|
| Thread Size | 632 | 832 | 1032 | 1/4-20 |
| Head diameter | .265 | .305 | .365 | .510 |
| Head height | .085 | .100 | .120 | .155 |



| | | | |
|-------------------------|---------------------|-----------------|--------------------|
| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

PROTECT INSULATE ISOLATE

The **shear strength of heat-treated steel.**
The **Dielectric insulation, corrosion resistance**
and **vibration resistance of nylon.**

A perfect combination to replace:

- *costly brass and stainless steel fasteners.
- *costly multiple component insulated screw assemblies.
- *costly sleeved and clad screws.
- *marginal standard nylon fastener applications.

Metal Core Screws are recommended in applications requiring electrical, thermal and vibration insulation in shear or double shear connections.

These reinforced screws will provide up to 4 times strength of standard nylon fasteners.

NYLON SHELL

Nylon 66 Natural
High dielectric resistance
Corrosion resistant
Vibration, abrasion resistant

REINFORCING CORE

- *High strength, high carbon C.H.Q. steel.
- *Precision cold formed and knurled.
- *Electro zinc or cadmium plated.

The reinforcing core incorporates a recessed metal head that permits tightening with high speed, high torque automatic drives.

Due to the corrosion resistant nature of the nylon, the Metal core Screws can, in certain applications, replace expensive stainless steel, brass and Monel fasteners at a substantial cost savings.

The insulating quality of the nylon shell makes the Metal Core Screws an ideal choice for areas where cathodic or thermal transfer is a problem.

| ITEM NUMBER | SIZE | DESCRIPTION |
|-------------|------------|-------------|
| 390632 025 | 632 1/4 | Metal Core |
| 390632 037 | 632 3/8 | Metal Core |
| 390632 050 | 632 1/2 | Metal Core |
| 390832 037 | 832 3/8 | Metal Core |
| 390832 050 | 832 1/2 | Metal Core |
| 391032 037 | 1032 3/8 | Metal Core |
| 391032 050 | 1032 1/2 | Metal Core |
| 391032 075 | 1032 3/4 | Metal Core |
| 391032 100 | 1032 1 | Metal Core |
| 392520 037 | 1/4-20 3/8 | Metal Core |
| 392520 050 | 1/4-20 1/2 | Metal Core |
| 392520 062 | 1/4-20 5/8 | Metal Core |
| 392520 075 | 1/4-20 3/4 | Metal Core |
| 392520 100 | 1/4-20 1 | Metal Core |

METRIC SIZES AVAILABLE ON APPLICATION

NOTE: SPECIFY HEAD STYLE CODE LETTER.

EXAMPLE: 632 X 1/2"
ROUND HEAD=390632R050

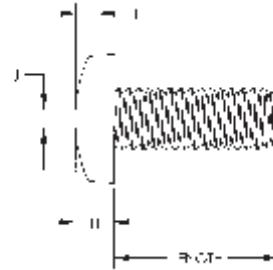
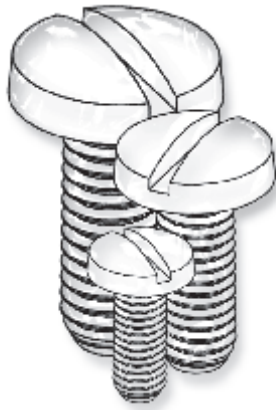


| SIZE | MAX TORQUE | | TENSILE TEST | | DOUBLE SHEAR | |
|--------|--------------------|-----------------|--------------|------------|--------------|------------|
| | BEFORE DEFORMATION | ULTIMATE TORQUE | YIELD LBS. | BREAK LBS. | YIELD LBS. | BREAK LBS. |
| 632 | 1 In. Lbs. | 1.5 In. Lbs. | 24 | 32 | 200 | 240 |
| 832 | 3 In. Lbs. | 4 In. Lbs. | 66 | 72 | 300 | 360 |
| 1032 | 5 In. Lbs. | 6 In. Lbs. | 96 | 104 | 600 | 640 |
| 1/4-20 | 12 In. Lbs. | 13 In. Lbs. | 120 | 174 | 1400 | 1600 |

SCREWS, BOLTS, AND THREADED ROD

SECTION

II



| THREAD SIZE | A | H | J | T |
|-------------|-----------|-----------|-----------|-----------|
| 2 | .171-.181 | .043-.050 | .023-.031 | .020-.030 |
| 4 | .223-.235 | .061-.068 | .031-.039 | .030-.042 |
| 6 | .275-.290 | .078-.087 | .039-.048 | .040-.053 |
| 8 | .326-.344 | .095-.105 | .045-.054 | .050-.065 |
| 10 | .378-.399 | .112-.123 | .050-.060 | .060-.077 |
| 12 | .430-.454 | .130-.141 | .056-.067 | .070-.089 |
| 1/4 | .498-.525 | .152-.165 | .064-.075 | .084-.105 |

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|---------------------|-----------|--------------|
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

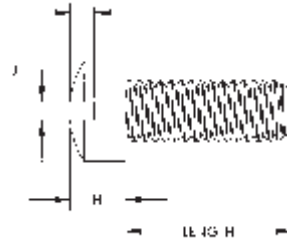
BINDER SLOTTED HEADSTYLE

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|
| 010256B009 | 256 | 3/32 | 010440B137 | 440 | 1 3/8 | 010832B050 | 832 | 1/2 | 011032B200 | 1032 | 2 |
| 010256B012 | 256 | 1/8 | 010440B150 | 440 | 1 1/2 | 010832B062 | 832 | 5/8 | 012520B025 | 1/4-20 | 1/4 |
| 010256B015 | 256 | 5/32 | 010440B162 | 440 | 1 5/8 | 010832B075 | 832 | 3/4 | 012520B031 | 1/4-20 | 5/16 |
| 010256B018 | 256 | 3/16 | 010440B175 | 440 | 1 3/4 | 010832B087 | 832 | 7/8 | 012520B037 | 1/4-20 | 3/8 |
| 010256B025 | 256 | 1/4 | 010448B025 | 448 | 1/4 | 010832B100 | 832 | 1 | 012520B050 | 1/4-20 | 1/2 |
| 010256B028 | 256 | 9/32 | 010632B009 | 632 | 3/32 | 010832B112 | 832 | 1 1/8 | 012520B062 | 1/4-20 | 5/8 |
| 010256B031 | 256 | 5/16 | 010632B012 | 632 | 1/8 | 010832B125 | 832 | 1 1/4 | 012520B075 | 1/4-20 | 3/4 |
| 010256B037 | 256 | 3/8 | 010632B015 | 632 | 5/32 | 010832B137 | 832 | 1 3/8 | 012520B087 | 1/4-20 | 7/8 |
| 010256B039 | 256 | 25/64 | 010632B018 | 632 | 3/16 | 010832B150 | 832 | 1 1/2 | 012520B100 | 1/4-20 | 1 |
| 010256B043 | 256 | 7/16 | 010632B025 | 632 | 1/4 | 010832B175 | 832 | 1 3/4 | 012520B125 | 1/4-20 | 1 1/4 |
| 010256B050 | 256 | 1/2 | 010632B031 | 632 | 5/16 | 010832B187 | 832 | 1 7/8 | 012520B150 | 1/4-20 | 1 1/2 |
| 010256B056 | 256 | 9/16 | 010632B037 | 632 | 3/8 | 010832B200 | 832 | 2 | 012520B175 | 1/4-20 | 1 3/4 |
| 010256B062 | 256 | 5/8 | 010632B043 | 632 | 7/16 | 011024B012 | 1024 | 1/8 | 012520B200 | 1/4-20 | 2 |
| 010256B075 | 256 | 3/4 | 010632B050 | 632 | 1/2 | 011024B018 | 1024 | 3/16 | 012520B250 | 1/4-20 | 2 1/2 |
| 010256B087 | 256 | 7/8 | 010632B056 | 632 | 9/16 | 011024B025 | 1024 | 1/4 | 012528B018 | 1/4-28 | 3/16 |
| 010256B100 | 256 | 1 | 010632B062 | 632 | 5/8 | 011024B031 | 1024 | 5/16 | 012528B025 | 1/4-28 | 1/4 |
| 010256B112 | 256 | 1 1/8 | 010632B068 | 632 | 11/16 | 011024B037 | 1024 | 3/8 | 012528B037 | 1/4-28 | 3/8 |
| 010264B018 | 264 | 3/16 | 010632B075 | 632 | 3/4 | 011024B050 | 1024 | 1/2 | 012528B062 | 1/4-28 | 5/8 |
| 010264B037 | 264 | 3/8 | 010632B087 | 632 | 7/8 | 011024B062 | 1024 | 5/8 | 012528B075 | 1/4-28 | 3/4 |
| 010436B050 | 436 | 1/2 | 010632B100 | 632 | 1 | 011024B075 | 1024 | 3/4 | 012528B100 | 1/4-28 | 1 |
| 010440B009 | 440 | 3/32 | 010632B112 | 632 | 1 1/8 | 011024B100 | 1024 | 1 | | | |
| 010440B012 | 440 | 1/8 | 010632B125 | 632 | 1 1/4 | 011024B125 | 1024 | 1 1/4 | | | |
| 010440B014 | 440 | 9/64 | 010632B150 | 632 | 1 1/2 | 011024B150 | 1024 | 1 1/2 | | | |
| 010440B018 | 440 | 3/16 | 010632B162 | 632 | 1 5/8 | 011032B012 | 1032 | 1/8 | | | |
| 010440B025 | 440 | 1/4 | 010632B175 | 632 | 1 3/4 | 011032B018 | 1032 | 3/16 | | | |
| 010440B028 | 440 | 9/32 | 010632B187 | 632 | 1 7/8 | 011032B025 | 1032 | 1/4 | | | |
| 010440B031 | 440 | 5/16 | 010632B200 | 632 | 2 | 011032B031 | 1032 | 5/16 | | | |
| 010440B037 | 440 | 3/8 | 010632B225 | 632 | 2 1/4 | 011032B037 | 1032 | 3/8 | | | |
| 010440B043 | 440 | 7/16 | 010640B025 | 640 | 1/4 | 011032B043 | 1032 | 7/16 | | | |
| 010440B050 | 440 | 1/2 | 010640B037 | 640 | 3/8 | 011032B050 | 1032 | 1/2 | | | |
| 010440B056 | 440 | 9/16 | 010640B075 | 640 | 3/4 | 011032B062 | 1032 | 5/8 | | | |
| 010440B062 | 440 | 5/8 | 010640B100 | 640 | 1 | 011032B075 | 1032 | 3/4 | | | |
| 010440B068 | 440 | 11/16 | 010832B012 | 832 | 1/8 | 011032B081 | 1032 | 13/16 | | | |
| 010440B075 | 440 | 3/4 | 010832B018 | 832 | 3/16 | 011032B087 | 1032 | 7/8 | | | |
| 010440B087 | 440 | 7/8 | 010832B025 | 832 | 1/4 | 011032B100 | 1032 | 1 | | | |
| 010440B100 | 440 | 1 | 010832B028 | 832 | 9/32 | 011032B106 | 1032 | 1-1/16 | | | |
| 010440B112 | 440 | 1 1/8 | 010832B031 | 832 | 5/16 | 011032B125 | 1032 | 1 1/4 | | | |
| 010440B118 | 440 | 1 3/16 | 010832B037 | 832 | 3/8 | 011032B150 | 1032 | 1 1/2 | | | |
| 010440B125 | 440 | 1 1/4 | 010832B043 | 832 | 7/16 | 011032B175 | 1032 | 1 3/4 | | | |



SCREWS, BOLTS, AND THREADED ROD

**METRIC Sizes
Also Available**
Page 229

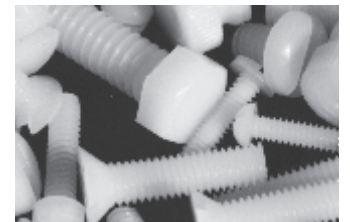


| THREAD SIZE | A | H | J | T |
|-------------|-----------|-----------|-----------|-----------|
| 2 | .124-.140 | .066-.083 | .023-.031 | .025-.037 |
| 3 | .145-.161 | .077-.095 | .027-.035 | .030-.043 |
| 4 | .166-.183 | .088-.107 | .031-.039 | .035-.048 |
| 6 | .208-.226 | .111-.132 | .039-.048 | .045-.060 |
| 8 | .250-.270 | .133-.156 | .045-.054 | .054-.071 |
| 10 | .292-.313 | .156-.180 | .050-.060 | .064-.083 |
| 12 | .334-.357 | .134-.148 | .056-.067 | .074-.094 |
| 1/4 | .389-.414 | .207-.237 | .064-.075 | .087-.109 |

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|---------------------|-----------|--------------|
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

FILLISTER SLOTTED HEADSTYLE

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|
| 010256F009 | 256 | 3/32 | 010440F056 | 440 | 9/16 | 010640F037 | 640 | 3/8 | 011032F050 | 1032 | 1/2 |
| 010256F012 | 256 | 1/8 | 010440F062 | 440 | 5/8 | 010640F075 | 640 | 3/4 | 011032F062 | 1032 | 5/8 |
| 010256F015 | 256 | 5/32 | 010440F068 | 440 | 11/16 | 010640F100 | 640 | 1 | 011032F075 | 1032 | 3/4 |
| 010256F018 | 256 | 3/16 | 010440F075 | 440 | 3/4 | 010832F012 | 832 | 1/8 | 011032F081 | 1032 | 13/16 |
| 010256F025 | 256 | 1/4 | 010440F087 | 440 | 7/8 | 010832F018 | 832 | 3/16 | 011032F087 | 1032 | 7/8 |
| 010256F028 | 256 | 9/32 | 010440F100 | 440 | 1 | 010832F025 | 832 | 1/4 | 011032F100 | 1032 | 1 |
| 010256F031 | 256 | 5/16 | 010440F112 | 440 | 1 1/8 | 010832F028 | 832 | 9/32 | 011032F106 | 1032 | 1 1/16 |
| 010256F037 | 256 | 3/8 | 010440F118 | 440 | 1 3/16 | 010832F031 | 832 | 5/16 | 011032F125 | 1032 | 1 1/4 |
| 010256F039 | 256 | 25/64 | 010440F125 | 440 | 1 1/4 | 010832F037 | 832 | 3/8 | 011032F150 | 1032 | 1 1/2 |
| 010256F043 | 256 | 7/16 | 010440F137 | 440 | 1 3/8 | 010832F043 | 832 | 7/16 | 011032F175 | 1032 | 1 3/4 |
| 010256F050 | 256 | 1/2 | 010440F150 | 440 | 1 1/2 | 010832F050 | 832 | 1/2 | 011032F200 | 1032 | 2 |
| 010256F056 | 256 | 9/16 | 010440F162 | 440 | 1 5/8 | 010832F062 | 832 | 5/8 | 012520F025 | 1/4-20 | 1/4 |
| 010256F062 | 256 | 5/8 | 010440F175 | 440 | 1 3/4 | 010832F075 | 832 | 3/4 | 012520F031 | 1/4-20 | 5/16 |
| 010256F075 | 256 | 3/4 | 010448F025 | 448 | 1/4 | 010832F087 | 832 | 7/8 | 012520F037 | 1/4-20 | 3/8 |
| 010256F087 | 256 | 7/8 | 010540F037 | 540 | 3/8 | 010832F100 | 832 | 1 | 012520F050 | 1/4-20 | 1/2 |
| 010256F100 | 256 | 1 | 010632F009 | 632 | 3/32 | 010832F112 | 832 | 1 1/8 | 012520F062 | 1/4-20 | 5/8 |
| 010256F112 | 256 | 1 1/8 | 010632F012 | 632 | 1/8 | 010832F125 | 832 | 1 1/4 | 012520F075 | 1/4-20 | 3/4 |
| 010264F018 | 264 | 3/16 | 010632F015 | 632 | 5/32 | 010832F137 | 832 | 1 3/8 | 012520F087 | 1/4-20 | 7/8 |
| 010264F037 | 264 | 3/8 | 010632F018 | 632 | 3/16 | 010832F150 | 832 | 1 1/2 | 012520F100 | 1/4-20 | 1 |
| 010348F012 | 348 | 1/8 | 010632F025 | 632 | 1/4 | 010832F175 | 832 | 1 3/4 | 012520F125 | 1/4-20 | 1 1/4 |
| 010348F018 | 348 | 3/16 | 010632F031 | 632 | 5/16 | 010832F187 | 832 | 1 7/8 | 012520F150 | 1/4-20 | 1 1/2 |
| 010348F025 | 348 | 1/4 | 010632F037 | 632 | 3/8 | 010832F200 | 832 | 2 | 012520F175 | 1/4-20 | 1 3/4 |
| 010348F031 | 348 | 5/16 | 010632F043 | 632 | 7/16 | 011024F012 | 1024 | 1/8 | 012520F200 | 1/4-20 | 2 |
| 010348F037 | 348 | 3/8 | 010632F050 | 632 | 1/2 | 011024F018 | 1024 | 3/16 | 012520F250 | 1/4-20 | 2 1/2 |
| 010348F043 | 348 | 7/16 | 010632F056 | 632 | 9/16 | 011024F025 | 1024 | 1/4 | 012528F018 | 1/4-28 | 3/16 |
| 010348F050 | 348 | 1/2 | 010632F062 | 632 | 5/8 | 011024F031 | 1024 | 5/16 | 012528F025 | 1/4-28 | 1/4 |
| 010348F075 | 348 | 3/4 | 010632F068 | 632 | 11/16 | 011024F037 | 1024 | 3/8 | 012528F037 | 1/4-28 | 3/8 |
| 010356F031 | 356 | 5/16 | 010632F075 | 632 | 3/4 | 011024F050 | 1024 | 1/2 | 012528F062 | 1/4-28 | 5/8 |
| 010436F050 | 436 | 1/2 | 010632F087 | 632 | 7/8 | 011024F062 | 1024 | 5/8 | 012528F075 | 1/4-28 | 3/4 |
| 010440F009 | 440 | 3/32 | 010632F100 | 632 | 1 | 011024F075 | 1024 | 3/4 | 012528F100 | 1/4-28 | 1 |
| 010440F012 | 440 | 1/8 | 010632F112 | 632 | 1 1/8 | 011024F100 | 1024 | 1 | 0137524F100 | 3/8-24 | 1 |
| 010440F014 | 440 | 9/64 | 010632F125 | 632 | 1 1/4 | 011024F125 | 1024 | 1 1/4 | | | |
| 010440F018 | 440 | 3/16 | 010632F150 | 632 | 1 1/2 | 011024F150 | 1024 | 1 1/2 | | | |
| 010440F025 | 440 | 1/4 | 010632F162 | 632 | 1 5/8 | 011032F012 | 1032 | 1/8 | | | |
| 010440F028 | 440 | 9/32 | 010632F175 | 632 | 1 3/4 | 011032F018 | 1032 | 3/16 | | | |
| 010440F031 | 440 | 5/16 | 010632F187 | 632 | 1 7/8 | 011032F025 | 1032 | 1/4 | | | |
| 010440F037 | 440 | 3/8 | 010632F200 | 632 | 2 | 011032F031 | 1032 | 5/16 | | | |
| 010440F043 | 440 | 7/16 | 010632F225 | 632 | 2 1/4 | 011032F037 | 1032 | 3/8 | | | |
| 010440F050 | 440 | 1/2 | 010640F025 | 640 | 1/4 | 011032F043 | 1032 | 7/16 | | | |

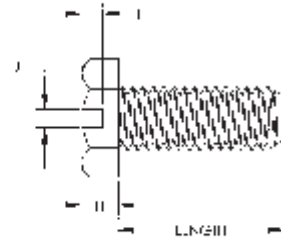
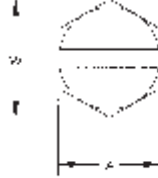
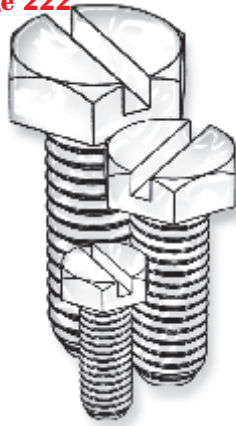


SCREWS, BOLTS, AND THREADED ROD

SECTION
II

**METRIC Sizes
Also Available**

Page 222



| THREAD SIZE | A | W | H | J | T |
|-------------|-----------|----------|-----------|-----------|-----------|
| 2 | .120-.125 | .134 MIN | .040-.050 | .024-.032 | .021-.029 |
| 4 | .181-.188 | .202 MIN | .049-.060 | .031-.039 | .025-.036 |
| 6 | .244-.250 | .272 MIN | .080-.093 | .039-.048 | .033-.046 |
| 8 | .244-.250 | .272 MIN | .096-.110 | .045-.054 | .052-.066 |
| 10 | .305-.312 | .340 MIN | .105-.120 | .050-.060 | .057-.072 |
| 12 | .305-.312 | .340 MIN | .139-.155 | .056-.067 | .077-.093 |
| 1/4 | .367-.375 | .409 MIN | .172-.190 | .064-.075 | .083-.101 |

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-----------------------------|--------------|----------------------------|--------------|
| Nominal Screw Length | | Tolerance on Length | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

HEX SLOTTED HEADSTYLE

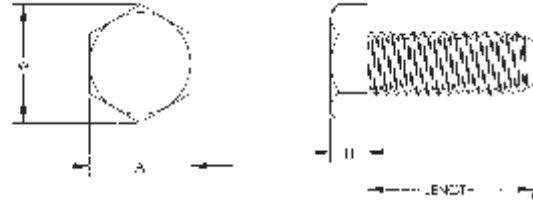
| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|
| 010256X009 | 256 | 3/32 | 010440X137 | 440 | 1 3/8 | 010832X050 | 832 | 1/2 | 011032X200 | 1032 | 2 |
| 010256X012 | 256 | 1/8 | 010440X150 | 440 | 1 1/2 | 010832X062 | 832 | 5/8 | 012520X025 | 1/4-20 | 1/4 |
| 010256X015 | 256 | 5/32 | 010440X162 | 440 | 1 5/8 | 010832X075 | 832 | 3/4 | 012520X031 | 1/4-20 | 5/16 |
| 010256X018 | 256 | 3/16 | 010440X175 | 440 | 1 3/4 | 010832X087 | 832 | 7/8 | 012520X037 | 1/4-20 | 3/8 |
| 010256X025 | 256 | 1/4 | 010448X025 | 448 | 1/4 | 010832X100 | 832 | 1 | 012520X050 | 1/4-20 | 1/2 |
| 010256X028 | 256 | 9/32 | 010632X009 | 632 | 3/32 | 010832X112 | 832 | 1 1/8 | 012520X062 | 1/4-20 | 5/8 |
| 010256X031 | 256 | 5/16 | 010632X012 | 632 | 1/8 | 010832X125 | 832 | 1 1/4 | 012520X075 | 1/4-20 | 3/4 |
| 010256X037 | 256 | 3/8 | 010632X015 | 632 | 5/32 | 010832X137 | 832 | 1 3/8 | 012520X087 | 1/4-20 | 7/8 |
| 010256X039 | 256 | 25/64 | 010632X018 | 632 | 3/16 | 010832X150 | 832 | 1 1/2 | 012520X100 | 1/4-20 | 1 |
| 010256X043 | 256 | 7/16 | 010632X025 | 632 | 1/4 | 010832X175 | 832 | 1 3/4 | 012520X125 | 1/4-20 | 1 1/4 |
| 010256X050 | 256 | 1/2 | 010632X031 | 632 | 5/16 | 010832X187 | 832 | 1 7/8 | 012520X150 | 1/4-20 | 1 1/2 |
| 010256X056 | 256 | 9/16 | 010632X037 | 632 | 3/8 | 010832X200 | 832 | 2 | 012520X175 | 1/4-20 | 1 3/4 |
| 010256X062 | 256 | 5/8 | 010632X043 | 632 | 7/16 | 011024X012 | 1024 | 1/8 | 012520X200 | 1/4-20 | 2 |
| 010256X075 | 256 | 3/4 | 010632X050 | 632 | 1/2 | 011024X018 | 1024 | 3/16 | 012520X250 | 1/4-20 | 2 1/2 |
| 010256X087 | 256 | 7/8 | 010632X056 | 632 | 9/16 | 011024X025 | 1024 | 1/4 | 012528X018 | 1/4-28 | 3/16 |
| 010256X100 | 256 | 1 | 010632X062 | 632 | 5/8 | 011024X031 | 1024 | 5/16 | 012528X025 | 1/4-28 | 1/4 |
| 010256X112 | 256 | 1 1/8 | 010632X068 | 632 | 11/16 | 011024X037 | 1024 | 3/8 | 012528X037 | 1/4-28 | 3/8 |
| 010264X018 | 264 | 3/16 | 010632X075 | 632 | 3/4 | 011024X050 | 1024 | 1/2 | 012528X050 | 1/4-28 | 1/2 |
| 010264X037 | 264 | 3/8 | 010632X087 | 632 | 7/8 | 011024X062 | 1024 | 5/8 | 012528X062 | 1/4-28 | 5/8 |
| 010436X050 | 436 | 1/2 | 010632X100 | 632 | 1 | 011024X075 | 1024 | 3/4 | 012528X075 | 1/4-28 | 3/4 |
| 010440X009 | 440 | 3/32 | 010632X112 | 632 | 1 1/8 | 011024X100 | 1024 | 1 | 012528X100 | 1/4-28 | 1 |
| 010440X012 | 440 | 1/8 | 010632X125 | 632 | 1 1/4 | 011024X125 | 1024 | 1 1/4 | | | |
| 010440X014 | 440 | 9/64 | 010632X150 | 632 | 1 1/2 | 011024X150 | 1024 | 1 1/2 | | | |
| 010440X018 | 440 | 3/16 | 010632X162 | 632 | 1 5/8 | 011032X012 | 1032 | 1/8 | | | |
| 010440X025 | 440 | 1/4 | 010632X175 | 632 | 1 3/4 | 011032X018 | 1032 | 3/16 | | | |
| 010440X028 | 440 | 9/32 | 010632X187 | 632 | 1 7/8 | 011032X025 | 1032 | 1/4 | | | |
| 010440X031 | 440 | 5/16 | 010632X200 | 632 | 2 | 011032X031 | 1032 | 5/16 | | | |
| 010440X037 | 440 | 3/8 | 010632X225 | 632 | 2 1/4 | 011032X037 | 1032 | 3/8 | | | |
| 010440X043 | 440 | 7/16 | 010640X025 | 640 | 1/4 | 011032X043 | 1032 | 7/16 | | | |
| 010440X050 | 440 | 1/2 | 010640X037 | 640 | 3/8 | 011032X050 | 1032 | 1/2 | | | |
| 010440X056 | 440 | 9/16 | 010640X075 | 640 | 3/4 | 011032X062 | 1032 | 5/8 | | | |
| 010440X062 | 440 | 5/8 | 010640X100 | 640 | 1 | 011032X075 | 1032 | 3/4 | | | |
| 010440X068 | 440 | 11/16 | 010832X012 | 832 | 1/8 | 011032X081 | 1032 | 13/16 | | | |
| 010440X075 | 440 | 3/4 | 010832X018 | 832 | 3/16 | 011032X087 | 1032 | 7/8 | | | |
| 010440X087 | 440 | 7/8 | 010832X025 | 832 | 1/4 | 011032X100 | 1032 | 1 | | | |
| 010440X100 | 440 | 1 | 010832X028 | 832 | 9/32 | 011032X106 | 1032 | 1 1/16 | | | |
| 010440X112 | 440 | 1 1/8 | 010832X031 | 832 | 5/16 | 011032X125 | 1032 | 1 1/4 | | | |
| 010440X118 | 440 | 1 3/16 | 010832X037 | 832 | 3/8 | 011032X150 | 1032 | 1 1/2 | | | |
| 010440X125 | 440 | 1 1/4 | 010832X043 | 832 | 7/16 | 011032X175 | 1032 | 1 3/4 | | | |



SCREWS, BOLTS, AND THREADED ROD

**METRIC Sizes
Also Available**

Page 223



HEX UNSLOTTED HEADSTYLE

| THREAD SIZE | A | W | H |
|-------------|-----------|-----------|-----------|
| 2 | .120-.125 | .134 min. | .040-.050 |
| 3 | .181-.188 | .202 min. | .044-.055 |
| 4 | .181-.188 | .202 min. | .049-.060 |
| 6 | .244-.250 | .272 min. | .080-.093 |
| 8 | .244-.250 | .272 min. | .096-.110 |
| 10 | .305-.312 | .340 min. | .105-.120 |
| 12 | .305-.312 | .340 min. | .139-.155 |
| 1/4 | .367-.375 | .409 min. | .172-.190 |

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|---------------------|-----------|--------------|
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|
| 010256H009 | 256 | 3/32 | 010440H056 | 440 | 9/16 | 010640H075 | 640 | 3/4 | 011032H062 | 1032 | 5/8 |
| 010256H012 | 256 | 1/8 | 010440H062 | 440 | 5/8 | 010640H100 | 640 | 1 | 011032H075 | 1032 | 3/4 |
| 010256H015 | 256 | 5/32 | 010440H068 | 440 | 11/16 | 010832H012 | 832 | 1/8 | 011032H081 | 1032 | 13/16 |
| 010256H018 | 256 | 3/16 | 010440H075 | 440 | 3/4 | 010832H018 | 832 | 3/16 | 011032H087 | 1032 | 7/8 |
| 010256H025 | 256 | 1/4 | 010440H087 | 440 | 7/8 | 010832H025 | 832 | 1/4 | 011032H100 | 1032 | 1 |
| 010256H028 | 256 | 9/32 | 010440H100 | 440 | 1 | 010832H028 | 832 | 9/32 | 011032H106 | 1032 | 1 1/16 |
| 010256H031 | 256 | 5/16 | 010440H112 | 440 | 1 1/8 | 010832H031 | 832 | 5/16 | 011032H125 | 1032 | 1 1/4 |
| 010256H037 | 256 | 3/8 | 010440H118 | 440 | 1 3/16 | 010832H037 | 832 | 3/8 | 011032H150 | 1032 | 1 1/2 |
| 010256H039 | 256 | 25/64 | 010440H125 | 440 | 1 1/4 | 010832H043 | 832 | 7/16 | 011032H175 | 1032 | 1 3/4 |
| 010256H043 | 256 | 7/16 | 010440H137 | 440 | 1 3/8 | 010832H050 | 832 | 1/2 | 011032H200 | 1032 | 2 |
| 010256H050 | 256 | 1/2 | 010440H150 | 440 | 1 1/2 | 010832H062 | 832 | 5/8 | 012520H025 | 1/4-20 | 1/4 |
| 010256H056 | 256 | 9/16 | 010440H162 | 440 | 1 5/8 | 010832H075 | 832 | 3/4 | 012520H031 | 1/4-20 | 5/16 |
| 010256H062 | 256 | 5/8 | 010440H175 | 440 | 1 3/4 | 010832H087 | 832 | 7/8 | 012520H037 | 1/4-20 | 3/8 |
| 010256H075 | 256 | 3/4 | 010448H025 | 448 | 1/4 | 010832H100 | 832 | 1 | 012520H050 | 1/4-20 | 1/2 |
| 010256H087 | 256 | 7/8 | 010632H009 | 632 | 3/32 | 010832H112 | 832 | 1 1/8 | 012520H062 | 1/4-20 | 5/8 |
| 010256H100 | 256 | 1 | 010632H012 | 632 | 1/8 | 010832H125 | 832 | 1 1/4 | 012520H075 | 1/4-20 | 3/4 |
| 010256H112 | 256 | 1 1/8 | 010632H015 | 632 | 5/32 | 010832H137 | 832 | 1 3/8 | 012520H087 | 1/4-20 | 7/8 |
| 010264H018 | 264 | 3/16 | 010632H018 | 632 | 3/16 | 010832H150 | 832 | 1 1/2 | 012520H100 | 1/4-20 | 1 |
| 010264H037 | 264 | 3/8 | 010632H025 | 632 | 1/4 | 010832H175 | 832 | 1 3/4 | 012520H125 | 1/4-20 | 1 1/4 |
| 010348H012 | 348 | 1/8 | 010632H031 | 632 | 5/16 | 010832H187 | 832 | 1 7/8 | 012520H150 | 1/4-20 | 1 1/2 |
| 010348H018 | 348 | 3/16 | 010632H037 | 632 | 3/8 | 010832H200 | 832 | 2 | 012520H175 | 1/4-20 | 1 3/4 |
| 010348H025 | 348 | 1/4 | 010632H043 | 632 | 7/16 | 011024H012 | 1024 | 1/8 | 012520H200 | 1/4-20 | 2 |
| 010348H031 | 348 | 5/16 | 010632H050 | 632 | 1/2 | 011024H018 | 1024 | 3/16 | 012520H250 | 1/4-20 | 2 1/2 |
| 010348H037 | 348 | 3/8 | 010632H056 | 632 | 9/16 | 011024H025 | 1024 | 1/4 | 012528H018 | 1/4-28 | 3/16 |
| 010348H043 | 348 | 7/16 | 010632H062 | 632 | 5/8 | 011024H031 | 1024 | 5/16 | 012528H025 | 1/4-28 | 1/4 |
| 010348H050 | 348 | 1/2 | 010632H068 | 632 | 11/16 | 011024H037 | 1024 | 3/8 | 012528H037 | 1/4-28 | 3/8 |
| 010348H075 | 348 | 3/4 | 010632H075 | 632 | 3/4 | 011024H050 | 1024 | 1/2 | 012528H062 | 1/4-28 | 5/8 |
| 010356H031 | 356 | 5/16 | 010632H087 | 632 | 7/8 | 011024H062 | 1024 | 5/8 | 012528H075 | 1/4-28 | 3/4 |
| 010436H050 | 436 | 1/2 | 010632H100 | 632 | 1 | 011024H075 | 1024 | 3/4 | 012528H100 | 1/4-28 | 1 |
| 010440H009 | 440 | 3/32 | 010632H112 | 632 | 1 1/8 | 011024H100 | 1024 | 1 | | | |
| 010440H012 | 440 | 1/8 | 010632H125 | 632 | 1 1/4 | 011024H125 | 1024 | 1 1/4 | | | |
| 010440H014 | 440 | 9/64 | 010632H150 | 632 | 1 1/2 | 011024H150 | 1024 | 1 1/2 | | | |
| 010440H018 | 440 | 3/16 | 010632H162 | 632 | 1 5/8 | 011032H012 | 1032 | 1/8 | | | |
| 010440H025 | 440 | 1/4 | 010632H175 | 632 | 1 3/4 | 011032H018 | 1032 | 3/16 | | | |
| 010440H028 | 440 | 9/32 | 010632H187 | 632 | 1 7/8 | 011032H025 | 1032 | 1/4 | | | |
| 010440H031 | 440 | 5/16 | 010632H200 | 632 | 2 | 011032H031 | 1032 | 5/16 | | | |
| 010440H037 | 440 | 3/8 | 010632H225 | 632 | 2 1/4 | 011032H037 | 1032 | 3/8 | | | |
| 010440H043 | 440 | 7/16 | 010640H025 | 640 | 1/4 | 011032H043 | 1032 | 7/16 | | | |
| 010440H050 | 440 | 1/2 | 010640H037 | 640 | 3/8 | 011032H050 | 1032 | 1/2 | | | |



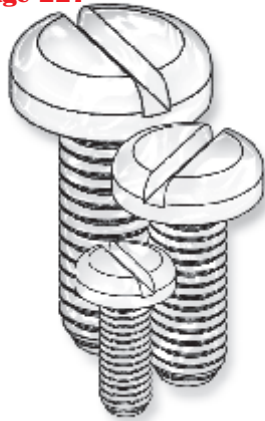
SCREWS, BOLTS, AND THREADED ROD

SECTION

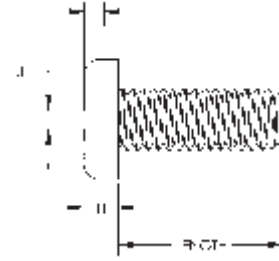
II

**METRIC Sizes
Also Available**

Page 227



New Sizes



PAN SLOTTED HEADSTYLE

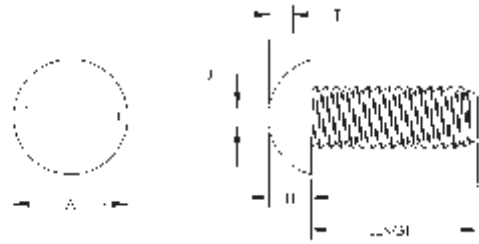
| THREAD SIZE | A | H | J | T |
|-------------|-----------|-----------|-----------|-----------|
| 1 | .130-.142 | .038-.046 | .019-.026 | .018-.027 |
| 2 | .155-.167 | .045-.053 | .023-.031 | .022-.031 |
| 4 | .205-.219 | .058-.068 | .031-.039 | .030-.040 |
| 6 | .256-.270 | .072-.082 | .039-.048 | .037-.050 |
| 8 | .306-.322 | .085-.096 | .045-.054 | .045-.058 |
| 10 | .357-.373 | .099-.110 | .050-.060 | .053-.068 |
| 12 | .407-.425 | .112-.125 | .056-.067 | .061-.077 |
| 1/4 | .473-.492 | .130-.144 | .064-.075 | .070-.087 |
| 5/16 | .594-.615 | .162-.178 | .072-.084 | .085-.106 |
| 1/2 | .958-.987 | .260-.281 | .091-.106 | .131-.161 |

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|---------------------|-----------|--------------|
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|-------------|---------|--------|
| 010164P025 | 164 | 1/4 | 010440P075 | 440 | 3/4 | 010832P018 | 832 | 3/16 | 011032P081 | 1032 | 13/16 |
| 010164P075 | 164 | 3/4 | 010440P087 | 440 | 7/8 | 010832P025 | 832 | 1/4 | 011032P087 | 1032 | 7/8 |
| 010172P025 | 172 | 1/4 | 010440P100 | 440 | 1 | 010832P028 | 832 | 9/32 | 011032P100 | 1032 | 1 |
| 010172P037 | 172 | 3/8 | 010440P112 | 440 | 1 1/8 | 010832P031 | 832 | 5/16 | 011032P106 | 1032 | 1 1/16 |
| 010172P050 | 172 | 1/2 | 010440P118 | 440 | 1 3/16 | 010832P037 | 832 | 3/8 | 011032P125 | 1032 | 1 1/4 |
| 010256P006 | 256 | 1/16 | 010440P125 | 440 | 1 1/4 | 010832P043 | 832 | 7/16 | 011032P150 | 1032 | 1 1/2 |
| 010256P009 | 256 | 3/32 | 010440P137 | 440 | 1 3/8 | 010832P050 | 832 | 1/2 | 011032P175 | 1032 | 1 3/4 |
| 010256P012 | 256 | 1/8 | 010440P150 | 440 | 1 1/2 | 010832P062 | 832 | 5/8 | 011032P200 | 1032 | 2 |
| 010256P015 | 256 | 5/32 | 010440P162 | 440 | 1 5/8 | 010832P075 | 832 | 3/4 | 011024P225 | 1024 | 2 1/2 |
| 010256P018 | 256 | 3/16 | 010440P175 | 440 | 1 3/4 | 010832P087 | 832 | 7/8 | 012520P025 | 1/4-20 | 1/4 |
| 010256P025 | 256 | 1/4 | 010448P025 | 448 | 1/4 | 010832P100 | 832 | 1 | 012520P031 | 1/4-20 | 5/16 |
| 010256P028 | 256 | 9/32 | 010632P009 | 632 | 3/32 | 010832P112 | 832 | 1 1/8 | 012520P037 | 1/4-20 | 3/8 |
| 010256P031 | 256 | 5/16 | 010632P012 | 632 | 1/8 | 010832P125 | 832 | 1 1/4 | 012520P050 | 1/4-20 | 1/2 |
| 010256P037 | 256 | 3/8 | 010632P015 | 632 | 5/32 | 010832P137 | 832 | 1 3/8 | 012520P062 | 1/4-20 | 5/8 |
| 010256P039 | 256 | 25/64 | 010632P018 | 632 | 3/16 | 010832P150 | 832 | 1 1/2 | 012520P075 | 1/4-20 | 3/4 |
| 010256P043 | 256 | 7/16 | 010632P025 | 632 | 1/4 | 010832P175 | 832 | 1 3/4 | 012520P087 | 1/4-20 | 7/8 |
| 010256P050 | 256 | 1/2 | 010632P031 | 632 | 5/16 | 010832P187 | 832 | 1 7/8 | 012520P100 | 1/4-20 | 1 |
| 010256P056 | 256 | 9/16 | 010632P037 | 632 | 3/8 | 010832P200 | 832 | 2 | 012520P125 | 1/4-20 | 1 1/4 |
| 010256P062 | 256 | 5/8 | 010632P043 | 632 | 7/16 | 011024P012 | 1024 | 1/8 | 012520P150 | 1/4-20 | 1 1/2 |
| 010256P075 | 256 | 3/4 | 010632P050 | 632 | 1/2 | 011024P018 | 1024 | 3/16 | 012520P175 | 1/4-20 | 1 3/4 |
| 010256P087 | 256 | 7/8 | 010632P056 | 632 | 9/16 | 011024P025 | 1024 | 1/4 | 012520P200 | 1/4-20 | 2 |
| 010256P100 | 256 | 1 | 010632P062 | 632 | 5/8 | 011024P031 | 1024 | 5/16 | 012520P250 | 1/4-20 | 2 1/2 |
| 010256P112 | 256 | 1 1/8 | 010632P068 | 632 | 11/16 | 011024P037 | 1024 | 3/8 | 012528P018 | 1/4-28 | 3/16 |
| 010264P018 | 264 | 3/16 | 010632P075 | 632 | 3/4 | 011024P050 | 1024 | 1/2 | 012528P025 | 1/4-28 | 1/4 |
| 010264P037 | 264 | 3/8 | 010632P087 | 632 | 7/8 | 011024P062 | 1024 | 5/8 | 012528P037 | 1/4-28 | 3/8 |
| 010436P050 | 436 | 1/2 | 010632P100 | 632 | 1 | 011024P075 | 1024 | 3/4 | 012528P062 | 1/4-28 | 5/8 |
| 010440P009 | 440 | 3/32 | 010632P112 | 632 | 1 1/8 | 011024P100 | 1024 | 1 | 012528P075 | 1/4-28 | 3/4 |
| 010440P012 | 440 | 1/8 | 010632P125 | 632 | 1 1/4 | 011024P125 | 1024 | 1 1/4 | 012528P100 | 1/4-28 | 1 |
| 010440P014 | 440 | 9/64 | 010632P150 | 632 | 1 1/2 | 011024P150 | 1024 | 1 1/2 | 0131218P087 | 5/16-18 | 7/8 |
| 010440P018 | 440 | 3/16 | 010632P162 | 632 | 1 5/8 | 011024P225 | 1024 | 2 1/4 | 0150013P075 | 1/2-13 | 3/4 |
| 010440P025 | 440 | 1/4 | 010632P175 | 632 | 1 3/4 | 011032P012 | 1032 | 1/8 | 0150013P100 | 1/2-13 | 1 |
| 010440P028 | 440 | 9/32 | 010632P187 | 632 | 1 7/8 | 011032P018 | 1032 | 3/16 | | | |
| 010440P031 | 440 | 5/16 | 010632P200 | 632 | 2 | 011032P025 | 1032 | 1/4 | | | |
| 010440P037 | 440 | 3/8 | 010632P225 | 632 | 2 1/4 | 011032P031 | 1032 | 5/16 | | | |
| 010440P043 | 440 | 7/16 | 010640P025 | 640 | 1/4 | 011032P037 | 1032 | 3/8 | | | |
| 010440P050 | 440 | 1/2 | 010640P037 | 640 | 3/8 | 011032P043 | 1032 | 7/16 | | | |
| 010440P056 | 440 | 9/16 | 010640P075 | 640 | 3/4 | 011032P050 | 1032 | 1/2 | | | |
| 010440P062 | 440 | 5/8 | 010640P100 | 640 | 1 | 011032P062 | 1032 | 5/8 | | | |
| 010440P068 | 440 | 11/16 | 010832P012 | 832 | 1/8 | 011032P075 | 1032 | 3/4 | | | |



SCREWS, BOLTS, AND THREADED ROD



ROUND SLOTTED HEADSTYLE

| THREAD SIZE | A | H | J | T |
|-------------|-----------|-----------|-----------|-----------|
| 1 | .122-.138 | .051-.061 | .019-.026 | .033-.044 |
| 2 | .146-.162 | .059-.069 | .023-.031 | .037-.048 |
| 3 | .169-.187 | .067-.078 | .027-.035 | .040-.053 |
| 4 | .193-.211 | .075-.086 | .031-.039 | .044-.058 |
| 5 | .217-.236 | .083-.095 | .035-.043 | .047-.063 |
| 6 | .240-.260 | .091-.103 | .039-.048 | .051-.068 |
| 8 | .287-.309 | .107-.120 | .045-.054 | .058-.077 |
| 10 | .334-.359 | .123-.137 | .050-.060 | .065-.087 |
| 12 | .382-.408 | .139-.153 | .056-.067 | .073-.096 |
| 1/4 | .443-.472 | .160-.175 | .064-.075 | .082-.109 |

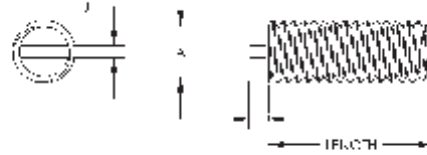
| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|---------------------|-----------|--------------|
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|
| 010164R025 | 164 | 1/4 | 010440R031 | 440 | 5/16 | 010632R187 | 632 | 1 7/8 | 011032R025 | 1032 | 1/4 |
| 010164R075 | 164 | 3/4 | 010440R037 | 440 | 3/8 | 010632R200 | 632 | 2 | 011032R031 | 1032 | 5/16 |
| 010172R025 | 172 | 1/4 | 010440R043 | 440 | 7/16 | 010632R225 | 632 | 2 1/4 | 011032R037 | 1032 | 3/8 |
| 010172R050 | 172 | 1/2 | 010440R050 | 440 | 1/2 | 010640R025 | 640 | 1/4 | 011032R043 | 1032 | 7/16 |
| 010256R006 | 256 | 1/16 | 010440R056 | 440 | 9/16 | 010640R037 | 640 | 3/8 | 011032R050 | 1032 | 1/2 |
| 010256R009 | 256 | 3/32 | 010440R062 | 440 | 5/8 | 010640R075 | 640 | 3/4 | 011032R062 | 1032 | 5/8 |
| 010256R012 | 256 | 1/8 | 010440R068 | 440 | 11/16 | 010640R100 | 640 | 1 | 011032R075 | 1032 | 3/4 |
| 010256R015 | 256 | 5/32 | 010440R075 | 440 | 3/4 | 010832R012 | 832 | 1/8 | 011032R081 | 1032 | 13/16 |
| 010256R018 | 256 | 3/16 | 010440R087 | 440 | 7/8 | 010832R018 | 832 | 3/16 | 011032R087 | 1032 | 7/8 |
| 010256R025 | 256 | 1/4 | 010440R100 | 440 | 1 | 010832R025 | 832 | 1/4 | 011032R100 | 1032 | 1 |
| 010256R028 | 256 | 9/32 | 010440R112 | 440 | 1 1/8 | 010832R028 | 832 | 9/32 | 011032R106 | 1032 | 1 1/16 |
| 010256R031 | 256 | 5/16 | 010440R118 | 440 | 1 3/16 | 010832R031 | 832 | 5/16 | 011032R125 | 1032 | 1 1/4 |
| 010256R037 | 256 | 3/8 | 010440R125 | 440 | 1 1/4 | 010832R037 | 832 | 3/8 | 011032R150 | 1032 | 1 1/2 |
| 010256R043 | 256 | 7/16 | 010440R137 | 440 | 1 3/8 | 010832R043 | 832 | 7/16 | 011032R162 | 1032 | 1 5/8 |
| 010256R050 | 256 | 1/2 | 010440R150 | 440 | 1 1/2 | 010832R050 | 832 | 1/2 | 011032R175 | 1032 | 1 3/4 |
| 010256R056 | 256 | 9/16 | 010440R162 | 440 | 1 5/8 | 010832R062 | 832 | 5/8 | 011032R200 | 1032 | 2 |
| 010256R062 | 256 | 5/8 | 010440R175 | 440 | 1 3/4 | 010832R075 | 832 | 3/4 | 012520R025 | 1/4-20 | 1/4 |
| 010256R075 | 256 | 3/4 | 010448R025 | 448 | 1/4 | 010832R087 | 832 | 7/8 | 012520R031 | 1/4-20 | 5/16 |
| 010256R087 | 256 | 7/8 | 010540R050 | 540 | 1/2 | 010832R100 | 832 | 1 | 012520R037 | 1/4-20 | 3/8 |
| 010256R100 | 256 | 1 | 010632R009 | 632 | 3/32 | 010832R112 | 832 | 1 1/8 | 012520R050 | 1/4-20 | 1/2 |
| 010256R112 | 256 | 1 1/8 | 010632R012 | 632 | 1/8 | 010832R125 | 832 | 1 1/4 | 012520R062 | 1/4-20 | 5/8 |
| 010264R018 | 264 | 3/16 | 010632R015 | 632 | 5/32 | 010832R137 | 832 | 1 3/8 | 012520R075 | 1/4-20 | 3/4 |
| 010264R037 | 264 | 3/8 | 010632R018 | 632 | 3/16 | 010832R150 | 832 | 1 1/2 | 012520R087 | 1/4-20 | 7/8 |
| 010348R012 | 348 | 1/8 | 010632R025 | 632 | 1/4 | 010832R175 | 832 | 1 3/4 | 012520R100 | 1/4-20 | 1 |
| 010348R018 | 348 | 3/16 | 010632R031 | 632 | 5/16 | 010832R187 | 832 | 1 7/8 | 012520R125 | 1/4-20 | 1 1/4 |
| 010348R025 | 348 | 1/4 | 010632R037 | 632 | 3/8 | 010832R200 | 832 | 2 | 012520R150 | 1/4-20 | 1 1/2 |
| 010348R031 | 348 | 5/16 | 010632R043 | 632 | 7/16 | 011024R012 | 1024 | 1/8 | 012520R175 | 1/4-20 | 1 3/4 |
| 010348R037 | 348 | 3/8 | 010632R050 | 632 | 1/2 | 011024R018 | 1024 | 3/16 | 012520R200 | 1/4-20 | 2 |
| 010348R043 | 348 | 7/16 | 010632R056 | 632 | 9/16 | 011024R025 | 1024 | 1/4 | 012520R250 | 1/4-20 | 2 1/2 |
| 010348R050 | 348 | 1/2 | 010632R062 | 632 | 5/8 | 011024R031 | 1024 | 5/16 | 012520R300 | 1/4-20 | 3 |
| 010348R075 | 348 | 3/4 | 010632R068 | 632 | 11/16 | 011024R037 | 1024 | 3/8 | 012528R018 | 1/4-28 | 3/16 |
| 010356R031 | 356 | 5/16 | 010632R075 | 632 | 3/4 | 011024R050 | 1024 | 1/2 | 012528R025 | 1/4-28 | 1/4 |
| 010436R050 | 436 | 1/2 | 010632R087 | 632 | 7/8 | 011024R062 | 1024 | 5/8 | 012528R037 | 1/4-28 | 3/8 |
| 010440R009 | 440 | 3/32 | 010632R100 | 632 | 1 | 011024R075 | 1024 | 3/4 | 012528R062 | 1/4-28 | 5/8 |
| 010440R012 | 440 | 1/8 | 010632R112 | 632 | 1 1/8 | 011024R100 | 1024 | 1 | 012528R075 | 1/4-28 | 3/4 |
| 010440R014 | 440 | 9/64 | 010632R125 | 632 | 1 1/4 | 011024R125 | 1024 | 1 1/4 | 012528R100 | 1/4-28 | 1 |
| 010440R018 | 440 | 3/16 | 010632R150 | 632 | 1 1/2 | 011024R150 | 1024 | 1 1/2 | | | |
| 010440R025 | 440 | 1/4 | 010632R162 | 632 | 1 5/8 | 011032R012 | 1032 | 1/8 | | | |
| 010440R028 | 440 | 9/32 | 010632R175 | 632 | 1 3/4 | 011032R018 | 1032 | 3/16 | | | |

SCREWS, BOLTS, AND THREADED ROD

SECTION

II



SET SLOTTED HEADSTYLE

| THREAD SIZE | A | H | J | T |
|-------------|------|------|------|------|
| 2 | .055 | .035 | .018 | .020 |
| 4 | .075 | .045 | .020 | .025 |
| 6 | .100 | .055 | .025 | .030 |
| 8 | .120 | .055 | .028 | .035 |
| 10 | .150 | .060 | .035 | .050 |
| 1/4 | .175 | .080 | .040 | .060 |
| 5/16 | .246 | .078 | .051 | .078 |

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|---------------------|-----------|--------------|
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|---------------------|---------|--------|
| 010256S006 | 256 | 1/16 | 010440S125 | 440 | 1 1/4 | 010832S043 | 832 | 7/16 | 011032S200 | 1032 | 2 |
| 010256S009 | 256 | 3/32 | 010440S137 | 440 | 1 3/8 | 010832S050 | 832 | 1/2 | 012520S025 | 1/4-20 | 1/4 |
| 010256S012 | 256 | 1/8 | 010440S150 | 440 | 1 1/2 | 010832S062 | 832 | 5/8 | 012520S031 | 1/4-20 | 5/16 |
| 010256S015 | 256 | 5/32 | 010440S162 | 440 | 1 5/8 | 010832S075 | 832 | 3/4 | 012520S037 | 1/4-20 | 3/8 |
| 010256S018 | 256 | 3/16 | 010440S175 | 440 | 1 3/4 | 010832S087 | 832 | 7/8 | 012520S050 | 1/4-20 | 1/2 |
| 010256S025 | 256 | 1/4 | 010448S025 | 448 | 1/4 | 010832S100 | 832 | 1 | 012520S062 | 1/4-20 | 5/8 |
| 010256S028 | 256 | 9/32 | 010632S009 | 632 | 3/32 | 010832S112 | 832 | 1 1/8 | 012520S075 | 1/4-20 | 3/4 |
| 010256S031 | 256 | 5/16 | 010632S012 | 632 | 1/8 | 010832S125 | 832 | 1 1/4 | 012520S087 | 1/4-20 | 7/8 |
| 010256S037 | 256 | 3/8 | 010632S015 | 632 | 5/32 | 010832S137 | 832 | 1 3/8 | 012520S100 | 1/4-20 | 1 |
| 010256S043 | 256 | 7/16 | 010632S018 | 632 | 3/16 | 010832S150 | 832 | 1 1/2 | 012520S125 | 1/4-20 | 1 1/4 |
| 010256S050 | 256 | 1/2 | 010632S025 | 632 | 1/4 | 010832S175 | 832 | 1 3/4 | 012520S150 | 1/4-20 | 1 1/2 |
| 010256S056 | 256 | 9/16 | 010632S031 | 632 | 5/16 | 010832S187 | 832 | 1 7/8 | 012520S175 | 1/4-20 | 1 3/4 |
| 010256S062 | 256 | 5/8 | 010632S037 | 632 | 3/8 | 010832S200 | 832 | 2 | 012520S200 | 1/4-20 | 2 |
| 010256S075 | 256 | 3/4 | 010632S043 | 632 | 7/16 | 011024S012 | 1024 | 1/8 | 012520S250 | 1/4-20 | 2 1/2 |
| 010256S087 | 256 | 7/8 | 010632S050 | 632 | 1/2 | 011024S018 | 1024 | 3/16 | 012528S018 | 1/4-28 | 3/16 |
| 010256S100 | 256 | 1 | 010632S056 | 632 | 9/16 | 011024S025 | 1024 | 1/4 | 012528S025 | 1/4-28 | 1/4 |
| 010256S112 | 256 | 1 1/8 | 010632S062 | 632 | 5/8 | 011024S031 | 1024 | 5/16 | 012528S037 | 1/4-28 | 3/8 |
| 010264S018 | 264 | 3/16 | 010632S068 | 632 | 11/16 | 011024S037 | 1024 | 3/8 | 012528S062 | 1/4-28 | 5/8 |
| 010264S037 | 264 | 3/8 | 010632S075 | 632 | 3/4 | 011024S050 | 1024 | 1/2 | 012528S075 | 1/4-28 | 3/4 |
| 010436B050 | 436 | 1/2 | 010632S087 | 632 | 7/8 | 011024S062 | 1024 | 5/8 | 012528S100 | 1/4-28 | 1 |
| 010440S009 | 440 | 3/32 | 010632S100 | 632 | 1 | 011024S075 | 1024 | 3/4 | 0137524S031* | 3/8-24 | 5/16 |
| 010440S012 | 440 | 1/8 | 010632S112 | 632 | 1 1/8 | 011024S100 | 1024 | 1 | 0131224S081 | 5/16-24 | 13/16 |
| 010440S014 | 440 | 9/64 | 010632S125 | 632 | 1 1/4 | 011024S125 | 1024 | 1 1/4 | *SLOT IS IN THREADS | | |
| 010440S015 | 440 | 5/32 | 010632S150 | 632 | 1 1/2 | 011024S150 | 1024 | 1 1/2 | | | |
| 010440S018 | 440 | 3/16 | 010632S162 | 632 | 1 5/8 | 011032S012 | 1032 | 1/8 | | | |
| 010440S025 | 440 | 1/4 | 010632S175 | 632 | 1 3/4 | 011032S018 | 1032 | 3/16 | | | |
| 010440S028 | 440 | 9/32 | 010632S187 | 632 | 1 7/8 | 011032S025 | 1032 | 1/4 | | | |
| 010440S031 | 440 | 5/16 | 010632S200 | 632 | 2 | 011032S031 | 1032 | 5/16 | | | |
| 010440S038 | 440 | 3/8 | 010632S225 | 632 | 2 1/4 | 011032S037 | 1032 | 3/8 | | | |
| 010440S043 | 440 | 7/16 | 010640S025 | 640 | 1/4 | 011032S050 | 1032 | 1/2 | | | |
| 010440S050 | 440 | 1/2 | 010640S037 | 640 | 3/8 | 011032S062 | 1032 | 5/8 | | | |
| 010440S056 | 440 | 9/16 | 010640S075 | 640 | 3/4 | 011032S075 | 1032 | 3/4 | | | |
| 010440S062 | 440 | 5/8 | 010640S100 | 640 | 1 | 011032S081 | 1032 | 13/16 | | | |
| 010440S068 | 440 | 11/16 | 010832S012 | 832 | 1/8 | 011032S087 | 1032 | 7/8 | | | |
| 010440S075 | 440 | 3/4 | 010832S018 | 832 | 3/16 | 011032S100 | 1032 | 1 | | | |
| 010440S087 | 440 | 7/8 | 010832S025 | 832 | 1/4 | 011032S106 | 1032 | 1 1/16 | | | |
| 010440S100 | 440 | 1 | 010832S028 | 832 | 9/32 | 011032S125 | 1032 | 1 1/4 | | | |
| 010440S112 | 440 | 1 1/8 | 010832S031 | 832 | 5/16 | 011032S150 | 1032 | 1 1/2 | | | |
| 010440S118 | 440 | 1 3/16 | 010832S037 | 832 | 3/8 | 011032S175 | 1032 | 1 3/4 | | | |



SCREWS, BOLTS, AND THREADED ROD



SOCKET SET

HEADSTYLE

| THREAD SIZE | J | T | THREAD SIZE | J | T |
|-------------|------|------|-------------|------|------|
| 4 | .050 | .070 | 5/16 | .156 | .156 |
| 6 | .062 | .080 | 3/8 | .188 | .188 |
| 8 | .078 | .090 | 1/2 | .250 | .250 |
| 10 | .094 | .100 | 5/8 | .312 | .312 |
| 1/4 | .125 | .125 | 3/4 | .370 | .185 |

| Nominal Screw Length, in. | Tolerance on Length |
|---------------------------|---------------------|
| Up to 0.63, incl | +/- 0.01 |
| Over 0.63 to 2.00, incl | +/- 0.02 |
| Over 2.00 to 6.00, incl | +/- 0.03 |
| Over 6.00 | +/- 0.06 |

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|-------------|---------|--------|
| 010436T050 | 436 | 1/2 | 010632T087 | 632 | 7/8 | 011024T062 | 1024 | 5/8 | 012528T075 | 1/4-28 | 3/4 |
| 010440T009 | 440 | 3/32 | 010632T100 | 632 | 1 | 011024T075 | 1024 | 3/4 | 012528T100 | 1/4-28 | 1 |
| 010440T012 | 440 | 1/8 | 010632T112 | 632 | 1 1/8 | 011024T100 | 1024 | 1 | 0131218T037 | 5/16-18 | 3/8 |
| 010440T014 | 440 | 9/64 | 010632T125 | 632 | 1 1/4 | 011024T125 | 1024 | 1 1/4 | 0131218T050 | 5/16-18 | 1/2 |
| 010440T015 | 440 | 5/32 | 010632T150 | 632 | 1 1/2 | 011024T150 | 1024 | 1 1/2 | 0131218T075 | 5/16-18 | 3/4 |
| 010440T018 | 440 | 3/16 | 010632T162 | 632 | 1 5/8 | 011032T012 | 1032 | 1/8 | 0131218T100 | 5/16-18 | 1 |
| 010440T025 | 440 | 1/4 | 010632T175 | 632 | 1 3/4 | 011032T018 | 1032 | 3/16 | 0137516T050 | 3/8-16 | 1/2 |
| 010440T028 | 440 | 9/32 | 010632T187 | 632 | 1 7/8 | 011032T025 | 1032 | 1/4 | 0137516T075 | 3/8-16 | 3/4 |
| 010440T031 | 440 | 5/16 | 010632T200 | 632 | 2 | 011032T031 | 1032 | 5/16 | 0137516T100 | 3/8-16 | 1 |
| 010440T037 | 440 | 3/8 | 010632T225 | 632 | 2 1/4 | 011032T037 | 1032 | 3/8 | 0150013T050 | 1/2-13 | 1/2 |
| 010440T043 | 440 | 7/16 | 010640T025 | 640 | 1/4 | 011032T043 | 1032 | 7/16 | 0150013T075 | 1/2-13 | 3/4 |
| 010440T050 | 440 | 1/2 | 010640T037 | 640 | 3/8 | 011032T050 | 1032 | 1/2 | 0150013T100 | 1/2-13 | 1 |
| 010440T056 | 440 | 9/16 | 010640T075 | 640 | 3/4 | 011032T062 | 1032 | 5/8 | 0150013T125 | 1/2-13 | 1 1/4 |
| 010440T062 | 440 | 5/8 | 010640T100 | 640 | 1 | 011032T075 | 1032 | 3/4 | 0162511T050 | 5/8-11 | 1/2 |
| 010440T068 | 440 | 11/16 | 010832T012 | 832 | 1/8 | 011032T081 | 1032 | 13/16 | 0162511T075 | 5/8-11 | 3/4 |
| 010440T075 | 440 | 3/4 | 010832T018 | 832 | 3/16 | 011032T087 | 1032 | 7/8 | 0162511T100 | 5/8-11 | 1 |
| 010440T087 | 440 | 7/8 | 010832T025 | 832 | 1/4 | 011032T100 | 1032 | 1 | 0162511T150 | 5/8-11 | 1 1/2 |
| 010440T100 | 440 | 1 | 010832T028 | 832 | 9/32 | 011032T106 | 1032 | 1 1/16 | 0175010T025 | 3/4-10 | 1/4 |
| 010440T112 | 440 | 1 1/8 | 010832T031 | 832 | 5/16 | 011032T125 | 1032 | 1 1/4 | | | |
| 010440T118 | 440 | 1 3/16 | 010832T037 | 832 | 3/8 | 011032T150 | 1032 | 1 1/2 | | | |
| 010440T125 | 440 | 1 1/4 | 010832T043 | 832 | 7/16 | 011032T175 | 1032 | 1 3/4 | | | |
| 010440T137 | 440 | 1 3/8 | 010832T050 | 832 | 1/2 | 011032T200 | 1032 | 2 | | | |
| 010440T150 | 440 | 1 1/2 | 010832T062 | 832 | 5/8 | 012520T025 | 1/4-20 | 1/4 | | | |
| 010440T162 | 440 | 1 5/8 | 010832T075 | 832 | 3/4 | 012520T031 | 1/4-20 | 5/16 | | | |
| 010440T175 | 440 | 1 3/4 | 010832T087 | 832 | 7/8 | 012520T037 | 1/4-20 | 3/8 | | | |
| 010448T025 | 448 | 1/4 | 010832T100 | 832 | 1 | 012520T050 | 1/4-20 | 1/2 | | | |
| 010632T009 | 632 | 3/32 | 010832T112 | 832 | 1 1/8 | 012520T062 | 1/4-20 | 5/8 | | | |
| 010632T012 | 632 | 1/8 | 010832T125 | 832 | 1 1/4 | 012520T075 | 1/4-20 | 3/4 | | | |
| 010632T015 | 632 | 5/32 | 010832T137 | 832 | 1 3/8 | 012520T087 | 1/4-20 | 7/8 | | | |
| 010632T018 | 632 | 3/16 | 010832T150 | 832 | 1/2 | 012520T100 | 1/4-20 | 1 | | | |
| 010632T025 | 632 | 1/4 | 010832T175 | 832 | 1 3/4 | 012520T125 | 1/4-20 | 1 1/4 | | | |
| 010632T031 | 632 | 5/16 | 010832T187 | 832 | 1 7/8 | 012520T150 | 1/4-20 | 1 1/2 | | | |
| 010632T037 | 632 | 3/8 | 010832T200 | 832 | 2 | 012520T175 | 1/4-20 | 1 3/4 | | | |
| 010632T043 | 632 | 7/16 | 011024T012 | 1024 | 1/8 | 012520T200 | 1/4-20 | 2 | | | |
| 010632T050 | 632 | 1/2 | 011024T018 | 1024 | 3/16 | 012520T250 | 1/4-20 | 2 1/2 | | | |
| 010632T056 | 632 | 9/16 | 011024T025 | 1024 | 1/4 | 012528T018 | 1/4-28 | 3/16 | | | |
| 010632T062 | 632 | 5/8 | 011024T031 | 1024 | 5/16 | 012528T025 | 1/4-28 | 1/4 | | | |
| 010632T068 | 632 | 11/16 | 011024T037 | 1024 | 3/8 | 012528T037 | 1/4-28 | 3/8 | | | |
| 010632T075 | 632 | 3/4 | 011024T050 | 1024 | 1/2 | 012528T062 | 1/4-28 | 5/8 | | | |

Due to the small delicate drive on this style set screw we recommend that you test samples prior to ordering production quantities of this style part. The drive on this style screw can be damaged very easily if the tapped hole is small or the thread is longer than a hex nut. An alternative would be the grub style screw.

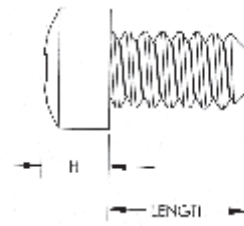


SCREWS, BOLTS, AND THREADED ROD

SECTION

II

New Product Line



FILLISTER PHILLIPS HEADSTYLE

| THREAD SIZE | A | H |
|-------------|-----------|-----------|
| 6 | .208/.226 | .111/.132 |
| 8 | .250/.270 | .133/.156 |
| 10 | .292/.313 | .156/.180 |
| 1/4 | .378/.403 | .189/.219 |

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|---------------------|-----------|--------------|
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.06 |

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|
| 010632WF009 | 632 | 3/32 | 010640WF025 | 640 | 1/4 | 011024WF012 | 1024 | 1/8 | 011032WF106 | 1032 | 1 1/16 |
| 010632WF012 | 632 | 1/8 | 010640WF037 | 640 | 3/8 | 011024WF018 | 1024 | 3/16 | 011032WF125 | 1032 | 1 1/4 |
| 010632WF015 | 632 | 5/32 | 010640WF075 | 640 | 3/4 | 011024WF025 | 1024 | 1/4 | 011032WF150 | 1032 | 1 1/2 |
| 010632WF018 | 632 | 3/16 | 010640WF100 | 640 | 1 | 011024WF031 | 1024 | 5/16 | 011032WF175 | 1032 | 1 3/4 |
| 010632WF025 | 632 | 1/4 | 010832WF012 | 832 | 1/8 | 011024WF037 | 1024 | 3/8 | 011032WF200 | 1032 | 2 |
| 010632WF031 | 632 | 5/16 | 010832WF018 | 832 | 3/16 | 011024WF050 | 1024 | 1/2 | 012520WF025 | 1/4-20 | 1/4 |
| 010632WF037 | 632 | 3/8 | 010832WF025 | 832 | 1/4 | 011024WF062 | 1024 | 5/8 | 012520WF031 | 1/4-20 | 5/16 |
| 010632WF043 | 632 | 7/16 | 010832WF028 | 832 | 9/32 | 011024WF075 | 1024 | 3/4 | 012520WF037 | 1/4-20 | 3/8 |
| 010632WF050 | 632 | 1/2 | 010832WF031 | 832 | 5/16 | 011024WF100 | 1024 | 1 | 012520WF050 | 1/4-20 | 1/2 |
| 010632WF056 | 632 | 9/16 | 010832WF037 | 832 | 3/8 | 011024WF125 | 1024 | 1 1/4 | 012520WF062 | 1/4-20 | 5/8 |
| 010632WF062 | 632 | 5/8 | 010832WF043 | 832 | 7/16 | 011024WF150 | 1024 | 1 1/2 | 012520WF075 | 1/4-20 | 3/4 |
| 010632WF068 | 632 | 11/16 | 010832WF050 | 832 | 1/2 | 011032WF012 | 1032 | 1/8 | 012520WF087 | 1/4-20 | 7/8 |
| 010632WF075 | 632 | 3/4 | 010832WF062 | 832 | 5/8 | 011032WF018 | 1032 | 3/16 | 012520WF100 | 1/4-20 | 1 |
| 010632WF087 | 632 | 7/8 | 010832WF075 | 832 | 3/4 | 011032WF025 | 1032 | 1/4 | 012520WF125 | 1/4-20 | 1 1/4 |
| 010632WF100 | 632 | 1 | 010832WF087 | 832 | 7/8 | 011032WF031 | 1032 | 5/16 | 012520WF150 | 1/4-20 | 1 1/2 |
| 010632WF112 | 632 | 1 1/8 | 010832WF100 | 832 | 1 | 011032WF037 | 1032 | 3/8 | 012520WF175 | 1/4-20 | 1 3/4 |
| 010632WF125 | 632 | 1 1/4 | 010832WF112 | 832 | 1 1/8 | 011032WF043 | 1032 | 7/16 | 012520WF200 | 1/4-20 | 2 |
| 010632WF150 | 632 | 1 1/2 | 010832WF125 | 832 | 1 1/4 | 011032WF050 | 1032 | 1/2 | 012520WF250 | 1/4-20 | 2 1/2 |
| 010632WF162 | 632 | 1 5/8 | 010832WF137 | 832 | 1 3/8 | 011032WF062 | 1032 | 5/8 | 012528WF018 | 1/4-28 | 3/16 |
| 010632WF175 | 632 | 1 3/4 | 010832WF150 | 832 | 1 1/2 | 011032WF075 | 1032 | 3/4 | 012528WF025 | 1/4-28 | 1/4 |
| 010632WF187 | 632 | 1 7/8 | 010832WF175 | 832 | 1 3/4 | 011032WF081 | 1032 | 13/16 | 012528WF037 | 1/4-28 | 3/8 |
| 010632WF200 | 632 | 2 | 010832WF187 | 832 | 1 7/8 | 011032WF087 | 1032 | 7/8 | 012528WF062 | 1/4-28 | 5/8 |
| 010632WF225 | 632 | 2 1/4 | 010832WF200 | 832 | 2 | 011032WF100 | 1032 | 1 | 012528WF075 | 1/4-28 | 3/4 |
| | | | | | | | | | 012528WF100 | 1/4-28 | 1 |



Machine Screws & Nut Assortment

ITEM NUMBER - 04AS0750MSN



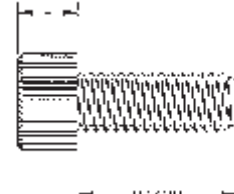
Metal Core Screw Assortment

ITEM NUMBER - 04AS0305MCS

SCREWS, BOLTS, AND THREADED ROD

**METRIC Sizes
Also Available**

Page 232



**HEX
SOCKET
CAP**

| THREAD SIZE | A | H | J | Key Engagement Min. |
|-------------|-----------|-----------|-------|---------------------|
| 2 | .134-.140 | .083-.086 | 5/64" | .038 |
| 4 | .176-.183 | .108-.112 | 3/32" | .051 |
| 6 | .218-.226 | .134-.138 | 7/64" | .064 |
| 8 | .262-.270 | .159-.164 | 9/64" | .077 |
| 10 | .303-.312 | .185-.190 | 5/32" | .090 |
| 1/4 | .365-.375 | .244-.250 | 3/16" | .120 |
| 5/16 | .457-.469 | .306-.312 | 1/4" | .151 |
| 3/8 | .550-.562 | .368-.375 | 5/16" | .182 |
| 1/2 | .735-.750 | .492-.500 | 3/8" | .245 |
| 5/8 | .921-.938 | .616-.625 | 1/2" | .307 |

| Nominal Screw Size | 0 thru 3/8 | 7/16 thru 3/4 | 7/8 thru 1 1/2 | Over 1 1/2 |
|--------------------------|------------|---------------------|----------------|------------|
| | incl | incl | incl | |
| Nominal Screw Length, in | | Tolerance on Length | | |
| Up to 1.00, incl | -0.03 | -0.03 | -0.05 | ... |
| Over 1.00 to 2.50, incl | -0.04 | -0.06 | -0.10 | -0.18 |
| Over 2.50 to 6.00, incl | -0.06 | -0.08 | -0.14 | -0.20 |
| Over 6.00 | -0.12 | -0.12 | -0.20 | -0.24 |

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|--------------|---------|---------|-------------|---------|---------|
| 3404360050 | 436 | 1/2 | 3406320187 | 632 | 1 7/8 | 3410320037 | 1032 | 3/8 | 3431218150 | 5/16-18 | 1 1/2 * |
| 3404400009 | 440 | 3/32 | 3406320225 | 632 | 2 1/4 | 3410320050 | 1032 | 1/2 | 3431218200 | 5/16-18 | 2 * |
| 3404400012 | 440 | 1/8 | 3406400025 | 640 | 1/4 | 3410320062 | 1032 | 5/8 | 3431218250 | 5/16-18 | 2 1/2 * |
| 3404400014 | 440 | 9/64 | 3406400037 | 640 | 3/8 | 3410320075 | 1032 | 3/4 | 3431218300 | 5/16-18 | 3 * |
| 3404400018 | 440 | 3/16 | 3406400075 | 640 | 3/4 | 3410320081 | 1032 | 13/16 | 3437516050 | 3/8-16 | 1/2 |
| 3404400025 | 440 | 1/4 | 3406400100 | 640 | 1 | 3410320087 | 1032 | 7/8 | 3437516075 | 3/8-16 | 3/4 |
| 3404400028 | 440 | 9/32 | 3408320012 | 832 | 1/8 | 3410320100 | 1032 | 1 | 3437516100 | 3/8-16 | 1 |
| 3404400031 | 440 | 5/16 | 3408320018 | 832 | 3/16 | 3410320106 | 1032 | 1 1/16 | 3437516125 | 3/8-16 | 1 1/4 * |
| 3404400037 | 440 | 3/8 | 3408320028 | 832 | 9/32 | 3410320125 | 1032 | 1 1/4 | 3437516150 | 3/8-16 | 1 1/2 * |
| 3404400043 | 440 | 7/16 | 3408320025 | 832 | 1/4 | 3410320150 | 1032 | 1 1/2 | 3437516200 | 3/8-16 | 2 * |
| 3404400050 | 440 | 1/2 | 3408320031 | 832 | 5/16 | 3410320200 | 1032 | 2 | 3437516250 | 3/8-16 | 2 1/2 * |
| 3404400056 | 440 | 9/16 | 3408320037 | 832 | 3/8 | 3425200018 | 1/4-20 | 3/16 | 3437516300 | 3/8-16 | 3 * |
| 3404400062 | 440 | 5/8 | 3408320043 | 832 | 7/16 | 3425200025 | 1/4-20 | 1/4 | 3450013050 | 1/2-13 | 1/2 |
| 3404400068 | 440 | 11/16 | 3408320050 | 832 | 1/2 | 3425200037 | 1/4-20 | 3/8 | 3450013075 | 1/2-13 | 3/4 |
| 3404400075 | 440 | 3/4 | 3408320062 | 832 | 5/8 | 3425200031 | 1/4-20 | 5/16 | 3450013100 | 1/2-13 | 1 |
| 3404400087 | 440 | 7/8 | 3408320075 | 832 | 3/4 | 3425200037 | 1/4-20 | 3/8 | 3450013125 | 1/2-13 | 1 1/4 * |
| 3404400100 | 440 | 1 | 3408320087 | 832 | 7/8 | 3425200050 | 1/4-20 | 1/2 | 3450013150 | 1/2-13 | 1 1/2 * |
| 3404400112 | 440 | 1 1/8 | 3408320100 | 832 | 1 | 3425200062 | 1/4-20 | 5/8 | 3450013200 | 1/2-13 | 2 * |
| 3404400125 | 440 | 1 1/4 | 3408320112 | 832 | 1 1/8 | 3425200075 | 1/4-20 | 3/4 | 3450013250 | 1/2-13 | 2 1/2 * |
| 3404400137 | 440 | 1 3/8 | 3408320125 | 832 | 1 1/4 | 3425200087 | 1/4-20 | 7/8 | 3450013300 | 1/2-13 | 3 * |
| 3404400150 | 440 | 1 1/2 | 3408320137 | 832 | 1 3/8 | 3425200100 | 1/4-20 | 1 | 3462511050 | 5/8-11 | 1/2 |
| 3406320009 | 632 | 3/32 | 3408320150 | 832 | 1 1/2 | 3425200112 | 1/4-20 | 1 1/8 | 3462511075 | 5/8-11 | 3/4 |
| 3406320012 | 632 | 1/8 | 3408320175 | 832 | 1 3/4 | 3425200125 | 1/4-20 | 1 1/4 | 3462511100 | 5/8-11 | 1 |
| 3406320015 | 632 | 5/32 | 3408320200 | 832 | 2 | 3425200150 | 1/4-20 | 1 1/2 | 3462511150 | 5/8-11 | 1 1/2 |
| 3406320018 | 632 | 3/16 | 3410240012 | 1024 | 1/8 | 3425200175 | 1/4-20 | 1 3/4 | 3462511200 | 5/8-11 | 2 |
| 3406320025 | 632 | 1/4 | 3410240018 | 1024 | 3/16 | 3425200200 | 1/4-20 | 2 * | | | |
| 3406320031 | 632 | 5/16 | 3410240025 | 1024 | 1/4 | 3425200225 | 1/4-20 | 2 1/4 * | | | |
| 3406320037 | 632 | 3/8 | 3410240031 | 1024 | 5/16 | 3425200250 | 1/4-20 | 2 1/2 * | | | |
| 3406320043 | 632 | 7/16 | 3410240037 | 1024 | 3/8 | 3425200250FT | 1/4-20 | 2 1/2 | | | |
| 3406320050 | 632 | 1/2 | 3410240050 | 1024 | 1/2 | 3425200300FT | 1/4-20 | 3 | | | |
| 3406320062 | 632 | 5/8 | 3410240062 | 1024 | 5/8 | 3425280018 | 1/4-28 | 3/16 | | | |
| 3406320068 | 632 | 11/16 | 3410240075 | 1024 | 3/4 | 3425280025 | 1/4-28 | 1/4 | | | |
| 3406320075 | 632 | 3/4 | 3410240100 | 1024 | 1 | 3425280037 | 1/4-28 | 3/8 | | | |
| 3406320087 | 632 | 7/8 | 3410240125 | 1024 | 1 1/4 | 3425280075 | 1/4-28 | 3/4 | | | |
| 3406320100 | 632 | 1 | 3410240150 | 1024 | 1 1/2 | 3425280100 | 1/4-28 | 1 | | | |
| 3406320112 | 632 | 1 1/8 | 3410320012 | 1032 | 1/8 | 3431218050 | 5/16-18 | 1/2 | | | |
| 3406320125 | 632 | 1 1/4 | 3410320018 | 1032 | 3/16 | 3431218075 | 5/16-18 | 3/4 | | | |
| 3406320150 | 632 | 1 1/2 | 3410320025 | 1032 | 1/4 | 3431218100 | 5/16-18 | 1 | | | |
| 3406320175 | 632 | 1 3/4 | 3410320031 | 1032 | 5/16 | 3431218125 | 5/16-18 | 1 1/4 * | | | |

*NOT FULL THREAD

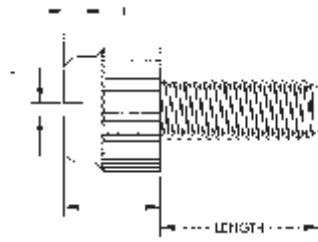
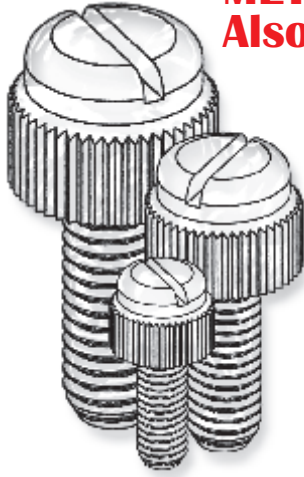


SCREWS, BOLTS, AND THREADED ROD

SECTION

II

**METRIC Sizes
Also Available**
Page 233



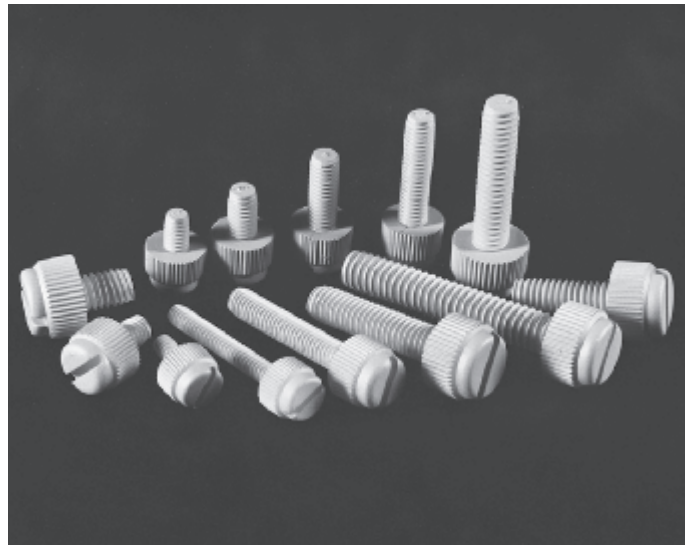
ECONOMY GRADE THUMB SCREWS

| THREAD SIZE | A* | H | J | T |
|-------------|------|------|------|------|
| 4 | .317 | .216 | .030 | .040 |
| 6 | .336 | .243 | .030 | .040 |
| 8 | .381 | .280 | .035 | .045 |
| 10 | .395 | .305 | .040 | .065 |
| 1/4 | .480 | .305 | .045 | .065 |

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|---------------------|-----------|--------------|
| | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 TO 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

*A +/- .010 TOLERANCE

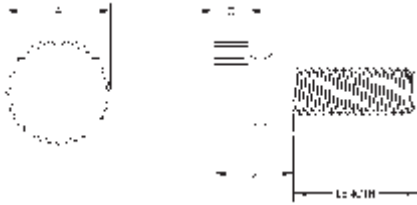
| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|--------------|--------|--------|--------------|--------|--------|--------------|--------|--------|--------------|--------|--------|
| 090440009TEG | 440 | 3/32 | 090632125TEG | 632 | 1 1/4 | 091024150TEG | 1024 | 1 1/2 | 092520031TEG | 1/4-20 | 5/16 |
| 090440012TEG | 440 | 1/8 | 090632150TEG | 632 | 1 1/2 | 091032012TEG | 1032 | 1/8 | 092520037TEG | 1/4-20 | 3/8 |
| 090440014TEG | 440 | 9/64 | 090632162TEG | 632 | 1 5/8 | 091032018TEG | 1032 | 3/16 | 092520050TEG | 1/4-20 | 1/2 |
| 090440018TEG | 440 | 3/16 | 090632175TEG | 632 | 1 3/4 | 091032025TEG | 1032 | 1/4 | 092520062TEG | 1/4-20 | 5/8 |
| 090440025TEG | 440 | 1/4 | 090632187TEG | 632 | 1 7/8 | 091032031TEG | 1032 | 5/16 | 092520075TEG | 1/4-20 | 3/4 |
| 090440028TEG | 440 | 9/32 | 090632225TEG | 632 | 2 1/4 | 091032037TEG | 1032 | 3/8 | 092520087TEG | 1/4-20 | 7/8 |
| 090440031TEG | 440 | 5/16 | 090640025TEG | 640 | 1/4 | 091032043TEG | 1032 | 7/16 | 092520100TEG | 1/4-20 | 1 |
| 090440037TEG | 440 | 3/8 | 090640037TEG | 640 | 3/8 | 091032050TEG | 1032 | 1/2 | 092520125TEG | 1/4-20 | 1 1/4 |
| 090440043TEG | 440 | 7/16 | 090640075TEG | 640 | 3/4 | 091032062TEG | 1032 | 5/8 | 092520150TEG | 1/4-20 | 1 1/2 |
| 090440050TEG | 440 | 1/2 | 090640100TEG | 640 | 1 | 091032075TEG | 1032 | 3/4 | 092520175TEG | 1/4-20 | 1 3/4 |
| 090440056TEG | 440 | 9/16 | 090832012TEG | 832 | 1/8 | 091032081TEG | 1032 | 13/16 | 092520200TEG | 1/4-20 | 2 |
| 090440062TEG | 440 | 5/8 | 090832018TEG | 832 | 3/16 | 091032087TEG | 1032 | 7/8 | 092520250TEG | 1/4-20 | 2 1/2 |
| 090440068TEG | 440 | 11/16 | 090832025TEG | 832 | 1/4 | 091032100TEG | 1032 | 1 | 092528018TEG | 1/4-28 | 3/16 |
| 090440075TEG | 440 | 3/4 | 090832028TEG | 832 | 9/32 | 091032106TEG | 1032 | 1 1/16 | 092528025TEG | 1/4-28 | 1/4 |
| 090440087TEG | 440 | 7/8 | 090832031TEG | 832 | 5/16 | 091032112TEG | 1032 | 1 1/4 | 092528037TEG | 1/4-28 | 3/8 |
| 090440100TEG | 440 | 1 | 090832037TEG | 832 | 3/8 | 091032150TEG | 1032 | 1 1/2 | 092528050TEG | 1/4-28 | 1/2 |
| 090440112TEG | 440 | 1 1/8 | 090832043TEG | 832 | 7/16 | 091032175TEG | 1032 | 1 3/4 | 092528075TEG | 1/4-28 | 3/4 |
| 090440118TEG | 440 | 1 3/16 | 090832050TEG | 832 | 1/2 | 091032200TEG | 1032 | 2 | 092528100TEG | 1/4-28 | 1 |
| 090440125TEG | 440 | 1 1/4 | 090832062TEG | 832 | 5/8 | 092520025TEG | 1/4-20 | 1/4 | | | |
| 090440137TEG | 440 | 1 3/8 | 090832075TEG | 832 | 3/4 | | | | | | |
| 090440150TEG | 440 | 1 1/2 | 090832087TEG | 832 | 7/8 | | | | | | |
| 090440175TEG | 440 | 1 3/4 | 090832100TEG | 832 | 1 | | | | | | |
| 090448025TEG | 448 | 1/4 | 090832112TEG | 832 | 1 1/8 | | | | | | |
| 090632009TEG | 632 | 3/32 | 090832125TEG | 832 | 1 1/4 | | | | | | |
| 090632012TEG | 632 | 1/8 | 090832137TEG | 832 | 1 3/8 | | | | | | |
| 090632015TEG | 632 | 5/32 | 090832150TEG | 832 | 1 1/2 | | | | | | |
| 090632018TEG | 632 | 3/16 | 090832175TEG | 832 | 1 3/4 | | | | | | |
| 090632025TEG | 632 | 1/4 | 090832187TEG | 832 | 1 7/8 | | | | | | |
| 090632031TEG | 632 | 5/16 | 090832200TEG | 832 | 2 | | | | | | |
| 090632037TEG | 632 | 3/8 | 091024012TEG | 1024 | 1/8 | | | | | | |
| 090632043TEG | 632 | 7/16 | 091024018TEG | 1024 | 3/16 | | | | | | |
| 090632050TEG | 632 | 1/2 | 091024025TEG | 1024 | 1/4 | | | | | | |
| 090632056TEG | 632 | 9/16 | 091024031TEG | 1024 | 5/16 | | | | | | |
| 090632062TEG | 632 | 5/8 | 091024037TEG | 1024 | 3/8 | | | | | | |
| 090632068TEG | 632 | 11/16 | 091024050TEG | 1024 | 1/2 | | | | | | |
| 090632075TEG | 632 | 3/4 | 091024062TEG | 1024 | 5/8 | | | | | | |
| 090632087TEG | 632 | 7/8 | 091024075TEG | 1024 | 3/4 | | | | | | |
| 090632100TEG | 632 | 1 | 091024100TEG | 1024 | 1 | | | | | | |
| 090632112TEG | 632 | 1 1/8 | 091024125TEG | 1024 | 1 1/4 | | | | | | |



SCREWS, BOLTS, AND THREADED ROD

SECTION

II



KNURLED HEAD THUMB SCREWS

| PART NUMBER | THREAD | LENGTH |
|-------------|---------|--------|
| 090440018T | 440 | 3/16 |
| 090440025T | 440 | 1 / 4 |
| 090440037T | 440 | 3 / 8 |
| 090440050T | 440 | 1 / 2 |
| 090440075T | 440 | 3 / 4 |
| 090632025T | 632 | 1 / 4 |
| 090632037T | 632 | 3 / 8 |
| 090632050T | 632 | 1 / 2 |
| 090632075T | 632 | 3 / 4 |
| 090632100T | 632 | 1 |
| 090832018T | 832 | 3/16 |
| 090832025T | 832 | 1 / 4 |
| 090832037T | 832 | 3 / 8 |
| 090832050T | 832 | 1 / 2 |
| 090832075T | 832 | 3 / 4 |
| 090832100T | 832 | 1 |
| 091024050T | 1024 | 1 / 2 |
| 091024075T | 1024 | 3/4 |
| 091024100T | 1024 | 1 |
| 091024125T | 1024 | 1 1/4 |
| 091024200T | 1024 | 2 |
| 091032037T | 1032 | 3 / 8 |
| 091032050T | 1032 | 1 / 2 |
| 091032075T | 1032 | 3 / 4 |
| 091032100T | 1032 | 1 |
| 091032106T | 1032 | 1 1/16 |
| 091032150T | 1032 | 1 1/2 |
| 091032200T | 1032 | 2 |
| 092520050T | 1/4-20 | 1 / 2 |
| 092520075T | 1/4-20 | 3 / 4 |
| 092520100T | 1/4-20 | 1 |
| 092520125T | 1/4-20 | 1 1/4 |
| 092520150T | 1/4-20 | 1 1/2 |
| 0931218050T | 5/16-18 | 1 / 2 |
| 0931218100T | 5/16-18 | 1 |
| 0931218150T | 5/16-18 | 1 1/2 |
| 0931218200T | 5/16-18 | 2 |
| 0937516050T | 3/8-16 | 1 / 2 |
| 0937516100T | 3/8-16 | 1 |
| 0937516150T | 3/8-16 | 1 1/2 |
| 0937516200T | 3/8-16 | 2 |
| 0950013050T | 1/2-13 | 1 / 2 |
| 0950013100T | 1/2-13 | 1 |
| 0950013150T | 1/2-13 | 1 1/2 |
| 0950013200T | 1/2-13 | 2 |



| THREAD SIZE | A * | B * | C |
|-------------|--------------|--------------|-------------|
| 4 | .300 (7,62) | .280 (7,11) | .125 (3,17) |
| 6 | .360 (9,14) | .275 (6,99) | .125 (3,18) |
| 8 | .425 (10,80) | .305 (7,75) | .140 (3,56) |
| 10 | .425 (10,80) | .325 (8,26) | .140 (3,56) |
| 1/4 | .540 (13,72) | .365 (9,27) | .155 (3,94) |
| 5/16 | .615 (15,62) | .385 (9,78) | .171 (4,34) |
| 3/8 | .687 (17,45) | .430 (10,92) | .187 (4,75) |
| 1/2 | .750 (19,05) | .468 (11,89) | .203 (5,16) |

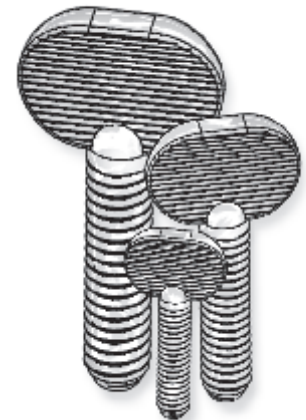
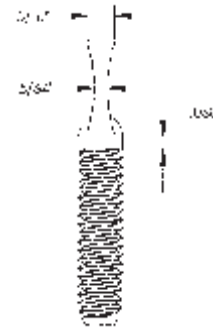
* +/- .010 on A and B Dimensions

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|--------------|-----------|--------------|
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 TO 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |



OVAL HEAD THUMB SCREWS

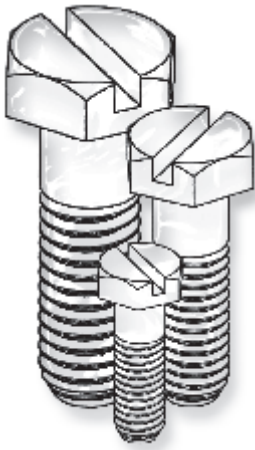
| PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|
| 092520037V | 1/4-20 | 3/8 |
| 092520050V | 1/4-20 | 1/2 |
| 092520062V | 1/4-20 | 5/8 |
| 092520100V | 1/4-20 | 1 |
| 092520150V | 1/4-20 | 1 1/2 |
| 092520175V | 1/4-20 | 1 3/4 |
| 092520200V | 1/4-20 | 2 |
| 092520250V | 1/4-20 | 2 1/2 |



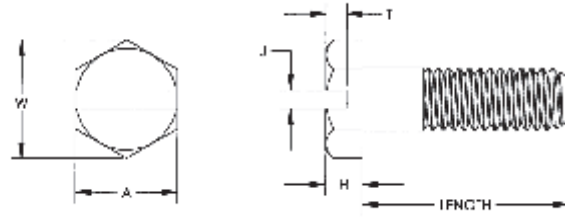
| THREAD SIZE | HD WIDTH | HD HEIGHT | HD THICKNESS |
|-------------|----------|-----------|--------------|
| 1/4 | .780 | .550 | 5/32 |

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|--------------|-----------|--------------|
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

SCREWS, BOLTS, AND THREADED ROD



New Sizes



| THREAD SIZE | A | W | H | J | T |
|-------------|-----------|-------------|-----------|------|------|
| 1/4 | .425-.438 | .484-.505 | .150-.188 | .070 | .090 |
| 5/16 | .484-.500 | .552-.577 | .195-.235 | .080 | .110 |
| 3/8 | .544-.562 | .620-.650 | .226-.268 | .090 | .140 |
| 1/2 | .725-.750 | .826-.866 | .302-.364 | .075 | .163 |
| 5/8 | .906-.938 | 1.033-1.083 | .378-.444 | .110 | .170 |

| Nominal Length | 1/4 to 3/8 | 7/16 to 1/2 | 9/16 to 3/4 | 7/8 to 1 | 1-1/8 to 1-1/2 | over 1-1/2 |
|--------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Up to 1 in., incl. | +0.02 -0.03 | +0.02 -0.03 | +0.02 -0.03 | --- | --- | --- |
| Over 1 in. to 2 1/2 in., incl. | +0.02 -0.04 | +0.04 -0.06 | +0.06 -0.08 | +0.08 -0.10 | +0.12 -0.12 | +0.18 -0.18 |
| Over 2-1/2 in. to 4 in., incl. | +0.04 -0.06 | +0.06 -0.08 | +0.08 -0.10 | +0.10 -0.14 | +0.16 -0.16 | +0.20 -0.20 |
| Over 4 in. to 6 in., incl. | +0.06 -0.10 | +0.08 -0.10 | +0.10 -0.10 | +0.12 -0.16 | +0.18 -0.18 | +0.22 -0.22 |
| Longer than 6 in. | +0.10 -0.18 | +0.12 -0.18 | +0.14 -0.18 | +0.16 -0.20 | +0.22 -0.22 | +0.24 -0.24 |

SLOTTED HEX CAP SCREWS

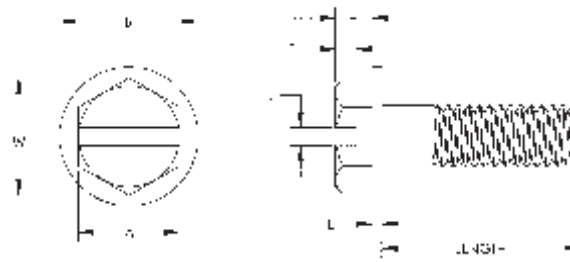
| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|---------|--------|--------------|---------|--------|-------------|--------|--------|--------------|--------|--------|
| 3225020037 | 1/4-20 | 3/8 | 3231218125 | 5/16-18 | 1 1/4 | 3237516250 | 3/8-16 | 2 1/2 | 3250013500 | 1/2-13 | 5 |
| 3225020050 | 1/4-20 | 1/2 | 3231218137 | 5/16-18 | 1 3/8 | 3237516300 | 3/8-16 | 3 | 3250013550 | 1/2-13 | 5 1/2 |
| 3225020062 | 1/4-20 | 5/8 | 3231218150 | 5/16-18 | 1 1/2 | 3237516350 | 3/8-16 | 3 1/2 | 3250013600 | 1/2-13 | 6 |
| 3225020075 | 1/4-20 | 3/4 | 3231218175 | 5/16-18 | 1 3/4 | 3237516400 | 3/8-16 | 4 | 3262511050 | 5/8-11 | 1/2 |
| 3225020100 | 1/4-20 | 1 | 3231218200 | 5/16-18 | 2 | 3237516450 | 3/8-16 | 4 1/2 | 3262511075 | 5/8-11 | 3/4 |
| 3225020125 | 1/4-20 | 1 1/4 | 3231218200FT | 5/16-18 | 2 | 3237516500 | 3/8-16 | 5 | 3262511100 | 5/8-11 | 1 |
| 3225020150 | 1/4-20 | 1 1/2 | 3231218250 | 5/16-18 | 2 1/2 | 3237516550 | 3/8-16 | 5 1/2 | 3262511150 | 5/8-11 | 1 1/2 |
| 3225020200 | 1/4-20 | 2 | 3231218300 | 5/16-18 | 3 | 3237516600 | 3/8-16 | 6 | 3262511200 | 5/8-11 | 2 |
| 3225020212 | 1/4-20 | 2 1/8 | 3231218350 | 5/16-18 | 3 1/2 | 3237524050 | 3/8-24 | 1/2 | 3262511250 | 5/8-11 | 2 1/2 |
| 3225020225 | 1/4-20 | 2 1/4 | 3231218400 | 5/16-18 | 4 | 3250013050 | 1/2-13 | 1/2 | 3262511300 | 5/8-11 | 3 |
| 3225020250 | 1/4-20 | 2 1/2 | 3231218450 | 5/16-18 | 4 1/2 | 3250013075 | 1/2-13 | 3/4 | 3262511350 | 5/8-11 | 3 1/2 |
| 3225020300 | 1/4-20 | 3 | 3231218500 | 5/16-18 | 5 | 3250013087 | 1/2-13 | 7/8 | 3262511400 | 5/8-11 | 4 |
| 3225020350 | 1/4-20 | 3 1/2 | 3231218550 | 5/16-18 | 5 1/2 | 3250013100 | 1/2-13 | 1 | 3262511400FT | 5/8-11 | 4 |
| 3225020400 | 1/4-20 | 4 | 3231218600 | 5/16-18 | 6 | 3250013125 | 1/2-13 | 1 1/4 | 3262511450 | 5/8-11 | 4 1/2 |
| 3225020450 | 1/4-20 | 4 1/2 | 3231224050 | 5/16-24 | 1/2 | 3250013150 | 1/2-13 | 1 1/2 | 3262511500 | 5/8-11 | 5 |
| 3225020500 | 1/4-20 | 5 | 3237516050 | 3/8-16 | 1/2 | 3250013200 | 1/2-13 | 2 | 3262511550 | 5/8-11 | 5 1/2 |
| 3225020550 | 1/4-20 | 5 1/2 | 3237516075 | 3/8-16 | 3/4 | 3250013250 | 1/2-13 | 2 1/2 | 3262511600 | 5/8-11 | 6 |
| 3225020600 | 1/4-20 | 6 | 3237516100 | 3/8-16 | 1 | 3250013300 | 1/2-13 | 3 | | | |
| 3231218050 | 5/16-18 | 1/2 | 3237516125 | 3/8-16 | 1 1/4 | 3250013350 | 1/2-13 | 3 1/2 | | | |
| 3231218075 | 5/16-18 | 3/4 | 3237516150 | 3/8-16 | 1 1/2 | 3250013400 | 1/2-13 | 4 | | | |
| 3231218100 | 5/16-18 | 1 | 3237516200 | 3/8-16 | 2 | 3250013450 | 1/2-13 | 4 1/2 | | | |

FT = FULL THREAD

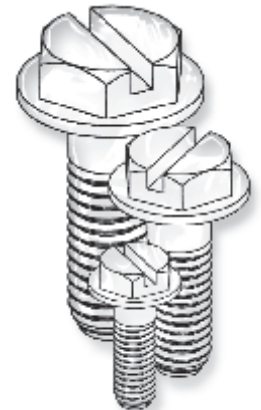
ALL PARTS UP TO 1" LONG ARE FULLY THREADED

SLOTTED HEX WASHER CAP

| PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|
| 32W37516050 | 3/8-16 | 1/2 |
| 32W37516075 | 3/8-16 | 3/4 |
| 32W37516100 | 3/8-16 | 1 |
| 32W37516125 | 3/8-16 | 1 1/4 |
| 32W37516150 | 3/8-16 | 1 1/2 |
| 32W37516200 | 3/8-16 | 2 |
| 32W37516250 | 3/8-16 | 2 1/2 |
| 32W37516300 | 3/8-16 | 3 |



| A | B | H | U | J | T | W |
|------|------|------|------|------|------|-----------|
| .558 | .745 | .282 | .050 | .087 | .149 | .620-.650 |

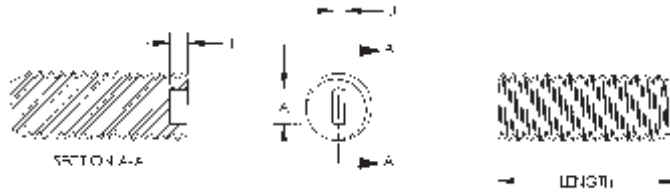


SCREWS, BOLTS, AND THREADED ROD

SECTION
II

**METRIC Sizes
Also Available**

Page 232



New Sizes

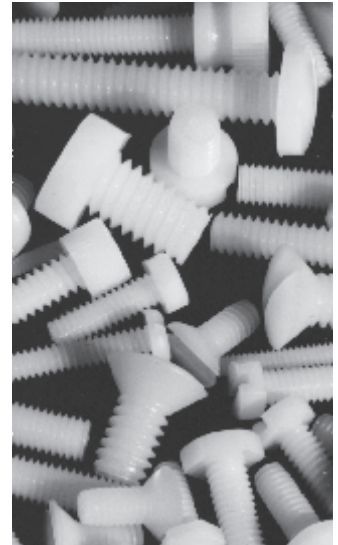


**GRUB
SLOTTED
HEADSTYLE**

| Nominal Screw Length, in. | Tolerance on Length |
|---------------------------|---------------------|
| Up to 0.63, incl | +/- 0.01 |
| Over 0.63 to 2.00, incl | +/- 0.02 |
| Over 2.00 to 6.00, incl | +/- 0.03 |
| Over 6.00 | +/- 0.06 |

| THREAD SIZE | T | A | J |
|-------------|------|------|------|
| 6 | .030 | .080 | .025 |
| 8 | .035 | .080 | .028 |
| 10 | .050 | .130 | .035 |
| 1/4 | .060 | .160 | .040 |
| 3/8 | .100 | .264 | .064 |
| 1/2 | .130 | .350 | .075 |
| 1 | .178 | .516 | .115 |

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|
| 010632G009 | 632 | 3/32 | 010832G100 | 832 | 1 | 012520G025 | 1/4-20 | 1/4 | 012528G018 | 1/4-28 | 3/16 |
| 010632G012 | 632 | 1/8 | 010832G112 | 832 | 1 1/8 | 012520G031 | 1/4-20 | 5/16 | 012528G025 | 1/4-28 | 1/4 |
| 010632G015 | 632 | 5/32 | 010832G125 | 832 | 1 1/4 | 012520G037 | 1/4-20 | 3/8 | 012528G037 | 1/4-28 | 3/8 |
| 010632G018 | 632 | 3/16 | 010832G137 | 832 | 1 3/8 | 012520G050 | 1/4-20 | 1/2 | 012528G062 | 1/4-28 | 5/8 |
| 010632G025 | 632 | 1/4 | 010832G150 | 832 | 1 1/2 | 012520G062 | 1/4-20 | 5/8 | 012528G075 | 1/4-28 | 3/4 |
| 010632G031 | 632 | 5/16 | 010832G175 | 832 | 1 3/4 | 012520G075 | 1/4-20 | 3/4 | 012528G100 | 1/4-28 | 1 |
| 010632G037 | 632 | 3/8 | 010832G187 | 832 | 1 7/8 | 012520G087 | 1/4-20 | 7/8 | 0137516G050 | 3/8-16 | 1/2 |
| 010632G043 | 632 | 7/16 | 010832G200 | 832 | 2 | 012520G100 | 1/4-20 | 1 | 0137516G075 | 3/8-16 | 3/4 |
| 010632G050 | 632 | 1/2 | 011024G012 | 1024 | 1/8 | 012520G125 | 1/4-20 | 1 1/4 | 0137516G100 | 3/8-16 | 1 |
| 010632G056 | 632 | 9/16 | 011024G018 | 1024 | 3/16 | 012520G150 | 1/4-20 | 1 1/2 | 0150013G050 | 1/2-13 | 1/2 |
| 010632G062 | 632 | 5/8 | 011024G025 | 1024 | 1/4 | 012520G175 | 1/4-20 | 1 3/4 | 0150013G075 | 1/2-13 | 3/4 |
| 010632G068 | 632 | 11/16 | 011024G031 | 1024 | 5/16 | 012520G200 | 1/4-20 | 2 | 0150013G100 | 1/2-13 | 1 |
| 010632G075 | 632 | 3/4 | 011024G037 | 1024 | 3/8 | 012520G250 | 1/4-20 | 2 1/2 | 011008G062 | 1 - 8 | 5/8 |
| 010632G087 | 632 | 7/8 | 011024G050 | 1024 | 1/2 | | | | | | |
| 010632G100 | 632 | 1 | 011024G062 | 1024 | 5/8 | | | | | | |
| 010632G112 | 632 | 1 1/8 | 011024G075 | 1024 | 3/4 | | | | | | |
| 010632G125 | 632 | 1 1/4 | 011024G100 | 1024 | 1 | | | | | | |
| 010632G150 | 632 | 1 1/2 | 011024G125 | 1024 | 1 1/4 | | | | | | |
| 010632G162 | 632 | 1 5/8 | 011024G150 | 1024 | 1 1/2 | | | | | | |
| 010632G175 | 632 | 1 3/4 | 011032G012 | 1032 | 1/8 | | | | | | |
| 010632G187 | 632 | 1 7/8 | 011032G018 | 1032 | 3/16 | | | | | | |
| 010640G025 | 640 | 1/4 | 011032G025 | 1032 | 1/4 | | | | | | |
| 010640G037 | 640 | 3/8 | 011032G031 | 1032 | 5/16 | | | | | | |
| 010640G075 | 640 | 3/4 | 011032G037 | 1032 | 3/8 | | | | | | |
| 010640G100 | 640 | 1 | 011032G043 | 1032 | 7/16 | | | | | | |
| 010832G012 | 832 | 1/8 | 011032G050 | 1032 | 1/2 | | | | | | |
| 010832G018 | 832 | 3/16 | 011032G062 | 1032 | 5/8 | | | | | | |
| 010832G025 | 832 | 1/4 | 011032G075 | 1032 | 3/4 | | | | | | |
| 010832G028 | 832 | 9/32 | 011032G081 | 1032 | 13/16 | | | | | | |
| 010832G031 | 832 | 5/16 | 011032G087 | 1032 | 7/8 | | | | | | |
| 010832G037 | 832 | 3/8 | 011032G100 | 1032 | 1 | | | | | | |
| 010832G043 | 832 | 7/16 | 011032G106 | 1032 | 1 1/16 | | | | | | |
| 010832G050 | 832 | 1/2 | 011032G125 | 1032 | 1 1/4 | | | | | | |
| 010832G062 | 832 | 5/8 | 011032G150 | 1032 | 1 1/2 | | | | | | |
| 010832G075 | 832 | 3/4 | 011032G175 | 1032 | 1 3/4 | | | | | | |
| 010832G087 | 832 | 7/8 | 011032G200 | 1032 | 2 | | | | | | |



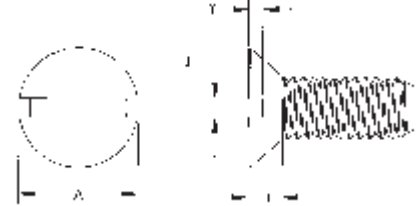
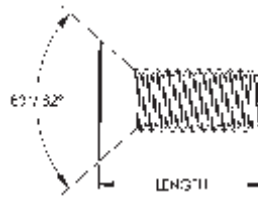
SCREWS, BOLTS, AND THREADED ROD

SECTION

II

METRIC Sizes
Also Available

Page 231



| THREAD SIZE | A | H *Ref. Only | J | T |
|-------------|-----------|--------------|-----------|-----------|
| 1 | .126-.146 | .043 | .019-.026 | .012-.019 |
| 2 | .147-.172 | .051 | .023-.031 | .015-.023 |
| 4 | .195-.225 | .067 | .031-.039 | .020-.030 |
| 6 | .244-.279 | .083 | .039-.048 | .024-.038 |
| 8 | .292-.332 | .100 | .045-.054 | .029-.045 |
| 10 | .340-.385 | .116 | .050-.060 | .034-.053 |
| 12 | .389-.438 | .132 | .056-.067 | .039-.060 |
| 1/4 | .452-.507 | .153 | .064-.075 | .046-.070 |
| 5/16 | .568-.635 | .191 | .072-.084 | .058-.088 |
| 3/8 | .685-.762 | .230 | .081-.094 | .070-.106 |

| Nominal Screw Size | 0000 | 0 | 1/4 |
|-------------------------|---------------------|------------|-------------|
| | thru 00 | thru 12 | thru 3/4 |
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 TO 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

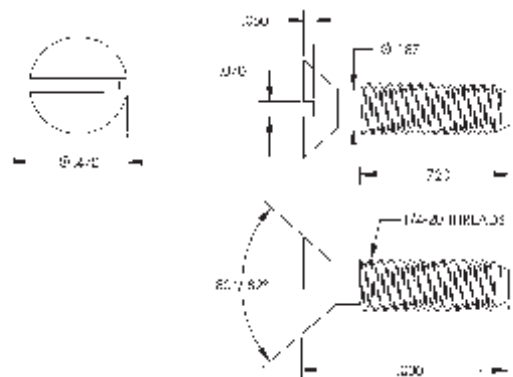
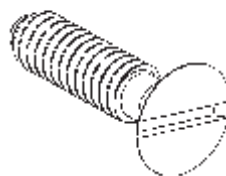
New Sizes

82° FLAT HEADSTYLE

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|---------|--------|
| 020172A025 | 172 | 1/4 | 020440A150 | 440 | 1 1/2 | 021024A075 | 1024 | 3/4 |
| 020172A031 | 172 | 5/16 | 020440A175 | 440 | 1 3/4 | 021024A100 | 1024 | 1 |
| 020172A050 | 172 | 1/2 | 020448A015 | 448 | 5/32 | 021032A025 | 1032 | 1/4 |
| 020256A018 | 256 | 3/16 | 020448A025 | 448 | 1/4 | 021032A031 | 1032 | 5/16 |
| 020256A025 | 256 | 1/4 | 020632A018 | 632 | 3/16 | 021032A037 | 1032 | 3/8 |
| 020256A031 | 256 | 5/16 | 020632A025 | 632 | 1/4 | 021032A050 | 1032 | 1/2 |
| 020256A037 | 256 | 3/8 | 020632A031 | 632 | 5/16 | 021032A075 | 1032 | 3/4 |
| 020256A043 | 256 | 7/16 | 020632A037 | 632 | 3/8 | 021032A087 | 1032 | 7/8 |
| 020256A050 | 256 | 1/2 | 020632A050 | 632 | 1/2 | 021032A100 | 1032 | 1 |
| 020256A056 | 256 | 9/16 | 020632A062 | 632 | 5/8 | 021032A125 | 1032 | 1 1/4 |
| 020256A062 | 256 | 5/8 | 020632A075 | 632 | 3/4 | 021032A150 | 1032 | 1 1/2 |
| 020256A075 | 256 | 3/4 | 020632A100 | 632 | 1 | 022520A025 | 1/4-20 | 1/4 |
| 020440A012 | 440 | 1/8 | 020632A112 | 632 | 1 1/8 | 022520A050 | 1/4-20 | 1/2 |
| 020440A015 | 440 | 5/32 | 020632A125 | 632 | 1 1/4 | 022520A062 | 1/4-20 | 5/8 |
| 020440A018 | 440 | 3/16 | 020832A012 | 832 | 1/8 | 022520A075 | 1/4-20 | 3/4 |
| 020440A025 | 440 | 1/4 | 020832A025 | 832 | 1/4 | 022520A087 | 1/4-20 | 7/8 |
| 020440A031 | 440 | 5/16 | 020832A031 | 832 | 5/16 | 022520A100 | 1/4-20 | 1 |
| 020440A037 | 440 | 3/8 | 020832A037 | 832 | 3/8 | 022520A125 | 1/4-20 | 1 1/4 |
| 020440A050 | 440 | 1/2 | 020832A043 | 832 | 7/16 | 022520A150 | 1/4-20 | 1 1/2 |
| 020440A056 | 440 | 9/16 | 020832A050 | 832 | 1/2 | 022520A175 | 1/4-20 | 1 3/4 |
| 020440A062 | 440 | 5/8 | 020832A056 | 832 | 9/16 | 022520A200 | 1/4-20 | 2 |
| 020440A075 | 440 | 3/4 | 020832A062 | 832 | 5/8 | 022520A250 | 1/4-20 | 2 1/2 |
| 020440A100 | 440 | 1 | 020832A075 | 832 | 3/4 | 0231218A100 | 5/16-18 | 1 |
| 020440A112 | 440 | 1 1/8 | 020832A100 | 832 | 1 | 0237516A175 | 3/8-16 | 1 3/4 |
| 020440A118 | 440 | 1 3/16 | 020832A125 | 832 | 1 1/4 | | | |
| 020440A125 | 440 | 1 1/4 | 020832A150 | 832 | 1 1/2 | | | |
| 020440A137 | 440 | 1 3/8 | 021024A050 | 1024 | 1/2 | | | |



SPECIAL ITEM 82° FLAT HEADSTYLE



ITEM NUMBER 401004

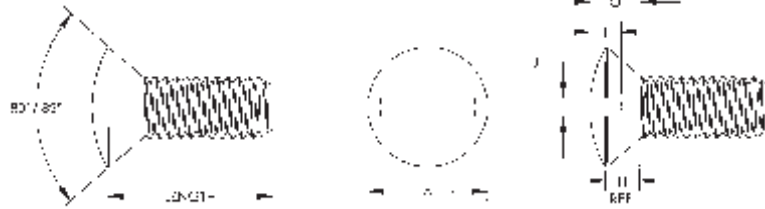
SCREWS, BOLTS, AND THREADED ROD

METRIC Sizes
Also Available

Page 225

SECTION

II



| THREAD SIZE | * REF. ONLY | | | | |
|-------------|-------------|------|-----------|-----------|-----------|
| | A | * H | O | J | T |
| 2 | .147-.172 | .051 | .063-.080 | .023-.031 | .037-.045 |
| 4 | .195-.225 | .067 | .084-.104 | .031-.039 | .049-.059 |
| 6 | .244-.279 | .083 | .105-.128 | .039-.048 | .060-.074 |
| 8 | .292-.332 | .100 | .126-.152 | .045-.054 | .072-.088 |
| 10 | .340-.385 | .116 | .148-.176 | .050-.060 | .084-.103 |
| 12 | .389-.438 | .132 | .169-.200 | .056-.067 | .096-.117 |
| 1/4 | .452-.507 | .153 | .197-.232 | .064-.075 | .112-.136 |

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|---------------------|-----------|--------------|
| | Up to 1/2 in., incl | -0.01 | -0.02 |
| Over 1/2 TO 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

82° OVAL HEADSTYLE

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|
| 330256A018 | 256 | 3/16 | 330448A025 | 448 | 1/4 | 331032A031 | 1032 | 5/16 | 332520A050 | 1/4-20 | 1/2 |
| 330256A025 | 256 | 1/4 | 330632A025 | 632 | 1/4 | 331032A037 | 1032 | 3/8 | 332520A062 | 1/4-20 | 5/8 |
| 330256A031 | 256 | 5/16 | 330632A031 | 632 | 5/16 | 331032A050 | 1032 | 1/2 | 332520A075 | 1/4-20 | 3/4 |
| 330256A037 | 256 | 3/8 | 330632A037 | 632 | 3/8 | 331032A075 | 1032 | 3/4 | 332520A087 | 1/4-20 | 7/8 |
| 330256A043 | 256 | 7/16 | 330632A050 | 632 | 1/2 | 331032A087 | 1032 | 7/8 | 332520A100 | 1/4-20 | 1 |
| 330256A050 | 256 | 1/2 | 330632A062 | 632 | 5/8 | 331032A100 | 1032 | 1 | 332520A125 | 1/4-20 | 1 1/4 |
| 330256A056 | 256 | 9/16 | 330632A075 | 632 | 3/4 | 331032A125 | 1032 | 1 1/4 | 332520A150 | 1/4-20 | 1 1/2 |
| 330256A062 | 256 | 5/8 | 330632A100 | 632 | 1 | 331032A150 | 1032 | 1 1/2 | 332520A175 | 1/4-20 | 1 3/4 |
| 330256A075 | 256 | 3/4 | 330632A112 | 632 | 1 1/8 | 332520A025 | 1/4-20 | 1/4 | 332520A200 | 1/4-20 | 2 |
| 330440A012 | 440 | 1/8 | 330632A125 | 632 | 1 1/4 | | | | 332520A250 | 1/4-20 | 2 1/2 |
| 330440A015 | 440 | 5/32 | 330632A175 | 632 | 1 3/4 | | | | | | |
| 330440A018 | 440 | 3/16 | 330832A012 | 832 | 1/8 | | | | | | |
| 330440A025 | 440 | 1/4 | 330832A025 | 832 | 1/4 | | | | | | |
| 330440A031 | 440 | 5/16 | 330832A031 | 832 | 5/16 | | | | | | |
| 330440A037 | 440 | 3/8 | 330832A037 | 832 | 3/8 | | | | | | |
| 330440A050 | 440 | 1/2 | 330832A043 | 832 | 7/16 | | | | | | |
| 330440A056 | 440 | 9/16 | 330832A050 | 832 | 1/2 | | | | | | |
| 330440A062 | 440 | 5/8 | 330832A056 | 832 | 9/16 | | | | | | |
| 330440A075 | 440 | 3/4 | 330832A062 | 832 | 5/8 | | | | | | |
| 330440A100 | 440 | 1 | 330832A075 | 832 | 3/4 | | | | | | |
| 330440A112 | 440 | 1 1/8 | 330832A100 | 832 | 1 | | | | | | |
| 330440A118 | 440 | 1 3/16 | 330832A125 | 832 | 1 1/4 | | | | | | |
| 330440A125 | 440 | 1 1/4 | 331024A050 | 1024 | 1/2 | | | | | | |
| 330440A137 | 440 | 1 3/8 | 331024A075 | 1024 | 3/4 | | | | | | |
| 330440A150 | 440 | 1 1/2 | 331024A100 | 1024 | 1 | | | | | | |
| 330440A175 | 440 | 1 3/4 | 331024A125 | 1024 | 1 1/4 | | | | | | |
| 330448A015 | 448 | 5/32 | 331032A025 | 1032 | 1/4 | | | | | | |



SCREWS, BOLTS, AND THREADED ROD

SECTION

II

This versatile threaded rod stock is easily cut to size, resistant to most chemicals, electrically insulating, non-magnetic, lightweight, low thermal conductivity, vibration and abrasion resistant. Stock length is 2 feet. Longer lengths up to 8 feet available on special order. We can furnish cut to your length with a nominal cutting charge. Other plastic materials can be furnished on special order. Request quote.

THREADED RODS



**METRIC Sizes
Also Available**
Page 236

| ITEM NUMBER | DESCRIPTION | |
|-------------|-------------|--------------|
| 3800440TR | 440 | Threaded Rod |
| 3800632TR | 632 | Threaded Rod |
| 3800832TR | 832 | Threaded Rod |
| 3801024TR | 1024 | Threaded Rod |
| * 3801032TR | 1032 | Threaded Rod |
| * 3825020TR | 1/4-20 | Threaded Rod |
| * 3831218TR | 5/16-18 | Threaded Rod |
| * 3837516TR | 3/8-16 | Threaded Rod |
| * 3850013TR | 1/2-13 | Threaded Rod |
| 3862511TR | 5/8-11 | Threaded Rod |
| 3875010TR | 3/4-10 | Threaded Rod |
| 3887509TR | 7/8-9 | Threaded Rod |
| 3810008TR | 1-8 | Threaded Rod |

* These sizes are available in natural Acetal material, contact sales for price.

THREADED STUDS

Injection molded threaded studs with chamfer on both ends are available in several of the most popular sizes and lengths. Threaded studs are molded in natural Nylon 6/6 UL 94V2. These studs are resistant to most chemicals, electrically insulating, non magnetic, lightweight, low thermal conductivity, vibration and abrasion resistant.

| LENGTH | TOLERANCE |
|--------------|-----------|
| 3/4 " to 1" | +0/- .03 |
| 1-1/2" to 2" | +0/- .06 |
| 2 1/2" to 5" | +0/- .09 |

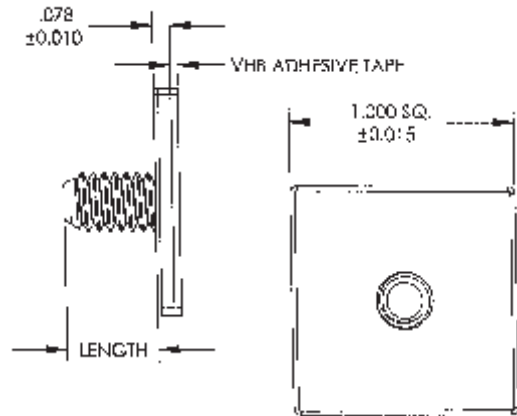
| ITEM NUMBER | DESCRIPTION | | |
|--------------|-------------|-------|---------------|
| 3801032075SD | 10-32 | 3/4 | Threaded Stud |
| 3801032100SD | 10-32 | 1 | Threaded Stud |
| 3801032150SD | 10-32 | 1 1/2 | Threaded Stud |
| 3801032200SD | 10-32 | 2 | Threaded Stud |
| 3801032250SD | 10-32 | 2 1/2 | Threaded Stud |
| 3825020075SD | 1/4-20 | 3/4 | Threaded Stud |
| 3825020100SD | 1/4-20 | 1 | Threaded Stud |
| 3825020150SD | 1/4-20 | 1 1/2 | Threaded Stud |
| 3825020200SD | 1/4-20 | 2 | Threaded Stud |
| 3825020250SD | 1/4-20 | 2 1/2 | Threaded Stud |
| 3825020300SD | 1/4-20 | 3 | Threaded Stud |
| 3831218100SD | 5/16-18 | 1 | Threaded Stud |
| 3831218150SD | 5/16-18 | 1 1/2 | Threaded Stud |
| 3831218200SD | 5/16-18 | 2 | Threaded Stud |
| 3831218250SD | 5/16-18 | 2 1/2 | Threaded Stud |
| 3831218300SD | 5/16-18 | 3 | Threaded Stud |
| 3837516100SD | 3/8-16 | 1 | Threaded Stud |
| 3837516150SD | 3/8-16 | 1 1/2 | Threaded Stud |
| 3837516200SD | 3/8-16 | 2 | Threaded Stud |
| 3837516250SD | 3/8-16 | 2 1/2 | Threaded Stud |
| 3837516300SD | 3/8-16 | 3 | Threaded Stud |
| 3837516400SD | 3/8-16 | 4 | Threaded Stud |
| 3850013150SD | 1/2-13 | 1 1/2 | Threaded Stud |
| 3850013200SD | 1/2-13 | 2 | Threaded Stud |
| 3850013250SD | 1/2-13 | 2 1/2 | Threaded Stud |
| 3850013300SD | 1/2-13 | 3 | Threaded Stud |
| 3850013400SD | 1/2-13 | 4 | Threaded Stud |
| 3850013500SD | 1/2-13 | 5 | Threaded Stud |



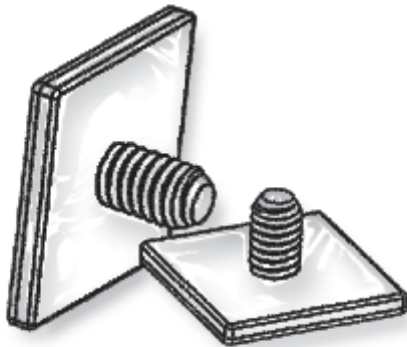
SCREWS, BOLTS, AND THREADED ROD

Micro Plastics' nylon base with threaded stud has very high bond (VHB) white closed cell acrylic foam carrier with all purpose acrylic adhesive. Shear and peel strength is very high and material has very good solvent resistance. Acrylic adhesive has fair initial adhesion with gradual adhesion build up over 72 hours. Surface must be unified, dry, and free of contamination. Firm pressure must be applied to increase the cold flow and contact of the adhesive with the substrate.

Parts can be purchased **without VHB adhesive foam**, just add **WOAF** to the end of part number.

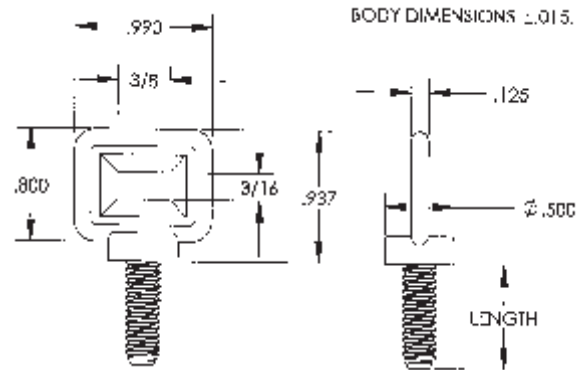
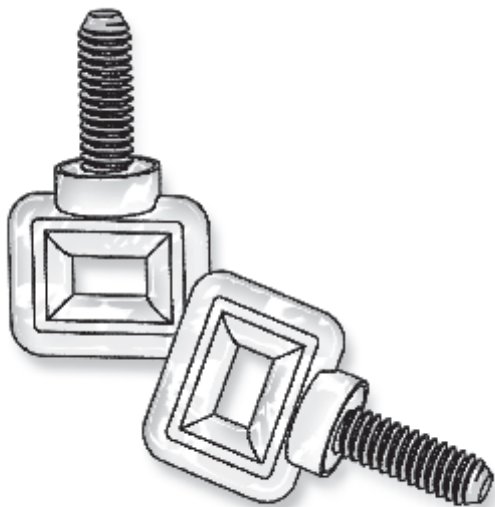


SQUARE BASE WITH THREADED STUD



| ITEM NUMBER | THREAD | LENGTH | TOLERANCE |
|---------------|--------|--------|---------------|
| 011032ABTS050 | 1032 | 1/2 | +0.000/-0.020 |
| 011032ABTS075 | 1032 | 3/4 | +0.000/-0.030 |
| 011032ABTS100 | 1032 | 1 | +0.000/-0.030 |
| 012520ABTS050 | 1/4 | 1/2 | +0.000/-0.030 |
| 012520ABTS075 | 1/4 | 3/4 | +0.000/-0.030 |
| 012520ABTS100 | 1/4 | 1 | +0.000/-0.030 |
| 013118ABTS050 | 5/16 | 1/2 | +0.000/-0.030 |
| 013118ABTS075 | 5/16 | 3/4 | +0.000/-0.030 |
| 013118ABTS100 | 5/16 | 1 | +0.000/-0.030 |

FLAT HEAD WING SCREW



| ITEM NUMBER | THREAD | LENGTH | TOLERANCE |
|----------------|--------|--------|---------------|
| 0101032FHWS050 | 1032 | 1/2 | +0.000/-0.020 |
| 0101032FHWS075 | 1032 | 3/4 | +0.000/-0.030 |
| 0101032FHWS100 | 1032 | 1 | +0.000/-0.030 |
| 0125020FHWS050 | 1/4 | 1/2 | +0.000/-0.030 |
| 0125020FHWS075 | 1/4 | 3/4 | +0.000/-0.030 |
| 0125020FHWS100 | 1/4 | 1 | +0.000/-0.030 |
| 0131218FHWS050 | 5/16 | 1/2 | +0.000/-0.030 |
| 0131218FHWS075 | 5/16 | 3/4 | +0.000/-0.030 |
| 0131218FHWS100 | 5/16 | 1 | +0.000/-0.030 |

SCREWS, BOLTS, AND THREADED ROD

SECTION

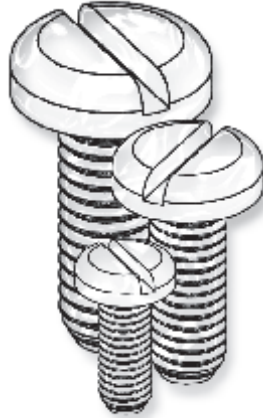
II

Polycarbonate is one of the toughest, most dimensionally stable thermoplastics over a wide temperature range. It has an exceptionally high impact strength and is unaffected by water below 140° F. **Polycarbonate** is unaffected by greases, oils, detergents, aliphatic hydrocarbons, most mineral acids, and the higher alcohols. It is attacked by chlorinated hydrocarbons and most aromatic solvents, ester, and ketone. **Polycarbonate** has white water transparency with a 90° light transmission. Melting Point 309 °F per ASTM D789. Underwriters Lab rating UL94V2

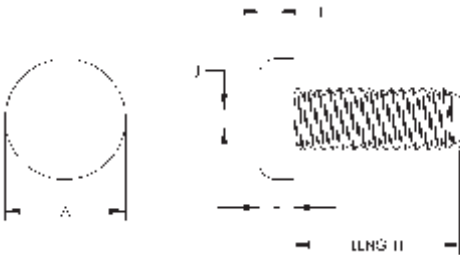
PAN SLOTTED HEADSTYLE - POLYCARBONATE

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|---------------------|-----------|--------------|
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

| THREAD SIZE | A | H | J | T |
|-------------|-----------|-----------|-----------|-----------|
| 4 | .205-.219 | .058-.068 | .031-.039 | .030-.040 |
| 6 | .256-.270 | .072-.082 | .039-.048 | .037-.050 |
| 8 | .306-.322 | .085-.096 | .045-.054 | .045-.058 |
| 10 | .357-.373 | .099-.110 | .050-.060 | .053-.068 |



Transparent



| PART NUMBER | THREAD | LENGTH | MATERIAL |
|--------------|--------|--------|---------------|
| 010440P025PC | 440 | 1/4 | POLYCARBONATE |
| 010440P028PC | 440 | 9/32 | POLYCARBONATE |
| 010440P037PC | 440 | 3/8 | POLYCARBONATE |
| 010440P050PC | 440 | 1/2 | POLYCARBONATE |
| 010632P025PC | 632 | 1/4 | POLYCARBONATE |
| 010632P037PC | 632 | 3/8 | POLYCARBONATE |
| 010632P050PC | 632 | 1/2 | POLYCARBONATE |
| 010632P062PC | 632 | 5/8 | POLYCARBONATE |
| 010632P075PC | 632 | 3/4 | POLYCARBONATE |
| 010832P012PC | 832 | 1/8 | POLYCARBONATE |
| 010832P025PC | 832 | 1/4 | POLYCARBONATE |
| 010832P037PC | 832 | 3/8 | POLYCARBONATE |
| 010832P050PC | 832 | 1/2 | POLYCARBONATE |
| 010832P062PC | 832 | 5/8 | POLYCARBONATE |
| 010832P075PC | 832 | 3/4 | POLYCARBONATE |
| 011032P025PC | 1032 | 1/4 | POLYCARBONATE |
| 011032P037PC | 1032 | 3/8 | POLYCARBONATE |
| 011032P050PC | 1032 | 1/2 | POLYCARBONATE |
| 011032P062PC | 1032 | 5/8 | POLYCARBONATE |
| 011032P075PC | 1032 | 3/4 | POLYCARBONATE |
| 011032P100PC | 1032 | 1 | POLYCARBONATE |

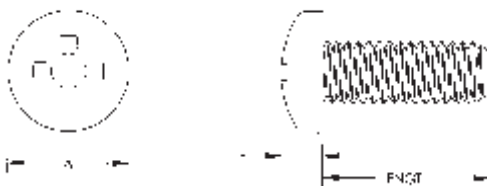
PAN PHILLIPS HEADSTYLE - POLYCARBONATE

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|---------------------|-----------|--------------|
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

| THREAD SIZE | A | H |
|-------------|-------------|-------------|
| 4 | .205 - .219 | .070 - .080 |
| 6 | .256 - .270 | .087 - .097 |
| 8 | .306 - .322 | .105 - .115 |
| 10 | .357 - .373 | .122 - .133 |



Transparent



| PART NUMBER | THREAD | LENGTH | MATERIAL |
|--------------|--------|--------|---------------|
| 010440W025PC | 440 | 1/4 | POLYCARBONATE |
| 010440W028PC | 440 | 9/32 | POLYCARBONATE |
| 010440W037PC | 440 | 3/8 | POLYCARBONATE |
| 010440W050PC | 440 | 1/2 | POLYCARBONATE |
| 010632W025PC | 632 | 1/4 | POLYCARBONATE |
| 010632W037PC | 632 | 3/8 | POLYCARBONATE |
| 010632W050PC | 632 | 1/2 | POLYCARBONATE |
| 010632W062PC | 632 | 5/8 | POLYCARBONATE |
| 010632W075PC | 632 | 3/4 | POLYCARBONATE |
| 010832W012PC | 832 | 1/8 | POLYCARBONATE |
| 010832W025PC | 832 | 1/4 | POLYCARBONATE |
| 010832W037PC | 832 | 3/8 | POLYCARBONATE |
| 010832W050PC | 832 | 1/2 | POLYCARBONATE |
| 010832W062PC | 832 | 5/8 | POLYCARBONATE |
| 010832W075PC | 832 | 3/4 | POLYCARBONATE |
| 011032W025PC | 1032 | 1/4 | POLYCARBONATE |
| 011032W037PC | 1032 | 3/8 | POLYCARBONATE |
| 011032W050PC | 1032 | 1/2 | POLYCARBONATE |
| 011032W062PC | 1032 | 5/8 | POLYCARBONATE |
| 011032W075PC | 1032 | 3/4 | POLYCARBONATE |
| 011032W100PC | 1032 | 1 | POLYCARBONATE |

SCREWS, BOLTS, AND THREADED ROD

Polycarbonate is one of the toughest, most dimensionally stable thermoplastics over a wide temperature range. It has an exceptionally high impact strength and is unaffected by water below 140° F. **Polycarbonate** is unaffected by greases, oils, detergents, aliphatic hydrocarbons, most mineral acids, and the higher alcohols. It is attacked by chlorinated hydrocarbons and most aromatic solvents, ester, and ketone. **Polycarbonate** has white water transparency with a 90° light transmission. Melting Point 309 °F per ASTM D789. Underwriters Lab rating UL94V2

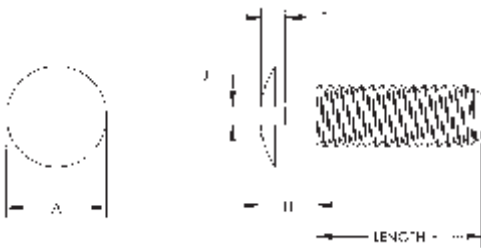
FILLISTER SLOTTED HEADSTYLE - POLYCARBONATE

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|--------------------|-----------------|--------------------|
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

| THREAD SIZE | A | H | J | T |
|-------------|-----------|-----------|-----------|-----------|
| 4 | .166-.183 | .088-.107 | .031-.039 | .035-.048 |
| 6 | .208-.226 | .111-.132 | .039-.048 | .045-.060 |
| 8 | .250-.270 | .133-.156 | .045-.054 | .054-.071 |
| 10 | .292-.313 | .156-.180 | .050-.060 | .064-.083 |



Transparent



| PART NUMBER | THREAD | LENGTH | MATERIAL |
|--------------|--------|--------|---------------|
| 010440F025PC | 440 | 1/4 | POLYCARBONATE |
| 010440F028PC | 440 | 9/32 | POLYCARBONATE |
| 010440F037PC | 440 | 3/8 | POLYCARBONATE |
| 010440F050PC | 440 | 1/2 | POLYCARBONATE |
| 010632F025PC | 632 | 1/4 | POLYCARBONATE |
| 010632F037PC | 632 | 3/8 | POLYCARBONATE |
| 010632F050PC | 632 | 1/2 | POLYCARBONATE |
| 010632F062PC | 632 | 5/8 | POLYCARBONATE |
| 010632F075PC | 632 | 3/4 | POLYCARBONATE |
| 010832F012PC | 832 | 1/8 | POLYCARBONATE |
| 010832F025PC | 832 | 1/4 | POLYCARBONATE |
| 010832F037PC | 832 | 3/8 | POLYCARBONATE |
| 010832F050PC | 832 | 1/2 | POLYCARBONATE |
| 010832F062PC | 832 | 5/8 | POLYCARBONATE |
| 010832F075PC | 832 | 3/4 | POLYCARBONATE |
| 011032F025PC | 1032 | 1/4 | POLYCARBONATE |
| 011032F037PC | 1032 | 3/8 | POLYCARBONATE |
| 011032F050PC | 1032 | 1/2 | POLYCARBONATE |
| 011032F062PC | 1032 | 5/8 | POLYCARBONATE |
| 011032F075PC | 1032 | 3/4 | POLYCARBONATE |
| 011032F100PC | 1032 | 1 | POLYCARBONATE |

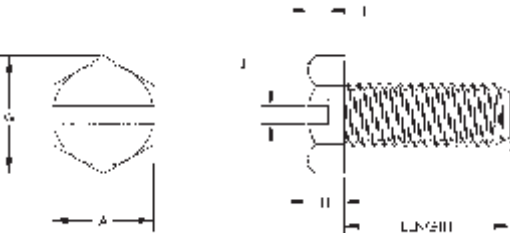
HEX SLOTTED HEADSTYLE - POLYCARBONATE

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-------------------------|--------------------|-----------------|--------------------|
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

| THREAD SIZE | A | W | H | J | T |
|-------------|-----------|----------|-----------|-----------|-----------|
| 4 | .181-.188 | .202 MIN | .049/.060 | .031/.039 | .025-.036 |
| 6 | .244-.250 | .272 MIN | .080-.093 | .039-.048 | .033-.046 |
| 8 | .244-.250 | .272 MIN | .096-.110 | .045-.054 | .052-.066 |
| 10 | .305-.312 | .340 MIN | .105-.120 | .050-.060 | .057-.072 |



Transparent



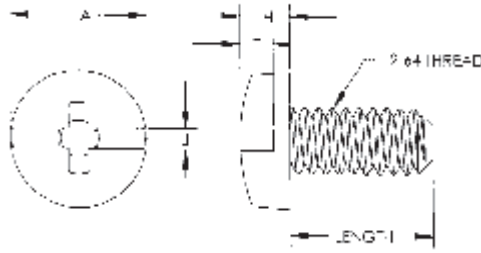
| PART NUMBER | THREAD | LENGTH | MATERIAL |
|--------------|--------|--------|---------------|
| 010440X025PC | 440 | 1/4 | POLYCARBONATE |
| 010440X028PC | 440 | 9/32 | POLYCARBONATE |
| 010440X037PC | 440 | 3/8 | POLYCARBONATE |
| 010440X050PC | 440 | 1/2 | POLYCARBONATE |
| 010632X025PC | 632 | 1/4 | POLYCARBONATE |
| 010632X037PC | 632 | 3/8 | POLYCARBONATE |
| 010632X050PC | 632 | 1/2 | POLYCARBONATE |
| 010632X062PC | 632 | 5/8 | POLYCARBONATE |
| 010632X075PC | 632 | 3/4 | POLYCARBONATE |
| 010832X012PC | 832 | 1/8 | POLYCARBONATE |
| 010832X025PC | 832 | 1/4 | POLYCARBONATE |
| 010832X037PC | 832 | 3/8 | POLYCARBONATE |
| 010832X050PC | 832 | 1/2 | POLYCARBONATE |
| 010832X062PC | 832 | 5/8 | POLYCARBONATE |
| 010832X075PC | 832 | 3/4 | POLYCARBONATE |
| 011032X025PC | 1032 | 1/4 | POLYCARBONATE |
| 011032X037PC | 1032 | 3/8 | POLYCARBONATE |
| 011032X050PC | 1032 | 1/2 | POLYCARBONATE |
| 011032X062PC | 1032 | 5/8 | POLYCARBONATE |
| 011032X075PC | 1032 | 3/4 | POLYCARBONATE |
| 011032X100PC | 1032 | 1 | POLYCARBONATE |

SCREWS, BOLTS, AND THREADED ROD

SECTION

II

NOTE: Head Height may be larger than standard binder headstyle.



| THREAD SIZE | A | H | J | T | DRIVE SIZE |
|-------------|-----------|-----------|-----------|-----------|------------|
| 2 | .171-.181 | .066-.072 | .023-.031 | .040-.046 | #0 |
| 4 | .223-.235 | .071-.077 | .031-.039 | .042-.048 | #1 |
| 6 | .275-.290 | .091-.097 | .039-.048 | .052-.059 | #2 |
| 8 | .326-.344 | .095-.105 | .045-.054 | .050-.065 | #2 |
| 10 | .378-.399 | .112-.123 | .050-.060 | .060-.077 | #2 |
| 1/4 | .498-.525 | .152-.165 | .064-.075 | .084-.105 | #3 |

| Nominal Screw Size | 0000 thru 00 | 0 thru 12 | 1/4 thru 3/4 |
|-----------------------------|----------------------------|-----------|--------------|
| Nominal Screw Length | Tolerance on Length | | |
| Up to 1/2 in., incl | -0.01 | -0.02 | -0.03 |
| Over 1/2 to 1 in., incl | -0.02 | -0.03 | -0.03 |
| Over 1 to 2 in., incl | - | -0.06 | -0.06 |
| Over 2 in. | - | -0.09 | -0.09 |

BINDER COMBINATION HEADSTYLE

| PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH | PART NUMBER | THREAD | LENGTH |
|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|-------------|--------|--------|
| 010256CD009 | 256 | 3/32 | 010440CD150 | 440 | 1 1/2 | 010832CD125 | 832 | 1 1/4 | 012520CD075 | 1/4-20 | 3/4 |
| 010256CD012 | 256 | 1/8 | 010440CD162 | 440 | 1 5/8 | 010832CD137 | 832 | 1 3/8 | 012520CD087 | 1/4-20 | 7/8 |
| 010256CD015 | 256 | 5/32 | 010440CD175 | 440 | 1 3/4 | 010832CD150 | 832 | 1 1/2 | 012520CD100 | 1/4-20 | 1 |
| 010256CD018 | 256 | 3/16 | 010632CD009 | 632 | 3/32 | 010832CD175 | 832 | 1 3/4 | 012520CD125 | 1/4-20 | 1 1/4 |
| 010256CD025 | 256 | 1/4 | 010632CD012 | 632 | 1/8 | 010832CD187 | 832 | 1 7/8 | 012520CD150 | 1/4-20 | 1 1/2 |
| 010256CD028 | 256 | 9/32 | 010632CD015 | 632 | 5/32 | 010832CD200 | 832 | 2 | 012520CD175 | 1/4-20 | 1 3/4 |
| 010256CD031 | 256 | 5/16 | 010632CD018 | 632 | 3/16 | 011024CD012 | 1024 | 1/8 | 012520CD200 | 1/4-20 | 2 |
| 010256CD037 | 256 | 3/8 | 010632CD025 | 632 | 1/4 | 011024CD018 | 1024 | 3/16 | 012520CD250 | 1/4-20 | 2 1/2 |
| 010256CD039 | 256 | 25/64 | 010632CD031 | 632 | 5/16 | 011024CD025 | 1024 | 1/4 | 012528CD018 | 1/4-28 | 3/16 |
| 010256CD043 | 256 | 7/16 | 010632CD037 | 632 | 3/8 | 011024CD031 | 1024 | 5/16 | 012528CD025 | 1/4-28 | 1/4 |
| 010256CD050 | 256 | 1/2 | 010632CD043 | 632 | 7/16 | 011024CD037 | 1024 | 3/8 | 012528CD037 | 1/4-28 | 3/8 |
| 010256CD056 | 256 | 9/16 | 010632CD050 | 632 | 1/2 | 011024CD050 | 1024 | 1/2 | 012528CD062 | 1/4-28 | 5/8 |
| 010256CD062 | 256 | 5/8 | 010632CD056 | 632 | 9/16 | 011024CD062 | 1024 | 5/8 | 012528CD075 | 1/4-28 | 3/4 |
| 010256CD075 | 256 | 3/4 | 010632CD062 | 632 | 5/8 | 011024CD075 | 1024 | 3/4 | 012528CD100 | 1/4-28 | 1 |
| 010256CD087 | 256 | 7/8 | 010632CD068 | 632 | 11/16 | 011024CD100 | 1024 | 1 | | | |
| 010256CD100 | 256 | 1 | 010632CD075 | 632 | 3/4 | 011024CD125 | 1024 | 1 1/4 | | | |
| 010256CD112 | 256 | 1 1/8 | 010632CD087 | 632 | 7/8 | 011024CD150 | 1024 | 1 1/2 | | | |
| 010264CD018 | 264 | 3/16 | 010632CD100 | 632 | 1 | 011032CD012 | 1032 | 1/8 | | | |
| 010264CD037 | 264 | 3/8 | 010632CD112 | 632 | 1 1/8 | 011032CD018 | 1032 | 3/16 | | | |
| 010440CD009 | 440 | 3/32 | 010632CD125 | 632 | 1 1/4 | 011032CD025 | 1032 | 1/4 | | | |
| 010440CD012 | 440 | 1/8 | 010632CD150 | 632 | 1 1/2 | 011032CD031 | 1032 | 5/16 | | | |
| 010440CD014 | 440 | 9/64 | 010632CD162 | 632 | 1 5/8 | 011032CD037 | 1032 | 3/8 | | | |
| 010440CD018 | 440 | 3/16 | 010632CD175 | 632 | 1 3/4 | 011032CD043 | 1032 | 7/16 | | | |
| 010440CD025 | 440 | 1/4 | 010632CD187 | 632 | 1 7/8 | 011032CD050 | 1032 | 1/2 | | | |
| 010440CD028 | 440 | 9/32 | 010632CD200 | 632 | 2 | 011032CD062 | 1032 | 5/8 | | | |
| 010440CD031 | 440 | 5/16 | 010632CD225 | 632 | 2 1/4 | 011032CD075 | 1032 | 3/4 | | | |
| 010440CD037 | 440 | 3/8 | 010832CD012 | 832 | 1/8 | 011032CD081 | 1032 | 13/16 | | | |
| 010440CD043 | 440 | 7/16 | 010832CD018 | 832 | 3/16 | 011032CD087 | 1032 | 7/8 | | | |
| 010440CD050 | 440 | 1/2 | 010832CD025 | 832 | 1/4 | 011032CD100 | 1032 | 1 | | | |
| 010440CD056 | 440 | 9/16 | 010832CD028 | 832 | 9/32 | 011032CD106 | 1032 | 1-1/16 | | | |
| 010440CD062 | 440 | 5/8 | 010832CD031 | 832 | 5/16 | 011032CD125 | 1032 | 1 1/4 | | | |
| 010440CD068 | 440 | 11/16 | 010832CD037 | 832 | 3/8 | 011032CD150 | 1032 | 1 1/2 | | | |
| 010440CD075 | 440 | 3/4 | 010832CD043 | 832 | 7/16 | 011032CD175 | 1032 | 1 3/4 | | | |
| 010440CD087 | 440 | 7/8 | 010832CD050 | 832 | 1/2 | 011032CD200 | 1032 | 2 | | | |
| 010440CD100 | 440 | 1 | 010832CD062 | 832 | 5/8 | 012520CD025 | 1/4-20 | 1/4 | | | |
| 010440CD112 | 440 | 1 1/8 | 010832CD075 | 832 | 3/4 | 012520CD031 | 1/4-20 | 5/16 | | | |
| 010440CD118 | 440 | 1 3/16 | 010832CD087 | 832 | 7/8 | 012520CD037 | 1/4-20 | 3/8 | | | |
| 010440CD125 | 440 | 1 1/4 | 010832CD100 | 832 | 1 | 012520CD050 | 1/4-20 | 1/2 | | | |
| 010440CD137 | 440 | 1 3/8 | 010832CD112 | 832 | 1 1/8 | 012520CD062 | 1/4-20 | 5/8 | | | |



UNIVERSAL NUTS

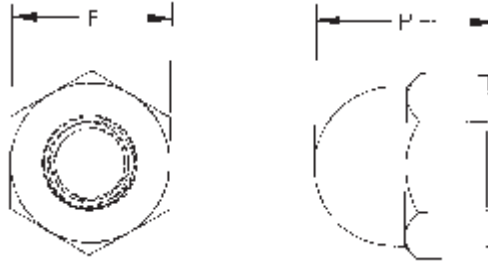
STOCKED IN NYLON 6/6 UL 94V2 - CAN BE FURNISHED IN ACETAL

SECTION

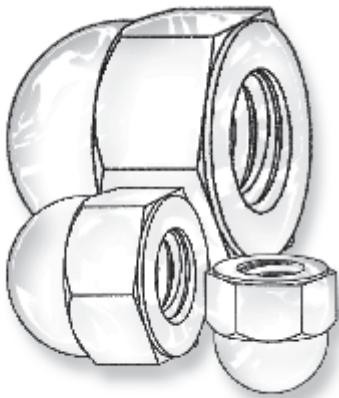


New Sizes

METRIC Sizes
Also Available
Page 235



NYLON CAP NUTS

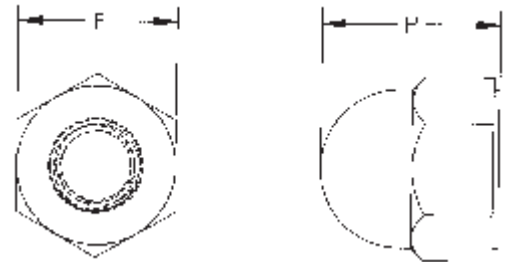


"F" TOLERANCES +/- .010

| ITEM NUMBER | DESCRIPTION | F | H * REF. |
|-------------|-----------------|--------------|--------------|
| 0500440CN | 440 CAP NUT | .250 (6,35) | .280 (7,11) |
| 0500632CN | 632 CAP NUT | .305 (7,75) | .345 (8,76) |
| 0500832CN | 832 CAP NUT | .330 (8,38) | .375 (9,53) |
| 0501024CN | 1024 CAP NUT | .365 (9,27) | .400 (10,16) |
| 0501032CN | 1032 CAP NUT | .365 (9,27) | .400 (10,16) |
| 0525020CN | 1/4-20 CAP NUT | .425 (10,80) | .475 (12,07) |
| 0525028CN | 1/4-28 CAP NUT | .425 (10,80) | .475 (12,07) |
| 0531218CN | 5/16-18 CAP NUT | .500 (12,70) | .530 (13,46) |
| 0531224CN | 5/16-24 CAP NUT | .500 (12,70) | .530 (13,46) |
| 0537516CN | 3/8-16 CAP NUT | .560 (14,22) | .620 (15,75) |
| 0537524CN | 3/8-24 CAP NUT | .560 (14,22) | .620 (15,75) |
| 0550013CN | 1/2-13 CAP NUT | .750 (19,05) | .810 (20,57) |
| 0550020CN | 1/2-20 CAP NUT | .750 (19,05) | .810 (20,57) |
| 0562511CN | 5/8-11 CAP NUT | .935 (23,75) | .970 (24,64) |

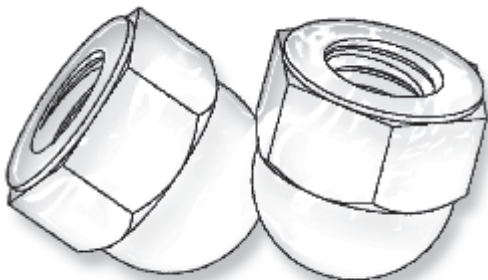
Similar to our standard cap nut, except with a molded-in locking thread. Use for applications which require higher torque, vibration resistance or a more secure assembly.

METRIC Sizes
Also Available
Page 235



NYLON LOCKING CAP NUTS

"F" TOLERANCES +/- .010



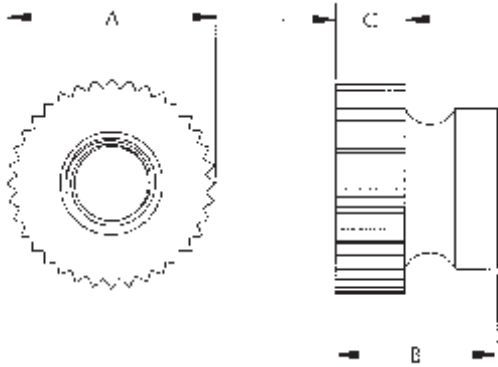
| ITEM NUMBER | DESCRIPTION | F | H * REF. |
|-------------|-------------------------|--------------|--------------|
| 0500440LCN | 440 LOCKING CAP NUT | .250 (6,35) | .280 (7,11) |
| 0500632LCN | 632 LOCKING CAP NUT | .305 (7,75) | .345 (8,76) |
| 0500832LCN | 832 LOCKING CAP NUT | .330 (8,38) | .375 (9,53) |
| 0501024LCN | 1024 LOCKING CAP NUT | .365 (9,27) | .400 (10,16) |
| 0501032LCN | 1032 LOCKING CAP NUT | .365 (9,27) | .400 (10,16) |
| 0525020LCN | 1/4-20 LOCKING CAP NUT | .425 (10,80) | .475 (12,07) |
| 0531218LCN | 5/16-18 LOCKING CAP NUT | .500 (12,70) | .530 (13,46) |

UNIVERSAL NUTS

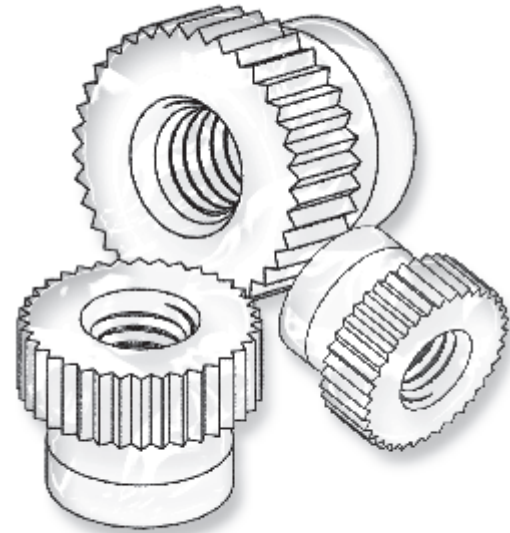
SECTION

III

STOCKED IN NYLON 6/6 UL 94V2 - CAN BE FURNISHED IN ACETAL



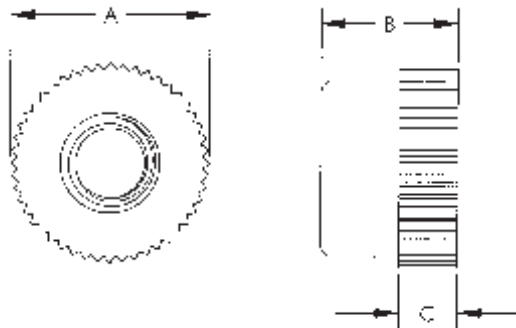
New Sizes



NYLON KNURLED THUMB NUTS

"A" AND "B" TOLERANCES +/- .010

| ITEM NUMBER | DESCRIPTION | A | B | C |
|-------------|-------------------|--------------|--------------|-------------|
| 0800440TN | 440 THUMB NUT | .300 (7,62) | .280 (7,11) | .125 (3,18) |
| 0800632TN | 632 THUMB NUT | .360 (9,14) | .275 (6,99) | .125 (3,18) |
| 0800832TN | 832 THUMB NUT | .425 (10,80) | .305 (7,75) | .140 (3,56) |
| 0801024TN | 1024 THUMB NUT | .425 (10,80) | .325 (8,26) | .140 (3,56) |
| 0801032TN | 1032 THUMB NUT | .425 (10,80) | .325 (8,26) | .140 (3,56) |
| 0825020TN | 1/4-20 THUMB NUT | .540 (13,72) | .365 (9,27) | .155 (3,94) |
| 0831218TN | 5/16-18 THUMB NUT | .612 (15,54) | .400 (10,16) | .170 (4,33) |
| 0831224TN | 5/16-24 THUMB NUT | .612 (15,54) | .400 (10,16) | .170 (4,33) |



METRIC Sizes
Also Available

Page 234

NYLON KNURLED THUMB NUTS "A"

"A" AND "B" TOLERANCES +/- .010

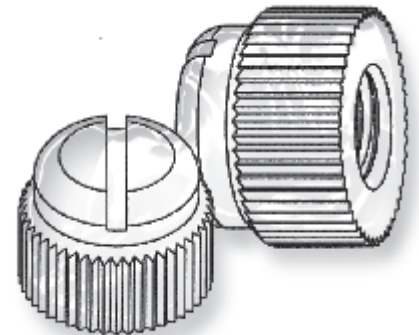
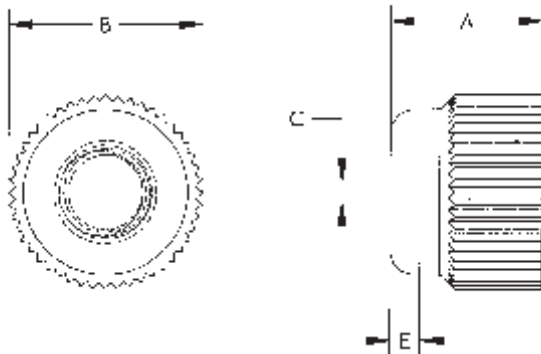
| ITEM NUMBER | DESCRIPTION | A | B | C |
|-------------|-----------------------|--------------|--------------|-------------|
| 0800440TNA | 440 THUMB NUT "A" | .300 (7,62) | .280 (7,11) | .120 (3,05) |
| 0800632TNA | 632 THUMB NUT "A" | .360 (9,14) | .275 (6,99) | .125 (3,18) |
| 0800832TNA | 832 THUMB NUT "A" | .425 (10,80) | .305 (7,75) | .140 (3,56) |
| 0801024TNA | 1024 THUMB NUT "A" | .425 (10,80) | .325 (8,26) | .140 (3,56) |
| 0801032TNA | 1032 THUMB NUT "A" | .425 (10,80) | .325 (8,26) | .140 (3,56) |
| 0825020TNA | 1/4-20 THUMB NUT "A" | .540 (13,72) | .365 (9,27) | .155 (3,94) |
| 0831218TNA | 5/16-18 THUMB NUT "A" | .615 (15,62) | .385 (9,78) | .171 (4,34) |
| 0837516TNA | 3/8-16 THUMB NUT "A" | .687 (17,45) | .430 (10,92) | .187 (4,75) |
| 0850013TNA | 1/2-13 THUMB NUT "A" | .750 (19,05) | .468 (11,89) | .203 (5,16) |



UNIVERSAL NUTS

STOCKED IN NYLON 6/6 UL 94V2 - CAN BE FURNISHED IN ACETAL

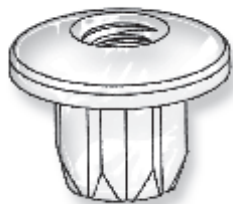
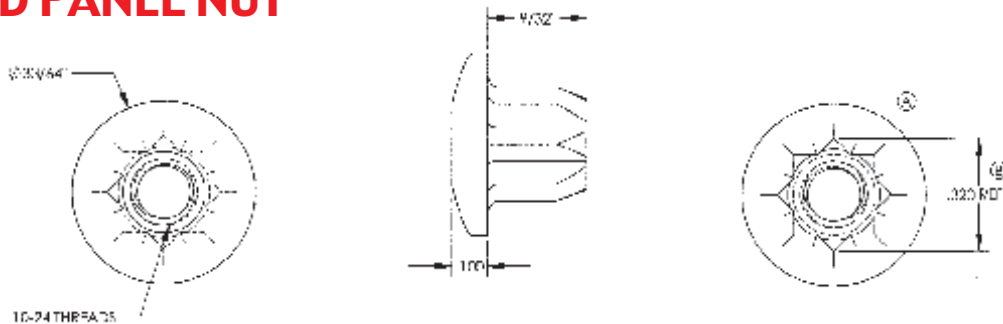
SECTION



NYLON SLOTTED THUMB NUTS

| ITEM NUMBER | DESCRIPTION | A Ref. | * B TOLERANCE +/- .010 | | |
|-------------|--------------------------|--------------|------------------------|-------------|-------------|
| | | | * B | C | E |
| 0500440SCN | 440 SLOTTED THUMB NUT | .295 (7,49) | .317 (8,05) | .039 (9,91) | .070 (1,78) |
| 0500632SCN | 632 SLOTTED THUMB NUT | .334 (8,48) | .348 (8,84) | .044 (1,12) | .051 (1,30) |
| 0500832SCN | 832 SLOTTED THUMB NUT | .378 (9,60) | .381 (9,68) | .049 (1,25) | .059 (1,50) |
| 0501024SCN | 1024 SLOTTED THUMB NUT | 23/64 (9,12) | .400 (10,16) | .056 (1,43) | .068 (1,73) |
| 0501032SCN | 1032 SLOTTED THUMB NUT | 23/64 (9,12) | .400 (10,16) | .056 (1,43) | .068 (1,73) |
| 0525020SCN | 1/4-20 SLOTTED THUMB NUT | .370 (9,40) | .478 (12,14) | .070 (1,78) | .088 (2,24) |

SPLINED PANEL NUT



Watch Instructional Video

[mms://www.microplastics.com/productvideos/SplinedPanelNut.asf](https://www.microplastics.com/productvideos/SplinedPanelNut.asf)



Transparent

NYLON

| ITEM NUMBER | DESCRIPTION |
|-------------|------------------------------|
| 091024SPNN | 1024 SPLINED PANEL NUT Nylon |

POLYCARBONATE

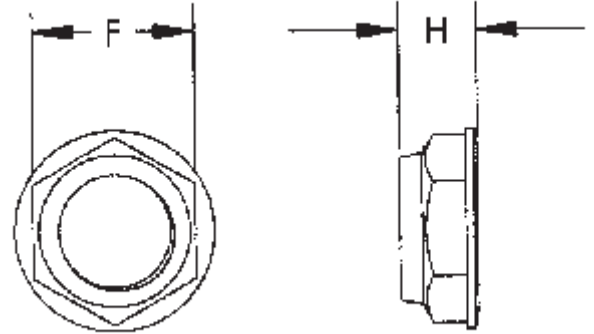
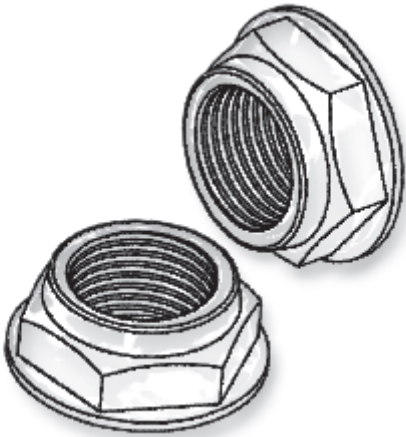
| ITEM NUMBER | DESCRIPTION |
|-------------|--------------------------------------|
| 091024SPNP | 1024 SPLINED PANEL NUT Polycarbonate |

UNIVERSAL NUTS

SECTION



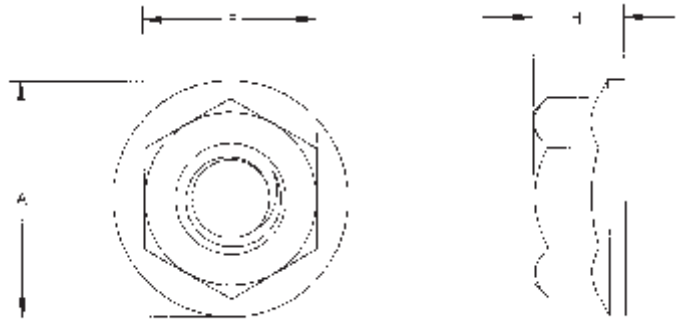
STOCKED IN NYLON 6/6 UL 94V2 - CAN BE FURNISHED IN ACETAL



NYLON DRESS NUT

Micro Plastics' Dress Nut is molded in non-conductive and chemical resistant Nylon 6/6. The aesthetic contour of the nut includes a washer base that gives a finished look to panel fronts.

| ITEM NUMBER | DESCRIPTION | F | H |
|-------------|------------------|--------------|-------------------------|
| 0437532HDN | 3/8-32 DRESS NUT | .500 (12,70) | .245 (6,22) +/- .015 |



Nylon Hex Flange nuts can be used where additional contact area is required. Eliminates the use of a washer in some applications.

HEX FLANGE NUT

TOLERANCES ARE +/- .010 ON ALL DIMENSIONS

| ITEM NUMBER | DESCRIPTION | A | F | H |
|-------------|-----------------------|--------------|--------------|-------------|
| 0401032HFN | 1032 HEX FLANGE NUT | .492 (12,50) | .364 (9,27) | .208 (5,28) |
| 0425020HFN | 1/4-20 HEX FLANGE NUT | .582 (14,78) | .428 (10,87) | .226 (5,74) |

UNIVERSAL NUTS

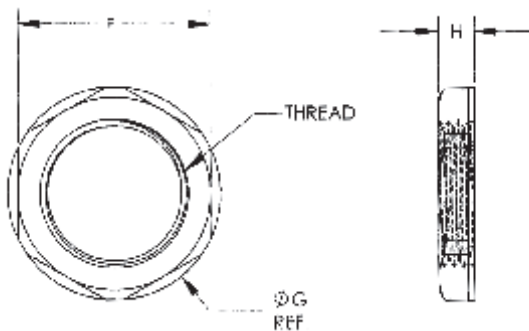
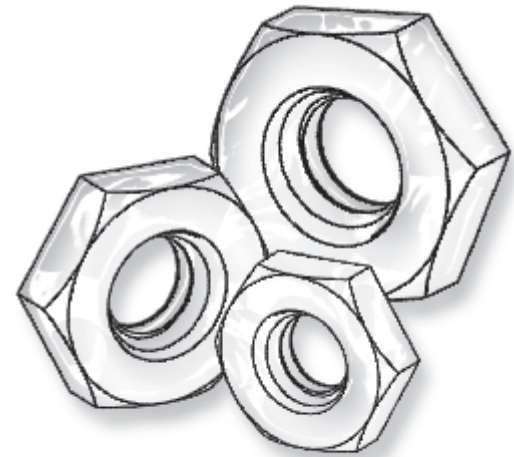
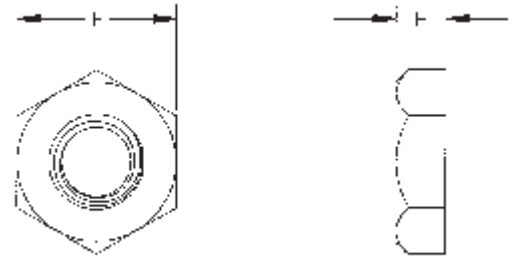
STOCKED IN NYLON 6/6 UL 94V2 - CAN BE FURNISHED IN ACETAL

SECTION

III

NYLON HEX JAM NUTS

| ITEM NUMBER | DESCRIPTION | F | H |
|-------------|--------------------------|---------------|--------------|
| 0431218HJN | 5/16-18 HEX JAM NUT | .500 (12,70) | .190 (4,83) |
| 0431224HJN | 5/16-24 HEX JAM NUT | .500 (12,70) | .190 (4,83) |
| 0437516HJN | 3/8-16 HEX JAM NUT | .500 (12,70) | .125 (3,18) |
| 0437524HJN | 3/8-24 HEX JAM NUT | .500 (12,70) | .125 (3,18) |
| 0437532HJN | 3/8-32 HEX JAM NUT | .500 (12,70) | .125 (3,18) |
| 0437516HHJN | 3/8-16 HEX JAM NUT SPEC. | .670 (17,02) | 7/32 (5,56) |
| 0443714HJN | 7/16-14 HEX JAM NUT | .687 (17,45) | .375 (9,53) |
| 0443720HJN | 7/16-20 HEX JAM NUT | .687 (17,45) | .250 (6,35) |
| 0446832HJN | 15/32-32 HEX JAM NUT | .625 (15,88) | .125 (3,18) |
| 0450013HJN | 1/2-13 HEX JAM NUT | .687 (17,45) | .220 (5,59) |
| 0450024HJN | 1/2-24 HEX JAM NUT | .687 (17,45) | .220 (5,59) |
| 0450028HJN | 1/2-28 HEX JAM NUT | .660 (16,76) | .125 (3,18) |
| 0456218HJN | 9/16-18 HEX JAM NUT | .750 (19,05) | .250 (6,35) |
| 0456224HJN | 9/16-24 HEX JAM NUT | .750 (19,05) | .250 (6,35) |
| 0462511HJN | 5/8-11 HEX JAM NUT | .937 (23,80) | .375 (9,53) |
| 0462518HJN | 5/8-18 HEX JAM NUT | .937 (23,80) | .375 (9,53) |
| 0475010HJN | 3/4-10 HEX JAM NUT | 1.12 (28,50) | .250 (6,35) |
| 0475016HJN | 3/4-16 HEX JAM NUT | 1.12 (28,50) | .250 (6,35) |
| 0475027HJN | 3/4-27 HEX JAM NUT | 1.00 (25,40) | .125 (3,18) |
| 0487514HJN | 7/8-14 HEX JAM NUT | 1.25 (31,75) | .340 (8,64) |
| 0487520HJN | 7/8-20 HEX JAM NUT | 1.000 (25,40) | .125 (3,18) |
| 0410008HJN | 1-8 HEX JAM NUT | 1.48 (37,59) | .410 (10,41) |
| 0412527PJN | 1/8-27 HEX JAM NUT | .56 (14,22) | .11 (2,79) |
| 0425018PJN | 1/4-18 HEX JAM NUT NPT | .740 (18,80) | .187 (4,75) |
| 0437518PJN | 3/8-18 HEX JAM NUT NPT | 1.00 (25,40) | .280 (7,11) |
| 0450014PJN | 1/2-14 HEX JAM NUT NPT | 1.25 (31,75) | .340 (8,64) |
| 0475014PJN | 3/4-14 HEX JAM NUT NPT | 1.48 (37,59) | .410 (10,41) |
| 0475014SJN | 3/4-14 HEX JAM NUT NPS | 1.48 (37,59) | .410 (10,41) |
| 0425018SJN | 1/4-18 HEX JAM NUT NPS | .687 (17,45) | .225 (5,72) |
| 0437518SJN | 3/8-18 HEX JAM NUT NPS | 1.00 (25,40) | .280 (7,11) |
| 0450014SJN | 1/2-14 HEX JAM NUT NPS | 1.25 (31,75) | .340 (8,64) |
| 0475014SJN | 3/4-14 HEX JAM NUT NPS | 1.48 (37,59) | .410 (10,41) |



NYLON HEX JAM NUTS WITH WASHER FACE

| ITEM NUMBER | DESCRIPTION | F | G | H |
|-------------|------------------------------|-----------------|-----------------|-------------|
| 0410011PJN | 1-11-1/2 HEX JAM NUT NPT | 1 21/32 (42,06) | 1 27/32 (46,84) | 5/16 (7,94) |
| 0412511PJN | 1 1/4-11-1/2 HEX JAM NUT NPT | 2 1/8 (53,98) | 2 11/32 (59,54) | 3/8 (9,53) |



UNIVERSAL NUTS

SECTION

III

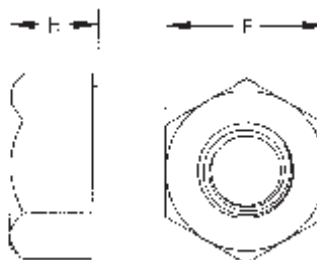
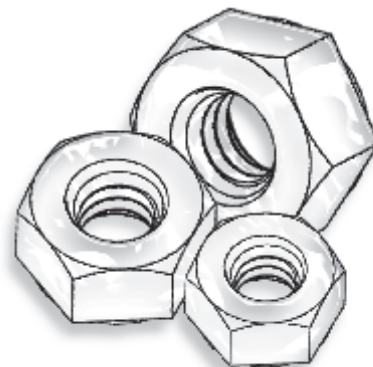
STOCKED IN NYLON 6/6 UL 94V2 - CAN BE FURNISHED IN ACETAL

METRIC Sizes
Also Available
 Page 235

NYLON HEX

TOLERANCES ARE +/- .010

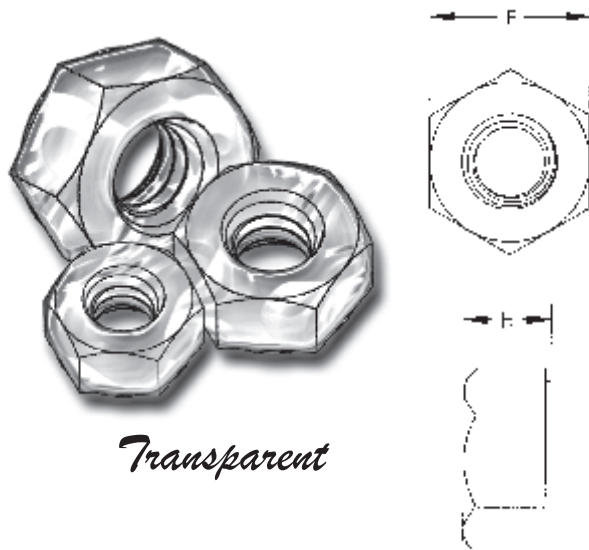
| ITEM NUMBER | DESCRIPTION | F | H |
|-------------|------------------|--------------|--------------|
| 0400256HN | 256 HEX NUT | .180 (4,57) | .070 (1,78) |
| 0400348HN | 348 HEX NUT | .180 (4,57) | .070 (1,78) |
| 0400440HN | 440 HEX NUT | .250 (6,35) | .100 (2,54) |
| 0400632HN | 632 HEX NUT | .305 (7,75) | .120 (3,05) |
| 0400640HN | 640 HEX NUT | .305 (7,75) | .120 (3,05) |
| 0400832HN | 832 HEX NUT | .335 (8,51) | .130 (3,30) |
| 0401024HN | 1024 HEX NUT | .365 (9,27) | .135 (3,43) |
| 0401032HN | 1032 HEX NUT | .365 (9,27) | .135 (3,43) |
| 0401224HN | 1224 HEX NUT | .425 (10,80) | .207 (5,26) |
| 0425020HN | 1/4-20 HEX NUT | .425 (10,80) | .235 (5,97) |
| 0425028HN | 1/4-28 HEX NUT | .425 (10,80) | .235 (5,97) |
| 0431218HN | 5/16-18 HEX NUT | .500 (12,70) | .270 (6,86) |
| 0431224HN | 5/16-24 HEX NUT | .500 (12,70) | .270 (6,86) |
| 0437516HN | 3/8-16 HEX NUT | .560 (14,22) | .330 (8,38) |
| 0437524HN | 3/8-24 HEX NUT | .560 (14,22) | .330 (8,38) |
| 0437532HN | 3/8-32 HEX NUT | .560 (14,22) | .330 (8,38) |
| 0443714HN | 7/16-14 HEX NUT | .685 (17,40) | .380 (9,65) |
| 0443720HN | 7/16-20 HEX NUT | .685 (17,40) | .380 (9,65) |
| 0450013HN | 1/2-13 HEX NUT | .750 (19,05) | .430 (10,92) |
| 0450020HN | 1/2-20 HEX NUT | .750 (19,05) | .430 (10,92) |
| 0462511HN | 5/8-11 HEX NUT | .925 (23,40) | .550 (13,97) |
| 0462518HN | 5/8-18 HEX NUT | .925 (23,50) | .550 (13,97) |
| 0468727HN | 11/16-27 HEX NUT | 1.00 (25,40) | .250 (6,35) |
| 0475010HN | 3/4-10 HEX NUT | 1.10 (27,94) | .640 (16,26) |
| 0487509HN | 7/8-9 HEX NUT | 1.28 (32,51) | .750 (19,05) |
| 0410008HN | 1-8 HEX NUT | 1.47 (37,34) | .870 (22,10) |



NYLON SPECIAL HEX NUTS

ALL TOLERANCES ARE +/- .010

| ITEM NUMBER | DESCRIPTION | F | H |
|-------------|------------------------|--------------|-------------|
| 0400256HNS | 256 SPECIAL HEX NUT | .180 (4,57) | .090 (2,29) |
| 0400440HNS | 440 SPECIAL HEX NUT | .250 (6,35) | .124 (3,15) |
| 0400632HNS | 632 SPECIAL HEX NUT | .305 (7,75) | .146 (3,71) |
| 0400832HNS | 832 SPECIAL HEX NUT | .340 (8,64) | .170 (4,32) |
| 0401024HNS | 1024 SPECIAL HEX NUT | .365 (9,27) | .196 (4,98) |
| 0401032HNS | 1032 SPECIAL HEX NUT | .365 (9,37) | .196 (4,98) |
| 0425020HNS | 1/4-20 SPECIAL HEX NUT | .425 (10,80) | .258 (6,55) |



POLYCARBONATE HEX NUTS

Micro Plastics' Polycarbonate Hex Nuts can be used with our Polycarbonate Screws to produce a transparent fastening. Polycarbonate properties are not affected by water absorption and have better impact and deflection temperature than Nylon.

| ITEM NUMBER | DESCRIPTION | F* | H* |
|-------------|--------------|-------------|-------------|
| 0400440HNPC | 440 HEX NUT | .250 (6,35) | .100 (2,54) |
| 0400632HNPC | 632 HEX NUT | .305 (7,75) | .120 (3,05) |
| 0400832HNPC | 832 HEX NUT | .335 (8,51) | .130 (3,30) |
| 0401032HNPC | 1032 HEX NUT | .365 (9,27) | .135 (3,43) |

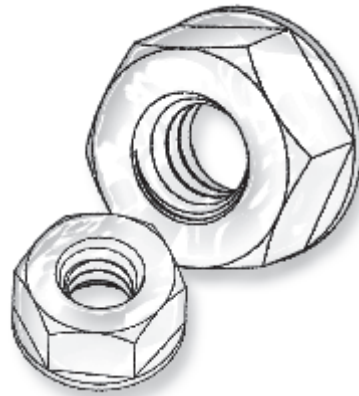
UNIVERSAL NUTS

STOCKED IN NYLON 6/6 UL 94V2 - CAN BE FURNISHED IN ACETAL

SECTION



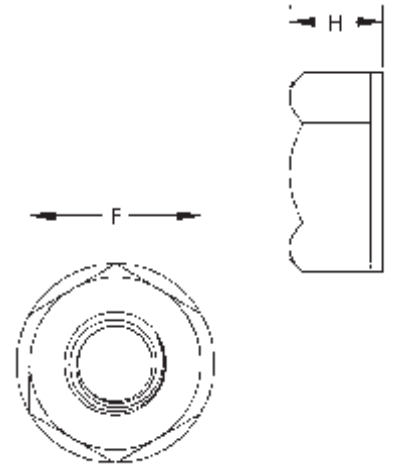
METRIC Sizes
Also Available
 Page 235



NYLON LOCK NUTS

DESIGNED FOR STEEL SCREWS

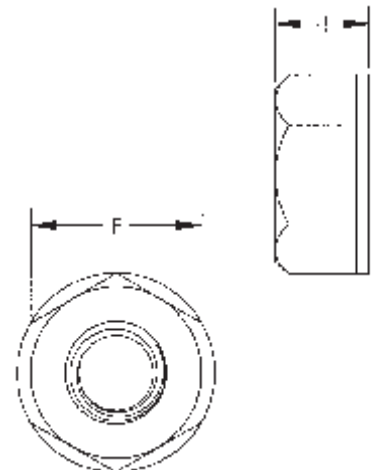
| ITEM NUMBER | DESCRIPTION | TOLERANCES +/- .010 | |
|-------------|-----------------|---------------------|-------------|
| | | F | H |
| 0700256LN | 256 LOCK NUT | .180 (4,57) | .140 (3,56) |
| 0700440LN | 440 LOCK NUT | .250 (6,35) | .180 (4,57) |
| 0700632LN | 632 LOCK NUT | .305 (7,75) | .200 (5,08) |
| 0700832LN | 832 LOCK NUT | .335 (8,51) | .230 (5,84) |
| 0701024LN | 1024 LOCK NUT | .365 (9,27) | .250 (6,35) |
| 0701032LN | 1032 LOCK NUT | .365 (9,27) | .250 (6,35) |
| 0725020LN | 1/4-20 LOCK NUT | .425 (10,80) | .275 (6,99) |



NYLON SELF - THREADING LOCK NUTS

DESIGNED FOR STEEL SCREWS

| ITEM NUMBER | DESCRIPTION | TOLERANCES +/- .010 | |
|-------------|----------------------|---------------------|-------------|
| | | F | H |
| 0700256SLN | 256 SELF - THREAD | .180 (4,57) | .140 (3,56) |
| 0700440SLN | 440 SELF - THREAD | .250 (6,35) | .200 (5,08) |
| 0700632SLN | 632 SELF - THREAD | .305 (7,75) | .200 (5,08) |
| 0700832SLN | 832 SELF - THREAD | .335 (8,51) | .230 (5,84) |
| 0701024SLN | 1024 SELF - THREAD | .365 (9,27) | .250 (6,35) |
| 0701032SLN | 1032 SELF - THREAD | .365 (9,27) | .250 (6,35) |
| 0725020SLN | 1/4-20 SELF - THREAD | .425 (10,80) | .275 (6,99) |



UNIVERSAL NUTS

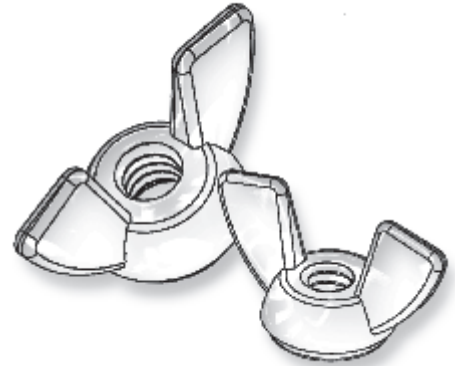
SECTION

III

STOCKED IN NYLON 6/6 UL 94V2 - CAN BE FURNISHED IN ACETAL

**METRIC Sizes
Also Available**

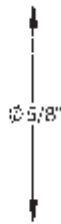
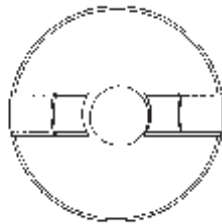
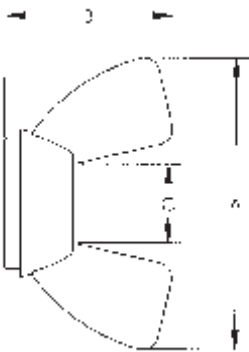
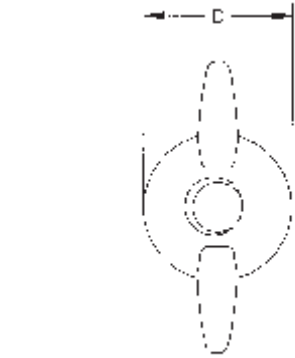
Page 236



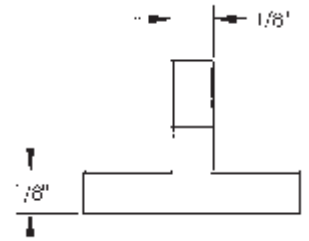
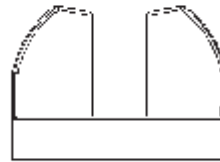
NYLON WING NUTS

TOLERANCES +/- .010

| ITEM NUMBER | DESCRIPTION | A | B | C | D |
|-------------|-------------------|---------------|-------------|-------------|-------------|
| 0600440WN | 440 WING NUT | .90 (22,86) | .48 (12,19) | .23 (5,84) | .40 (10,16) |
| 0600632WN | 632 WING NUT | .90 (22,86) | .48 (12,19) | .23 (5,84) | .40 (10,16) |
| 0600832WN | 832 WING NUT | .90 (22,86) | .48 (12,19) | .23 (5,84) | .40 (10,16) |
| 0601024WN | 1024 WING NUT | .90 (22,86) | .48 (12,19) | .23 (5,84) | .40 (10,16) |
| 0601032WN | 1032 WING NUT | .90 (22,86) | .48 (12,19) | .23 (5,84) | .40 (10,16) |
| 0601024WNA | 1024 WING NUT-A | 1.10 (27,94) | .63 (16,00) | .30 (7,62) | .56 (14,22) |
| 0601032WNA | 1032 WING NUT-A | 1.10 (27,94) | .63 (16,00) | .30 (7,62) | .56 (14,22) |
| 0625020WNA | 1/4-20 WING NUT-A | 1.090 (27,69) | .63 (16,00) | .30 (7,62) | .56 (14,22) |
| 0625028WNA | 1/4-28 WING NUT-A | 1.10 (27,94) | .63 (16,00) | .30 (7,62) | .56 (14,22) |
| 0625020WN | 1/4-20 WING NUT | 1.36 (34,54) | .71 (18,03) | .36 (9,14) | .65 (16,51) |
| 0625028WN | 1/4-28 WING NUT | 1.36 (34,54) | .71 (18,03) | .36 (9,14) | .65 (16,51) |
| 0631218WN | 5/16-18 WING NUT | 1.37 (34,80) | .72 (18,29) | .38 (9,65) | .64 (16,26) |
| 0637516WN | 3/8-16 WING NUT | 1.37 (34,80) | .72 (18,29) | .38 (9,65) | .64 (16,26) |
| 0637524WN | 3/8-24 WING NUT | 1.37 (34,80) | .72 (18,29) | .38 (9,65) | .64 (16,26) |
| 0643714WN | 7/16-14 WING NUT | 1.76 (44,70) | .90 (22,86) | .56 (14,22) | .85 (21,59) |
| 0650013WN | 1/2-13 WING NUT | 1.76 (44,70) | .90 (22,86) | .56 (14,22) | .85 (21,59) |
| 0656212WN | 9/16-12 WING NUT | 1.76 (44,70) | .90 (22,86) | .56 (14,22) | .85 (21,59) |



5/16" REF.



MATERIAL: CLEAR COPOLYESTER
CAN BE USED WITH TRANSPARENT POLYCARBONATE SCREWS

CLEAR DECORATIVE WING NUT



Transparent

| ITEM NUMBER | DESCRIPTION | THREAD |
|-------------|---------------------|--------|
| 0600832WNC | DECORATIVE WING NUT | 832 |
| 0601024WNC | DECORATIVE WING NUT | 1024 |
| 0601032WNC | DECORATIVE WING NUT | 1032 |
| 0625020WNC | DECORATIVE WING NUT | 1/4-20 |

UNIVERSAL NUTS

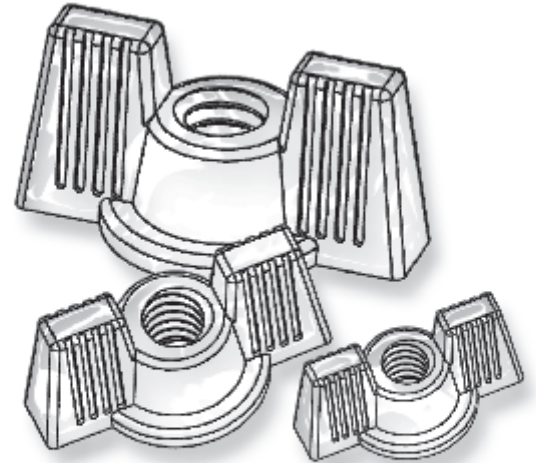
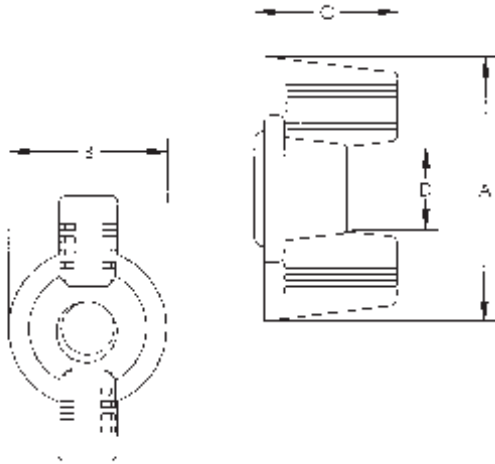
STOCKED IN NYLON 6/6 UL 94V2 - CAN BE FURNISHED IN ACETAL

SECTION

III

**METRIC Sizes
Also Available**

Page 236



NYLON DECO WING NUTS

| ITEM NUMBER | DESCRIPTION | A | B | C | D |
|-----------------|-----------------------|------------------|---------------|----------------|----------------|
| 0600440DECOWN | 440 DECO WING NUT | 5/8" (15,88) | 3/8" (9,53) | 5/16" (7,94) | 15/64" (5,94) |
| 0600632DECOWN | 632 DECO WING NUT | 5/8" (15,88) | 3/8" (9,53) | 5/16" (7,94) | 15/64" (5,94) |
| 0600832DECOWN | 832 DECO WING NUT | 5/8" (15,88) | 3/8" (9,53) | 5/16" (7,94) | 15/64" (5,94) |
| 0601024DECOWN | 1024 DECO WING NUT | 7/8" (22,23) | 1/2" (12,70) | 7/16" (11,10) | 5/16" (7,93) |
| 0601032DECOWN | 1032 DECO WING NUT | 7/8" (22,23) | 1/2" (12,70) | 7/16" (11,10) | 5/16" (7,93) |
| 0625020DECOWN | 1/4-20 DECO WING NUT | 1-11/64" (29,74) | 5/8" (15,88) | 17/32" (13,49) | 3/8" (9,53) |
| 0631218DECOWN * | 5/16-18 DECO WING NUT | 1-9/16" (39,69) | 63/64" (25,0) | 29/64" (11,51) | 39/64" (15,47) |
| 0637516DECOWN * | 3/8-16 DECO WING NUT | 1-9/16" (39,69) | 63/64" (25,0) | 29/64" (11,51) | 21/32" (16,66) |
| 0637524DECOWN * | 3/8-24 DECO WING NUT | 1-9/16" (39,67) | 63/64" (25,0) | 29/64" (11,51) | 21/32" (16,66) |

* PART IS FLUSH ACROSS WINGS

NYLON LOCKING DECO WING NUTS

Similar to our standard wing nut, except with a molded-in locking thread. Use for applications which require higher torque, vibration resistance or a more secure assembly.

**METRIC Sizes
Also Available**

Page 236

| ITEM NUMBER | DESCRIPTION | A | B | C | D |
|--------------|-------------------------|------------------|----------------|----------------|----------------|
| 0600440DLWN | 440 L DECO WING NUT | 5/8" (15,88) | 3/8" (9,53) | 5/16" (7,94) | 15/64" (5,94) |
| 0600632DLWN | 632 L DECO WING NUT | 5/8" (15,88) | 3/8" (9,53) | 5/16" (7,94) | 15/64" (5,94) |
| 0600832DLWN | 832 L DECO WING NUT | 5/8" (15,88) | 3/8" (9,53) | 5/16" (7,94) | 15/64" (5,94) |
| 0601024DLWN | 1024 L DECO WING NUT | 7/8" (22,23) | 1/2" (12,70) | 7/16" (11,10) | 5/16" (7,93) |
| 0601032DLWN | 1032 L DECO WING NUT | 7/8" (22,23) | 1/2" (12,70) | 7/16" (11,10) | 5/16" (7,93) |
| 0625020DLWN | 1/4-20 L DECO WING NUT | 1-11/64" (29,74) | 5/8" (15,88) | 17/32" (13,49) | 3/8" (9,53) |
| *0631218DLWN | 5/16-18 L DECO WING NUT | 1-9/16" (39,69) | 63/64" (25,00) | 29/64" (11,51) | 39/64" (15,48) |

*PART IS FLUSH ACROSS THE WINGS

WASHERS, SHOULDER WASHERS & SCREW INSULATORS

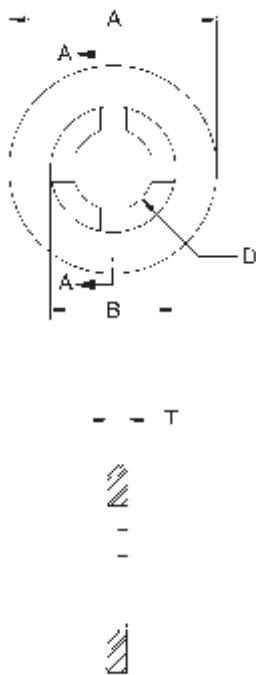
SECTION IV



Similar to our standard flat washers, but with a specially configured I.D. designed to grip the outside of the screw shank. The washer slides on the screw easily, but is retained on the screw. For use in applications requiring pre-assembly of the screw and washer, to reduce final assembly cost. Other sizes will be tooled on request.

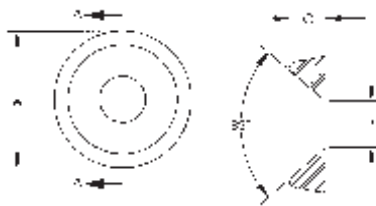
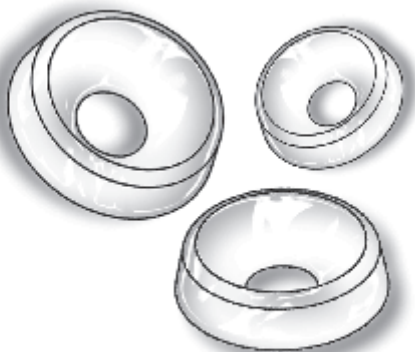
New Sizes

NYLON RETAINING WASHERS



| ITEM NUMBER | DESCRIPTION | A | B | D | T |
|---------------|----------------------|---------|---------------|--------------|-------------|
| 16FWRT002032 | FWRT 2-032 13/64 | (5,16) | .115 (2,92) | .078 (1,98) | .032 (0,81) |
| 16FWRT002062 | FWRT 2-062 13/64 | (5,16) | .115 (2,92) | .078 (1,98) | .062 (1,58) |
| 16FWRT004032 | FWRT 4-032 17/64 | (6,75) | .156 (3,96) | .102 (2,59) | .032 (0,81) |
| 16FWRT004062 | FWRT 4-062 17/64 | (6,75) | .156 (3,96) | .102 (2,59) | .062 (1,58) |
| 16FWRT004125 | FWRT 4-125 17/64 | (6,75) | .156 (3,96) | .102 (2,59) | .125 (3,18) |
| 16FWRT006032 | FWRT 6-032 21/64 | (8,33) | .198 (5,03) | .128 (3,25) | .032 (0,81) |
| 16FWRT006062 | FWRT 6-062 21/64 | (8,33) | .198 (5,03) | .128 (3,25) | .062 (1,58) |
| 16FWRT008032 | FWRT 8-032 25/64 | (9,92) | .235 (5,97) | .152 (3,86) | .032 (0,81) |
| 16FWRT008062 | FWRT 8-062 25/64 | (9,92) | .235 (5,97) | .152 (3,86) | .062 (1,58) |
| 16FWRT010032 | FWRT 10-032 29/64 | (11,51) | .277 (7,04) | .177 (4,50) | .032 (0,81) |
| 16FWRT010062 | FWRT 10-062 29/64 | (11,51) | .277 (7,04) | .177 (4,50) | .062 (1,58) |
| 16FWRT010062A | FWRT 10-062A 1/2 | (12,70) | .277 (7,04) | .177 (4,50) | .062 (1,58) |
| 16FWRT250032 | FWRT 250-032 19/32 | (15,08) | .375 (9,53) | .234 (5,94) | .032 (0,81) |
| 16FWRT250032A | FWRT 250-032A .500 | (12,70) | .344 (8,74) | .234 (5,94) | .032 (0,81) |
| 16FWRT250062 | FWRT 250-062 19/32 | (15,08) | .375 (9,53) | .234 (5,94) | .062 (1,58) |
| 16FWRT312032 | FWRT 312-032 47/64 | (18,65) | .470 (11,94) | .292 (7,42) | .032 (0,81) |
| 16FWRT312062 | FWRT 312-062 47/64 | (18,65) | .470 (11,94) | .292 (7,42) | .062 (1,58) |
| 16FWRT375032 | FWRT 375-032 57/64 | (22,62) | .564 (14,33) | .350 (8,89) | .032 (0,81) |
| 16FWRT375062 | FWRT 375-062 57/64 | (22,62) | .564 (14,33) | .350 (8,89) | .062 (1,58) |
| 16FWRT375062A | FWRT 375-062A 1.260 | (32,00) | .563 (14,30) | .350 (8,89) | .062 (1,57) |
| 16FWRT437032 | FWRT 437-032 1-1/32 | (26,19) | .570 (14,48) | .410 (10,41) | .032 (0,81) |
| 16FWRT437062 | FWRT 437-062 1-1/32 | (26,19) | .570 (14,48) | .410 (10,41) | .062 (1,58) |
| 16FWRT500032 | FWRT 500-032 1-1/8 | (28,58) | .690 (17,53) | .468 (11,89) | .032 (0,81) |
| 16FWRT500062 | FWRT 500-062 1-1/8 | (28,58) | .690 (17,53) | .468 (11,89) | .062 (1,58) |
| 16FWRT875062 | FWRT 875-062 1-11/32 | (34,14) | .940 (23,88) | .825 (20,96) | .062 (1,58) |
| 16FWRT999062 | FWRT 999-062 1.385 | (35,18) | 1.070 (27,18) | .970 (24,64) | .062 (1,57) |

NYLON FINISHING WASHERS



Available in natural or black nylon, these molded washers protect cabinets from scratching, cover misaligned holes, etc. May also be used as glides, bumpers, feet, and spacers.

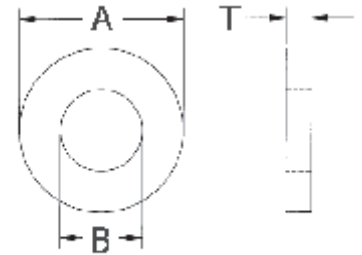
| ITEM NUMBER | DESCRIPTION | A | B | C |
|-------------|-------------|--------------|-------------|-------------|
| 11SFW0006 | SFW 6 | .437 (11,10) | .143 (3,63) | .100 (2,54) |
| 11SFW0008 | SFW 8 | .510 (12,95) | .171 (4,34) | .115 (2,92) |
| 11SFW0010 | SFW 10 | .575 (14,61) | .196 (4,98) | .152 (3,86) |
| 11SFW0012 | SFW 12 | .609 (15,47) | .225 (5,75) | .160 (4,06) |
| 11SFW0025 | SFW 25 | .683 (17,35) | .260 (6,61) | .180 (4,57) |

We will also tool custom flatwashers for a nominal engineering charge .
Size range up to 3" O.D. Minimum thickness 1/32"

METRIC Sizes
Also Available
Page 237

NYLON STANDARD FLAT WASHERS

| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|-------------|--------------|-------------|
| 16FW002032 | FW 2-032 | 1/4 (6,35) | .090 (2,29) | .032 (0,81) |
| 16FW002062 | FW 2-062 | 1/4 (6,35) | .090 (2,29) | .062 (1,58) |
| 16FW002093 | FW 2-093 | 1/4 (6,35) | .090 (2,29) | .093 (2,36) |
| 16FW002125 | FW 2-125 | 1/4 (6,35) | .090 (2,29) | .125 (3,18) |
| 16FW004032 | FW 4-032 | 1/4 (6,35) | .115 (2,92) | .032 (0,81) |
| 16FW004062 | FW 4-062 | 1/4 (6,35) | .115 (2,92) | .062 (1,58) |
| 16FW004093 | FW 4-093 | 1/4 (6,35) | .115 (2,92) | .093 (2,36) |
| 16FW004125 | FW 4-125 | 1/4 (6,35) | .115 (2,92) | .125 (3,18) |
| 16FW006032 | FW 6-032 | 5/16 (7,94) | .140 (3,56) | .032 (0,81) |
| 16FW006062 | FW 6-062 | 5/16 (7,94) | .140 (3,56) | .062 (1,58) |
| 16FW006093 | FW 6-093 | 5/16 (7,94) | .140 (3,56) | .093 (2,36) |
| 16FW006125 | FW 6-125 | 5/16 (7,94) | .140 (3,56) | .125 (3,18) |
| 16FW008032 | FW 8-032 | 3/8 (9,53) | .171 (4,34) | .032 (0,81) |
| 16FW008062 | FW 8-062 | 3/8 (9,53) | .171 (4,34) | .062 (1,58) |
| 16FW008093 | FW 8-093 | 3/8 (9,53) | .171 (4,34) | .093 (2,36) |
| 16FW008125 | FW 8-125 | 3/8 (9,53) | .171 (4,34) | .125 (3,18) |
| 16FW010032 | FW 10-032 | 3/8 (9,53) | .194 (4,93) | .032 (0,81) |
| 16FW010062 | FW 10-062 | 3/8 (9,53) | .194 (4,93) | .062 (1,58) |
| 16FW010093 | FW 10-093 | 3/8 (9,53) | .194 (4,93) | .093 (2,36) |
| 16FW010125 | FW 10-125 | 3/8 (9,53) | .194 (4,93) | .125 (3,18) |
| 16FW250032 | FW 250-032 | 1/2 (12,70) | .257 (6,53) | .032 (0,81) |
| 16FW250062 | FW 250-062 | 1/2 (12,70) | .257 (6,53) | .062 (1,58) |
| 16FW250093 | FW 250-093 | 1/2 (12,70) | .257 (6,53) | .093 (2,36) |
| 16FW250125 | FW 250-125 | 1/2 (12,70) | .257 (6,53) | .125 (3,18) |
| 16FW312032 | FW 312-032 | 1/2 (12,70) | .317 (8,05) | .032 (0,81) |
| 16FW312062 | FW 312-062 | 1/2 (12,70) | .317 (8,05) | .062 (1,58) |
| 16FW312093 | FW 312-093 | 1/2 (12,70) | .317 (8,05) | .093 (2,36) |
| 16FW312125 | FW 312-125 | 1/2 (12,70) | .317 (8,05) | .125 (3,18) |
| 16FW375032 | FW 375-032 | 5/8 (15,88) | .375 (9,53) | .032 (0,81) |
| 16FW375062 | FW 375-062 | 5/8 (15,88) | .380 (9,65) | .062 (1,58) |
| 16FW375093 | FW 375-093 | 5/8 (15,88) | .380 (9,65) | .093 (2,36) |
| 16FW375125 | FW 375-125 | 5/8 (15,88) | .380 (9,65) | .125 (3,18) |
| 16FW437032 | FW 437-032 | 3/4 (19,05) | .443 (11,25) | .032 (0,81) |
| 16FW437062 | FW 437-062 | 3/4 (19,05) | .443 (11,25) | .062 (1,58) |
| 16FW437093 | FW 437-093 | 3/4 (19,05) | .443 (11,25) | .093 (2,36) |
| 16FW437125 | FW 437-125 | 3/4 (19,05) | .443 (11,25) | .125 (3,18) |
| 16FW500032 | FW 500-032 | 3/4 (19,05) | .505 (12,83) | .032 (0,81) |
| 16FW500062 | FW 500-062 | 3/4 (19,05) | .505 (12,83) | .062 (1,58) |
| 16FW500093 | FW 500-093 | 3/4 (19,05) | .505 (12,83) | .093 (2,36) |
| 16FW500125 | FW 500-125 | 3/4 (19,05) | .505 (12,83) | .125 (3,18) |



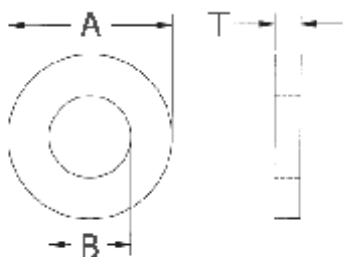
WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

New Sizes

NYLON SPECIAL FLAT WASHERS

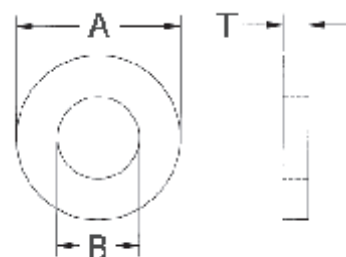
| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|-------------|-------------|-------------|
| 17W00850 | W 850 | .085 (2,16) | .032 (0,81) | .062 (1,57) |
| 17W00901 | W 901 | .090 (2,29) | .031 (0,79) | .031 (0,79) |
| 17W01001 | W 1001 | .100 (2,54) | .035 (0,89) | .020 (0,51) |
| 17W01011 | W 1011 | .125 (3,18) | .032 (0,81) | .060 (1,57) |
| 17W01012 | W 1012 | .120 (3,05) | .063 (1,60) | .180 (4,57) |
| 17W01013 | W 1013 | .120 (3,05) | .045 (1,14) | .130 (3,30) |
| 17W01014 | W 1014 | .120 (3,05) | .055 (1,40) | .080 (2,03) |
| 17W01045 | W 1045 | .156 (3,96) | .031 (0,79) | .062 (1,57) |
| 17W01381 | W 1381 | .138 (3,51) | .040 (1,02) | .033 (0,84) |
| 17W01560 | W 1560 | .156 (3,96) | .050 (2,00) | .200 (5,08) |
| 17W01566 | W 1566 | .156 (3,96) | .076 (1,93) | .062 (1,57) |
| 17W01581 | W 1581 | .158 (4,01) | .110 (2,79) | .070 (1,79) |
| 17W01701 | W 1701 | .170 (4,32) | .038 (0,97) | .060 (1,52) |
| 17W01702 | W 1702 | .182 (4,62) | .120 (3,05) | .125 (3,17) |
| 17W01784 | W 1784 | .178 (4,52) | .098 (2,49) | .045 (1,14) |
| 17W01791 | W 1791 | .179 (4,55) | .065 (1,65) | .078 (1,98) |
| 17W01802 | W 1802 | .180 (4,57) | .139 (3,53) | .064 (1,63) |
| 17W01803 | W 1803 | .186 (4,72) | .098 (2,49) | .030 (1,02) |
| 17W01804 | W 1804 | .187 (4,75) | .120 (3,05) | .060 (1,52) |
| 17W01805 | W 1805 | .187 (4,75) | .086 (2,18) | .130 (3,30) |
| 17W01806 | W 1806 | .187 (4,75) | .145 (3,68) | .050 (1,27) |
| 17W01807 | W 1807 | .187 (4,75) | .120 (3,05) | .032 (0,81) |
| 17W01809 | W 1809 | .187 (4,75) | .141 (3,58) | .125 (3,18) |
| 17W01811 | W 1811 | .187 (4,75) | .115 (2,92) | .165 (4,19) |
| 17W01815 | W 1815 | .188 (4,78) | .094 (2,39) | .020 (0,51) |
| 17W01825 | W 1825 | .196 (4,98) | .085 (2,16) | .031 (0,79) |
| 17W01870 | W 1870 | .187 (4,75) | .120 (3,05) | .062 (1,57) |
| 17W01871 | W 1871 | .185 (4,70) | .051 (1,30) | .132 (3,35) |
| 17W01872 | W 1872 | .187 (4,75) | .091 (2,31) | .080 (2,03) |
| 17W01875 | W 1875 | .187 (4,75) | .130 (3,30) | .150 (3,81) |
| 17W01900 | W 1900 | .199 (5,05) | .115 (2,95) | .050 (1,27) |
| 17W01906 | W 1906 | .206 (5,23) | .112 (2,84) | .053 (1,35) |
| 17W01910 | W 1910 | .190 (4,83) | .120 (3,05) | .100 (2,54) |
| 17W01950 | W 1950 | .197 (5,00) | .115 (2,92) | .030 (0,76) |
| 17W01970 | W 1970 | .197 (5,00) | .100 (2,54) | .156 (3,96) |
| 17W01971 | W 1971 | .197 (5,00) | .067 (1,70) | .154 (3,91) |
| 17W01994 | W 1994 | .199 (5,05) | .125 (3,18) | .045 (1,14) |
| 17W02181 | W 2181 | .218 (5,54) | .120 (3,05) | .037 (0,94) |
| 17W02190 | W 2190 | .220 (5,59) | .104 (2,64) | .031 (0,79) |
| 17W02191 | W 2191 | .219 (5,56) | .094 (2,39) | .100 (2,54) |
| 17W02192 | W 2192 | .228 (5,79) | .122 (3,10) | .093 (2,36) |
| 17W02245 | W 2245 | .225 (5,72) | .150 (3,81) | .045 (1,14) |
| 17W02251 | W 2251 | .225 (5,72) | .125 (3,18) | .100 (2,54) |
| 17W02252 | W 2252 | .225 (5,72) | .150 (3,81) | .090 (2,29) |
| 17W02349 | W 2349 | .234 (5,94) | .141 (3,58) | .090 (2,29) |
| 17W02350 | W 2350 | .235 (5,97) | .125 (3,18) | .040 (1,02) |
| 17W02401 | W 2401 | .240 (6,10) | .113 (2,87) | .040 (1,02) |



New Sizes

NYLON SPECIAL FLAT WASHERS

| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|-------------|-------------|-------------|
| 17W02450 | W 2450 | .245 (6,22) | .195 (4,95) | .125 (3,18) |
| 17W02451 | W 2451 | .245 (6,22) | .128 (3,25) | .093 (2,36) |
| 17W02460 | W 2460 | .246 (6,25) | .171 (4,34) | .100 (2,54) |
| 17W02500 | W 2500 | .250 (6,35) | .120 (3,05) | .140 (3,56) |
| 17W02501 | W 2501 | .250 (6,35) | .160 (4,07) | .062 (1,57) |
| 17W02502 | W 2502 | .250 (6,35) | .126 (3,20) | .025 (0,64) |
| 17W02503 | W 2503 | .250 (6,35) | .090 (2,29) | .055 (1,40) |
| 17W02504 | W 2504 | .250 (6,35) | .141 (3,58) | .062 (1,57) |
| 17W02505 | W 2505 | .260 (6,60) | .140 (3,56) | .080 (2,03) |
| 17W02506 | W 2506 | .250 (6,35) | .125 (3,18) | .095 (2,41) |
| 17W02507 | W 2507 | .250 (6,35) | .140 (3,56) | .094 (2,39) |
| 17W02508 | W 2508 | .250 (6,35) | .125 (3,18) | .062 (1,57) |
| 17W02509 | W 2509 | .250 (6,35) | .171 (4,34) | .100 (2,54) |
| 17W02510 | W 2510 | .250 (6,35) | .187 (4,75) | .130 (3,30) |
| 17W02511 | W 2511 | .250 (6,35) | .142 (3,61) | .110 (2,79) |
| 17W02512 | W 2512 | .250 (6,35) | .147 (3,73) | .125 (3,18) |
| 17W02513 | W 2513 | .250 (6,35) | .143 (3,63) | .082 (2,08) |
| 17W02514 | W 2514 | .250 (6,35) | .166 (4,22) | .082 (2,08) |
| 17W02515 | W 2515 | .250 (6,35) | .140 (3,56) | .150 (3,81) |
| 17W02516 | W 2516 | .251 (6,38) | .151 (3,84) | .035 (0,88) |
| 17W02517 | W 2517 | .250 (6,35) | .156 (3,96) | .100 (2,54) |
| 17W02518 | W 2518 | .250 (6,35) | .125 (3,18) | .150 (3,81) |
| 17W02519 | W 2519 | .251 (6,38) | .155 (3,94) | .077 (1,96) |
| 17W02520 | W 2520 | .250 (6,35) | .166 (4,22) | .061 (1,55) |
| 17W02564 | W 2564 | .256 (6,50) | .187 (4,75) | .045 (1,14) |
| 17W02591 | W 2591 | .259 (6,58) | .081 (2,06) | .062 (1,57) |
| 17W02595 | W 2595 | .295 (7,49) | .135 (3,43) | .127 (3,23) |
| 17W02751 | W 2751 | .275 (6,99) | .120 (3,05) | .062 (1,57) |
| 17W02752 | W 2752 | .270 (6,86) | .207 (5,26) | .05 (1,27) |
| 17W02781 | W 2781 | .280 (7,11) | .210 (5,33) | .125 (3,18) |
| 17W02801 | W 2801 | .280 (7,11) | .120 (3,05) | .145 (3,68) |
| 17W02810 | W 2810 | .280 (7,11) | .150 (3,81) | .108 (2,74) |
| 17W02811 | W 2811 | .288 (7,32) | .120 (3,05) | .040 (1,02) |
| 17W02812 | W 2812 | .290 (7,38) | .115 (2,92) | .047 (1,19) |
| 17W02813 | W 2813 | .280 (7,11) | .120 (3,05) | .030 (0,76) |
| 17W02814 | W 2814 | .281 (7,14) | .120 (3,05) | .020 (0,51) |
| 17W02815 | W 2815 | .281 (7,14) | .120 (3,05) | .040 (1,02) |
| 17W02816 | W 2816 | .281 (7,14) | .120 (3,05) | .060 (1,52) |
| 17W02817 | W 2817 | .280 (7,11) | .155 (3,94) | .160 (4,06) |
| 17W02818 | W 2818 | .281 (7,14) | .140 (3,56) | .020 (0,51) |
| 17W02819 | W 2819 | .281 (7,14) | .107 (2,71) | .020 (0,51) |
| 17W02851 | W 2851 | .285 (7,24) | .130 (3,30) | .060 (1,52) |
| 17W02852 | W 2852 | .285 (7,24) | .160 (4,06) | .032 (0,81) |
| 17W02853 | W 2853 | .280 (7,11) | .200 (5,08) | .093 (2,36) |
| 17W02862 | W 2862 | .282 (7,16) | .190 (4,83) | .065 (1,65) |
| 17W02951 | W 2951 | .295 (7,49) | .220 (5,59) | .127 (3,23) |
| 17W02952 | W 2952 | .310 (7,87) | .138 (3,50) | .030 (0,76) |

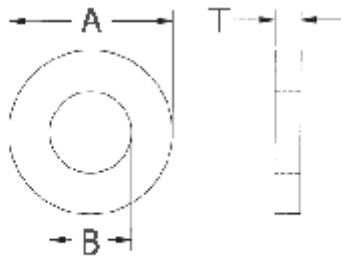


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

New Sizes

NYLON SPECIAL FLAT WASHERS



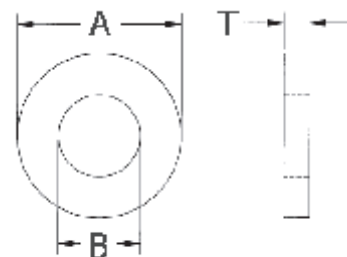
| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|--------------|-------------|-------------|
| 17W02953 | W 2953 | .310 (7,87) | .190 (4,83) | .032 (0,81) |
| 17W02954 | W 2954 | .310 (7,87) | .185 (4,70) | .032 (0,81) |
| 17W03070 | W 3070 | .307 (7,80) | .210 (5,33) | .125 (3,18) |
| 17W03071 | W 3071 | .307 (7,80) | .144 (3,66) | .059 (1,50) |
| 17W03101 | W 3101 | .310 (7,87) | .160 (4,06) | .060 (1,52) |
| 17W03121 | W 3121 | .312 (7,92) | .187 (4,75) | .050 (1,27) |
| 17W03122 | W 3122 | .312 (7,92) | .095 (2,41) | .062 (1,57) |
| 17W03123 | W 3123 | .318 (8,08) | .130 (3,30) | .062 (1,57) |
| 17W03124 | W 3124 | .312 (7,92) | .110 (2,79) | .125 (3,18) |
| 17W03125 | W 3125 | .312 (7,92) | .062 (1,57) | .125 (3,18) |
| 17W03126 | W 3126 | .312 (7,92) | .115 (2,92) | .140 (3,56) |
| 17W03127 | W 3127 | .312 (7,92) | .140 (3,56) | .047 (1,19) |
| 17W03128 | W 3128 | .320 (8,13) | .156 (3,96) | .031 (0,79) |
| 17W03129 | W 3129 | .312 (7,92) | .228 (5,79) | .250 (6,35) |
| 17W03130 | W 3130 | .312 (7,92) | .162 (4,11) | .062 (1,57) |
| 17W03131 | W 3131 | .312 (7,92) | .150 (3,81) | .020 (0,51) |
| 17W03132 | W 3132 | .312 (7,92) | .125 (3,18) | .032 (0,81) |
| 17W03133 | W 3133 | .312 (7,92) | .262 (6,65) | .127 (3,23) |
| 17W03134 | W 3134 | .312 (7,92) | .150 (3,81) | .030 (0,76) |
| 17W03135 | W 3135 | .312 (7,92) | .192 (4,88) | .110 (2,79) |
| 17W03136 | W 3136 | .313 (7,95) | .217 (5,51) | .125 (3,18) |
| 17W03137 | W 3137 | .312 (7,92) | .150 (3,81) | .040 (1,02) |
| 17W03138 | W 3138 | .312 (7,92) | .150 (3,81) | .050 (1,27) |
| 17W03139 | W 3139 | .312 (7,92) | .150 (3,81) | .060 (1,52) |
| 17W03140 | W 3140 | 5/16 (7,94) | 5/32 (3,96) | 1/8 (3,18) |
| 17W03141 | W 3141 | .314 (7,98) | .110 (2,79) | .062 (1,57) |
| 17W03142 | W 3142 | .312 (7,92) | .260 (6,60) | .070 (0,78) |
| 17W03143 | W 3143 | .316 (8,03) | .100 (2,54) | .033 (0,84) |
| 17W03145 | W 3145 | .312 (7,92) | .063 (1,60) | .090 (2,29) |
| 17W03146 | W 3146 | .312 (7,92) | .140 (3,56) | .020 (0,51) |
| 17W03148 | W 3148 | .315 (8,00) | .125 (3,18) | .031 (0,79) |
| 17W03150 | W 3150 | .315 (8,00) | .157 (3,98) | .197 (5,00) |
| 17W03151 | W 3151 | .312 (7,92) | .260 (6,60) | .109 (2,77) |
| 17W03221 | W 3221 | .322 (8,18) | .128 (3,25) | .062 (1,57) |
| 17W03223 | W 3223 | .330 (8,38) | .189 (4,80) | .080 (2,03) |
| 17W03280 | W 3280 | .329 (8,36) | .150 (3,81) | .060 (1,52) |
| 17W03281 | W 3281 | .335 (8,51) | .280 (7,11) | .195 (4,95) |
| 17W03351 | W 3351 | .335 (8,51) | .190 (4,83) | .032 (0,81) |
| 17W03412 | W 3412 | .434 (11,02) | .190 (4,83) | 1/8 (3,18) |
| 17W03450 | W 3450 | .345 (8,76) | .218 (5,54) | .032 (0,81) |
| 17W03480 | W 3480 | .348 (8,84) | .222 (5,64) | .081 (2,06) |
| 17W03501 | W 3501 | .350 (8,89) | .240 (6,10) | .040 (1,02) |
| 17W03505 | W 3505 | .355 (9,02) | .130 (3,30) | .062 (1,57) |
| 17W03506 | W 3506 | .356 (9,04) | .179 (4,55) | .118 (3,00) |
| 17W03510 | W 3510 | .350 (8,89) | .260 (6,60) | .062 (1,57) |
| 17W03540 | W 3540 | .354 (8,99) | .169 (4,29) | .031 (0,79) |
| 17W03541 | W 3541 | .353 (8,97) | .197 (5,00) | .157 (3,99) |



New Sizes

NYLON SPECIAL FLAT WASHERS

| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|---------------|-------------|-------------|
| 17W03542 | W 3542 | .370 (9,40) | .192 (4,88) | .080 (2,03) |
| 17W03601 | W 3601 | .374 (9,50) | .220 (5,59) | .062 (1,57) |
| 17W03602 | W 3602 | .375 (9,53) | .173 (4,39) | .093 (2,36) |
| 17W03630 | W 3630 | .370 (9,40) | .184 (4,67) | .047 (1,19) |
| 17W03749 | W 3749 | .370 (9,40) | .192 (4,88) | .125 (3,18) |
| 17W03750 | W 3750 | .375 (9,53) | .150 (3,81) | .030 (0,76) |
| 17W03751 | W 3751 | .375 (9,53) | .172 (4,37) | .060 (1,52) |
| 17W03752 | W 3752 | .375 (9,53) | .190 (4,83) | .065 (1,65) |
| 17W03753 | W 3753 | .375 (9,53) | .131 (3,33) | .093 (2,36) |
| 17W03754 | W 3754 | .375 (9,53) | .250 (6,35) | .093 (2,36) |
| 17W03755 | W 3755 | .375 (9,53) | .218 (5,54) | .032 (0,81) |
| 17W03756 | W 3756 | .375 (9,53) | .253 (6,43) | .084 (2,13) |
| 17W03757 | W 3757 | .375 (9,53) | .141 (3,58) | .031 (0,79) |
| 17W03758 | W 3758 | .375 (9,53) | .125 (3,18) | .040 (1,02) |
| 17W03759 | W 3759 | .375 (9,53) | .094 (2,39) | .281 (7,14) |
| 17W03760 | W 3760 | .375 (9,53) | .242 (6,15) | .062 (1,57) |
| 17W03761 | W 3761 | .375 (9,53) | .210 (5,33) | .160 (4,06) |
| 17W03762 | W 3762 | .375 (9,53) | .170 (4,32) | .040 (1,02) |
| 17W03763 | W 3763 | .375 (9,53) | .170 (4,32) | .050 (1,27) |
| 17W03764 | W 3764 | .375 (9,53) | .189 (4,80) | .031 (0,79) |
| 17W03765 | W 3765 | .375 (9,53) | .140 (3,56) | .080 (2,03) |
| 17W03766 | W 3766 | .375 (9,53) | .153 (3,89) | .063 (1,60) |
| 17W03767 | W 3767 | .377 (9,58) | .221 (5,61) | .095 (2,41) |
| 17W03768 | W 3768 | .375 (9,53) | .250 (6,35) | .150 (3,81) |
| 17W03769 | W 3769 | .375 (9,53) | .210 (5,33) | .152 (3,86) |
| 17W03770 | W 3770 | .375 (9,53) | .130 (3,30) | .030 (0,76) |
| 17W03771 | W 3771 | .375 (9,53) | .255 (6,48) | .093 (2,36) |
| 17W03772 | W 3772 | .375 (9,53) | .125 (3,18) | .072 (1,83) |
| 17W03773 | W 3773 | 1.000 (25,40) | .375 (9,53) | .312 (7,92) |
| 17W03801 | W 3801 | .380 (9,65) | .200 (5,08) | .030 (0,76) |
| 17W03802 | W 3802 | .380 (9,65) | .187 (4,75) | .155 (3,94) |
| 17W03820 | W 3820 | .382 (9,70) | .255 (6,48) | .195 (4,95) |
| 17W03901 | W 3901 | .390 (9,91) | .200 (5,08) | .031 (0,79) |
| 17W03902 | W 3902 | .389 (9,88) | .251 (6,37) | .125 (3,17) |
| 17W03903 | W 3903 | .390 (9,91) | .328 (8,33) | .079 (2,01) |
| 17W03904 | W 3904 | .400 (10,16) | .140 (3,56) | .062 (1,57) |
| 17W04000 | W 4000 | .400 (10,16) | .200 (5,08) | .093 (2,36) |
| 17W04060 | W 4060 | .405 (10,29) | .265 (6,73) | .125 (3,18) |
| 17W04061 | W 4061 | .406 (10,31) | .234 (5,94) | .062 (1,57) |
| 17W04062 | W 4062 | .406 (10,31) | .192 (4,88) | .062 (1,57) |
| 17W04081 | W 4081 | .408 (10,36) | .177 (4,50) | .062 (1,57) |
| 17W04150 | W 4150 | .415 (10,54) | .229 (5,82) | .102 (2,59) |
| 17W04160 | W 4160 | .416 (10,57) | .272 (6,91) | .120 (3,05) |
| 17W04250 | W 4250 | .425 (10,79) | .235 (5,97) | .130 (3,30) |
| 17W04330 | W 4330 | .435 (11,05) | .209 (5,31) | .039 (0,99) |
| 17W04331 | W 4331 | .433 (11,00) | .262 (6,65) | .126 (3,20) |
| 17W04332 | W 4332 | .433 (11,00) | .275 (6,99) | .075 (1,91) |

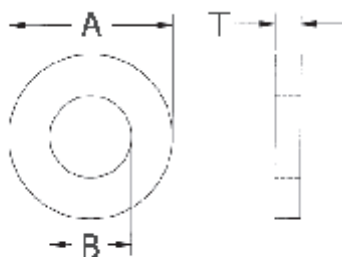


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION
IV

New Sizes

NYLON SPECIAL FLAT WASHERS



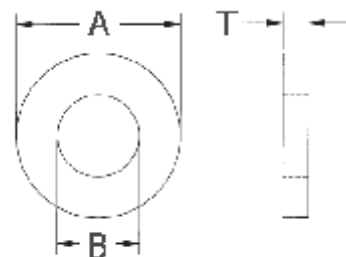
| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|--------------|--------------|-------------|
| 17W04333 | W 4333 | .433 (11,00) | .244 (6,20) | .054 (1,37) |
| 17W04350 | W 4350 | .435 (11,05) | .202 (5,13) | .187 (4,75) |
| 17W04351 | W 4351 | .435 (11,05) | .250 (6,35) | .094 (2,39) |
| 17W04352 | W 4352 | .435 (11,05) | .196 (4,98) | .046 (1,17) |
| 17W04353 | W 4353 | .438 (11,13) | .218 (5,54) | .156 (3,96) |
| 17W04371 | W 4371 | .437 (11,10) | .200 (5,08) | .062 (1,57) |
| 17W04372 | W 4372 | .437 (11,10) | .260 (6,60) | .047 (1,19) |
| 17W04373 | W 4373 | .437 (11,10) | .195 (4,95) | .031 (0,79) |
| 17W04374 | W 4374 | .437 (11,10) | .200 (5,08) | .115 (2,92) |
| 17W04375 | W 4375 | .437 (11,10) | .200 (5,08) | .090 (2,29) |
| 17W04376 | W 4376 | .437 (11,10) | .195 (4,95) | .020 (0,51) |
| 17W04377 | W 4377 | .437 (11,10) | .195 (4,95) | .040 (1,02) |
| 17W04378 | W 4378 | .437 (11,10) | .195 (4,95) | .050 (1,27) |
| 17W04379 | W 4379 | .437 (11,10) | .195 (4,95) | .060 (1,27) |
| 17W04380 | W 4380 | 7/16 (11,10) | 11/32 (8,74) | 1/16 (0,81) |
| 17W04386 | W 4386 | .438 (11,13) | .156 (3,96) | .062 (1,57) |
| 17W04400 | W 4400 | .440 (11,18) | .156 (3,96) | .032 (0,81) |
| 17W04401 | W 4401 | .445 (11,30) | .290 (7,37) | .033 (0,84) |
| 17W04402 | W 4402 | .440 (11,18) | .187 (4,75) | .093 (2,36) |
| 17W04403 | W 4403 | .440 (11,18) | .318 (8,08) | .031 (0,79) |
| 17W04430 | W 4430 | .443 (11,25) | .253 (6,43) | .125 (3,18) |
| 17W04450 | W 4450 | .450 (11,43) | .225 (5,72) | .048 (1,22) |
| 17W04451 | W 4451 | .453 (11,51) | .375 (9,52) | .062 (1,57) |
| 17W04452 | W 4452 | .453 (11,51) | .280 (7,11) | .030 (0,76) |
| 17W04501 | W 4501 | .450 (11,43) | .200 (5,08) | .048 (1,22) |
| 17W04502 | W 4502 | .465 (11,81) | .250 (6,35) | .015 (0,38) |
| 17W04520 | W 4520 | .452 (11,48) | .349 (8,86) | .075 (1,91) |
| 17W04601 | W 4601 | .460 (11,68) | .204 (5,18) | .031 (0,79) |
| 17W04650 | W 4650 | .465 (11,81) | .330 (8,38) | .031 (0,79) |
| 17W04651 | W 4651 | .486 (12,34) | .252 (6,40) | .069 (1,75) |
| 17W04719 | W 4719 | .492 (12,50) | .209 (5,31) | .020 (0,51) |
| 17W04720 | W 4720 | .472 (11,99) | .252 (6,40) | .059 (1,50) |
| 17W04721 | W 4721 | .505 (12,83) | .375 (9,53) | .050 (1,27) |
| 17W04722 | W 4722 | .472 (11,99) | .350 (8,89) | .110 (2,79) |
| 17W04725 | W 4725 | .495 (12,57) | .310 (7,87) | .095 (2,41) |
| 17W04900 | W 4900 | .490 (12,45) | .136 (3,45) | .055 (1,40) |
| 17W04901 | W 4901 | .490 (12,45) | .375 (9,53) | .087 (2,21) |
| 17W04950 | W 4950 | .490 (12,45) | .260 (6,60) | .245 (6,22) |
| 17W04951 | W 4951 | .500 (12,70) | .205 (5,21) | .125 (3,18) |
| 17W04952 | W 4952 | .502 (12,72) | .101 (2,57) | .040 (1,02) |
| 17W04953 | W 4953 | .500 (12,70) | .375 (9,53) | .032 (0,81) |
| 17W05000 | W 5000 | .500 (12,70) | .165 (4,19) | .075 (1,91) |
| 17W05001 | W 5001 | .500 (12,70) | .343 (8,71) | .109 (2,77) |
| 17W05002 | W 5002 | .500 (12,70) | .385 (9,78) | .160 (4,06) |
| 17W05003 | W 5003 | .490 (12,45) | .281 (7,14) | .030 (0,76) |
| 17W05004 | W 5004 | .500 (12,70) | .317 (8,05) | .032 (0,81) |
| 17W05005 | W 5005 | .500 (12,70) | .375 (9,53) | .087 (2,21) |



New Sizes

NYLON SPECIAL FLAT WASHERS

| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|--------------|--------------|-------------|
| 17W05006 | W 5006 | .500 (12,70) | .312 (7,92) | .156 (3,96) |
| 17W05007 | W 5007 | .500 (12,70) | .250 (6,35) | .150 (3,81) |
| 17W05008 | W 5008 | .505 (12,83) | .188 (4,78) | .032 (0,81) |
| 17W05009 | W 5009 | .500 (12,70) | .255 (6,48) | .075 (1,91) |
| 17W05010 | W 5010 | .500 (12,70) | .312 (7,92) | .125 (3,18) |
| 17W05012 | W 5012 | .50 (12,70) | .125 (3,18) | .125 (3,18) |
| 17W05013 | W 5013 | .500 (12,70) | .320 (8,13) | .170 (4,32) |
| 17W05014 | W 5014 | .500 (12,70) | .140 (3,56) | .062 (1,57) |
| 17W05015 | W 5015 | .500 (12,70) | .144 (3,66) | .125 (3,18) |
| 17W05016 | W 5016 | .500 (12,70) | .219 (5,54) | .156 (3,90) |
| 17W05017 | W 5017 | .50 (12,70) | .262 (6,65) | .15 (3,81) |
| 17W05018 | W 5018 | .500 (12,70) | .187 (4,75) | .062 (1,57) |
| 17W05019 | W 5019 | .500 (12,70) | .175 (4,45) | .062 (1,57) |
| 17W05020 | W 5020 | .500 (12,70) | .320 (8,13) | .200 (5,08) |
| 17W05021 | W 5021 | .505 (12,83) | .138 (3,51) | .080 (2,03) |
| 17W05022 | W 5022 | .495 (12,57) | .147 (3,73) | .298 (7,57) |
| 17W05023 | W 5023 | .500 (12,70) | .188 (4,78) | .062 (1,57) |
| 17W05027 | W 5027 | 1/2 (12,70) | .320 (8,13) | .250 (6,35) |
| 17W05028 | W 5028 | .500 (12,70) | .320 (8,13) | .281 (7,14) |
| 17W05081 | W 5081 | .500 (12,70) | .312 (7,92) | .096 (2,44) |
| 17W05120 | W 5120 | .510 (12,95) | .193 (4,90) | .050 (1,27) |
| 17W05121 | W 5121 | .512 (13,00) | .406 (10,31) | .089 (2,26) |
| 17W05230 | W 5230 | .523 (13,28) | .463 (11,76) | .060 (1,52) |
| 17W05231 | W 5231 | .538 (13,67) | .272 (6,91) | .047 (1,19) |
| 17W05251 | W 5251 | .530 (13,46) | .375 (9,53) | .093 (2,36) |
| 17W05252 | W 5252 | .528 (13,41) | .402 (10,21) | .039 (0,99) |
| 17W05253 | W 5253 | .525 (13,34) | .475 (12,07) | .070 (1,78) |
| 17W05254 | W 5254 | .525 (13,34) | .194 (4,93) | .032 (0,81) |
| 17W05310 | W 5310 | .531 (13,49) | .313 (7,95) | .031 (0,79) |
| 17W05400 | W 5400 | .540 (13,72) | .405 (10,29) | .112 (2,84) |
| 17W05401 | W 5401 | .540 (13,72) | .382 (9,70) | .096 (2,44) |
| 17W05421 | W 5421 | .542 (13,77) | .388 (9,86) | .220 (5,59) |
| 17W05422 | W 5422 | .542 (13,77) | .404 (10,26) | .097 (2,46) |
| 17W05423 | W 5423 | .542 (13,77) | .404 (10,26) | .110 (2,79) |
| 17W05451 | W 5451 | .547 (13,89) | .363 (9,22) | .062 (1,57) |
| 17W05461 | W 5461 | .554 (14,07) | .481 (12,22) | .030 (0,76) |
| 17W05510 | W 5510 | .551 (14,00) | .378 (9,60) | .063 (1,60) |
| 17W05552 | W 5552 | .555 (14,10) | .255 (6,48) | .047 (1,19) |
| 17W05553 | W 5553 | .555 (14,10) | .415 (10,54) | .060 (1,52) |
| 17W05601 | W 5601 | .560 (14,22) | .265 (6,73) | .030 (0,76) |
| 17W05602 | W 5602 | .560 (14,22) | .260 (6,60) | .125 (3,18) |
| 17W05603 | W 5603 | .560 (14,22) | .320 (8,13) | .187 (4,75) |
| 17W05605 | W 5605 | .560 (14,22) | .373 (9,47) | .031 (0,79) |
| 17W05606 | W 5606 | .562 (14,27) | .265 (6,73) | .187 (4,75) |
| 17W05607 | W 5607 | .560 (14,22) | .290 (7,37) | .062 (1,57) |
| 17W05608 | W 5608 | .560 (14,22) | .315 (8,00) | .062 (1,57) |
| 17W05620 | W 5620 | .562 (14,27) | .141 (3,58) | .062 (1,57) |

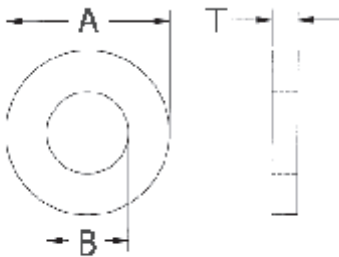


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION
IV

New Sizes

NYLON SPECIAL FLAT WASHERS



| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|--------------|--------------|--------------|
| 17W05621 | W 5621 | .562 (14,27) | .250 (6,35) | .031 (0,79) |
| 17W05622 | W 5622 | .562 (14,27) | .260 (6,60) | .062 (1,57) |
| 17W05623 | W 5623 | .565 (14,35) | .203 (5,16) | .062 (1,57) |
| 17W05624 | W 5624 | .562 (14,27) | .320 (8,13) | .020 (0,51) |
| 17W05629 | W 5629 | .562 (14,27) | .328 (8,33) | .095 (2,41) |
| 17W05630 | W 5630 | .565 (14,35) | .317 (8,05) | .095 (2,41) |
| 17W05631 | W 5631 | .568 (14,43) | .253 (6,43) | .093 (2,36) |
| 17W05650 | W 5650 | .565 (14,35) | .254 (6,45) | .094 (2,39) |
| 17W05700 | W 5700 | .578 (14,68) | .307 (7,80) | .125 (3,18) |
| 17W05751 | W 5751 | .575 (14,61) | .467 (11,86) | .090 (2,29) |
| 17W05910 | W 5910 | .591 (15,01) | .256 (6,50) | .087 (2,21) |
| 17W05980 | W 5980 | .598 (15,19) | .396 (10,03) | .175 (4,45) |
| 17W05981 | W 5981 | .562 (14,27) | .320 (8,13) | .125 (3,18) |
| 17W05982 | W 5982 | .590 (14,99) | .328 (8,33) | .147 (3,73) |
| 17W05983 | W 5983 | .591 (15,01) | .374 (9,50) | .118 (3,00) |
| 17W06001 | W 6001 | .600 (15,24) | .500 (12,70) | .120 (3,05) |
| 17W06101 | W 6101 | .615 (15,62) | .406 (10,31) | .042 (1,07) |
| 17W06140 | W 6140 | .614 (15,60) | .464 (11,79) | .110 (2,79) |
| 17W06150 | W 6150 | .615 (15,62) | .260 (6,60) | .100 (2,54) |
| 17W06151 | W 6151 | .625 (15,88) | .500 (12,70) | .132 (3,35) |
| 17W06152 | W 6152 | .615 (15,62) | .340 (8,64) | .125 (3,18) |
| 17W06153 | W 6153 | .625 (15,88) | .406 (10,31) | .120 (3,05) |
| 17W06154 | W 6154 | .753 (19,13) | .605 (15,37) | .067 (1,70) |
| 17W06155 | W 6155 | .615 (15,62) | .380 (9,65) | .122 (3,10) |
| 17W06201 | W 6201 | .620 (15,75) | .265 (6,73) | .192 (4,89) |
| 17W06203 | W 6203 | .620 (15,75) | .209 (5,31) | .187 (4,75) |
| 17W06204 | W 6204 | .620 (15,75) | .350 (8,89) | .188 (4,78) |
| 17W06205 | W 6205 | .625 (15,88) | .410 (10,41) | .033 (8,38) |
| 17W06206 | W 6206 | .625 (15,88) | .260 (6,60) | .140 (3,56) |
| 17W06221 | W 6221 | .622 (15,80) | .252 (6,40) | .060 (1,52) |
| 17W06222 | W 6222 | .625 (15,88) | .250 (6,35) | .190 (4,83) |
| 17W06240 | W 6240 | .625 (15,88) | .505 (12,83) | .092 (2,34) |
| 17W06248 | W 6248 | .625 (15,88) | .330 (8,38) | .064 (1,63) |
| 17W06249 | W 6249 | .625 (15,88) | .260 (6,60) | .180 (4,57) |
| 17W06250 | W 6250 | .620 (15,75) | .165 (4,19) | .250 (6,35) |
| 17W06251* | W 6251 | .620 (15,87) | .301 (7,64) | .039 (0,99) |
| 17W06252 | W 6252 | .625 (15,88) | .194 (4,93) | .125 (3,18) |
| 17W06253 | W 6253 | .625 (15,88) | .187 (4,75) | .062 (1,57) |
| 17W06254 | W 6254 | .625 (15,88) | .218 (5,54) | .062 (1,57) |
| 17W06255 | W 6255 | .625 (15,88) | .250 (6,35) | .062 (1,57) |
| 17W06256 | W 6256 | .625 (15,88) | .437 (11,10) | .093 (2,36) |
| 17W06257 | W 6257 | .625 (15,88) | .125 (3,18) | .062 (1,57) |
| 17W06258 | W 6258 | .625 (15,88) | .218 (5,54) | .125 (3,18) |
| 17W06259 | W 6259 | .625 (15,88) | .218 (5,54) | .500 (12,70) |
| 17W06260 | W 6260 | .625 (15,88) | .218 (5,54) | .250 (6,35) |
| 17W06261 | W 6261 | .625 (15,88) | .390 (9,91) | .265 (6,73) |
| 17W06262 | W 6262 | .625 (15,88) | .257 (6,53) | .020 (0,51) |

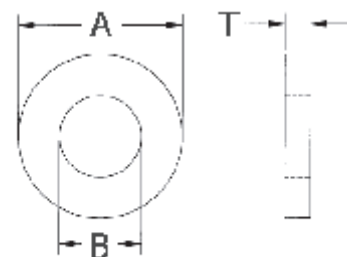
* ID IS CHAMFERED



New Sizes

NYLON SPECIAL FLAT WASHERS

| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|---------------|--------------|-------------|
| 17W06263 | W 6263 | .625 (15,88) | .281 (7,14) | .110 (2,79) |
| 17W06264 | W 6264 | .625 (15,88) | .315 (8,00) | .031 (0,79) |
| 17W06265 | W 6265 | .625 (15,88) | .422 (10,72) | .203 (5,16) |
| 17W06266 | W 6266 | .625 (15,88) | .321 (8,15) | .125 (3,18) |
| 17W06267 | W 6267 | .625 (15,88) | .218 (5,54) | .031 (0,79) |
| 17W06268 | W 6268 | .625 (15,88) | .437 (11,10) | .250 (6,35) |
| 17W06269 | W 6269 | 5/8 (15,87) | .281 (7,14) | .210 (5,33) |
| 17W06270 | W 6270 | .618 (15,70) | .270 (6,86) | .220 (5,59) |
| 17W06271 | W 6271 | .630 (16,00) | .327 (8,31) | .071 (1,80) |
| 17W06272 | W 6272 | .625 (15,88) | .385 (9,78) | .185 (4,70) |
| 17W06273 | W 6273 | .625 (15,88) | .312 (7,92) | .250 (6,35) |
| 17W06274 | W 6274 | .625 (15,88) | .284 (7,21) | .062 (1,57) |
| 17W06275 | W 6275 | .625 (15,88) | .292 (7,42) | .040 (1,02) |
| 17W06289 | W 6289 | .625 (15,88) | .265 (6,73) | .093 (2,36) |
| 17W06302 | W 6302 | .630 (16,00) | .171 (4,34) | .060 (1,52) |
| 17W06303 | W 6303 | .638 (16,20) | .283 (7,19) | .077 (1,96) |
| 17W06304 | W 6304 | .629 (15,98) | .437 (11,10) | .125 (3,18) |
| 17W06310 | W 6310 | .630 (16,00) | .280 (7,11) | .030 (0,76) |
| 17W06365 | W 6365 | .636 (16,15) | .526 (13,36) | .098 (2,49) |
| 17W06439 | W 6439 | .643 (16,33) | .510 (12,95) | .090 (2,29) |
| 17W06440 | W 6440 | 1.122 (28,50) | .644 (16,36) | .217 (5,51) |
| 17W06500 | W 6500 | .650 (16,51) | .440 (11,18) | .125 (3,18) |
| 17W06501 | W 6501 | 1.190 (30,23) | .650 (16,51) | .090 (2,29) |
| 17W06591 | W 6591 | .659 (16,74) | .468 (11,89) | .119 (3,02) |
| 17W06620 | W 6620 | .662 (16,81) | .440 (11,18) | .122 (3,10) |
| 17W06701 | W 6701 | .670 (17,02) | .448 (11,38) | .120 (3,05) |
| 17W06711 | W 6711 | .671 (17,04) | .481 (12,22) | .031 (0,79) |
| 17W06820 | W 6820 | .682 (17,32) | .170 (4,32) | .062 (1,57) |
| 17W06830 | W 6830 | .683 (17,35) | .337 (8,56) | .063 (1,60) |
| 17W06851 | W 6851 | .685 (17,40) | .260 (6,60) | .032 (0,81) |
| 17W06855 | W 6855 | .685 (17,40) | .295 (7,49) | .062 (1,57) |
| 17W06856 | W 6856 | .695 (17,65) | .388 (9,85) | .059 (1,50) |
| 17W06867 | W 6867 | .687 (17,45) | .343 (8,71) | .031 (0,79) |
| 17W06868 | W 6868 | .687 (17,45) | .260 (6,60) | .020 (0,51) |
| 17W06869 | W 6869 | .687 (17,45) | .260 (6,60) | .050 (1,27) |
| 17W06870 | W 6870 | .687 (17,45) | .344 (8,79) | .064 (1,63) |
| 17W06871 | W 6871 | .687 (17,45) | .260 (6,60) | .060 (1,52) |
| 17W06872 | W 6872 | .687 (17,45) | .260 (6,60) | .040 (1,02) |
| 17W06873 | W 6873 | .692 (17,58) | .421 (10,69) | .031 (0,79) |
| 17W06874 | W 6874 | .687 (17,45) | .421 (10,69) | .062 (1,57) |
| 17W06875 | W 6875 | .692 (17,58) | .507 (12,88) | .042 (1,07) |
| 17W06876 | W 6876 | .687 (17,45) | .568 (14,43) | .062 (1,57) |
| 17W06877 | W 6877 | .680 (17,27) | .390 (9,91) | .125 (3,18) |
| 17W06878 | W 6878 | .687 (17,45) | .156 (3,96) | .135 (3,43) |
| 17W06879 | W 6879 | .687 (17,45) | .280 (7,11) | .031 (0,79) |
| 17W06880 | W 6880 | .680 (17,27) | .318 (8,08) | .187 (4,75) |
| 17W06881 | W 6881 | .688 (17,48) | .390 (9,91) | .031 (0,79) |

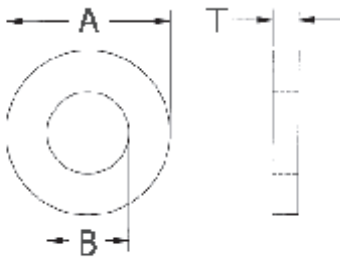


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION
IV

New Sizes

NYLON SPECIAL FLAT WASHERS



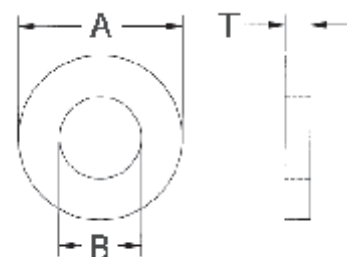
| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|--------------|--------------|-------------|
| 17W06882 | W 6882 | .688 (17,48) | .318 (8,08) | .190 (4,83) |
| 17W06883 | W 6883 | .689 (17,50) | .244 (6,20) | .236 (5,99) |
| 17W06934 | W 6934 | .695 (17,65) | .082 (2,08) | .184 (4,67) |
| 17W06935 | W 6935 | .690 (17,53) | .525 (13,34) | .250 (6,35) |
| 17W07001 | W 7001 | .700 (17,78) | .565 (14,35) | .062 (1,57) |
| 17W07002 | W 7002 | .700 (17,78) | .531 (13,49) | .093 (2,36) |
| 17W07051 | W 7051 | .715 (18,16) | .570 (14,48) | .100 (2,54) |
| 17W07090 | W 7090 | .709 (18,01) | .336 (8,53) | .079 (2,01) |
| 17W07091 | W 7091 | .709 (18,01) | .461 (11,71) | .110 (2,79) |
| 17W07092 | W 7092 | .697 (17,70) | .531 (13,49) | .158 (4,01) |
| 17W07093 | W 7093 | .71 (18,03) | .49 (12,45) | .125 (3,17) |
| 17W07120 | W 7120 | .712 (18,08) | .522 (13,30) | .062 (1,57) |
| 17W07121 | W 7121 | .712 (18,08) | .312 (7,92) | .081 (2,06) |
| 17W07130 | W 7130 | .713 (18,11) | .463 (11,76) | .065 (1,65) |
| 17W07181 | W 7181 | .718 (18,24) | .526 (13,36) | .219 (5,56) |
| 17W07182 | W 7182 | .718 (18,24) | .526 (13,36) | .281 (7,14) |
| 17W07191 | W 7191 | .719 (18,26) | .250 (6,35) | .062 (1,57) |
| 17W07192 | W 7192 | .719 (18,26) | .281 (7,14) | .062 (1,57) |
| 17W07301 | W 7301 | .720 (18,29) | .390 (9,91) | .300 (7,62) |
| 17W07302 | W 7302 | .731 (18,57) | .266 (6,76) | .118 (3,00) |
| 17W07381 | W 7381 | .740 (18,80) | .220 (5,59) | .120 (3,05) |
| 17W07382 | W 7382 | .738 (18,75) | .522 (13,26) | .120 (3,05) |
| 17W07401 | W 7401 | .740 (18,80) | .340 (8,64) | .062 (1,57) |
| 17W07402 | W 7402 | .750 (19,05) | .375 (9,53) | .062 (1,57) |
| 17W07403 | W 7403 | .748 (19,00) | .395 (10,03) | .093 (2,36) |
| 17W07404 | W 7404 | .750 (19,05) | .440 (11,18) | .093 (2,36) |
| 17W07405 | W 7405 | .750 (19,05) | .385 (9,78) | .045 (1,14) |
| 17W07406 | W 7406 | .740 (18,80) | .516 (13,11) | .125 (3,18) |
| 17W07420 | W 7420 | .742 (18,85) | .498 (12,65) | .119 (3,02) |
| 17W07480 | W 7480 | .748 (19,00) | .403 (10,24) | .059 (1,50) |
| 17W07491 | W 7491 | .750 (19,05) | .191 (4,85) | .100 (2,54) |
| 17W07493 | W 7493 | .738 (18,75) | .220 (5,59) | .155 (3,94) |
| 17W07494 | W 7494 | .750 (19,05) | .257 (6,53) | .030 (0,76) |
| 17W07500 | W 7500 | .750 (19,05) | .261 (6,63) | .095 (2,41) |
| 17W07501 | W 7501 | .750 (19,05) | .187 (4,75) | .156 (3,96) |
| 17W07502 | W 7502 | .735 (18,67) | .360 (9,14) | .160 (4,06) |
| 17W07503 | W 7503 | .750 (19,05) | .323 (8,20) | .125 (3,18) |
| 17W07504 | W 7504 | .738 (18,75) | .382 (9,70) | .160 (4,06) |
| 17W07505 | W 7505 | .740 (18,79) | .531 (13,49) | .187 (4,75) |
| 17W07506 | W 7506 | .750 (19,05) | .390 (9,91) | .062 (1,57) |
| 17W07507 | W 7507 | .750 (19,05) | .352 (8,94) | .031 (0,79) |
| 17W07508 | W 7508 | .750 (19,05) | .390 (9,91) | .050 (1,27) |
| 17W07509 | W 7509 | .750 (19,05) | .390 (9,91) | .140 (3,56) |
| 17W07510 | W 7510 | .750 (19,05) | .530 (13,46) | .230 (5,84) |
| 17W07511 | W 7511 | .750 (19,05) | .625 (15,88) | .170 (4,32) |
| 17W07512 | W 7512 | .750 (19,05) | .385 (9,78) | .200 (5,08) |



New Sizes

NYLON SPECIAL FLAT WASHERS

| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|--------------|--------------|-------------|
| 17W07513 | W 7513 | .750 (19,05) | .317 (8,05) | .062 (1,57) |
| 17W07514 | W 7514 | .750 (19,05) | .193 (4,90) | .040 (1,02) |
| 17W07516 | W 7516 | .750 (19,05) | .382 (9,70) | .066 (1,68) |
| 17W07517 | W 7517 | .750 (19,05) | .406 (10,31) | .032 (0,81) |
| 17W07518 | W 7518 | .745 (18,92) | .443 (11,25) | .095 (2,41) |
| 17W07519 | W 7519 | .750 (19,05) | .218 (5,54) | .187 (4,75) |
| 17W07520 | W 7520 | .745 (18,92) | .260 (6,60) | .066 (1,68) |
| 17W07521 | W 7521 | .750 (19,05) | .320 (8,13) | .250 (6,35) |
| 17W07522 | W 7522 | .750 (19,05) | .406 (10,31) | .060 (1,52) |
| 17W07523 | W 7523 | .745 (18,92) | .260 (6,60) | .125 (3,18) |
| 17W07524 | W 7524 | .743 (18,87) | .516 (13,11) | .093 (2,36) |
| 17W07525 | W 7525 | .750 (19,05) | .406 (10,31) | .200 (5,08) |
| 17W07527 | W 7527 | .750 (19,05) | .375 (9,53) | .125 (3,18) |
| 17W07528 | W 7528 | .750 (19,05) | .385 (9,78) | .020 (0,51) |
| 17W07529 | W 7529 | .75 (19,05) | .31 (7,87) | .375 (9,53) |
| 17W07530 | W 7530 | .750 (19,05) | .257 (6,53) | .062 (1,57) |
| 17W07531 | W 7531 | .755 (19,18) | .558 (14,17) | .030 (0,76) |
| 17W07532 | W 7532 | .750 (19,05) | .150 (3,81) | .055 (1,40) |
| 17W07533 | W 7533 | .750 (19,05) | .47 (11,94) | .200 (5,08) |
| 17W07534 | W 7534 | .685 (17,40) | .473 (12,01) | .190 (4,83) |
| 17W07535 | W 7535 | .75 (19,05) | .30 (7,62) | .125 (3,17) |
| 17W07536 | W 7536 | .754 (19,15) | .389 (9,88) | .075 (1,91) |
| 17W07537 | W 7537 | .750 (19,05) | .437 (11,10) | .036 (0,91) |
| 17W07539 | W 7539 | .962 (24,43) | .755 (19,18) | .101 (2,57) |
| 17W07540 | W 7540 | .753 (19,13) | .605 (15,37) | .055 (1,40) |
| 17W07541 | W 7541 | 3/4" (19,05) | .257 (6,53) | .109 (2,77) |
| 17W07542 | W 7542 | .755 (19,18) | .318 (8,08) | .100 (2,54) |
| 17W07559 | W 7559 | .750 (19,05) | .380 (9,65) | .187 (4,75) |
| 17W07560 | W 7560 | .756 (19,20) | .578 (14,68) | .110 (2,79) |
| 17W07565 | W 7565 | .745 (18,92) | .509 (12,93) | .150 (3,81) |
| 17W07566 | W 7566 | .750 (19,05) | .310 (7,87) | .170 (4,32) |
| 17W07625 | W 7625 | .75 (19,05) | .274 (6,96) | .25 (6,35) |
| 17W07714 | W 7714 | 3/4" (19,05) | .317 (8,05) | .040 (1,02) |
| 17W07716 | W 7716 | .750 (19,05) | .296 (7,52) | .032 (0,81) |
| 17W07717 | W 7717 | .750 (19,05) | .328 (8,33) | .032 (0,81) |
| 17W07718 | W 7718 | .757 (19,23) | .394 (10,01) | .125 (3,18) |
| 17W07719 | W 7719 | .748 (19,00) | .400 (10,16) | .089 (2,26) |
| 17W07720 | W 7720 | .753 (19,13) | .282 (7,16) | .123 (3,12) |
| 17W07721 | W 7721 | .740 (18,80) | .215 (5,46) | .095 (2,41) |
| 17W07722 | W 7722 | .750 (19,05) | .565 (14,35) | .125 (3,18) |
| 17W07750 | W 7750 | .775 (19,69) | .515 (13,08) | .250 (6,35) |
| 17W07751 | W 7751 | .775 (19,69) | .500 (12,70) | .120 (3,05) |
| 17W07752 | W 7752 | .775 (19,69) | .485 (12,32) | .150 (3,81) |
| 17W07811 | W 7811 | .781 (19,84) | .640 (16,26) | .031 (0,79) |
| 17W07820 | W 7820 | .782 (19,86) | .633 (16,08) | .125 (3,18) |
| 17W07821 | W 7821 | .778 (19,76) | .590 (14,99) | .032 (0,81) |

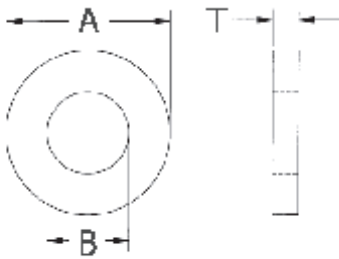


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

New Sizes

NYLON SPECIAL FLAT WASHERS



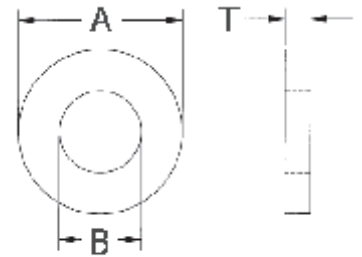
| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|---------------------|--------------|--------------|---|
| 17W07850 | W 7850 .785 (19,94) | .394 (10,01) | .080 (2,03) | |
| 17W08049 | W 8049 .805 (20,45) | .418 (10,62) | .062 (1,57) | |
| 17W08050 | W 8050 .805 (20,45) | .510 (12,95) | .220 (5,59) | |
| 17W08051 | W 8051 .805 (20,45) | .621 (15,77) | .125 (3,18) | |
| 17W08070 | W 8070 .807 (20,50) | .402 (10,21) | .065 (1,65) | |
| 17W08090 | W 8090 .809 (20,55) | .495 (12,57) | .059 (1,50) | |
| 17W08100 | W 8100 .810 (20,57) | .435 (11,05) | .060 (1,52) | |
| 17W08110 | W 8110 .817 (20,75) | .544 (13,82) | .140 (3,56) | |
| 17W08121 | W 8121 .812 (20,67) | .695 (17,65) | .093 (2,36) | |
| 17W08122 | W 8122 .812 (20,62) | .630 (16,00) | .100 (2,56) | |
| 17W08123 | W 8123 .812 (20,62) | .312 (7,92) | .125 (3,18) | |
| 17W08125 | W 8125 .812 (20,62) | .630 (16,00) | .220 (5,59) | |
| 17W08126 | W 8126 .812 (20,62) | .386 (9,80) | .187 (4,75) | |
| 17W08251 | W 8251 .825 (20,96) | .480 (12,19) | .100 (2,54) | |
| 17W08252 | W 8252 .825 (20,96) | .561 (14,25) | .145 (3,68) | |
| 17W08400 | W 8400 .840 (21,34) | .730 (18,54) | .125 (3,18) | |
| 17W08430 | W 8430 .844 (21,44) | .656 (16,66) | .060 (1,52) | |
| 17W08431 | W 8431 .845 (21,46) | .621 (15,77) | .101 (2,57) | |
| 17W08452 | W 8452 .825 (20,96) | .375 (9,53) | .100 (2,54) | |
| 17W08650 | W 8650 .865 (21,97) | .531 (13,49) | .200 (5,08) | |
| 17W08651 | W 8651 .865 (21,97) | .688 (17,48) | .155 (3,94) | |
| 17W08652 | W 8652 .875 (22,23) | .755 (19,18) | .125 (3,18) | |
| 17W08660 | W 8660 .866 (21,97) | .413 (10,49) | .098 (2,49) | |
| 17W08661 | W 8661 .876 (22,25) | .437 (11,10) | .502 (12,75) | |
| 17W08711 | W 8711 .871 (22,12) | .706 (17,93) | .111 (2,82) | |
| 17W08751 | W 8751 .875 (22,23) | .312 (7,92) | .125 (3,18) | |
| 17W08752 | W 8752 .875 (22,23) | .408 (10,36) | .060 (1,52) | |
| 17W08753 | W 8753 .875 (22,23) | .257 (6,53) | .031 (0,79) | |
| 17W08754 | W 8754 .885 (22,48) | .343 (8,71) | .062 (1,57) | |
| 17W08755 | W 8755 .855 (21,72) | .312 (7,92) | .125 (3,18) | |
| 17W08756 | W 8756 .875 (22,23) | .500 (12,70) | .125 (3,18) | |
| 17W08757 | W 8757 .875 (22,23) | .312 (7,92) | .187 (4,75) | |
| 17W08758 | W 8758 .865 (21,97) | .340 (8,64) | .187 (4,75) | |
| 17W08759 | W 8759 .875 (22,23) | .377 (9,58) | .062 (1,57) | |
| 17W08760 | W 8760 .875 (22,23) | .380 (9,65) | .093 (2,36) | |
| 17W08761 | W 8761 .875 (22,23) | .390 (9,91) | .093 (2,36) | |
| 17W08762 | W 8762 .875 (22,23) | .257 (6,53) | .062 (1,57) | |
| 17W08763 | W 8763 .875 (22,23) | .627 (15,93) | .114 (2,90) | |
| 17W08764 | W 8764 7/8 (22,23) | .265 (6,73) | .093 (2,36) | |
| 17W08765 | W 8765 .870 (22,10) | .531 (13,49) | .187 (4,75) | |
| 17W08767 | W 8767 .860 (21,84) | .397 (10,08) | .165 (4,19) | |
| 17W08768 | W 8768 .885 (22,48) | .390 (9,91) | .094 (2,39) | |
| 17W08769 | W 8769 .875 (22,23) | .750 (19,05) | .160 (4,06) | |
| 17W08800 | W 8800 .880 (22,35) | .390 (9,91) | .062 (1,57) | |
| 17W08801 | W 8801 .872 (22,15) | .315 (8,00) | .062 (1,57) | |
| 17W08803 | W 8803 .882 (22,40) | .589 (14,96) | .085 (2,16) | |
| 17W08806 | W 8806 .885 (22,48) | .385 (9,78) | .062 (1,57) | |



New Sizes

NYLON SPECIAL FLAT WASHERS

| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|---------------|--------------|-------------|
| 17W08810 | W 8810 | .880 (22,35) | .500 (12,70) | .065 (1,65) |
| 17W08812 | W 8812 | .880 (22,86) | .385 (9,78) | .125 (3,18) |
| 17W08901 | W 8901 | .890 (22,61) | .315 (8,00) | .215 (5,46) |
| 17W08950 | W 8950 | .900 (22,86) | .255 (6,48) | .125 (3,18) |
| 17W08951 | W 8951 | .890 (22,61) | .317 (8,05) | .245 (6,22) |
| 17W09000 | W 9000 | .900 (22,86) | .375 (9,53) | .055 (1,40) |
| 17W09001 | W 9001 | .900 (22,86) | .500 (12,70) | .075 (1,91) |
| 17W09002 | W 9002 | .900 (22,86) | .515 (13,08) | .060 (1,52) |
| 17W09260 | W 9260 | .926 (23,52) | .705 (17,91) | .124 (3,15) |
| 17W09282 | W 9282 | .970 (24,64) | .230 (5,84) | .125 (3,18) |
| 17W09283 | W 9283 | 1.005 (25,53) | .406 (10,31) | .080 (2,03) |
| 17W09290 | W 9290 | .929 (23,60) | .472 (11,99) | .126 (3,20) |
| 17W09320 | W 9320 | .932 (23,67) | .381 (9,68) | .031 (0,79) |
| 17W09350 | W 9350 | 15/16 (23,81) | .380 (9,65) | .062 (1,57) |
| 17W09371 | W 9371 | .937 (23,80) | .625 (15,88) | .093 (2,36) |
| 17W09376 | W 9376 | .937 (23,80) | .583 (14,81) | .062 (1,57) |
| 17W09378 | W 9378 | .937 (23,80) | .580 (14,73) | .082 (2,08) |
| 17W09381 | W 9381 | .938 (23,83) | .453 (11,51) | .155 (3,94) |
| 17W09400 | W 9400 | .944 (23,98) | .331 (8,41) | .098 (2,49) |
| 17W09406 | W 9406 | .940 (23,88) | .506 (12,85) | .064 (1,63) |
| 17W09571 | W 9571 | .957 (24,31) | .666 (16,92) | .139 (3,53) |
| 17W09600 | W 9600 | .960 (24,38) | .692 (17,58) | .126 (3,20) |
| 17W09806 | W 9806 | .980 (24,89) | .343 (8,71) | .065 (1,65) |
| 17W09841 | W 9841 | .984 (24,99) | .406 (10,31) | .125 (3,18) |
| 17W09851 | W 9851 | .983 (24,97) | .360 (9,14) | .120 (3,05) |
| 17W09852 | W 9852 | .990 (25,15) | .416 (10,57) | .060 (1,52) |
| 17W09853 | W 9853 | 1.000 (25,40) | .781 (19,84) | .075 (1,91) |
| 17W09854 | W 9854 | 1.000 (25,40) | .333 (8,46) | .385 (9,78) |
| 17W09855 | W 9855 | .990 (25,15) | .337 (8,56) | .292 (7,42) |
| 17W09856 | W 9856 | 1.000 (25,40) | .339 (8,61) | .154 (3,91) |
| 17W09900 | W 9900 | 1.000 (25,40) | .375 (9,53) | .062 (1,57) |
| 17W09901 | W 9901 | 1 (25,40) | .76 (19,30) | .062 (1,57) |
| 17W09902 | W 9902 | 1.003 (25,48) | .485 (12,32) | .173 (4,39) |
| 17W09903 | W 9903 | 1.006 (25,55) | .189 (4,80) | .040 (1,02) |
| 17W09904 | W 9904 | 1.030 (26,16) | .550 (13,97) | .062 (1,57) |
| 17W09930 | W 9930 | .993 (25,22) | .771 (19,58) | .124 (3,15) |
| 17W09931 | W 9931 | 1.000 (25,40) | .390 (9,91) | .250 (6,35) |
| 17W09932 | W 9932 | 1.000 (25,40) | .390 (9,91) | .175 (4,45) |
| 17W09934 | W 9934 | 1.000 (25,40) | .297 (7,54) | .063 (1,60) |
| 17W10000 | W 10000 | 1.000 (25,40) | .156 (3,96) | .062 (1,57) |
| 17W10001 | W 10001 | 1.000 (25,40) | .450 (11,43) | .125 (3,18) |
| 17W10002 | W 10002 | 1.000 (25,40) | .406 (10,31) | .062 (1,57) |
| 17W10003 | W 10003 | 1.00 (25,40) | .562 (14,27) | .125 (3,18) |
| 17W10005 | W 10005 | 1.000 (25,40) | .632 (16,05) | .185 (4,70) |
| 17W10006 | W 10006 | 1.000 (25,40) | .518 (13,16) | .080 (2,03) |
| 17W10007 | W 10007 | 1.000 (25,40) | .730 (18,54) | .062 (1,57) |
| 17W10008 | W 10008 | 1.000 (25,40) | .631 (16,03) | .128 (3,25) |

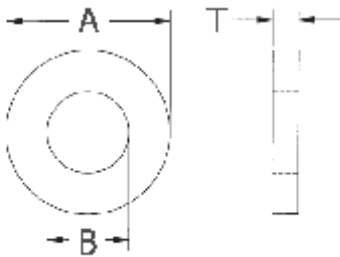


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

New Sizes

NYLON SPECIAL FLAT WASHERS



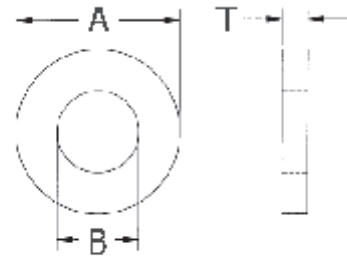
| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|---------------|---------------|--------------|
| 17W10009 | W 10009 | 1.000 (25,40) | .320 (8,13) | .375 (9,53) |
| 17W10010 | W 10010 | 1.000 (25,40) | .505 (12,83) | .125 (3,18) |
| 17W10011 | W 10011 | 1.004 (25,40) | .631 (16,03) | .065 (1,65) |
| 17W10012 | W 10012 | 1.000 (25,40) | .254 (6,45) | .325 (8,26) |
| 17W10013 | W 10013 | 1 (25,40) | .312 (7,92) | .032 (0,81) |
| 17W10014 | W 10014 | 1 (25,40) | 5/16 (7,94) | 3/16 (4,76) |
| 17W10015 | W 10015 | 1 (25,40) | 17/64 (6,74) | 5/16 (7,94) |
| 17W10016 | W 10016 | 1.000 (25,40) | .500 (12,70) | .100 (2,54) |
| 17W10017 | W 10017 | 1.000 (25,40) | .755 (19,18) | .175 (4,45) |
| 17W10018 | W 10018 | 1.500 (38,10) | 1.015 (25,78) | .250 (6,35) |
| 17W10019 | W 10019 | 1" (25,40) | .665 (16,89) | .125 (3,18) |
| 17W10020 | W 10020 | 1.000 (25,40) | .326 (8,28) | .125 (3,18) |
| 17W10021 | W 10021 | 1.000 (25,40) | .194 (4,93) | .160 (4,06) |
| 17W10022 | W 10022 | 1.024 (26,01) | .563 (14,30) | .220 (5,59) |
| 17W10023 | W 10023 | 1" (25,40) | 1/2" (12,70) | 1/16" (1,59) |
| 17W10024 | W 10024 | 1.000 (25,40) | .093 (2,36) | .125 (3,18) |
| 17W10025 | W 10025 | .995 (25,27) | .635 (16,13) | .250 (6,35) |
| 17W10041 | W 10041 | 1.000 (25,40) | .264 (6,71) | .070 (1,78) |
| 17W10042 | W 10042 | .750 (19,05) | .515 (13,08) | .250 (6,35) |
| 17W10043 | W 10043 | 1.000 (25,40) | .265 (6,73) | .262 (6,65) |
| 17W10060 | W 10060 | 1.006 (25,52) | .189 (4,80) | .064 (1,63) |
| 17W10100 | W 10100 | 1.010 (25,65) | .410 (10,41) | .100 (2,54) |
| 17W10311 | W 10311 | 1.031 (26,19) | .844 (21,44) | .040 (1,02) |
| 17W10570 | W 10570 | 1.057 (26,85) | .812 (20,62) | .125 (3,18) |
| 17W10571 | W 10571 | 1 (25,40) | .844 (21,44) | .125 (3,18) |
| 17W10620 | W 10620 | 1.060 (26,92) | .740 (18,80) | .10 (2,54) |
| 17W10622 | W 10622 | 1.062 (26,97) | .740 (18,80) | .225 (5,72) |
| 17W10625 | W 10625 | 1.055 (26,80) | .406 (10,31) | 1/4 (6,35) |
| 17W10626 | W 10626 | 1.102 (28,00) | .728 (18,49) | .039 (0,99) |
| 17W10627 | W 10627 | 1.135 (28,83) | 1.022 (25,96) | .500 (12,70) |
| 17W11000 | W 11000 | 1.128 (28,65) | .605 (15,37) | .239 (6,07) |
| 17W11001 | W 11001 | 1.181 (30,00) | .413 (10,49) | .098 (2,49) |
| 17W11002 | W 11002 | 1.117 (28,37) | .875 (22,23) | .195 (4,95) |
| 17W11140 | W 11140 | 1.114 (28,30) | .840 (21,34) | .127 (3,23) |
| 17W11202 | W 11202 | 1.120 (28,45) | .390 (9,91) | .125 (3,18) |
| 17W11203 | W 11203 | 1.120 (28,45) | .503 (12,78) | .033 (0,84) |
| 17W11204 | W 11204 | 1.120 (28,45) | .635 (16,13) | .140 (3,56) |
| 17W11210 | W 11210 | 1-1/8 (28,58) | .320 (8,13) | .062 (1,57) |
| 17W11211 | W 11211 | 1.121 (28,47) | .316 (8,03) | .034 (0,86) |
| 17W11212 | W 11212 | 1.13 (28,70) | .63 (16,00) | 1/16 (1,59) |
| 17W11251 | W 11251 | 1.120 (28,45) | .540 (13,72) | .125 (3,18) |
| 17W11256 | W 11256 | 1.125 (28,58) | .889 (22,58) | .060 (1,52) |
| 17W11257 | W 11257 | 1.125 (28,58) | .500 (12,70) | .062 (1,57) |
| 17W11258 | W 11258 | 1.125 (28,58) | .763 (19,38) | .125 (3,18) |
| 17W11259 | W 11259 | 1.125 (28,58) | .920 (23,37) | .126 (3,20) |
| 17W11320 | W 11320 | 1.132 (28,75) | .942 (23,93) | .130 (3,30) |
| 17W11720 | W 11720 | 1.17 (29,72) | .377 (9,58) | .125 (3,18) |



New Sizes

NYLON SPECIAL FLAT WASHERS

| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|-----------------|---------------|--------------|
| 17W11750 | W 11750 | 1.175 (29,85) | .310 (7,87) | .125 (3,18) |
| 17W11800 | W 11800 | 1.184 (30,07) | .477 (12,12) | .079 (2,01) |
| 17W12030 | W 12030 | 1.220 (30,99) | .502 (12,75) | .150 (3,81) |
| 17W12031 | W 12031 | 1.203 (30,56) | .984 (24,99) | .050 (1,27) |
| 17W12032 | W 12032 | 1.28 (32,57) | .88 (22,35) | .062 (1,57) |
| 17W12181 | W 12181 | 1.218 (30,94) | 1.031 (26,19) | .040 (1,02) |
| 17W12250 | W 12250 | 1.225 (31,12) | .643 (16,33) | .100 (2,54) |
| 17W12251 | W 12251 | 1.245 (31,62) | 1.001 (25,43) | .031 (0,79) |
| 17W12501 | W 12501 | 1.235 (31,37) | .365 (9,27) | .110 (2,79) |
| 17W12502 | W 12502 | 1.250 (31,75) | .875 (22,23) | .125 (3,18) |
| 17W12503 | W 12503 | 1.250 (31,75) | .765 (19,43) | .080 (2,03) |
| 17W12504 | W 12504 | 1.250 (31,75) | .516 (13,11) | .062 (1,57) |
| 17W12505 | W 12505 | 1.267 (32,18) | .390 (9,91) | .045 (1,14) |
| 17W12506 | W 12506 | 1.250 (31,75) | .250 (6,35) | .255 (6,48) |
| 17W12507 | W 12507 | 1.250 (31,75) | .805 (20,45) | .060 (1,52) |
| 17W12508 | W 12508 | 1.250 (31,75) | .281 (7,14) | .063 (1,60) |
| 17W12509 | W 12509 | 1 1/4 (31,75) | 9/16 (14,29) | 1/32 (0,79) |
| 17W12510 | W 12510 | 1.250 (31,75) | .812 (20,62) | .080 (2,03) |
| 17W12511 | W 12511 | 1 17/64 (32,13) | .390 (9,90) | .156 (3,96) |
| 17W12512 | W 12512 | 1.250 (31,75) | .380 (9,66) | .125 (3,18) |
| 17W12513 | W 12513 | 1.250 (31,75) | .310 (7,87) | .120 (3,05) |
| 17W12515 | W 12515 | 1.250 (31,75) | .226 (5,74) | .125 (3,18) |
| 17W12516 | W 12516 | 1 1/4" (31,75) | .260 (6,60) | .060 (1,52) |
| 17W12517 | W 12517 | 1.250 (31,75) | .839 (21,31) | .040 (1,02) |
| 17W12518 | W 12518 | 1.250 (31,75) | .437 (11,10) | .125 (3,18) |
| 17W12525 | W 12525 | 1.260 (32,00) | .340 (8,64) | .250 (6,35) |
| 17W12527 | W 12527 | 1.250 (31,75) | .257 (6,53) | .255 (6,48) |
| 17W12528 | W 12528 | 1.250 (31,75) | .270 (6,86) | .080 (2,03) |
| 17W12562 | W 12562 | 1 1/4 (31,75) | .250 (6,35) | .062 (1,57) |
| 17W12580 | W 12580 | 1.258 (31,95) | .226 (5,74) | .065 (1,65) |
| 17W12593 | W 12593 | 1.250 (31,75) | .100 (2,54) | .060 (1,52) |
| 17W12604 | W 12604 | 1.27 (32,36) | .400 (10,16) | .062 (1,57) |
| 17W13101 | W 13101 | 1.310 (33,27) | .645 (16,38) | .120 (3,05) |
| 17W13119 | W 13119 | 1.312 (33,32) | .510 (12,95) | .400 (10,16) |
| 17W13120 | W 13120 | 1.312 (33,32) | 1.000 (25,40) | .191 (4,85) |
| 17W13121 | W 13121 | 1.312 (33,32) | 1.088 (27,36) | .062 (1,57) |
| 17W13122 | W 13122 | 1.312 (33,32) | 1.000 (25,40) | .125 (3,18) |
| 17W13123 | W 13123 | 1.375 (34,93) | .640 (16,26) | .090 (2,29) |
| 17W13125 | W 13125 | 1.312 (33,32) | 1.026 (26,06) | .191 (4,85) |
| 17W13126 | W 13126 | 1.312 (33,32) | .625 (15,88) | .050 (1,27) |
| 17W13748 | W 13748 | 1.375 (34,93) | .250 (6,35) | .750 (19,05) |
| 17W13749 | W 13749 | 1.370 (24,80) | .380 (7,65) | .125 (3,18) |
| 17W13750 | W 13750 | 1.375 (34,93) | .250 (6,35) | .064 (7,63) |
| 17W13751 | W 13751 | 1.375 (34,93) | .525 (13,34) | .125 (3,18) |
| 17W13752 | W 13752 | 1.375 (34,93) | .510 (12,95) | .062 (1,57) |
| 17W13753 | W 13753 | 1.375 (34,93) | .656 (16,66) | .125 (3,18) |
| 17W13754 | W 13754 | 1.375 (34,93) | .330 (8,32) | .125 (3,18) |

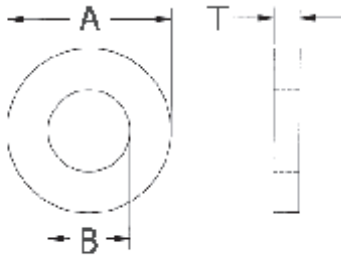


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION
IV

New Sizes

NYLON SPECIAL FLAT WASHERS



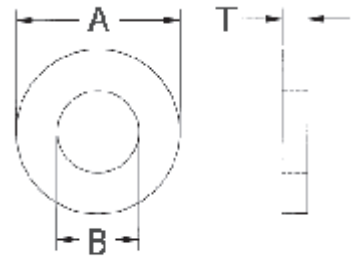
| ITEM NUMBER | DESCRIPTION | A | | B | | T | |
|-------------|-------------|--------|---------|-------|---------|-------|---------|
| 17W13755 | W 13755 | 1.31 | (33,27) | .938 | (23,82) | .040 | (1,02) |
| 17W13756 | W 13756 | 1.363 | (34,62) | .523 | (13,28) | .051 | (1,30) |
| 17W13757 | W 13757 | 1.375 | (34,93) | .450 | (11,43) | .090 | (2,29) |
| 17W13758 | W 13758 | 1.375 | (34,93) | .530 | (13,46) | .173 | (4,39) |
| 17W13759 | W 13759 | 1.375 | (34,93) | 1.015 | (25,78) | .125 | (3,18) |
| 17W14250 | W 14250 | 1.420 | (36,07) | .760 | (19,30) | .100 | (1,54) |
| 17W14251 | W 14251 | 1.395 | (35,43) | .250 | (6,35) | .118 | (3,00) |
| 17W14371 | W 14371 | 1.437 | (36,50) | 1.000 | (25,40) | .069 | (1,75) |
| 17W14501 | W 14501 | 1.450 | (36,83) | 1.000 | (25,40) | .063 | (1,65) |
| 17W14502 | W 14502 | 1.450 | (36,83) | .990 | (25,15) | .120 | (3,05) |
| 17W14610 | W 14610 | 1.460 | (37,08) | 1.180 | (29,97) | .100 | (2,54) |
| 17W14681 | W 14681 | 1.468 | (37,29) | .515 | (13,08) | .050 | (1,27) |
| 17W14930 | W 14930 | 1.500 | (38,10) | .437 | (11,10) | .130 | (3,30) |
| 17W14931 | W 14931 | 1.500 | (38,10) | .505 | (12,83) | .125 | (3,18) |
| 17W14932 | W 14932 | 1.500 | (38,10) | .265 | (6,73) | .375 | (9,53) |
| 17W14933 | W 14933 | 1 1/2 | (38,10) | 5/16 | (7,94) | 1/16 | (1,59) |
| 17W15000 | W 15000 | 1.500 | (38,10) | .188 | (4,75) | .068 | (1,72) |
| 17W15001 | W 15001 | 1.500 | (38,10) | .665 | (16,89) | .094 | (2,39) |
| 17W15002 | W 15002 | 1.500 | (38,10) | .500 | (12,70) | .125 | (3,18) |
| 17W15003 | W 15003 | 1.500 | (38,10) | .375 | (9,53) | .375 | (9,53) |
| 17W15004 | W 15004 | 1.500 | (38,10) | .755 | (19,18) | .125 | (3,18) |
| 17W15005 | W 15005 | 1.500 | (38,10) | .696 | (17,68) | .120 | (3,05) |
| 17W15006 | W 15006 | 1.490 | (37,85) | .521 | (13,23) | .120 | (3,05) |
| 17W15007 | W 15007 | 1.575 | (40,01) | .659 | (16,74) | .118 | (3,00) |
| 17W15008 | W 15008 | 1.500 | (38,10) | 1.015 | (25,78) | .080 | (2,03) |
| 17W15009 | W 15009 | 1 1/2 | (38,10) | 1 1/4 | (31,75) | 1/8 | (3,18) |
| 17W15010 | W 15010 | 1.493 | (37,92) | .604 | (15,34) | .220 | (5,59) |
| 17W15011 | W 15011 | 1 1/2 | (38,10) | .335 | (8,51) | .125 | (3,18) |
| 17W15012 | W 15012 | 1.500 | (38,10) | .505 | (12,83) | .130 | (3,30) |
| 17W15013 | W 15013 | 1.500 | (38,10) | .507 | (12,88) | .250 | (6,35) |
| 17W15014 | W 15014 | 1.468 | (37,29) | 1.010 | (25,65) | .112 | (2,84) |
| 17W15031 | W 15031 | 1.500 | (38,10) | .515 | (13,08) | .7/16 | (11,11) |
| 17W15050 | W 15050 | 1.505 | (38,23) | .750 | (19,05) | .053 | (1,35) |
| 17W15051 | W 15051 | 1.49 | (37,85) | .81 | (20,57) | .062 | (1,57) |
| 17W15052 | W 15052 | 1.57 | (39,87) | .512 | (13,00) | .118 | (3,00) |
| 17W15053 | W 15053 | 1.575 | (40,01) | .795 | (20,19) | .039 | (0,99) |
| 17W15400 | W 15400 | 1.540 | (39,12) | 1.164 | (29,57) | .192 | (4,88) |
| 17W15620 | W 15620 | 1.563 | (39,70) | 1" | (25,40) | .062 | (1,57) |
| 17W15625 | W 15625 | 1-9/16 | (39,70) | .630 | (16,00) | .062 | (1,57) |
| 17W16240 | W 16240 | 1.619 | (41,12) | 1.495 | (37,97) | .245 | (6,22) |
| 17W16250 | W 16250 | 1.625 | (41,28) | .531 | (13,49) | .312 | (7,92) |
| 17W16251 | W 16251 | 1.625 | (41,28) | 1.375 | (34,93) | .110 | (2,79) |
| 17W16252 | W 16252 | 1.625 | (41,28) | 1.0 | (25,40) | .187 | (4,75) |
| 17W16253 | W 16253 | 1.625 | (41,28) | .940 | (23,88) | .060 | (1,52) |
| 17W16300 | W 16300 | 1.635 | (41,53) | 1.405 | (35,69) | .093 | (2,36) |
| 17W16514 | W 16514 | 1.650 | (41,91) | 1.395 | (35,43) | .140 | (3,56) |
| 17W16900 | W 16900 | 1.695 | (43,05) | 1.255 | (31,88) | .065 | (1,65) |



New Sizes

NYLON SPECIAL FLAT WASHERS

| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-------------|-----------------|---------------|-------------|
| 17W17181 | W 17181 | 1.718 (43,64) | .625 (15,88) | .050 (1,27) |
| 17W17241 | W 17241 | 1.724 (43,79) | 1.500 (38,10) | .032 (0,81) |
| 17W17242 | W 17242 | 1.750 (44,45) | .812 (20,62) | .125 (3,18) |
| 17W17251 | W 17251 | 1.425 (36,90) | .697 (17,70) | .100 (2,54) |
| 17W17252 | W 17252 | 1.490 (37,85) | .765 (19,43) | .100 (2,54) |
| 17W17500 | W 17500 | 1.750 (44,45) | .928 (23,57) | .275 (6,99) |
| 17W18001 | W 18001 | 1.800 (45,72) | .948 (24,08) | .057 (1,45) |
| 17W18500 | W 18500 | 1.850 (46,99) | 1.028 (26,11) | .120 (3,05) |
| 17W19060 | W 19060 | 1.906 (48,41) | 1.500 (38,10) | .093 (2,36) |
| 17W20001 | W 20001 | 2.01 (51,05) | 1.28 (32,51) | .135 (3,43) |
| 17W20002 | W 20002 | 2.000 (50,80) | .510 (12,95) | .060 (1,52) |
| 17W20003 | W 20003 | 2.000 (50,80) | 1.525 (38,75) | .060 (1,52) |
| 17W20004 | W 20004 | 2.000 (50,80) | 1.080 (27,43) | .160 (4,06) |
| 17W20006 | W 20006 | 2.000 (50,80) | .630 (16,00) | .125 (3,18) |
| 17W20007 | W 20007 | 2.000 (50,80) | .390 (9,91) | .062 (1,57) |
| 17W20012 | W 20012 | 1.985 (50,42) | 1.525 (38,75) | .125 (3,18) |
| 17W20013 | W 20013 | 2.000 (50,80) | 1.325 (33,66) | .310 (7,87) |
| 17W20014 | W 20014 | 2.250 (57,15) | 1.410 (35,81) | .130 (3,30) |
| 17W20015 | W 20015 | 2.150 (54,61) | .275 (6,99) | .125 (3,18) |
| 17W20062 | W 20062 | 2 (50,80) | .805 (20,45) | .062 (1,57) |
| 17W20600 | W 20600 | 2.060 (52,32) | 1.800 (45,72) | .055 (1,40) |
| 17W21350 | W 21350 | 2 9/64 (54,38) | 1.760 (44,70) | .130 (3,30) |
| 17W21850 | W 21850 | 2.180 (55,37) | 1.420 (36,07) | .050 (1,27) |
| 17W22005 | W 22005 | 2.205 (56,01) | 1.720 (43,69) | .050 (1,27) |
| 17W22500 | W 22500 | 2 1/4 (57,15) | 1 (25,40) | .075 (1,91) |
| 17W22800 | W 22800 | 2.275 (57,79) | 1.275 (32,39) | .120 (3,05) |
| 17W25001 | W 25001 | 2.500 (63,50) | 1.075 (27,31) | .125 (3,18) |
| 17W25003 | W 25003 | 2.500 (63,50) | 1.750 (44,45) | .125 (3,18) |
| 17W20007 | W 20007 | 2.000 (50,80) | .390 (9,91) | .062 (1,57) |
| 17W26802 | W 26802 | 2.69 (68,33) | 1.93 (49,02) | .125 (3,18) |
| 17W29300 | W 29300 | 2.930 (74,42) | .632 (16,05) | .150 (3,81) |
| 17W29503 | W 29503 | 2.935 (74,93) | 1.125 (28,60) | .093 (2,54) |
| 17W30000 | W 30000 | 3.000 (76,20) | 1.270 (32,26) | .093 (2,36) |
| 17W30002 | W 30002 | 2.970 (75,44) | 1.490 (37,85) | .125 (3,18) |
| 17W30003 | W 30003 | 3.016 (76,61) | 2.800 (71,12) | .122 (3,10) |
| 17W30300 | W 30300 | 3.600 (91,44) | 3.030 (76,96) | .075 (1,91) |
| 17W30062 | W 30062 | 2-31/32 (75,41) | .805 (20,45) | 1/16 (1,59) |
| 17W30073 | W 30073 | 3.016 (76,61) | 2.80 (71,12) | .072 (1,83) |
| 17W30093 | W 30093 | 2.995 (76,07) | 1.625 (41,28) | .093 (2,36) |
| 17W31250 | W 31250 | 3.132 (79,55) | .812 (20,62) | .125 (3,18) |
| 17W32600 | W 32600 | 3.260 (82,80) | 2.620 (66,55) | .062 (1,57) |
| 17W37500 | W 37500 | 3.750 (95,25) | .375 (9,53) | .062 (1,57) |

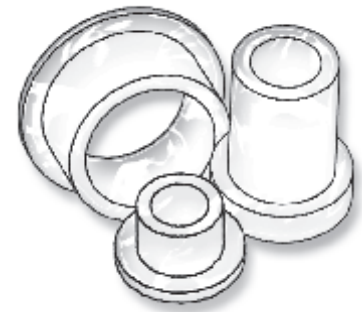


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

NYLON SHOULDER WASHERS

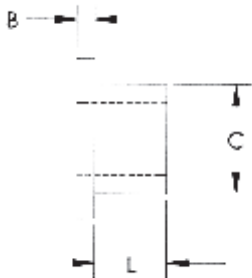
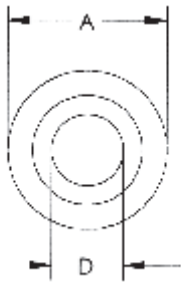
Nylon Shoulder Washers are suitable for a large variety of insulation and mechanical applications.



New Sizes

- ▶ THEY SEAL
- ▶ REDUCE VIBRATION
- ▶ ACT AS SPACERS AND GUIDES
- ▶ STRONG AND CORROSION RESISTANT

| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|--------------|--------------|--------------|-------------|-------------|
| 12SWS0152 | SWS 152 | 3/64 (1,19) | .105 (2,67) | 3/64 (1,19) | .084 (2,13) | .061 (1,55) |
| 12SWS0155 | SWS 155 | .060 (1,52) | .125 (3,18) | .030 (0,76) | .080 (2,03) | .055 (1,40) |
| 12SWS0156 | SWS 156 | 1/32 (0,79) | .228 (5,79) | 1/32 (0,79) | .122 (3,10) | .093 (2,36) |
| 12SWS0157 | SWS 157 | .035 (0,89) | .235 (5,97) | .095 (2,41) | .147 (3,73) | .115 (2,92) |
| 12SWS0158 | SWS 158 | .250 (6,35) | .187 (4,75) | .047 (1,19) | .120 (3,05) | .090 (2,29) |
| 12SWS0159 | SWS 159 | .206 (5,28) | .187 (4,75) | .156 (3,96) | .156 (3,96) | .096 (2,44) |
| 12SWS0180 | SWS 180 | .075 (1,91) | .181 (4,60) | 3/64 (1,19) | .120 (3,05) | .045 (1,14) |
| 12SWS0183 | SWS 183 | 1/32 (0,79) | .182 (4,62) | 5/64 (1,98) | .125 (3,18) | .085 (2,16) |
| 12SWS0184 | SWS 184 | 1/32 (0,79) | .189 (4,80) | 1/16 (1,59) | .119 (3,02) | .095 (2,41) |
| 12SWS0185 | SWS 185 | .106 (2,69) | .433 (10,10) | .161 (4,09) | .259 (6,58) | .197 (5,00) |
| 12SWS0186 | SWS 186 | .088 (2,24) | .228 (5,79) | .039 (0,99) | .140 (3,56) | .098 (2,49) |
| 12SWS0187 | SWS 187 | 1/64 (0,41) | .187 (4,75) | 1/32 (0,79) | .119 (3,02) | .089 (2,26) |
| 12SWS0188 | SWS 188 | .030 (0,76) | .187 (4,75) | .030 (0,76) | .131 (3,33) | .090 (2,29) |
| 12SWS0189 | SWS 189 | .020 (0,51) | .187 (4,75) | .030 (0,76) | .119 (3,02) | .090 (2,29) |
| 12SWS0190 | SWS 190 | 9/32 (7,14) | .197 (5,00) | 1/32 (0,79) | .118 (3,00) | .075 (1,91) |
| 12SWS0191 | SWS 191 | .100 (2,54) | .350 (8,89) | .090 (2,29) | .200 (5,08) | .140 (3,56) |
| 12SWS0192 | SWS 192 | .052 (1,32) | .253 (6,43) | .047 (1,19) | .136 (3,45) | .120 (3,05) |
| 12SWS0193 | SWS 193 | .040 (1,02) | .250 (6,35) | .031 (0,79) | .140 (3,56) | .093 (2,36) |
| 12SWS0194 | SWS 194 | .046 (1,17) | .197 (5,00) | .027 (0,69) | .144 (3,66) | .118 (3,00) |
| 12SWS0195 | SWS 195 | 1/16 (1,59) | .195 (4,95) | 1/32 (0,79) | .120 (3,05) | .093 (2,36) |
| 12SWS0196 | SWS 196 | 3/64 (1,19) | .240 (6,09) | 1/16 (1,59) | .135 (3,42) | .114 (2,89) |
| 12SWS0197 | SWS 197 | 1/32 (0,79) | .216 (5,48) | 3/64 (1,19) | .135 (3,42) | .115 (2,92) |
| 12SWS0198 | SWS 198 | 1/32 (0,79) | .200 (5,08) | 1/32 (0,79) | .140 (3,56) | .115 (2,92) |
| 12SWS0199 | SWS 199 | 5/64 (1,98) | .187 (4,75) | 1/32 (0,79) | .119 (3,02) | .063 (1,60) |
| 12SWS0200 | SWS 200 | 1/32 (0,79) | .200 (5,08) | 5/64 (1,98) | .135 (3,43) | .116 (2,95) |
| 12SWS0201 | SWS 201 | 3/16 (4,76) | .187 (4,75) | 1/32 (0,79) | .119 (3,02) | .063 (1,60) |
| 12SWS0202 | SWS 202 | 5/64 (1,98) | .205 (5,21) | 1/32 (0,79) | .125 (3,18) | .093 (2,36) |
| 12SWS0203 | SWS 203 | 7/64 (2,77) | .205 (5,21) | 1/32 (0,79) | .125 (3,18) | .093 (2,36) |
| 12SWS0204 | SWS 204 | 3/16 (4,76) | .205 (5,21) | 1/32 (0,79) | .125 (3,18) | .093 (2,36) |
| 12SWS0205 | SWS 205 | 3/64 (1,19) | .202 (5,13) | 1/64 (0,41) | .145 (3,68) | .120 (3,05) |
| 12SWS0206 | SWS 206 | 1/16 (1,59) | .224 (5,69) | 1/32 (0,79) | .154 (3,91) | .120 (3,05) |
| 12SWS0207 | SWS 207 | 5/32 (3,97) | .242 (6,15) | 3/64 (1,19) | .135 (3,43) | .110 (2,79) |
| 12SWS0208 | SWS 208 | 1/16 (1,59) | .200 (5,08) | 1/32 (0,79) | .120 (3,05) | .093 (2,36) |
| 12SWS0209 | SWS 209 | 3/64 (1,19) | .210 (5,33) | 1/64 (0,41) | .145 (3,68) | .120 (3,05) |
| 12SWS0210 | SWS 210 | 3/64 (1,19) | .230 (5,84) | 1/64 (0,41) | .142 (3,61) | .122 (3,10) |
| 12SWS0211 | SWS 211 | 1/32 (0,79) | .218 (5,54) | 3/64 (1,19) | .135 (3,43) | .115 (2,92) |
| 12SWS0212 | SWS 212 | 7/16 (11,11) | .224 (5,69) | 1/32 (0,79) | .154 (3,91) | .120 (3,05) |
| 12SWS0213 | SWS 213 | 3/64 (1,19) | .200 (5,08) | 1/32 (0,79) | .138 (3,51) | .109 (2,77) |
| 12SWS0214 | SWS 214 | 1/32 (0,79) | .235 (5,97) | 3/64 (1,19) | .137 (3,48) | .115 (2,77) |
| 12SWS0215 | SWS 215 | 7/32 (5,55) | .250 (6,35) | 11/64 (4,37) | .150 (3,81) | .115 (2,92) |
| 12SWS0216 | SWS 216 | 1/32 (0,79) | .240 (6,10) | 1/32 (0,79) | .150 (3,81) | .098 (2,49) |
| 12SWS0217 | SWS 217 | 1/32 (0,79) | .228 (5,79) | 3/64 (1,19) | .138 (3,51) | .100 (2,54) |
| 12SWS0218 | SWS 218 | 1/8 (3,18) | .242 (6,15) | 3/64 (1,19) | .140 (3,56) | .115 (2,92) |
| 12SWS0219 | SWS 219 | 1/8 (3,18) | .290 (7,37) | 1/64 (0,41) | .250 (6,35) | .193 (4,90) |
| 12SWS0220 | SWS 220 | 3/64 (1,19) | .234 (5,94) | 3/64 (1,19) | .147 (3,73) | .115 (2,92) |

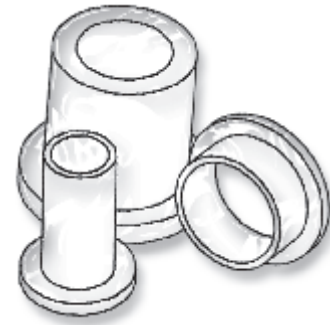


NYLON SHOULDER WASHERS

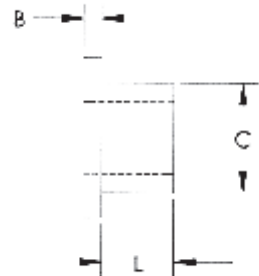
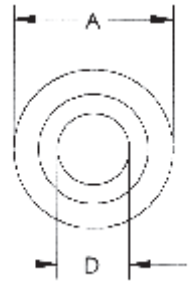
Nylon Shoulder Washers are suitable for a large variety of insulation and mechanical applications.

- ▶ THEY SEAL
- ▶ REDUCE VIBRATION
- ▶ ACT AS SPACERS AND GUIDES
- ▶ STRONG AND CORROSION RESISTANT

New Sizes



| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|---------------|--------------|-------------|--------------|-------------|
| 12SWS0221 | SWS 221 | 3/32 (2,38) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 12SWS0222 | SWS 222 | 1/8 (3,18) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 12SWS0223 | SWS 223 | 1/32 (0,79) | .250 (6,35) | 1/16 (1,59) | .187 (4,75) | .140 (3,56) |
| 12SWS0224 | SWS 224 | 3/64 (1,19) | .260 (6,60) | 1/16 (1,59) | .190 (4,83) | .140 (3,56) |
| 12SWS0225 | SWS 225 | 43/64 (17,02) | .250 (6,35) | 3/64 (1,19) | .187 (4,75) | .095 (2,41) |
| 12SWS0226 | SWS 226 | 1/16 (1,59) | .250 (6,35) | 1/32 (0,79) | .143 (3,63) | .118 (3,00) |
| 12SWS0227 | SWS 227 | 1/32 (0,79) | .257 (6,53) | 1/16 (1,59) | .187 (4,75) | .141 (3,58) |
| 12SWS0228 | SWS 228 | 1/64 (0,41) | .260 (6,60) | 1/64 (0,41) | .154 (3,91) | .095 (2,41) |
| 12SWS0229 | SWS 229 | 1/8 (3,18) | .250 (6,35) | 3/64 (1,19) | .139 (3,53) | .118 (3,00) |
| 12SWS0230 | SWS 230 | 5/32 (3,97) | .265 (6,73) | 1/32 (0,79) | .205 (5,21) | .142 (3,61) |
| 12SWS0232 | SWS 232 | 5/64 (1,98) | .253 (6,42) | 3/64 (1,19) | .136 (3,45) | .120 (3,05) |
| 12SWS0233 | SWS 233 | 1/32 (0,79) | .203 (5,16) | 3/64 (1,19) | .140 (3,56) | .115 (2,92) |
| 12SWS0234 | SWS 234 | .050 (1,40) | .239 (6,07) | .020 (0,51) | .139 (3,53) | .116 (2,95) |
| 12SWS0235 | SWS 235 | .033 (0,84) | .210 (5,33) | .042 (1,07) | .143 (3,63) | .116 (2,95) |
| 12SWS0236 | SWS 236 | .020 (0,51) | .250 (6,35) | .030 (0,76) | .150 (3,81) | .116 (2,96) |
| 12SWS0237 | SWS 237 | .040 (1,02) | .235 (5,97) | .047 (1,19) | .147 (3,73) | .115 (2,92) |
| 12SWS0238 | SWS 238 | .030 (0,76) | .230 (5,84) | .040 (1,02) | .150 (3,81) | .125 (3,18) |
| 12SWS0239 | SWS 239 | .090 (2,29) | .224 (5,69) | .028 (0,71) | .154 (3,91) | .120 (3,05) |
| 12SWS0240 | SWS 240 | .100 (2,54) | .230 (5,84) | .025 (0,64) | .190 (4,83) | .150 (3,81) |
| 12SWS0241 | SWS 241 | .155 (3,94) | .224 (5,69) | .028 (0,71) | .154 (3,91) | .120 (3,05) |
| 12SWS0242 | SWS 242 | 3/32 (2,38) | .635 (16,13) | 9/64 (3,57) | .425 (10,80) | .201 (5,11) |
| 12SWS0243 | SWS 243 | .063 (1,60) | 15/64 (5,94) | .025 (0,64) | .164 (4,17) | .130 (3,30) |
| 12SWS0244 | SWS 244 | .031 (0,79) | .234 (5,94) | .025 (0,64) | .145 (3,68) | .115 (2,92) |
| 12SWS0245 | SWS 245 | .093 (2,36) | .235 (5,97) | .250 (6,35) | .145 (3,68) | .115 (2,92) |
| 12SWS0246 | SWS 246 | .027 (0,69) | .240 (6,10) | .047 (1,19) | .134 (3,40) | .115 (2,92) |
| 12SWS0247 | SWS 247 | 3/64 (1,19) | .252 (6,40) | 3/64 (1,19) | .140 (3,56) | .115 (2,92) |
| 12SWS0248 | SWS 248 | .090 (2,29) | .290 (7,37) | .060 (1,52) | .205 (5,21) | .125 (3,18) |
| 12SWS0249 | SWS 249 | .177 (4,50) | .244 (6,20) | .040 (1,02) | .157 (3,99) | .118 (3,00) |
| 12SWS0250 | SWS 250 | .156 (3,96) | .265 (6,73) | .118 (3,00) | .205 (5,21) | .142 (3,61) |
| 12SWS0251 | SWS 251 | .031 (0,79) | .250 (6,35) | .031 (0,79) | .154 (3,91) | .093 (2,36) |
| 12SWS0252 | SWS 252 | 3/64 (1,19) | .240 (6,10) | .130 (3,30) | .138 (3,51) | .114 (2,90) |
| 12SWS0253 | SWS 253 | .052 (1,32) | .200 (5,08) | .078 (1,98) | .135 (3,43) | .120 (3,05) |
| 12SWS0254 | SWS 254 | .281 (7,13) | .203 (5,16) | .040 (1,02) | .156 (3,96) | .100 (2,54) |
| 12SWS0255 | SWS 255 | 1/8 (2,94) | .500 (12,70) | 1/8 (2,94) | .375 (9,53) | .285 (7,14) |
| 12SWS0256 | SWS 256 | .100 (2,54) | .243 (6,17) | .060 (1,52) | .199 (5,05) | .125 (3,18) |
| 12SWS0280 | SWS 280 | .185 (4,70) | .280 (7,11) | .042 (1,07) | .150 (3,81) | .112 (2,84) |
| 12SWS0290 | SWS 290 | 1/32 (0,79) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 12SWS0291 | SWS 291 | .375 (9,53) | .290 (7,37) | .234 (5,94) | .170 (4,32) | .140 (3,56) |
| 12SWS0296 | SWS 296 | .375 (9,53) | .499 (12,67) | .125 (3,18) | .295 (7,49) | .187 (4,75) |
| 12SWS0300 | SWS 300 | .090 (2,29) | .250 (6,35) | .050 (1,27) | .150 (3,81) | .120 (3,05) |
| 12SWS0301 | SWS 301 | .065 (1,65) | .250 (6,35) | .030 (0,76) | .140 (3,56) | .098 (2,49) |
| 12SWS0302 | SWS 302 | .039 (0,99) | .210 (5,33) | .032 (0,81) | .141 (3,58) | .118 (3,00) |
| 12SWS0304 | SWS 304 | .453 (11,51) | .256 (6,50) | .055 (1,40) | .173 (4,39) | .118 (3,00) |
| 12SWS0305 | SWS 305 | .120 (3,05) | .250 (6,35) | .050 (1,27) | .135 (3,43) | .118 (3,00) |
| 12SWS0306 | SWS 306 | .062 (1,57) | .250 (6,35) | .031 (0,79) | .150 (3,81) | .116 (2,95) |

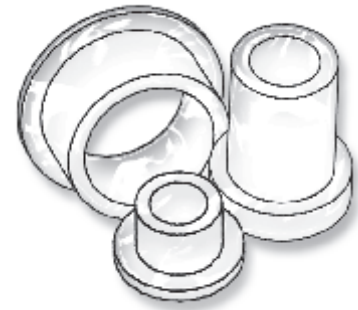


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

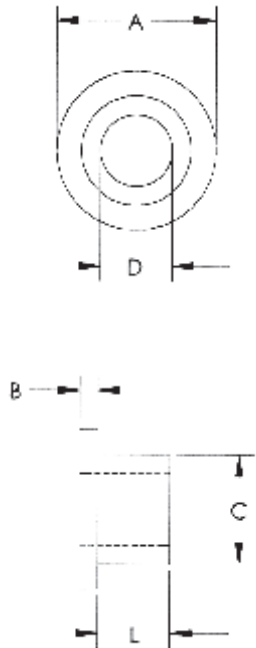
NYLON SHOULDER WASHERS

Nylon Shoulder Washers are suitable for a large variety of insulation and mechanical applications.



- ▶ THEY SEAL
- ▶ REDUCE VIBRATION
- ▶ ACT AS SPACERS AND GUIDES
- ▶ STRONG AND CORROSION RESISTANT

New Sizes



| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|--------------|--------------|-------------|-------------|-------------|
| 12SWS0310 | SWS 310 | .250 (6,35) | .250 (6,35) | .047 (1,19) | .156 (3,96) | .125 (3,18) |
| 12SWS0311 | SWS 311 | .437 (11,10) | .260 (6,60) | .032 (0,81) | .158 (4,01) | .125 (3,18) |
| 12SWS0312 | SWS 312 | .190 (4,83) | .575 (14,61) | .030 (0,76) | .365 (9,27) | .312 (7,92) |
| 12SWS0364 | SWS 364 | .453 (11,51) | .364 (9,24) | .055 (1,40) | .244 (6,20) | .197 (5,00) |
| 12SWS0380 | SWS 380 | .070 (1,78) | .255 (6,48) | .040 (1,02) | .145 (3,68) | .120 (3,05) |
| 12SWS0393 | SWS 393 | .380 (9,65) | .400 (10,16) | .032 (0,81) | .200 (5,08) | .132 (3,35) |
| 12SWS0394 | SWS 394 | .226 (5,74) | .276 (7,01) | .030 (0,76) | .236 (5,99) | .177 (4,50) |
| 12SWS0395 | SWS 395 | .025 (0,64) | .250 (6,35) | .031 (0,79) | .122 (3,10) | .093 (2,36) |
| 12SWS0396 | SWS 396 | .040 (1,02) | .250 (6,35) | .047 (1,19) | .140 (3,56) | .102 (2,59) |
| 12SWS0397 | SWS 397 | .032 (0,81) | .250 (6,35) | .063 (1,60) | .150 (3,81) | .116 (2,95) |
| 12SWS0398 | SWS 398 | .296 (7,52) | .290 (7,37) | .047 (1,19) | .170 (4,32) | .140 (3,56) |
| 12SWS0399 | SWS 399 | .050 (1,27) | .250 (6,35) | .031 (0,79) | .185 (4,70) | .120 (3,02) |
| 12SWS0400 | SWS 400 | 3/32 (2,38) | .235 (5,97) | 3/64 (1,19) | .140 (3,56) | .115 (2,92) |
| 12SWS0401 | SWS 401 | 1/4 (6,35) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 12SWS0402 | SWS 402 | 3/64 (1,19) | .240 (6,09) | 1/16 (1,59) | .138 (3,50) | .114 (2,89) |
| 12SWS0403 | SWS 403 | 1/16 (1,59) | .312 (7,93) | 1/16 (1,59) | .149 (3,79) | .115 (2,92) |
| 12SWS0404 | SWS 404 | 3/32 (2,38) | .312 (7,93) | 1/16 (1,59) | .149 (3,79) | .115 (2,92) |
| 12SWS0405 | SWS 405 | 1/64 (0,41) | .250 (6,35) | 3/64 (1,19) | .124 (3,15) | .111 (2,82) |
| 12SWS0406 | SWS 406 | 1/32 (0,79) | .252 (6,40) | 1/32 (0,79) | .186 (4,72) | .140 (3,56) |
| 12SWS0407 | SWS 407 | 1/32 (0,79) | .250 (6,35) | 1/32 (0,79) | .186 (4,72) | .139 (3,53) |
| 12SWS0408 | SWS 408 | .250 (6,35) | .235 (5,97) | .032 (0,81) | .120 (3,05) | .090 (2,29) |
| 12SWS0409 | SWS 409 | 1/8 (3,18) | .250 (6,35) | 1/32 (0,79) | .195 (4,95) | .130 (3,30) |
| 12SWS0410 | SWS 410 | 1/32 (0,79) | .250 (6,35) | 3/64 (1,19) | .114 (2,90) | .100 (2,54) |
| 12SWS0411 | SWS 411 | 1/16 (1,59) | .250 (6,35) | 1/32 (0,79) | .143 (3,63) | .115 (2,92) |
| 12SWS0412 | SWS 412 | 1/16 (1,59) | .250 (6,35) | 1/32 (0,79) | .169 (4,29) | .102 (2,59) |
| 12SWS0413 | SWS 413 | 3/32 (2,38) | .250 (6,35) | 3/64 (1,19) | .114 (2,90) | .100 (2,54) |
| 12SWS0414 | SWS 414 | 1/8 (3,18) | .281 (7,14) | 3/32 (2,38) | .158 (4,01) | .093 (2,36) |
| 12SWS0415 | SWS 415 | 3/16 (4,76) | .293 (7,44) | 3/64 (1,19) | .218 (5,53) | .138 (3,51) |
| 12SWS0416 | SWS 416 | 11/64 (4,37) | .250 (6,35) | 3/64 (1,19) | .186 (4,72) | .126 (3,20) |
| 12SWS0417 | SWS 417 | 1/64 (0,41) | .310 (7,87) | 1/16 (1,59) | .183 (4,65) | .139 (3,53) |
| 12SWS0418 | SWS 418 | 1/64 (0,41) | .312 (7,93) | 1/16 (1,59) | .187 (4,75) | .115 (2,92) |
| 12SWS0419 | SWS 419 | 1/32 (0,79) | .312 (7,93) | 1/32 (0,79) | .185 (4,70) | .140 (3,56) |
| 12SWS0420 | SWS 420 | 1/16 (1,59) | .312 (7,93) | 1/16 (1,59) | .170 (4,32) | .120 (3,05) |
| 12SWS0421 | SWS 421 | 3/64 (1,19) | .312 (7,93) | 1/16 (1,59) | .170 (4,32) | .127 (3,23) |
| 12SWS0422 | SWS 422 | 1/8 (3,18) | .312 (7,93) | 3/64 (1,19) | .234 (5,94) | .144 (3,66) |
| 12SWS0423 | SWS 423 | 1/64 (0,41) | .250 (6,35) | 1/32 (0,79) | .150 (3,81) | .116 (2,95) |
| 12SWS0424 | SWS 424 | 7/32 (5,55) | .295 (7,49) | 1/32 (0,79) | .234 (5,94) | .140 (3,56) |
| 12SWS0425 | SWS 425 | 1/32 (0,79) | .312 (7,93) | 1/16 (1,59) | .250 (6,35) | .196 (4,98) |
| 12SWS0426 | SWS 426 | 11/64 (4,37) | .250 (6,35) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 12SWS0427 | SWS 427 | 3/64 (1,19) | .250 (6,35) | 1/32 (0,79) | .185 (4,70) | .116 (2,95) |
| 12SWS0428 | SWS 428 | 7/64 (2,77) | .242 (6,15) | 3/64 (1,19) | .140 (3,56) | .115 (2,92) |
| 12SWS0429 | SWS 429 | 9/64 (3,58) | .250 (6,35) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 12SWS0430 | SWS 430 | 3/16 (4,76) | .312 (7,93) | 1/16 (1,59) | .250 (6,35) | .156 (3,96) |
| 12SWS0431 | SWS 431 | 3/32 (2,38) | .240 (6,10) | 1/32 (0,79) | .185 (4,70) | .125 (3,18) |
| 12SWS0432 | SWS 432 | 3/64 (1,19) | .250 (6,35) | 3/64 (1,19) | .143 (3,63) | .113 (2,87) |

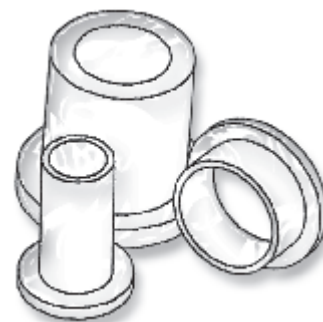


NYLON SHOULDER WASHERS

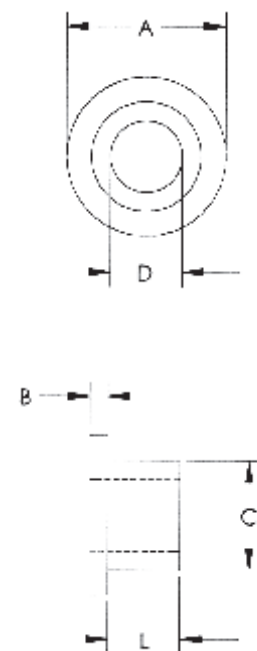
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- ▶ REDUCE VIBRATION
- ▶ ACT AS SPACERS AND GUIDES
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New Sizes



| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|--------------|-------------|-------------|-------------|-------------|
| 12SWS0433 | SWS 433 | 7/64 (2,77) | .250 (6,35) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 12SWS0434 | SWS 434 | 1/16 (1,59) | .312 (7,93) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 12SWS0435 | SWS 435 | 3/64 (1,19) | .250 (6,35) | 1/16 (1,59) | .185 (4,70) | .116 (2,95) |
| 12SWS0436 | SWS 436 | 1/32 (0,79) | .240 (6,10) | 3/64 (1,19) | .139 (3,53) | .115 (2,92) |
| 12SWS0437 | SWS 437 | 1/32 (0,79) | .265 (6,73) | 1/32 (0,79) | .157 (3,99) | .126 (3,20) |
| 12SWS0438 | SWS 438 | 1/32 (0,79) | .312 (7,93) | 1/16 (1,59) | .187 (4,75) | .141 (3,58) |
| 12SWS0439 | SWS 439 | 1/16 (1,59) | .250 (6,35) | 3/64 (1,19) | .138 (3,50) | .120 (3,05) |
| 12SWS0440 | SWS 440 | 5/16 (7,94) | .312 (7,93) | 1/32 (0,79) | .154 (3,91) | .130 (3,30) |
| 12SWS0441 | SWS 441 | 3/16 (4,76) | .312 (7,93) | 1/32 (0,79) | .234 (5,94) | .184 (4,67) |
| 12SWS0442 | SWS 442 | 7/32 (5,54) | .296 (7,52) | 1/32 (0,79) | .235 (5,97) | .135 (3,43) |
| 12SWS0443 | SWS 443 | .156 (3,96) | .252 (6,40) | .047 (1,19) | .140 (3,56) | .115 (2,92) |
| 12SWS0444 | SWS 444 | 1/16 (1,59) | .300 (7,62) | 3/64 (1,19) | .194 (4,93) | .160 (4,06) |
| 12SWS0445 | SWS 445 | 1/32 (0,79) | .313 (7,95) | 1/32 (0,79) | .175 (4,45) | .143 (3,63) |
| 12SWS0446 | SWS 446 | 1/64 (0,41) | .312 (7,93) | 3/64 (1,19) | .160 (4,06) | .097 (2,46) |
| 12SWS0448 | SWS 448 | 3/32 (2,38) | .312 (7,93) | 3/64 (1,19) | .187 (4,75) | .128 (3,25) |
| 12SWS0449 | SWS 449 | 1/32 (0,79) | .313 (7,95) | 1/32 (0,79) | .219 (5,56) | .124 (3,15) |
| 12SWS0450 | SWS 450 | 1/16 (1,59) | .312 (7,93) | 3/64 (1,19) | .234 (5,94) | .144 (3,66) |
| 12SWS0451 | SWS 451 | 1/32 (0,79) | .315 (8,00) | .030 (0,76) | .150 (3,81) | .115 (2,92) |
| 12SWS0452 | SWS 452 | 1/32 (0,79) | .312 (7,93) | 3/64 (1,19) | .203 (5,16) | .120 (3,05) |
| 12SWS0453 | SWS 453 | .027 (0,69) | .312 (7,93) | .035 (0,89) | .187 (4,75) | .140 (3,56) |
| 12SWS0454 | SWS 454 | 1/32 (0,79) | .313 (7,95) | 1/32 (0,79) | .219 (5,56) | .136 (3,45) |
| 12SWS0455 | SWS 455 | 3/64 (1,19) | .315 (8,00) | 1/32 (0,79) | .185 (4,70) | .126 (3,20) |
| 12SWS0456 | SWS 456 | 3/64 (1,19) | .250 (6,35) | 3/64 (1,19) | .156 (3,96) | .115 (2,92) |
| 12SWS0457 | SWS 457 | .031 (0,79) | .250 (6,35) | .031 (0,79) | .187 (4,75) | .120 (3,05) |
| 12SWS0458 | SWS 458 | .078 (1,98) | .312 (7,92) | .031 (0,79) | .185 (4,70) | .128 (3,25) |
| 12SWS0459 | SWS 459 | 15/64 (5,94) | .291 (7,39) | 1/16 (1,59) | .154 (3,91) | .120 (3,05) |
| 12SWS0460 | SWS 460 | .125 (3,18) | .290 (7,37) | .047 (1,19) | .170 (4,32) | .140 (3,56) |
| 12SWS0462 | SWS 462 | .031 (0,79) | .312 (7,93) | .063 (1,60) | .187 (4,75) | .123 (3,12) |
| 12SWS0463 | SWS 463 | .050 (1,27) | .312 (7,93) | .046 (1,17) | .229 (5,82) | .163 (4,13) |
| 12SWS0464 | SWS 464 | 19/64 (7,52) | .250 (6,35) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 12SWS0465 | SWS 465 | .060 (1,52) | .312 (7,93) | .030 (0,76) | .189 (4,80) | .144 (3,66) |
| 12SWS0466 | SWS 466 | .025 (0,64) | .307 (7,80) | .065 (0,89) | .154 (3,91) | .093 (2,36) |
| 12SWS0467 | SWS 467 | .062 (1,57) | .312 (7,93) | .063 (1,60) | .126 (3,20) | .091 (0,23) |
| 12SWS0468 | SWS 468 | .250 (6,35) | .312 (7,93) | .060 (1,52) | .210 (5,33) | .142 (3,61) |
| 12SWS0469 | SWS 469 | .122 (3,10) | .388 (9,85) | .187 (4,75) | .207 (5,26) | .160 (4,06) |
| 12SWS0470 | SWS 470 | .165 (4,19) | .290 (7,37) | .047 (1,19) | .200 (5,08) | .145 (3,68) |
| 12SWS0472 | SWS 472 | .027 (0,69) | .316 (8,03) | .096 (2,44) | .181 (4,60) | .150 (3,81) |
| 12SWS0473 | SWS 473 | .600 (15,24) | .290 (7,39) | .047 (1,19) | .210 (5,33) | .140 (3,56) |
| 12SWS0474 | SWS 474 | .312 (7,92) | .312 (7,92) | .058 (1,47) | .185 (4,70) | .125 (3,18) |
| 12SWS0475 | SWS 475 | .100 (2,54) | .312 (7,93) | .045 (1,14) | .150 (3,81) | .114 (2,90) |
| 12SWS0476 | SWS 476 | .052 (1,32) | .300 (7,62) | .035 (0,89) | .087 (2,21) | .055 (1,40) |
| 12SWS0477 | SWS 477 | .067 (1,70) | .308 (7,82) | .045 (1,14) | .183 (4,65) | .132 (3,35) |
| 12SWS0478 | SWS 478 | .750 (19,05) | .325 (8,26) | .047 (1,19) | .220 (5,59) | .140 (3,56) |
| 12SWS0479 | SWS 479 | .187 (4,75) | 5/16 (7,94) | .062 (1,58) | .172 (4,37) | .147 (3,73) |
| 12SWS0480 | SWS 480 | .100 (2,54) | .310 (7,87) | .037 (0,94) | .242 (6,15) | .164 (4,17) |

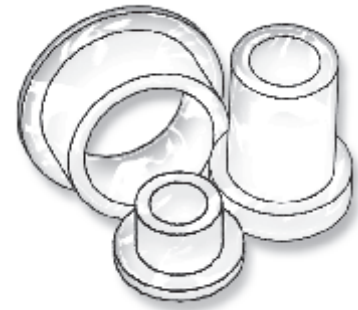


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

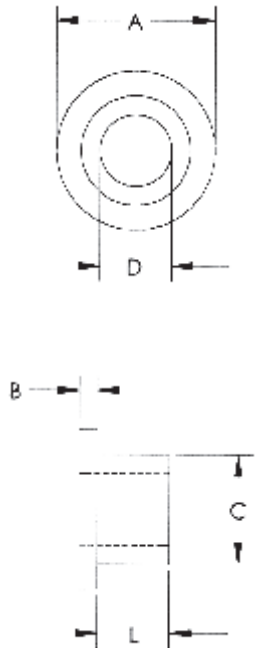
NYLON SHOULDER WASHERS

Nylon Shoulder Washers are suitable for a large variety of insulation and mechanical applications.



- ▶ THEY SEAL
- ▶ REDUCE VIBRATION
- ▶ ACT AS SPACERS AND GUIDES
- ▶ STRONG AND CORROSION RESISTANT

New Sizes



| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|---------------|--------------|-------------|-------------|-------------|
| 12SWS0601 | SWS 601 | 1/4 (6,35) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 12SWS0602 | SWS 602 | 1/32 (0,79) | .330 (8,38) | 1/16 (1,59) | .206 (5,23) | .141 (3,58) |
| 12SWS0603 | SWS 603 | .062 (1,57) | .300 (7,62) | .050 (1,27) | .180 (4,57) | .150 (3,81) |
| 12SWS0604 | SWS 604 | .125 (3,18) | .300 (7,62) | .047 (1,19) | .194 (4,93) | .160 (4,06) |
| 12SWS0605 | SWS 605 | 3/64 (1,19) | .328 (8,33) | 3/64 (1,19) | .218 (5,54) | .146 (3,71) |
| 12SWS0606 | SWS 606 | 3/64 (1,19) | .340 (8,64) | 5/64 (1,98) | .250 (6,35) | .140 (3,56) |
| 12SWS0607 | SWS 607 | 1/16 (1,59) | .289 (7,34) | 1/16 (1,59) | .215 (5,46) | .093 (2,36) |
| 12SWS0608 | SWS 608 | 3/64 (1,19) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 12SWS0609 | SWS 609 | 3/64 (1,19) | .312 (7,93) | 1/32 (0,79) | .185 (4,70) | .116 (2,95) |
| 12SWS0610 | SWS 610 | 1/16 (1,59) | .348 (8,83) | 1/32 (0,79) | .290 (7,36) | .256 (6,50) |
| 12SWS0612 | SWS 612 | 3/32 (2,38) | .316 (8,03) | 3/64 (1,19) | .158 (4,01) | .116 (2,95) |
| 12SWS0614 | SWS 614 | 1/32 (0,79) | .324 (8,23) | 1/16 (1,59) | .204 (5,18) | .140 (3,56) |
| 12SWS0615 | SWS 615 | .065 (1,65) | .320 (8,13) | .050 (1,27) | .182 (4,62) | .141 (3,58) |
| 12SWS0616 | SWS 616 | .126 (3,20) | .320 (8,13) | .039 (0,99) | .250 (6,35) | .218 (5,54) |
| 12SWS0621 | SWS 621 | 3/32 (2,38) | .340 (8,64) | 1/16 (1,59) | .220 (5,59) | .175 (4,45) |
| 12SWS0622 | SWS 622 | .387 (9,83) | .372 (9,45) | .062 (1,57) | .201 (5,11) | .176 (4,47) |
| 12SWS0628 | SWS 628 | 3/8 (9,53) | .345 (8,76) | 1/16 (1,59) | .205 (5,21) | .173 (4,39) |
| 12SWS0629 | SWS 629 | 3/64 (1,19) | .345 (8,76) | 1/16 (1,59) | .209 (5,30) | .171 (4,34) |
| 12SWS0630 | SWS 630 | 13/64 (5,16) | .368 (9,34) | 5/64 (1,98) | .146 (3,70) | .115 (2,92) |
| 12SWS0632 | SWS 632 | 1/16 (1,59) | .349 (8,87) | 3/64 (1,19) | .248 (6,30) | .140 (3,56) |
| 12SWS0633 | SWS 633 | .060 (1,52) | .349 (8,87) | .050 (1,27) | .260 (6,60) | .133 (3,38) |
| 12SWS0634 | SWS 634 | 11/64 (4,37) | .350 (8,89) | 1/64 (0,41) | .300 (7,62) | .112 (2,84) |
| 12SWS0635 | SWS 635 | .070 (1,78) | .375 (9,53) | .04 (1,02) | .190 (4,83) | .125 (3,18) |
| 12SWS0636 | SWS 636 | .120 (3,05) | .344 (8,74) | .063 (1,60) | .235 (5,97) | .175 (4,45) |
| 12SWS0798 | SWS 798 | .085 (2,16) | .344 (8,74) | .063 (1,60) | .235 (5,97) | .175 (4,45) |
| 12SWS0799 | SWS 799 | 3/64 (1,19) | .344 (8,74) | 7/64 (2,77) | .189 (4,80) | .141 (3,58) |
| 12SWS0800 | SWS 800 | 9/64 (3,58) | .344 (8,74) | 1/16 (1,59) | .210 (5,33) | .170 (4,32) |
| 12SWS0801 | SWS 801 | 3/8 (9,53) | .344 (8,74) | 1/16 (1,59) | .205 (5,21) | .173 (4,39) |
| 12SWS0802 | SWS 802 | 1/16 (1,59) | .375 (9,53) | 1/32 (0,79) | .195 (4,95) | .171 (4,34) |
| 12SWS0803 | SWS 803 | 13/32 (10,32) | .510 (12,95) | 1/16 (1,59) | .250 (6,35) | .171 (4,34) |
| 12SWS0804 | SWS 804 | .177 (4,50) | .355 (9,02) | .020 (0,51) | .315 (8,00) | .236 (5,99) |
| 12SWS0805 | SWS 805 | .283 (7,19) | .370 (9,40) | .067 (1,70) | .242 (6,15) | .195 (4,95) |
| 12SWS0806 | SWS 806 | .250 (6,35) | .344 (8,74) | .032 (0,81) | .205 (5,21) | .173 (4,39) |
| 12SWS0807 | SWS 807 | .046 (1,17) | .359 (9,12) | .060 (1,52) | .300 (7,62) | .227 (5,77) |
| 12SWS0808 | SWS 808 | 1/8 (3,18) | .375 (9,53) | 1/16 (1,59) | .280 (7,11) | .201 (5,10) |
| 12SWS0809 | SWS 809 | 5/32 (3,97) | .378 (9,60) | 5/64 (1,98) | .194 (4,92) | .116 (2,94) |
| 12SWS0810 | SWS 810 | 1/32 (0,79) | .375 (9,53) | 1/16 (1,59) | .250 (6,35) | .171 (4,34) |
| 12SWS0811 | SWS 811 | 3/64 (1,19) | .375 (9,53) | 3/64 (1,19) | .245 (6,22) | .192 (4,88) |
| 12SWS0812 | SWS 812 | 3/32 (2,38) | .375 (9,53) | 1/32 (0,79) | .260 (6,60) | .220 (5,59) |
| 12SWS0813 | SWS 813 | 7/64 (2,77) | .375 (9,53) | 3/64 (1,19) | .195 (4,95) | .136 (3,45) |
| 12SWS0814 | SWS 814 | 3/64 (1,19) | .375 (9,53) | 5/64 (1,98) | .244 (6,20) | .150 (3,81) |
| 12SWS0815 | SWS 815 | 3/32 (2,38) | .375 (9,53) | 1/32 (0,79) | .185 (4,70) | .140 (3,56) |
| 12SWS0816 | SWS 816 | 1/32 (0,79) | .375 (9,53) | 1/32 (0,79) | .250 (6,35) | .169 (4,29) |
| 12SWS0817 | SWS 817 | 3/64 (1,19) | .375 (9,53) | 1/16 (1,59) | .218 (5,54) | .140 (3,56) |
| 12SWS0818 | SWS 818 | 1/32 (0,79) | .375 (9,53) | 1/16 (1,59) | .246 (6,25) | .167 (4,24) |

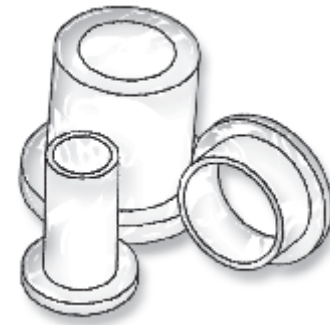


NYLON SHOULDER WASHERS

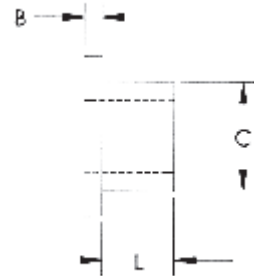
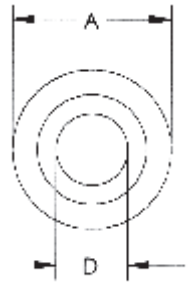
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New Sizes



| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|--------------|--------------|-------------|-------------|-------------|
| 12SWS0819 | SWS 819 | 1/16 (1,59) | .437 (11,10) | 1/16 (1,59) | .313 (7,95) | .188 (4,78) |
| 12SWS0820 | SWS 820 | 1/32 (0,79) | .375 (9,53) | 1/16 (1,59) | .185 (4,70) | .140 (3,56) |
| 12SWS0821 | SWS 821 | 1/32 (0,79) | .381 (9,68) | 1/16 (1,59) | .308 (7,82) | .196 (4,98) |
| 12SWS0822 | SWS 822 | 1/32 (0,79) | .374 (9,50) | 1/32 (0,79) | .246 (6,24) | .141 (3,58) |
| 12SWS0823 | SWS 823 | .099 (2,51) | .375 (9,53) | .040 (1,02) | .250 (6,35) | .171 (4,34) |
| 12SWS0824 | SWS 824 | .05 (1,27) | 3/8 (9,53) | .06 (1,52) | .245 (6,22) | .140 (3,56) |
| 12SWS0825 | SWS 825 | .060 (1,52) | .375 (9,53) | .030 (0,76) | .245 (6,22) | .145 (3,68) |
| 12SWS0826 | SWS 826 | .062 (1,57) | .500 (12,70) | 1/16 (1,59) | .308 (7,82) | .196 (4,98) |
| 12SWS0827 | SWS 827 | .046 (1,17) | .375 (9,53) | .040 (1,02) | .250 (6,35) | .171 (4,34) |
| 12SWS0828 | SWS 828 | .125 (3,18) | .380 (9,65) | .065 (1,65) | .254 (6,45) | .196 (4,98) |
| 12SWS0829 | SWS 829 | 1/8 (3,18) | .370 (9,40) | .110 (2,79) | .307 (7,80) | .255 (6,48) |
| 12SWS0830 | SWS 830 | .032 (0,81) | .375 (9,53) | .062 (1,57) | .187 (4,75) | .147 (3,73) |
| 12SWS0831 | SWS 831 | .250 (6,35) | .375 (9,53) | .040 (1,02) | .250 (6,35) | .171 (4,34) |
| 12SWS0832 | SWS 832 | .043 (1,09) | .375 (9,53) | .035 (0,76) | .257 (6,53) | .193 (4,90) |
| 12SWS0833 | SWS 833 | .050 (1,27) | .375 (9,53) | .031 (0,79) | .243 (6,17) | .199 (5,05) |
| 12SWS0834 | SWS 834 | .015 (0,38) | .375 (9,53) | .057 (1,45) | .304 (7,72) | .200 (5,08) |
| 12SWS0835 | SWS 835 | .050 (1,27) | .377 (9,58) | .050 (1,27) | .245 (6,22) | .155 (3,94) |
| 12SWS0836 | SWS 836 | .030 (0,76) | .375 (9,53) | .063 (1,60) | .250 (6,35) | .174 (4,42) |
| 12SWS0837 | SWS 837 | .031 (0,79) | .375 (9,53) | .062 (1,57) | .187 (4,75) | .093 (2,36) |
| 12SWS0838 | SWS 838 | .180 (4,57) | .350 (8,89) | .067 (1,70) | .240 (6,10) | .188 (4,78) |
| 12SWS0839 | SWS 839 | .050 (1,27) | .385 (9,78) | .030 (0,76) | .250 (6,35) | .169 (4,29) |
| 12SWS0840 | SWS 840 | 13/64 (5,16) | .370 (9,40) | 5/64 (1,98) | .145 (3,68) | .115 (2,92) |
| 12SWS0841 | SWS 841 | 1/8" (3,17) | 3/8" (9,52) | .035 (0,89) | .242 (6,15) | .185 (4,70) |
| 12SWS0842 | SWS 842 | 5/64 (1,98) | .375 (9,53) | 7/32 (5,55) | .199 (5,05) | .140 (3,56) |
| 12SWS0843 | SWS 843 | .072 (1,83) | .385 (9,78) | .051 (1,30) | .250 (6,35) | .137 (3,48) |
| 12SWS0844 | SWS 844 | 3/64 (1,19) | .381 (9,68) | 1/16 (1,59) | .185 (4,70) | .140 (3,56) |
| 12SWS0845 | SWS 845 | .346 (8,79) | .370 (9,40) | .031 (0,79) | .242 (6,15) | .180 (4,57) |
| 12SWS0846 | SWS 846 | 1/16 (1,59) | .375 (9,53) | 3/32 (2,38) | .250 (6,35) | .140 (3,56) |
| 12SWS0847 | SWS 847 | .213 (5,14) | .375 (9,53) | 1/16 (1,59) | .250 (6,35) | .197 (5,00) |
| 12SWS0848 | SWS 848 | 1/32 (0,79) | .385 (9,78) | 1/16 (1,59) | .240 (6,10) | .145 (3,68) |
| 12SWS0849 | SWS 849 | .060 (1,52) | .375 (9,53) | .030 (0,76) | .312 (7,92) | .253 (6,43) |
| 12SWS0850 | SWS 850 | 1/16 (1,59) | .375 (9,53) | 3/32 (2,38) | .250 (6,35) | .138 (3,51) |
| 12SWS0852 | SWS 852 | 3/32 (2,38) | .375 (9,53) | 1/16 (1,59) | .248 (6,30) | .136 (3,45) |
| 12SWS0853 | SWS 853 | .030 (0,76) | .380 (9,65) | .066 (1,68) | .250 (6,35) | .190 (4,83) |
| 12SWS0854 | SWS 854 | 3/64 (1,19) | .375 (9,53) | 1/16 (1,59) | .240 (6,10) | .194 (4,93) |
| 12SWS0855 | SWS 855 | 7/64 (2,77) | .375 (9,53) | 1/16 (1,59) | .240 (6,10) | .138 (3,51) |
| 12SWS0856 | SWS 856 | 3/32 (2,38) | .375 (9,53) | 1/64 (0,41) | .185 (4,70) | .140 (3,56) |
| 12SWS0857 | SWS 857 | 5/32 (3,97) | .375 (9,53) | 5/64 (1,98) | .193 (4,90) | .116 (2,95) |
| 12SWS0858 | SWS 858 | 1/16 (1,59) | .375 (9,53) | 1/16 (1,59) | .250 (6,35) | .145 (3,68) |
| 12SWS0859 | SWS 859 | 9/64 (3,58) | .375 (9,53) | 1/32 (0,79) | .245 (6,22) | .187 (4,75) |
| 12SWS0860 | SWS 860 | 13/64 (5,16) | .380 (9,65) | 1/16 (1,59) | .220 (5,59) | .148 (3,76) |
| 12SWS0861 | SWS 861 | 1/8 (3,18) | .378 (9,60) | 1/32 (0,79) | .255 (6,48) | .116 (2,94) |
| 12SWS0862 | SWS 862 | 3/16 (4,76) | .390 (9,91) | 5/64 (1,98) | .287 (7,29) | .196 (4,98) |
| 12SWS0863 | SWS 863 | 5/64 (1,98) | .390 (9,91) | 5/64 (1,98) | .313 (7,95) | .203 (5,16) |
| 12SWS0864 | SWS 864 | 7/64 (2,77) | .395 (10,03) | 5/64 (1,98) | .299 (7,59) | .230 (5,84) |

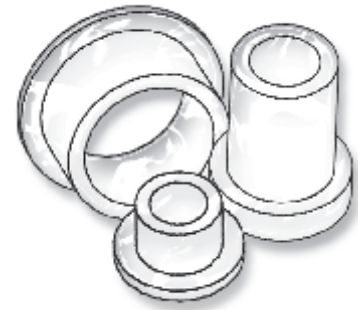


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

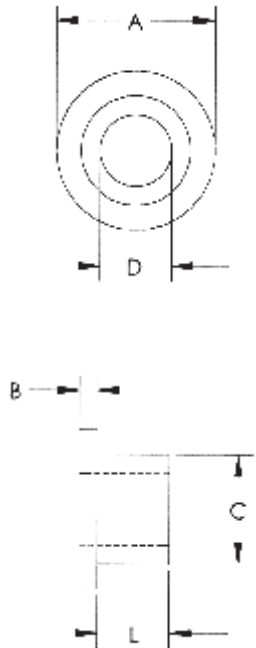
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New Sizes



| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|---------------|--------------|-------------|--------------|-------------|
| 12SWS0865 | SWS 865 | .055 (1,44) | .380 (9,65) | .065 (1,65) | .254 (6,45) | .196 (4,98) |
| 12SWS0867 | SWS 867 | .046 (1,17) | .375 (9,53) | .040 (1,02) | .214 (5,44) | .141 (3,58) |
| 12SWS0868 | SWS 868 | .031 (0,79) | .375 (9,53) | .062 (1,57) | .312 (7,92) | .253 (6,43) |
| 12SWS0869 | SWS 869 | .207 (5,26) | .390 (9,91) | .062 (1,57) | .348 (8,84) | .312 (7,92) |
| 12SWS0870 | SWS 870 | 1/8 (3,18) | .433 (10,99) | 1/16 (1,59) | .312 (7,92) | .199 (5,05) |
| 12SWS0871 | SWS 871 | .130 (3,30) | .390 (9,91) | .062 (1,57) | .260 (6,60) | .200 (5,08) |
| 12SWS0872 | SWS 872 | .160 (4,06) | 27/64(10,72) | .050 (1,27) | 9/32 (7,15) | .200 (5,08) |
| 12SWS0873 | SWS 873 | .126 (3,20) | .394 (10,01) | .039 (0,99) | .256 (6,50) | .221 (5,61) |
| 12SWS0874 | SWS 874 | .139 (3,53) | .390 (9,91) | .025 (0,63) | .303 (7,70) | .223 (5,66) |
| 12SWS0875 | SWS 875 | .300 (7,62) | .375 (9,53) | .050 (1,27) | .253 (6,43) | .125 (3,18) |
| 12SWS0876 | SWS 876 | .075 (1,91) | .390 (9,91) | .062 (1,57) | .260 (6,60) | .200 (5,08) |
| 12SWS0877 | SWS 877 | .312 (7,92) | .390 (9,91) | .055 (1,40) | .281 (7,14) | .171 (4,34) |
| 12SWS0878 | SWS 878 | .126 (3,20) | .394 (10,01) | .030 (0,76) | .256 (6,50) | .221 (5,61) |
| 12SWS0879 | SWS 879 | .380 (9,65) | .385 (9,78) | .060 (1,52) | .236 (5,99) | .195 (4,95) |
| 12SWS0880 | SWS 880 | 1/8 (3,18) | .400 (10,16) | 1/8 (3,18) | .275 (6,99) | .140 (3,56) |
| 12SWS0881 | SWS 881 | .187 (4,75) | .312 (7,92) | .125 (3,18) | .250 (6,35) | .115 (2,92) |
| 12SWS0882 | SWS 882 | 9/32 (7,14) | .470 (11,93) | 5/64 (1,98) | .312 (7,92) | .140 (3,56) |
| 12SWS0885 | SWS 885 | .100 (1,54) | .400 (10,16) | 1/8 (3,18) | .275 (6,99) | .140 (3,56) |
| 12SWS0887 | SWS 887 | .187 (4,75) | .408 (10,36) | .062 (1,57) | .240 (6,10) | .197 (5,00) |
| 12SWS0888 | SWS 888 | 3/64 (1,19) | .400 (10,16) | 3/64 (1,19) | .243 (6,17) | .156 (3,96) |
| 12SWS0890 | SWS 890 | 3/64 (1,19) | .415 (10,54) | 5/32 (3,97) | .243 (6,17) | .141 (3,58) |
| 12SWS0891 | SWS 891 | .058 (1,47) | .445 (11,30) | .077 (1,96) | .343 (8,71) | .308 (7,82) |
| 12SWS0894 | SWS 894 | 1/16 (1,59) | .418 (10,62) | 7/64 (2,77) | .243 (6,17) | .141 (3,58) |
| 12SWS0895 | SWS 895 | .050 (1,27) | .437 (11,10) | .062 (1,57) | .274 (6,96) | .199 (5,05) |
| 12SWS0896 | SWS 896 | 3/16 (4,76) | .408 (10,36) | 1/16 (1,59) | .240 (6,10) | .220 (5,59) |
| 12SWS0897 | SWS 897 | .315 (8,00) | .433 (11,00) | .079 (2,01) | .310 (7,87) | .202 (5,13) |
| 12SWS0898 | SWS 898 | .050 (1,27) | .438 (11,13) | .062 (1,57) | .350 (8,89) | .125 (3,18) |
| 12SWS0900 | SWS 900 | 1/32 (0,79) | .428 (10,87) | 1/16 (1,59) | .245 (6,22) | .156 (3,96) |
| 12SWS0901 | SWS 901 | .093 (2,36) | .437 (11,10) | .040 (1,02) | .375 (9,53) | .194 (4,93) |
| 12SWS0902 | SWS 902 | 1/32 (0,79) | .437 (11,10) | 1/16 (1,59) | .245 (6,22) | .156 (3,96) |
| 12SWS0903 | SWS 903 | .115 (2,92) | .432 (10,97) | .065 (1,65) | .256 (6,50) | .196 (4,98) |
| 12SWS0904 | SWS 904 | 3/8 (9,53) | .437 (11,10) | 1/16 (1,59) | .282 (7,16) | .225 (5,72) |
| 12SWS0905 | SWS 905 | 1/16 (1,59) | .425 (10,78) | 1/16 (1,59) | .310 (7,87) | .250 (6,35) |
| 12SWS0906 | SWS 906 | .035 (0,89) | .625 (15,87) | .050 (1,27) | .427 (10,84) | .170 (4,32) |
| 12SWS0907 | SWS 907 | .026 (0,66) | .438 (11,13) | .094 (2,39) | .307 (7,80) | .253 (6,43) |
| 12SWS0908 | SWS 908 | 3/32 (2,38) | .438 (11,13) | 1/32 (0,79) | .267 (6,78) | .203 (5,16) |
| 12SWS0909 | SWS 909 | 13/32 (10,32) | .493 (12,52) | 3/32 (2,38) | .376 (9,55) | .176 (4,47) |
| 12SWS0910 | SWS 910 | .070 (1,78) | .443 (11,25) | .048 (1,22) | .285 (7,24) | .191 (4,85) |
| 12SWS0911 | SWS 911 | .048 (1,22) | .428 (10,87) | .155 (3,94) | .261 (6,63) | .163 (4,14) |
| 12SWS0912 | SWS 912 | 9/64 (3,58) | .432 (10,97) | 1/32 (0,79) | .303 (7,70) | .196 (4,98) |
| 12SWS0914 | SWS 914 | .043 (1,09) | .440 (11,18) | .094 (2,39) | .312 (7,92) | .193 (4,90) |
| 12SWS0915 | SWS 915 | .138 (3,51) | .413 (10,49) | .315 (8,00) | .244 (6,20) | .217 (5,51) |
| 12SWS0916 | SWS 916 | 3/16 (4,76) | .743 (18,87) | 1/16 (1,59) | .437 (11,10) | .376 (9,55) |
| 12SWS0917 | SWS 917 | 3/64 (1,19) | .428 (10,87) | 1/8 (3,18) | .350 (8,89) | .308 (7,82) |
| 12SWS0918 | SWS 918 | 3/64 (1,19) | .450 (11,43) | 1/64 (0,41) | .310 (7,87) | .230 (5,84) |

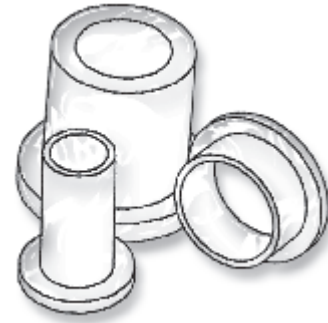


NYLON SHOULDER WASHERS

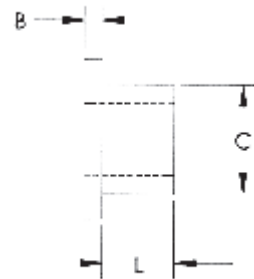
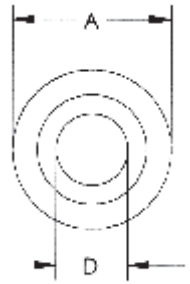
Nylon Shoulder Washers are suitable for a large variety of insulation and mechanical applications.

- ▶ THEY SEAL
- ▶ REDUCE VIBRATION
- ▶ ACT AS SPACERS AND GUIDES
- ▶ STRONG AND CORROSION RESISTANT

New Sizes



| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|---------------|--------------|-------------|--------------|--------------|
| 12SWS0919 | SWS 919 | .060 (1,52) | .460 (11,68) | .030 (0,76) | .370 (9,40) | .260 (6,60) |
| 12SWS0920 | SWS 920 | .138 (3,51) | .413 (10,62) | .118 (3,00) | .244 (6,20) | .217 (5,51) |
| 12SWS0921 | SWS 921 | .236 (5,99) | .480 (12,19) | .079 (2,01) | .315 (8,00) | .240 (6,10) |
| 12SWS0922 | SWS 922 | .280 (7,11) | .450 (11,43) | .047 (1,19) | .170 (4,32) | .140 (3,56) |
| 12SWS0925 | SWS 925 | 3/64 (1,19) | .468 (11,89) | 1/16 (1,59) | .248 (6,30) | .140 (3,56) |
| 12SWS0926 | SWS 926 | 11/16 (17,53) | .498 (12,64) | 1/16 (1,59) | .375 (9,53) | .254 (6,45) |
| 12SWS0930 | SWS 930 | 7/32 (5,55) | .468 (11,89) | 3/64 (1,19) | .375 (9,53) | .325 (8,26) |
| 12SWS0935 | SWS 935 | .187 (4,75) | .495 (12,57) | .065 (1,65) | .312 (7,92) | .200 (5,08) |
| 12SWS0940 | SWS 940 | .157 (3,99) | .483 (12,27) | .059 (1,50) | .315 (8,00) | .240 (6,10) |
| 12SWS0950 | SWS 950 | .157 (3,99) | .472 (11,99) | .181 (4,60) | .315 (8,00) | .205 (5,21) |
| 12SWS0951 | SWS 951 | .031 (0,79) | .500 (12,70) | .031 (0,79) | .243 (6,17) | .171 (4,34) |
| 12SWS0952 | SWS 952 | .099 (2,51) | .500 (12,70) | .096 (2,44) | .373 (9,47) | .194 (4,93) |
| 12SWS0953 | SWS 953 | .187 (4,75) | .500 (12,70) | .062 (1,57) | .307 (7,80) | .265 (6,73) |
| 12SWS0954 | SWS 954 | .085 (2,16) | .500 (12,70) | .039 (0,99) | .234 (5,94) | .195 (4,95) |
| 12SWS0968 | SWS 968 | .748 (19,00) | .698 (17,73) | .065 (1,65) | .400 (10,16) | .316 (8,03) |
| 12SWS0969 | SWS 969 | .335 (8,51) | .551 (14,00) | .059 (1,50) | .413 (10,49) | .335 (8,51) |
| 12SWS0970 | SWS 970 | .200 (5,08) | .500 (12,70) | .105 (2,67) | .245 (6,22) | .171 (4,34) |
| 12SWS1000 | SWS 1000 | .240 (6,10) | .563 (14,30) | .068 (1,73) | .443 (11,25) | .320 (8,13) |
| 12SWS1001 | SWS 1001 | 3/8 (9,53) | .399 (10,13) | 1/16 (1,59) | .260 (6,60) | .200 (5,08) |
| 12SWS1002 | SWS 1002 | 3/32 (2,38) | .438 (11,13) | 1/16 (1,59) | .267 (6,78) | .203 (5,16) |
| 12SWS1003 | SWS 1003 | 3/16 (4,76) | .745 (18,92) | 1/32 (0,79) | .282 (7,16) | .234 (5,94) |
| 12SWS1004 | SWS 1004 | 9/64 (3,58) | .438 (11,13) | 1/32 (0,79) | .250 (6,35) | .135 (3,43) |
| 12SWS1005 | SWS 1005 | 5/64 (1,98) | .464 (11,79) | 1/64 (0,41) | .312 (7,92) | .255 (6,48) |
| 12SWS1006 | SWS 1006 | 11/64 (4,37) | .425 (10,80) | 1/16 (1,59) | .377 (9,58) | .260 (6,60) |
| 12SWS1007 | SWS 1007 | 3/64 (1,19) | .437 (11,10) | 3/64 (1,19) | .281 (7,14) | .201 (5,11) |
| 12SWS1008 | SWS 1008 | 3/64 (1,19) | .620 (15,75) | 3/64 (1,19) | .312 (7,92) | .205 (5,21) |
| 12SWS1009 | SWS 1009 | 1/16 (1,59) | .740 (18,80) | 1/32 (0,79) | .368 (9,53) | .320 (8,13) |
| 12SWS1010 | SWS 1010 | 3/64 (1,19) | .625 (15,88) | 7/64 (2,77) | .375 (9,53) | .250 (6,35) |
| 12SWS1011 | SWS 1011 | 1/16 (1,59) | .675 (17,14) | 3/32 (2,38) | .480 (12,19) | .257 (6,53) |
| 12SWS1012 | SWS 1012 | 1/8 (3,18) | .697 (17,70) | 1/16 (1,59) | .359 (9,12) | .266 (6,76) |
| 12SWS1013 | SWS 1013 | 3/64 (1,19) | .688 (17,48) | 1/32 (0,79) | .543 (13,79) | .508 (12,90) |
| 12SWS1014 | SWS 1014 | 1/32 (0,79) | .437 (11,10) | 1/32 (0,79) | .310 (7,87) | .253 (6,43) |
| 12SWS1015 | SWS 1015 | 3/64 (1,19) | .500 (12,70) | 3/32 (2,38) | .275 (6,99) | .145 (3,68) |
| 12SWS1016 | SWS 1016 | 7/16 (11,11) | .500 (12,70) | 1/8 (3,18) | .250 (6,35) | .167 (4,24) |
| 12SWS1017 | SWS 1017 | 1/16 (1,59) | .562 (14,27) | 3/32 (2,38) | .375 (9,53) | .260 (6,60) |
| 12SWS1018 | SWS 1018 | 3/16 (4,76) | .625 (15,88) | 1/16 (1,59) | .322 (8,18) | .255 (6,48) |
| 12SWS1019 | SWS 1019 | 3/64 (1,19) | .615 (15,62) | 1/32 (0,79) | .310 (7,87) | .253 (6,43) |
| 12SWS1020 | SWS 1020 | 1/16 (1,59) | .640 (16,26) | 1/16 (1,59) | .380 (9,65) | .195 (4,95) |
| 12SWS1021 | SWS 1021 | 3/64 (1,19) | .630 (16,00) | 1/32 (0,79) | .248 (6,30) | .171 (4,34) |
| 12SWS1022 | SWS 1022 | 3/64 (1,19) | .625 (15,88) | 1/16 (1,59) | .375 (9,53) | .190 (4,83) |
| 12SWS1023 | SWS 1023 | 3/64 (1,19) | .555 (14,10) | 5/64 (1,98) | .300 (7,62) | .260 (6,60) |
| 12SWS1024 | SWS 1024 | 1/2 (12,70) | .620 (15,75) | .031 (0,79) | .370 (9,40) | .316 (8,03) |
| 12SWS1025 | SWS 1025 | 7/16 (11,11) | 9/16 (14,28) | 1/16 (1,59) | .375 (9,53) | .255 (6,48) |
| 12SWS1026 | SWS 1026 | 1/32 (0,79) | .588 (14,93) | 1/32 (0,79) | .253 (6,43) | .198 (5,02) |
| 12SWS1027 | SWS 1027 | 1/2 (12,70) | .500 (12,70) | 1/16 (1,59) | .365 (9,27) | .312 (7,92) |

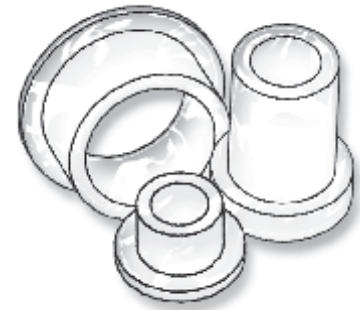


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

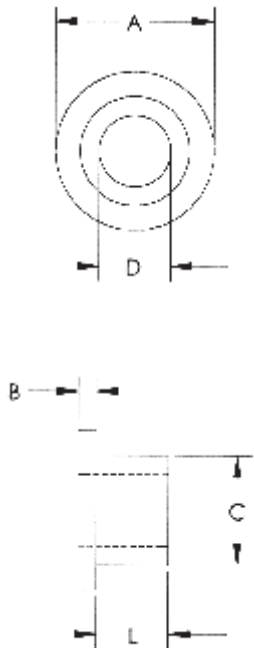
NYLON SHOULDER WASHERS

Nylon Shoulder Washers are suitable for a large variety of insulation and mechanical applications.



New Sizes

- ▶ THEY SEAL
- ▶ REDUCE VIBRATION
- ▶ ACT AS SPACERS AND GUIDES
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| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|---------------|--------------|-------------|--------------|-------------|
| 12SWS1028 | SWS 1028 | .249 (6,32) | .500 (12,70) | .062 (1,57) | .250 (6,35) | .189 (4,80) |
| 12SWS1029 | SWS 1029 | .158 (4,01) | .500 (12,70) | .120 (3,05) | .300 (7,62) | .196 (4,98) |
| 12SWS1030 | SWS 1030 | 3/32 (2,38) | .490 (12,45) | 1/16 (1,59) | .281 (7,14) | .200 (5,08) |
| 12SWS1031 | SWS 1031 | .050 (1,27) | .500 (12,70) | .062 (1,57) | .248 (6,30) | .194 (4,93) |
| 12SWS1032 | SWS 1032 | 1/32 (0,79) | .500 (12,70) | 3/32 (2,38) | .250 (6,35) | .156 (3,96) |
| 12SWS1033 | SWS 1033 | 5/16 (7,94) | .500 (12,70) | 1/16 (1,59) | .312 (7,92) | .200 (5,08) |
| 12SWS1034 | SWS 1034 | 1/32 (0,79) | .500 (12,70) | 1/32 (0,79) | .312 (7,92) | .252 (6,40) |
| 12SWS1035 | SWS 1035 | 1/32 (0,79) | .500 (12,70) | 1/16 (1,59) | .230 (5,84) | .147 (3,73) |
| 12SWS1036 | SWS 1036 | 1/64 (0,41) | .500 (12,70) | 5/64 (1,98) | .250 (6,35) | .165 (4,19) |
| 12SWS1037 | SWS 1037 | .047 (1,19) | .500 (12,70) | .125 (3,17) | .281 (7,14) | .219 (5,56) |
| 12SWS1038 | SWS 1038 | 1.000 (25,40) | .875 (22,23) | .062 (1,57) | .500 (12,70) | .390 (9,91) |
| 12SWS1039 | SWS 1039 | .310 (7,87) | .630 (16,0) | .070 (1,78) | .265 (6,73) | .184 (4,67) |
| 12SWS1040 | SWS 1040 | 3/32 (2,38) | .505 (12,83) | 1/16 (1,59) | .343 (8,71) | .257 (6,53) |
| 12SWS1041 | SWS 1041 | .335 (8,51) | .495 (12,57) | .050 (1,27) | .346 (8,79) | .260 (6,60) |
| 12SWS1042 | SWS 1042 | .027 (0,69) | .500 (12,70) | .031 (0,79) | .248 (6,30) | .199 (5,05) |
| 12SWS1044 | SWS 1044 | .080 (2,03) | .500 (12,70) | .078 (1,98) | .213 (5,41) | .145 (3,68) |
| 12SWS1045 | SWS 1045 | 3/16 (4,76) | .498 (12,65) | 1/4 (6,35) | .310 (7,87) | .195 (4,95) |
| 12SWS1046 | SWS 1046 | .150 (3,81) | .504 (12,80) | .160 (4,06) | .312 (7,92) | .265 (6,73) |
| 12SWS1047 | SWS 1047 | 1.250 (31,75) | .500 (12,70) | .125 (3,18) | .375 (9,53) | .250 (6,35) |
| 12SWS1048 | SWS 1048 | 7/16 (11,11) | .500 (12,70) | 1/16 (1,59) | .375 (9,53) | .250 (6,35) |
| 12SWS1049 | SWS 1049 | .076 (1,93) | .500 (12,70) | .040 (1,02) | .345 (8,76) | .265 (6,73) |
| 12SWS1050 | SWS 1050 | 5/32 (3,97) | .490 (12,45) | 1/16 (1,59) | .250 (6,35) | .190 (4,83) |
| 12SWS1051 | SWS 1051 | 3/64 (1,19) | .441 (11,20) | 1/16 (1,59) | .248 (6,30) | .194 (4,92) |
| 12SWS1052 | SWS 1052 | 5/32 (3,97) | .488 (12,39) | 1/8 (3,18) | .250 (6,35) | .190 (4,83) |
| 12SWS1053 | SWS 1053 | .170 (4,32) | .500 (12,70) | .125 (3,17) | .375 (9,52) | .257 (6,53) |
| 12SWS1054 | SWS 1054 | 9/64 (3,58) | .500 (12,70) | 1/16 (1,59) | .345 (8,76) | .285 (7,34) |
| 12SWS1055 | SWS 1055 | 1/32 (0,79) | .495 (12,57) | 1/32 (0,79) | .312 (7,92) | .260 (6,60) |
| 12SWS1057 | SWS 1057 | 3/32 (2,38) | .505 (12,83) | 1/16 (1,59) | .312 (7,92) | .260 (6,60) |
| 12SWS1058 | SWS 1058 | 1/32 (0,79) | .490 (12,45) | 1/32 (0,79) | .310 (7,87) | .193 (4,90) |
| 12SWS1059 | SWS 1059 | .060 (1,52) | .500 (12,70) | .030 (0,76) | .365 (9,27) | .260 (6,60) |
| 12SWS1060 | SWS 1060 | 5/64 (1,98) | .492 (12,50) | 1/32 (0,79) | .318 (8,08) | .265 (6,73) |
| 12SWS1061 | SWS 1061 | 5/32 (3,97) | .488 (12,39) | 1/8 (3,18) | .250 (6,35) | .215 (5,46) |
| 12SWS1065 | SWS 1065 | 3/16 (4,76) | .513 (13,03) | 1/16 (1,59) | .312 (7,92) | .175 (4,45) |
| 12SWS1069 | SWS 1069 | .630 (16,00) | .492 (12,50) | .055 (1,40) | .370 (9,40) | .315 (8,00) |
| 12SWS1070 | SWS 1070 | 5/64 (1,98) | .495 (12,57) | 1/32 (0,79) | .318 (8,08) | .193 (4,90) |
| 12SWS1071 | SWS 1071 | .253 (6,43) | .502 (12,75) | .187 (4,75) | .374 (9,50) | .318 (8,08) |
| 12SWS1075 | SWS 1075 | 1/4 (6,35) | .513 (13,03) | 1/16 (1,59) | .370 (9,40) | .260 (6,60) |
| 12SWS1079 | SWS 1079 | .122 (3,10) | .500 (12,70) | .167 (4,24) | .270 (6,86) | .222 (5,64) |
| 12SWS1080 | SWS 1080 | 1/64 (0,41) | .500 (12,70) | 1/32 (0,79) | .318 (8,08) | .141 (3,58) |
| 12SWS1081 | SWS 1081 | .375 (9,53) | .500 (12,70) | .093 (2,36) | .411 (10,44) | .380 (9,65) |
| 12SWS1082 | SWS 1082 | 3/64 (1,19) | .500 (12,70) | 1/32 (0,79) | .318 (8,08) | .193 (4,90) |
| 12SWS1083 | SWS 1083 | .160 (4,06) | 1/2 (12,70) | .062 (1,57) | .360 (9,14) | .260 (6,60) |
| 12SWS1084 | SWS 1084 | 3/64 (1,19) | .500 (12,70) | 1/32 (0,79) | .318 (8,08) | .141 (3,58) |
| 12SWS1086 | SWS 1086 | 1/16 (1,59) | .500 (12,70) | 1/16 (1,59) | .330 (8,38) | .150 (3,81) |
| 12SWS1088 | SWS 1088 | .109 (2,77) | .500 (12,70) | 1/16 (1,59) | .240 (6,10) | .138 (3,51) |

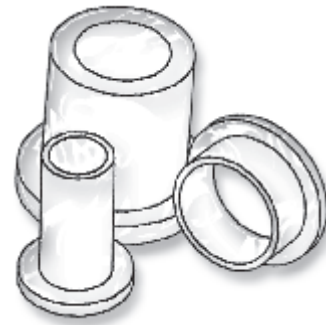


NYLON SHOULDER WASHERS

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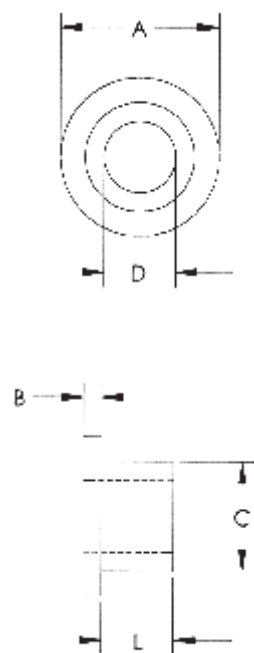
- ▶ THEY SEAL
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- ▶ STRONG AND CORROSION RESISTANT

New Sizes



| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|---------------|---------------|-------------|--------------|--------------|
| 12SWS1090 | SWS 1090 | 3/64 (1,19) | .518 (13,16) | 1/32 (0,79) | .305 (7,75) | .080 (2,03) |
| 12SWS1092 | SWS 1092 | .075 (1,91) | .500 (12,70) | .175 (4,45) | .300 (7,62) | .195 (4,95) |
| 12SWS1095 | SWS 1095 | 1/8 (3,18) | .502 (12,75) | 1/32 (0,79) | .399 (10,13) | .349 (8,86) |
| 12SWS1096 | SWS 1096 | *.375 (9,53) | *.437 (11,10) | .055 (1,40) | *.310 (7,87) | *.196 (4,98) |
| 12SWS1098 | SWS 1098 | 9/64 (3,58) | .515 (13,08) | 1/16 (1,59) | .312 (7,93) | .260 (6,60) |
| 12SWS1100 | SWS 1100 | 15/16 (23,81) | .540 (13,72) | .065 (1,65) | .370 (9,40) | .260 (6,60) |
| 12SWS1101 | SWS 1101 | 3/32 (2,38) | .500 (12,70) | 1/32 (0,79) | .282 (7,16) | .234 (5,94) |
| 12SWS1115 | SWS 1115 | .500 (12,70) | .525 (15,88) | .063 (1,60) | .370 (9,40) | .267 (6,78) |
| 12SWS1145 | SWS 1145 | .030 (0,76) | .562 (14,28) | .030 (0,76) | .400 (10,16) | .318 (8,08) |
| 12SWS1150 | SWS 1150 | 3/64 (1,19) | .562 (14,28) | 3/64 (1,19) | .300 (7,62) | .260 (6,60) |
| 12SWS1151 | SWS 1151 | .104 (2,64) | .562 (14,28) | .046 (1,17) | .300 (7,62) | .260 (6,60) |
| 12SWS1152 | SWS 1152 | .500 (12,70) | .525 (13,33) | .063 (1,60) | .370 (9,40) | .265 (6,73) |
| 12SWS1153 | SWS 1153 | .040 (1,02) | .560 (14,22) | .060 (1,52) | .312 (7,92) | .257 (6,53) |
| 12SWS1154 | SWS 1154 | .050 (1,27) | .516 (13,11) | .060 (1,52) | .345 (8,76) | .260 (6,60) |
| 12SWS1155 | SWS 1155 | 3/64 (1,19) | .562 (14,28) | .024 (0,61) | .370 (9,40) | .335 (8,51) |
| 12SWS1159 | SWS 1159 | 9/16 (14,29) | .550 (13,97) | 1/16 (1,59) | .375 (9,53) | .255 (6,48) |
| 12SWS1160 | SWS 1160 | 1/16 (1,59) | .562 (14,28) | 7/64 (2,77) | .365 (9,27) | .215 (5,46) |
| 12SWS1161 | SWS 1161 | .620 (15,75) | 9/16 (14,27) | 1/16 (1,57) | .395 (10,03) | .355 (9,02) |
| 12SWS1162 | SWS 1162 | 27/64 (10,72) | .560 (14,22) | 1/16 (1,59) | .375 (9,53) | .255 (6,48) |
| 12SWS1163 | SWS 1163 | 15/32 (11,91) | .550 (13,97) | 1/16 (1,59) | .380 (9,65) | .247 (6,27) |
| 12SWS1164 | SWS 1164 | 1/32 (0,79) | .562 (14,28) | 1/8 (3,18) | .312 (7,93) | .169 (4,29) |
| 12SWS1165 | SWS 1165 | 1/4 (6,35) | .551 (13,99) | 1/16 (1,59) | .380 (9,65) | .248 (6,30) |
| 12SWS1167 | SWS 1167 | .128 (3,25) | .591 (15,01) | .197 (5,00) | .394 (10,01) | .157 (3,99) |
| 12SWS1170 | SWS 1170 | 3/8 (9,53) | .570 (14,48) | 1/16 (1,59) | .470 (11,94) | .385 (9,78) |
| 12SWS1175 | SWS 1175 | .783 (19,89) | .570 (14,48) | .039 (0,99) | .491 (12,47) | .413 (10,49) |
| 12SWS1176 | SWS 1176 | .335 (8,51) | .545 (13,84) | .075 (1,91) | .316 (8,03) | .166 (4,22) |
| 12SWS1180 | SWS 1180 | 3/64 (1,19) | .578 (14,68) | 1/16 (1,59) | .185 (4,70) | .140 (3,56) |
| 12SWS1197 | SWS 1197 | .342 (8,69) | .625 (15,88) | .125 (3,18) | .485 (12,32) | .390 (9,91) |
| 12SWS1198 | SWS 1198 | .093 (2,36) | .620 (15,75) | .063 (1,60) | .360 (9,14) | .320 (8,13) |
| 12SWS1199 | SWS 1199 | .100 (2,54) | .620 (15,75) | .062 (1,57) | .400 (10,16) | .260 (6,60) |
| 12SWS1200 | SWS 1200 | 3/64 (1,19) | .615 (15,62) | 3/64 (1,19) | .315 (8,00) | .208 (5,28) |
| 12SWS1201 | SWS 1201 | 1/8 (3,18) | .620 (15,75) | 3/8 (9,53) | .360 (9,14) | .320 (8,13) |
| 12SWS1204 | SWS 1204 | .500 (12,70) | .600 (15,24) | .025 (0,64) | .485 (12,32) | .324 (8,23) |
| 12SWS1205 | SWS 1205 | 1/32 (0,79) | .620 (15,75) | 3/64 (1,19) | .434 (11,02) | .383 (9,73) |
| 12SWS1207 | SWS 1207 | .163 (4,14) | .625 (15,88) | .040 (1,02) | .281 (7,14) | .219 (5,56) |
| 12SWS1208 | SWS 1208 | .100 (2,54) | .620 (15,75) | .060 (1,52) | .502 (12,75) | .316 (8,03) |
| 12SWS1210 | SWS 1210 | 1/32 (0,79) | .625 (15,88) | 1/16 (1,59) | .495 (12,57) | .378 (9,60) |
| 12SWS1211 | SWS 1211 | .139 (3,53) | .625 (15,88) | .066 (1,68) | .405 (10,29) | .320 (8,13) |
| 12SWS1212 | SWS 1212 | .025 (0,64) | .625 (15,88) | .062 (1,57) | .375 (9,53) | .200 (5,08) |
| 12SWS1213 | SWS 1213 | .031 (0,79) | .625 (15,88) | .031 (0,79) | .437 (11,10) | .380 (9,65) |
| 12SWS1214 | SWS 1214 | .150 (3,81) | .630 (16,00) | .050 (1,27) | .375 (9,53) | .280 (7,11) |
| 12SWS1215 | SWS 1215 | .062 (1,57) | .625 (15,88) | 1/32 (0,79) | .310 (7,87) | .195 (4,95) |
| 12SWS1217 | SWS 1217 | .030 (0,76) | .625 (15,88) | .030 (0,76) | .447 (12,12) | .378 (9,60) |
| 12SWS1219 | SWS 1219 | 3/64 (1,19) | .625 (15,88) | 1/16 (1,59) | .310 (7,87) | .172 (4,37) |
| 12SWS1220 | SWS 1220 | 3/4 (19,05) | .620 (15,75) | 1/8 (3,18) | .400 (10,60) | .260 (6,60) |

* +/- .010

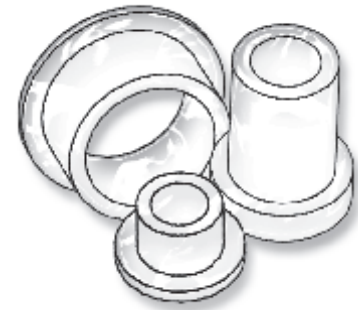


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

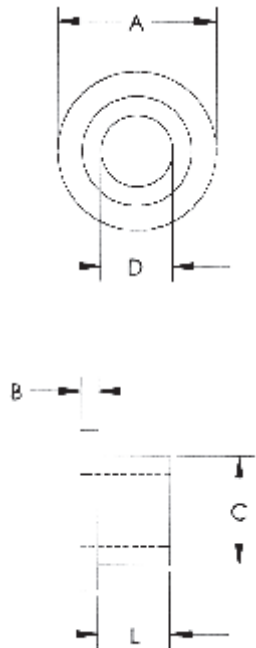
NYLON SHOULDER WASHERS

Nylon Shoulder Washers are suitable for a large variety of insulation and mechanical applications.



New Sizes

- ▶ THEY SEAL
- ▶ REDUCE VIBRATION
- ▶ ACT AS SPACERS AND GUIDES
- ▶ STRONG AND CORROSION RESISTANT



| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|----------------|--------------|-------------|--------------|--------------|
| 12SWS1221 | SWS 1221 | 1/8 (3,18) | .630 (16,00) | 1/16 (1,59) | .327 (8,31) | .260 (6,60) |
| 12SWS1222 | SWS 1222 | 1/32 (0,79) | .625 (15,88) | 1/32 (0,79) | .448 (11,37) | .378 (9,60) |
| 12SWS1225 | SWS 1225 | .027 (0,69) | .625 (15,88) | .062 (1,57) | .248 (6,30) | .120 (3,05) |
| 12SWS1227 | SWS 1227 | .210 (5,33) | .625 (15,88) | .058 (1,47) | .379 (9,63) | .263 (6,68) |
| 12SWS1228 | SWS 1228 | .025 (0,64) | .625 (15,88) | .060 (1,52) | .219 (5,56) | .140 (3,56) |
| 12SWS1230 | SWS 1230 | 3/64 (1,19) | .550 (13,97) | 5/64 (1,98) | .305 (7,75) | .260 (6,60) |
| 12SWS1232 | SWS 1232 | 1/2 (12,70) | .620 (15,75) | 1/16 (1,59) | .370 (9,40) | .316 (8,03) |
| 12SWS1233 | SWS 1233 | .090 (2,29) | .625 (15,88) | .062 (1,57) | .311 (7,90) | .253 (6,43) |
| 12SWS1235 | SWS 1235 | .150 (3,81) | .620 (15,75) | .060 (1,52) | .502 (12,75) | .316 (8,03) |
| 12SWS1239 | SWS 1239 | .188 (4,78) | .625 (15,88) | .032 (0,81) | .260 (6,60) | .200 (5,08) |
| 12SWS1240 | SWS 1240 | 3/16 (4,76) | .630 (16,00) | 1/16 (1,59) | .375 (9,53) | .254 (6,45) |
| 12SWS1241 | SWS 1241 | .175 (4,45) | .650 (16,51) | .125 (3,18) | .490 (12,45) | .385 (9,78) |
| 12SWS1242 | SWS 1242 | .563 (14,30) | .625 (15,88) | .125 (3,18) | .485 (12,32) | .390 (9,91) |
| 12SWS1243 | SWS 1243 | .748 (19,00) | .630 (16,00) | .055 (1,40) | .500 (12,70) | .437 (11,10) |
| 12SWS1244 | SWS 1244 | .090 (2,29) | .635 (16,13) | .042 (1,07) | .380 (9,65) | .216 (5,49) |
| 12SWS2102 | SWS 2102 | .220 (5,59) | .620 (15,75) | .057 (1,45) | .366 (9,30) | .310 (7,87) |
| 12SWS2498 | SWS 2498 | .513 (13,03) | .687 (17,44) | .263 (6,68) | .412 (10,46) | .325 (8,26) |
| 12SWS2499 | SWS 2499 | 3/8 (9,53) | .513 (13,03) | 1/16 (1,59) | .312 (7,93) | .191 (4,85) |
| 12SWS2500 | SWS 2500 | 1/32 (7,94) | .500 (12,70) | 3/32 (2,38) | .250 (6,35) | .156 (3,96) |
| 12SWS2501 | SWS 2501 | 3/8 (9,53) | .513 (13,03) | 1/16 (1,59) | .312 (7,93) | .261 (6,63) |
| 12SWS2502 | SWS 2502 | 1/8 (3,18) | .467 (11,86) | 3/64 (1,19) | .312 (7,93) | .255 (6,48) |
| 12SWS2503 | SWS 2503 | 1/32 (0,79) | .625 (15,88) | 1/16 (1,59) | .375 (9,53) | .295 (7,49) |
| 12SWS2504 | SWS 2504 | 1/8 (3,18) | .687 (17,45) | 1/8 (3,18) | .437 (11,10) | .328 (8,33) |
| 12SWS2505 | SWS 2505 | 1/32 (0,79) | .500 (12,70) | 1/16 (1,59) | .312 (7,93) | .252 (6,40) |
| 12SWS2506 | SWS 2506 | 5/16 (7,94) | .625 (15,88) | 1/16 (1,59) | .500 (12,70) | .380 (9,65) |
| 12SWS2507 | SWS 2507 | 1/8 (3,18) | .600 (15,24) | 1/8 (3,18) | .370 (7,93) | .250 (6,35) |
| 12SWS2508 | SWS 2508 | 3/16 (4,76) | .674 (17,12) | 3/32 (2,38) | .500 (12,70) | .290 (7,36) |
| 12SWS2509 | SWS 2509 | 1-7/64 (28,17) | .635 (16,13) | 9/64 (3,58) | .425 (10,80) | .201 (5,11) |
| 12SWS2510 | SWS 2510 | 3/8 (9,53) | .687 (17,45) | 3/8 (9,53) | .359 (9,12) | .263 (6,68) |
| 12SWS2511 | SWS 2511 | 5/16 (7,94) | .625 (15,88) | 1/16 (1,59) | .500 (12,70) | .395 (10,03) |
| 12SWS2512 | SWS 2512 | .334 (8,48) | .687 (17,45) | .046 (1,17) | .348 (8,84) | .263 (6,68) |
| 12SWS2513 | SWS 2513 | 1/8 (3,18) | .703 (17,86) | 1/16 (1,59) | .437 (11,10) | .335 (8,51) |
| 12SWS2515 | SWS 2515 | .420 (10,67) | .710 (18,03) | .075 (1,90) | .470 (11,94) | .420 (10,67) |
| 12SWS2516 | SWS 2516 | .280 (7,11) | .701 (17,80) | .062 (1,57) | .305 (7,75) | .258 (6,55) |
| 12SWS2517 | SWS 2517 | .110 (2,79) | .710 (18,03) | .190 (4,83) | .338 (8,59) | .255 (6,48) |
| 12SWS2518 | SWS 2518 | .146 (3,71) | .692 (17,58) | .051 (1,30) | .417 (10,59) | .249 (6,32) |
| 12SWS2519 | SWS 2519 | .145 (3,68) | .736 (18,69) | .125 (3,18) | .371 (9,42) | .168 (4,27) |
| 12SWS2520 | SWS 2520 | 5/32 (3,97) | .725 (18,41) | 5/32 (3,97) | .445 (11,30) | .375 (9,53) |
| 12SWS2521 | SWS 2521 | 5/32 (3,97) | .720 (18,29) | 1/16 (1,59) | .485 (12,32) | .270 (6,86) |
| 12SWS2522 | SWS 2522 | .187 (4,75) | .700 (17,78) | .225 (5,72) | .375 (9,53) | .268 (6,81) |
| 12SWS2524 | SWS 2524 | .150 (3,81) | .730 (18,54) | .125 (3,18) | .500 (12,70) | .315 (8,00) |
| 12SWS2525 | SWS 2525 | 11/32 (3,43) | .730 (18,54) | 1/4 (6,35) | .375 (9,53) | .257 (6,52) |
| 12SWS2526 | SWS 2526 | .500 (12,70) | .688 (17,48) | .062 (1,58) | .562 (14,27) | .437 (11,10) |
| 12SWS2528 | SWS 2528 | 3/16 (4,76) | .743 (18,87) | 1/16 (1,59) | .443 (11,25) | .375 (9,53) |
| 12SWS2529 | SWS 2529 | 19/32 (15,08) | .750 (19,05) | .060 (1,52) | .528 (13,41) | .385 (9,78) |

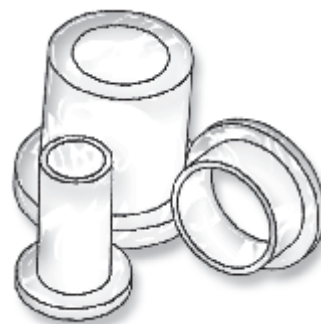


NYLON SHOULDER WASHERS

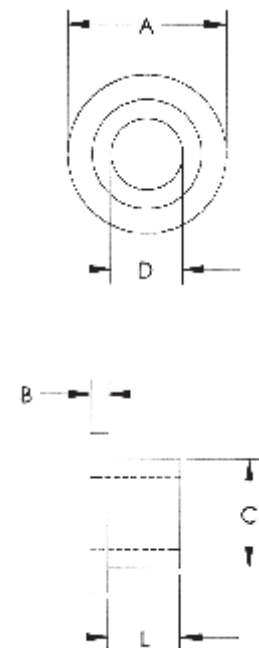
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- ▶ REDUCE VIBRATION
- ▶ ACT AS SPACERS AND GUIDES
- ▶ STRONG AND CORROSION RESISTANT

New Sizes



| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|---------------|--------------|--------------|--------------|--------------|
| 12SWS2531 | SWS 2531 | 5/16 (7,94) | .743 (18,87) | 5/64 (1,98) | .502 (12,75) | .383 (9,72) |
| 12SWS2532 | SWS 2532 | .155 (3,94) | .745 (18,92) | .100 (2,54) | .545 (13,84) | .391 (9,93) |
| 12SWS2533 | SWS 2533 | .375 (9,52) | 3/4 (19,05) | .375 (9,52) | .594 (15,09) | .380 (9,65) |
| 12SWS2534 | SWS 2534 | .187 (4,75) | .745 (18,92) | .031 (0,79) | .282 (7,16) | .234 (5,94) |
| 12SWS2535 | SWS 2535 | .118 (3,00) | .750 (19,05) | .032 (0,81) | .688 (17,48) | .569 (14,45) |
| 12SWS2536 | SWS 2536 | .031 (0,79) | .750 (19,05) | .062 (1,58) | .500 (12,70) | .375 (9,53) |
| 12SWS2538 | SWS 2538 | 1/8 (3,18) | 3/4 (19,05) | 1/16 (1,59) | .469 (11,91) | .344 (8,74) |
| 12SWS2539 | SWS 2539 | 11/32 (8,73) | .740 (18,80) | 3/32 (2,38) | .375 (9,53) | .266 (6,76) |
| 12SWS2540 | SWS 2540 | 1/8 (3,18) | .740 (18,80) | 3/32 (2,38) | .371 (9,42) | .266 (6,76) |
| 12SWS2541 | SWS 2541 | 5/64 (1,98) | .750 (19,05) | 3/32 (2,38) | .380 (9,65) | .266 (6,76) |
| 12SWS2542 | SWS 2542 | 3/64 (1,19) | .750 (19,05) | 3/16 (4,76) | .500 (12,70) | .430 (10,92) |
| 12SWS2543 | SWS 2543 | .779 (19,79) | .750 (19,05) | .095 (2,41) | .490 (12,45) | .189 (4,80) |
| 12SWS2544 | SWS 2544 | 1.00 (25,40) | .75 (19,05) | .095 (2,41) | .375 (9,53) | .265 (6,73) |
| 12SWS2545 | SWS 2545 | .100 (2,54) | 3/4 (19,05) | .086 (2,18) | .500 (12,70) | .250 (6,35) |
| 12SWS2546 | SWS 2546 | .125 (3,18) | .750 (19,05) | .187 (4,75) | .500 (12,70) | .344 (8,74) |
| 12SWS2547 | SWS 2547 | .250 (6,35) | .750 (19,05) | .062 (1,57) | .617 (15,67) | .509 (12,93) |
| 12SWS2548 | SWS 2548 | .425 (10,80) | .750 (19,05) | 1/16" (1,59) | .590 (14,99) | .375 (9,53) |
| 12SWS2549 | SWS 2549 | .140 (3,56) | .750 (19,05) | .031 (0,79) | .708 (17,98) | .630 (16,00) |
| 12SWS2550 | SWS 2550 | 1/16 (1,59) | .734 (18,64) | 1/8" (3,18) | .488 (12,40) | .250 (6,35) |
| 12SWS2551 | SWS 2551 | 3/64 (1,19) | .753 (19,12) | 5/64 (1,98) | .409 (10,38) | .258 (6,55) |
| 12SWS2552 | SWS 2552 | 7/64 (2,77) | .743 (18,87) | 3/32 (2,38) | .500 (12,70) | .375 (9,53) |
| 12SWS2553 | SWS 2553 | 5/16 (7,94) | .750 (19,05) | 5/64 (1,98) | .500 (12,70) | .370 (9,39) |
| 12SWS2554 | SWS 2554 | 3/64 (1,19) | .735 (18,67) | 3/16 (4,76) | .490 (12,45) | .435 (11,05) |
| 12SWS2555 | SWS 2555 | .098 (2,49) | .747 (18,87) | .079 (2,01) | .482 (12,24) | .358 (9,09) |
| 12SWS2556 | SWS 2556 | 3/16 (4,76) | .750 (19,05) | 1/16 (1,59) | .500 (12,70) | .375 (9,53) |
| 12SWS2557 | SWS 2557 | 23/64 (10,00) | .748 (18,99) | 1/8 (3,18) | .504 (12,80) | .384 (9,75) |
| 12SWS2558 | SWS 2558 | 1/8 (3,18) | .750 (19,05) | 1/16 (1,59) | .500 (12,70) | .375 (9,53) |
| 12SWS2559 | SWS 2559 | .020 (0,51) | .750 (19,05) | .074 (1,88) | .495 (12,57) | .385 (9,78) |
| 12SWS2560 | SWS 2560 | 3/64 (1,19) | .750 (19,05) | 1/32 (0,79) | .371 (9,42) | .253 (6,43) |
| 12SWS2561 | SWS 2561 | 27/64 (10,72) | .750 (19,05) | 11/64 (4,37) | .434 (11,02) | .312 (7,93) |
| 12SWS2562 | SWS 2562 | 1/4 (3,38) | .755 (19,17) | 5/64 (1,98) | .505 (12,83) | .378 (9,60) |
| 12SWS2563 | SWS 2563 | 3/32 (1,19) | .750 (19,05) | 1/8 (3,18) | .375 (9,53) | .265 (6,73) |
| 12SWS2564 | SWS 2564 | 1/4 (6,35) | .750 (19,05) | 1/16 (1,59) | .250 (6,35) | .150 (3,81) |
| 12SWS2565 | SWS 2565 | .250 (6,35) | .750 (19,05) | .190 (4,83) | .500 (12,70) | .310 (7,87) |
| 12SWS2566 | SWS 2566 | 15/32 (11,90) | .740 (18,80) | 5/32 (3,97) | .375 (9,53) | .250 (6,35) |
| 12SWS2567 | SWS 2567 | .174 (4,42) | .750 (19,05) | .066 (1,68) | .625 (15,88) | .470 (11,94) |
| 12SWS2568 | SWS 2568 | 3/64 (1,19) | .750 (19,05) | 1/32 (0,79) | .341 (8,66) | .253 (6,43) |
| 12SWS2569 | SWS 2569 | .420 (10,67) | .550 (13,97) | .172 (4,37) | .436 (11,07) | .307 (7,80) |
| 12SWS2570 | SWS 2570 | 11/16 (17,46) | .740 (18,80) | 9/64 (3,58) | .385 (9,78) | .260 (6,60) |
| 12SWS2571 | SWS 2571 | .320 (8,13) | .750 (19,05) | .030 (0,76) | .580 (14,73) | .517 (13,13) |
| 12SWS2572 | SWS 2572 | 1/2 (12,70) | .750 (19,05) | 1/16 (1,59) | .375 (9,53) | .125 (3,18) |
| 12SWS2573 | SWS 2573 | .125 (3,18) | .750 (19,05) | .093 (2,36) | .375 (9,53) | .172 (4,37) |
| 12SWS2574 | SWS 2574 | .360 (9,14) | .750 (19,05) | .062 (1,57) | .506 (12,85) | .380 (9,65) |
| 12SWS2575 | SWS 2575 | 51/64 (20,24) | .750 (19,06) | 3/32 (2,38) | .315 (8,01) | .190 (4,83) |
| 12SWS2576 | SWS 2576 | 1/32 (0,76) | .750 (19,05) | 1/32 (0,79) | .500 (12,70) | .219 (5,56) |

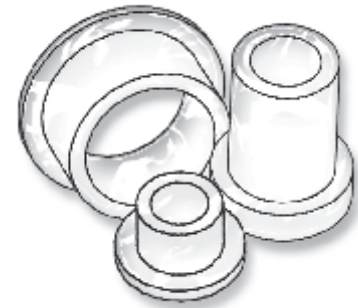


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

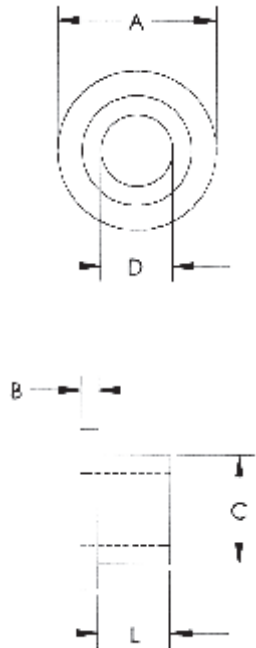
NYLON SHOULDER WASHERS

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- ▶ ACT AS SPACERS AND GUIDES
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| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|------------------------|--------------|-------------|--------------|--------------|---|
| 12SWS2577 | SWS 2577 .250 (6,35) | .750 (19,05) | .065 (1,65) | .320 (8,13) | .170 (4,32) | |
| 12SWS2578 | SWS 2578 3/16 (4,76) | .750 (19,06) | 1/16 (1,59) | .625 (15,88) | .510 (12,95) | |
| 12SWS2579 | SWS 2579 .180 (4,57) | .750 (19,05) | .240 (6,10) | .500 (12,70) | .370 (9,40) | |
| 12SWS2580 | SWS 2580 5/16 (7,94) | .745 (18,92) | 1/32 (0,79) | .560 (14,22) | .500 (12,70) | |
| 12SWS2581 | SWS 2581 1/4 (6,35) | .750 (19,05) | 5/64 (1,98) | .505 (12,83) | .315 (8,00) | |
| 12SWS2584 | SWS 2584 .050 (1,27) | .735 (18,67) | .050 (1,27) | .710 (18,03) | .640 (16,26) | |
| 12SWS2585 | SWS 2585 1/4 (6,35) | .740 (18,80) | 1/2 (12,70) | .605 (15,37) | .380 (9,65) | |
| 12SWS2586 | SWS 2586 1/4 (6,35) | .750 (19,05) | 1/8 (3,18) | .500 (12,70) | .281 (7,14) | |
| 12SWS2587 | SWS 2587 7/16 (11,11) | 3/4 (19,05) | 1/16 (1,59) | 5/8 (15,88) | 1/2 (12,70) | |
| 12SWS2590 | SWS 2590 .018 (0,46) | .745 (18,92) | .085 (2,16) | .305 (7,75) | .200 (5,08) | |
| 12SWS3001 | SWS 3001 1/8 (3,18) | .693 (17,60) | 1/16 (1,59) | .437 (11,10) | .328 (8,33) | |
| 12SWS3002 | SWS 3002 3/64 (1,19) | .750 (19,05) | 3/64 (1,19) | .375 (9,53) | .323 (8,20) | |
| 12SWS3003 | SWS 3003 7/32 (5,55) | .750 (19,05) | 3/32 (2,38) | .380 (9,65) | .266 (6,76) | |
| 12SWS3004 | SWS 3004 1/16 (1,59) | .750 (19,05) | 3/32 (2,38) | .359 (9,12) | .152 (3,86) | |
| 12SWS3005 | SWS 3005 5/32 (3,97) | .750 (19,05) | 1/32 (0,79) | .498 (12,64) | .378 (9,60) | |
| 12SWS3006 | SWS 3006 1/32 (0,79) | .750 (19,05) | 1/8 (3,18) | .500 (12,70) | .375 (9,53) | |
| 12SWS3007 | SWS 3007 1/16 (1,59) | .750 (19,05) | 1/8 (3,18) | .500 (12,70) | .375 (9,53) | |
| 12SWS3008 | SWS 3008 1/16 (1,59) | .745 (18,92) | 1/32 (0,79) | .375 (9,53) | .320 (8,13) | |
| 12SWS3009 | SWS 3009 3/64 (1,19) | .760 (19,30) | 5/64 (1,98) | .410 (10,41) | .258 (6,55) | |
| 12SWS3010 | SWS 3010 .027 (0,68) | .750 (19,05) | .031 (0,79) | .310 (7,87) | .257 (6,53) | |
| 12SWS3011 | SWS 3011 .196 (4,98) | .763 (19,38) | .026 (0,66) | .562 (14,27) | .394 (10,01) | |
| 12SWS3012 | SWS 3012 .395 (10,03) | .740 (18,80) | .065 (1,65) | .430 (10,92) | .322 (8,18) | |
| 12SWS3015 | SWS 3015 1.005 (25,53) | .752 (19,10) | .060 (1,52) | .505 (12,83) | .320 (8,13) | |
| 12SWS3016 | SWS 3016 .050 (1,27) | .745 (18,82) | 1/16 (1,59) | .556 (14,12) | .515 (13,08) | |
| 12SWS3017 | SWS 3017 5/32 (3,97) | .755 (19,18) | 1/2 (12,70) | .510 (12,95) | .385 (9,78) | |
| 12SWS3020 | SWS 3020 .305 (7,75) | .740 (18,80) | .130 (3,30) | .495 (12,57) | .219 (5,56) | |
| 12SWS3021 | SWS 3021 .440 (11,18) | .745 (18,92) | 1/16 (1,59) | .495 (12,57) | .390 (9,91) | |
| 12SWS3022 | SWS 3022 .188 (4,78) | .750 (19,05) | .092 (2,34) | .627 (15,93) | .506 (12,85) | |
| 12SWS3023 | SWS 3023 .216 (5,49) | .765 (19,43) | .126 (3,20) | .481 (12,22) | .250 (6,35) | |
| 12SWS3030 | SWS 3030 .252 (6,40) | .780 (19,81) | .079 (2,01) | .392 (9,96) | .250 (6,35) | |
| 12SWS3031 | SWS 3031 .110 (2,79) | .810 (20,57) | .130 (3,30) | .498 (12,65) | .388 (9,86) | |
| 12SWS3032 | SWS 3032 .108 (2,74) | .805 (20,45) | .132 (3,35) | .502 (12,75) | .324 (8,23) | |
| 12SWS3100 | SWS 3100 .325 (8,26) | .825 (20,96) | .060 (1,52) | .435 (11,05) | .310 (7,87) | |
| 12SWS3101 | SWS 3101 1/32 (0,79) | .750 (19,05) | 1/16 (1,59) | .375 (9,53) | .260 (6,60) | |
| 12SWS3102 | SWS 3102 1/2 (12,70) | .825 (20,96) | 1/16 (1,59) | .620 (15,75) | .520 (13,21) | |
| 12SWS3103 | SWS 3103 1/2 (12,70) | .872 (22,14) | 1/8 (3,18) | .617 (15,67) | .335 (8,51) | |
| 12SWS3104 | SWS 3104 .125 (3,18) | .750 (19,05) | .075 (1,91) | .437 (11,10) | .265 (6,73) | |
| 12SWS3105 | SWS 3105 .190 (4,83) | .825 (20,96) | .060 (1,52) | .435 (11,05) | .310 (7,87) | |
| 12SWS3106 | SWS 3106 .204 (5,18) | .875 (22,23) | .062 (1,57) | .626 (15,90) | .379 (9,63) | |
| 12SWS3149 | SWS 3149 .455 (11,56) | .865 (21,97) | .045 (1,14) | .600 (15,24) | .510 (12,95) | |
| 12SWS3150 | SWS 3150 1 (25,40) | .875 (22,23) | 1/16 (1,59) | .500 (12,70) | .375 (9,53) | |
| 12SWS3151 | SWS 3151 3/8 (9,53) | 7/8 (22,22) | 1/8 (3,17) | .633 (16,08) | .510 (12,95) | |
| 12SWS3155 | SWS 3155 3/8 (9,53) | .875 (22,23) | 1/8 (3,18) | .630 (16,00) | .440 (11,18) | |
| 12SWS3156 | SWS 3156 .689 (17,50) | .874 (22,20) | .063 (1,60) | .634 (16,10) | .507 (12,88) | |
| 12SWS3160 | SWS 3160 1/2 (12,70) | .875 (22,23) | 1/16 (1,59) | .750 (19,05) | .635 (16,13) | |

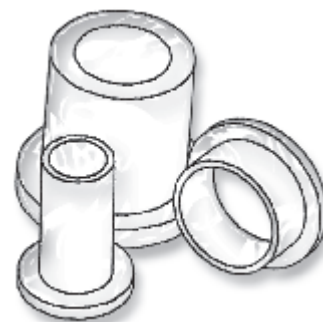


NYLON SHOULDER WASHERS

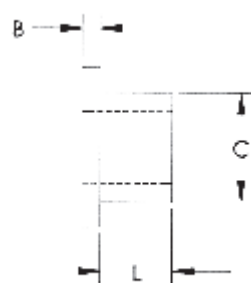
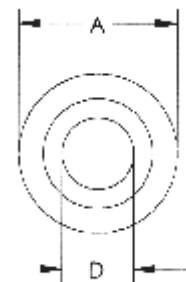
Nylon Shoulder Washers are suitable for a large variety of insulation and mechanical applications.

- ▶ THEY SEAL
- ▶ REDUCE VIBRATION
- ▶ ACT AS SPACERS AND GUIDES
- ▶ STRONG AND CORROSION RESISTANT

New Sizes



| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|---------------|---------------|-------------|---------------|--------------|
| 12SWS3165 | SWS 3165 | 3/8 (9,53) | .875 (22,23) | 1/8 (3,18) | .620 (15,75) | .250 (6,35) |
| 12SWS3200 | SWS 3200 | 3/16 (4,76) | .995 (25,27) | 1/8 (3,18) | .792 (20,12) | .695 (17,65) |
| 12SWS3205 | SWS 3205 | 5/8 (15,88) | .995 (25,27) | 1/8 (3,18) | .787 (19,99) | .695 (17,65) |
| 12SWS3210 | SWS 3210 | 1 (25,40) | .995 (25,27) | 1/8 (3,18) | .787 (19,99) | .695 (17,65) |
| 12SWS3500 | SWS 3500 | 3/16 (4,76) | .750 (19,05) | 1/16 (1,59) | .498 (12,64) | .378 (9,60) |
| 12SWS3501 | SWS 3501 | 7/64 (2,77) | .750 (19,05) | 3/32 (2,38) | .577 (14,66) | .390 (9,91) |
| 12SWS3502 | SWS 3502 | 27/64 (10,72) | .790 (20,07) | 3/64 (1,19) | .625 (15,88) | .550 (13,97) |
| 12SWS3503 | SWS 3503 | 13/16 (20,64) | .625 (15,88) | 1/8 (3,18) | .375 (9,53) | .255 (6,47) |
| 12SWS3504 | SWS 3504 | 13/16 (20,64) | .625 (15,88) | 1/8 (3,18) | .375 (9,53) | .260 (6,60) |
| 12SWS3505 | SWS 3505 | .100 (2,54) | .800 (20,32) | .055 (1,40) | .655 (16,64) | .563 (14,30) |
| 12SWS3507 | SWS 3507 | .250 (6,35) | .830 (21,08) | .100 (2,54) | .452 (11,18) | .253 (6,43) |
| 12SWS3510 | SWS 3510 | 13/32 (10,32) | .825 (20,96) | 3/32 (2,38) | .445 (11,30) | .306 (7,77) |
| 12SWS3511 | SWS 3511 | 13/64 (5,16) | .880 (22,35) | 3/64 (1,19) | .750 (19,05) | .617 (15,67) |
| 12SWS3512 | SWS 3512 | .935 (23,75) | .872 (22,15) | .110 (2,79) | .497 (12,62) | .385 (9,78) |
| 12SWS3513 | SWS 3513 | .250 (6,35) | .875 (22,22) | .125 (3,17) | .617 (15,67) | .335 (8,51) |
| 12SWS3514 | SWS 3514 | 3/8 (9,53) | 7/8 (22,23) | 1/16 (1,57) | 31/64 (12,29) | .386 (9,80) |
| 12SWS3515 | SWS 3515 | 3/8 (9,53) | 7/8 (22,23) | 1/16 (1,57) | 17/32 (13,49) | .438 (11,13) |
| 12SWS3520 | SWS 3520 | 17/32 (13,49) | .945 (24,03) | 5/64 (1,98) | .470 (11,93) | .406 (10,31) |
| 12SWS3521 | SWS 3521 | .060 (1,52) | .940 (23,88) | .090 (2,29) | .560 (14,22) | .257 (6,53) |
| 12SWS3562 | SWS 3562 | 1/4 (6,35) | .980 (24,89) | 1/8 (3,18) | .556 (14,12) | .380 (9,65) |
| 12SWS3563 | SWS 3563 | .080 (2,03) | 1.000 (25,40) | .125 (3,18) | .306 (7,77) | .205 (5,21) |
| 12SWS3564 | SWS 3564 | .250 (6,35) | .980 (24,89) | .125 (3,18) | .546 (13,87) | .406 (10,31) |
| 12SWS3580 | SWS 3580 | 9/16 (14,29) | 1.25 (31,75) | 3/64 (1,19) | 1.00 (25,40) | .559 (14,20) |
| 12SWS3598 | SWS 3598 | .200 (5,08) | 1.000 (25,40) | .050 (1,27) | .750 (19,05) | .630 (16,00) |
| 12SWS3599 | SWS 3599 | 5/8 (15,88) | 1" (25,40) | 1/8 (3,18) | .666 (16,92) | .520 (13,21) |
| 12SWS3600 | SWS 3600 | .660 (16,76) | 1.010 (25,65) | .160 (4,06) | .600 (15,24) | .260 (6,60) |
| 12SWS3601 | SWS 3601 | 3/16 (4,76) | 1.000 (25,40) | 1/4 (6,35) | .435 (11,05) | .325 (8,26) |
| 12SWS3602 | SWS 3602 | 1/32 (0,79) | 1.000 (25,40) | 3/32 (2,38) | .616 (15,65) | .515 (13,08) |
| 12SWS3603 | SWS 3603 | .050 (1,27) | 1.005 (25,53) | .070 (1,78) | .500 (12,70) | .453 (11,51) |
| 12SWS3604 | SWS 3604 | .243 (6,17) | 1.006 (25,55) | .078 (1,98) | .504 (12,80) | .376 (9,55) |
| 12SWS3605 | SWS 3605 | 5/16 (7,94) | 1.005 (25,53) | 1/16 (1,59) | .500 (12,70) | .375 (9,53) |
| 12SWS3606 | SWS 3606 | .33 (8,38) | 1.00 (25,40) | .04 (1,02) | .625 (15,87) | .515 (13,08) |
| 12SWS3607 | SWS 3607 | .521 (13,23) | 1.068 (27,13) | .062 (1,57) | .896 (22,76) | .630 (16,00) |
| 12SWS3608 | SWS 3608 | .500 (12,70) | 1.000 (25,40) | .125 (3,18) | .687 (17,45) | .510 (12,95) |
| 12SWS3609 | SWS 3609 | .120 (3,05) | 1.000 (25,40) | .130 (3,30) | .745 (18,92) | .645 (16,38) |
| 12SWS3610 | SWS 3610 | 9/16 (14,29) | 1.000 (25,40) | 1/16 (1,59) | .500 (12,70) | .382 (9,70) |
| 12SWS3612 | SWS 3612 | .085 (2,16) | 1.000 (25,40) | .075 (1,91) | .562 (14,27) | .190 (4,83) |
| 12SWS3615 | SWS 3615 | 3/4 (19,05) | 1.000 (25,40) | 1/8 (3,18) | .500 (12,70) | 3/8 (9,53) |
| 12SWS3650 | SWS 3650 | 7/64 (2,77) | 1.000 (25,40) | 5/64 (1,98) | .770 (19,56) | .508 (12,90) |
| 12SWS3680 | SWS 3680 | 1/16 (1,59) | 1.000 (25,40) | 1/16 (1,59) | .298 (7,57) | .203 (5,16) |
| 12SWS3685 | SWS 3685 | 1/16 (1,59) | 1.064 (27,02) | 1/16 (1,59) | .787 (19,99) | .612 (15,54) |
| 12SWS3686 | SWS 3686 | 9/32 (7,14) | 1.105 (28,07) | .092 (2,34) | .718 (18,24) | .515 (13,08) |
| 12SWS3687 | SWS 3687 | .118 (3,00) | 1.102 (27,99) | .039 (0,99) | .906 (23,01) | .827 (21,01) |
| 12SWS3688 | SWS 3688 | .313 (7,95) | 1.130 (28,70) | .062 (1,57) | .880 (22,35) | .750 (19,05) |
| 12SWS3689 | SWS 3689 | .313 (7,95) | 1.130 (28,70) | .062 (1,57) | .880 (22,35) | .758 (19,25) |

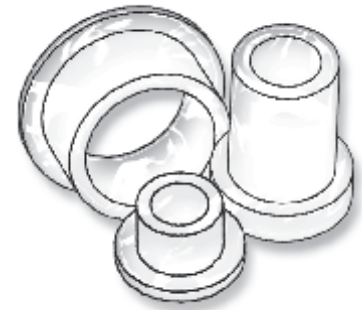


WASHERS, SHOULDER WASHERS & SCREW INSULATORS

SECTION IV

NYLON SHOULDER WASHERS

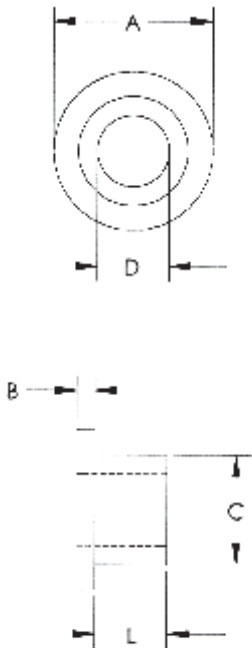
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- ▶ REDUCE VIBRATION
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New Sizes

| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|---------------|---------------|--------------|---------------|---------------|
| 12SWS3690 | SWS 3690 | 7/16 (11,11) | 1.125 (28,58) | 3/32 (2,38) | .700 (17,78) | .510 (12,95) |
| 12SWS3691 | SWS 3691 | .060 (1,52) | 1.160 (29,46) | .128 (3,25) | .495 (12,57) | .377 (9,58) |
| 12SWS3693 | SWS 3693 | .422 (10,72) | 1.250 (31,75) | .156 (3,96) | 1.002 (25,45) | .818 (20,78) |
| 12SWS3694 | SWS 3694 | .250 (6,35) | 1.125 (28,58) | .187 (4,75) | .718 (18,24) | .515 (13,08) |
| 12SWS3695 | SWS 3695 | .125 (3,18) | 1.250 (31,75) | .045 (1,14) | .480 (12,19) | .380 (9,65) |
| 12SWS3696 | SWS 3696 | .100 (2,54) | 1.250 (31,75) | .150 (3,81) | 1.000 (25,40) | .340 (8,64) |
| 12SWS3697 | SWS 3697 | .100 (2,54) | 1.250 (31,75) | .212 (5,38) | 1.000 (25,40) | .340 (8,64) |
| 12SWS4001 | SWS 4001 | 3/32 (2,38) | 1.125 (28,58) | 1/16 (1,59) | .740 (18,80) | .515 (13,08) |
| 12SWS4002 | SWS 4002 | 3/32 (2,38) | 1.230 (31,24) | 1/16 (1,59) | .980 (24,89) | .510 (12,95) |
| 12SWS4003 | SWS 4003 | 9/32 (7,14) | 1.105 (28,07) | 1/8 (3,18) | .752 (19,10) | .515 (13,08) |
| 12SWS4004 | SWS 4004 | 1/2 (12,70) | 1.245 (31,69) | 1/8 (3,18) | .875 (22,23) | .627 (15,92) |
| 12SWS4005 | SWS 4005 | 13/32 (10,32) | 1.252 (31,80) | 1/16 (1,59) | .600 (15,24) | .538 (13,66) |
| 12SWS4006 | SWS 4006 | 13/32 (10,32) | 1.251 (31,77) | 1/16 (1,59) | .528 (13,41) | .471 (11,96) |
| 12SWS4007 | SWS 4007 | 13/64 (5,16) | 1.739 (44,17) | 13/64 (5,16) | 1.095 (27,81) | .435 (11,04) |
| 12SWS4008 | SWS 4008 | 11/32 (8,71) | 1.250 (31,75) | 5/32 (3,97) | .995 (25,27) | .885 (22,48) |
| 12SWS4009 | SWS 4009 | 3/4 (19,05) | 1 1/8 (28,57) | 1/16 (1,59) | 7/16 (11,11) | 5/16 (7,94) |
| 12SWS4010 | SWS 4010 | 3/32 (2,38) | 1.250 (31,75) | 1/16 (1,59) | .930 (23,62) | .562 (14,27) |
| 12SWS4011 | SWS 4011 | .094 (2,39) | 1.250 (31,75) | .062 (1,57) | .989 (25,12) | .562 (14,27) |
| 12SWS4012 | SWS 4012 | .060 (1,52) | 1.650 (41,91) | .060 (1,52) | 1.380 (35,05) | 1.125 (28,58) |
| 12SWS4013 | SWS 4013 | 5/8 (15,88) | 1-3/4 (44,45) | 1/8 (3,18) | 1-3/8 (34,93) | 1.015 (25,78) |
| 12SWS4014 | SWS 4014 | .238 (6,04) | 1.501 (38,12) | .133 (3,38) | 1.248 (31,70) | .942 (23,92) |
| 12SWS4016 | SWS 4016 | .100 (2,54) | 1.250 (31,75) | .250 (6,35) | .419 (10,64) | .254 (6,45) |
| 12SWS4017 | SWS 4017 | .170 (4,32) | 1.570 (39,88) | .175 (4,45) | 1.055 (26,80) | .887 (22,53) |
| 12SWS4018 | SWS 4018 | .250 (6,35) | 1.500 (38,10) | .120 (3,05) | .615 (15,62) | .265 (6,73) |
| 12SWS4019 | SWS 4019 | .309 (7,85) | 1.365 (34,67) | .128 (3,25) | 1.120 (28,45) | .870 (22,10) |
| 12SWS5000 | SWS 5000 | 5/8 (15,88) | 1.952 (49,58) | .125 (3,18) | 31/64 (12,29) | .380 (9,65) |
| 12SWS5001 | SWS 5001 | 1/2 (12,70) | 2.065 (52,45) | 1/8 (3,18) | 1.050 (26,67) | .806 (20,42) |
| 12SWS5002 | SWS 5002 | .500 (12,70) | 2.065 (52,45) | .125 (3,18) | 1.050 (26,67) | .783 (19,89) |
| 12SWS5003 | SWS 5003 | .305 (7,75) | 1.989 (50,52) | .129 (3,28) | 1.743 (44,27) | 1.326 (33,68) |
| 12SWS5009 | SWS 5009 | 45/64 (17,85) | 2.111 (53,62) | 1/8 (3,18) | .603 (15,31) | .270 (6,85) |



SHOULDER WASHER ASSORTMENT KIT page 216



WASHERS, SHOULDER WASHERS & SCREW INSULATORS

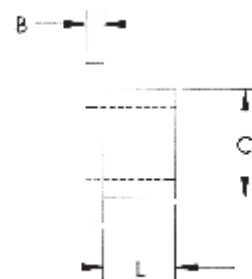
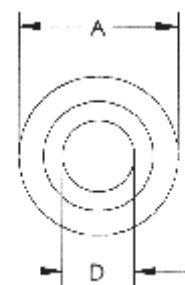
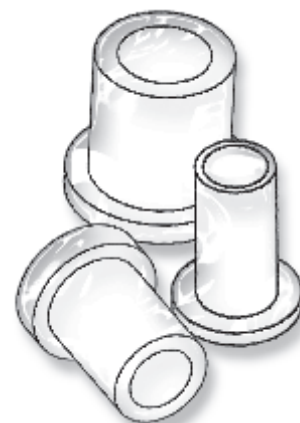
NYLON SCREW INSULATORS

METRIC Sizes
Also Available
 Page 238

SECTION
IV

Screw Insulators may also be used as light load bearings in many applications.

| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|--------------|--------------|-------------|-------------|-------------|
| 10SC002012 | SC 2 | 1/8 (3,18) | .181 (4,60) | 3/64 (1,19) | .120 (3,05) | .090 (2,29) |
| 10SC002018 | SC 2 | 3/16 (4,76) | .181 (4,60) | 3/64 (1,19) | .120 (3,05) | .090 (2,29) |
| 10SC002025 | SC 2 | 1/4 (6,35) | .181 (4,60) | 3/64 (1,19) | .120 (3,05) | .090 (2,29) |
| 10SC002037 | SC 2 | 3/8 (9,53) | .181 (4,60) | 3/64 (1,19) | .120 (3,05) | .090 (2,29) |
| 10SC004003 | SC 4 | 1/32 (0,79) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 10SC004004 | SC 4 | 3/64 (1,19) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 10SC004006 | SC 4 | 1/16 (1,59) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 10SC004009 | SC 4 | 3/32 (2,38) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 10SC004012 | SC 4 | 1/8 (3,18) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 10SC004015 | SC 4 | 5/32 (3,97) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 10SC004018 | SC 4 | 3/16 (4,76) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 10SC004025 | SC 4 | 1/4 (6,35) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 10SC004037 | SC 4 | 3/8 (9,53) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 10SC004050 | SC 4 | 1/2 (12,70) | .235 (5,97) | 3/64 (1,19) | .145 (3,68) | .115 (2,92) |
| 10SC006004 | SC 6 | 3/64 (1,19) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 10SC006006 | SC 6 | 1/16 (1,59) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 10SC006009 | SC 6 | 3/32 (2,38) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 10SC006012 | SC 6 | 1/8 (3,18) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 10SC006015 | SC 6 | 5/32 (3,97) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 10SC006018 | SC 6 | 3/16 (4,76) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 10SC006025 | SC 6 | 1/4 (6,35) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 10SC006037 | SC 6 | 3/8 (9,53) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 10SC006050 | SC 6 | 1/2 (12,70) | .290 (7,37) | 3/64 (1,19) | .170 (4,32) | .140 (3,56) |
| 10SC008012 | SC 8 | 1/8 (3,18) | .344 (8,74) | 1/16 (1,59) | .205 (5,21) | .173 (4,39) |
| 10SC008014 | SC 8 | 9/64 (3,58) | .344 (8,74) | 1/16 (1,59) | .205 (5,21) | .173 (4,39) |
| 10SC008025 | SC 8 | 1/4 (6,35) | .344 (8,74) | 1/16 (1,59) | .205 (5,21) | .173 (4,39) |
| 10SC008037 | SC 8 | 3/8 (9,53) | .344 (8,74) | 1/16 (1,59) | .205 (5,21) | .173 (4,39) |
| 10SC008050 | SC 8 | 1/2 (12,70) | .344 (8,74) | 1/16 (1,59) | .205 (5,21) | .173 (4,39) |
| 10SC008062 | SC 8 | 5/8 (15,88) | .344 (8,74) | 1/16 (1,59) | .205 (5,21) | .173 (4,39) |
| 10SC008075 | SC 8 | 3/4 (19,05) | .344 (8,74) | 1/16 (1,59) | .205 (5,21) | .173 (4,39) |
| 10SC010006 | SC 10 | 1/16 (1,59) | .399 (10,13) | 1/16 (1,59) | .260 (6,60) | .200 (5,08) |
| 10SC010014 | SC 10 | 9/64 (3,58) | .399 (10,13) | 1/16 (1,59) | .260 (6,60) | .200 (5,08) |
| 10SC010018 | SC 10 | 3/16 (4,76) | .399 (10,13) | 1/16 (1,59) | .260 (6,60) | .200 (5,08) |
| 10SC010025 | SC 10 | 1/4 (6,35) | .399 (10,13) | 1/16 (1,59) | .260 (6,60) | .200 (5,08) |
| 10SC010037 | SC 10 | 3/8 (9,53) | .399 (10,13) | 1/16 (1,59) | .260 (6,60) | .200 (5,08) |
| 10SC010050 | SC 10 | 1/2 (12,70) | .399 (10,13) | 1/16 (1,59) | .260 (6,60) | .200 (5,08) |
| 10SC010056 | SC 10 | 9/16 (14,29) | .399 (10,13) | 1/16 (1,59) | .260 (6,60) | .200 (5,08) |
| 10SC010062 | SC 10 | 5/8 (15,88) | .399 (10,13) | 1/16 (1,59) | .260 (6,60) | .200 (5,08) |
| 10SC010075 | SC 10 | 3/4 (19,05) | .399 (10,13) | 1/16 (1,59) | .260 (6,60) | .200 (5,08) |
| 10SC250012 | SC 250 | 1/8 (3,18) | .513 (13,03) | 1/16 (1,59) | .312 (7,92) | .260 (6,60) |
| 10SC250014 | SC 250 | 9/64 (3,58) | .513 (13,03) | 1/16 (1,59) | .312 (7,92) | .260 (6,60) |
| 10SC250018 | SC 250 | 3/16 (4,76) | .513 (13,03) | 1/16 (1,59) | .312 (7,92) | .260 (6,60) |
| 10SC250025 | SC 250 | 1/4 (6,35) | .513 (13,03) | 1/16 (1,59) | .312 (7,92) | .260 (6,60) |
| 10SC250037 | SC 250 | 3/8 (9,53) | .513 (13,03) | 1/16 (1,59) | .312 (7,92) | .260 (6,60) |
| 10SC250050 | SC 250 | 1/2 (12,70) | .513 (13,03) | 1/16 (1,59) | .312 (7,92) | .260 (6,60) |
| 10SC250062 | SC 250 | 5/8 (15,88) | .513 (13,03) | 1/16 (1,59) | .312 (7,92) | .260 (6,60) |
| 10SC250075 | SC 250 | 3/4 (19,05) | .513 (13,03) | 1/16 (1,59) | .312 (7,92) | .260 (6,60) |
| 10SC312012 | SC 312 | 1/8 (3,18) | .620 (15,75) | 1/16 (1,59) | .360 (9,14) | .320 (8,13) |
| 10SC312025 | SC 312 | 1/4 (6,35) | .620 (15,75) | 1/16 (1,59) | .360 (9,14) | .320 (8,13) |
| 10SC312037 | SC 312 | 3/8 (9,53) | .620 (15,75) | 1/16 (1,59) | .360 (9,14) | .320 (8,13) |
| 10SC312050 | SC 312 | 1/2 (12,70) | .620 (15,75) | 1/16 (1,59) | .360 (9,14) | .320 (8,13) |
| 10SC312062 | SC 312 | 5/8 (15,88) | .620 (15,75) | 1/16 (1,59) | .360 (9,14) | .320 (8,13) |



Specify screw size and length when ordering. Specials can be made to order for a small tooling charge.



WASHERS, SHOULDER WASHERS & SCREW INSULATORS

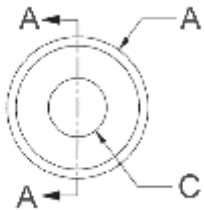
SECTION IV

Nylon Cup Washers are designed to :

- Protect the head of a metal screw from electrical contact.
Accommodate the most common screw head-styles including:
- Cheese, Pan and Fillister, in sizes from #4 TO 1/4".

Cup Washers are molded from tough, electrically insulating Nylon 6/6.

New Sizes



NYLON CUP WASHERS

| ITEM NUMBER | A | B | C | D | E |
|-------------|--------------|--------------|-------------|-------------|--------------|
| 16CW004040 | .305 (7,76) | .245 (6,22) | .115 (2,92) | .117 (2,97) | .157 (3,99) |
| 16CW006040 | .360 (9,14) | .300 (7,62) | .140 (3,56) | .142 (3,61) | .182 (4,62) |
| 16CW008040 | .414 (10,52) | .354 (8,99) | .171 (4,34) | .166 (4,22) | .206 (5,23) |
| 16CW008042 | .497 (12,62) | .389 (9,88) | .187 (4,75) | .093 (2,36) | .139 (3,53) |
| 16CW008041 | .414 (10,52) | .354 (8,99) | .171 (4,34) | .130 (3,30) | .170 (4,32) |
| 16CW010030 | .568 (14,43) | .375 (9,53) | .201 (5,11) | .127 (3,23) | .157 (3,99) |
| 16CW010040 | .470 (11,94) | .410 (10,41) | .194 (4,93) | .190 (4,83) | .230 (5,85) |
| 16CW250040 | .595 (15,11) | .535 (13,59) | .257 (6,53) | .247 (6,27) | .287 (7,29) |
| 16CW312375 | .875 (22,23) | .625 (15,88) | .344 (8,74) | .250 (6,35) | .375 (9,53) |
| 16CW312500 | .875 (22,23) | .625 (15,88) | .344 (8,74) | .375 (9,53) | .500 (12,70) |



NYLON STANDARD SHOULDER WASHERS

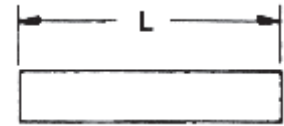


| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|-------------|--------------|-------------|--------------|-------------|
| 24SW0002 | SW 2 | .040 (1,02) | .250 (6,35) | .040 (1,02) | .156 (3,96) | .093 (2,36) |
| 24SW0004 | SW 4 | .040 (1,02) | .281 (7,14) | .040 (1,02) | .187 (4,75) | .122 (3,09) |
| 24SW0006 | SW 6 | .040 (1,02) | .328 (8,33) | .040 (1,02) | .218 (5,54) | .146 (3,71) |
| 24SW0008 | SW 8 | .050 (1,27) | .375 (9,53) | .050 (1,27) | .250 (6,35) | .174 (4,42) |
| 24SW0010 | SW 10 | .050 (1,27) | .437 (11,10) | .050 (1,27) | .281 (7,14) | .201 (5,11) |
| 24SW0250 | SW1/4 | .060 (1,52) | .562 (14,27) | .060 (1,52) | .375 (9,53) | .260 (6,60) |
| 24SW0375 | SW3/8 | .060 (1,52) | .750 (19,05) | .060 (1,52) | .500 (12,70) | .385 (9,78) |

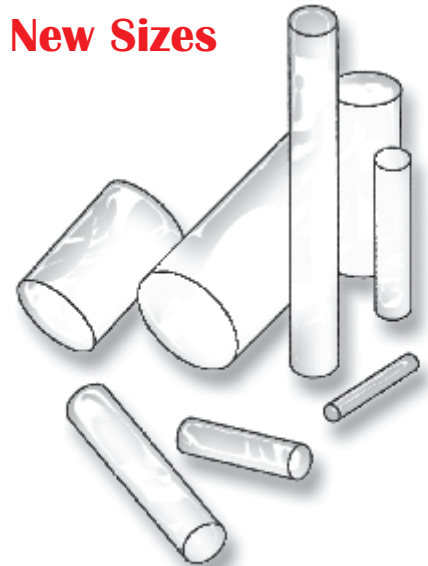
MOLDED PLASTIC DOWELS

| ITEM NUMBER | DESCRIPTION | O.D. | LENGTH |
|-------------|-------------|--------------|---------------|
| 2500470125 | 047125 | .047 (1,19) | 1/8 (3,18) |
| 2500470250 | 047250 | .047 (1,19) | 1/4 (6,35) |
| 2500470375 | 047375 | .047 (1,19) | 3/8 (9,53) |
| 2500470500 | 047500 | .047 (1,19) | 1/2 (12,70) |
| 2500620125 | 062125 | .062 (1,57) | 1/8 (3,18) |
| 2500620250 | 062250 | .062 (1,57) | 1/4 (6,35) |
| 2500620375 | 062375 | .062 (1,57) | 3/8 (9,53) |
| 2500620500 | 062500 | .062 (1,57) | 1/2 (12,70) |
| 2500930125 | 093125 | .093 (2,36) | 1/8 (3,18) |
| 2500930250 | 093250 | .093 (2,36) | 1/4 (6,35) |
| 2500930375 | 093375 | .093 (2,36) | 3/8 (9,53) |
| 2500930500 | 093500 | .093 (2,36) | 1/2 (12,70) |
| 2501221125 | 122125 | .122 (3,10) | 1-1/8 (28,58) |
| 2501250125 | 125125 | .125 (3,18) | 1/8 (3,18) |
| 2501250187 | 125187 | .125 (3,18) | 3/16 (4,76) |
| 2501250250 | 125250 | .125 (3,18) | 1/4 (6,35) |
| 2501250375 | 125375 | .125 (3,18) | 3/8 (9,53) |
| 2501250500 | 125500 | .125 (3,18) | 1/2 (12,70) |
| 2501870125 | 187125 | .187 (4,75) | 1/8 (3,18) |
| 2501870250 | 187250 | .187 (4,75) | 1/4 (6,35) |
| 2501870375 | 187375 | .187 (4,75) | 3/8 (9,53) |
| 2501870500 | 187500 | .187 (4,75) | 1/2 (12,70) |
| 2501870625 | 187625 | .187 (4,75) | 5/8 (15,88) |
| 2501870750 | 187750 | .187 (4,75) | 3/4 (19,05) |
| 2502451250 | 245250 | .245 (6,22) | 1-1/4 (31,75) |
| 2502100500 | 210500 | .210 (5,33) | 1/2 (12,70) |
| 2502500125 | 250125 | .250 (6,35) | 1/8 (3,18) |
| 2502500250 | 250250 | .250 (6,35) | 1/4 (6,35) |
| 2502500375 | 250375 | .250 (6,35) | 3/8 (9,53) |
| 2502500500 | 250500 | .250 (6,35) | 1/2 (12,70) |
| 2502500750 | 250750 | .250 (6,35) | 3/4 (19,05) |
| 2503120125 | 312125 | .312 (7,92) | 1/8 (3,18) |
| 2503120250 | 312250 | .312 (7,92) | 1/4 (6,35) |
| 2503120375 | 312375 | .312 (7,92) | 3/8 (9,53) |
| 2503120500 | 312500 | .312 (7,92) | 1/2 (12,70) |
| 2503120625 | 312625 | .312 (7,92) | 5/8 (15,88) |
| 2503120750 | 312750 | .312 (7,92) | 3/4 (19,05) |
| 2504370250 | 437250 | .437 (11,10) | 1/4 (6,35) |

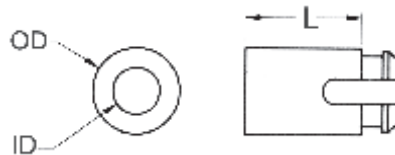
Uses include dowel pins, stop pins, insulating spacers, switch actuators, and keys. Natural color acetal plastic is standard though they may be molded of other materials. Other lengths are available.



New Sizes



NYLON SPECIAL SNAP-IN STANDOFF

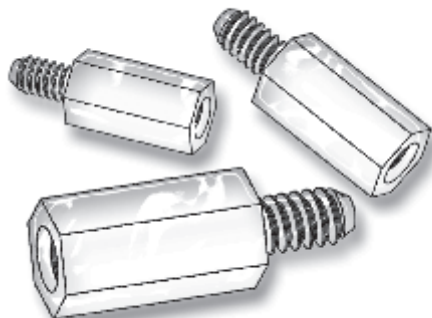


| ITEM NUMBER | PANEL THICKNESS | HOLE SIZE | L | OD | ID |
|-------------|-----------------|-------------|--------------|--------------|-------------|
| 13SS003094 | 1/16" (1,58) | .187 (4,75) | .945 (24,0) | 1/4" (6,35) | .106 (2,69) |
| 13SS004018 | .062 (1,57) | .187 (4,75) | .187 (4,75) | .250 (6,35) | .125 (3,18) |
| 13SS006025 | 1/16" (1,58) | .234 (5,95) | 1/4" (6,35) | 9/32" (7,14) | .153 (3,89) |
| 13SS006037 | 1/16" (1,58) | .234 (5,95) | 3/8" (9,53) | 9/32" (7,14) | .153 (3,89) |
| 13SS008037 | 1/16" (1,58) | .234 (5,95) | 3/8" (9,53) | 9/32" (7,14) | .169 (4,29) |
| 13SS008050 | 1/16" (1,58) | .234 (5,95) | 1/2" (12,70) | 9/32" (7,14) | .169 (4,29) |

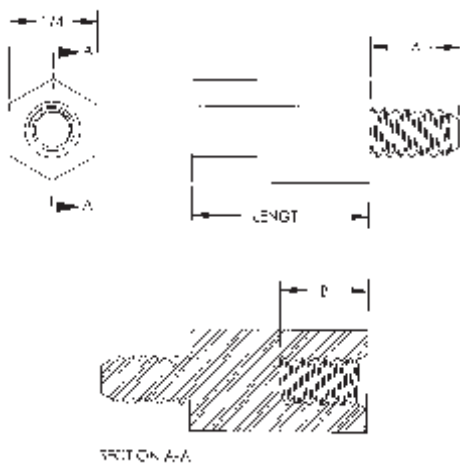


New Sizes

MALE-FEMALE NYLON THREADED STANDOFFS



DEPTH OF THREAD IN 1/4" BODY LENGTHS IS 3/16" MINIMUM



| THREAD SIZE | A | B |
|-------------|-------------|---------------------|
| 440 | 3/16 (4,76) | 3/16 (4,76) Minimum |
| 632 | 1/4 (6,35) | 1/4 (6,35) Minimum |
| 832 | 3/8 (9,53) | 3/8 (9,53) Minimum |

- * B = 7/32
- ** B = 13/64
- *** B = .200
- **** B = .270



| ITEM NUMBER | DESCRIPTION | THREAD | L |
|-----------------|-------------|--------|----------------|
| 36440MF025 | Standoff | 440 | 1/4 (6,35) |
| 36440MF031 | Standoff | 440 | 5/16 (7,94) |
| 36440MF037 | Standoff | 440 | 3/8 (9,53) |
| 36440MF050 | Standoff | 440 | 1/2 (12,70) |
| 36440MF060 | Standoff | 440 | .600 (15,24) |
| 36440MF062 | Standoff | 440 | 5/8 (15,88) |
| 36440MF075 | Standoff | 440 | 3/4 (19,05) |
| 36440MF087 | Standoff | 440 | 7/8 (22,22) |
| 36440MF100 | Standoff | 440 | 1 (25,40) |
| 36440MF112 | Standoff | 440 | 1 1/8 (28,58) |
| 36440MF125 | Standoff | 440 | 1 1/4 (31,75) |
| 36440MF137 | Standoff | 440 | 1 3/8 (34,93) |
| 36440MF150 | Standoff | 440 | 1 1/2 (38,10) |
| 36440MF162 | Standoff | 440 | 1 5/8 (38,28) |
| 36440MF175 | Standoff | 440 | 1 3/4 (44,45) |
| 36440MF200 | Standoff | 440 | 2 (50,80) |
| * 36632MF025 | Standoff | 632 | 1/4 (6,35) |
| ** 36632MF026 | Standoff | 632 | 17/64 (6,75) |
| 36632MF037 | Standoff | 632 | 3/8 (9,53) |
| 36632MF050 | Standoff | 632 | 1/2 (12,70) |
| 36632MF056 | Standoff | 632 | 9/16 (14,27) |
| 36632MF062 | Standoff | 632 | 5/8 (15,88) |
| 36632MF075 | Standoff | 632 | 3/4 (19,05) |
| 36632MF087 | Standoff | 632 | 7/8 (22,22) |
| 36632MF093 | Standoff | 632 | 15/16 (23,81) |
| 36632MF100 | Standoff | 632 | 1 (25,40) |
| 36632MF112 | Standoff | 632 | 1 1/8 (28,58) |
| 36632MF125 | Standoff | 632 | 1 1/4 (31,75) |
| 36632MF131 | Standoff | 632 | 1 5/16 (33,32) |
| 36632MF137 | Standoff | 632 | 1 3/8 (34,93) |
| 36632MF150 | Standoff | 632 | 1 1/2 (38,10) |
| 36632MF162 | Standoff | 632 | 1 5/8 (41,28) |
| 36632MF175 | Standoff | 632 | 1 3/4 (44,45) |
| *** 36632MF200 | Standoff | 632 | 2 (50,80) |
| **** 36832MF025 | Standoff | 832 | 1/4 (6,35) |
| 36832MF037 | Standoff | 832 | 3/8 (9,53) |
| 36832MF050 | Standoff | 832 | 1/2 (12,70) |
| 36832MF062 | Standoff | 832 | 5/8 (15,88) |
| 36832MF075 | Standoff | 832 | 3/4 (19,05) |
| 36832MF087 | Standoff | 832 | 7/8 (22,22) |
| 36832MF100 | Standoff | 832 | 1 (25,40) |
| 36832MF112 | Standoff | 832 | 1 1/8 (28,58) |
| 36832MF125 | Standoff | 832 | 1 1/4 (31,75) |
| 36832MF137 | Standoff | 832 | 1 3/8 (34,93) |
| 36832MF150 | Standoff | 832 | 1 1/2 (38,10) |
| 36832MF162 | Standoff | 832 | 1 5/8 (41,28) |
| 36832MF175 | Standoff | 832 | 1 3/4 (44,45) |
| 36832MF200 | Standoff | 832 | 2 (50,80) |

SPACERS

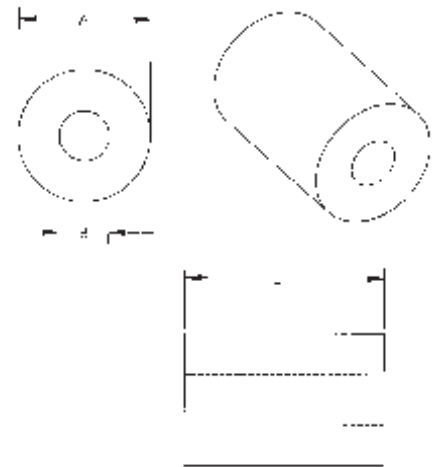
SECTION
V

| ITEM NUMBER | DESCRIPTION | A | B | L | SCREW |
|-------------|-------------|-------------|-------------|---------------|-------|
| 13SP000 | SP 0 | 1/8 (3,18) | .063 (1,60) | 3/16 (4,76) | 0 |
| 13SP001 | SP 1 | 3/16 (4,76) | .091 (2,31) | 1/8 (3,18) | 2 |
| 13SP002 | SP 2 | 3/16 (4,76) | .115 (2,92) | 1/8 (3,18) | 4 |
| 13SP003 | SP 3 | 3/16 (4,76) | .091 (2,31) | 3/16 (4,76) | 2 |
| 13SP004 | SP 4 | 3/16 (4,76) | .115 (2,92) | 3/16 (4,76) | 4 |
| 13SP005 | SP 5 | 3/16 (4,76) | .091 (2,31) | 1/4 (6,35) | 2 |
| 13SP006 | SP 6 | 3/16 (4,76) | .115 (2,92) | 1/4 (6,35) | 4 |
| 13SP007 | SP 7 | 3/16 (4,76) | .091 (2,31) | 5/16 (7,94) | 2 |
| 13SP008 | SP 8 | 3/16 (4,76) | .115 (2,92) | 5/16 (7,94) | 4 |
| 13SP009 | SP 9 | 3/16 (4,76) | .091 (2,31) | 3/8 (9,53) | 2 |
| 13SP010 | SP 10 | 3/16 (4,76) | .115 (2,92) | 3/8 (9,53) | 4 |
| 13SP011 | SP 11 | 3/16 (4,76) | .091 (2,31) | 7/16 (11,11) | 2 |
| 13SP012 | SP 12 | 3/16 (4,76) | .115 (2,92) | 7/16 (11,11) | 4 |
| 13SP013 | SP 13 | 3/16 (4,76) | .091 (2,31) | 1/2 (12,70) | 2 |
| 13SP014 | SP 14 | 3/16 (4,76) | .115 (2,92) | 1/2 (12,70) | 4 |
| 13SP015 | SP 15 | 3/16 (4,76) | .091 (2,31) | 9/16 (14,29) | 2 |
| 13SP016 | SP 16 | 3/16 (4,76) | .115 (2,92) | 9/16 (14,29) | 4 |
| 13SP017 | SP 17 | 3/16 (4,76) | .091 (2,31) | 5/8 (15,88) | 2 |
| 13SP018 | SP 18 | 3/16 (4,76) | .115 (2,92) | 5/8 (15,88) | 4 |
| 13SP019 | SP 19 | 3/16 (4,76) | .091 (2,31) | 11/16 (17,46) | 2 |
| 13SP020 | SP 20 | 3/16 (4,76) | .115 (2,92) | 11/16 (17,46) | 4 |
| 13SP021 | SP 21 | 3/16 (4,76) | .091 (2,31) | 3/4 (19,05) | 2 |
| 13SP022 | SP 22 | 3/16 (4,76) | .115 (2,92) | 3/4 (19,05) | 4 |
| 13SP023 | SP 23 | 3/16 (4,76) | .091 (2,31) | 13/16 (20,64) | 2 |
| 13SP024 | SP 24 | 3/16 (4,76) | .115 (2,92) | 13/16 (20,64) | 4 |
| 13SP025 | SP 25 | 3/16 (4,76) | .091 (2,31) | 7/8 (22,22) | 2 |
| 13SP026 | SP 26 | 3/16 (4,76) | .115 (2,92) | 7/8 (22,22) | 4 |
| 13SP027 | SP 27 | 3/16 (4,76) | .091 (2,31) | 15/16 (23,81) | 2 |
| 13SP028 | SP 28 | 3/16 (4,76) | .115 (2,92) | 15/16 (23,81) | 4 |
| 13SP029 | SP 29 | 3/16 (4,76) | .091 (2,31) | 1 (25,40) | 2 |
| 13SP030 | SP 30 | 3/16 (4,76) | .115 (2,92) | 1 (25,40) | 4 |
| 13SP031 | SP 31 | 1/4 (6,35) | .091 (2,31) | 1/8 (3,18) | 2 |
| 13SP032 | SP 32 | 1/4 (6,35) | .115 (2,92) | 1/8 (3,18) | 4 |
| 13SP033 | SP 33 | 1/4 (6,35) | .140 (3,56) | 1/8 (3,18) | 6 |
| 13SP034 | SP 34 | 1/4 (6,35) | .171 (4,34) | 1/8 (3,18) | 8 |
| 13SP035 | SP 35 | 1/4 (6,35) | .091 (2,31) | 3/16 (4,76) | 2 |
| 13SP036 | SP 36 | 1/4 (6,35) | .115 (2,92) | 3/16 (4,76) | 4 |
| 13SP037 | SP 37 | 1/4 (6,35) | .140 (3,56) | 3/16 (4,76) | 6 |
| 13SP038 | SP 38 | 1/4 (6,35) | .171 (4,34) | 3/16 (4,76) | 8 |
| 13SP039 | SP 39 | 1/4 (6,35) | .091 (2,31) | 1/4 (6,35) | 2 |
| 13SP040 | SP 40 | 1/4 (6,35) | .115 (2,92) | 1/4 (6,35) | 4 |
| 13SP041 | SP 41 | 1/4 (6,35) | .140 (3,56) | 1/4 (6,35) | 6 |
| 13SP042 | SP 42 | 1/4 (6,35) | .171 (4,34) | 1/4 (6,35) | 8 |
| 13SP043 | SP 43 | 1/4 (6,35) | .091 (2,31) | 5/16 (7,94) | 2 |
| 13SP044 | SP 44 | 1/4 (6,35) | .115 (2,92) | 5/16 (7,94) | 4 |
| 13SP045 | SP 45 | 1/4 (6,35) | .140 (3,56) | 5/16 (7,94) | 6 |
| 13SP046 | SP 46 | 1/4 (6,35) | .171 (4,34) | 5/16 (7,94) | 8 |
| 13SP047 | SP 47 | 1/4 (6,35) | .091 (2,31) | 3/8 (9,53) | 2 |
| 13SP048 | SP 48 | 1/4 (6,35) | .115 (2,92) | 3/8 (9,53) | 4 |
| 13SP049 | SP 49 | 1/4 (6,35) | .140 (3,56) | 3/8 (9,53) | 6 |
| 13SP050 | SP 50 | 1/4 (6,35) | .171 (4,34) | 3/8 (9,53) | 8 |
| 13SP051 | SP 51 | 1/4 (6,35) | .091 (2,31) | 7/16 (11,11) | 2 |
| 13SP052 | SP 52 | 1/4 (6,35) | .115 (2,92) | 7/16 (11,11) | 4 |
| 13SP053 | SP 53 | 1/4 (6,35) | .140 (3,56) | 7/16 (11,11) | 6 |
| 13SP054 | SP 54 | 1/4 (6,35) | .171 (4,34) | 7/16 (11,11) | 8 |

STANDARD NYLON SPACERS



**METRIC Sizes
Also Available**
Page 241



ALL STANDARD NYLON SPACERS CAN BE TAPPED TWO THREAD SIZES LARGER THAN THE SCREW SIZE LISTED.

FOR EXAMPLE:

13SP023 WITH A SCREW SIZE OF 2 CAN BE TAPPED 440 THREAD.

TO ORDER A TAPPED SPACER, SIMPLY ADD A "T" TO THE PART NUMBER.

FOR EXAMPLE:

13SP101 BECOMES 13TSP101



SPACERS

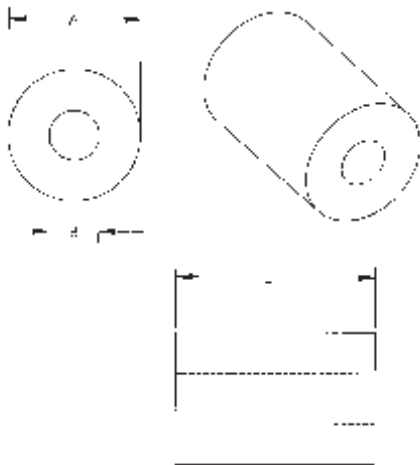
SECTION

V

STANDARD NYLON SPACERS



**METRIC Sizes
Also Available**
Page 241



ALL STANDARD NYLON SPACERS CAN BE TAPPED TWO THREAD SIZES LARGER THAN THE SCREW SIZE LISTED.

FOR EXAMPLE:

13SP023 WITH A SCREW SIZE OF 2 CAN BE TAPPED 440 THREAD.

TO ORDER A TAPPED SPACER, SIMPLY ADD A "T" TO THE PART NUMBER.

FOR EXAMPLE:

13SP101 BECOMES 13TSP101



| ITEM NUMBER | DESCRIPTION | A | B | L | SCREW |
|-------------|-------------|-------------|-------------|---------------|-------|
| 13SP055 | SP 55 | 1/4 (6,35) | .091 (2,31) | 1/2 (12,70) | 2 |
| 13SP056 | SP 56 | 1/4 (6,35) | .115 (2,92) | 1/2 (12,70) | 4 |
| 13SP057 | SP 57 | 1/4 (6,35) | .140 (3,56) | 1/2 (12,70) | 6 |
| 13SP058 | SP 58 | 1/4 (6,35) | .171 (4,34) | 1/2 (12,70) | 8 |
| 13SP059 | SP 59 | 1/4 (6,35) | .091 (2,31) | 9/16 (14,29) | 2 |
| 13SP060 | SP 60 | 1/4 (6,35) | .115 (2,92) | 9/16 (14,29) | 4 |
| 13SP061 | SP 61 | 1/4 (6,35) | .140 (3,56) | 9/16 (14,29) | 6 |
| 13SP062 | SP 62 | 1/4 (6,35) | .171 (4,34) | 9/16 (14,29) | 8 |
| 13SP063 | SP 63 | 1/4 (6,35) | .091 (2,31) | 5/8 (15,88) | 2 |
| 13SP064 | SP 64 | 1/4 (6,35) | .115 (2,92) | 5/8 (15,88) | 4 |
| 13SP065 | SP 65 | 1/4 (6,35) | .140 (3,56) | 5/8 (15,88) | 6 |
| 13SP066 | SP 66 | 1/4 (6,35) | .171 (4,34) | 5/8 (15,88) | 8 |
| 13SP067 | SP 67 | 1/4 (6,35) | .091 (2,31) | 11/16 (17,46) | 2 |
| 13SP068 | SP 68 | 1/4 (6,35) | .115 (2,92) | 11/16 (17,46) | 4 |
| 13SP069 | SP 69 | 1/4 (6,35) | .140 (3,56) | 11/16 (17,46) | 6 |
| 13SP070 | SP 70 | 1/4 (6,35) | .171 (4,34) | 11/16 (17,46) | 8 |
| 13SP071 | SP 71 | 1/4 (6,35) | .091 (2,31) | 3/4 (19,05) | 2 |
| 13SP072 | SP 72 | 1/4 (6,35) | .115 (2,92) | 3/4 (19,05) | 4 |
| 13SP073 | SP 73 | 1/4 (6,35) | .140 (3,56) | 3/4 (19,05) | 6 |
| 13SP074 | SP 74 | 1/4 (6,35) | .171 (4,34) | 3/4 (19,05) | 8 |
| 13SP075 | SP 75 | 1/4 (6,35) | .091 (2,31) | 13/16 (20,64) | 2 |
| 13SP076 | SP 76 | 1/4 (6,35) | .115 (2,92) | 13/16 (20,64) | 4 |
| 13SP077 | SP 77 | 1/4 (6,35) | .140 (3,56) | 13/16 (20,64) | 6 |
| 13SP078 | SP 78 | 1/4 (6,35) | .171 (4,34) | 13/16 (20,64) | 8 |
| 13SP079 | SP 79 | 1/4 (6,35) | .091 (2,31) | 7/8 (22,22) | 2 |
| 13SP080 | SP 80 | 1/4 (6,35) | .115 (2,92) | 7/8 (22,22) | 4 |
| 13SP081 | SP 81 | 1/4 (6,35) | .140 (3,56) | 7/8 (22,22) | 6 |
| 13SP082 | SP 82 | 1/4 (6,35) | .171 (4,34) | 7/8 (22,22) | 8 |
| 13SP083 | SP 83 | 1/4 (6,35) | .091 (2,31) | 15/16 (23,81) | 2 |
| 13SP084 | SP 84 | 1/4 (6,35) | .115 (2,92) | 15/16 (23,81) | 4 |
| 13SP085 | SP 85 | 1/4 (6,35) | .140 (3,56) | 15/16 (23,81) | 6 |
| 13SP086 | SP 86 | 1/4 (6,35) | .171 (4,34) | 15/16 (23,81) | 8 |
| 13SP087 | SP 87 | 1/4 (6,35) | .091 (2,31) | 1 (25,40) | 2 |
| 13SP088 | SP 88 | 1/4 (6,35) | .115 (2,92) | 1 (25,40) | 4 |
| 13SP089 | SP 89 | 1/4 (6,35) | .140 (3,56) | 1 (25,40) | 6 |
| 13SP090 | SP 90 | 1/4 (6,35) | .171 (4,34) | 1 (25,40) | 8 |
| 13SP091 | SP 91 | 5/16 (7,94) | .115 (2,92) | 1/8 (3,18) | 4 |
| 13SP092 | SP 92 | 5/16 (7,94) | .140 (3,56) | 1/8 (3,18) | 6 |
| 13SP093 | SP 93 | 5/16 (7,94) | .171 (4,34) | 1/8 (3,18) | 8 |
| 13SP094 | SP 94 | 5/16 (7,94) | .194 (4,93) | 1/8 (3,18) | 10 |
| 13SP095 | SP 95 | 5/16 (7,94) | .115 (2,92) | 3/16 (4,76) | 4 |
| 13SP096 | SP 96 | 5/16 (7,94) | .140 (3,56) | 3/16 (4,76) | 6 |
| 13SP097 | SP 97 | 5/16 (7,94) | .171 (4,34) | 3/16 (4,76) | 8 |
| 13SP098 | SP 98 | 5/16 (7,94) | .194 (4,93) | 3/16 (4,76) | 10 |
| 13SP099 | SP 99 | 5/16 (7,94) | .115 (2,92) | 1/4 (6,35) | 4 |
| 13SP100 | SP100 | 5/16 (7,94) | .140 (3,56) | 1/4 (6,35) | 6 |
| 13SP101 | SP101 | 5/16 (7,94) | .171 (4,34) | 1/4 (6,35) | 8 |
| 13SP102 | SP102 | 5/16 (7,94) | .194 (4,93) | 1/4 (6,35) | 10 |
| 13SP103 | SP103 | 5/16 (7,94) | .115 (2,92) | 5/16 (7,94) | 4 |
| 13SP104 | SP104 | 5/16 (7,94) | .140 (3,56) | 5/16 (7,94) | 6 |
| 13SP105 | SP105 | 5/16 (7,94) | .171 (4,34) | 5/16 (7,94) | 8 |
| 13SP106 | SP106 | 5/16 (7,94) | .194 (4,93) | 5/16 (7,94) | 10 |
| 13SP107 | SP107 | 5/16 (7,94) | .115 (2,92) | 3/8 (9,53) | 4 |
| 13SP108 | SP108 | 5/16 (7,94) | .140 (3,56) | 3/8 (9,53) | 6 |
| 13SP109 | SP109 | 5/16 (7,94) | .171 (4,34) | 3/8 (9,53) | 8 |

SPACERS

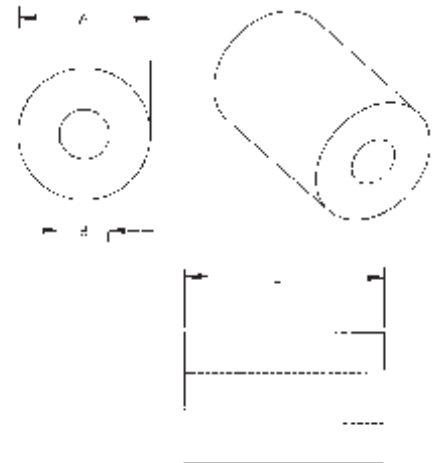
SECTION
V

| ITEM NUMBER | DESCRIPTION | A | B | L | SCREW |
|-------------|-------------|-------------|-------------|---------------|-------|
| 13SP110 | SP110 | 5/16 (7,94) | .194 (4,93) | 3/8 (9,53) | 10 |
| 13SP111 | SP111 | 5/16 (7,94) | .115 (2,92) | 7/16 (11,11) | 4 |
| 13SP112 | SP112 | 5/16 (7,94) | .140 (3,56) | 7/16 (11,11) | 6 |
| 13SP113 | SP113 | 5/16 (7,94) | .171 (4,34) | 7/16 (11,11) | 8 |
| 13SP114 | SP114 | 5/16 (7,94) | .194 (4,93) | 7/16 (11,11) | 10 |
| 13SP115 | SP115 | 5/16 (7,94) | .115 (2,92) | 1/2 (12,70) | 4 |
| 13SP116 | SP116 | 5/16 (7,94) | .140 (3,56) | 1/2 (12,70) | 6 |
| 13SP117 | SP117 | 5/16 (7,94) | .171 (4,34) | 1/2 (12,70) | 8 |
| 13SP118 | SP118 | 5/16 (7,94) | .194 (4,93) | 1/2 (12,70) | 10 |
| 13SP119 | SP119 | 5/16 (7,94) | .115 (2,92) | 9/16 (14,29) | 4 |
| 13SP120 | SP120 | 5/16 (7,94) | .140 (3,56) | 9/16 (14,29) | 6 |
| 13SP121 | SP121 | 5/16 (7,94) | .171 (4,34) | 9/16 (14,29) | 8 |
| 13SP122 | SP122 | 5/16 (7,94) | .194 (4,93) | 9/16 (14,29) | 10 |
| 13SP123 | SP123 | 5/16 (7,94) | .115 (2,92) | 5/8 (15,88) | 4 |
| 13SP124 | SP124 | 5/16 (7,94) | .140 (3,56) | 5/8 (15,88) | 6 |
| 13SP125 | SP125 | 5/16 (7,94) | .171 (4,34) | 5/8 (15,88) | 8 |
| 13SP126 | SP126 | 5/16 (7,94) | .194 (4,93) | 5/8 (15,88) | 10 |
| 13SP127 | SP127 | 5/16 (7,94) | .115 (2,92) | 11/16 (17,46) | 4 |
| 13SP128 | SP128 | 5/16 (7,94) | .140 (3,56) | 11/16 (17,46) | 6 |
| 13SP129 | SP129 | 5/16 (7,94) | .171 (4,34) | 11/16 (17,46) | 8 |
| 13SP130 | SP130 | 5/16 (7,94) | .194 (4,93) | 11/16 (17,46) | 10 |
| 13SP131 | SP131 | 5/16 (7,94) | .115 (2,92) | 3/4 (19,05) | 4 |
| 13SP132 | SP132 | 5/16 (7,94) | .140 (3,56) | 3/4 (19,05) | 6 |
| 13SP133 | SP133 | 5/16 (7,94) | .171 (4,34) | 3/4 (19,05) | 8 |
| 13SP134 | SP134 | 5/16 (7,94) | .194 (4,93) | 3/4 (19,05) | 10 |
| 13SP135 | SP135 | 5/16 (7,94) | .115 (2,92) | 13/16 (20,63) | 4 |
| 13SP136 | SP136 | 5/16 (7,94) | .140 (3,56) | 13/16 (20,63) | 6 |
| 13SP137 | SP137 | 5/16 (7,94) | .171 (4,34) | 13/16 (20,63) | 8 |
| 13SP138 | SP138 | 5/16 (7,94) | .194 (4,93) | 13/16 (20,63) | 10 |
| 13SP139 | SP139 | 5/16 (7,94) | .115 (2,92) | 7/8 (22,22) | 4 |
| 13SP140 | SP140 | 5/16 (7,94) | .140 (3,56) | 7/8 (22,22) | 6 |
| 13SP141 | SP141 | 5/16 (7,94) | .171 (4,34) | 7/8 (22,22) | 8 |
| 13SP142 | SP142 | 5/16 (7,94) | .194 (4,93) | 7/8 (22,22) | 10 |
| 13SP143 | SP143 | 5/16 (7,94) | .115 (2,92) | 15/16 (23,81) | 4 |
| 13SP144 | SP144 | 5/16 (7,94) | .140 (3,56) | 15/16 (23,81) | 6 |
| 13SP145 | SP145 | 5/16 (7,94) | .171 (4,34) | 15/16 (23,81) | 8 |
| 13SP146 | SP146 | 5/16 (7,94) | .194 (4,93) | 15/16 (23,81) | 10 |
| 13SP147 | SP147 | 5/16 (7,94) | .115 (2,92) | 1 (25,40) | 4 |
| 13SP148 | SP148 | 5/16 (7,94) | .140 (3,56) | 1 (25,40) | 6 |
| 13SP149 | SP149 | 5/16 (7,94) | .171 (4,34) | 1 (25,40) | 8 |
| 13SP150 | SP150 | 5/16 (7,94) | .194 (4,93) | 1 (25,40) | 10 |
| 13SP158 | SP158 | 3/8 (9,53) | .140 (3,56) | 1/8 (3,18) | 6 |
| 13SP159 | SP159 | 3/8 (9,53) | .171 (4,34) | 1/8 (3,18) | 8 |
| 13SP160 | SP160 | 3/8 (9,53) | .194 (4,93) | 1/8 (3,18) | 10 |
| 13SP161 | SP161 | 3/8 (9,53) | .140 (3,56) | 3/16 (4,76) | 6 |
| 13SP162 | SP162 | 3/8 (9,53) | .171 (4,34) | 3/16 (4,76) | 8 |
| 13SP163 | SP163 | 3/8 (9,53) | .194 (4,93) | 3/16 (4,76) | 10 |
| 13SP164 | SP164 | 3/8 (9,53) | .140 (3,56) | 1/4 (6,35) | 6 |
| 13SP165 | SP165 | 3/8 (9,53) | .171 (4,34) | 1/4 (6,35) | 8 |
| 13SP166 | SP166 | 3/8 (9,53) | .194 (4,93) | 1/4 (6,35) | 10 |
| 13SP167 | SP167 | 3/8 (9,53) | .140 (3,56) | 5/16 (7,94) | 6 |
| 13SP168 | SP168 | 3/8 (9,53) | .171 (4,34) | 5/16 (7,94) | 8 |
| 13SP169 | SP169 | 3/8 (9,53) | .194 (4,93) | 5/16 (7,94) | 10 |
| 13SP170 | SP170 | 3/8 (9,53) | .140 (3,56) | 3/8 (9,53) | 6 |
| 13SP171 | SP171 | 3/8 (9,53) | .171 (4,34) | 3/8 (9,53) | 8 |

STANDARD NYLON SPACERS



**METRIC Sizes
Also Available**
Page 239



ALL STANDARD NYLON SPACERS CAN BE TAPPED TWO THREAD SIZES LARGER THAN THE SCREW SIZE LISTED.

FOR EXAMPLE:

13SP023 WITH A SCREW SIZE OF 2 CAN BE TAPPED 440 THREAD.

TO ORDER A TAPPED SPACER, SIMPLY ADD A "T" TO THE PART NUMBER.

FOR EXAMPLE:

13SP101 BECOMES 13TSP101



SPACERS

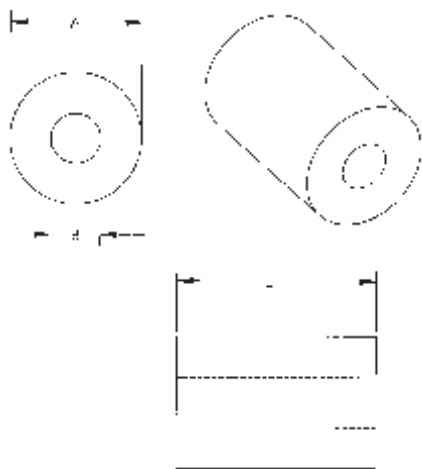
SECTION

V

STANDARD NYLON SPACERS



**METRIC Sizes
Also Available**
Page 239



ALL STANDARD NYLON SPACERS CAN BE TAPPED TWO THREAD SIZES LARGER THAN THE SCREW SIZE LISTED.

FOR EXAMPLE:

13SP023 WITH A SCREW SIZE OF 2 CAN BE TAPPED 440 THREAD.

TO ORDER A TAPPED SPACER, SIMPLY ADD A "T" TO THE PART NUMBER.

FOR EXAMPLE:

13SP101 BECOMES 13TSP101



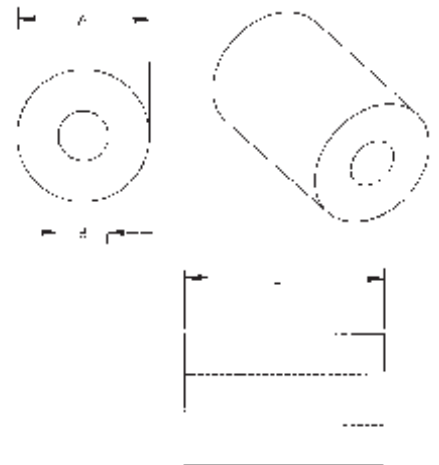
| ITEM NUMBER | DESCRIPTION | A | B | L | SCREW |
|-------------|-------------|-------------|-------------|---------------|-------|
| 13SP172 | SP172 | 3/8 (9,53) | .194 (4,93) | 3/8 (9,53) | 10 |
| 13SP173 | SP173 | 3/8 (9,53) | .140 (3,56) | 7/16 (11,11) | 6 |
| 13SP174 | SP174 | 3/8 (9,53) | .171 (4,34) | 7/16 (11,11) | 8 |
| 13SP175 | SP175 | 3/8 (9,53) | .194 (4,93) | 7/16 (11,11) | 10 |
| 13SP176 | SP176 | 3/8 (9,53) | .140 (3,56) | 1/2 (12,70) | 6 |
| 13SP177 | SP177 | 3/8 (9,53) | .171 (4,34) | 1/2 (12,70) | 8 |
| 13SP178 | SP178 | 3/8 (9,53) | .194 (4,93) | 1/2 (12,70) | 10 |
| 13SP179 | SP179 | 3/8 (9,53) | .140 (3,56) | 9/16 (14,29) | 6 |
| 13SP180 | SP180 | 3/8 (9,53) | .171 (4,34) | 9/16 (14,29) | 8 |
| 13SP181 | SP181 | 3/8 (9,53) | .194 (4,93) | 9/16 (14,29) | 10 |
| 13SP182 | SP182 | 3/8 (9,53) | .140 (3,56) | 5/8 (15,88) | 6 |
| 13SP183 | SP183 | 3/8 (9,53) | .171 (4,34) | 5/8 (15,88) | 8 |
| 13SP184 | SP184 | 3/8 (9,53) | .194 (4,93) | 5/8 (15,88) | 10 |
| 13SP185 | SP185 | 3/8 (9,53) | .140 (3,56) | 11/16 (17,46) | 6 |
| 13SP186 | SP186 | 3/8 (9,53) | .171 (4,34) | 11/16 (17,46) | 8 |
| 13SP187 | SP187 | 3/8 (9,53) | .194 (4,93) | 11/16 (17,46) | 10 |
| 13SP188 | SP188 | 3/8 (9,53) | .140 (3,56) | 3/4 (19,05) | 6 |
| 13SP189 | SP189 | 3/8 (9,53) | .171 (4,34) | 3/4 (19,05) | 8 |
| 13SP190 | SP190 | 3/8 (9,53) | .194 (4,93) | 3/4 (19,05) | 10 |
| 13SP191 | SP191 | 3/8 (9,53) | .140 (3,56) | 13/16 (20,64) | 6 |
| 13SP192 | SP192 | 3/8 (9,53) | .171 (4,34) | 13/16 (20,64) | 8 |
| 13SP193 | SP193 | 3/8 (9,53) | .194 (4,93) | 13/16 (20,64) | 10 |
| 13SP194 | SP194 | 3/8 (9,53) | .140 (3,56) | 7/8 (22,22) | 6 |
| 13SP195 | SP195 | 3/8 (9,53) | .171 (4,34) | 7/8 (22,22) | 8 |
| 13SP196 | SP196 | 3/8 (9,53) | .194 (4,93) | 7/8 (22,22) | 10 |
| 13SP197 | SP197 | 3/8 (9,53) | .140 (3,56) | 15/16 (23,81) | 6 |
| 13SP198 | SP198 | 3/8 (9,53) | .171 (4,34) | 15/16 (23,81) | 8 |
| 13SP199 | SP199 | 3/8 (9,53) | .194 (4,93) | 15/16 (23,81) | 10 |
| 13SP200 | SP200 | 3/8 (9,53) | .140 (3,56) | 1 (25,40) | 6 |
| 13SP201 | SP201 | 3/8 (9,53) | .171 (4,34) | 1 (25,40) | 8 |
| 13SP202 | SP202 | 3/8 (9,53) | .194 (4,93) | 1 (25,40) | 10 |
| 13SP203 | SP203 | 1/2 (12,70) | .140 (3,56) | 1/8 (3,18) | 6 |
| 13SP204 | SP204 | 1/2 (12,70) | .171 (4,34) | 1/8 (3,18) | 8 |
| 13SP205 | SP205 | 1/2 (12,70) | .194 (4,93) | 1/8 (3,18) | 10 |
| 13SP206 | SP206 | 1/2 (12,70) | .219 (5,56) | 1/8 (3,18) | 12 |
| 13SP207 | SP207 | 1/2 (12,70) | .260 (6,60) | 1/8 (3,18) | 1/4 |
| 13SP208 | SP208 | 1/2 (12,70) | .140 (3,56) | 3/16 (4,76) | 6 |
| 13SP209 | SP209 | 1/2 (12,70) | .171 (4,34) | 3/16 (4,76) | 8 |
| 13SP210 | SP210 | 1/2 (12,70) | .194 (4,93) | 3/16 (4,76) | 10 |
| 13SP211 | SP211 | 1/2 (12,70) | .219 (5,56) | 3/16 (4,76) | 12 |
| 13SP212 | SP212 | 1/2 (12,70) | .260 (6,60) | 3/16 (4,76) | 1/4 |
| 13SP213 | SP213 | 1/2 (12,70) | .140 (3,56) | 1/4 (6,35) | 6 |
| 13SP214 | SP214 | 1/2 (12,70) | .171 (4,34) | 1/4 (6,35) | 8 |
| 13SP215 | SP215 | 1/2 (12,70) | .194 (4,93) | 1/4 (6,35) | 10 |
| 13SP216 | SP216 | 1/2 (12,70) | .219 (5,56) | 1/4 (6,35) | 12 |
| 13SP217 | SP217 | 1/2 (12,70) | .260 (6,60) | 1/4 (6,35) | 1/4 |
| 13SP218 | SP218 | 1/2 (12,70) | .140 (3,56) | 5/16 (7,94) | 6 |
| 13SP219 | SP219 | 1/2 (12,70) | .171 (4,34) | 5/16 (7,94) | 8 |
| 13SP220 | SP220 | 1/2 (12,70) | .194 (4,93) | 5/16 (7,94) | 10 |
| 13SP221 | SP221 | 1/2 (12,70) | .219 (5,56) | 5/16 (7,94) | 12 |
| 13SP222 | SP222 | 1/2 (12,70) | .257 (6,53) | 5/16 (7,94) | 1/4 |
| 13SP223 | SP223 | 1/2 (12,70) | .140 (3,56) | 3/8 (9,53) | 6 |
| 13SP224 | SP224 | 1/2 (12,70) | .171 (4,34) | 3/8 (9,53) | 8 |

| ITEM NUMBER | DESCRIPTION | A | B | L | SCREW |
|-------------|-------------|-------------|-------------|---------------|-------|
| 13SP225 | SP225 | 1/2 (12,70) | .194 (4,93) | 3/8 (9,53) | 10 |
| 13SP226 | SP226 | 1/2 (12,70) | .219 (5,56) | 3/8 (9,53) | 12 |
| 13SP227 | SP227 | 1/2 (12,70) | .257 (6,53) | 3/8 (9,53) | 1/4 |
| 13SP228 | SP228 | 1/2 (12,70) | .140 (3,56) | 7/16 (11,11) | 6 |
| 13SP229 | SP229 | 1/2 (12,70) | .171 (4,34) | 7/16 (11,11) | 8 |
| 13SP230 | SP230 | 1/2 (12,70) | .194 (4,93) | 7/16 (11,11) | 10 |
| 13SP231 | SP231 | 1/2 (12,70) | .219 (5,56) | 7/16 (11,11) | 12 |
| 13SP232 | SP232 | 1/2 (12,70) | .257 (6,53) | 7/16 (11,11) | 1/4 |
| 13SP233 | SP233 | 1/2 (12,70) | .140 (3,56) | 1/2 (12,70) | 6 |
| 13SP234 | SP234 | 1/2 (12,70) | .171 (4,34) | 1/2 (12,70) | 8 |
| 13SP235 | SP235 | 1/2 (12,70) | .194 (4,93) | 1/2 (12,70) | 10 |
| 13SP236 | SP236 | 1/2 (12,70) | .219 (5,56) | 1/2 (12,70) | 12 |
| 13SP237 | SP237 | 1/2 (12,70) | .257 (6,53) | 1/2 (12,70) | 1/4 |
| 13SP238 | SP238 | 1/2 (12,70) | .140 (3,56) | 9/16 (14,29) | 6 |
| 13SP239 | SP239 | 1/2 (12,70) | .171 (4,34) | 9/16 (14,29) | 8 |
| 13SP240 | SP240 | 1/2 (12,70) | .194 (4,93) | 9/16 (14,29) | 10 |
| 13SP241 | SP241 | 1/2 (12,70) | .219 (5,56) | 9/16 (14,29) | 12 |
| 13SP242 | SP242 | 1/2 (12,70) | .257 (6,53) | 9/16 (14,29) | 1/4 |
| 13SP243 | SP243 | 1/2 (12,70) | .140 (3,56) | 5/8 (15,88) | 6 |
| 13SP244 | SP244 | 1/2 (12,70) | .171 (4,34) | 5/8 (15,88) | 8 |
| 13SP245 | SP245 | 1/2 (12,70) | .194 (4,93) | 5/8 (15,88) | 10 |
| 13SP246 | SP246 | 1/2 (12,70) | .219 (5,56) | 5/8 (15,88) | 12 |
| 13SP247 | SP247 | 1/2 (12,70) | .257 (6,53) | 5/8 (15,88) | 1/4 |
| 13SP248 | SP248 | 1/2 (12,70) | .140 (3,56) | 11/16 (17,46) | 6 |
| 13SP249 | SP249 | 1/2 (12,70) | .171 (4,34) | 11/16 (17,46) | 8 |
| 13SP250 | SP250 | 1/2 (12,70) | .194 (4,93) | 11/16 (17,46) | 10 |
| 13SP251 | SP251 | 1/2 (12,70) | .219 (5,56) | 11/16 (17,46) | 12 |
| 13SP252 | SP252 | 1/2 (12,70) | .257 (6,53) | 11/16 (17,46) | 1/4 |
| 13SP253 | SP253 | 1/2 (12,70) | .140 (3,56) | 3/4 (19,05) | 6 |
| 13SP254 | SP254 | 1/2 (12,70) | .171 (4,34) | 3/4 (19,05) | 8 |
| 13SP255 | SP255 | 1/2 (12,70) | .194 (4,93) | 3/4 (19,05) | 10 |
| 13SP256 | SP256 | 1/2 (12,70) | .219 (5,56) | 3/4 (19,05) | 12 |
| 13SP257 | SP257 | 1/2 (12,70) | .260 (6,60) | 3/4 (19,05) | 1/4 |
| 13SP258 | SP258 | 1/2 (12,70) | .140 (3,56) | 13/16 (20,64) | 6 |
| 13SP259 | SP259 | 1/2 (12,70) | .171 (4,34) | 13/16 (20,64) | 8 |
| 13SP260 | SP260 | 1/2 (12,70) | .194 (4,93) | 13/16 (20,64) | 10 |
| 13SP261 | SP261 | 1/2 (12,70) | .219 (5,56) | 13/16 (20,64) | 12 |
| 13SP262 | SP262 | 1/2 (12,70) | .260 (6,60) | 13/16 (20,64) | 1/4 |
| 13SP263 | SP263 | 1/2 (12,70) | .140 (3,56) | 7/8 (22,22) | 6 |
| 13SP264 | SP264 | 1/2 (12,70) | .171 (4,34) | 7/8 (22,22) | 8 |
| 13SP265 | SP265 | 1/2 (12,70) | .194 (4,93) | 7/8 (22,22) | 10 |
| 13SP266 | SP266 | 1/2 (12,70) | .219 (5,56) | 7/8 (22,22) | 12 |
| 13SP267 | SP267 | 1/2 (12,70) | .260 (6,60) | 7/8 (22,22) | 1/4 |
| 13SP268 | SP268 | 1/2 (12,70) | .140 (3,56) | 15/16 (23,81) | 6 |
| 13SP269 | SP269 | 1/2 (12,70) | .171 (4,34) | 15/16 (23,81) | 8 |
| 13SP270 | SP270 | 1/2 (12,70) | .194 (4,93) | 15/16 (23,81) | 10 |
| 13SP271 | SP271 | 1/2 (12,70) | .219 (5,56) | 15/16 (23,81) | 12 |
| 13SP272 | SP272 | 1/2 (12,70) | .257 (6,53) | 15/16 (23,81) | 1/4 |
| 13SP273 | SP273 | 1/2 (12,70) | .140 (3,56) | 1 (25,40) | 6 |
| 13SP274 | SP274 | 1/2 (12,70) | .171 (4,34) | 1 (25,40) | 8 |
| 13SP275 | SP275 | 1/2 (12,70) | .194 (4,93) | 1 (25,40) | 10 |
| 13SP276 | SP276 | 1/2 (12,70) | .219 (5,56) | 1 (25,40) | 12 |
| 13SP277 | SP277 | 1/2 (12,70) | .257 (6,53) | 1 (25,40) | 1/4 |

STANDARD NYLON SPACERS



**METRIC Sizes
Also Available**
Page 239



ALL STANDARD NYLON SPACERS CAN BE TAPPED TWO THREAD SIZES LARGER THAN THE SCREW SIZE LISTED.

FOR EXAMPLE:

13SP023 WITH A SCREW SIZE OF 2 CAN BE TAPPED 440 THREAD.

TO ORDER A TAPPED SPACER, SIMPLY ADD A "T" TO THE PART NUMBER.

FOR EXAMPLE:

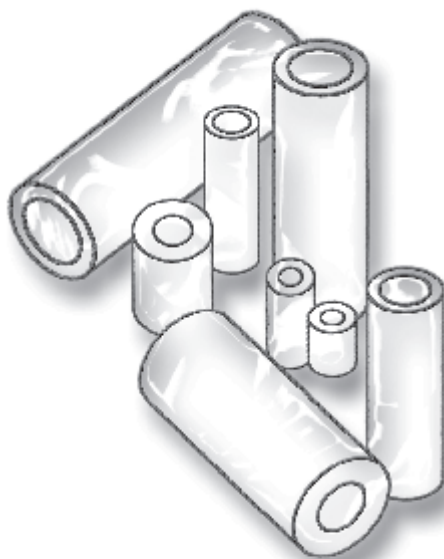
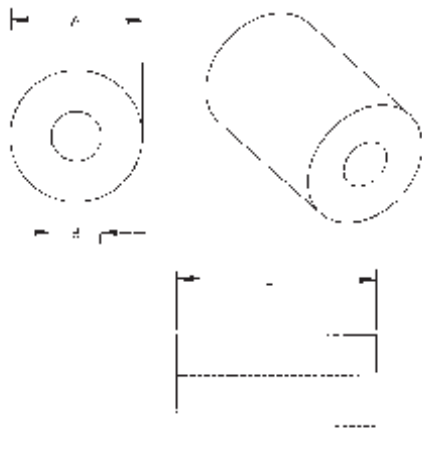
13SP101 BECOMES 13TSP101



STANDARD LONG NYLON SPACERS

Tough and resilient, nylon spacers are useful for many applications. Ideal for use in electrical and electronic assemblies, they also can be used as bushings, bearings, rollers, and glides. Molded from corrosion resistant Type 66 Nylon, all parts are available on short delivery from standard tooling. Samples for testing are available but NOT ALL SIZES are in stock. Special sizes and lengths at a slight extra tooling charge. Parts are stocked in Nylon 6/6 UL 94V2 Parts can be furnished in: Acetal, Resin TICONA Celcon M-90 UL 94HB

Tolerances: O.D. +/-0.015; I.D. +/-0.005; Length +/-0.015



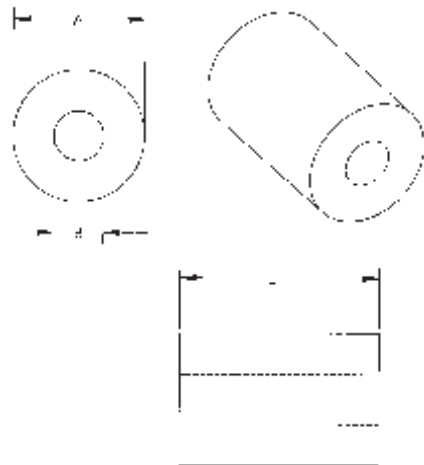
| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|-------------|-------------|-----------------|
| 13SP300 | SP 300 | 1/4 (6,35) | .115 (2,92) | 1 -1/16 (27,00) |
| 13SP301 | SP 301 | 1/4 (6,35) | .140 (3,56) | 1 -1/16 (27,00) |
| 13SP304 | SP 304 | 1/4 (6,35) | .115 (2,92) | 1-1/8 (28,58) |
| 13SP305 | SP 305 | 1/4 (6,35) | .140 (3,56) | 1-1/8 (28,58) |
| 13SP308 | SP 308 | 1/4 (6,35) | .115 (2,92) | 1-3/16 (30,18) |
| 13SP309 | SP 309 | 1/4 (6,35) | .140 (3,56) | 1-3/16 (30,18) |
| 13SP312 | SP 312 | 1/4 (6,35) | .115 (2,92) | 1-1/4 (31,75) |
| 13SP313 | SP 313 | 1/4 (6,35) | .140 (3,56) | 1-1/4 (31,75) |
| 13SP316 | SP 316 | 1/4 (6,35) | .115 (2,92) | 1-5/16 (33,35) |
| 13SP317 | SP 317 | 1/4 (6,35) | .140 (3,56) | 1-5/16 (33,35) |
| 13SP320 | SP 320 | 1/4 (6,35) | .115 (2,92) | 1-3/8 (34,93) |
| 13SP321 | SP 321 | 1/4 (6,35) | .140 (3,56) | 1-3/8 (34,93) |
| 13SP324 | SP 324 | 1/4 (6,35) | .115 (2,92) | 1-7/16 (36,53) |
| 13SP325 | SP 325 | 1/4 (6,35) | .140 (3,56) | 1-7/16 (36,53) |
| 13SP328 | SP 328 | 1/4 (6,35) | .115 (2,92) | 1-1/2 (38,10) |
| 13SP329 | SP 329 | 1/4 (6,35) | .140 (3,56) | 1-1/2 (38,10) |
| 13SP335 | SP 335 | 5/16 (7,94) | .115 (2,92) | 1-1/16 (27,00) |
| 13SP336 | SP 336 | 5/16 (7,94) | .140 (3,56) | 1-1/16 (27,00) |
| 13SP337 | SP 337 | 5/16 (7,94) | .171 (4,34) | 1-1/16 (27,00) |
| 13SP338 | SP 338 | 5/16 (7,94) | .194 (4,93) | 1-1/16 (27,00) |
| 13SP339 | SP 339 | 5/16 (7,94) | .115 (2,92) | 1-1/8 (28,58) |
| 13SP340 | SP 340 | 5/16 (7,94) | .140 (3,56) | 1-1/8 (28,58) |
| 13SP341 | SP 341 | 5/16 (7,94) | .171 (4,34) | 1-1/8 (28,58) |
| 13SP342 | SP 342 | 5/16 (7,94) | .194 (4,93) | 1-1/8 (28,58) |
| 13SP343 | SP 343 | 5/16 (7,94) | .115 (2,92) | 1-3/16 (30,18) |
| 13SP344 | SP 344 | 5/16 (7,94) | .140 (3,56) | 1-3/16 (30,18) |
| 13SP345 | SP 345 | 5/16 (7,94) | .171 (4,34) | 1-3/16 (30,18) |
| 13SP346 | SP 346 | 5/16 (7,94) | .194 (4,93) | 1-3/16 (30,18) |
| 13SP347 | SP 347 | 5/16 (7,94) | .115 (2,92) | 1-1/4 (31,75) |
| 13SP348 | SP 348 | 5/16 (7,94) | .140 (3,56) | 1-1/4 (31,75) |
| 13SP349 | SP 349 | 5/16 (7,94) | .171 (4,34) | 1-1/4 (31,75) |
| 13SP350 | SP 350 | 5/16 (7,94) | .194 (4,93) | 1-1/4 (31,75) |
| 13SP351 | SP 351 | 5/16 (7,94) | .115 (2,92) | 1-5/16 (33,35) |
| 13SP352 | SP 352 | 5/16 (7,94) | .140 (3,56) | 1-5/16 (33,35) |
| 13SP353 | SP 353 | 5/16 (7,94) | .171 (4,34) | 1-5/16 (33,35) |
| 13SP354 | SP 354 | 5/16 (7,94) | .194 (4,93) | 1-5/16 (33,35) |



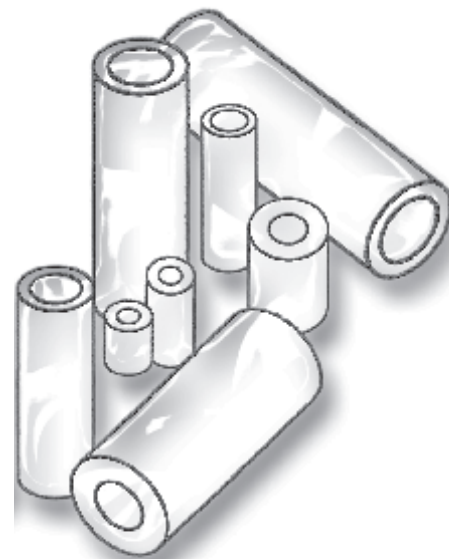
STANDARD LONG NYLON SPACERS

Tough and resilient, nylon spacers are useful for many applications. Ideal for use in electrical and electronic assemblies, they also can be used as bushings, bearings, rollers, and glides. Molded from corrosion resistant Type 66 Nylon, all parts are available on short delivery from standard tooling. Samples for testing are available but NOT ALL SIZES are in stock. Special sizes and lengths at a slight extra tooling charge. Parts are stocked in Nylon 6/6 UL 94V2 Parts can be furnished in: Acetal, Resin TICONA Celcon M-90 UL 94HB

Tolerances: O.D. +/-0.015; I.D. +/-0.005; Length +/-0.015



| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|-------------|-------------|----------------|
| 13SP355 | SP 355 | 5/16 (7,94) | .115 (2,92) | 1-3/8 (34,93) |
| 13SP356 | SP 356 | 5/16 (7,94) | .140 (3,56) | 1-3/8 (34,93) |
| 13SP357 | SP 357 | 5/16 (7,94) | .171 (4,34) | 1-3/8 (34,93) |
| 13SP358 | SP 358 | 5/16 (7,94) | .194 (4,93) | 1-3/8 (34,93) |
| 13SP359 | SP 359 | 5/16 (7,94) | .115 (2,92) | 1-7/16 (36,53) |
| 13SP360 | SP 360 | 5/16 (7,94) | .140 (3,56) | 1-7/16 (36,53) |
| 13SP361 | SP 361 | 5/16 (7,94) | .171 (4,34) | 1-7/16 (36,53) |
| 13SP362 | SP 362 | 5/16 (7,94) | .194 (4,93) | 1-7/16 (36,53) |
| 13SP363 | SP 363 | 5/16 (7,94) | .115 (2,92) | 1-1/2 (38,10) |
| 13SP364 | SP 364 | 5/16 (7,94) | .140 (3,56) | 1-1/2 (38,10) |
| 13SP365 | SP 365 | 5/16 (7,94) | .171 (4,34) | 1-1/2 (38,10) |
| 13SP366 | SP 366 | 5/16 (7,94) | .194 (4,93) | 1-1/2 (38,10) |
| 13SP372 | SP 372 | 3/8 (9,53) | .140 (3,56) | 1-1/16 (27,00) |
| 13SP373 | SP 373 | 3/8 (9,53) | .171 (4,34) | 1-1/16 (27,00) |
| 13SP374 | SP 374 | 3/8 (9,53) | .194 (4,93) | 1-1/16 (27,00) |
| 13SP375 | SP 375 | 3/8 (9,53) | .140 (3,56) | 1-1/8 (28,58) |
| 13SP376 | SP 376 | 3/8 (9,53) | .171 (4,34) | 1-1/8 (28,58) |
| 13SP377 | SP 377 | 3/8 (9,53) | .194 (4,93) | 1-1/8 (28,58) |
| 13SP378 | SP 378 | 3/8 (9,53) | .140 (3,56) | 1-3/16 (30,18) |
| 13SP379 | SP 379 | 3/8 (9,53) | .171 (4,34) | 1-3/16 (30,18) |
| 13SP380 | SP 380 | 3/8 (9,53) | .194 (4,93) | 1-3/16 (30,18) |
| 13SP381 | SP 381 | 3/8 (9,53) | .140 (3,56) | 1-1/4 (31,75) |
| 13SP382 | SP 382 | 3/8 (9,53) | .171 (4,34) | 1-1/4 (31,75) |
| 13SP383 | SP 383 | 3/8 (9,53) | .194 (4,93) | 1-1/4 (31,75) |
| 13SP384 | SP 384 | 3/8 (9,53) | .140 (3,56) | 1-5/16 (33,35) |
| 13SP385 | SP 385 | 3/8 (9,53) | .171 (4,34) | 1-5/16 (33,35) |
| 13SP386 | SP 386 | 3/8 (9,53) | .194 (4,93) | 1-5/16 (33,35) |
| 13SP387 | SP 387 | 3/8 (9,53) | .140 (3,56) | 1-3/8 (34,93) |
| 13SP388 | SP 388 | 3/8 (9,53) | .171 (4,34) | 1-3/8 (34,93) |
| 13SP389 | SP 389 | 3/8 (9,53) | .194 (4,93) | 1-3/8 (34,93) |
| 13SP390 | SP 390 | 3/8 (9,53) | .140 (3,56) | 1-7/16 (36,53) |
| 13SP391 | SP 391 | 3/8 (9,53) | .171 (4,34) | 1-7/16 (36,53) |
| 13SP392 | SP 392 | 3/8 (9,53) | .194 (4,93) | 1-7/16 (36,53) |
| 13SP393 | SP 393 | 3/8 (9,53) | .140 (3,56) | 1-1/2 (38,10) |
| 13SP394 | SP 394 | 3/8 (9,53) | .171 (4,34) | 1-1/2 (38,10) |
| 13SP395 | SP 395 | 3/8 (9,53) | .194 (4,93) | 1-1/2 (38,10) |



SPACERS

SECTION
V

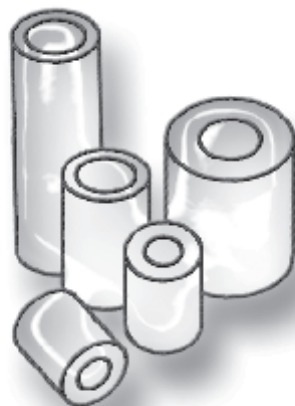
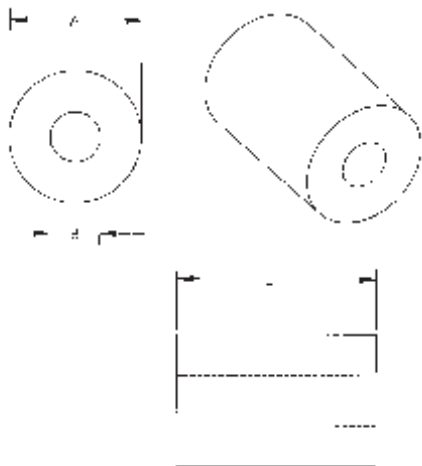
SPACERS ARE NOT STOCKED - They are molded to your order requirements - NO SAMPLES AVAILABLE.

- Order quantities are subject to - 10% + 20% variation.
- Tolerances OD +/- .015 - ID +/- .005 - LENGTH +/- .005
- Available in natural Nylon 66 only.
- Parts can be dyed Black at no additional cost, dyed parts may be out of tolerance.
- Minimum order quantity 1000 pieces.

O.D. - I.D. COMBINATIONS AVAILABLE

LENGTHS AVAILABLE 0.125 THRU 1.000 +/- .005 IN .001 INCH INCREMENTS

LAST 4 DIGITS OF PART NUMBER



LENGTH TO SPECIFICATION SPACERS

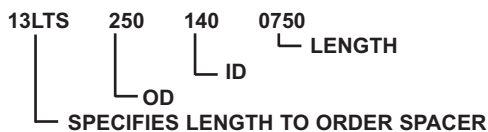
| ITEM NUMBER | A | B |
|--------------------------|-------------|-------------|
| 3/16 O.D. SPACERS | | |
| 13LTS188091 _____ | 3/16 (4,76) | .091 (2,31) |
| 13LTS188115 _____ | 3/16 (4,76) | .115 (2,92) |
| 1/4 O.D. SPACERS | | |
| 13LTS250091 _____ | 1/4 (6,35) | .091 (2,31) |
| 13LTS250115 _____ | 1/4 (6,35) | .115 (2,92) |
| 13LTS250140 _____ | 1/4 (6,35) | .140 (3,56) |
| 13LTS250171 _____ | 1/4 (6,35) | .171 (4,34) |
| 5/16 O.D. SPACERS | | |
| 13LTS312115 _____ | 5/16 (7,94) | .115 (2,92) |
| 13LTS312140 _____ | 5/16 (7,94) | .140 (3,56) |
| 13LTS312171 _____ | 5/16 (7,94) | .171 (4,34) |
| 13LTS312194 _____ | 5/16 (7,94) | .194 (4,67) |
| 3/8 O.D. SPACERS | | |
| 13LTS375140 _____ | 3/8 (9,53) | .140 (3,56) |
| 13LTS375171 _____ | 3/8 (9,53) | .171 (4,34) |
| 13LTS375194 _____ | 3/8 (9,53) | .194 (4,67) |
| 1/2 O.D. SPACERS | | |
| 13LTS500140 _____ | 1/2 (12,70) | .140 (3,56) |
| 13LTS500171 _____ | 1/2 (12,70) | .171 (4,34) |
| 13LTS500194 _____ | 1/2 (12,70) | .194 (4,67) |
| 13LTS500219 _____ | 1/2 (12,70) | .219 (5,56) |
| 13LTS500257 _____ | 1/2 (12,70) | .257 (6,53) |

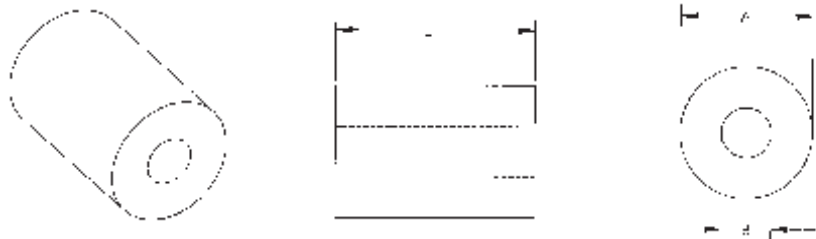
Micro Plastics' length to specification spacers are molded in corrosion resistant, electrical insulating Nylon 6/6.

Available in standard O.D. -- I.D. combinations to your specified length. -- Length specified in .001 increments +/- .005

To order this item, add the desired length to the last four digits of the item number.

PART NUMBER EXAMPLE 1/4 O.D. X .140 I.D. X 3/4 LONG

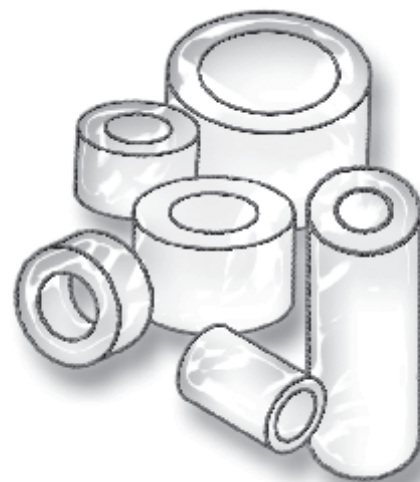




New Sizes

SPECIAL NYLON SPACERS

| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|-------------|-------------|---------------|
| 13RS012504 | RS 12504 | .125 (3,18) | .047 (1,19) | 3/8 (9,53) |
| 13RS014528 | RS 14528 | .148 (3,76) | .085 (2,16) | .280 (7,11) |
| 13RS014529 | RS 14529 | .125 (3,18) | .047 (1,19) | .187 (4,75) |
| 13RS014530 | RS 14530 | .150 (3,81) | .078 (1,98) | 5/16 (7,94) |
| 13RS014531 | RS 14531 | .138 (3,50) | .038 (0,97) | .125 (3,17) |
| 13RS014532 | RS 14532 | .156 (3,96) | .063 (1,60) | .120 (3,05) |
| 13RS014533 | RS 14533 | .138 (3,51) | .038 (0,97) | .065 (1,65) |
| 13RS015721 | RS 15721 | .157 (3,99) | .102 (2,59) | .217 (5,51) |
| 13RS016040 | RS 16040 | .160 (4,06) | .100 (2,54) | 13/32 (10,32) |
| 13RS018020 | RS 18020 | .192 (4,89) | .093 (2,36) | 13/64 (5,16) |
| 13RS018713 | RS 18713 | .188 (4,77) | .091 (2,31) | .275 (6,99) |
| 13RS018714 | RS 18714 | .188 (4,77) | .09 (2,29) | .52 (13,21) |
| 13RS018715 | RS 18715 | .187 (4,75) | .067 (1,70) | 9/64 (3,58) |
| 13RS018720 | RS 18720 | .187 (4,75) | .096 (2,44) | 5/32 (3,97) |
| 13RS018721 | RS 18721 | .187 (4,75) | .063 (1,60) | .200 (5,08) |
| 13RS018722 | RS 18722 | 3/16 (4,76) | .115 (2,92) | 9/32 (7,14) |
| 13RS018725 | RS 18725 | .187 (4,75) | .120 (3,05) | 5/16 (7,94) |
| 13RS018726 | RS 18726 | .187 (4,75) | .135 (3,43) | 1/4 (6,35) |
| 13RS018727 | RS 18727 | .197 (5,00) | .118 (3,00) | .108 (2,74) |
| 13RS018730 | RS 18730 | .187 (4,75) | .120 (3,05) | 11/32 (8,71) |
| 13RS018735 | RS 18735 | .187 (4,75) | .120 (3,05) | 7/16 (11,11) |
| 13RS018785 | RS 18785 | .187 (4,75) | .091 (2,31) | 27/32 (21,41) |
| 13RS018790 | RS 18790 | .187 (4,75) | .091 (2,31) | 13/64 (13,87) |
| 13RS019330 | RS 19330 | .193 (4,90) | .125 (3,18) | 1/4 (6,35) |
| 13RS020030 | RS 20030 | .200 (5,08) | .145 (3,68) | 11/64 (4,37) |
| 13RS020031 | RS 20031 | .200 (5,08) | .145 (3,68) | .110 (2,79) |
| 13RS020032 | RS 20032 | .198 (5,03) | .109 (2,77) | .345 (8,76) |
| 13RS020313 | RS 20313 | .203 (5,16) | .130 (3,30) | 9/32 (7,14) |
| 13RS021025 | RS 21025 | .210 (5,33) | .156 (3,96) | .250 (6,35) |
| 13RS021337 | RS 21337 | .218 (5,54) | .125 (3,18) | .385 (9,78) |
| 13RS021535 | RS 21535 | .215 (5,46) | .145 (3,68) | 21/64 (8,33) |
| 13RS021830 | RS 21830 | .218 (5,54) | .140 (3,56) | 5/32 (3,97) |
| 13RS022013 | RS 22013 | .220 (5,59) | .138 (3,50) | 21/32 (16,66) |
| 13RS024014 | RS 24014 | .245 (6,22) | .175 (4,45) | 5/32 (3,97) |
| 13RS024015 | RS 24015 | .245 (6,22) | .175 (4,45) | .166 (4,22) |
| 13RS025009 | RS 25009 | .250 (6,35) | .195 (4,95) | .195 (4,95) |
| 13RS025010 | RS 25010 | .250 (6,35) | .153 (3,89) | .250 (6,35) |
| 13RS025011 | RS 25011 | .250 (6,35) | .171 (4,34) | .413 (10,49) |
| 13RS025012 | RS 25012 | .250 (6,35) | .126 (3,20) | 51/64 (20,22) |
| 13RS025013 | RS 25013 | .250 (6,35) | .171 (4,34) | .355 (9,02) |
| 13RS025014 | RS 25014 | .250 (6,35) | .125 (3,18) | .823 (20,90) |

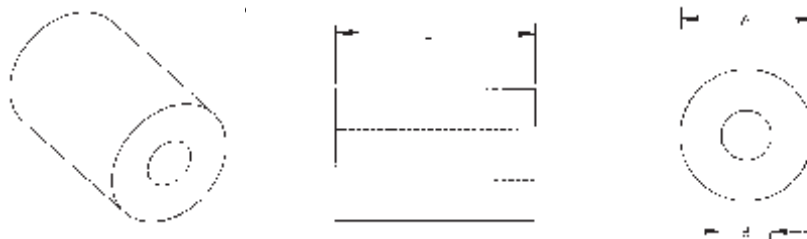


SPACERS

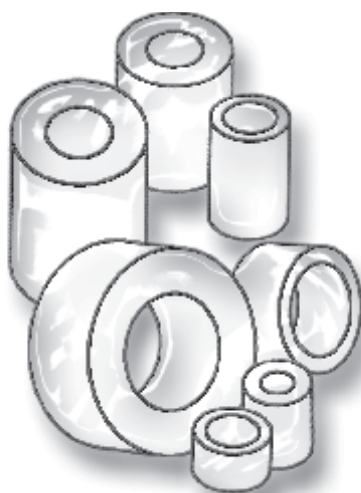
SECTION

V

New Sizes

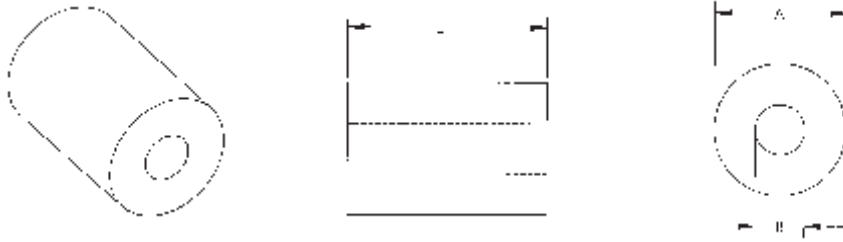


SPECIAL NYLON SPACERS



| ITEM NUMBER | DESCRIPTION | A | | B | | L | |
|-------------|-------------|------|--------|------|--------|--------|---------|
| 13RS025015 | RS 25015 | .250 | (6,35) | .166 | (4,22) | 1/2 | (12,70) |
| 13RS025016 | RS 25016 | .250 | (6,35) | .188 | (4,78) | .188 | (4,78) |
| 13RS025017 | RS 25017 | .254 | (6,45) | .150 | (3,81) | .166 | (4,26) |
| 13RS025018 | RS 25018 | .250 | (6,35) | .171 | (4,34) | .575 | (14,61) |
| 13RS025019 | RS 25019 | .250 | (6,35) | .171 | (4,34) | .475 | (12,07) |
| 13RS025020 | RS 25020 | .250 | (6,35) | .205 | (5,21) | .230 | (5,84) |
| 13RS025021 | RS 25021 | .250 | (6,35) | .125 | (3,18) | .375 | (9,53) |
| 13RS025041 | RS 25041 | .250 | (6,35) | .120 | (3,05) | .389 | (9,88) |
| 13RS025042 | RS 25042 | .250 | (6,35) | .125 | (3,18) | .420 | (10,67) |
| 13RS025048 | RS 25048 | .250 | (6,35) | .115 | (2,92) | 7/32 | (5,55) |
| 13RS025050 | RS 25050 | .250 | (6,35) | .147 | (3,73) | 19/64 | (7,52) |
| 13RS025053 | RS 25053 | .250 | (6,35) | .140 | (3,56) | 17/32 | (13,49) |
| 13RS025055 | RS 25055 | .250 | (6,35) | .140 | (3,56) | 35/64 | (13,87) |
| 13RS025056 | RS 25056 | .250 | (6,35) | .140 | (3,56) | .640 | (16,26) |
| 13RS025057 | RS 25057 | .250 | (6,35) | .171 | (4,34) | .375 | (9,53) |
| 13RS025058 | RS 25058 | .250 | (6,35) | .140 | (3,56) | .220 | (5,59) |
| 13RS025062 | RS 25062 | .260 | (6,60) | .200 | (5,08) | 19/32 | (15,08) |
| 13RS025065 | RS 25065 | .250 | (6,35) | .160 | (4,06) | .750 | (19,05) |
| 13RS025070 | RS 25070 | .250 | (6,35) | .141 | (3,58) | 9/32 | (7,14) |
| 13RS025075 | RS 25075 | .250 | (6,35) | .115 | (2,92) | .207 | (5,26) |
| 13RS025090 | RS 25090 | .250 | (6,35) | .115 | (2,92) | 1-5/16 | (33,32) |
| 13RS025091 | RS 25091 | .251 | (6,38) | .152 | (3,86) | 5/32 | (3,97) |
| 13RS025095 | RS 25095 | .251 | (6,38) | .115 | (2,92) | 17/32 | (13,49) |
| 13RS027540 | RS 27540 | .275 | (6,99) | .195 | (4,95) | .40 | (10,16) |
| 13RS027541 | RS 27541 | .275 | (6,99) | .185 | (4,70) | .090 | (2,29) |
| 13RS028030 | RS 28030 | .280 | (7,11) | .170 | (4,32) | .300 | (7,62) |
| 13RS028038 | RS 28038 | .280 | (7,11) | .125 | (3,18) | 19/64 | (7,54) |
| 13RS028440 | RS 28440 | .284 | (7,21) | .224 | (5,69) | .400 | (10,16) |
| 13RS029618 | RS 29618 | .296 | (7,52) | .125 | (3,18) | 3/32 | (2,38) |
| 13RS031210 | RS 31210 | .312 | (7,93) | .095 | (2,41) | 1/4 | (6,35) |
| 13RS030500 | RS 30500 | .305 | (7,75) | .260 | (6,60) | .179 | (4,55) |
| 13RS031211 | RS 31211 | .312 | (7,93) | .194 | (4,93) | 1.405 | (35,68) |
| 13RS031212 | RS 31212 | .312 | (7,93) | .194 | (4,93) | .530 | (13,46) |
| 13RS031213 | RS 31213 | .312 | (7,93) | .205 | (5,21) | .160 | (4,06) |
| 13RS031214 | RS 31214 | .312 | (7,93) | .140 | (3,56) | 9/32 | (7,14) |
| 13RS031221 | RS 31221 | .312 | (7,93) | .195 | (4,95) | .214 | (5,44) |
| 13RS031225 | RS 31225 | .312 | (7,93) | .156 | (3,96) | .256 | (6,50) |
| 13RS031226 | RS 31226 | 5/16 | (7,94) | .228 | (5,79) | .260 | (6,60) |
| 13RS031230 | RS 31230 | .312 | (7,93) | .246 | (6,25) | 1/4 | (6,35) |
| 13RS031243 | RS 31243 | 5/16 | (7,94) | .171 | (4,34) | 2-7/16 | (61,93) |
| 13RS031244 | RS 31244 | .312 | (7,93) | .194 | (4,93) | 1.155 | (29,33) |

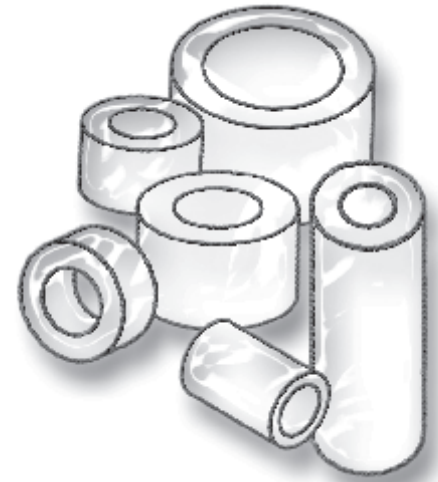




New Sizes

SPECIAL NYLON SPACERS

| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|--------------|-------------|---------------|
| 13RS031245 | RS 31245 | .312 (7,93) | .195 (4,95) | .355 (9,02) |
| 13RS031246 | RS 31246 | .312 (7,93) | .140 (3,56) | .200 (5,08) |
| 13RS031247 | RS 31247 | 5/16 (7,94) | 7/32 (5,54) | 13/16 (20,64) |
| 13RS031250 | RS 31250 | .312 (7,93) | .246 (6,25) | .495 (12,57) |
| 13RS031251 | RS 31251 | .312 (7,93) | .171 (4,34) | 1-7/8 (47,63) |
| 13RS031252 | RS 31252 | .480 (12,19) | .345 (8,76) | 3/16 (4,75) |
| 13RS031253 | RS 31253 | .313 (7,95) | .187 (4,75) | .171 (4,34) |
| 13RS031254 | RS 31254 | 5/16 (7,94) | .171 (4,34) | .671 (17,04) |
| 13RS031255 | RS 31255 | .320 (8,13) | .215 (5,46) | .220 (5,59) |
| 13RS031256 | RS 31256 | .325 (8,26) | .125 (3,18) | .360 (9,14) |
| 13RS031257 | RS 31257 | 5/16 (7,94) | .175 (4,45) | .154 (3,91) |
| 13RS031258 | RS 31258 | .312 (7,93) | .225 (5,72) | 7/16 (11,11) |
| 13RS031339 | RS 31339 | .313 (7,95) | .195 (4,95) | .385 (9,78) |
| 13RS031640 | RS 31640 | .316 (8,03) | .188 (4,78) | 13/64 (5,16) |
| 13RS031641 | RS 31641 | .250 (6,35) | .120 (3,05) | .200 (5,08) |
| 13RS031830 | RS 31830 | .313 (7,95) | .189 (4,80) | 19/64 (7,54) |
| 13RS034001 | RS 34001 | .340 (8,64) | .280 (7,11) | .310 (7,87) |
| 13RS034002 | RS 34002 | 11/32 (8,74) | .198 (5,03) | *.281 (7,14) |
| 13RS034003 | RS 34003 | .340 (8,64) | .280 (7,11) | 1/2 (12,70) |
| 13RS034004 | RS 34004 | .355 (9,02) | .255 (6,48) | .130 (3,30) |
| 13RS035453 | RS 35453 | .354 (8,99) | .172 (4,37) | .531 (13,49) |
| 13RS036031 | RS 36031 | .360 (9,14) | .316 (8,03) | 1/4 (6,35) |
| 13RS036032 | RS 36032 | .360 (9,14) | .252 (6,40) | .425 (10,80) |
| 13RS037030 | RS 37030 | .370 (9,40) | .265 (6,73) | 5/32 (3,96) |
| 13RS037031 | RS 37031 | .375 (9,53) | .254 (6,45) | .453 (11,51) |
| 13RS037032 | RS 37032 | .372 (9,45) | .288 (7,32) | .969 (24,61) |
| 13RS037041 | RS 37041 | .370 (9,40) | .194 (4,93) | .418 (10,62) |
| 13RS037441 | RS 37441 | .374 (9,50) | .248 (6,30) | 13/32 (10,32) |
| 13RS037514 | RS 37514 | .376 (9,55) | .175 (4,45) | .150 (3,81) |
| 13RS037515 | RS 37515 | .375 (9,53) | .219 (5,56) | 5/32 (3,96) |
| 13RS037516 | RS 37516 | .375 (9,53) | .252 (6,40) | .820 (20,83) |
| 13RS037517 | RS 37517 | .375 (9,53) | .219 (5,56) | 11/64 (4,36) |
| 13RS037518 | RS 37518 | .375 (9,53) | .252 (6,40) | 3/16 (4,75) |
| 13RS037520 | RS 37520 | .375 (9,53) | .219 (5,56) | 13/64 (5,16) |
| 13RS037521 | RS 37521 | .375 (9,53) | .218 (5,54) | 7/16 (11,11) |
| 13RS037522 | RS 37522 | .375 (9,53) | .220 (5,59) | 3/8 (9,53) |
| 13RS037523 | RS 37523 | 3/8 (9,53) | .257 (6,53) | 1/4 (6,35) |
| 13RS037525 | RS 37525 | .375 (9,53) | .225 (5,72) | .250 (6,35) |
| 13RS037534 | RS 37534 | .375 (9,53) | .140 (3,56) | 11/32 (8,73) |
| 13RS037538 | RS 37538 | .375 (9,53) | .255 (6,48) | .380 (9,65) |
| 13RS037542 | RS 37542 | .375 (9,53) | .265 (6,73) | 1/4 (6,35) |



* L Dimension +/- .015

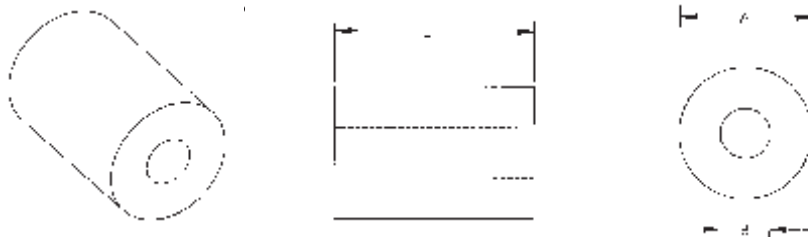


SPACERS

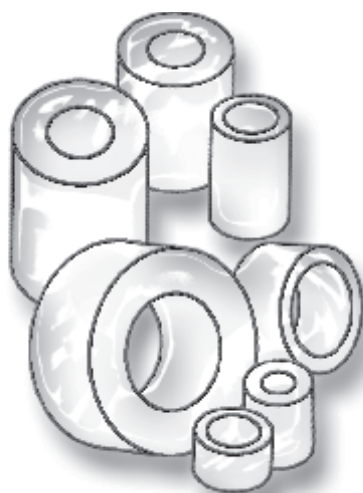
SECTION

V

New Sizes

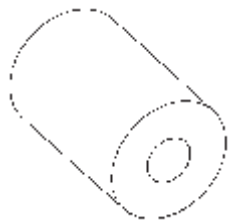


SPECIAL NYLON SPACERS



| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|--------------|-------------|----------------|
| 13RS037546 | RS 37546 | .375 (9,53) | .094 (2,39) | 9/32 (7,14) |
| 13RS037547 | RS 37547 | .375 (9,53) | .203 (5,16) | 17/64 (6,74) |
| 13RS037548 | RS 37548 | .375 (9,53) | .203 (5,16) | 7/64 (2,78) |
| 13RS037550 | RS 37550 | .375 (9,53) | .252 (6,40) | 3/8 (9,53) |
| 13RS037552 | RS 37552 | .375 (9,53) | .265 (6,73) | 3/8 (9,53) |
| 13RS037559 | RS 37559 | .375 (9,53) | .250 (6,35) | .593 (15,06) |
| 13RS037565 | RS 37565 | .375 (9,53) | .265 (6,73) | 1/2 (12,70) |
| 13RS037570 | RS 37570 | .375 (9,53) | .140 (3,56) | .700 (17,78) |
| 13RS037571 | RS 37571 | .375 (9,53) | .255 (6,48) | .700 (17,78) |
| 13RS037575 | RS 37575 | .375 (9,53) | .265 (6,73) | 7/8 (22,22) |
| 13RS037580 | RS 37580 | .375 (9,53) | .265 (6,73) | 1 (25,40) |
| 13RS037585 | RS 37585 | .375 (9,53) | .257 (6,53) | 1-1/4 (31,75) |
| 13RS037590 | RS 37590 | .375 (9,53) | .265 (6,73) | 3/4 (19,05) |
| 13RS037591 | RS 37591 | .375 (9,53) | .140 (3,56) | .725 (18,42) |
| 13RS037598 | RS 37598 | .375 (9,53) | .115 (2,92) | 1-1/16 (27,00) |
| 13RS037599 | RS 37599 | .375 (9,53) | .230 (5,84) | .925 (23,50) |
| 13RS038037 | RS 38037 | .380 (9,65) | .250 (6,35) | .440 (11,18) |
| 13RS038038 | RS 38038 | .380 (9,65) | .320 (8,13) | .382 (9,70) |
| 13RS038039 | RS 38039 | .385 (9,78) | .254 (6,45) | .240 (6,10) |
| 13RS038518 | RS 38518 | 5/8 (15,88) | .385 (9,78) | .187 (4,75) |
| 13RS038930 | RS 38930 | .389 (9,88) | .251 (6,38) | 1/8 (3,18) |
| 13RS039315 | RS 39315 | .393 (9,98) | .151 (3,83) | 1/4 (6,35) |
| 13RS039342 | RS 39342 | .393 (9,98) | .169 (4,29) | 15/64 (5,94) |
| 13RS039459 | RS 39459 | .395 (10,03) | .320 (8,13) | .591 (15,01) |
| 13RS040080 | RS 40080 | .400 (10,16) | .140 (3,56) | 23/32 (18,25) |
| 13RS040082 | RS 40082 | .430 (10,92) | .285 (7,24) | .400 (10,16) |
| 13RS040085 | RS 40085 | .400 (10,16) | .140 (3,56) | 25/32 (19,84) |
| 13RS040630 | RS 40630 | .406 (10,31) | .269 (6,83) | 1/4 (6,35) |
| 13RS040636 | RS 40636 | .406 (10,31) | .265 (6,73) | .562 (14,27) |
| 13RS040637 | RS 40637 | .406 (10,31) | .265 (6,73) | .625 (15,88) |
| 13RS040660 | RS 40660 | .406 (10,31) | .267 (6,78) | 1/2 (12,70) |
| 13RS040670 | RS 40670 | .406 (10,31) | .265 (6,73) | 3/4 (19,05) |
| 13RS040671 | RS 40671 | .406 (10,31) | .311 (7,90) | .591 (15,01) |
| 13RS040675 | RS 40675 | .406 (10,31) | .280 (7,11) | 3/8 (9,53) |
| 13RS040685 | RS 40685 | .406 (10,31) | .265 (6,73) | 1 (25,40) |
| 13RS041500 | RS 41500 | .415 (10,54) | .320 (8,13) | .640 (16,26) |
| 13RS042700 | RS 42700 | .427 (10,85) | .182 (4,62) | 47/64 (18,64) |
| 13RS042701 | RS 42701 | .433 (10,10) | .256 (6,50) | .220 (5,59) |
| 13RS043724 | RS 43724 | 7/16 (11,11) | 1/4 (6,35) | 3.94 (10,01) |
| 13RS043725 | RS 43725 | 7/16 (11,11) | 1/4 (6,35) | .591 (15,01) |
| 13RS043726 | RS 43726 | .437 (11,10) | .312 (7,92) | .350 (8,89) |

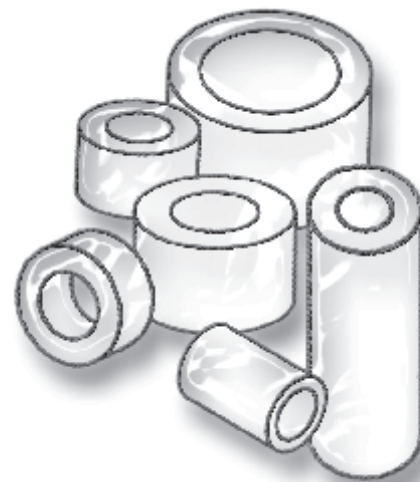




New Sizes

SPECIAL NYLON SPACERS

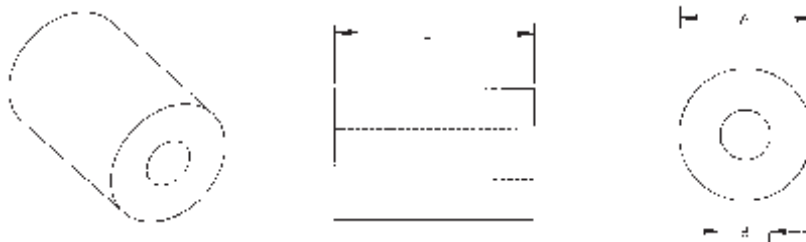
| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|--------------|--------------|----------------|
| 13RS043727 | RS 43727 | .438 (11,13) | .325 (8,26) | .422 (10,72) |
| 13RS043728 | RS 43728 | .437 (11,10) | .318 (8,08) | .281 (7,14) |
| 13RS043729 | RS 43729 | 7/16 (11,11) | .171 (4,34) | .655 (16,64) |
| 13RS043730 | RS 43730 | .437 (11,10) | .318 (8,08) | .150 (3,81) |
| 13RS045040 | RS 45040 | .450 (11,43) | .325 (8,26) | 27/64 (10,72) |
| 13RS046060 | RS 46060 | .460 (11,68) | .252 (6,40) | 9/16 (14,29) |
| 13RS046061 | RS 46061 | .460 (11,68) | .400 (10,16) | .440 (11,18) |
| 13RS046319 | RS 46319 | .463 (11,76) | .190 (4,83) | 5/16 (7,92) |
| 13RS046500 | RS 46500 | .465 (11,81) | .382 (9,70) | .282 (7,16) |
| 13RS046823 | RS 46823 | .468 (11,89) | .314 (7,98) | .230 (5,84) |
| 13RS048012 | RS 48012 | .470 (11,94) | .120 (3,05) | 23/64 (9,12) |
| 13RS048013 | RS 48013 | .472 (11,99) | .394 (10,01) | .787 (19,99) |
| 13RS048015 | RS 48015 | .475 (12,06) | .191 (4,85) | 21/64 (8,33) |
| 13RS048016 | RS 48016 | .480 (12,19) | .257 (6,53) | 3/16 (4,76) |
| 13RS048420 | RS 48420 | .484 (12,29) | .343 (8,71) | 3/16 (4,76) |
| 13RS048421 | RS 48421 | .486 (12,34) | .320 (8,13) | .375 (9,53) |
| 13RS050009 | RS 50009 | .500 (12,70) | .219 (5,56) | .649 (16,48) |
| 13RS050010 | RS 50010 | .500 (12,70) | .320 (8,13) | .270 (6,86) |
| 13RS050011 | RS 50011 | .500 (12,70) | .244 (6,20) | .295 (7,49) |
| 13RS050014 | RS 50014 | .501 (12,72) | .249 (6,32) | .390 (9,91) |
| 13RS050015 | RS 50015 | .500 (12,70) | .194 (4,93) | 13/32 (10,31) |
| 13RS050016 | RS 50016 | .500 (12,70) | .265 (6,73) | .156 (3,96) |
| 13RS050017 | RS 50017 | .500 (12,70) | .265 (6,73) | .200 (5,08) |
| 13RS050018 | RS 50018 | 1/2 (12,70) | .257 (6,53) | 15/64 (5,94) |
| 13RS050019 | RS 50019 | .500 (12,70) | .195 (4,95) | .451 (13,74) |
| 13RS050020 | RS 50020 | .500 (12,70) | .213 (5,41) | .250 (6,35) |
| 13RS050021 | RS 50021 | 1/2 (12,70) | .382 (9,70) | .625 (15,88) |
| 13RS050022 | RS 50022 | .500 (12,70) | .260 (6,60) | 1/4 (6,35) |
| 13RS050023 | RS 50023 | .500 (12,70) | .281 (7,14) | 13/16 (20,64) |
| 13RS050024 | RS 50024 | .500 (12,70) | .220 (5,59) | .135 (3,43) |
| 13RS050025 | RS 50025 | .500 (12,70) | .170 (4,32) | .255 (6,48) |
| 13RS050027 | RS 50027 | .500 (12,70) | .170 (4,32) | .270 (6,86) |
| 13RS050028 | RS 50028 | .500 (12,70) | .312 (7,93) | 5/32 (3,97) |
| 13RS050031 | RS 50031 | .500 (12,70) | .382 (9,70) | .312 (7,92) |
| 13RS050040 | RS 50040 | .500 (12,70) | .344 (8,74) | 13/16 (20,64) |
| 13RS050041 | RS 50041 | .500 (12,70) | .375 (9,53) | .225 (5,72) |
| 13RS050045 | RS 50045 | .500 (12,70) | .257 (6,53) | 13/32 (10,31) |
| 13RS050046 | RS 50046 | 1/2 (12,70) | .312 (7,93) | 1-5/16 (33,33) |
| 13RS050047 | RS 50047 | .500 (12,70) | .368 (9,34) | .470 (11,94) |
| 13RS050050 | RS 50050 | .500 (12,70) | .328 (8,33) | 1 (25,40) |
| 13RS050055 | RS 50055 | .500 (12,70) | .383 (9,73) | 1/2 (12,70) |



SPACERS

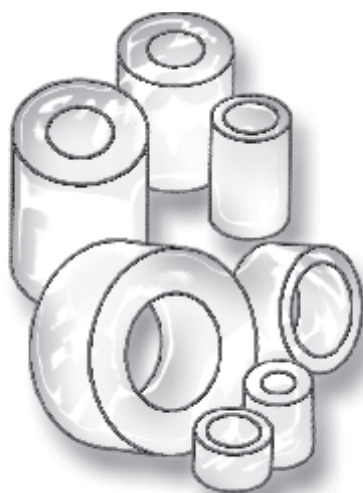
SECTION

V



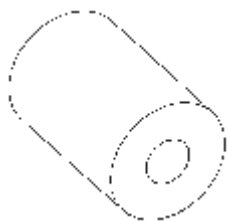
New Sizes

SPECIAL NYLON SPACERS



| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|--------------|--------------|---------------|
| 13RS050060 | RS 50060 | .490 (12,47) | .257 (6,53) | 3/8 (9,53) |
| 13RS050061 | RS 50061 | .500 (12,70) | .335 (8,51) | .209 (5,31) |
| 13RS050062 | RS 50062 | .505 (12,83) | .385 (9,78) | 5/32 (3,97) |
| 13RS050063 | RS 50063 | .500 (12,70) | .285 (7,24) | .630 (16,00) |
| 13RS050064 | RS 50064 | .683 (17,35) | .505 (12,83) | .500 (12,70) |
| 13RS050070 | RS 50070 | .500 (12,70) | .316 (8,03) | 1/2 (12,70) |
| 13RS050071 | RS 50071 | .500 (12,70) | .316 (8,03) | 15/64 (5,95) |
| 13RS050080 | RS 50080 | .500 (12,70) | .380 (9,65) | 27/64 (10,72) |
| 13RS050082 | RS 50082 | .500 (12,70) | .375 (9,53) | 7/16 (11,11) |
| 13RS050085 | RS 50085 | .500 (12,70) | .281 (7,14) | 3/8 (9,53) |
| 13RS050088 | RS 50088 | .500 (12,70) | .260 (6,60) | 1-5/8 (41,28) |
| 13RS050089 | RS 50089 | .500 (12,70) | .375 (9,53) | .380 (9,65) |
| 13RS050090 | RS 50090 | .500 (12,70) | .375 (9,53) | 5/8 (15,88) |
| 13RS050091 | RS 50091 | .500 (12,70) | .375 (9,53) | .635 (16,13) |
| 13RS050093 | RS 50093 | .500 (12,70) | .285 (7,24) | .930 (23,62) |
| 13RS050094 | RS 50094 | .500 (12,70) | .375 (9,53) | 11/16 (17,46) |
| 13RS050095 | RS 50095 | .500 (12,70) | .385 (9,78) | 1 (25,40) |
| 13RS050096 | RS 50096 | .500 (12,70) | .260 (6,60) | 1-3/8 (34,93) |
| 13RS050097 | RS 50097 | .515 (13,08) | .445 (11,30) | .380 (9,65) |
| 13RS050099 | RS 50099 | 1/2 (12,70) | .250 (6,35) | 2.125 (53,98) |
| 13RS051001 | RS 51001 | .510 (12,95) | .390 (9,91) | 1/4 (6,35) |
| 13RS051062 | RS 51062 | .510 (12,95) | .320 (8,13) | 7/8 (22,22) |
| 13RS052001 | RS 52001 | .518 (13,16) | .382 (9,70) | .280 (7,11) |
| 13RS052002 | RS 52002 | .533 (13,54) | .219 (5,56) | .360 (9,14) |
| 13RS053546 | RS 53546 | .535 (13,59) | .250 (6,35) | .610 (15,49) |
| 13RS056030 | RS 56030 | .560 (14,22) | .379 (9,63) | 3/8 (9,53) |
| 13RS056031 | RS 56031 | .562 (14,27) | .375 (9,53) | 1/2 (12,70) |
| 13RS056032 | RS 56032 | .563 (14,30) | .453 (11,51) | .281 (7,14) |
| 13RS056033 | RS 56033 | .560 (14,22) | .280 (7,11) | .500 (12,70) |
| 13RS056256 | RS 56256 | .555 (13,97) | .245 (6,22) | 9/16 (14,29) |
| 13RS056337 | RS 56337 | .563 (14,30) | .281 (7,14) | 3/8 (9,53) |
| 13RS056656 | RS 56656 | .565 (14,35) | .33 (8,38) | .56 (14,22) |
| 13RS056718 | RS 56718 | .567 (14,40) | .318 (8,08) | 35/64 (13,87) |
| 13RS056740 | RS 56740 | .567 (14,40) | .437 (11,10) | .406 (10,31) |
| 13RS057032 | RS 57032 | .570 (14,48) | .320 (8,13) | 35/64 (13,87) |
| 13RS057033 | RS 57033 | .589 (14,96) | .312 (7,92) | .310 (7,87) |
| 13RS059031 | RS 59031 | .590 (14,99) | .314 (7,98) | 23/64 (9,12) |
| 13RS059032 | RS 59032 | .590 (14,99) | .319 (8,10) | .655 (16,64) |
| 13RS060550 | RS 60550 | .606 (15,39) | .203 (5,16) | 5/8 (15,88) |
| 13RS060551 | RS 60551 | .602 (15,29) | .250 (6,35) | .622 (15,80) |
| 13RS061018 | RS 61018 | .615 (15,62) | .385 (9,78) | 3/16 (4,76) |

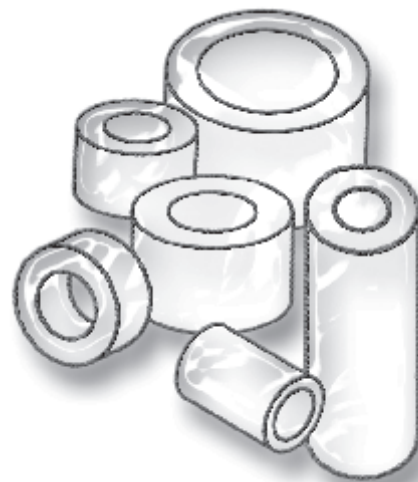




SPECIAL NYLON SPACERS

New Sizes

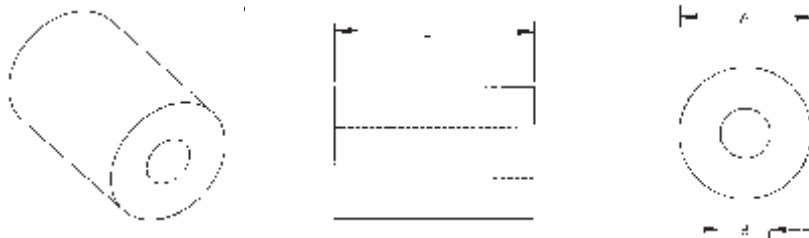
| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|--------------|--------------|-----------------|
| 13RS061019 | RS 61019 | .615 (15,62) | .325 (8,26) | .813 (20,65) |
| 13RS061020 | RS 61020 | .615 (15,62) | .328 (8,33) | .438 (11,13) |
| 13RS061731 | RS 61731 | .617 (15,67) | .313 (7,95) | 11/16 (17,46) |
| 13RS062012 | RS 62012 | .620 (15,75) | .350 (8,89) | 3/16 (4,76) |
| 13RS062035 | RS 62035 | .620 (15,75) | .507 (12,89) | 1-11/16 (42,85) |
| 13RS062040 | RS 62040 | .620 (15,75) | .504 (12,80) | 13/16 (20,64) |
| 13RS062062 | RS 62062 | .620 (15,75) | .504 (12,80) | .625 (15,88) |
| 13RS062331 | RS 62331 | .623 (15,82) | .311 (7,90) | 13/16 (20,64) |
| 13RS062514 | RS 62514 | .625 (15,88) | .160 (4,06) | .312 (7,92) |
| 13RS062515 | RS 62515 | .620 (15,75) | .323 (8,20) | 5/32 (3,96) |
| 13RS062516 | RS 62516 | 5/8 (15,88) | .312 (7,92) | 3/4 (19,05) |
| 13RS062517 | RS 62517 | .621 (15,77) | .254 (6,45) | .652 (16,56) |
| 13RS062519 | RS 62519 | .625 (15,88) | .191 (4,85) | 1/4 (6,35) |
| 13RS062520 | RS 62520 | .63 (16,00) | .50 (12,70) | 1-1/4 (31,75) |
| 13RS062521 | RS 62521 | .625 (15,88) | .140 (3,56) | .375 (9,53) |
| 13RS062522 | RS 62522 | .625 (15,88) | .435 (11,10) | 1/4 (6,35) |
| 13RS062523 | RS 62523 | .635 (16,13) | .385 (9,78) | .230 (5,84) |
| 13RS062524 | RS 62524 | .625 (15,88) | .412 (10,46) | .155 (3,94) |
| 13RS062525 | RS 62525 | .625 (15,88) | .390 (9,91) | 1/4 (6,35) |
| 13RS062526 | RS 62526 | .625 (15,88) | .380 (9,65) | .750 (19,05) |
| 13RS062527 | RS 62527 | .625 (15,88) | .328 (8,33) | .250 (6,35) |
| 13RS062528 | RS 62528 | .625 (15,88) | .280 (7,11) | 7/16 (11,10) |
| 13RS062530 | RS 62530 | .610 (15,49) | .250 (6,35) | 3/8 (9,53) |
| 13RS062531 | RS 62531 | .625 (15,88) | .260 (6,60) | 1/4 (6,35) |
| 13RS062535 | RS 62535 | .625 (15,88) | .500 (12,70) | 5/16 (7,94) |
| 13RS062537 | RS 62537 | .625 (15,88) | .342 (8,69) | 3/8 (9,53) |
| 13RS062538 | RS 62538 | .627 (15,93) | .484 (12,29) | .467 (11,86) |
| 13RS062540 | RS 62540 | .625 (15,88) | .375 (9,53) | 3/8 (9,53) |
| 13RS062541 | RS 62541 | .625 (15,88) | .312 (7,92) | .500 (12,70) |
| 13RS062546 | RS 62546 | .625 (15,88) | .375 (9,53) | .462 (11,73) |
| 13RS062547 | RS 62547 | .625 (15,88) | .315 (8,00) | .312 (7,92) |
| 13RS062550 | RS 62550 | .613 (15,57) | .281 (7,14) | 1/2 (12,70) |
| 13RS062560 | RS 62560 | .615 (15,62) | .281 (7,14) | 13/16 (20,64) |
| 13RS062561 | RS 62561 | .625 (15,88) | .386 (9,80) | 5/8 (15,88) |
| 13RS062565 | RS 62565 | .625 (15,88) | .450 (11,43) | 5/8 (15,88) |
| 13RS062570 | RS 62570 | .635 (16,13) | .425 (10,80) | 7/8 (22,22) |
| 13RS062571 | RS 62571 | .625 (15,88) | .450 (11,43) | 7/8 (22,22) |
| 13RS062572 | RS 62572 | .618 (15,70) | .500 (12,70) | 31/64 (12,29) |
| 13RS062573 | RS 62573 | .625 (15,88) | .386 (9,80) | .738 (18,75) |
| 13RS062575 | RS 62575 | .625 (15,88) | .500 (12,70) | 1.000 (25,40) |
| 13RS062580 | RS 62580 | .625 (15,88) | .257 (6,53) | 1/8 (3,18) |



SPACERS

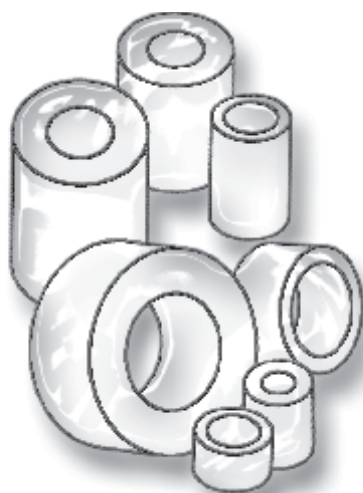
SECTION

V



New Sizes

SPECIAL NYLON SPACERS

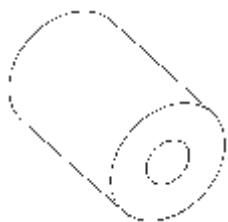


| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|--------------|--------------|---------------|
| 13RS062582 | RS 62582 | .625 (15,88) | .375 (9,53) | .082 (2,08) |
| 13RS062583 | RS 62583 | .634 (16,10) | .434 (11,02) | .380 (9,65) |
| 13RS062584 | RS 62584 | 5/8 (15,88) | .380 (9,65) | 1 1/4 (31,75) |
| 13RS062591 | RS 62591 | .630 (16,00) | .350 (8,89) | .200 (5,08) |
| 13RS062650 | RS 62650 | .620 (15,75) | .507 (12,89) | 1/2 (12,70) |
| 13RS063050 | RS 63050 | .630 (16,00) | .378 (9,60) | .50 (12,70) |
| 13RS063550 | RS 63550 | .635 (16,13) | .520 (13,21) | .500 (12,70) |
| 13RS063564 | RS 63564 | .913 (23,19) | .635 (16,13) | .641 (16,28) |
| 13RS064057 | RS 64057 | .640 (16,26) | .327 (8,31) | .560 (14,22) |
| 13RS065650 | RS 65650 | .656 (16,66) | .516 (13,11) | 1/2 (12,70) |
| 13RS065830 | RS 65830 | .648 (16,50) | .280 (7,11) | 23/64 (9,12) |
| 13RS066850 | RS 66850 | .668 (16,97) | .506 (12,85) | 15/16 (23,81) |
| 13RS066851 | RS 66851 | .670 (17,02) | .350 (8,90) | .200 (5,08) |
| 13RS068711 | RS 68711 | .687 (17,45) | .260 (6,60) | .457 (11,61) |
| 13RS068712 | RS 68712 | .687 (17,45) | .156 (3,96) | 1/8 (3,18) |
| 13RS069038 | RS 69038 | .680 (17,27) | .600 (15,24) | .56 (14,22) |
| 13RS069039 | RS 69039 | .680 (17,27) | .390 (9,91) | 5/8 (15,88) |
| 13RS070086 | RS 70086 | .700 (17,78) | .335 (8,51) | .866 (22,00) |
| 13RS071820 | RS 71820 | .718 (18,24) | .526 (13,36) | 7/32 (5,55) |
| 13RS071821 | RS 71821 | .720 (18,29) | .392 (9,96) | .230 (5,84) |
| 13RS071828 | RS 71828 | .718 (18,24) | .526 (13,36) | 9/32 (7,14) |
| 13RS072050 | RS 72050 | .720 (18,29) | .515 (13,08) | .49 (12,45) |
| 13RS073030 | RS 73030 | .730 (18,54) | .265 (6,73) | .295 (7,49) |
| 13RS075009 | RS 75009 | .750 (19,05) | .320 (8,13) | .500 (12,70) |
| 13RS075010 | RS 75010 | .750 (19,05) | .280 (7,11) | .440 (11,18) |
| 13RS075011 | RS 75011 | .754 (19,15) | .531 (13,49) | .451 (11,46) |
| 13RS075012 | RS 75012 | 3/4 (19,05) | .260 (6,60) | 3/4 (19,05) |
| 13RS075013 | RS 75013 | .750 (19,05) | .255 (6,48) | .290 (7,37) |
| 13RS075020 | RS 75020 | .740 (18,80) | .250 (6,35) | 1/4 (6,35) |
| 13RS075021 | RS 75021 | .744 (18,90) | .397 (10,08) | .371 (9,42) |
| 13RS075022 | RS 75022 | .745 (18,92) | .387 (9,83) | .187 (4,75) |
| 13RS075023 | RS 75023 | .752 (19,10) | .480 (12,19) | .226 (5,74) |
| 13RS075024 | RS 75024 | 3/4 (19,05) | .315 (8,00) | 5/16 (7,94) |
| 13RS075025 | RS 75025 | .750 (19,05) | .258 (6,55) | 7/16 (11,10) |
| 13RS075026 | RS 75026 | .750 (19,05) | .260 (6,60) | .375 (9,53) |
| 13RS075027 | RS 75027 | 3/4 (19,05) | 5/16 (7,94) | 9/16 (14,29) |
| 13RS075028 | RS 75028 | 3/4 (19,05) | .266 (6,76) | 5/16 (7,94) |
| 13RS075029 | RS 75029 | .750 (19,05) | .370 (9,40) | 11/32 (8,71) |
| 13RS075030 | RS 75030 | .750 (19,05) | .406 (10,32) | .562 (14,27) |
| 13RS075031 | RS 75031 | .750 (19,05) | .315 (8,00) | .187 (4,75) |
| 13RS075032 | RS 75032 | .750 (19,05) | .385 (9,78) | 13/64 (5,16) |
| 13RS075033 | RS 75033 | 3/4 (19,05) | 1/4 (6,35) | 3/16 (4,76) |
| 13RS075034 | RS 75034 | .750 (19,05) | .515 (13,08) | .340 (8,64) |



SPACERS

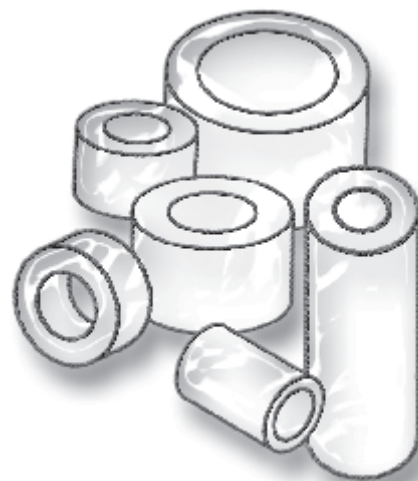
SECTION
V



SPECIAL NYLON SPACERS

New Sizes

| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|---------------|--------------|---------------|
| 13RS075035 | RS 75035 | .750 (19,05) | .245 (6,25) | .361 (9,17) |
| 13RS075036 | RS 75036 | .750 (19,05) | .312 (7,92) | .938 (23,82) |
| 13RS075037 | RS 75037 | .745 (18,92) | .250 (6,35) | 3/8 (9,53) |
| 13RS075039 | RS 75039 | .750 (19,05) | .490 (12,45) | 3/8 (9,53) |
| 13RS075040 | RS 75040 | .750 (19,05) | .323 (8,20) | .250 (6,35) |
| 13RS075041 | RS 75041 | .740 (18,80) | .390 (9,91) | 1 (25,40) |
| 13RS075042 | RS 75042 | .750 (19,05) | .260 (6,60) | .625 (15,88) |
| 13RS075043 | RS 75043 | .740 (18,80) | .310 (7,87) | .437 (11,10) |
| 13RS075044 | RS 75044 | 1-3/4 (44,45) | 5/8 (15,88) | 1/4 (6,35) |
| 13RS075045 | RS 75045 | .745 (18,92) | .385 (9,78) | 5/16 (7,92) |
| 13RS075046 | RS 75046 | .750 (19,05) | .460 (11,68) | 1/4 (6,35) |
| 13RS075047 | RS 75047 | 3/4 (19,05) | .380 (9,65) | .472 (11,99) |
| 13RS075048 | RS 75048 | .750 (19,05) | .250 (6,35) | .500 (12,70) |
| 13RS075049 | RS 75049 | .750 (19,05) | .312 (7,92) | .250 (6,35) |
| 13RS075050 | RS 75050 | .750 (19,05) | .344 (8,74) | .500 (12,70) |
| 13RS075051 | RS 75051 | 3/4 (19,05) | .260 (6,60) | 1 (25,40) |
| 13RS075052 | RS 75052 | .750 (19,05) | .250 (6,35) | .878 (22,30) |
| 13RS075065 | RS 75065 | 3/4 (19,05) | .260 (6,60) | 9/16 (14,29) |
| 13RS075070 | RS 75070 | .750 (19,05) | .510 (12,95) | .700 (17,78) |
| 13RS075071 | RS 75071 | .750 (19,05) | .510 (12,95) | .375 (9,53) |
| 13RS075075 | RS 75075 | 3/4 (19,05) | .320 (8,13) | 3/4 (19,05) |
| 13RS075076 | RS 75076 | .750 (19,05) | .320 (8,13) | 1 (25,40) |
| 13RS075077 | RS 75077 | .755 (19,18) | .400 (10,16) | .290 (7,33) |
| 13RS075078 | RS 75078 | .750 (19,05) | .344 (8,74) | .250 (6,35) |
| 13RS075079 | RS 75079 | .750 (19,05) | .200 (5,08) | 1.000 (25,40) |
| 13RS075080 | RS 75080 | .750 (19,05) | .260 (6,60) | .500 (12,70) |
| 13RS075081 | RS 75081 | 3/4 (19,05) | 3/8 (9,53) | 3/8 (9,53) |
| 13RS075086 | RS 75086 | .760 (19,30) | .401 (10,19) | .600 (15,24) |
| 13RS075087 | RS 75087 | .750 (19,05) | .327 (8,31) | .188 (4,78) |
| 13RS075088 | RS 75088 | .750 (19,05) | .187 (4,75) | .500 (12,70) |
| 13RS075990 | RS 75990 | .760 (19,30) | .394 (10,01) | .910 (23,11) |
| 13RS075991 | RS 75991 | .780 (19,81) | .501 (12,73) | .205 (5,21) |
| 13RS077530 | RS 77530 | .775 (19,69) | .507 (12,89) | 1/4 (6,35) |
| 13RS077531 | RS 77531 | .770 (19,56) | .434 (11,02) | .377 (9,58) |
| 13RS081045 | RS 81045 | .803 (20,40) | .520 (13,21) | 1/2 (12,70) |
| 13RS081222 | RS 81222 | .812 (20,63) | .312 (7,93) | 1/8 (3,18) |
| 13RS081223 | RS 81223 | .812 (20,63) | .403 (10,24) | .250 (6,35) |
| 13RS081224 | RS 81224 | .812 (20,63) | .403 (10,24) | .710 (18,03) |
| 13RS081262 | RS 81262 | .825 (20,95) | .203 (5,16) | 5/8 (15,88) |
| 13RS081263 | RS 81263 | .825 (20,95) | .257 (6,53) | .370 (9,40) |
| 13RS083531 | RS 83531 | .835 (21,21) | .540 (13,72) | .188 (4,78) |
| 13RS084101 | RS 84101 | .841 (21,36) | .605 (15,37) | .600 (15,24) |
| 13RS087045 | RS 87045 | .870 (22,10) | .531 (13,49) | 25/64 (9,91) |



SPACERS

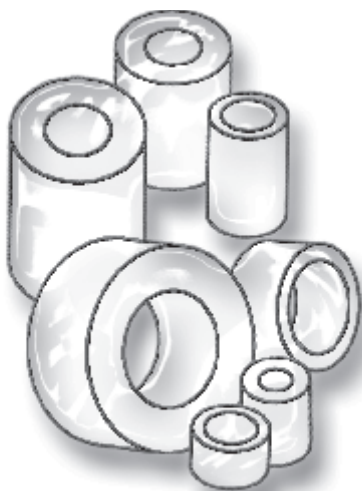
SECTION

V

New Sizes



SPECIAL NYLON SPACERS

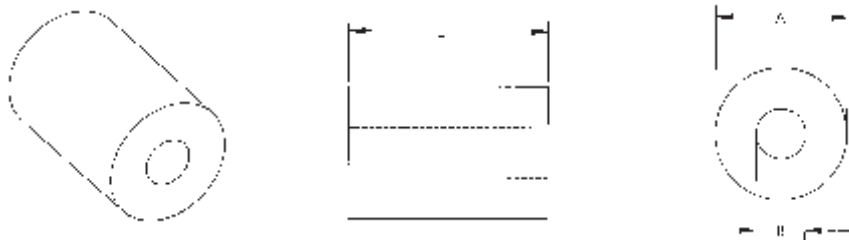


| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|---------------|---------------|---------------|
| 13RS087046 | RS 87046 | .866 (22,00) | 1/4 (6,35) | .394 (10,01) |
| 13RS087047 | RS 87047 | .870 (22,10) | .610 (15,49) | .500 (12,70) |
| 13RS087536 | RS 87536 | .870 (22,10) | .527 (13,39) | .875 (22,23) |
| 13RS087537 | RS 87537 | .875 (22,23) | .330 (8,38) | .375 (9,53) |
| 13RS087539 | RS 87539 | .875 (22,23) | .375 (9,53) | .312 (7,92) |
| 13RS087540 | RS 87540 | .875 (22,23) | .265 (6,73) | .375 (9,53) |
| 13RS087541 | RS 87541 | .875 (22,23) | .325 (8,26) | .250 (6,35) |
| 13RS087542 | RS 87542 | .875 (22,23) | .265 (6,73) | .250 (6,35) |
| 13RS087550 | RS 87550 | .875 (22,23) | .251 (6,38) | .625 (15,88) |
| 13RS087551 | RS 87551 | .875 (22,23) | .265 (6,73) | .156 (3,96) |
| 13RS087555 | RS 87555 | .875 (22,23) | .280 (7,11) | .500 (12,70) |
| 13RS087556 | RS 87556 | .875 (22,23) | .265 (6,73) | 3/4 (19,05) |
| 13RS087557 | RS 87557 | 7/8 (22,23) | 27/64 (10,72) | 3/8 (9,53) |
| 13RS089037 | RS 89037 | .885 (22,48) | .438 (11,13) | .370 (9,40) |
| 13RS089038 | RS 89038 | .907 (23,04) | .780 (19,81) | .315 (8,00) |
| 13RS091775 | RS 91775 | .917 (23,29) | .785 (19,94) | .750 (19,05) |
| 13RS094550 | RS 94550 | .946 (24,03) | .248 (6,30) | .500 (12,70) |
| 13RS094551 | RS 94551 | .984 (24,99) | .509 (12,93) | .984 (24,99) |
| 13RS097518 | RS 97518 | .975 (24,76) | .390 (9,91) | 1.180 (29,97) |
| 13RS098528 | RS 98528 | .985 (25,02) | .285 (7,24) | 1/4 (6,35) |
| 13RS098550 | RS 98550 | .980 (24,89) | .352 (8,84) | 1/2 (12,70) |
| 13RS098552 | RS 98552 | 1.000 (25,40) | .328 (8,33) | 1.000 (25,40) |
| 13RS098551 | RS 98551 | 1" (25,40) | 5/16 (7,94) | 1/4 (6,35) |
| 13RS100008 | RS 100008 | 1" (25,40) | .450 (11,43) | .219 (5,56) |
| 13RS100009 | RS 100009 | 1" (25,40) | .530 (13,46) | .500 (12,70) |
| 13RS100010 | RS 100010 | 1.000 (25,40) | .650 (16,51) | .373 (9,47) |
| 13RS100011 | RS 100011 | .998 (23,35) | .523 (13,28) | .453 (11,51) |
| 13RS100012 | RS 100012 | 1.00 (25,40) | .250 (6,35) | 1/8 (3,18) |
| 13RS100013 | RS 100013 | .990 (25,15) | .344 (8,74) | 5/16 (7,92) |
| 13RS100014 | RS 100014 | 1.00 (25,40) | .260 (6,60) | 3/8 (9,53) |
| 13RS100015 | RS 100015 | 1.000 (25,40) | .344 (8,74) | .435 (11,05) |
| 13RS100018 | RS 100018 | 1.00 (25,40) | .250 (6,35) | 3/16 (4,76) |
| 13RS100020 | RS 100020 | .990 (25,15) | .187 (4,75) | 1/4 (6,35) |
| 13RS100021 | RS 100021 | 1" (25,40) | .250 (6,35) | 1/4 (6,35) |
| 13RS100022 | RS 100022 | 1.00 (25,40) | .375 (9,53) | .800 (20,32) |
| 13RS100025 | RS 100025 | 1.00 (25,40) | .915 (23,24) | 1/4 (6,35) |
| 13RS100026 | RS 100026 | 1.00 (25,40) | .250 (6,35) | 7/16 (11,10) |
| 13RS100030 | RS 100030 | 1.00 (25,40) | .250 (6,35) | .225 (5,72) |
| 13RS100031 | RS 100031 | 1.00 (25,40) | .517 (13,13) | .375 (9,52) |
| 13RS100036 | RS 100036 | 1.000 (25,40) | .385 (9,78) | .340 (8,64) |
| 13RS100037 | RS 100037 | 1.00 (25,40) | .385 (9,78) | 3/8 (9,53) |
| 13RS100038 | RS 100038 | 1.00 (25,40) | .200 (5,08) | 3/8 (9,53) |
| 13RS100043 | RS 100043 | 1.00 (25,40) | .406 (10,31) | 7/16 (11,10) |
| 13RS100050 | RS 100050 | 1.00 (25,40) | .755 (19,18) | 13/64 (5,16) |
| 13RS100051 | RS 100051 | 1.00 (25,40) | .643 (16,33) | .500 (12,70) |



SPACERS

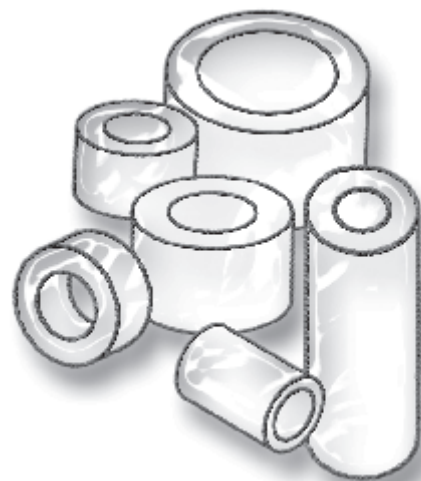
SECTION
V



SPECIAL NYLON SPACERS

New Sizes

| ITEM NUMBER | DESCRIPTION | A | B | L |
|-------------|-------------|----------------|---------------|--------------|
| 13RS100054 | RS 100054 | 1.00 (25,40) | .375 (9,53) | .50 (12,70) |
| 13RS100055 | RS 100055 | 1.080 (27,43) | .950 (24,13) | .875 (22,23) |
| 13RS100056 | RS 100056 | 1.00 (25,40) | .765 (19,43) | 9/16 (14,29) |
| 13RS100057 | RS 100057 | 1.18 (29,97) | .250 (6,35) | .217 (5,51) |
| 13RS100058 | RS 100058 | .984 (24,99) | .366 (9,29) | 3/8 (9,53) |
| 13RS100059 | RS 100059 | 1.000 (25,40) | .517 (13,13) | .687 (17,45) |
| 13RS100060 | RS 100060 | .987 (25,07) | .500 (12,70) | 3/8 (9,53) |
| 13RS100061 | RS 100061 | 1.000 (25,40) | .517 (13,13) | .312 (7,92) |
| 13RS100555 | RS 100555 | .986 (25,04) | .375 (9,53) | 1/4 (6,35) |
| 13RS105720 | RS 105720 | 1.057 (26,85) | .812 (20,63) | 1/8 (3,18) |
| 13RS106212 | RS 106212 | 1.055 (26,80) | .740 (18,80) | 3/16 (4,76) |
| 13RS112027 | RS 112027 | 1.120 (28,45) | 1.015 (25,78) | .375 (9,53) |
| 13RS112028 | RS 112028 | 1.120 (28,45) | .281 (7,14) | 7/16 (11,10) |
| 13RS112030 | RS 112030 | 1.240 (31,50) | .505 (12,83) | .500 (12,70) |
| 13RS125075 | RS 125075 | 1-1/4 (31,75) | .177 (4,50) | 5/8 (15,88) |
| 13RS125080 | RS 125080 | 1.250 (31,75) | .642 (16,31) | .082 (12,08) |
| 13RS125081 | RS 125081 | 1.250 (31,75) | .875 (22,22) | 9/16 (14,29) |
| 13RS125082 | RS 125082 | 1.25 (31,75) | .255 (6,48) | .531 (13,49) |
| 13RS125250 | RS 125250 | 1.240 (31,50) | .312 (7,93) | 1/4 (7,92) |
| 13RS125311 | RS 125311 | 1-1/4 (31,75) | .177 (4,50) | 9/16 (14,29) |
| 13RS125312 | RS 125312 | 1.250 (31,75) | .510 (12,95) | 5/16 (6,35) |
| 13RS125313 | RS 125313 | 1.239 (31,47) | .761 (19,33) | 9/16 (14,29) |
| 13RS125387 | RS 125387 | 1.25 (31,75) | .380 (9,65) | .38 (9,65) |
| 13RS125500 | RS 125500 | 1.24 (31,50) | .307 (7,80) | 1/2 (12,70) |
| 13RS125501 | RS 125501 | 1.250 (31,75) | .400 (10,16) | 5/8 (15,88) |
| 13RS125750 | RS 125750 | 1 1/4 (31,75) | 17/64 (6,76) | .750 (19,05) |
| 13RS126210 | RS 126210 | 1.262 (32,05) | 1.043 (26,49) | .950 (24,13) |
| 13RS132056 | RS 132056 | 1.320 (33,53) | 1.031 (26,19) | .562 (14,27) |
| 13RS131255 | RS 131255 | 1.312 (33,33) | 1.078 (27,38) | 3/4 (19,05) |
| 13RS131256 | RS 131256 | 1-5/16 (33,33) | .385 (9,78) | .100 (2,54) |
| 13RS137520 | RS 137520 | 1.375 (34,93) | .656 (16,66) | 1/8 (3,18) |
| 13RS146050 | RS 146050 | 1.460 (37,08) | .521 (13,23) | .500 (12,70) |
| 13RS150011 | RS 150011 | 1.500 (38,10) | 1.187 (30,15) | 23/64 (9,13) |
| 13RS150050 | RS 150050 | 1.50 (38,10) | 1.02 (25,91) | .50 (12,70) |
| 13RS162590 | RS 162590 | 1.625 (41,28) | 1.388 (35,26) | 3/32 (2,38) |
| 13RS162591 | RS 162591 | 1 1/16 (26,99) | .680 (17,27) | .200 (5,08) |
| 13RS175032 | RS 175032 | 1.750 (44,45) | .928 (23,57) | 9/32 (7,14) |
| 13RS187509 | RS 187509 | 1.188 (30,18) | .813 (20,65) | .250 (6,35) |
| 13RS187510 | RS 187510 | 1.860 (47,24) | .250 (6,35) | 1 (25,40) |
| 13RS231251 | RS 231251 | 2 1/32 (70,97) | 1.420 (36,07) | .350 (8,89) |
| 13RS213580 | RS 213580 | 2.135 (54,23) | 1.760 (44,70) | 1/8 (3,18) |
| 13RS213581 | RS 213581 | 2.13 (54,10) | 1.63 (41,40) | .130 (3,30) |



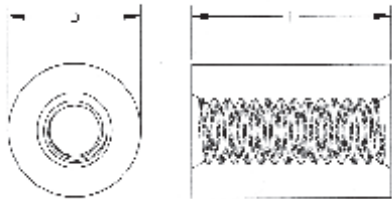
SPACERS

SECTION

V

Molded from Type 66 Nylon and then machine tapped, these spacers are low cost insulators that can be used in many electrical applications.

Special sizes can be made to order from our large untapped spacer inventory.



NOTE:
ON THREADED SPACERS 3/4" AND LONGER, THE TAP IS 3/8" FROM EACH END AND NOT CONTINUOUS THROUGH.

TAPPED NYLON SPACERS

| ITEM NUMBER | DESCRIPTION | D | L | TAPPED |
|-------------|-------------|-------------|---------------|-----------|
| 15TSP055 | TSP 55 | 3/16 (4,76) | 7/16 (11,11) | 2-56 |
| 15TSP056 | TSP 56 | 3/16 (4,76) | 1/2 (12,70) | 2-56 |
| 15TSP106 | TSP 106 | 3/16 (4,76) | 17/64 (6,73) | 4-40* |
| 15TSP057 | TSP 57 | 1/4 (6,35) | 1/4 (6,35) | 2-56 |
| 15TSP001 | TSP 1 | 1/4 (6,35) | 1/4 (6,35) | 4-40* |
| 15TSP050 | TSP 50 | 1/4 (6,35) | 5/16 (7,94) | 4-40* |
| 15TSP002 | TSP 2 | 1/4 (6,35) | 3/8 (9,53) | 4-40* |
| 15TSP003 | TSP 3 | 1/4 (6,35) | 1/2 (12,70) | 4-40* |
| 15TSP036 | TSP 36 | 1/4 (6,35) | 5/8 (15,88) | 4-40* |
| 15TSP004 | TSP 4 | 1/4 (6,35) | 3/4 (19,05) | 4-40* |
| 15TSP037 | TSP 37 | 1/4 (6,35) | 7/8 (22,22) | 4-40* |
| 15TSP005 | TSP 5 | 1/4 (6,35) | 1 (25,40) | 4-40* |
| 15TSP006 | TSP 6 | 1/4 (6,35) | 1/4 (6,35) | 6-32** |
| 15TSP054 | TSP 54 | 1/4 (6,35) | 5/16 (7,94) | 6-32** |
| 15TSP007 | TSP 7 | 1/4 (6,35) | 3/8 (9,53) | 6-32** |
| 15TSP008 | TSP 8 | 1/4 (6,35) | 1/2 (12,70) | 6-32** |
| 15TSP051 | TSP 51 | 1/4 (6,35) | 9/16 (14,29) | 6-32** |
| 15TSP038 | TSP 38 | 1/4 (6,35) | 5/8 (15,88) | 6-32** |
| 15TSP009 | TSP 9 | 1/4 (6,35) | 3/4 (19,05) | 6-32** |
| 15TSP052 | TSP 52 | 1/4 (6,35) | 15/16 (23,81) | 6-32** |
| 15TSP039 | TSP 39 | 1/4 (6,35) | 7/8 (22,22) | 6-32** |
| 15TSP010 | TSP 10 | 1/4 (6,35) | 1 (25,40) | 6-32** |
| 15TSP053 | TSP 53 | 1/4 (6,35) | 1 1/2 (38,10) | 6-32** |
| 15TSP011 | TSP 11 | 1/4 (6,35) | 1/4 (6,35) | 8-32*** |
| 15TSP012 | TSP 12 | 1/4 (6,35) | 3/8 (9,53) | 8-32*** |
| 15TSP013 | TSP 13 | 1/4 (6,35) | 1/2 (12,70) | 8-32*** |
| 15TSP040 | TSP 40 | 1/4 (6,35) | 5/8 (15,88) | 8-32*** |
| 15TSP014 | TSP 14 | 1/4 (6,35) | 3/4 (19,05) | 8-32*** |
| 15TSP041 | TSP 41 | 1/4 (6,35) | 7/8 (22,22) | 8-32*** |
| 15TSP015 | TSP 15 | 1/4 (6,35) | 1 (25,40) | 8-32*** |
| 15TSP016 | TSP 16 | 5/16 (7,94) | 1/4 (6,35) | 8-32*** |
| 15TSP017 | TSP 17 | 5/16 (7,94) | 3/8 (9,53) | 8-32*** |
| 15TSP018 | TSP 18 | 5/16 (7,94) | 1/2 (12,70) | 8-32*** |
| 15TSP042 | TSP 42 | 5/16 (7,94) | 5/8 (15,88) | 8-32*** |
| 15TSP019 | TSP 19 | 5/16 (7,94) | 3/4 (19,05) | 8-32*** |
| 15TSP043 | TSP 43 | 5/16 (7,94) | 7/8 (22,22) | 8-32*** |
| 15TSP020 | TSP 20 | 5/16 (7,94) | 1 (25,40) | 8-32*** |
| 15TSP021 | TSP 21 | 3/8 (9,53) | 1/4 (6,35) | 10-32**** |
| 15TSP022 | TSP 22 | 3/8 (9,53) | 3/8 (9,53) | 10-32**** |
| 15TSP023 | TSP 23 | 3/8 (9,53) | 1/2 (12,70) | 10-32**** |



*NOTE THESE ITEMS ARE AVAILABLE IN METRIC THREADS.

4-40* Available in M3 Thread
6-32** Available in M3.5 Thread

8-32*** Available in M4 Thread
10-32**** Available in M5 Thread



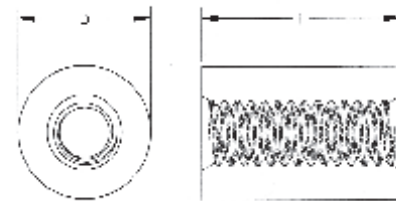
SPACERS

SECTION
V

To order metric threads, simply add an M to the Part Number.

EXAMPLE: 15TSP006 with a 6-32 Thread,

Becomes 15MTSP006 with a M3.5 Thread



TAPPED NYLON SPACERS

| ITEM NUMBER | DESCRIPTION | D | L | TAPPED |
|-------------|-------------|-------------|--------------|-----------|
| 15TSP044 | TSP 44 | 3/8 (9,53) | 5/8 (15,88) | 10-32**** |
| 15TSP024 | TSP 24 | 3/8 (9,53) | 3/4 (19,05) | 10-32**** |
| 15TSP045 | TSP 45 | 3/8 (9,53) | 7/8 (22,22) | 10-32**** |
| 15TSP025 | TSP 25 | 3/8 (9,53) | 1 (25,40) | 10-32**** |
| 15TSP026 | TSP 26 | 1/2 (12,70) | 1/4 (6,35) | 10-32**** |
| 15TSP027 | TSP 27 | 1/2 (12,70) | 3/8 (9,53) | 10-32**** |
| 15TSP028 | TSP 28 | 1/2 (12,70) | 1/2 (12,70) | 10-32**** |
| 15TSP046 | TSP 46 | 1/2 (12,70) | 5/8 (15,88) | 10-32**** |
| 15TSP029 | TSP 29 | 1/2 (12,70) | 3/4 (19,05) | 10-32**** |
| 15TSP047 | TSP 47 | 1/2 (12,70) | 7/8 (22,22) | 10-32**** |
| 15TSP030 | TSP 30 | 1/2 (12,70) | 1 (25,40) | 10-32**** |
| 15TSP031 | TSP 31 | 1/2 (12,70) | 1/4 (6,35) | 1/4-20 |
| 15TSP032 | TSP 32 | 1/2 (12,70) | 3/8 (9,53) | 1/4-20 |
| 15TSP033 | TSP 33 | 1/2 (12,70) | 1/2 (12,70) | 1/4-20 |
| 15TSP048 | TSP 48 | 1/2 (12,70) | 5/8 (15,88) | 1/4-20 |
| 15TSP034 | TSP 34 | 1/2 (12,70) | 3/4 (19,05) | 1/4-20 |
| 15TSP049 | TSP 49 | 1/2 (12,70) | 7/8 (22,22) | 1/4-20 |
| 15TSP035 | TSP 35 | 1/2 (12,70) | 1 (25,40) | 1/4-20 |
| 15TSP058 | TSP 58 | 3/16 (4,76) | 3/8 (9,53) | 2-56 |
| 15TSP099 | TSP 99 | 3/16 (4,76) | 5/32 (3,97) | 4-40 |
| 15TSP100 | TSP 100 | 3/16 (4,76) | 3/16 (4,76) | 4-40 |
| 15TSP101 | TSP 101 | 3/16 (4,76) | 1/4 (6,35) | 4-40 |
| 15TSP102 | TSP 102 | 3/16 (4,76) | 5/16 (7,94) | 4-40 |
| 15TSP103 | TSP 103 | 3/16 (4,76) | 3/8 (9,53) | 4-40 |
| 15TSP104 | TSP 104 | 3/16 (4,76) | 7/16 (11,11) | 4-40 |
| 15TSP105 | TSP 105 | 3/16 (4,76) | 1/2 (12,70) | 4-40 |
| 15TSP107 | TSP 107 | 3/16 (4,76) | 5/8 (15,88) | 4-40 |
| 15TSP109 | TSP 109 | 3/16 (4,76) | 3/4 (19,05) | 4-40 |
| 15TSP111 | TSP 111 | 3/16 (4,76) | 7/8 (22,22) | 4-40 |
| 15TSP115 | TSP 115 | 3/16 (4,76) | 1 | 4-40 |
| 15TSP140 | TSP 140 | 3/16 (4,76) | 3/16 (25,40) | 6-32 |
| 15TSP141 | TSP 141 | 3/16 (4,76) | 1/4 (4,76) | 6-32 |
| 15TSP142 | TSP 142 | 3/16 (4,76) | 5/16 (6,35) | 6-32 |
| 15TSP143 | TSP 143 | 3/16 (4,76) | 3/8 (7,94) | 6-32 |
| 15TSP144 | TSP 144 | 3/16 (4,76) | 7/16 (9,53) | 6-32 |
| 15TSP145 | TSP 145 | 3/16 (4,76) | 1/2 (11,11) | 6-32 |
| 15TSP147 | TSP 147 | 3/16 (4,76) | 5/8 (12,70) | 6-32 |
| 15TSP149 | TSP 149 | 3/16 (4,76) | 3/4 (15,88) | 6-32 |
| 15TSP151 | TSP 151 | 3/16 (4,76) | 7/8 (19,05) | 6-32 |
| 15TSP155 | TSP 155 | 3/16 (4,76) | 1 (22,22) | 6-32 |
| | | | (25,40) | |

NOTE:
ON THREADED SPACERS 3/4" AND LONGER, THE TAP IS 3/8" FROM EACH END AND NOT CONTINUOUS THROUGH.



*NOTE THESE ITEMS ARE AVAILABLE IN METRIC THREADS.

4-40* Available in M3 Thread
6-32** Available in M3.5 Thread

8-32*** Available in M4 Thread
10-32**** Available in M5 Thread

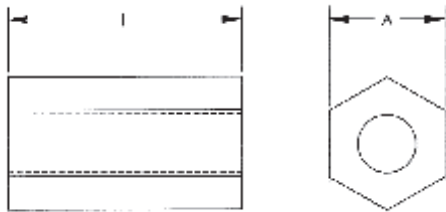


SPACERS

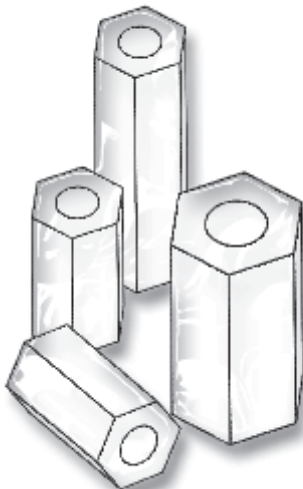
SECTION

V

HEX NYLON SPACERS



New Sizes



Self-threading, use with tapping screws designed for plastics.

| ITEM NUMBER | DESCRIPTION | ID | SELF TAPPING SCREW | L | A |
|-------------|-------------|-------------|--------------------|---------------|------|
| 35HSP112 | HSP 112 | .072 (1,83) | 2 | 7/16 (11,11) | 3/16 |
| 35HSP115 | HSP 115 | .072 (1,83) | 2 | 5/16 (7,93) | 3/16 |
| 35HSP114 | HSP 114 | .072 (1,83) | 2 | 3/8 (9,53) | 3/16 |
| 35HSP113 | HSP 113 | .075 (1,91) | 2 | 9/16 (14,28) | 3/16 |
| 35HSP101 | HSP 101 | .091 (2,31) | 4 | 1/4 (6,35) | 3/16 |
| 35HSP102 | HSP 102 | .091 (2,31) | 4 | 3/8 (9,53) | 3/16 |
| 35HSP124 | HSP 124 | .091 (2,31) | 4 | 3/4 (19,05) | 3/16 |
| 35HSP103 | HSP 103 | .091 (2,31) | 4 | 1/2 (12,70) | 3/16 |
| 35HSP111 | HSP 111 | .091 (2,31) | 4 | 9/16 (14,27) | 3/16 |
| 35HSP119 | HSP 119 | .091 (2,31) | 4 | 5/8 (15,88) | 3/16 |
| 35HSP104 | HSP 104 | .091 (2,31) | 4 | 7/16 (11,10) | 3/16 |
| 35HSP116 | HSP 116 | .091 (2,31) | 4 | 7/8 (22,22) | 3/16 |
| 35HSP106 | HSP 106 | .115 (2,92) | 6 | 1/4 (6,35) | 3/16 |
| 35HSP107 | HSP 107 | .115 (2,92) | 6 | 3/8 (9,53) | 3/16 |
| 35HSP108 | HSP 108 | .115 (2,92) | 6 | 1/2 (12,70) | 3/16 |
| 35HSP120 | HSP 120 | .115 (2,92) | 6 | 5/8 (15,88) | 3/16 |
| 35HSP109 | HSP 109 | .115 (2,92) | 6 | 3/4 (19,05) | 3/16 |
| 35HSP001 | HSP 1 | .091 (2,31) | 4 | 1/4 (6,35) | 1/4 |
| 35HSP022 | HSP 22 | .091 (2,31) | 4 | 5/16 (7,92) | 1/4 |
| 35HSP002 | HSP 2 | .091 (2,31) | 4 | 3/8 (9,53) | 1/4 |
| 35HSP029 | HSP 29 | .091 (2,31) | 4 | 7/16 (11,10) | 1/4 |
| 35HSP003 | HSP 3 | .091 (2,31) | 4 | 1/2 (12,70) | 1/4 |
| 35HSP024 | HSP 24 | .091 (2,31) | 4 | 9/16 (14,27) | 1/4 |
| 35HSP019 | HSP 19 | .091 (2,31) | 4 | 5/8 (15,88) | 1/4 |
| 35HSP004 | HSP 4 | .091 (2,31) | 4 | 3/4 (19,05) | 1/4 |
| 35HSP016 | HSP 16 | .091 (2,31) | 4 | 7/8 (22,22) | 1/4 |
| 35HSP005 | HSP 5 | .091 (2,31) | 4 | 1 (25,40) | 1/4 |
| 35HSP037 | HSP 37 | .094 (2,39) | 4 | .826 (20,98) | 1/4 |
| 35HSP032 | HSP 32 | .091 (2,31) | 4 | 1-1/2 (38,10) | 1/4 |
| 35HSP038 | HSP 38 | .111 (2,82) | 6 | 9/16 (14,29) | 1/4 |
| 35HSP035 | HSP 35 | .115 (2,92) | 6 | 3/16 (4,75) | 1/4 |
| 35HSP006 | HSP 6 | .115 (2,92) | 6 | 1/4 (6,35) | 1/4 |
| 35HSP007 | HSP 7 | .115 (2,92) | 6 | 3/8 (9,53) | 1/4 |
| 35HSP040 | HSP 40 | .111 (2,82) | 6 | 7/16 (11,11) | 1/4 |
| 35HSP008 | HSP 8 | .115 (2,92) | 6 | 1/2 (12,70) | 1/4 |
| 35HSP020 | HSP 20 | .115 (2,92) | 6 | 5/8 (15,88) | 1/4 |
| 35HSP009 | HSP 9 | .115 (2,92) | 6 | 3/4 (19,05) | 1/4 |
| 35HSP017 | HSP 17 | .115 (2,92) | 6 | 7/8 (22,22) | 1/4 |
| 35HSP010 | HSP 10 | .115 (2,92) | 6 | 1 (25,40) | 1/4 |
| 35HSP023 | HSP 23 | .115 (2,92) | 6 | 1-1/4 (31,75) | 1/4 |
| 35HSP011 | HSP 11 | .140 (3,56) | 8 | 1/4 (6,35) | 1/4 |
| 35HSP012 | HSP 12 | .140 (3,56) | 8 | 3/8 (9,53) | 1/4 |
| 35HSP013 | HSP 13 | .140 (3,56) | 8 | 1/2 (12,70) | 1/4 |
| 35HSP021 | HSP 21 | .140 (3,56) | 8 | 5/8 (15,88) | 1/4 |
| 35HSP014 | HSP 14 | .140 (3,56) | 8 | 3/4 (19,05) | 1/4 |
| 35HSP018 | HSP 18 | .140 (3,56) | 8 | 7/8 (22,22) | 1/4 |
| 35HSP015 | HSP 15 | .140 (3,56) | 8 | 1 (25,40) | 1/4 |
| 35HSP208 | HSP 208 | .115 (2,92) | 6 | 1/2 (12,70) | 5/16 |
| 35HSP220 | HSP 220 | .115 (2,92) | 6 | 7/8 (22,23) | 5/16 |
| 35HSP225 | HSP 225 | .115 (2,92) | 6 | 1-1/8 (28,58) | 5/16 |
| 35HSP309 | HSP 309 | .110 (2,74) | 6 | 3/4 (19,05) | 3/8 |
| 35HSP207 | HSP 207 | .225 (5,72) | 1/4 | 7/32 (5,56) | 5/16 |
| 35HSP400 | HSP 400 | .195 (4,95) | 1/4-20 | 1/2 (12,70) | 3/8 |



SPACERS

*NOTE THESE ITEMS ARE AVAILABLE IN METRIC THREADS.

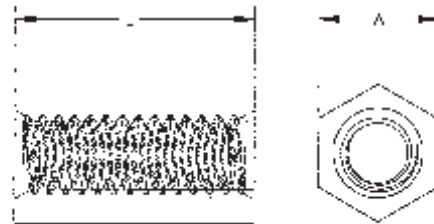
4-40* Available in M3 Thread

6-32** Available in M3.5 Thread

8-32*** Available in M 4 Thread

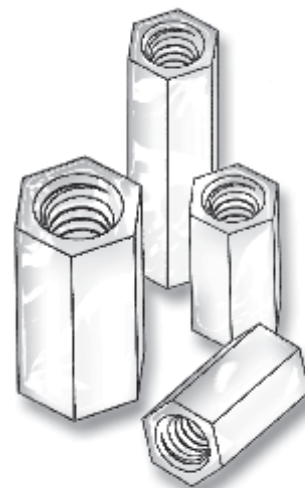
| ITEM NUMBER | DESCRIPTION | TAPPED | L | A | |
|-------------|-------------|---------|---------------|------|--------------------|
| 14HTSP112 | HTSP 112 | 2-56 | 7/16 (11,11) | 3/16 | |
| 14HTSP115 | HTSP 115 | 2-56 | 5/16 (7,94) | 3/16 | |
| 14HTSP114 | HTSP 114 | 2-56 | 3/8 (9,53) | 3/16 | |
| 14HTSP113 | HTSP 113 | 2-56 | 9/16 (14,28) | 3/16 | |
| 14HTSP101 | HTSP 101 | 4-40* | 1/4 (6,35) | 3/16 | |
| 14HTSP102 | HTSP 102 | 4-40* | 3/8 (9,53) | 3/16 | |
| 14HTSP124 | HTSP 124 | 4-40* | 3/4 (19,05) | 3/16 | |
| 14HTSP103 | HTSP 103 | 4-40* | 1/2 (12,70) | 3/16 | |
| 14HTSP111 | HTSP 111 | 4-40* | 9/16 (14,27) | 3/16 | |
| 14HTSP119 | HTSP 119 | 4-40* | 5/8 (15,88) | 3/16 | |
| 14HTSP104 | HTSP 104 | 4-40* | 7/16 (11,10) | 3/16 | |
| 14HTSP116 | HTSP 116 | 4-40* | 7/8 (22,22) | 3/16 | |
| 14HTSP106 | HTSP 106 | 6-32** | 1/4 (6,35) | 3/16 | |
| 14HTSP107 | HTSP 107 | 6-32** | 3/8 (9,53) | 3/16 | |
| 14HTSP108 | HTSP 108 | 6-32** | 1/2 (12,70) | 3/16 | |
| 14HTSP120 | HTSP 120 | 6-32** | 5/8 (15,88) | 3/16 | |
| 14HTSP109 | HTSP 109 | 6-32** | 3/4 (19,05) | 3/16 | |
| 14HTSP036 | HTSP 36 | 6-32** | 1-1/2 (38,10) | 1/4 | NOTE: no thru hole |
| 14HTSP001 | HTSP 1 | 4-40* | 1/4 (6,35) | 1/4 | |
| 14HTSP022 | HTSP 22 | 4-40* | 5/16 (7,92) | 1/4 | |
| 14HTSP002 | HTSP 2 | 4-40* | 3/8 (9,53) | 1/4 | |
| 14HTSP029 | HTSP 29 | 4-40* | 7/16 (11,10) | 1/4 | |
| 14HTSP003 | HTSP 3 | 4-40* | 1/2 (12,70) | 1/4 | |
| 14HTSP024 | HTSP 24 | 4-40* | 9/16 (14,27) | 1/4 | |
| 14HTSP019 | HTSP 19 | 4-40* | 5/8 (15,88) | 1/4 | |
| 14HTSP004 | HTSP 4 | 4-40* | 3/4 (19,05) | 1/4 | |
| 14HTSP016 | HTSP 16 | 4-40* | 7/8 (22,22) | 1/4 | |
| 14HTSP037 | HTSP 37 | 4-40* | .826 (20,98) | 1/4 | |
| 14HTSP005 | HTSP 5 | 4-40* | 1 (25,40) | 1/4 | |
| 14HTSP032 | HTSP 32 | 4-40* | 1-1/2 (38,10) | 1/4 | |
| 14HTSP038 | HTSP 38 | 6-32** | 9/16(14,29) | 1/4 | |
| 14HTSP039 | HTSP 39 | 4-40* | 1-3/8 (34,93) | 1/4 | NOTE: no thru hole |
| 14HTSP035 | HTSP 35 | 6-32** | 3/16 (4,75) | 1/4 | |
| 14HTSP006 | HTSP 6 | 6-32** | 1/4 (6,35) | 1/4 | |
| 14HTSP007 | HTSP 7 | 6-32** | 3/8 (9,53) | 1/4 | |
| 14HTSP040 | HTSP 40 | 6-32** | 7/16 (11,11) | 1/4 | |
| 14HTSP008 | HTSP 8 | 6-32** | 1/2 (12,70) | 1/4 | |
| 14HTSP020 | HTSP 20 | 6-32** | 5/8 (15,88) | 1/4 | |
| 14HTSP009 | HTSP 9 | 6-32** | 3/4 (19,05) | 1/4 | |
| 14HTSP017 | HTSP 17 | 6-32** | 7/8 (22,22) | 1/4 | |
| 14HTSP010 | HTSP 10 | 6-32** | 1 (25,40) | 1/4 | |
| 14HTSP023 | HTSP 23 | 6-32** | 1-1/4 (31,75) | 1/4 | |
| 14HTSP011 | HTSP 11 | 8-32*** | 1/4 (6,35) | 1/4 | |
| 14HTSP012 | HTSP 12 | 8-32*** | 3/8 (9,53) | 1/4 | |
| 14HTSP013 | HTSP 13 | 8-32*** | 1/2 (12,70) | 1/4 | |
| 14HTSP021 | HTSP 21 | 8-32*** | 5/8 (15,88) | 1/4 | |
| 14HTSP014 | HTSP 14 | 8-32*** | 3/4 (19,05) | 1/4 | |
| 14HTSP018 | HTSP 18 | 8-32*** | 7/8 (22,22) | 1/4 | |
| 14HTSP015 | HTSP 15 | 8-32*** | 1 (25,40) | 1/4 | |
| 14HTSP208 | HTSP 208 | 6-32** | 1/2 (12,70) | 5/16 | |
| 14HTSP220 | HTSP 220 | 6-32** | 7/8 (22,22) | 5/16 | |
| 14HTSP225 | HTSP 225 | 6-32** | 1-1/8 (28,58) | 5/16 | |
| 14HTSP309 | HTSP 309 | 6-32** | 3/4 (19,05) | 3/8 | |
| 14HTSP207 | HTSP 207 | 1/4-20 | 7/32 (5,56) | 5/16 | |
| 14HTSP400 | HTSP 400 | 1/4-20 | 1/2 (12,70) | 3/8 | |

HEX NYLON TAPPED SPACERS



NOTE:
ON THREADED SPACERS 3/4" AND LONGER, THE TAP IS 3/8" MINIMUM FROM EACH END AND NOT CONTINUOUS THROUGH.

New Sizes



To order metric threads, simply add an M to the Part Number.

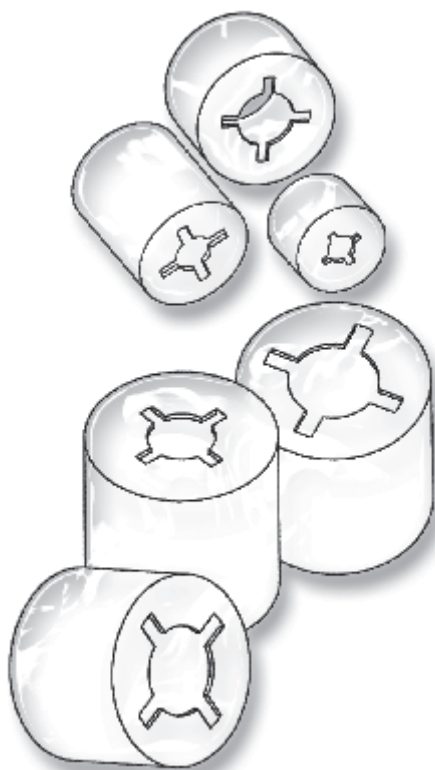
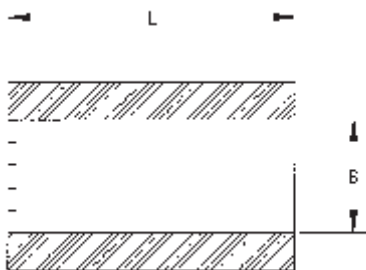
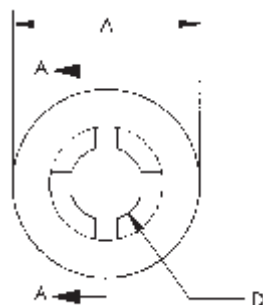
EXAMPLE: 14HTSP106 with a 6-32 Thread,
Becomes 14MHTSP106 with a M3.5 Thread



SPACERS

SECTION

V



NYLON RETAINING SPACERS

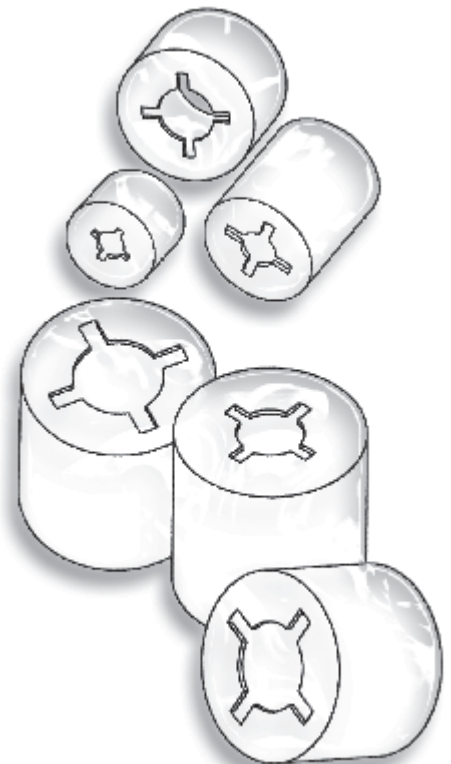
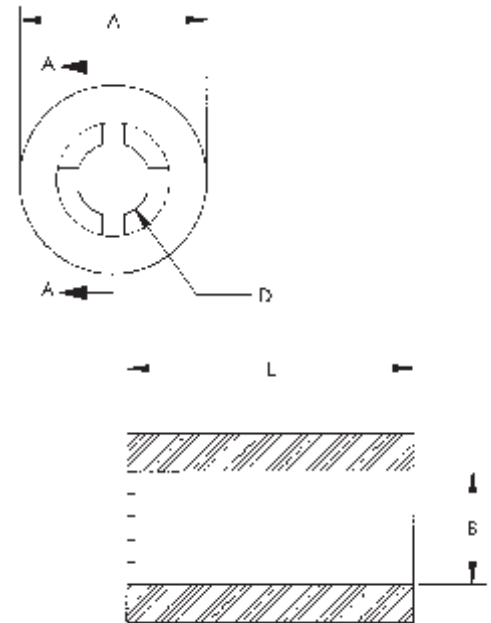
Similar to our standard spacers, but with a specially configured ID designed to grip the screw shank. The spacer remains attached to the screw, for quick, easy assembly.

| ITEM NUMBER | A | B | D | L |
|-------------|-------------|-------------|-------------|---------------|
| 13SPRT031 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 1/8 (3,18) |
| 13SPRT032 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 3/16 (4,76) |
| 13SPRT033 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 1/4 (6,35) |
| 13SPRT034 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 5/16 (7,94) |
| 13SPRT035 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 3/8 (9,53) |
| 13SPRT036 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 7/16 (11,11) |
| 13SPRT037 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 1/2 (12,70) |
| 13SPRT038 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 9/16 (14,29) |
| 13SPRT039 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 5/8 (15,88) |
| 13SPRT040 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 11/16 (17,46) |
| 13SPRT041 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 3/4 (19,05) |
| 13SPRT042 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 13/16 (20,64) |
| 13SPRT043 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 7/8 (22,23) |
| 13SPRT044 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 15/16 (23,81) |
| 13SPRT045 | 1/4 (6,35) | .115 (2,92) | .078 (1,98) | 1 (25,40) |
| 13SPRT046 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 1/8 (3,18) |
| 13SPRT047 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 3/16 (4,76) |
| 13SPRT048 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 1/4 (6,35) |
| 13SPRT049 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 5/16 (7,94) |
| 13SPRT050 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 3/8 (9,53) |
| 13SPRT051 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 7/16 (11,11) |
| 13SPRT052 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 1/2 (12,70) |
| 13SPRT053 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 9/16 (14,29) |
| 13SPRT054 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 5/8 (15,88) |
| 13SPRT055 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 11/16 (17,46) |
| 13SPRT056 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 3/4 (19,05) |
| 13SPRT057 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 13/16 (20,64) |
| 13SPRT058 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 7/8 (22,23) |
| 13SPRT059 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 15/16 (23,81) |
| 13SPRT060 | 1/4 (6,35) | .156 (3,96) | .102 (2,59) | 1 (25,40) |
| 13SPRT061 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 1/8 (3,18) |
| 13SPRT062 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 3/16 (4,76) |
| 13SPRT063 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 1/4 (6,35) |
| 13SPRT064 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 5/16 (7,94) |
| 13SPRT065 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 3/8 (9,53) |
| 13SPRT066 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 7/16 (11,11) |
| 13SPRT067 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 1/2 (12,70) |
| 13SPRT068 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 9/16 (14,29) |
| 13SPRT069 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 5/8 (15,88) |
| 13SPRT070 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 11/16 (17,46) |
| 13SPRT071 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 3/4 (19,05) |
| 13SPRT072 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 13/16 (20,64) |
| 13SPRT073 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 7/8 (22,23) |
| 13SPRT074 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 15/16 (23,81) |
| 13SPRT075 | 5/16 (7,94) | .198 (5,03) | .128 (3,25) | 1 (25,40) |

NYLON RETAINING SPACERS

Similar to our standard spacers, but with a specially configured ID designed to grip the screw shank. The spacer remains attached to the screw, for quick, easy assembly.

| ITEM NUMBER | A | B | D | L |
|-------------|-------------|-------------|-------------|---------------|
| 13SPRT076 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 1/8 (3,18) |
| 13SPRT077 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 3/16 (4,76) |
| 13SPRT078 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 1/4 (6,35) |
| 13SPRT079 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 5/16 (7,94) |
| 13SPRT080 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 3/8 (9,53) |
| 13SPRT081 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 7/16 (11,11) |
| 13SPRT082 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 1/2 (12,70) |
| 13SPRT083 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 9/16 (14,29) |
| 13SPRT084 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 5/8 (15,88) |
| 13SPRT085 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 11/16 (17,46) |
| 13SPRT086 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 3/4 (19,05) |
| 13SPRT087 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 13/16 (20,64) |
| 13SPRT088 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 7/8 (22,23) |
| 13SPRT089 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 15/16 (23,81) |
| 13SPRT090 | 3/8 (9,53) | .240 (6,10) | .152 (3,86) | 1 (25,40) |
| 13SPRT091 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 1/8 (3,18) |
| 13SPRT092 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 3/16 (4,76) |
| 13SPRT093 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 1/4 (6,35) |
| 13SPRT094 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 5/16 (7,94) |
| 13SPRT095 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 3/8 (9,53) |
| 13SPRT096 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 7/16 (11,11) |
| 13SPRT097 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 1/2 (12,70) |
| 13SPRT098 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 9/16 (14,29) |
| 13SPRT099 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 5/8 (15,88) |
| 13SPRT100 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 11/16 (17,46) |
| 13SPRT101 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 3/4 (19,05) |
| 13SPRT102 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 13/16 (20,64) |
| 13SPRT103 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 7/8 (22,23) |
| 13SPRT104 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 15/16 (23,81) |
| 13SPRT105 | 1/2 (12,70) | .277 (7,04) | .177 (4,50) | 1 (25,40) |
| 13SPRT106 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 1/8 (3,18) |
| 13SPRT107 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 3/16 (4,76) |
| 13SPRT108 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 1/4 (6,35) |
| 13SPRT109 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 5/16 (7,94) |
| 13SPRT110 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 3/8 (9,53) |
| 13SPRT111 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 7/16 (11,11) |
| 13SPRT112 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 1/2 (12,70) |
| 13SPRT113 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 9/16 (14,29) |
| 13SPRT114 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 5/8 (15,88) |
| 13SPRT115 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 11/16 (17,46) |
| 13SPRT116 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 3/4 (19,05) |
| 13SPRT117 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 13/16 (20,64) |
| 13SPRT118 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 7/8 (22,23) |
| 13SPRT119 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 15/16 (23,81) |
| 13SPRT120 | 1/2 (12,70) | .375 (9,53) | .234 (5,94) | 1 (25,40) |



PANEL FASTENERS AND HOLE PLUGS

SECTION VI

SNAP TACKS

Watch Instructional Video

[mms://www.microplastics.com/productvideos/SnapTacks.asf](https://www.microplastics.com/productvideos/SnapTacks.asf)

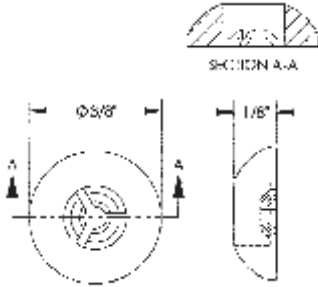
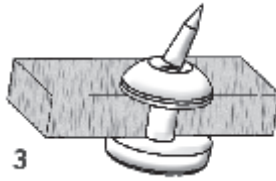
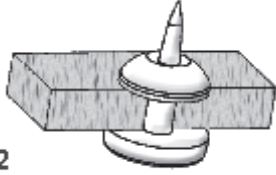
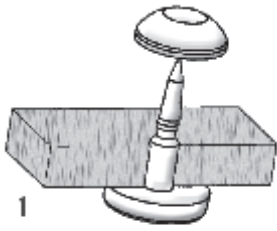
Micro Plastics' 2 piece snap tack consists of a male acetal tack and a female nylon button retainer. The tack has a sharp point for piercing soft materials that will not require a pre-punched hole.

Easily assembled by pushing the tack through the front of the soft material and pushing the retainer to the **second** detent - no tools required.

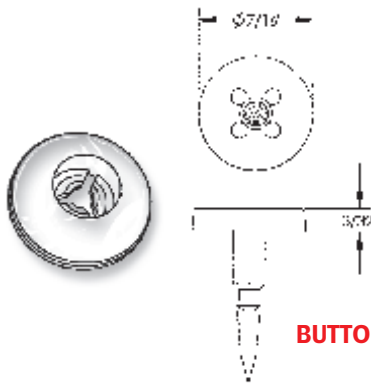
After assembly simply break off the pointed end and the remaining end is shielded by the retainer.

CAUTION the point is very sharp and can pierce your skin.

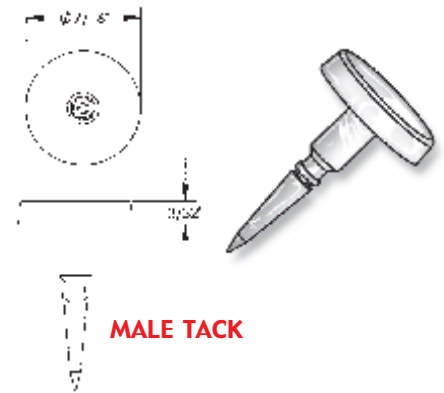
Can be used as an emergency button - no sewing expertise, thread, or needle required.



FEMALE BUTTON



BUTTON MALE TACK



MALE TACK

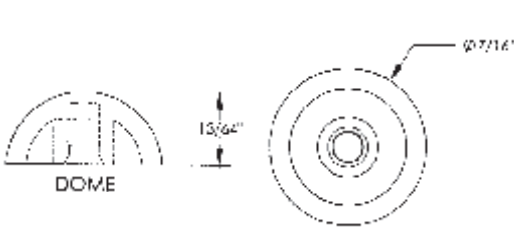
| ITEM NUMBER | DESCRIPTION | ITEM NUMBER | DESCRIPTION | ITEM NUMBER | DESCRIPTION |
|-------------|--------------------|--------------|------------------------|-------------|-----------------|
| 27STF375 | 3/8" Female Button | 27STMB430188 | 3/16" Button Male Tack | 27STM430062 | 1/16" Male Tack |
| | | | | 27STM430125 | 1/8" Male Tack |
| | | | | 27STM430188 | 3/16" Male Tack |

DOME AND TACK

Watch Instructional Video

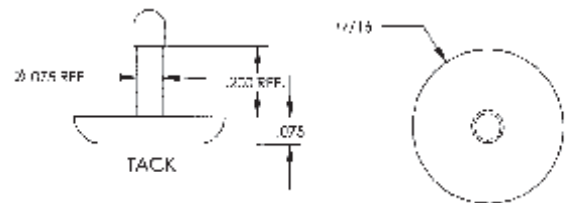
[mms://www.microplastics.com/productvideos/DomeAndTack](https://www.microplastics.com/productvideos/DomeAndTack)

Micro Plastics' two piece dome and tack molded nylon fastener has the locking mechanism totally enclosed to prevent tampering. No exterior sharp edges after part is assembled.



| ITEM NUMBER | DESCRIPTION |
|-------------|-------------|
| 27DM070 | DOME |

PANEL THICKNESS - 3/16"



| ITEM NUMBER | DESCRIPTION |
|-------------|-------------|
| 27TM070188 | TACK |

PANEL FASTENERS AND HOLE PLUGS

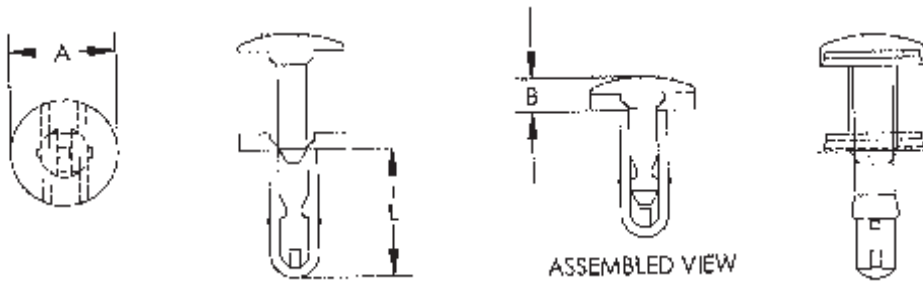
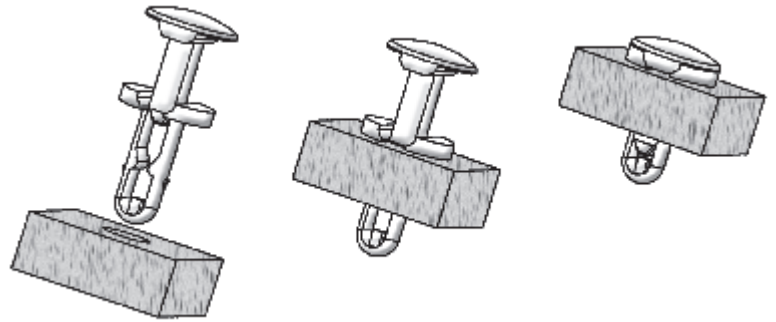
SECTION
VI

PANEL CINCHING RIVETS

Watch Instructional Video

[mms://www.microplastics.com/productvideos/PanelCinchingRivet.asf](https://www.microplastics.com/productvideos/PanelCinchingRivet.asf)

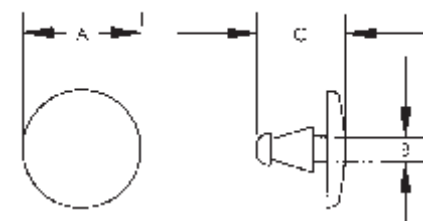
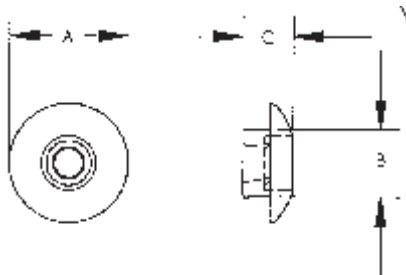
Micro Plastics' one-piece molded nylon panel cinching rivet consisting of two elements, the "T" shaped drive pin and "U" shaped body which are joined by thin webs. To install the fastener, insert the "U" shaped body into the panel hole and rap the head of the "T" shaped pin with a hammer or impact tool.



| PART NUMBER | HOLE SIZE | MAX. PANEL THICKNESS | "A" HEAD DIA. | "L" LENGTH * | "B" ASSEMBLED HEAD HEIGHT +/- .015 |
|-------------|-------------|-------------------------|---------------|--------------|------------------------------------|
| 27CINCH01 | .125 (3,18) | 0.020-0.109 (0,51-2,77) | 1/4" (6,35) | .357 (9,07) | .080 (2,03) |
| 27CINCH02 | .187 (4,75) | 0.020-0.174 (0,51-4,42) | 3/8" (9,53) | .450 (11,08) | .120 (3,38) |
| 27CINCH03 | .250 (6,35) | 0.020-0.109 (0,51-2,77) | 3/8" (9,53) | .475 (12,07) | .115 (2,92) |
| 27CINCH04 | .250 (6,35) | 0.020-0.174 (0,51-4,42) | 5/8" (15,88) | .555 (14,10) | .117 (2,97) |

FEMALE & MALE RIVET

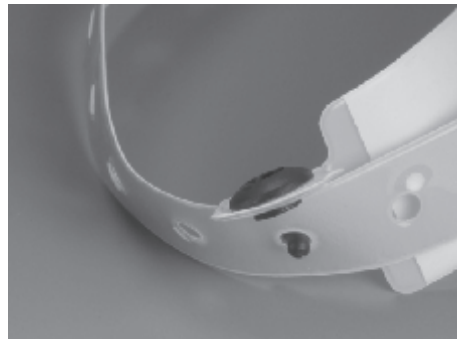
Two piece Nylon 6/6 rivet for flexible plastic I.D. or security bracelet. Male and female rivets snap into pre-punched holes in plastic bracelet and then snap together. Very difficult to remove without damaging. Parts are molded in natural Nylon 6/6, black is also available upon request.



FEMALE RIVET



MALE RIVET



| ITEM NUMBER | A | B | C |
|-------------|-------------|-------------|-------------|
| 27MRF22 | .380 (9,65) | .213 (5,41) | .160 (4,06) |

| ITEM NUMBER | A | POST DIAMETER B | C |
|-------------|-------------|-----------------|-------------|
| 27MRM218125 | .375 (9,53) | .081 (2,06) | .283 (7,19) |

PANEL FASTENERS AND HOLE PLUGS

SECTION VI

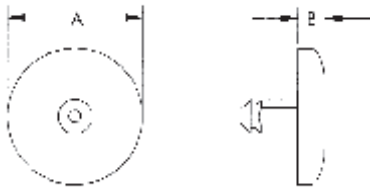
NYLON MINI RIVETS

Micro Plastics' Mini Rivets consist of a male and female component. Mini Rivets are used to fasten a variety of materials. Simply press together for fast, easy assembly. Male and female rivets are packaged and sold separately. Mini Rivets are molded in natural Nylon 6/6 but are available in black upon request.

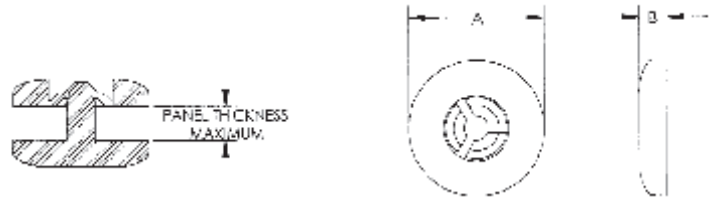


New Sizes

MALE MINI RIVET



FEMALE MINI RIVET



| PART NUMBER | DESCRIPTION | PANEL THICKNESS | A | B | POST DIAMETER |
|-------------|-------------------|-----------------|-------------|-------------|---------------|
| 27MRM060010 | MALE MINI RIVET | .010 (0,25) | 1/4" (6,35) | .050 (1,27) | .060 (1,52) |
| 27MRM060020 | MALE MINI RIVET | .020 (0,51) | 1/4" (6,35) | .050 (1,27) | .060 (1,52) |
| 27MRM060030 | MALE MINI RIVET | .030 (0,76) | 1/4" (6,35) | .050 (1,27) | .060 (1,52) |
| 27MRM060045 | MALE MINI RIVET | .045 (1,14) | 1/4" (6,35) | .050 (1,27) | .060 (1,52) |
| 27MRM060062 | MALE MINI RIVET | .062 (1,57) | 1/4" (6,35) | .050 (1,27) | .060 (1,52) |
| 27MRM060075 | MALE MINI RIVET | .075 (1,91) | 1/4" (6,35) | .050 (1,27) | .060 (1,52) |
| *27MRF06 | FEMALE MINI RIVET | | 1/4" (6,35) | .050 (1,27) | .060 (1,52) |

* FOR USE WITH ALL .060 MALE RIVETS

| PART NUMBER | DESCRIPTION | PANEL THICKNESS | A | B | POST DIAMETER |
|-------------|-------------------|-----------------|-------------|-------------|---------------|
| 27MRM090020 | MALE MINI RIVET | .020 (0,51) | 3/8" (9,53) | .075 (1,91) | .094 (2,39) |
| 27MRM090032 | MALE MINI RIVET | .032 (0,81) | 3/8" (9,53) | .075 (1,91) | .094 (2,39) |
| 27MRM090045 | MALE MINI RIVET | .045 (1,14) | 3/8" (9,53) | .075 (1,91) | .094 (2,39) |
| 27MRM090062 | MALE MINI RIVET | .062 (1,57) | 3/8" (9,53) | .075 (1,91) | .094 (2,39) |
| 27MRM090075 | MALE MINI RIVET | .075 (1,91) | 3/8" (9,53) | .075 (1,91) | .094 (2,39) |
| 27MRM090090 | MALE MINI RIVET | .090 (2,29) | 3/8" (9,53) | .075 (1,91) | .094 (2,39) |
| 27MPM090112 | MALE MINI RIVET | .125 (3,18) | 3/8" (9,53) | .075 (1,91) | .094 (2,39) |
| 27MRM090312 | MALE MINI RIVET | .312 (7,92) | 3/8" (9,53) | .075 (1,91) | .094 (2,39) |
| *27MRF09 | FEMALE MINI RIVET | | 3/8" (9,53) | .075 (1,91) | .094 (2,39) |

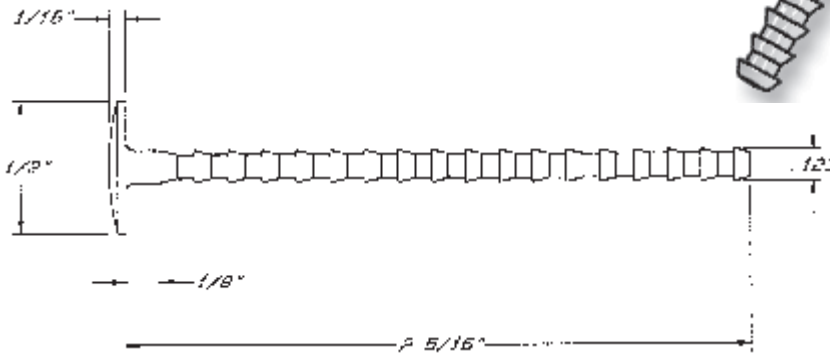
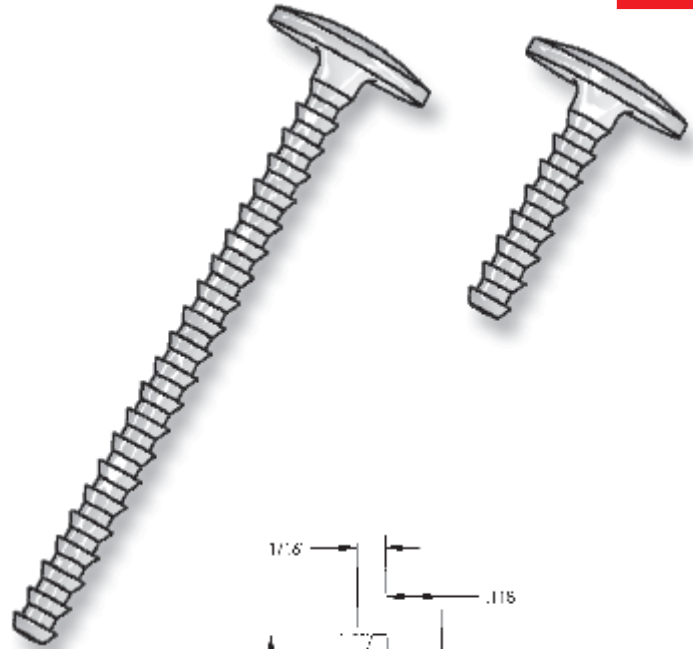
* FOR USE WITH ALL .090 MALE RIVETS

| PART NUMBER | DESCRIPTION | PANEL THICKNESS | A | B | POST DIAMETER |
|-------------|-------------------|-----------------|--------------|-------------|---------------|
| 27MRM125032 | MALE MINI RIVET | .032 (0,81) | 1/2" (12,70) | .100 (2,54) | .125 (3,18) |
| 27MRM125045 | MALE MINI RIVET | .045 (1,14) | 1/2" (12,70) | .100 (2,54) | .125 (3,18) |
| 27MRM125062 | MALE MINI RIVET | .062 (1,57) | 1/2" (12,70) | .100 (2,54) | .125 (3,18) |
| 27MRM125093 | MALE MINI RIVET | .093 (2,36) | 1/2" (12,70) | .100 (2,54) | .125 (3,18) |
| 27MRM125125 | MALE MINI RIVET | .125 (3,18) | 1/2" (12,70) | .100 (2,54) | .125 (3,18) |
| 27MRM125143 | MALE MINI RIVET | .143 (1,09) | 1/2" (12,70) | .100 (2,54) | .125 (3,18) |
| 27MRM125187 | MALE MINI RIVET | .187 (4,75) | 1/2" (12,70) | .100 (2,54) | .125 (3,18) |
| 27MRM125325 | MALE MINI RIVET | .325 (8,26) | 1/2" (12,70) | .100 (2,54) | .125 (3,18) |
| *27MRF12 | FEMALE MINI RIVET | | 1/2" (12,70) | .100 (2,54) | .125 (3,18) |

* FOR USE WITH ALL .125 MALE RIVETS

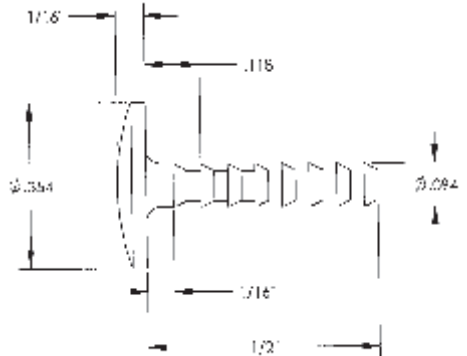
ADJUSTABLE MALE MINI RIVETS

Adjustable male mini rivets are designed to be used with Micro Plastics' female mini rivets. Rivets are molded in tough, resilient, corrosion and chemical resistant Nylon 6/6 material. Variable length rivets can be used to fasten and control computer sheets, catalogs, samples and many other objects. Simply push the adjustable rivet through pre-punched holes, secure with a female mini rivet and clip to desired length.



* FOR USE WITH 27MRF12 FEMALE MINI RIVET

| PART NUMBER | LENGTH |
|--------------|-----------------|
| 27AMR1252187 | 2 5/16" (58,72) |



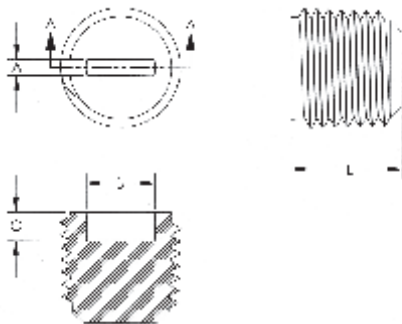
* FOR USE WITH 27MRF09 FEMALE MINI RIVET

| PART NUMBER | LENGTH |
|--------------|--------------|
| 27AMRO940500 | 1/2" (12,70) |

PIPE PLUG

New Product Line

Nylon Pipe Plugs with NPT threads are used to protect valves, hydraulic and pneumatic devices from contamination. Grub style drive allows installation and removal with a common screw driver. Available in 5 NPT sizes from 1/8-27 to 3/4-14.

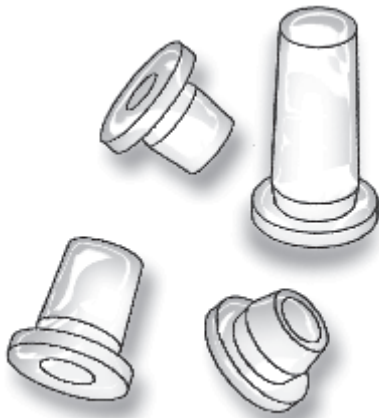


| PART NUMBER | DESCRIPTION | A | B | C | L |
|-------------|-----------------------------|-------------|--------------|--------------|--------------|
| 62NPT01227 | 1/8-27 NPT Pipe Thread Plug | .072 (1,83) | .240 (6,10) | .130 (3,30) | .390 (9,91) |
| 62NPT02518 | 1/4-18 NPT Pipe Thread Plug | .150 (3,81) | .312 (7,92) | .130 (3,30) | .500 (12,70) |
| 62NPT03718 | 3/8-18 NPT Pipe Thread Plug | .150 (3,81) | .380 (9,10) | .358 (9,65) | .550 (13,97) |
| 62NPT07514 | 3/4-14 NPT Pipe Thread Plug | .175 (4,44) | .550 (13,97) | .435 (11,05) | .610 (15,49) |

PANEL FASTENERS AND HOLE PLUGS

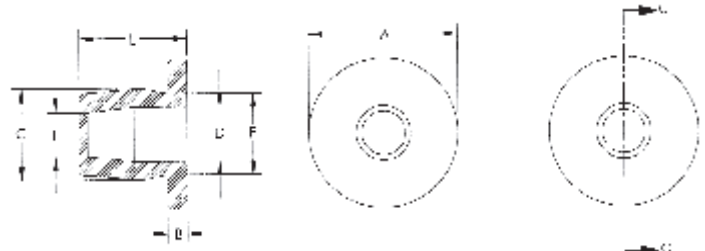
SECTION VI

TUBULAR EMBLEM CLIPS



Micro Plastic's Tubular Emblem Clips or Speed Nut Clips

Nut Clips offer a low substitute to the expensive all metal or metal/rubber clips. These easily installed molded low density polyethylene clips eliminate paint and surface damage. The inevitable rust associated with the sharp metal parts they replace is also eliminated by the electrically insulating, non-cathodic plastic clip.

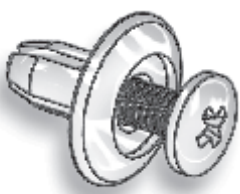
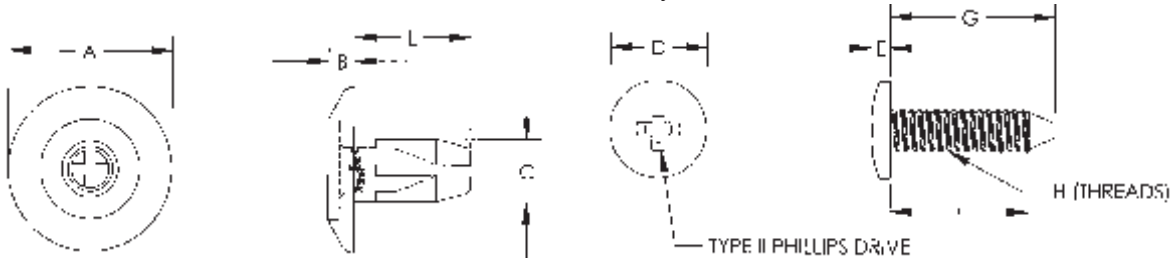


| ITEM NUMBER | DESCRIPTION | A | B | C | D | E | F | L |
|--------------|-----------------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|
| 60TC125250 | 1/8 X .250 TUBE CLIP | 11/32 (8,73) | .046 (1,17) | .209 (5,31) | .125 (3,17) | .187 (4,76) | .100 (2,54) | .250 (6,35) |
| 60TC155200 * | 5/32 X .200 TUBE CLIP | 11/32 (8,73) | .046 (1,17) | .239 (6,07) | .155 (3,94) | .220 (5,59) | .145 (3,68) | .200 (5,08) |
| 60TC155360 | 5/32 X .360 TUBE CLIP | 11/32 (8,73) | .046 (1,17) | .239 (6,07) | .155 (3,94) | .220 (5,59) | .125 (3,18) | .360 (9,13) |
| 60TC155600 | 5/32 X .600 TUBE CLIP | 11/32 (8,73) | .046 (1,17) | .239 (6,07) | .155 (3,94) | .220 (5,59) | .125 (3,18) | .600 (15,24) |

* I.D. HAS A THRU HOLE

"SPECIAL ITEM" TWO PIECE SCREW RIVETS

Micro Plastics' two-piece screw rivets are designed to fasten larger components or small assemblies to their mating panels. Pressing or tapping the screw through the body creates a secure insulated connection. In addition the screw may be removed with a phillips screw driver and the fastener re-used. Rivets are molded from Nylon 6/6.



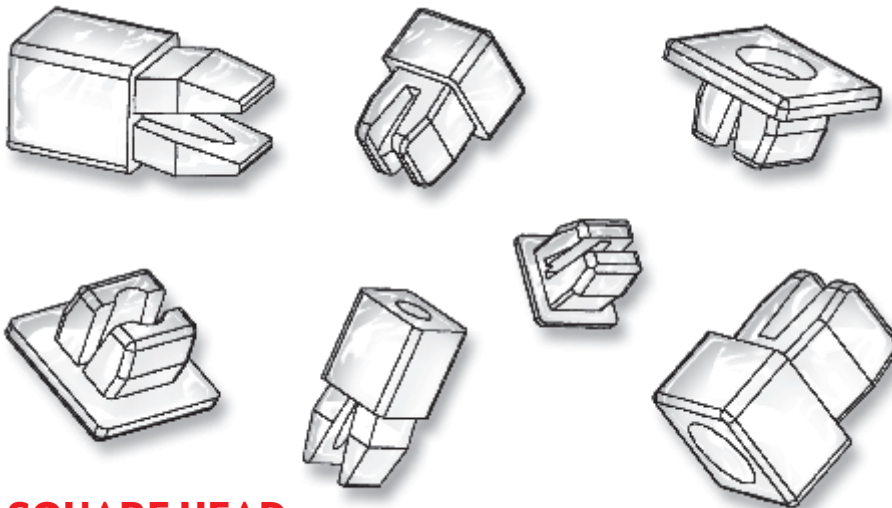
| ITEM NUMBER | HOLE SIZE | PANEL THK. | ITEM NUMBER | HOLE SIZE | PANEL THK. | ITEM NUMBER | HOLE SIZE | PANEL THK. |
|-------------|------------|-------------|-------------|------------|-------------|-------------|-------------|------------|
| 401007 | 1/4 (6,35) | 3/16 (4,76) | 401008 | 1/4 (6,35) | 5/32 (3,97) | 401009 | 9/32 (7,14) | 1/8 (3,18) |

| ITEM NUMBER | A | B | C | L | D | E | F | G | H |
|-------------|---------------|-------------|-------------|---------------|--------------|-------------|---------------|---------------|-------|
| 401007 | 19/32 (15,08) | 3/32 (2,38) | .230 (5,84) | 27/64 (10,72) | .350 (8,89) | .070 (1,78) | 1/2 (12,70) | 19/32 (15,08) | 8-32 |
| 401008 | 45/64 (17,86) | 3/32 (2,38) | .235 (5,97) | 29/64 (11,51) | 5/16 (7,94) | .040 (1,02) | 27/64 (10,72) | 33/64 (13,10) | 8-32 |
| 401009 | .555 (14,10) | .065 (1,65) | .270 (6,86) | 7/16 (11,11) | 25/64 (9,72) | .050 (1,27) | 21/64 (8,33) | 1/2 (12,70) | 10-32 |

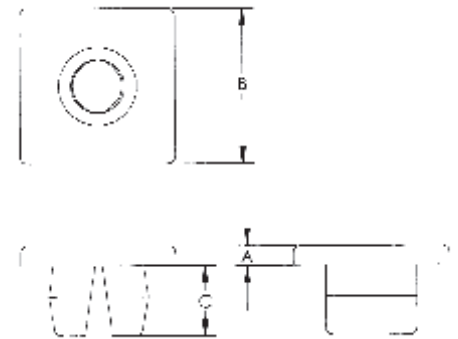
NYLON GROMMET NUTS

Micro Plastics' Open Poly Grommet Nuts provide a low cost, positive connection of thin gauge materials while they eliminate cross thread-

ing. The specially designed locks snap into a pre-punched square hole. As the self-threading sheet metal screw is tightened, the Poly Grommet expands and securely locks the screw and assembled parts in place. The Grommet will provide a corrosion and vibration resistant connection and can be used to insulate areas of an assembly from electrical and thermal transfer. Some of the more common sizes that we have initially tooled are shown below. Because of unique tooling approach, we can vary this design over a wide range. Request the size you need. Poly Grommets are molded in Nylon 6/6 and can be dyed or molded in various colors. Different plastic materials can be substituted. Naturally, changes in our standard product will involve additional costs. Let us know what you need.



New Sizes



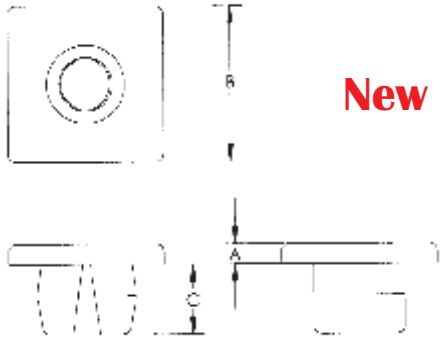
SQUARE HEAD

| PART NUMBER | HOLE SIZE | THICKNESS RANGE | SCREW | HEAD SIZE "B" | HEIGHT "A" | LENGTH "C" +/- .015 |
|-------------|-----------------------|-----------------------|-------|------------------------|---------------|---------------------|
| 60SGN00001 | .275/.290 (6,99/7,37) | .031/.125 (0,79/3,18) | 8-10 | 3/8 (9,53) | .031 (0,79) | .320 (8,13) |
| 60SGN00002 | .275/.290 (6,99/7,37) | .031/.125 (0,79/3,18) | 8-10 | .375 (9,53) | .062 (1,57) | .320 (8,13) |
| 60SGN00003 | .275/.290 (6,99/7,37) | .031/.125 (0,79/3,18) | 8-10 | .375 (9,53) | .125 (3,18) | .320 (8,13) |
| 60SGN00004 | .275/.290 (6,99/7,37) | .031/.125 (0,79/3,18) | 8-10 | 3/8 (9,53) | .250 (6,35) | .320 (8,13) |
| 60SGN00005 | .375 (9,53) | .031/.125 (0,79/3,18) | 1/4 | 5/8 (15,88) | 1-1/16 (27,0) | 9/32 (7,14) |
| 60SGN00006 | .250/.260 (6,35/6,61) | .031/.115 (0,79/2,92) | 6 | .435 (11,05) | .094 (2,39) | .220 (5,59) |
| 60SGN00007 | .270/.270 (6,86/6,86) | .062/.275 (1,57/6,99) | 6 | .375/.500 (9,53/12,70) | .031 (0,79) | .435 (11,05) |
| 60SGN00912 | .225/.255 (5,71/6,48) | .031/.125 (0,79/3,18) | 8 | .375 (9,53) | .187 (4,75) | .300 (7,62) |
| 60SGN00913 | .250 (6,35) | .031/.060 (0,79/1,52) | 8-10 | 13/32 (10,31) | .030 (0,76) | 9/32 (7,14) |
| 60SGN00915 | .245/.255 (6,22/6,48) | .031/.125 (0,79/3,18) | 6-8 | 3/8 (9,53) | 1/32 (0,79) | 9/32 (7,14) |
| 60SGN01000 | .250/.255 (6,35/6,48) | .110/.125 (2,79/3,18) | 6 | .375 (9,53) | .031 (0,79) | .265 (6,73) |
| 60SGN01012 | .173/.178 (4,39/4,52) | .031/.078 (0,79/1,98) | 4 | .218 (5,54) | .250 (6,35) | .218 (5,54) |
| 60SGN01014 | .250/.270 (6,35/6,86) | .062/.155 (1,57/3,94) | 6 | .375 (9,53) | .032 (0,81) | .312 (7,92) |
| 60SGN01016 | .285 (7,24) | .078/.175 (1,98/4,45) | 8 | .380 (9,65) | .045 (1,14) | .340 (8,64) |
| 60SGN01020 | .275/.280 (6,99/7,11) | .040/.045 (1,02/1,14) | 8-10 | .370 (9,40) | .032 (0,81) | .330 (8,38) |
| 60SGN01122 | .350/.355 (8,89/9,02) | .218/.230 (5,54/5,84) | 8-10 | .475 (12,07) | .062 (1,57) | .421 (10,69) |
| 60SGN01125 | .370/.390 (9,40/9,91) | .064/.187 (1,57/4,75) | 10 | 39/64 (15,47) | .085 (2,16) | .290 (7,37) |
| 60SGN01126 | .305/.315 (7,75/8,00) | .031/.175 (0,79/4,44) | 8 | .470 (11,94) | .060 (1,52) | .300 (7,62) |
| 60SGN01130 | .370/.375 (9,40/9,52) | .031/.100 (0,79/2,54) | 12 | .620 (15,75) | .080 (2,03) | .275 (6,98) |
| 60SGN01135 | .173/.178 (4,39/4,52) | .031/.078 (0,79/1,98) | 4 | .218 (5,54) | .050 (1,27) | .218 (5,54) |
| 60SGN01145 | .270/.310 (6,85/7,87) | .031/.170 (0,79/4,32) | 8 | .405 (10,29) | .062 (1,57) | .312 (7,92) |
| 60SGN01150 | .310/.310 (7,87/7,87) | .031/.170 (0,79/4,32) | 10 | .465 (11,81) | .062 (1,57) | .295 (7,49) |
| 60SGN01154 | .320/.320 (8,13/8,13) | .031/.155 (0,79/3,94) | 10 | .650 (16,51) | .072 (1,83) | .305 (7,75) |
| 60SGN01155 | .245/.250 (6,22/6,35) | .047/.095 (1,19/2,41) | 2 | .375 (9,52) | .032 (0,81) | .240 (6,07) |
| 60SGN01160 | .335/.340 (8,52/8,64) | .062/.125 (1,58/3,17) | 8 | .512 (12,96) | .075 (1,90) | .315 (8,00) |
| 60SGN01165 | .270/.270 (6,86/6,86) | .062/.125 (1,58/3,17) | 6 | .390 (9,90) | .050 (1,27) | .275 (6,99) |
| 60SGN01170 | .275/.285 (6,90/7,24) | .031/.125 (0,79/3,17) | 4 | .375 (9,53) | .050 (1,27) | .218 (5,54) |

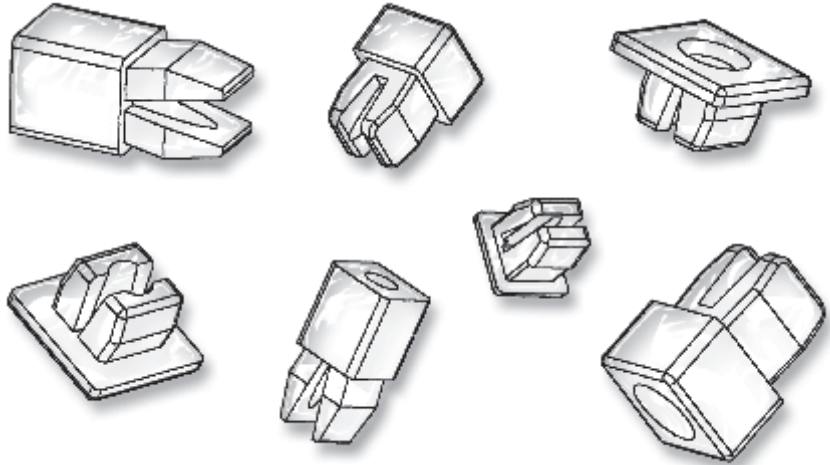
PANEL FASTENERS AND HOLE PLUGS

SECTION VI

NYLON GROMMET NUTS

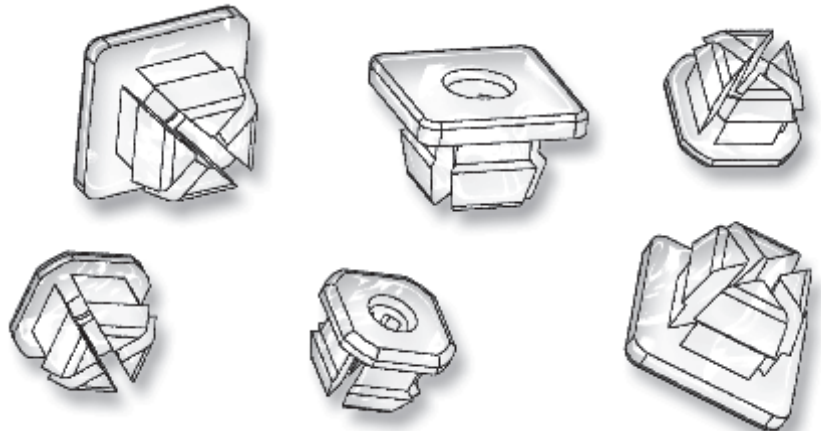
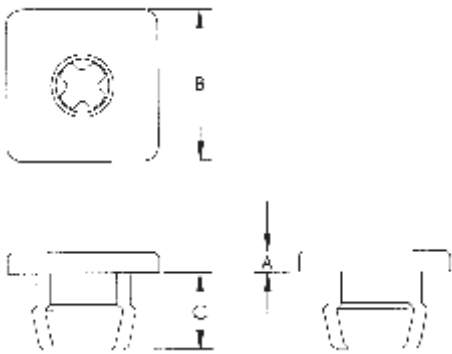


New Sizes



SQUARE HEAD

| PART NUMBER | HOLE SIZE | THICKNESS RANGE | SCREW | HEAD SIZE "B" | HEIGHT "A" | LENGTH "C" +/- .015 |
|-------------|--------------------------|-----------------------|---------|-----------------------|-------------|---------------------|
| 60SGN00914 | .270/.275 (6,86/6,99) | .031/.109 (0,79/2,77) | 6 3/8 | (9,53) | .305 (7,75) | 9/32 (7,14) |
| 60SGN01171 | .200/.270 (5,08/6,86) | .032/.156 (0,81/3,96) | 6 | .312/.437 (7,93/11,1) | .035 (0,89) | .312 (7,93) |
| 60SGN01175 | .275/.280 (6,99/7,11) | .062/.120 (1,60/3,05) | 6 | .390 (9,90) | .055 (1,40) | .281 (7,14) |
| 60SGN01176 | .260/.270 (6,61/6,86) | .093/.187 (2,36/4,75) | 6 | .410 (10,41) | .040 (1,02) | .310 (7,87) |
| 60SGN01178 | .275 (6,99) | .047/.180 (1,19/4,57) | 8 | .375 (9,53) | .032 (0,81) | .327 (8,31) |
| 60SGN01179 | .370/.445 (9,40)/(11,30) | .062/.120 (1,19/4,57) | 1/4 5/8 | (15,88) | .080 (2,04) | 9/32 (7,14) |
| 60SGN01180 | .370/.375 (9,40/9,50) | .062/.120 (1,60/3,05) | 1/4 | .625 (15,90) | .080 (2,04) | .281 (7,14) |
| 60SGN01185 | .320/.335 (8,08/8,51) | .032/.234 (0,81/5,94) | 10 | .470 (11,94) | .055 (1,40) | .420 (10,67) |
| 60SGN01190 | .335/.345 (8,51/8,76) | .062/.171 (1,58/4,35) | 10 | .468 (11,88) | .095 (2,42) | .400 (10,16) |
| 60SGN01195 | .330/.365 (8,38/9,28) | .032/.095 (0,81/2,41) | 10 | .500 (12,70) | .094 (2,39) | .295 (7,50) |
| 60SGN01200 | .250/.260 (6,35/6,61) | .062/.125 (1,58/3,18) | 6 | .375 (9,53) | .140 (3,56) | .265 (6,73) |



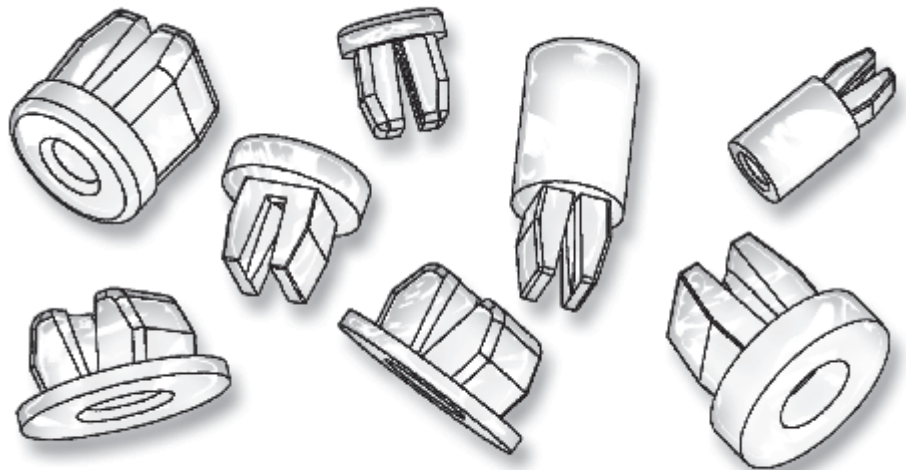
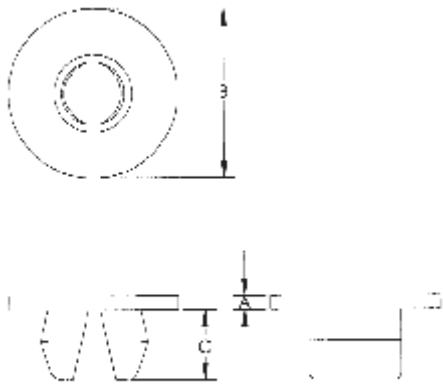
DOUBLE SPLIT SQUARE HEAD

| PART NUMBER | HOLE SIZE | THICKNESS RANGE | SCREW | HEAD SIZE "B" | HEIGHT "A" | LENGTH "C" +/- .015 |
|-------------|-------------------------|-----------------------|---------|---------------|-------------|---------------------|
| 60SGN01010 | .377/.382 (9,58/9,70) | .125/.130 (3,18/3,30) | 10 | 39/64 (15,48) | .082 (2,08) | .308 (7,82) |
| 60SGN01015 | .228/.233 (5,79/5,92) | .250/.271 (6,35/6,88) | 8 | .375 (9,53) | .031 (0,79) | .406 (10,31) |
| 60SGN01018 | .310/.315 (7,87/8,00) | .110/.115 (2,79/2,92) | 8 | .437 (11,10) | .078 (1,98) | .281 (7,14) |
| 60SGN01019 | .305/.310 (7,75/7,87) | .125/.135 (3,18/3,43) | 8 | .437 (11,10) | .062 (1,57) | .281 (7,14) |
| 60SGN01021 | .375/.390 (9,53/9,91) | .230 (5,48) | 1/4 5/8 | (15,88) | .080 (2,03) | .438 (11,13) |
| 60SGN01025 | .250/.250 (6,35/6,35) | .093/.275 (0,91/6,99) | 8 | .375 (9,53) | .047 (1,19) | .420 (10,67) |
| 60SGN01128 | .330/.330 (8,38/8,38) | .031/.125 (0,79/3,18) | 8 | .505 (12,83) | .032 (0,81) | .275 (6,98) |
| 60SGN01030 | .303 (7,70) | .031/.145 (0,79/3,68) | 8-10 | .435 (11,05) | .062 (1,57) | .270 (6,86) |
| 60SGN01181 | .410/.410 (10,42/10,42) | .031/.062 (0,79/1,58) | 1/4 | .630 (16,00) | .140 (3,56) | .280 (7,12) |

NYLON GROMMET NUTS

Micro Plastics' Open Poly Grommet Nuts provide a low cost, positive connection of thin gauge materials while they eliminate cross threading. The specially designed locks snap into a pre-punched square hole. As the self-threading sheet metal screw is tightened, the Poly Grommet expands and securely locks the screw and assembled parts in place. The Grommet will provide a corrosion and vibration resistant connection and can be used to insulate areas of an assembly from electrical and thermal transfer. Some of the more common sizes that we have initially tooled are shown below. Because of unique tooling approach, we can vary this design over a wide range. Request the size you need. Poly Grommets are molded in Nylon 6/6 and can be dyed or molded in various colors. Different plastic materials can be substituted. Naturally, changes in our standard product will involve additional costs. Let us know what you need.

New Sizes



ROUND HEAD

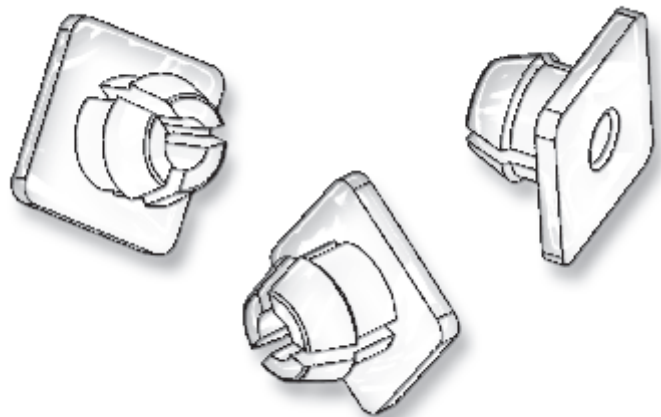
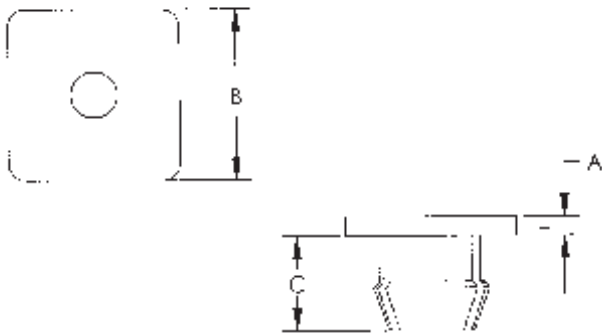
| PART NUMBER | HOLE SIZE | THICKNESS RANGE | SCREW | HEAD SIZE "B" | HEIGHT "A" | LENGTH "C" +/- .015 |
|-------------|-------------------------|-----------------------|-------|---------------|---------------|---------------------|
| 60SGN00009 | .270/.280 (6,86/7,11) | .062/.165 (1,57/4,19) | 6 | .375 (9,53) | .093 (2,36) | .300 (7,62) |
| 60SGN00008 | .267/.272 (6,78/6,91) | .031/.109 (0,79/2,77) | 8-10 | 9/16 (14,29) | 9/16 (14,29) | 9/32 (7,14) |
| 60SGN00010 | .275/.290 (6,99/7,37) | .031/.125 (0,79/3,18) | 8-10 | .500 (12,70) | .031 (0,79) | .320 (8,13) |
| 60SGN00011 | .271/.290 (6,88/7,37) | .031/.125 (0,79/3,18) | 8-10 | .500 (12,70) | .062 (1,57) | .320 (8,13) |
| 60SGN00012 | .271/.290 (6,88/7,37) | .031/.125 (0,79/3,18) | 8-10 | .500 (12,70) | .125 (3,18) | .320 (8,13) |
| 60SGN00013 | .275/.290 (6,99/7,37) | .031/.125 (0,79/3,18) | 8-10 | .500 (12,70) | .250 (6,35) | .320 (8,13) |
| 60SGN00014 | .169/.177 (4,29/4,50) | .063 (1,60) | 4 | .264 (6,71) | .374 (9,50) | .217 (5,51) |
| 60SGN00038 | .275/.290 (6,99/7,37) | .031/.156 (0,79/3,96) | 8 | .500 (12,70) | .375 (9,53) | .320 (8,13) |
| 60SGN00072 | .275/.290 (6,99/7,37) | .031/.156 (0,79/3,96) | 8-10 | .500 (12,70) | .708 (17,98) | .315 (8,00) |
| 60SGN00073 | .280/.285 (7,11/7,24) | .032/.150 (0,81/3,81) | 6 | 1/2 (12,70) | 23/32 (18,26) | 11/32 (8,73) |
| 60SGN00100 | .275/.290 (6,99/7,37) | .031/.156 (0,79/3,96) | 8-10 | .437 (11,10) | .032 (0,81) | .325 (8,26) |
| 60SGN00818 | .275/.290 (6,99/7,37) | .031/.109 (0,79/2,77) | 8-10 | .547 (13,89) | 1.062 (26,97) | .281 (7,14) |
| 60SGN00910 | .281/.286 (7,14/7,26) | .031/.109 (0,79/2,77) | 8-10 | .492 (12,50) | .693 (17,60) | .281 (7,14) |
| 60SGN01121 | .350/.355 (8,89/9,02) | .032/.125 (0,81/3,18) | 12 | .531 (13,31) | .125 (3,18) | .281 (7,14) |
| 60SGN01124 | .350/.355 (8,89/9,02) | .032/.125 (0,81/3,18) | 10 | 9/16" (14,29) | 1/4" (6,35) | .320 (8,13) |
| 60SGN01140 | .310/.310 (7,87/7,87) | .031/.160 (0,79/4,06) | 10 | .500 (12,70) | .035 (0,89) | .292 (7,42) |
| 60SGN02200 | .425/.429 (10,80/10,90) | .031/.110 (0,79/2,79) | 5/16 | .740 (18,80) | .190 (4,83) | .312 (7,92) |
| 60SGN02300 | .415/.430 (10,54/10,92) | .032/.135 (0,81/3,43) | 5/16 | .750 (19,05) | .062 (1,57) | .310 (7,87) |
| 60SGN02400 | .325/.330 (8,26/8,38) | .031/.156 (0,79/3,96) | 10 | .565 (14,35) | .062 (1,57) | .320 (8,13) |
| 60SGN02500 | .275 (6,99) | .062/.170 (1,57/4,32) | 8 | .495 (12,57) | .312 (7,92) | .325 (8,26) |

PANEL FASTENERS AND HOLE PLUGS

SECTION VI

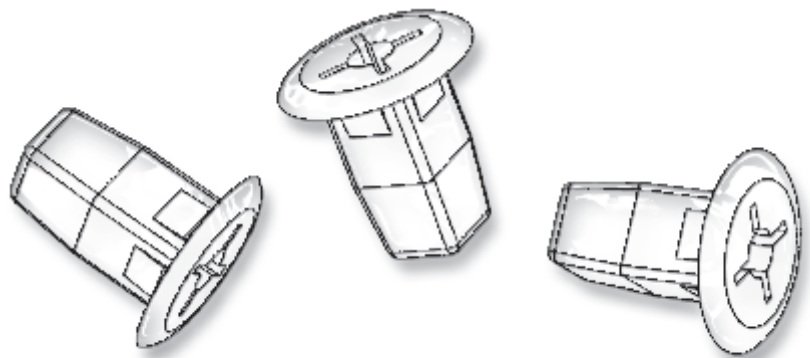
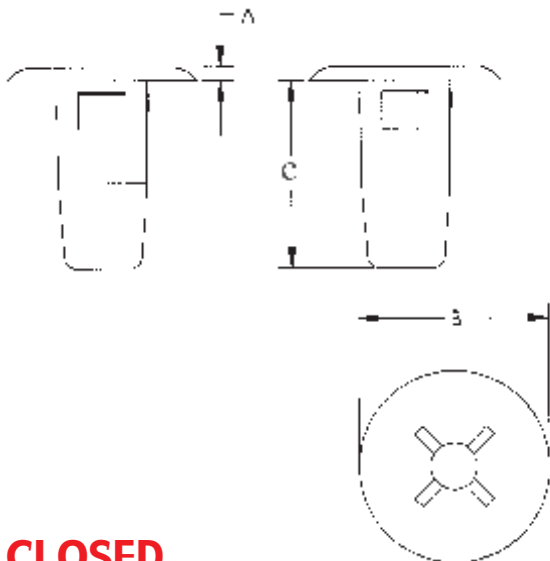
NYLON GROMMET NUTS

Micro Plastics' Open Poly Grommet Nuts provide a low cost, positive connection of thin gauge materials while they eliminate cross threading. The specially designed locks snap into a pre-punched square hole. As the self-threading sheet metal screw is tightened, the Poly Grommet expands and securely locks the screw and assembled parts in place. The Grommet will provide a corrosion and vibration resistant connection and can be used to insulate areas of an assembly from electrical and thermal transfer. Some of the more common sizes that we have initially tooled are shown below. Because of unique tooling approach, we can vary this design over a wide range. Request the size you need. Poly Grommets are molded in Nylon 6/6 and can be dyed or molded in various colors. Different plastic materials can be substituted. Naturally, changes in our standard product will involve additional costs. Let us know what you need.



THREE LEGGED SQUARE HEAD (Fits Round Hole)

| PART NUMBER | HOLE SIZE | THICKNESS RANGE | SCREW | HEAD SIZE "B" | HEIGHT "A" | LENGTH "C" +/- .015 |
|-------------|-----------------------|-----------------------|-------|---------------|-------------|---------------------|
| 60SGN03300 | .300/.300 (7,62/7,62) | .031/.135 (0,78/3,43) | 6 | 485 (12,32) | .055 (1,40) | .265 (6,73) |

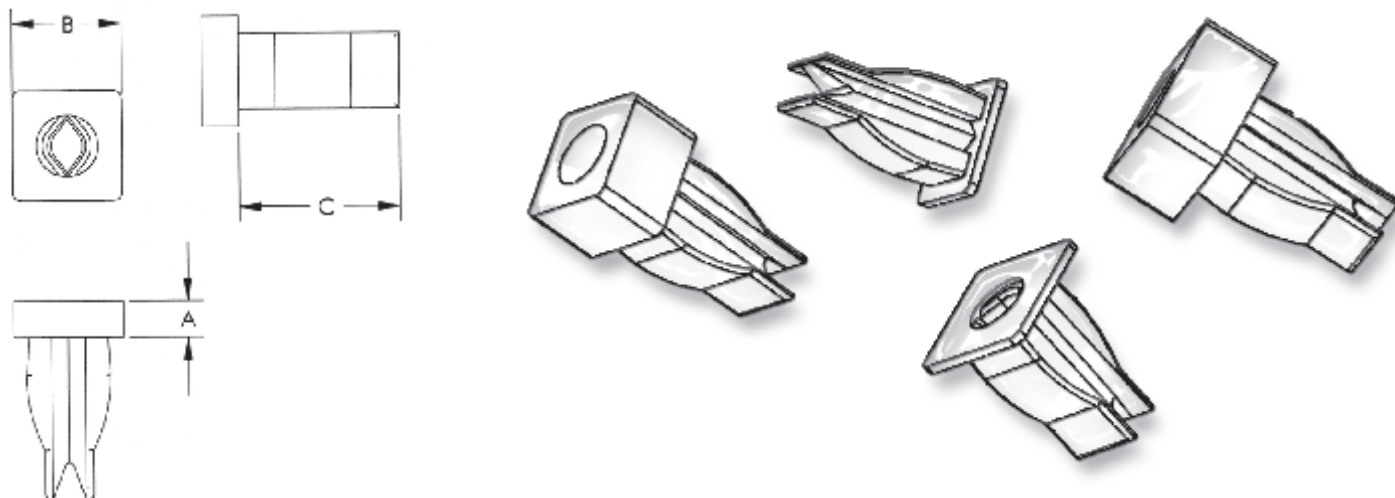


CLOSED

| PART NUMBER | HOLE SIZE | THICKNESS RANGE | SCREW | HEAD SIZE "B" | HEIGHT "A" | LENGTH "C" +/- .015 |
|-------------|-----------------------|-----------------------|-------|---------------|-------------|---------------------|
| 60SGN01402* | .355/.355 (9,02/9,02) | .062/.350 (1,57/8,81) | 10 | .700 (17,78) | .050 (1,27) | .685 (17,40) |

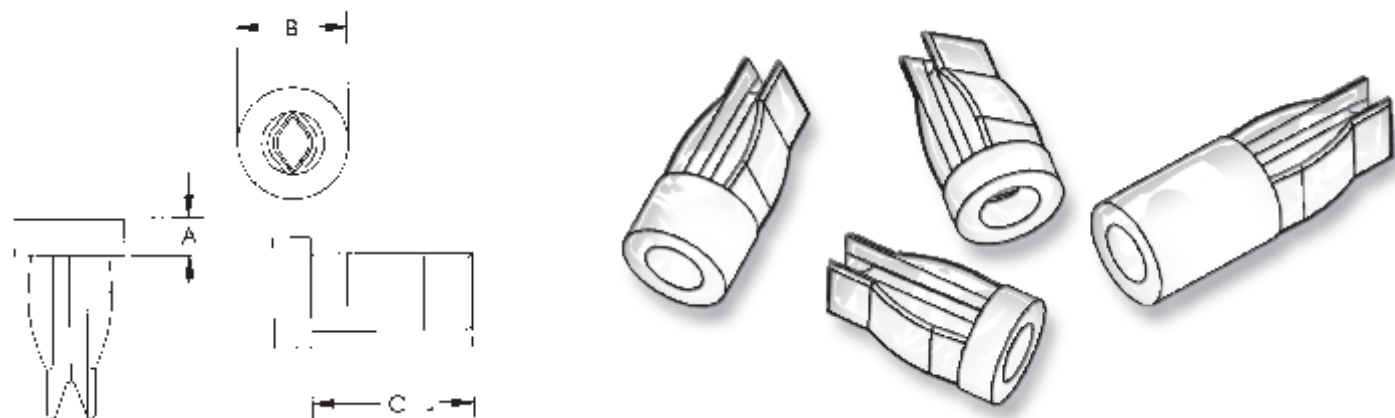
*ROUND HEAD

NYLON GROMMET NUTS



NYLON CLOSED SCREW STANDARD GROMMET NUTS

| PART NUMBER | HOLE SIZE | PANEL THK. RANGE | SCREW SIZE | HEAD SIZE "B" | HEIGHT "A" | LENGTH "C" (+/- .015) |
|-------------|-----------------------|-----------------------|------------|---------------|-------------|-----------------------|
| 60SGC00001 | .270-.290 (6,86/7,37) | .020-.140 (0,51/3,56) | 8-10 | .375 (9,53) | .031 (0,79) | .540 (13,7) |
| 60SGC00002 | .270-.290 (6,86/7,37) | .020-.140 (0,51/3,56) | 8-10 | .375 (9,53) | .062 (1,57) | .540 (13,7) |
| 60SGC00003 | .270-.290 (6,86/7,37) | .020-.140 (0,51/3,56) | 8-10 | .375 (9,53) | .125 (3,18) | .540 (13,7) |
| 60SGC00004 | .270-.290 (6,86/7,37) | .020-.140 (0,51/3,56) | 8-10 | .375 (9,53) | .250 (6,35) | .540 (13,7) |
| 60SGC00005 | .309-.315 (7,85/8,00) | .020-.140 (0,51/3,56) | 8-10 | .437 (11,1) | .031 (0,79) | .540 (13,7) |
| 60SGC00006 | .309-.315 (7,85/8,00) | .020-.140 (0,51/3,56) | 8-10 | .437 (11,1) | .062 (1,57) | .540 (13,7) |
| 60SGC00007 | .309-.315 (7,85/8,00) | .020-.140 (0,51/3,56) | 8-10 | .437 (11,1) | .125 (3,18) | .540 (13,7) |
| 60SGC00008 | .309-.315 (7,85/8,00) | .020-.140 (0,51/3,56) | 8-10 | .437 (11,1) | .250 (6,35) | .540 (13,7) |
| 60SGC00010 | .250-.281 (6,35/7,14) | .020/.140 (0,51/3,56) | 8-10 | .375 (9,53) | .125 (3,18) | .438 (11,1) |



NYLON CLOSED SCREW SPACER GROMMET NUTS

| PART NUMBER | SPACER LENGTH | SPACER OD | HOLE SIZE | PANEL THK. RANGE | SCREW SIZE | LENGTH "C" (+/- .015) |
|-------------|---------------|-------------|-----------------------|-----------------------|------------|-----------------------|
| 60SPG00001 | .125 (3,18) | 3/8" (9,53) | .270-.290 (6,86/7,37) | .020-.140 (0,51/3,56) | 8-10 | .548 (13,9) |
| 60SPG00002 | .187 (4,75) | 3/8" (9,53) | .270-.290 (6,86/7,37) | .020-.140 (0,51/3,56) | 8-10 | .548 (13,9) |
| 60SPG00003 | .250 (6,35) | 3/8" (9,53) | .270-.290 (6,86/7,37) | .020-.140 (0,51/3,56) | 8-10 | .548 (13,9) |
| 60SPG00004 | .312 (7,92) | 3/8" (9,53) | .270-.290 (6,86/7,37) | .020-.140 (0,51/3,56) | 8-10 | .548 (13,9) |
| 60SPG00005 | .375 (9,53) | 3/8" (9,53) | .270-.290 (6,86/7,37) | .020-.140 (0,51/3,56) | 8-10 | .548 (13,9) |
| 60SPG00006 | .500 (12,7) | 3/8" (9,53) | .270-.290 (6,86/7,37) | .020-.140 (0,51/3,56) | 8-10 | .548 (13,9) |

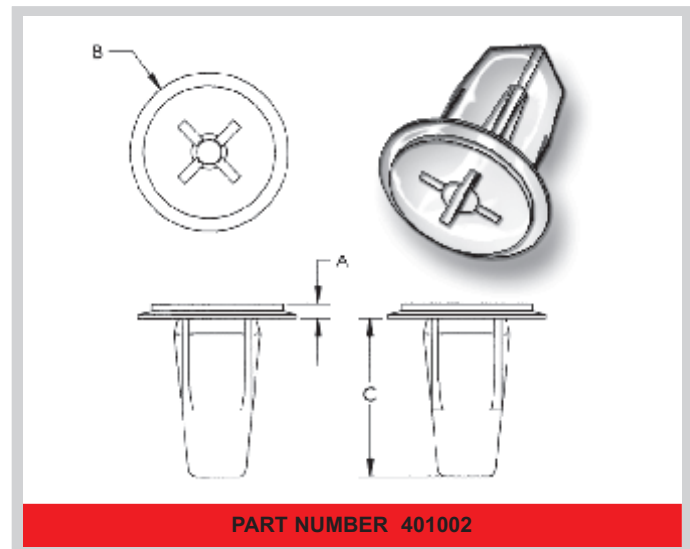
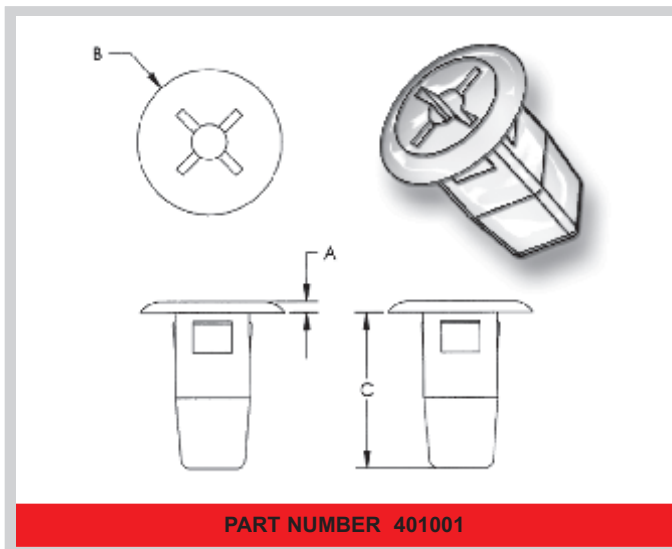
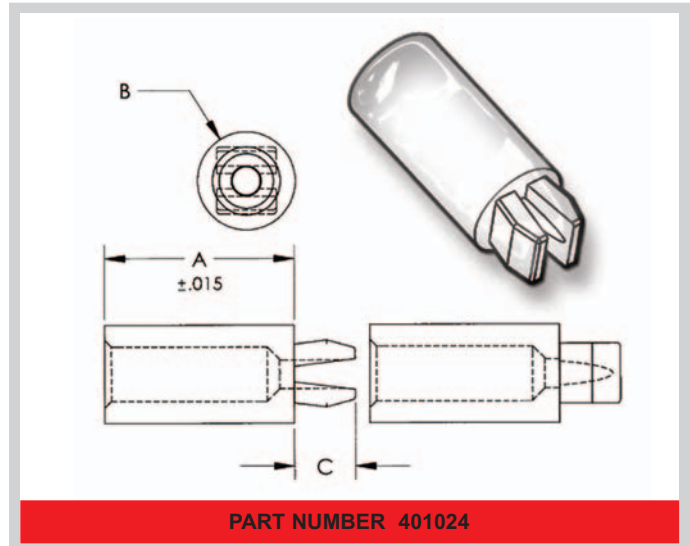
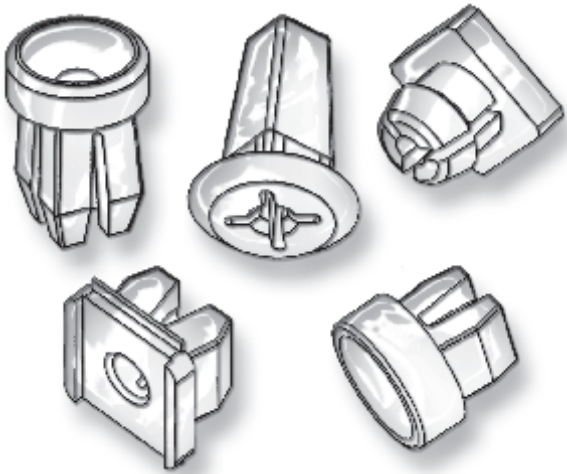
PANEL FASTENERS AND HOLE PLUGS

SECTION
VI

NYLON "SPECIAL ITEM "GROMMET NUTS

New Sizes

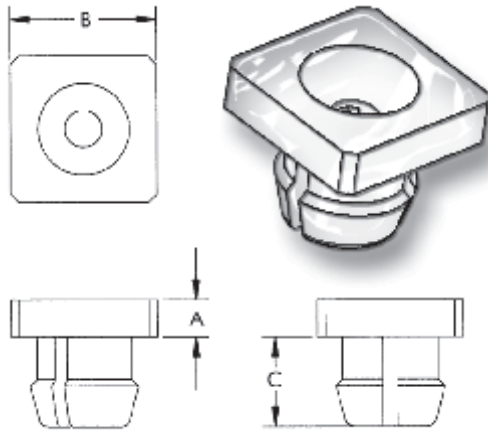
| PART NUMBER | HOLE SIZE | | PANEL THK. RANGE | | SCREW SIZE | HEAD SIZE "B" | | HEAD HEIGHT "A" | | LOCK LENGTH "C" +/-0.15 | |
|-------------|-----------|-------------|------------------|-------------|------------|---------------|-------------|-----------------|--------|-------------------------|--------|
| 401001 | .355 | (9,02) | .125-.275 | (3,17-6,98) | 10 | .641 | (16,3) | .048 | (1,22) | .680 | (17,3) |
| 401002 | .260-.265 | (6,60-6,73) | .062-.437 | (1,57-11,1) | 8 | .562 | (14,3) | .050 | (1,27) | .562 | (14,3) |
| 401003 | .310 | (7,87) | .031-.135 | (0,79-3,43) | 6 | .465 | (11,8) | .120 | (3,05) | .286 | (7,26) |
| 401012 | .230-.235 | (5,84-5,97) | .125-.275 | (3,17-6,98) | 8 | .375 | (9,53) | .125 | (3,18) | .406 | (10,3) |
| 401018 | .280 | (7,11) | .056-.235 | (1,42-5,99) | 4 | .531 | (13,5) | .062 | (1,57) | .640 | (16,3) |
| 401021 | .275-.290 | (6,98-7,37) | .093-.145 | (2,36-3,68) | 8 | 1/2 | (12,7) | .187 | (4,75) | .280 | (7,11) |
| 401025 | .275-.290 | (6,98-7,37) | .062-.125 | (1,57-3,17) | 6 | .405/.430 | (10,3/10,9) | .073 | (1,85) | .213 | (5,41) |
| 401034 | .285-.290 | (7,24-7,37) | .031-.094 | (0,79-2,39) | 8 | .455 | (11,6) | 2.000 | (50,8) | .275 | (6,98) |
| 401024 | .275-.290 | (6,98-7,37) | .031-.140 | (0,79-3,56) | 10 | .450 | (25,4) | 7/8 | (22,2) | .280 | (7,11) |



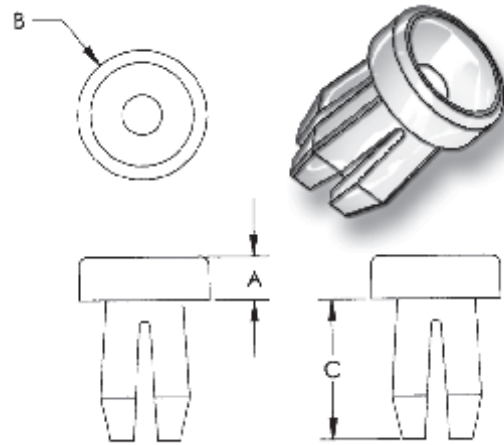
PANEL FASTENERS AND HOLE PLUGS

NYLON "SPECIAL ITEM "GROMMET NUTS

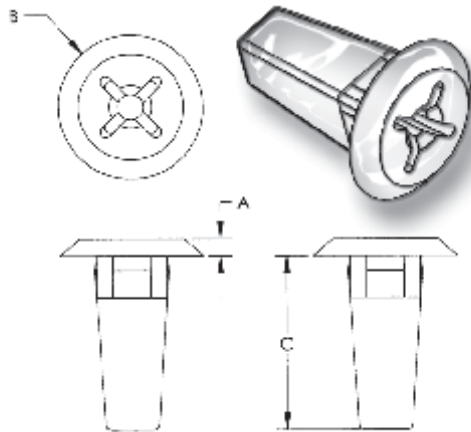
SECTION
VI



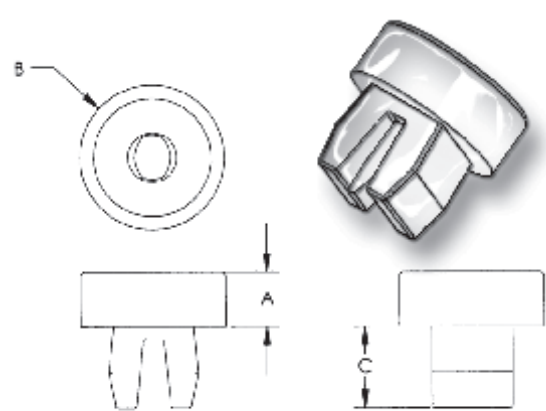
PART NUMBER 401003



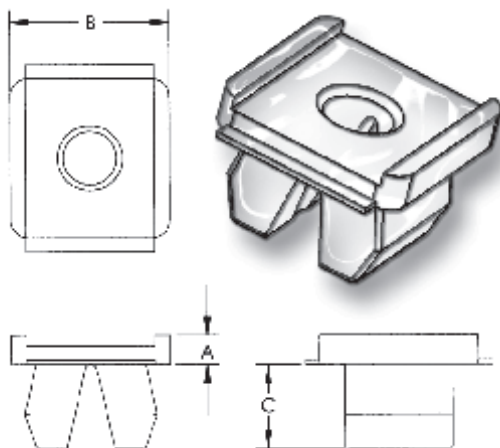
PART NUMBER 401012



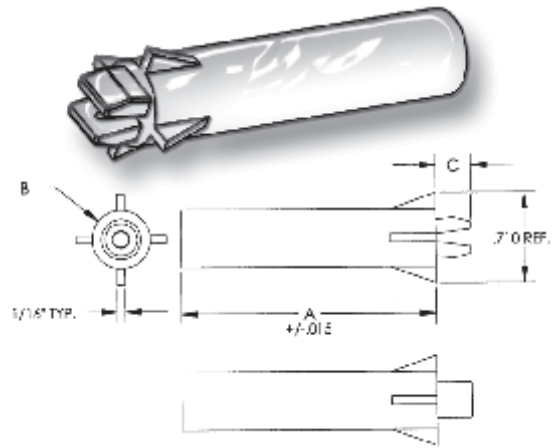
PART NUMBER 401018



PART NUMBER 401021



PART NUMBER 401025

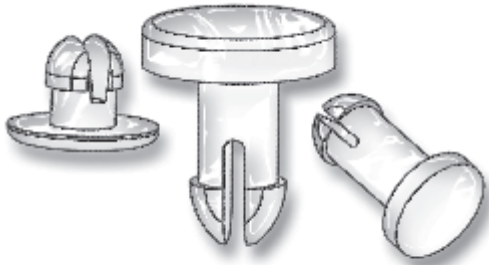


PART NUMBER 401034

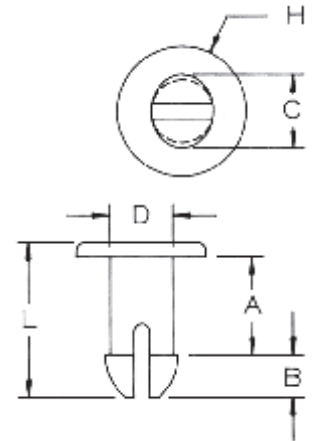
PANEL FASTENERS AND HOLE PLUGS

SECTION VI

NYLON PUSH-IN-FASTENERS



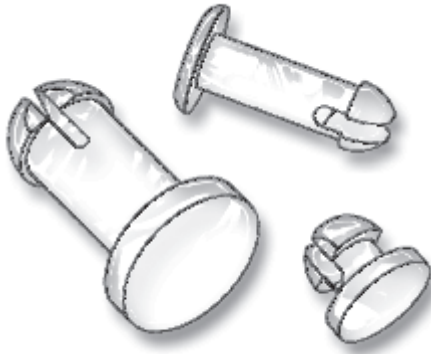
Micro Plastics' Push-in Fasteners provide an inexpensive, fast, convenient method to join plastic, light sheet metal, insulating materials, circuit boards, or any other thin, light-weight material. They can also be used as push-in glides or as bumpers. Special designed legs provide compression and expansion to lock fastener into pre-punched holes. These fasteners are vibration, abrasion and corrosion resistant, and feature large heads for easier assembly, and can be used over and over.



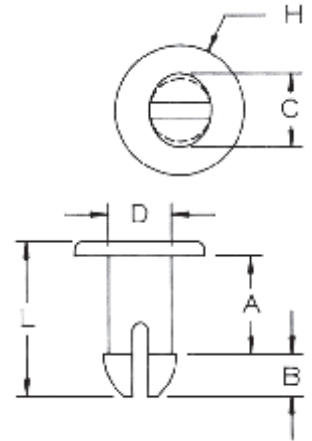
| PART NUMBER | DESCRIPTION | H | A | B | C | D | L +/- .015 |
|-------------|-------------|---------------|---------------|--------------|-------------|-------------|---------------|
| 27PIF0010 | PIF 10 | .500 (12,70) | .220 (5,59) | .110 (12,79) | .200 (5,08) | .148 (3,76) | .400 (10,16) |
| 27PIF0011 | PIF 11 | 13/64 (5,16) | .208 (5,28) | .083 (2,11) | .140 (3,56) | .115 (2,92) | .320 (8,13) |
| 27PIF0012 | PIF 12 | .175 (4,45) | .268 (6,81) | .090 (2,29) | .140 (3,56) | .096 (2,44) | .400 (10,16) |
| 27PIF0013 | PIF 13 | 3/16 (4,75) | .533 (13,54) | .087 (2,21) | .130 (3,30) | .095 (2,41) | .675 (17,15) |
| 27PIF0014 | PIF 14 | .248 (6,30) | .813 (20,65) | .140 (3,56) | .144 (3,66) | .110 (2,79) | 1.017 (25,83) |
| 27PIF0015 | PIF 15 | 21/64 (8,33) | .030 (0,76) | .130 (3,30) | .162 (4,12) | .152 (3,86) | .200 (5,08) |
| 27PIF0017 | PIF 17 | 11/32 (8,73) | .130 (3,30) | .110 (2,80) | .200 (5,08) | .160 (4,06) | .270 (6,86) |
| 27PIF0018 | PIF 18 | 13/64 (5,16) | .230 (5,84) | .098 (2,49) | .156 (3,96) | .128 (3,25) | .370 (9,40) |
| 27PIF0019 | PIF 19 | 1/4 (6,35) | .445 (11,30) | .085 (2,16) | .145 (3,68) | .095 (2,41) | .590 (14,99) |
| 27PIF0020 | PIF 20 | 15/64 (5,95) | .080 (2,03) | .080 (2,03) | .180 (4,57) | .124 (3,15) | .200 (5,08) |
| 27PIF0021 | PIF 21 | .186 (4,72) | .200 (5,08) | .065 (1,65) | .104 (2,64) | .080 (2,03) | .297 (7,54) |
| 27PIF0022 | PIF 22 | 1/2 (12,70) | .064 (1,63) | .185 (4,70) | .280 (7,11) | .243 (6,17) | .370 (9,40) |
| 27PIF0023 | PIF 23 | 3/16 (4,75) | .075 (1,91) | .060 (1,52) | .150 (3,81) | .120 (3,05) | .190 (4,83) |
| 27PIF0024 | PIF 24 | 19/32 (15,08) | .365 (9,27) | .187 (4,75) | .295 (7,49) | .245 (6,22) | .685 (17,40) |
| 27PIF0025 | PIF 25 | 15/64 (5,95) | 1.010 (25,65) | .082 (2,08) | .164 (4,17) | .124 (3,15) | 1.13 (28,70) |
| 27PIF0026 | PIF 26 | 15/64 (5,95) | .080 (2,03) | .070 (1,78) | .180 (4,57) | .124 (3,15) | .205 (5,21) |
| 27PIF0027 | PIF 27 | 3/8 (9,52) | 1.062 (26,97) | .177 (4,50) | .202 (5,13) | .165 (4,19) | 1.303 (28,32) |
| 27PIF0028 | PIF 28 | 11/32 (8,73) | .875 (22,23) | .174 (4,42) | .224 (5,69) | .175 (4,45) | 1.115 (28,32) |
| 27PIF0029 | PIF 29 | 13/64 (5,16) | .210 (5,33) | .091 (2,31) | .179 (4,55) | .130 (3,30) | .342 (8,69) |
| 27PIF0030 | PIF 30 | .135 (3,43) | .125 (3,18) | .070 (1,78) | .110 (2,79) | .089 (2,26) | .235 (5,97) |
| 27PIF0031 | PIF 31 | 25/64 (9,93) | .503 (12,78) | .210 (5,33) | .295 (7,49) | .230 (5,84) | 1.083 (27,51) |
| 27PIF0032 | PIF 32 | 13/64 (5,16) | .235 (5,97) | .066 (1,68) | .145 (3,68) | .115 (2,92) | .341 (8,66) |
| 27PIF0033 | PIF 33 | 3/8 (9,52) | .505 (12,83) | .130 (3,30) | .200 (5,08) | .160 (4,06) | .705 (17,91) |
| 27PIF0034 | PIF 34 | 3/4 (19,05) | .636 (16,15) | .180 (4,57) | .220 (5,59) | .180 (4,57) | .875 (22,23) |
| 27PIF0035 | PIF 35 | 5/16 (7,94) | .125 (3,18) | .070 (1,78) | .110 (2,80) | .089 (2,26) | .235 (5,96) |
| 27PIF0036 | PIF 36 | 3/16 (4,75) | .066 (1,68) | .075 (1,91) | .100 (2,54) | .090 (2,29) | .179 (4,55) |
| 27PIF0037 | PIF 37 | 3/8 (9,52) | .636 (16,15) | .180 (4,57) | .220 (5,59) | .180 (4,57) | .875 (22,22) |
| 27PIF0038* | PIF 38* | 9/32 (7,14) | .063 (1,60) | .078 (1,98) | .100 (2,54) | .093 (2,36) | .165 (4,19) |
| 27PIF0039 | PIF 39 | 1/4 (6,35) | .115 (2,92) | .085 (2,16) | .145 (3,68) | .093 (2,36) | .240 (6,10) |
| 27PIF0040* | PIF 40* | 9/32 (7,14) | .093 (2,36) | .078 (1,98) | .105 (2,67) | .093 (2,36) | .200 (5,08) |
| 27PIF0041* | PIF 41* | 5/16 (7,94) | .121 (3,07) | .085 (2,16) | .145 (3,68) | .089 (2,26) | .246 (6,25) |
| 27PIF0042 | PIF 42 | 13/64 (5,16) | .190 (4,83) | .090 (2,29) | .180 (4,57) | .130 (3,30) | .320 (8,13) |
| 27PIF0043 | PIF 43 | 13/64 (5,16) | .156 (3,96) | .135 (3,43) | .140 (3,56) | .115 (2,92) | .320 (8,13) |
| 27PIF0044 | PIF 44 | 13/64 (5,16) | .135 (3,43) | .135 (3,43) | .140 (3,56) | .115 (2,92) | .295 (7,49) |
| 27PIF0045 | PIF 45 | 13/64 (5,16) | .235 (5,97) | .070 (1,79) | .137 (3,48) | .115 (2,92) | .345 (8,76) |
| 27PIF0046 | PIF 46 | 13/64 (5,16) | .250 (6,35) | .106 (2,69) | .145 (3,68) | .115 (2,92) | .395 (10,03) |

PARTS WITH * HAVE NO SLOT -----"L" DIM. (TOTAL LENGTH = +/- .015"

PANEL FASTENERS AND HOLE PLUGS



Micro Plastics' Push-in Fasteners provide an inexpensive, fast, convenient method to join plastic, light sheet metal, insulating materials, circuit boards, or any other thin, light-weight material. They can also be used as push-in glides or as bumpers. Special designed legs provide compression and expansion to lock fastener into pre-punched holes. These fasteners are vibration, abrasion and corrosion resistant, and feature large heads for easier assembly, and can be used over and over.

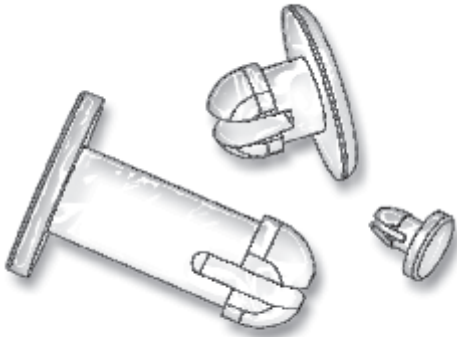


| PART NUMBER | DESCRIPTION | H | A | B | C | D | L | +/- .015 |
|-------------|-------------|---------------|---------------|-------------|-------------|-------------|---------------|----------|
| 27PIF0047 | PIF 47 | 13/64 (5,16) | .121 (3,07) | .105 (2,67) | .145 (3,68) | .115 (2,92) | .260 (6,60) | |
| 27PIF0048 | PIF 48 | 25/64 (9,93) | .315 (8,00) | .113 (2,87) | .208 (5,28) | .157 (3,99) | .488 (12,40) | |
| 27PIF0049 | PIF 49 | 11/32 (8,73) | .450 (11,43) | .160 (4,06) | .200 (5,08) | .160 (4,06) | .680 (17,27) | |
| 27PIF0050 | PIF 50 | 11/32 (8,73) | .125 (3,18) | .137 (3,48) | .202 (5,13) | .165 (4,19) | .305 (7,75) | |
| 27PIF0051 | PIF 51 | 11/32 (8,73) | .065 (1,65) | .137 (3,48) | .202 (5,13) | .165 (4,19) | .325 (8,26) | |
| 27PIF0052 | PIF 52 | 11/32 (8,73) | .556 (14,12) | .153 (3,89) | .225 (5,72) | .180 (4,57) | .780 (19,81) | |
| 27PIF0053 | PIF 53 | 11/32 (8,73) | .242 (6,15) | .174 (4,42) | .224 (5,69) | .175 (4,45) | .490 (12,45) | |
| 27PIF0054 | PIF 54 | 11/32 (8,73) | .197 (5,00) | .185 (4,70) | .295 (7,49) | .255 (6,48) | .415 (10,54) | |
| 27PIF0055 | PIF 55 | 11/32 (8,73) | .555 (14,08) | .145 (3,68) | .225 (5,71) | .180 (4,57) | .770 (19,56) | |
| 27PIF0056 | PIF 56 | 9/64 (3,56) | .315 (8,00) | .075 (1,91) | .135 (3,43) | .095 (2,41) | .450 (11,43) | |
| 27PIF0057 | PIF 57 | 7/16 (11,10) | .120 (3,05) | .255 (6,48) | .380 (9,65) | .305 (7,74) | .445 (11,43) | |
| 27PIF0058 | PIF 58 | 15/32 (11,90) | .121 (3,07) | .153 (3,86) | .238 (6,05) | .200 (5,08) | .324 (8,24) | |
| 27PIF0059 | PIF 59 | 3/16 (4,75) | .145 (3,69) | .065 (1,65) | .105 (2,66) | .090 (2,29) | .255 (6,48) | |
| 27PIF0060 | PIF 60 | 15/32 (11,90) | .156 (3,89) | .125 (3,18) | .228 (5,79) | .200 (5,05) | .333 (8,46) | |
| 27PIF0061 | PIF 61 | 11/32 (8,73) | .370 (9,40) | .105 (2,67) | .236 (5,99) | .203 (5,16) | .540 (13,72) | |
| 27PIF0062 | PIF 62 | 25/64 (9,93) | 1.730 (43,94) | .210 (5,33) | .295 (7,49) | .230 (5,84) | 2.010 (51,05) | |
| 27PIF0063 | PIF 63 | 29/64 (11,51) | .276 (7,01) | .142 (3,61) | .295 (7,49) | .240 (6,10) | .460 (11,68) | |
| 27PIF0064 | PIF 64 | 29/64 (11,51) | .300 (7,62) | .170 (4,32) | .295 (7,49) | .240 (6,10) | .535 (13,59) | |
| 27PIF0065 | PIF 65 | 19/32 (15,08) | .480 (12,19) | .187 (4,75) | .293 (7,44) | .245 (6,22) | .715 (18,16) | |
| 27PIF0066 | PIF 66 | 29/64 (11,51) | .330 (8,38) | .187 (4,75) | .295 (7,49) | .240 (6,10) | .555 (14,10) | |
| 27PIF0067 | PIF 67 | 1/2 (12,70) | .171 (4,34) | .187 (4,75) | .295 (7,49) | .260 (6,60) | .405 (10,29) | |
| 27PIF0068 | PIF 68 | 11/16 (17,45) | .140 (3,56) | .255 (6,48) | .360 (9,14) | .290 (7,37) | .468 (11,89) | |
| 27PIF0069* | PIF 69 | .312 (7,92) | .095 (2,41) | .075 (1,91) | .145 (3,68) | .095 (2,41) | .218 (5,54) | |
| 27PIF0070 | PIF 70 | 19/32 (15,08) | .171 (4,34) | .187 (4,75) | .295 (7,49) | .260 (6,60) | .418 (10,62) | |
| 27PIF0071 | PIF 71 | 19/32 (15,08) | .250 (6,35) | .187 (4,75) | .300 (7,62) | .245 (6,22) | .497 (12,62) | |
| 27PIF0072 | PIF 72 | 19/32 (15,08) | .365 (9,27) | .187 (4,75) | .290 (7,37) | .245 (6,22) | .622 (15,80) | |
| 27PIF0073 | PIF 73 | 11/32 (8,73) | .171 (4,34) | .187 (4,75) | .295 (7,49) | .260 (6,60) | .380 (9,65) | |
| 27PIF0074 | PIF 74 | 19/32 (15,08) | .405 (10,29) | .160 (4,06) | .315 (8,00) | .275 (6,99) | .620 (15,75) | |
| 27PIF0075 | PIF 75 | 1/4 (6,35) | .550 (13,97) | .135 (3,43) | .145 (3,68) | .112 (2,84) | .745 (18,92) | |
| 27PIF0076 | PIF 76 | 15/32 (11,90) | .129 (3,28) | .148 (3,76) | .238 (6,05) | .197 (5,00) | .399 (10,13) | |
| 27PIF0077 | PIF 77 | 15/64 (5,95) | .320 (8,13) | .084 (2,13) | .145 (3,68) | .118 (3,00) | .437 (11,10) | |
| 27PIF0078 | PIF 78 | 13/32 (10,32) | .250 (6,35) | .100 (2,54) | .278 (7,06) | .217 (5,51) | .395 (10,03) | |
| 27PIF0079 | PIF 79 | 9/16 (14,29) | .950 (24,13) | .174 (4,42) | .228 (5,79) | .172 (4,37) | 1.20 (30,48) | |
| 27PIF0080 | PIF 80 | 3/8 (9,53) | 1.125 (28,58) | .17 (4,32) | .202 (5,13) | .165 (4,19) | 1.365 (34,67) | |
| 27PIF0081 | PIF 81 | .343 (8,71) | .125 (3,18) | .137 (3,48) | .202 (5,13) | .165 (4,19) | .31 (7,87) | |
| 27PIF0082 | PIF 82 | 11/16 (17,45) | .250 (6,35) | .255 (6,48) | .360 (9,14) | .290 (7,37) | .585 (14,86) | |

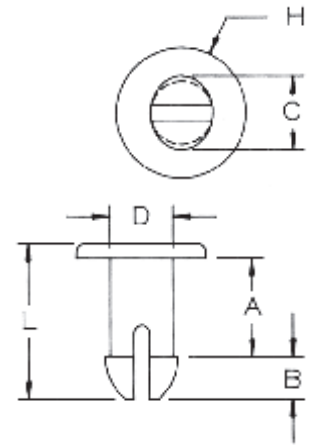
PANEL FASTENERS AND HOLE PLUGS

SECTION VI

NYLON PUSH-IN-FASTENERS



Micro Plastics' Push-in Fasteners provide an inexpensive, fast, convenient method to join plastic, light sheet metal, insulating materials, circuit boards, or any other thin, light-weight material. They can also be used as push-in glides or as bumpers. Special designed legs provide compression and expansion to lock fastener into pre-punched holes. These fasteners are vibration, abrasion and corrosion resistant, and feature large heads for easier assembly, and can be used over and over.

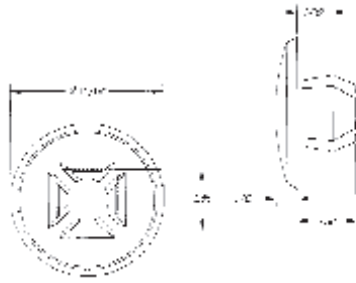


| PART NUMBER | DESCRIPTION | H | A | B | C | D | L +/- .015 |
|-------------|-------------|---------------|---------------|-------------|--------------|-------------|---------------|
| 27PIF0083 | PIF 83 | 1/2 (12,70) | .064 (1,63) | .138 (3,51) | .280 (7,11) | .243 (6,17) | .262 (6,65) |
| 27PIF0084 | PIF 84 | 1/2 (12,70) | .099 (2,51) | .168 (4,27) | .280 (7,11) | .245 (6,22) | .324 (8,23) |
| 27PIF0085 | PIF 85 | 1/2 (12,70) | .127 (3,23) | .177 (4,50) | .281 (7,14) | .241 (6,12) | .361 (9,17) |
| 27PIF0086 | PIF 86 | 1/2 (12,70) | .156 (3,96) | .170 (4,32) | .281 (7,14) | .242 (6,15) | .380 (9,65) |
| 27PIF0087 | PIF 87 | 1/2 (12,70) | .189 (4,80) | .151 (3,84) | .278 (7,06) | .241 (6,12) | .395 (10,03) |
| 27PIF0088 | PIF 88 | 1/2 (12,70) | .219 (5,56) | .178 (4,52) | .277 (7,04) | .239 (6,07) | .445 (11,30) |
| 27PIF0089 | PIF 89 | 1/2 (12,70) | .250 (6,35) | .175 (4,45) | .283 (7,19) | .241 (6,12) | .487 (12,37) |
| 27PIF0090 | PIF 90 | 1/2 (12,70) | .281 (7,14) | .176 (4,47) | .280 (7,11) | .240 (6,10) | .513 (13,03) |
| 27PIF0091 | PIF 91 | 1/2 (12,70) | .314 (7,98) | .152 (3,86) | .281 (7,14) | .241 (6,12) | .520 (13,21) |
| 27PIF0092 | PIF 92 | 1/2 (12,70) | .345 (8,76) | .177 (4,50) | .281 (7,14) | .240 (6,10) | .578 (14,68) |
| 27PIF0093 | PIF 93 | 1/2 (12,70) | .375 (9,53) | .166 (4,22) | .281 (7,14) | .242 (6,15) | .609 (15,47) |
| 27PIF0094 | PIF 94 | 1/2 (12,70) | .405 (10,29) | .175 (4,45) | .282 (7,16) | .243 (6,17) | .638 (16,21) |
| 27PIF0095 | PIF 95 | 19/32 (15,08) | .130 (3,30) | .125 (3,18) | .205 (5,21) | .145 (3,68) | .305 (7,75) |
| 27PIF0096 | PIF 96 | 1/2 (12,70) | .466 (11,84) | .178 (4,52) | .280 (7,11) | .240 (6,10) | .701 (17,81) |
| 27PIF0097 | PIF 97 | 1/2 (12,70) | .498 (12,65) | .176 (4,47) | .283 (7,19) | .240 (6,10) | .734 (18,64) |
| 27PIF0098 | PIF 98 | 1/2 (12,70) | .438 (11,13) | .176 (4,47) | .281 (7,14) | .240 (6,10) | .672 (17,07) |
| 27PIF0099 | PIF 99 | 1/2 (12,70) | 1.020 (25,91) | .380 (9,65) | .475 (12,07) | .350 (8,89) | 1.460 (37,08) |
| 27PIF0100 | PIF 100 | 3/8 (9,53) | 1.543 (39,19) | .205 (5,21) | .295 (7,49) | .250 (6,35) | 1.875 (47,63) |
| 27PIF0101 | PIF 101 | .680 (17,28) | .154 (3,91) | .255 (6,48) | .347 (8,81) | .285 (7,24) | .473 (12,01) |
| 27PIF0102 | PIF 102 | .300 (7,62) | .050 (1,27) | .137 (3,48) | .202 (5,13) | .165 (4,19) | .337 (8,56) |
| 27PIF0104 | PIF 104 | 15/64 (0,23) | .750 (19,05) | .082 (2,08) | .164 (4,17) | .120 (3,05) | .875 (22,23) |
| 27PIF0105 | PIF 105 | 5/8 (15,88) | 1.065 (27,05) | .360 (9,14) | .360 (9,14) | .270 (6,86) | 1.50 (38,10) |
| 27PIF0106 | PIF 106 | .380 (9,65) | .340 (8,64) | .180 (4,57) | .220 (5,59) | .180 (4,57) | .580 (14,73) |
| 27PIF0107 | PIF 107 | .310 (7,87) | .195 (4,95) | .200 (5,08) | .200 (5,08) | .160 (4,06) | .450 (11,43) |
| 27PIF0108 | PIF 108 | .155 (3,94) | .460 (11,68) | .085 (2,16) | .135 (3,43) | .093 (2,36) | .595 (15,11) |
| 27PIF0109 | PIF 109 | 15/64 (5,94) | .080 (2,03) | .060 (1,52) | .200 (5,08) | .160 (4,06) | .180 (4,57) |
| 27PIF0110 | PIF 110 | 3/16 (4,76) | .145 (3,68) | .090 (2,29) | .135 (3,43) | .090 (2,29) | .300 (7,62) |
| 27PIF0111 | PIF 111 | .320 (8,13) | .130 (3,30) | .110 (2,79) | .220 (5,59) | .195 (4,95) | .290 (7,37) |
| 27PIF0112 | PIF 112 | .320 (8,13) | .180 (4,57) | .110 (2,79) | .220 (5,59) | .195 (4,95) | .340 (8,64) |
| 27PIF0113 | PIF 113 | .344 (8,74) | .560 (14,22) | .145 (3,68) | .224 (5,69) | .175 (4,45) | .765 (19,43) |

PANEL FASTENERS AND HOLE PLUGS

SECTION
VI

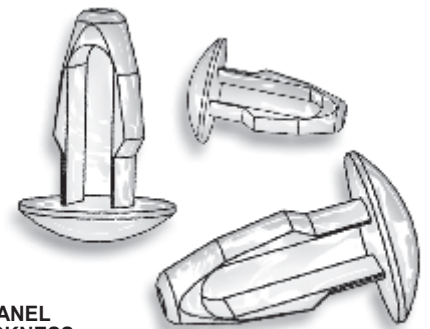
NYLON "SPECIAL ITEM" PUSH-IN-FASTENERS



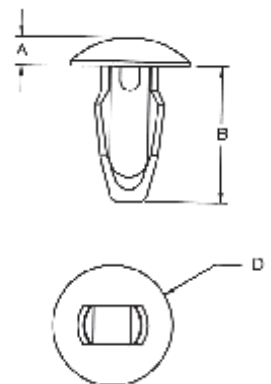
| PART NUMBER | HOLE SIZE/TYPE | PANEL THICKNESS |
|-------------|-----------------------------------|-----------------|
| 401005 | .276/.286 (7,01/7,26) SQUARE HOLE | .156" (3,96) |

SNAP CLIPS

A combination of Celcon Acetal material, and a resilient body design, give these parts a positive "snap" and more definite grip when assembled into place. Designed for other hole sizes from 1/8" to 1/4" and panel thicknesses from 1/32" to 3/16".



| PART NUMBER | A | B | D | HOLE SIZE | PANEL THICKNESS |
|--------------|-------------|---------------|--------------|-------------|-----------------|
| 27SNC1250032 | .060 (1,52) | 1/4 (6,35) | 1/4 (6,35) | .125 (3,18) | .032 (0,81) |
| 27SNC1250062 | .060 (1,52) | 9/32 (7,14) | 1/4 (6,35) | .125 (3,18) | .062 (1,57) |
| 27SNC1250093 | .060 (1,52) | 5/16 (7,94) | 1/4 (6,35) | .125 (3,18) | .093 (2,36) |
| 27SNC1250125 | .060 (1,52) | 11/32 (8,73) | 1/4 (6,35) | .125 (3,18) | .125 (3,18) |
| 27SNC1560032 | .060 (1,52) | 9/32 (7,14) | 5/16 (7,94) | .156 (3,96) | .032 (0,81) |
| 27SNC1560062 | .060 (1,52) | 5/16 (7,94) | 5/16 (7,94) | .156 (3,96) | .062 (1,57) |
| 27SNC1560093 | .060 (1,52) | 11/32 (8,73) | 5/16 (7,94) | .156 (3,96) | .093 (2,36) |
| 27SNC1560125 | .060 (1,52) | 3/8 (9,53) | 5/16 (7,94) | .156 (3,96) | .125 (3,18) |
| 27SNC1560156 | .060 (1,52) | 13/32 (10,32) | 5/16 (7,94) | .156 (3,96) | .156 (3,96) |
| 27SNC1870032 | .060 (1,52) | 5/16 (7,94) | 5/16 (7,94) | .187 (4,75) | .032 (0,81) |
| 27SNC1870062 | .060 (1,52) | 11/32 (8,73) | 5/16 (7,94) | .187 (4,75) | .062 (1,57) |
| 27SNC1870093 | .060 (1,52) | 3/8 (9,53) | 5/16 (7,94) | .187 (4,75) | .093 (2,36) |
| 27SNC1870125 | .060 (1,52) | 13/32 (10,32) | 5/16 (7,94) | .187 (4,75) | .125 (3,18) |
| 27SNC1870156 | .060 (1,52) | 7/16 (11,11) | 5/16 (7,94) | .187 (4,75) | .156 (3,96) |
| 27SNC1870187 | .060 (1,52) | 15/32 (11,91) | 5/16 (7,94) | .187 (4,75) | .187 (4,75) |
| 27SNC2190032 | .060 (1,52) | 25/64 (9,93) | 11/32 (8,73) | .219 (5,56) | .032 (0,81) |
| 27SNC2190062 | .060 (1,52) | 27/64 (10,72) | 11/32 (8,73) | .219 (5,56) | .062 (1,57) |
| 27SNC2190093 | .060 (1,52) | 29/64 (11,51) | 11/32 (8,73) | .219 (5,56) | .093 (2,36) |
| 27SNC2190125 | .060 (1,52) | 31/64 (12,30) | 11/32 (8,73) | .219 (5,56) | .125 (3,18) |
| 27SNC2190156 | .060 (1,52) | 33/64 (13,11) | 11/32 (8,73) | .219 (5,56) | .156 (3,96) |
| 27SNC2190187 | .060 (1,52) | 35/64 (13,89) | 11/32 (8,73) | .219 (5,56) | .187 (4,75) |
| 27SNC2500032 | .060 (1,52) | 13/32 (10,32) | 1/2 (12,70) | .250 (6,35) | .032 (0,81) |
| 27SNC2500062 | .060 (1,52) | 27/64 (10,72) | 1/2 (12,70) | .250 (6,35) | .062 (1,57) |
| 27SNC2500093 | .060 (1,52) | 29/64 (11,51) | 1/2 (12,70) | .250 (6,35) | .093 (2,36) |
| 27SNC2500125 | .060 (1,52) | 31/64 (12,30) | 1/2 (12,70) | .250 (6,35) | .125 (3,18) |
| 27SNC2500156 | .060 (1,52) | 33/64 (13,11) | 1/2 (12,70) | .250 (6,35) | .156 (3,96) |
| 27SNC2500187 | .060 (1,52) | 35/64 (13,89) | 1/2 (12,70) | .250 (6,35) | .187 (4,75) |

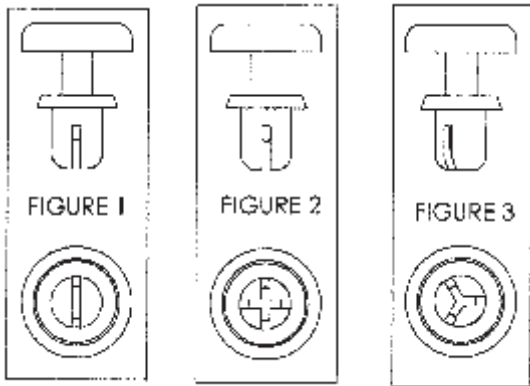


PANEL FASTENERS AND HOLE PLUGS

SECTION VI

NYLON SNAP RIVETS

New Sizes



Micro Plastics' Nylon Snap Rivet is designed for assemblies requiring fast and economical fasteners that can be installed without tools. The two piece molded fastener comes assembled ready for use. The Rivet is placed in the hole and the smooth, oversized head is pressed. The specially designed legs expand and firmly lock the components permanently in place. Snap Rivets are molded in high dielectric (UL 94V2) Nylon 6/6 making them ideal for electronic applications.

- The following standard sizes are available from stock, other sizes will be tooled on request.
- Parts are stocked in black, other colors available upon request.

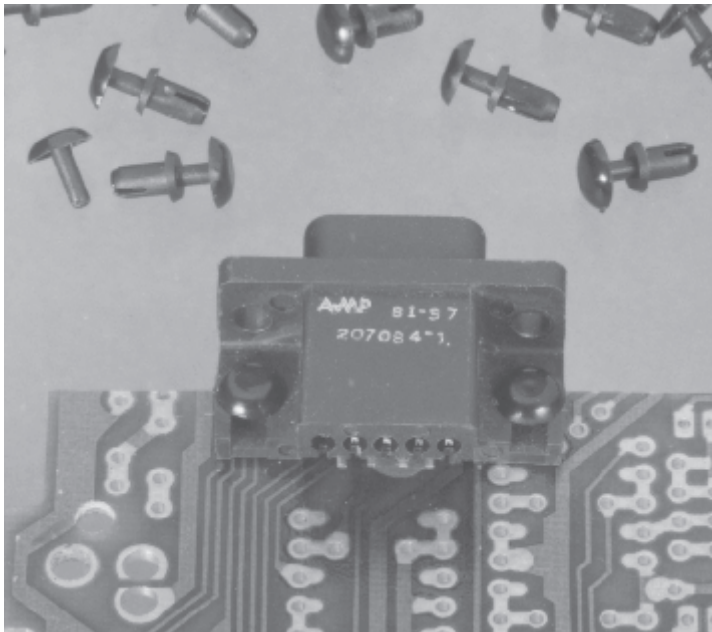
| ITEM NUMBER | PANEL THICKNESS | HOLE SIZE | A | * B | HEAD HEIGHT C | HEAD DIA. D | FIG. NO. |
|-------------|-----------------------|---------------------|------------|-------------|------------------|----------------|----------|
| 27SR079090 | .024/.047 (0,6/1,2) | .083/.087 (2,1/2,2) | .076 (1,9) | .090 (2,3) | .047 (1,2) | .165 (4,2) | 1 |
| 27SR079130 | .051/.079 (1,3/2,0) | .083/.087 (2,1/2,2) | .076 (1,9) | .130 (3,3) | .047 (1,2) | .165 (4,2) | 1 |
| 27SR079160 | .083/.110 (2,1/2,8) | .083/.087 (2,1/2,2) | .076 (1,9) | .160 (4,0) | .025 (0,6) | .123 (3,1) | 1 |
| 27SR079190 | .114/.142 (2,9/3,6) | .083/.087 (2,1/2,2) | .076 (1,9) | .190 (4,8) | .047 (1,2) | .165 (4,2) | 1 |
| 27SR079220 | .148/.170 (3,8/4,3) | .083/.087 (2,1/2,2) | .076 (1,9) | .220 (5,6) | .047 (1,2) | .165 (4,2) | 1 |
| 27SR079250 | .173/.197 (4,4/5,0) | .083/.087 (2,1/2,2) | .076 (1,9) | .250 (6,3) | .047 (1,2) | .165 (4,2) | 1 |
| 27SR102125 | .035/.080 (0,9/2,0) | .105/.109 (2,6/2,7) | .100 (2,5) | .125 (3,1) | .062 (1,5) | .203 (5,1) | 2 |
| 27SR102130 | .039/.079 (0,9/2,0) | .102/.106 (2,6/2,7) | .100 (2,5) | .130 (3,3) | .055 (1,4) | .197 (5,0) | 1 |
| 27SR102190 | .106/.142 (2,6/3,6) | .102/.106 (2,6/2,7) | .100 (2,5) | .190 (4,8) | .055 (1,4) | .197 (5,0) | 1 |
| 27SR106220 | .134/.169 (3,4/4,3) | .102/.106 (2,6/2,7) | .100 (2,5) | .220 (5,6) | .027 (0,7) | .147 (3,7) | 1 |
| 27SR102250 | .142/.198 (3,6/5,0) | .102/.106 (2,6/2,7) | .100 (2,5) | .250 (6,3) | .055 (1,4) | .197 (5,0) | 1 |
| 27SR102280 | .170/.229 (4,3/5,8) | .102/.106 (2,6/2,7) | .100 (2,5) | .281 (7,1) | .055 (1,4) | .197 (5,0) | 1 |
| 27SR102170 | .078/.118 (2,0/3,0) | .107/.111 (2,7/2,8) | .102 (2,6) | .170 (4,3) | .067 (1,7) | .203 (5,1) | 2 |
| 27SR102220 | .125/.156 (3,1/3,9) | .107/.111 (2,7/2,8) | .102 (2,6) | .200 (5,0) | .064 (1,9) | .201 (5,1) | 2 |
| 27SR0010 | .050/.100 (1,3/2,5) | .123/.127 (3,1/3,2) | .118 (3,0) | .140 (3,5) | .065 (1,6) | .254 (6,4) | 2 |
| 27SR122180 | .079/.118 (2,0/3,0) | .122/.126 (3,0/3,2) | .118 (3,0) | .180 (4,5) | .063 (1,6) | .252 (6,4) | 1 |
| 27SR118180 | .075/.120 (1,9/3,0) | .123/.127 (3,1/3,2) | .118 (3,0) | .183 (4,6) | .062 (1,5) | .245 (6,2) | 1 |
| 27SR118260 | .157/.197 (4,0/5,0) | .122/.126 (3,0/3,2) | .118 (3,0) | .260 (6,6) | .063 (1,6) | .252 (6,4) | 1 |
| 27SR118300 | .197/.236 (5,0/6,0) | .122/.126 (3,0/3,2) | .118 (3,0) | .300 (7,6) | .063 (1,6) | .252 (6,4) | 1 |
| 27SR118310 | .217/.256 (5,5/6,5) | .122/.126 (3,0/3,2) | .118 (3,0) | .310 (7,9) | .063 (1,6) | .252 (6,4) | 1 |
| 27SR118350 | .256/.295 (6,5/7,5) | .122/.126 (3,0/3,2) | .118 (3,0) | .350 (8,9) | .063 (1,6) | .252 (6,4) | 1 |
| 27SR118390 | .295/.335 (7,5/8,5) | .122/.126 (3,0/3,2) | .118 (3,0) | .390 (9,9) | .063 (1,6) | .252 (6,4) | 1 |
| 27SR1180515 | .400/.440 (10,2/11,2) | .123/.127 (3,1/3,2) | .118 (3,0) | .520 (13,2) | .068 (1,7) | .253 (6,4) | 3 |
| 27SR0012 | .122/.160 (3,0/4,0) | .127/.131 (3,2/3,3) | .122 (3,0) | .220 (5,6) | .065 (1,6) | .249 (6,3) | 1 |
| 27SR138140 | .047/.083 (1,9/2,1) | .142/.146 (3,6/3,7) | .135 (3,4) | .140 (3,5) | .063 (1,6) | .252 (6,4) | 2 |
| 27SR138180 | .083/.118 (2,1/3,0) | .142/.146 (3,6/3,7) | .135 (3,4) | .170 (4,3) | .063 (1,6) | .252 (6,4) | 2 |
| 27SR135180 | .060/.120 (1,5/3,0) | .140/.144 (3,5/3,6) | .135 (3,4) | .180 (4,6) | .061 (1,5) | .253 (6,4) | 2 |
| 27SR138200 | .106/.142 (2,7/3,6) | .142/.146 (3,6/3,7) | .135 (3,4) | .200 (5,0) | .063 (1,6) | .252 (6,4) | 2 |
| 27SR135220 | .118/.157 (3,0/4,0) | .140/.144 (3,5/3,6) | .135 (3,4) | .220 (5,6) | .060 (1,5) | .252 (6,4) | 2 |
| 27SR138240 | .146/.181 (3,7/4,6) | .142/.146 (3,6/3,7) | .135 (3,4) | .240 (6,1) | .063 (1,6) | .252 (6,4) | 2 |
| 27SR138280 | .177/.217 (4,5/5,5) | .142/.146 (3,6/3,7) | .135 (3,4) | .280 (7,1) | .063 (1,6) | .252 (6,4) | 2 |
| 27SR138310 | .217/.256 (5,5/6,5) | .142/.146 (3,6/3,7) | .135 (3,4) | .310 (7,9) | .063 (1,6) | .252 (6,4) | 2 |
| 27SR0018 | .100/.140 (2,5/3,5) | .160/.164 (4,0/4,1) | .155 (3,9) | .200 (5,0) | .082 (2,0) | .316 (8,0) | 1 |
| 27SR0020 | .144/.188 (3,5/4,5) | .160/.164 (4,0/4,1) | .155 (3,9) | .240 (6,0) | .078 (1,9) | .317 (8,0) | 1 |

* +/- .010" on B DIMENSION

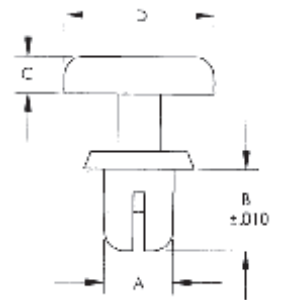
PANEL FASTENERS AND HOLE PLUGS

SECTION
VI

NYLON SNAP RIVETS



New Sizes

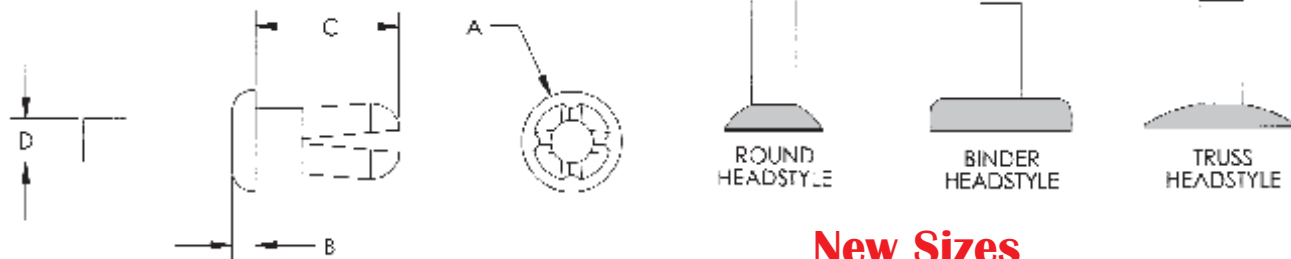


| ITEM NUMBER | PANEL THICKNESS | HOLE SIZE | A | * B | HEAD HEIGHT C | HEAD DIA. D | FIG. NO. |
|-------------|----------------------|---------------------|------------|-------------|------------------|----------------|----------|
| 27SR157475 | .335/.408 (8,5/10,4) | .161/.165 (4,1/4,2) | .156 (4,0) | .475 (12,1) | .071 (1,8) | .315 (8,0) | 2 |
| 27SR1660240 | .050/.180 (1,2/4,5) | .162/.166 (4,1/4,2) | .157 (4,0) | .236 (5,9) | .081 (2,0) | .375 (9,5) | 1 |
| 27SR157275 | .175/.215 (4,5/5,5) | .162/.166 (4,1/4,2) | .157 (4,0) | .284 (7,2) | .084 (2,1) | .318 (8,0) | 2 |
| 27SR157315 | .148/.188 (3,8/4,8) | .162/.166 (4,1/4,2) | .157 (4,0) | .315 (8,0) | .083 (2,1) | .315 (8,0) | 2 |
| 27SR157350 | .256/.295 (6,5/7,5) | .161/.165 (4,1/4,2) | .157 (4,0) | .350 (8,9) | .071 (1,8) | .317 (8,1) | 2 |
| 27SR157390 | .295/.335 (7,5/8,5) | .161/.165 (4,1/4,2) | .157 (4,0) | .390 (9,9) | .071 (1,8) | .317 (8,7) | 2 |
| 27SR157290 | .290/.330 (7,4/8,4) | .162/.166 (4,1/4,2) | .157 (4,0) | .395 (10,0) | .083 (2,1) | .317 (8,0) | 2 |
| 27SR1600315 | .100/.250 (2,5/6,4) | .165/.169 (4,2/4,3) | .160 (4,0) | .315 (8,0) | .034 (0,8) | .278 (7,0) | 2 |
| 27SR1660400 | .250/.265 (6,3/6,7) | .170 (4,3) | .165 (4,2) | .410 (10,4) | .079 (2,0) | .370 (9,4) | 2 |
| 27SR1660265 | .170/.210 (4,3/5,3) | .171/.175 (4,3/4,4) | .166 (4,2) | .265 (6,7) | .084 (2,1) | .315 (8,0) | 1 |
| 27SR180530 | .250/.437 (6,3/11,1) | .187/.191 (4,7/4,8) | .182 (4,6) | .530 (13,4) | .098 (2,4) | .356 (9,0) | 2 |
| 27SR197180 | .059/.098 (1,5/2,5) | .201/.205 (5,1/5,2) | .195 (4,9) | .180 (4,5) | .087 (2,2) | .350 (8,9) | 2 |
| 27SR197220 | .098/.138 (2,5/3,5) | .201/.205 (5,1/5,2) | .195 (4,9) | .220 (5,6) | .087 (2,2) | .350 (8,9) | 2 |
| 27SR197260 | .105/.170 (2,7/4,3) | .201/.205 (5,1/5,2) | .195 (4,9) | .260 (6,6) | .038 (0,9) | .264 (6,7) | 2 |
| 27SR200300 | .138/.177 (3,5/4,5) | .201/.205 (5,1/5,2) | .195 (4,9) | .330 (8,4) | .087 (2,2) | .350 (8,9) | 2 |
| 27SR197410 | .295/.335 (7,5/8,5) | .201/.205 (5,1/5,2) | .195 (4,9) | .410 (10,4) | .087 (2,2) | .350 (8,9) | 2 |
| 27SR1970330 | .217/.256 (5,5/6,5) | .202/.206 (5,1/5,2) | .197 (5,0) | .330 (8,4) | .085 (2,1) | .356 (9,0) | 2 |
| 27SR2000370 | .230/.300 (5,8/7,6) | .203/.207 (5,1/5,2) | .198 (5,0) | .368 (9,4) | .095 (2,4) | .352 (8,9) | 2 |
| 27SR0030 | .160/.200 (4,0/5,0) | .205/.209 (5,2/5,3) | .200 (5,0) | .280 (7,0) | .064 (1,9) | .350 (8,0) | 2 |
| 27SR236240 | .098/.157 (2,4/4,0) | .240/.244 (6,1/6,2) | .236 (5,9) | .240 (6,1) | .098 (2,4) | .475 (12,1) | 2 |
| 27SR236310 | .138/.217 (3,5/5,5) | .240/.244 (6,1/6,2) | .236 (6,0) | .310 (7,9) | .118 (3,0) | .472 (12,0) | 2 |
| 27SR2400187 | .031/.062 (0,7/1,5) | .248/.252 (6,3/6,4) | .240 (6,1) | .187 (5,0) | .120 (3,0) | .440 (11,1) | 2 |
| 27SR2400250 | .062/.125 (1,5/3,1) | .248/.252 (6,3/6,4) | .240 (6,1) | .250 (6,3) | .120 (3,0) | .440 (11,1) | 2 |
| 27SR2400312 | .125/.187 (3,1/4,7) | .248/.252 (6,3/6,4) | .240 (6,1) | .312 (7,9) | .120 (3,0) | .440 (11,1) | 2 |
| 27SR2400375 | .187/.250 (4,7/6,3) | .248/.252 (6,3/6,4) | .240 (6,1) | .375 (9,5) | .120 (3,0) | .440 (11,1) | 2 |
| 27SR2400500 | .250/.375 (6,3/9,5) | .248/.252 (6,3/6,4) | .240 (6,1) | .500 (12,7) | .120 (3,0) | .440 (11,1) | 2 |

* +/- .010" on B DIMENSION

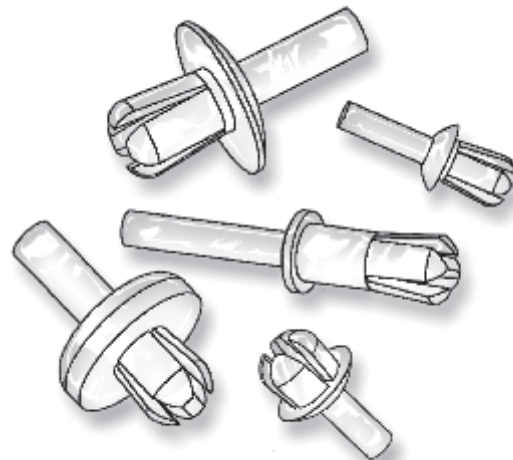
PANEL FASTENERS AND HOLE PLUGS

SECTION VI



Micro Plastics' Poly Rivets are one-piece nylon blind rivets that offer a fast economical, permanent, fastener that can be used in a wide variety of materials including sheet metal, plastic sheets, fiberglass, P.C. boards and composites. Fast, easy installation can be made without tools from one side of the work piece. The rivet is inserted in a pre-punched hole and the drive pin is forced into the specially designed legs, with a drive rivet tool, which expand and securely locks the assembled components in place. The versatile Poly Rivet provides a secure joint even under extreme vibration conditions while it electrically insulates and resists corrosion and cathodic transfer. The following are some of the more common sizes available. Because of Micro Plastics' unique tooling approach, designs can be varied over a wide range: diameter, head style and lengths can be adjusted to meet your requirements. Let us know what you need.

New Sizes



*61PR300800 WILL NOT WORK WITH DRIVE RIVET INSERTION TOOLS.

NYLON POLY DRIVE RIVETS

| PART NUMBER | NOMINAL HOLE | PANEL THICKNESS RANGE | HEAD STYLE | HEAD DIA. "A" | HEAD HEIGHT "B" | LOCK LENGTH "C" | PIN DIA. "D" |
|-------------|--------------|------------------------|------------|---------------|-----------------|-----------------|--------------|
| 61PR100000 | .218 (5,54) | .093/.350 (2,36/9,53) | Round | .375 (9,53) | .080 (2,03) | .450 (11,43) | .120 (3,05) |
| 61PR100100 | .156 (3,96) | .187/.250 (4,75/6,35) | Binder | .218 (5,54) | .050 (1,27) | .312 (7,92) | .093 (2,36) |
| 61PR100200 | .218 (5,54) | .094/.312 (2,39/7,92) | Binder | .437 (11,10) | .100 (2,54) | .464 (11,79) | .125 (3,18) |
| 61PR100300 | .156 (3,96) | .218/.312 (5,54/7,92) | Binder | .218 (5,54) | .050 (1,27) | .359 (9,12) | .093 (2,36) |
| 61PR100400 | .187 (4,75) | .062/.187 (1,57/4,75) | Truss | .281 (7,14) | .050 (1,27) | .296 (7,52) | .125 (3,18) |
| 61PR100500 | .226 (5,74) | .125/.312 (3,18/7,92) | Truss | .376 (9,55) | .080 (2,03) | .467 (11,86) | .120 (3,05) |
| 61PR100800 | .156 (3,96) | .218/.383 (5,54/9,73) | Binder | .218 (5,54) | .050 (1,27) | .421 (10,69) | .093 (2,36) |
| 61PR200000 | .187 (4,75) | .156/.281 (3,96/7,14) | Truss | .433 (11,00) | .075 (1,91) | .380 (9,65) | .125 (3,18) |
| 61PR200100 | .187 (4,75) | .062/.125 (1,57/3,18) | Binder | .430 (10,92) | .120 (3,05) | .216 (5,49) | .125 (3,18) |
| 61PR200200 | .187 (4,75) | .125/.187 (3,18/4,75) | Truss | .430 (10,92) | .075 (1,91) | .281 (7,14) | .125 (3,18) |
| 61PR200300 | .187 (4,75) | .062/.187 (1,57/4,75) | Truss | .430 (10,92) | .075 (1,91) | .285 (7,24) | .125 (3,18) |
| 61PR200800 | .187 (4,75) | .031/.200 (0,79/5,08) | Round | .275 (6,98) | .075 (1,91) | .295 (7,49) | .125 (3,18) |
| 61PR300000 | .187 (4,75) | .312/.440 (7,92/11,18) | Binder | .281 (7,14) | .075 (1,91) | .535 (13,59) | .125 (3,18) |
| 61PR300100 | .187 (4,75) | .062/.187 (1,57/4,75) | Round | .281 (7,14) | .075 (1,91) | .295 (7,49) | .125 (3,18) |
| 61PR300200 | .187 (4,75) | .062/.125 (1,57/3,18) | Round | .281 (7,14) | .075 (1,91) | .230 (5,84) | .125 (3,18) |
| 61PR300300 | .187 (4,75) | .078/.375 (1,98/9,53) | Round | .281 (7,14) | .047 (1,19) | .450 (11,43) | .125 (3,18) |
| 61PR300400 | .187 (4,75) | .312/.440 (7,92/11,18) | Round | .320 (8,13) | .109 (2,77) | .535 (13,59) | .125 (3,18) |
| 61PR300500 | .187 (4,75) | .375/.500 (9,53/12,70) | Binder | .281 (7,14) | .080 (2,03) | .625 (15,88) | .125 (3,18) |
| 61PR300600 | .187 (4,75) | .078/.375 (1,98/9,50) | Round | .320 (8,13) | .109 (2,77) | .455 (11,56) | .125 (3,18) |
| 61PR300900 | .275 (6,99) | .062/.600 (1,57/15,24) | Round | .370 (9,40) | .080 (2,03) | .640 (16,26) | .150 (3,81) |
| 61PR300700 | .187 (4,75) | .375/.500 (9,53/12,70) | Round | .320 (8,13) | .109 (2,77) | .609 (15,47) | .125 (3,18) |
| 61PR300800* | .187 (4,75) | .375/.750 (9,53/19,05) | Round | .320 (8,13) | .109 (2,77) | .850 (21,59) | .125 (3,18) |
| 61PR400000 | .250 (6,35) | .350/.500 (8,89/12,70) | Binder | .468 (11,89) | .080 (2,03) | .620 (15,75) | .150 (3,81) |
| 61PR400100 | .250 (6,35) | .350/.500 (8,89/12,70) | Round | .370 (9,40) | .080 (2,03) | .620 (15,75) | .150 (3,81) |
| 61PR400200 | .250 (6,35) | .156/.330 (3,96/8,38) | Binder | .468 (11,89) | .080 (2,03) | .375 (9,53) | .155 (3,94) |
| 61PR400300 | .250 (6,35) | .093/.312 (2,36/7,92) | Binder | .468 (11,89) | .080 (2,03) | .500 (12,70) | .150 (3,81) |
| 61PR400400 | .187 (4,75) | .312/.440 (7,92/11,18) | Binder | .312 (7,92) | .062 (1,57) | .535 (13,59) | .125 (3,18) |
| 61PR400500 | .187 (4,75) | .375/.500 (9,53/12,70) | Binder | .315 (8,00) | .062 (1,57) | .609 (15,47) | .125 (3,18) |

+0.005/-0.015 FOR LOCK LENGTH "C"

PANEL FASTENERS AND HOLE PLUGS

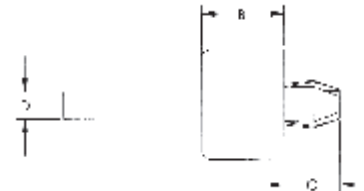
SECTION
VI

NYLON POLY DRIVE RIVETS

New Sizes

| PART NUMBER | NOMINAL HOLE | PANEL THICKNESS RANGE | HEAD STYLE | HEAD DIA. "A" | HEAD HEIGHT "B" | LOCK LENGTH "C" | PIN DIA. "D" |
|-------------|--------------|------------------------|------------|---------------|-----------------|-----------------|--------------|
| 61PR400600 | .187 (4,75) | .078/.375 (1,98/9,53) | Binder | .312 (7,92) | .062 (1,57) | .445 (11,30) | .125 (3,18) |
| 61PR400700 | .245 (6,22) | .140/.550 (3,56/13,99) | Round | .375 (9,53) | .100 (2,54) | .625 (15,88) | .150 (3,81) |
| 61PR400800 | .250 (6,35) | .125/.437 (3,18/11,10) | Binder | .468 (11,89) | .080 (2,03) | .585 (14,86) | .150 (3,81) |
| 61PR400900 | .250 (6,35) | .078/.275 (1,98/6,99) | Button | .494 (12,55) | .305 (7,75) | .375 (9,53) | .155 (3,94) |
| 61PR500500 | .218 (5,54) | .031/.062 (0,79/1,57) | Button | .375 (9,53) | .223 (5,66) | .170 (4,32) | .125 (3,18) |
| 61PR600000 | .182 (4,62) | .130/.290 (3,30/7,37) | Truss | .280 (7,11) | .050 (1,27) | .380 (9,65) | .120 (3,05) |
| 61PR600100 | .160 (4,06) | .062/.180 (1,57/4,57) | Round | .295 (7,49) | .050 (1,27) | .230 (5,84) | .093 (2,36) |
| 61PR700100 | .187 (4,75) | .156/.281 (3,96/7,14) | Truss | .437 (11,10) | .075 (1,91) | .380 (9,65) | .125 (3,18) |
| 61PR700200 | .187 (4,75) | .062/.187 (1,57/4,75) | Truss | .437 (11,10) | .075 (1,91) | .295 (7,49) | .125 (3,18) |
| 61PR700300 | .226 (5,74) | .125/.312 (3,18/7,92) | Truss | .437 (11,10) | .075 (1,91) | .468 (11,43) | .125 (3,18) |
| 61PR700900 | .250 (6,35) | .062/.125 (1,57/3,18) | Round | .370 (9,40) | .080 (2,03) | .218 (5,54) | .125 (3,18) |
| 61PR800000 | .250 (6,35) | .093/.312 (2,36/7,92) | Truss | .468 (11,89) | .080 (2,03) | .500 (12,70) | .150 (3,81) |
| 61PR800100 | .250 (6,35) | .281/.500 (7,14/12,70) | Truss | .468 (11,89) | .080 (2,03) | .620 (15,75) | .150 (3,81) |
| 61PR800300 | .250 (6,35) | .109/.156 (2,77/3,96) | Round | 1/2 (12,70) | 5/16 (7,94) | 3/8 (9,53) | .155 (3,94) |
| 61PR900000 | .125 (3,18) | .031/.140 (0,79/3,56) | Round | .187 (4,75) | .047 (1,19) | .190 (4,83) | .075 (1,91) |
| 61PR900100 | .125 (3,18) | .031/.140 (0,79/3,56) | Round | .218 (5,54) | .060 (1,52) | .225 (5,72) | .075 (1,91) |
| 61PR010000 | .218 (5,54) | .187/.250 (4,75/6,35) | Truss | .375 (9,53) | .080 (2,03) | .343 (8,71) | .120 (3,05) |
| 61PR010100 | .275 (6,99) | .093/.350 (2,36/8,89) | Binder | .620 (15,75) | .109 (2,77) | .480 (12,19) | .150 (3,81) |
| 61PR010200 | .280 (7,11) | .062/.350 (1,57/8,89) | Truss | .485 (12,32) | .075 (1,91) | .468 (11,89) | .187 (4,75) |
| 61PR010300 | .250 (6,35) | .093/.312 (2,36/7,92) | Binder | .625 (15,88) | .109 (2,77) | .500 (12,70) | .150 (3,81) |
| 61PR010400 | .250 (6,35) | .281/.500 (7,14/12,70) | Binder | .615 (15,62) | .109 (2,77) | .620 (15,75) | .150 (3,81) |
| 61PR010500 | .290 (7,37) | .093/.187 (2,37/4,75) | Binder | .620 (15,75) | .109 (2,77) | .300 (7,62) | .150 (3,81) |
| 61PR010600 | .160 (4,06) | .218/.312 (5,54/7,92) | Round | .375 (9,53) | .050 (1,27) | .355 (8,89) | .093 (2,36) |
| 61PR010110 | .226 (5,74) | .125/.312 (3,18/7,92) | Round | .375 (9,53) | .080 (2,03) | .468 (11,43) | .120 (3,05) |
| 61PR010210 | .187 (4,75) | .062/.187 (1,57/4,75) | Round | .375 (9,53) | .080 (2,03) | .295 (7,49) | .125 (3,18) |
| 61PR010310 | .187 (4,75) | .156/.281 (3,96/7,14) | Round | .375 (9,53) | .080 (2,03) | .380 (9,65) | .125 (3,18) |
| 61PR010410 | .187 (4,75) | .062/.187 (1,57/4,75) | Round | .375 (9,53) | .080 (2,03) | .281 (7,14) | .125 (3,18) |
| 61PR010510 | .215 (5,46) | .078/.300 (1,98/7,62) | Truss | .630 (16,00) | .080 (2,03) | .430 (10,92) | .120 (3,05) |

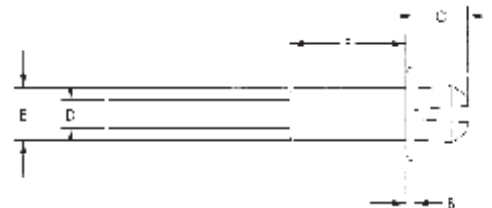
+ .005/- .015 FOR LOCK LENGTH "C"



NYLON POLY DRIVE RIVET MOUNTING FEET

| PART NUMBER | NOMINAL HOLE | PANEL THK. RANGE | HEAD STYLE | HEAD DIA. "A" | HEAD HEIGHT "B" | LOCK LENGTH "C" | PIN DIA. "D" |
|-------------|--------------|-----------------------|------------|---------------|-----------------|-----------------|--------------|
| 61PMF10000* | .280 (7,11) | .061/.187 (1,55/4,75) | Foot | .760 (19,30) | .570 (14,48) | .385 (9,78) | .187 (4,75) |
| 61PSS40000 | .250 (6,35) | .030/.125 (0,76/3,18) | Foot | .375 (9,53) | .500 (12,70) | .238 (6,05) | .150 (3,81) |

* Low Density Polyethylene Material.



NYLON POLY DRIVE RIVET SUPPORTS

| PART NUMBER | NOMINAL HOLE | PANEL THK. RANGE | HEAD STYLE | HEAD DIA. "A" | HEAD HT. "B" | LOCK LENGTH "C" | PIN DIA. "D" | SUP. LENGTH "F" | SUPPORT DIA. "E" |
|-------------|--------------|-----------------------|------------|---------------|--------------|-----------------|--------------|-----------------|------------------|
| 61PSS10000 | .187 (4,75) | .030/.125 (0,76/3,18) | Support | .325 (8,26) | .030 (0,76) | .200 (5,08) | .097 (2,46) | .400 (10,16) | .180 (4,57) |
| 61PSS20000 | .250 (6,35) | .030/.125 (0,76/3,18) | Support | 13/32 (10,31) | .047 (1,19) | .187 (4,75) | .125 (3,18) | .703 (17,86) | .240 (6,10) |

PANEL FASTENERS AND HOLE PLUGS

SECTION

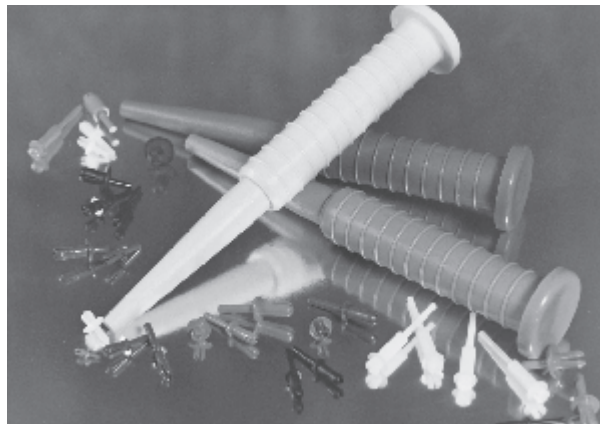
VI

DRIVE RIVET INSERTION TOOLS

Micro Plastics' tough, lightweight drive rivet insertion tool makes the assembly of our polyrivets even more economical. This tool provides a faster assembly, more accurate placement and positions in hard to reach areas. Large plunger head and easy-grip handle reduce operator fatigue. Rivets do not have to be predriven. In use, the rivet is loaded in tool and inserted in prepared hole, pressure on the plunger frees the pin and expands the rivet in the assembly. Three sizes are available to cover all standard drive rivets.

- **TOOLS ARE COLOR CODED FOR IDENTIFICATION**

| ITEM NUMBER | RIVET PIN SIZE | COLOR |
|-------------|----------------|--------|
| 61PRT0075 | .075 (1,91) | RED |
| 61PRT0093 | .093 (2,36) | BLACK |
| 61PRT0125 | .125 (3,18) | YELLOW |
| 61PRT0150 | .150 (3,81) | GREEN |



PNEUMATIC DRIVE RIVET INSERTION TOOL

- **BOOST PRODUCTIVITY**
- **IMPROVE QUALITY**
- **INCREASE COST CONTROL ON YOUR ASSEMBLY OPERATIONS**

The Pneumatic Drive Rivet Tool is especially suited for hard to reach or delicate assemblies encountered on all kinds of mechanical and electrical components, appliances, P.C. board assemblies, relays, switches, controls, etc.

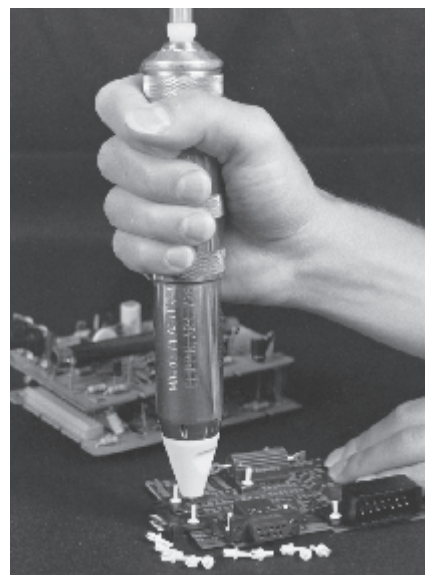
The durable, lightweight alloy insert tool weighs only 22 ounces and features an easy-grip, non-slip, straight case for single hand fatigue free operation and is equipped with a suspension bail for overhead connections on bench type precision assemblies. The insert tool can be safely used in all positions.

In operation the rivet is loaded in the tool and inserted in the prepared hole, slight pressure activates the pneumatic switch and the rivet is driven into the assembly effortlessly.

RIVETS NEED NOT BE PREDRIVEN.

Tool is designed to use standard shop air, operating pressure range is 50 to 70 PSI with instant cycling time. One tool will drive all standard rivet sizes, three interchangeable driver attachments are included. Mandrel sizes are .075, .125 and .150

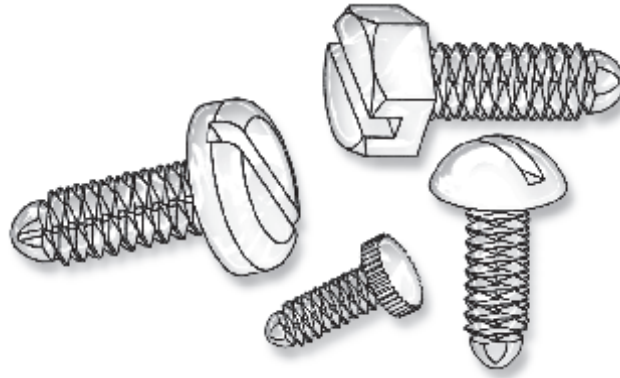
UNIQUE, PRECISION TOOL DESIGNED TO EFFICIENTLY ASSEMBLE ALL NYLON DRIVE RIVETS AND MOST ONE-PIECE METAL EXPANSION RIVETS.



COVERED BY U.S. / FOREIGN PATENTS

| ITEM NUMBER | DESCRIPTION |
|-------------|---|
| 61PPRT100 | PNEUMATIC RIVET INSERT TOOL (WITH 3 DRIVER ATTACHMENTS) |

NYLON SPIN CLIPS



This design combines the advantages of a push-in type fastener with a screw. For fast assembly, the part can be pushed into a 1/4-20 threaded hole, and then screwed in for a tighter fit, or screwed out for disassembly.

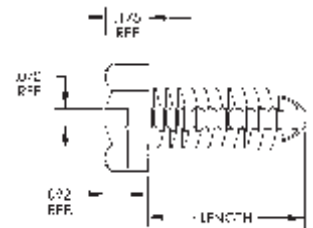
This part will also function as a standard Fin Clip for use in a unthreaded hole with a diameter of approximately 13/64"

Slotted HEX Head



Slotted HEX

| PART NUMBER | DESCRIPTION |
|--------------|---------------|
| 27SC2520H037 | 1/4-20 X 3/8" |
| 27SC2520H050 | 1/4-20 X 1/2" |
| 27SC2520H062 | 1/4-20 X 5/8" |
| 27SC2520H075 | 1/4-20 X 3/4" |
| 27SC2520H100 | 1/4-20 X 1" |

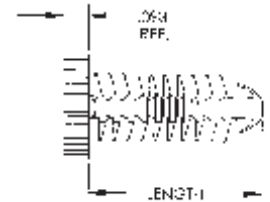
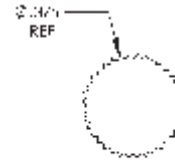


Unslotted KNURLED Head



Unslotted KNURLED

| PART NUMBER | DESCRIPTION |
|--------------|---------------|
| 27SC2520K037 | 1/4-20 X 3/8" |
| 27SC2520K050 | 1/4-20 X 1/2" |
| 27SC2520K062 | 1/4-20 X 5/8" |
| 27SC2520K075 | 1/4-20 X 3/4" |
| 27SC2520K100 | 1/4-20 X 1" |

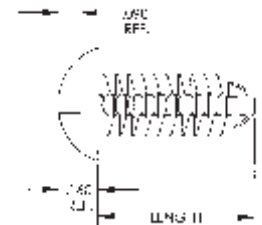


Slotted ROUND Head



Slotted ROUND

| PART NUMBER | DESCRIPTION |
|--------------|---------------|
| 27SC2520R037 | 1/4-20 X 3/8" |
| 27SC2520R050 | 1/4-20 X 1/2" |
| 27SC2520R062 | 1/4-20 X 5/8" |
| 27SC2520R075 | 1/4-20 X 3/4" |
| 27SC2520R100 | 1/4-20 X 1" |

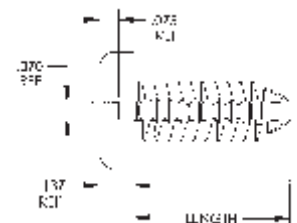
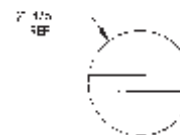


Slotted PAN Head



Slotted PAN

| PART NUMBER | DESCRIPTION |
|--------------|---------------|
| 27SC2520P037 | 1/4-20 X 3/8" |
| 27SC2520P050 | 1/4-20 X 1/2" |
| 27SC2520P062 | 1/4-20 X 5/8" |
| 27SC2520P075 | 1/4-20 X 3/4" |
| 27SC2520P100 | 1/4-20 X 1" |

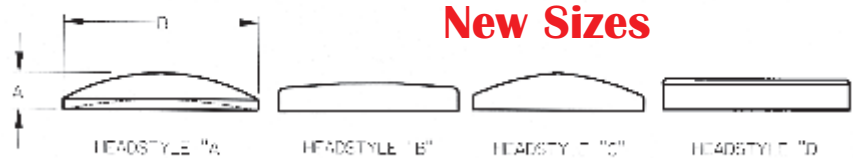
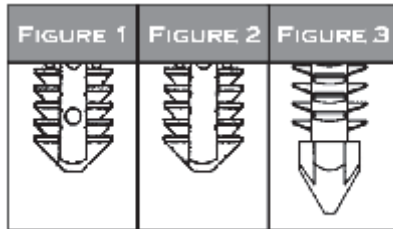
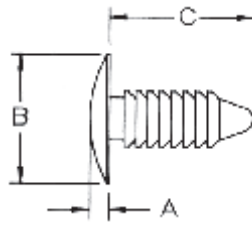


PANEL FASTENERS AND HOLE PLUGS

SECTION VI

RACHET FASTENERS

Micro Plastics' Ratchet Fasteners are designed to provide an economical fastening method over a wide range of panel thicknesses and materials. The easy hand installation assures a quick assembly and a strong and reliable finished product. Parts are molded in Black Nylon 6/6



New Sizes

RACHET FASTENERS ARE PACKAGED 1000 PIECES PER BAG --- PARTS MUST BE PURCHASED IN PACKAGED QUANTITIES.

| PART NUMBER | HOLE SIZE | PANEL THK. RANGE | HEADSTYLE | HEAD SIZE "B" | HEAD HEIGHT "A" | * LOCK LENGTH "C" | FIGURE |
|----------------|-------------|------------------------|-----------|---------------|-----------------|-------------------|--------|
| 27RT187675 | .187 (4,75) | .030/.512 (0,76/13,00) | "B" | 7/16 (11,11) | .070 (1,78) | .680 (17,27) | 1 |
| 27RT187500 | .187 (4,75) | .025/.365 (0,64/9,27) | "A" | .375 (9,53) | .070 (1,78) | .500 (12,70) | 1 |
| 27RT187550 | .187 (4,75) | .030/.330 (0,76/8,38) | "B" | .442 (11,23) | .068 (1,73) | .562 (14,27) | 2 |
| 27RT187640 | .187 (4,75) | .125/.365 (3,18/9,27) | "D" | 7/16 (11,11) | .070 (1,78) | .640 (16,26) | 3 |
| *27RT187700PPB | .187 (4,75) | .125/.450 (3,18/11,43) | "C" | .300 (7,22) | .065 (1,65) | .700 (17,78) | 2 |
| 27RT250425 | .250 (6,35) | .020/.218 (5,08/5,54) | "A" | .720 (18,29) | .098 (2,26) | .425 (10,80) | 1 |
| 27RT250440 | .250 (6,35) | .105/.300 (2,67/7,62) | "A" | .700 (17,78) | .100 (2,54) | .437 (11,10) | 1 |
| 27RT250800 | .250 (6,35) | .150/.535 (3,81/13,59) | "A" | .700 (17,78) | .107 (2,71) | .783 (18,88) | 2 |
| 27RT250810 | .250 (6,35) | .150/.535 (3,81/13,59) | "A" | .495 (12,57) | .074 (1,88) | .783 (19,89) | 1 |
| 27RT250900 | .250 (6,35) | .062/.480 (1,57/12,19) | "B" | .492 (12,50) | .070 (1,78) | .787 (19,99) | 1 |
| 27RT2811000 | .281 (7,13) | .093/.500 (2,36/12,70) | "A" | .625 (15,87) | .110 (2,79) | .890 (22,61) | 2 |

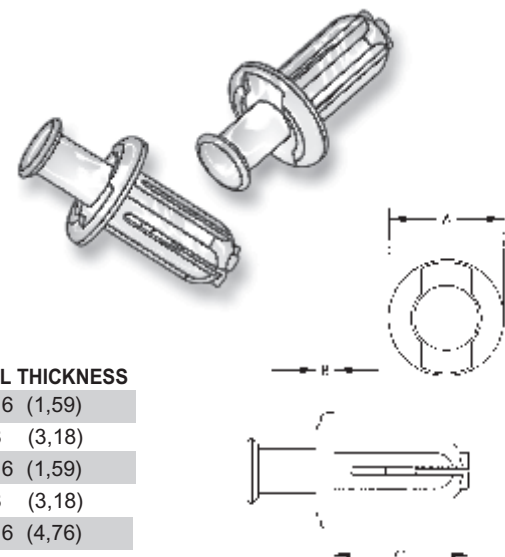
* +/- .015 Tolerance

* PART MOLDED IN BLACK POLYPROPYLENE * HEAD WILL HAVE A TEXTURED FINISH * BULK PACKAGING

NYLON TWO-PIECE REMOVABLE RIVETS

Removable rivets are two-piece nylon rivets which can be removed by retracting the pin, and then the body. The body incorporates a slot in line with the pin so that the pin can be removed by inserting a small screw driver, other sharp edge, or even a fingernail underneath the head of the pin.

* In addition to working in a .250 round hole, part number 61RR250500, will also fit the .210" x .218" square hole found in the "darling" type shelf commonly used in retail stores.

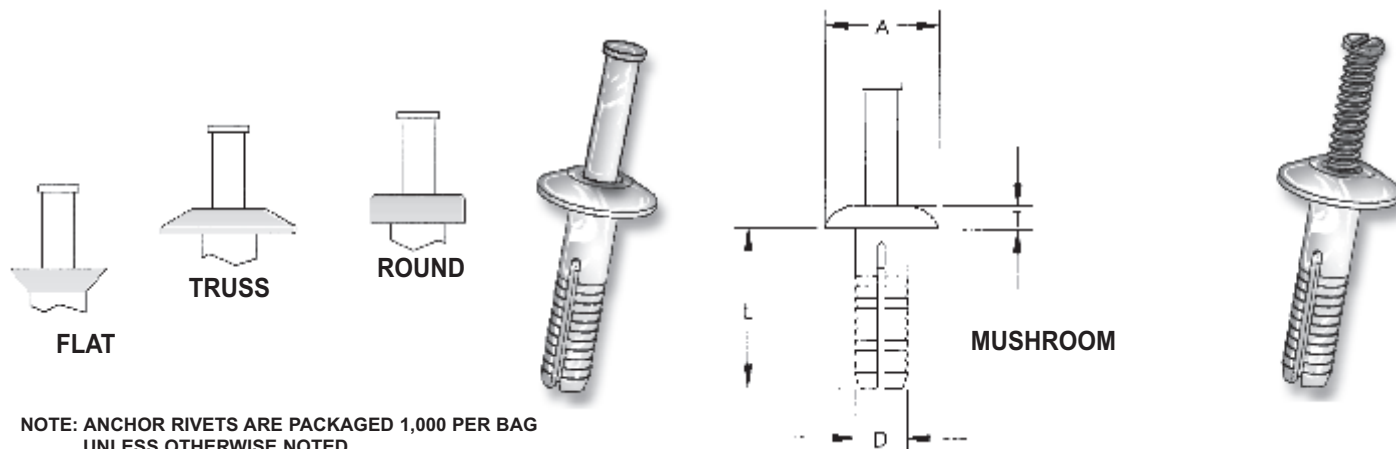


| PART NUMBER | A | B | * C | HOLE SIZE | PANEL THICKNESS |
|--------------|--------------|------------|-------------|-------------|-----------------|
| 61RR188062 | 3/8 (9,53) | .07 (1,78) | 1/2 (12,70) | .188 (4,78) | 1/16 (1,59) |
| 61RR188125 | 3/8 (9,53) | .07 (1,78) | 1/2 (12,70) | .188 (4,78) | 1/8 (3,18) |
| * 61RR250500 | 7/16 (11,11) | .07 (1,78) | 1/2 (12,70) | .250 (6,35) | 1/16 (1,59) |
| 61RR250125 | 7/16 (11,11) | .07 (1,78) | 1/2 (12,70) | .250 (6,35) | 1/8 (3,18) |
| 61RR250188 | 7/16 (11,11) | .07 (1,78) | 1/2 (12,70) | .250 (6,35) | 3/16 (4,76) |

* TOLERANCE FOR "C" DIMENSION IS +/- 1/32"

TWO PIECE ANCHOR RIVETS WITH PLASTIC & STEEL DRIVE PINS

Micro Plastics' two piece Anchor Rivets provide versatile, inexpensive, vibration-resistant blind fasteners for solid or hollow materials including wood, concrete, plaster, metal, plastic, tile block or mortar. Installation is fast, rivet is inserted in predrilled hole and tapped with a hammer. The drive pin expands and seats the rivet securely in place. The Hi-Impact nylon anchor body provides high thermal, electrical, corrosion and vibration resistance. Typical uses for Micro Plastics' anchor are semi-trailer construction, liner panels, rails, scuff boards, floor plates, electrical fixtures, signs, plumbing fixtures, piping and conduit strap hangers, window and drapery hardware, railings, storage shelves and other assemblies requiring a positive, durable fastener. The following are the standard sizes available. Micro Plastics' will tool non-standards in suitable quantities.



NOTE: ANCHOR RIVETS ARE PACKAGED 1,000 PER BAG UNLESS OTHERWISE NOTED

PLASTIC DRIVE PIN

- THERMAL AND ELECTRICAL INSULATING.
- CORROSION AND VIBRATION RESISTANT.

| PART NUMBER | D | X | L | DESCRIPTION | TYPE |
|-------------|-------------|---|---------------|-------------------|------|
| 61APM18075 | 3/16 (4,76) | X | 3/4 (19,05) | Mushroom, Plastic | |
| 61APM25075 | 1/4 (6,35) | X | 3/4 (19,05) | Mushroom, Plastic | |
| 61APM25100 | 1/4 (6,35) | X | 1 (25,40) | Mushroom, Plastic | |
| 61APM25150 | 1/4 (6,35) | X | 1-1/2 (38,10) | Mushroom, Plastic | |

| | | | | | |
|------------|-------------|---|---------------|----------------|--|
| 61APR18075 | 3/16 (4,76) | X | 3/4 (19,05) | Round, Plastic | |
| 61APR25075 | 1/4 (6,35) | X | 3/4 (19,05) | Round, Plastic | |
| 61APR25100 | 1/4 (6,35) | X | 1 (25,40) | Round, Plastic | |
| 61APR25150 | 1/4 (6,35) | X | 1-1/2 (38,10) | Round, Plastic | |

| | | | | | |
|--------------|-------------|---|---------------|----------------|--|
| 61APT18075 | 3/16 (4,76) | X | 3/4 (19,05) | Truss, Plastic | |
| 61APT25075 | 1/4 (6,35) | X | 3/4 (19,05) | Truss, Plastic | |
| 61APT25100 | 1/4 (6,35) | X | 1 (25,40) | Truss, Plastic | |
| 61APT25150 | 1/4 (6,35) | X | 1-1/2 (38,10) | Truss, Plastic | |
| 61APT25200 | 1/4 (6,35) | X | 2 (50,80) | Truss, Plastic | |
| 61APT25300* | 1/4 (6,35) | X | 3 (76,20) | Truss, Plastic | |
| 61APT25400* | 1/4 (6,35) | X | 4 (101,6) | Truss, Plastic | |
| 61APT25500** | 1/4 (6,35) | X | 5 (127,0) | Truss, Plastic | |
| 61APT25600** | 1/4 (6,35) | X | 6 (152,4) | Truss, Plastic | |

| | | | | | |
|------------|------------|---|--------------|---------------|--|
| 61APF25056 | 1/4 (6,35) | X | 9/16 (14,29) | Flat, Plastic | |
| 61APF25075 | 1/4 (6,35) | X | 3/4 (19,05) | Flat, Plastic | |

* PARTS ARE PACKAGED 500 PIECES PER BAG

**PARTS ARE PACKAGED 250 PIECES PER BAG

* L DIMENSIONS +/- .062 TOLERANCE

STEEL DRIVE PIN

- HIGH STRENGTH.
- ZINC PLATED.
- DEVELOPS HIGH PULL-OUT FORCE.

| PART NUMBER | D | X | L | DESCRIPTION | TYPE |
|-------------|-------------|---|---------------|-----------------|------|
| 61ASM18075 | 3/16 (4,76) | X | 3/4 (19,05) | Mushroom, Steel | |
| 61ASM18100 | 3/16 (4,76) | X | 1 (25,40) | Mushroom, Steel | |
| 61ASM25075 | 1/4 (6,35) | X | 3/4 (19,05) | Mushroom, Steel | |
| 61ASM25100 | 1/4 (6,35) | X | 1 (25,40) | Mushroom, Steel | |
| 61ASM25150 | 1/4 (6,35) | X | 1-1/2 (38,10) | Mushroom, Steel | |

| | | | | | |
|------------|-------------|---|---------------|--------------|--|
| 61ASR18075 | 3/16 (4,76) | X | 3/4 (19,05) | Round, Steel | |
| 61ASR18100 | 3/16 (4,76) | X | 1 (25,40) | Round, Steel | |
| 61ASR25075 | 1/4 (6,35) | X | 3/4 (19,05) | Round, Steel | |
| 61ASR25100 | 1/4 (6,35) | X | 1 (25,40) | Round, Steel | |
| 61ASR25150 | 1/4 (6,35) | X | 1-1/2 (38,10) | Round, Steel | |

| | | | | | |
|------------|-------------|---|---------------|--------------|--|
| 61AST18075 | 3/16 (4,76) | X | 3/4 (19,05) | Truss, Steel | |
| 61AST18100 | 3/16 (4,76) | X | 1 (25,40) | Truss, Steel | |
| 61AST25075 | 1/4 (6,35) | X | 3/4 (19,05) | Truss, Steel | |
| 61AST25100 | 1/4 (6,35) | X | 1 (25,40) | Truss, Steel | |
| 61AST25150 | 1/4 (6,35) | X | 1-1/2 (38,10) | Truss, Steel | |

| TYPE | A* | T |
|----------|--------------|-------------|
| Mushroom | 5/8 (15,88) | .110 (2,79) |
| Round | 7/16 (11,11) | .125 (3,18) |
| Truss | 5/8 (15,88) | .110 (2,79) |
| Flat | 7/16 (11,11) | .108 (2,74) |

A* REF. DIM.

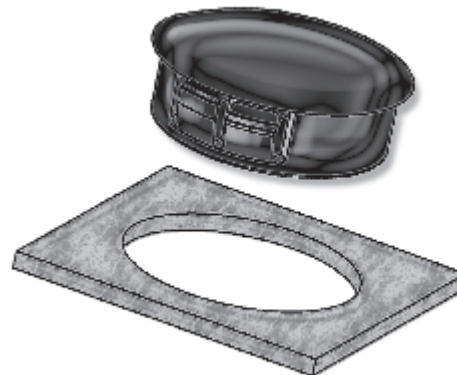
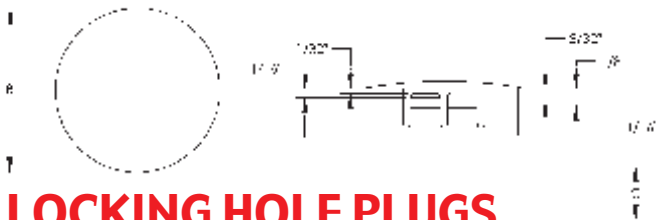
PANEL FASTENERS AND HOLE PLUGS

SECTION VI

Nylon Locking Hole Plugs are available in a large selection of sizes from 3/16" to 2 1/2". Designed with multiple locks to positively snap in panel thicknesses ranging from 1/64" to 1/8". Locking Hole Plugs are used to close excess chassis holes, wiring outlets, and production access holes.

- MOLDED OF HEAT STABILIZED NYLON (UL94V2) BLACK
- SUITABLE FOR CRITICAL OR ELEVATED TEMPERATURE APPLICATIONS.
- WHITE PARTS ADD "W" TO THE END OF PART NUMBER.

New Sizes



LOCKING HOLE PLUGS

| ITEM NUMBER | HOLE DIAMETER | MAXIMUM THICKNESS | HEAD DIAMETER B | THICKNESS C |
|---------------|---------------|-------------------|-----------------|-------------|
| * 62MP0187 | .187 (4,8) | .062 (1,6) | .250 (6,4) | .234 (5,9) |
| * 62MP0250 | .250 (6,4) | .062 (1,6) | .312 (8,0) | .312 (8,0) |
| * 62MP0312 | .312 (8,0) | .062 (1,6) | .375 (9,5) | .312 (8,0) |
| * 62MP0375 | .375 (9,5) | .125 (3,2) | .468 (12,0) | .406 (10,3) |
| * 62MP0437 | .437 (11,0) | .125 (3,2) | .531 (13,5) | .406 (10,3) |
| * 62MP0500 | .500 (12,7) | .125 (3,2) | .578 (14,6) | .406 (10,3) |
| * 62MP0562 | .562 (14,3) | .125 (3,2) | .656 (16,7) | .406 (10,3) |
| * 62MP0625 | .625 (15,9) | .125 (3,2) | .718 (18,2) | .406 (10,3) |
| * 62MP0687 | .687 (17,5) | .125 (3,2) | .781 (20,0) | .406 (10,3) |
| * 62MP0750 | .750 (19,0) | .125 (3,2) | .922 (23,2) | .406 (10,3) |
| * 62MP0812 | .812 (20,6) | .125 (3,2) | .890 (22,6) | .406 (10,3) |
| * 62MP0875 | .875 (22,2) | .125 (3,2) | 1.016 (25,8) | .453 (11,5) |
| ** 62MP1000 | 1.000 (25,5) | .125 (3,2) | 1.203 (30,5) | .453 (11,5) |
| ** 62MP1093 | 1.093 (27,8) | .125 (3,2) | 1.218 (31,0) | .453 (11,5) |
| ** 62MP1187 | 1.187 (30,1) | .125 (3,2) | 1.312 (33,3) | .453 (11,5) |
| ** 62MP1250 | 1.250 (32,0) | .125 (3,2) | 1.375 (34,9) | .453 (11,5) |
| ** 62MP1250A | 1.250 (32,0) | .125 (3,2) | 1.500 (38,0) | .453 (11,5) |
| ** 62MP1375 | 1.375 (35,0) | .125 (3,2) | 1.500 (38,0) | .453 (11,5) |
| ** 62MP1500 | 1.500 (38,0) | .125 (3,2) | 1.672 (42,7) | .453 (11,5) |
| ** 62MP1750 | 1.750 (45,0) | .125 (3,2) | 1.925 (48,9) | .453 (11,5) |
| **** 62MP2000 | 2.000 (51,0) | .125 (3,2) | 2.140 (55,0) | .453 (11,5) |
| **** 62MP2500 | 2.500 (63,5) | .250 (6,4) | 2.775 (70,5)* | .750 (19,1) |

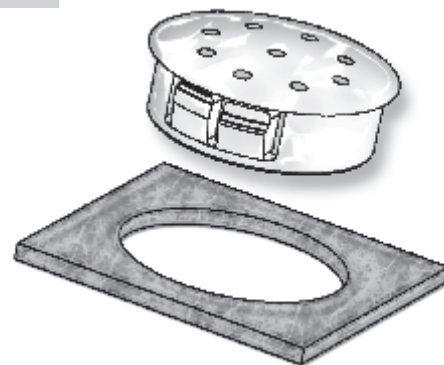
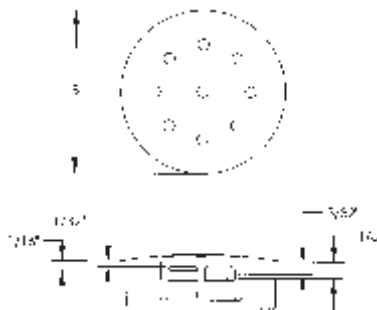
* +/- 1/32"

NOTE: +/- .015" ON ALL DIMENSIONS

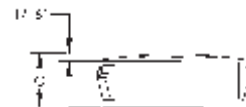
- * MINIMUM ORDER QUANTITY 1,000 PIECES
- ** MINIMUM ORDER QUANTITY 500 PIECES
- *** MINIMUM ORDER QUANTITY 250 PIECES
- **** MINIMUM ORDER QUANTITY 100 PIECES

LOCKING VENT PLUGS

LOCKING VENT PLUGS ARE AVAILABLE IN 3/4" TO 7/8" AND 1" DIAMETERS.

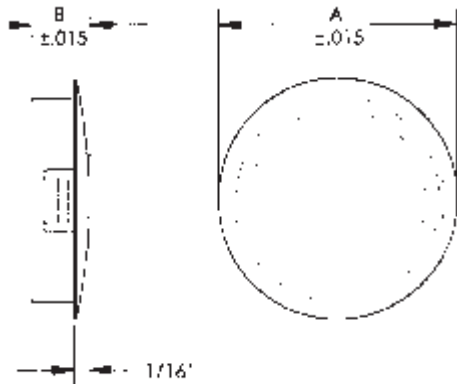


| ITEM NUMBER | HOLE DIAMETER | MAXIMUM THICKNESS | HEAD DIAMETER B | THICKNESS C |
|--------------|---------------|-------------------|-----------------|-------------|
| * 62MP0750V | .750 (19,1) | .125 (3,2) | .906 (23,0) | .406 (10,3) |
| * 62MP0875V | .875 (22,5) | .125 (3,2) | 1.016 (25,8) | .453 (11,5) |
| ** 62MP1000V | 1.000 (25,5) | .125 (3,2) | 1.203 (30,5) | .453 (11,5) |



MINIATURE LOCKING HOLE PLUGS

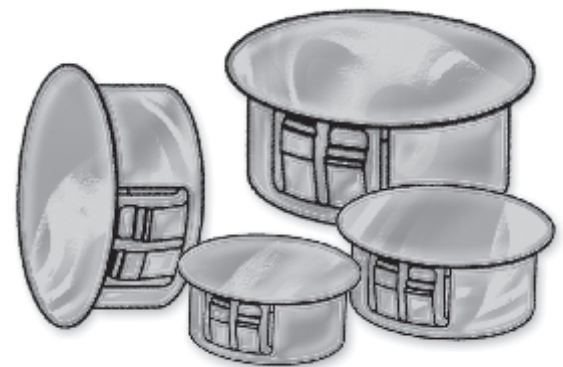
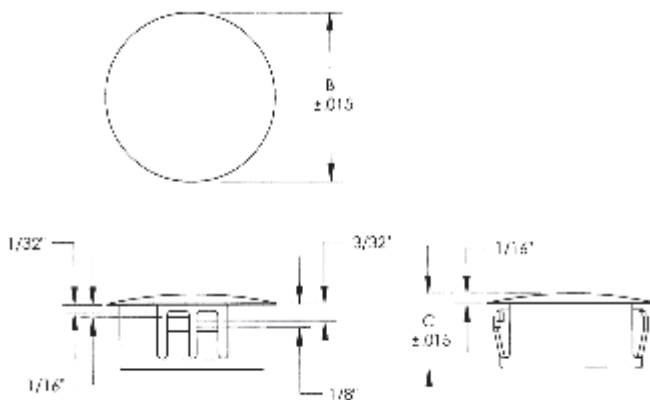
Nylon Miniature Locking Hole Plugs are available in sizes from 3/16" to 7/8". Designed with multiple locks to positively snap in panel thickness of 1/16". Locking Hole Plugs are used to close excess chassis holes, wiring outlets, and production access holes.



| ITEM NUMBER | DESCRIPTION | HOLE DIAMETER | A | B |
|-------------|-----------------------------------|---------------|--------------|--------------|
| 62MPS0187 | 3/16" Miniature Locking Hole Plug | 0.187 (4,75) | 0.250 (6,35) | 0.234 (5,94) |
| 62MPS0250 | 1/4" Miniature Locking Hole Plug | 0.250 (6,35) | 0.312 (7,93) | 0.312 (7,93) |
| 62MPS0312 | 5/16" Miniature Locking Hole Plug | 0.312 (7,93) | 0.375 (9,53) | 0.234 (5,94) |
| 62MPS0500 | 1/2" Miniature Locking Hole Plug | 0.500 (12,7) | 0.578 (14,7) | 0.250 (6,35) |
| 62MPS0625 | 5/8" Miniature Locking Hole Plug | 0.625 (15,9) | 0.718 (18,2) | 0.250 (6,35) |
| 62MPS0750 | 3/4" Miniature Locking Hole Plug | 0.750 (19,1) | 0.922 (23,4) | 0.250 (6,35) |
| 62MPS0875 | 7/8" Miniature Locking Hole Plug | 0.875 (22,2) | 1.016 (25,8) | 0.250 (6,35) |

heat stabilized KNOCK OUT PLUGS

KNOCK OUT PLUGS are molded in Grey Nylon to blend in with galvanized steel. Economical plugs that lock firmly into 5 trade size holes with panel thickness up to 1/8". Installs with fingertip pressure - no tools required.



| ITEM NUMBER | DESCRIPTION | MAXIMUM HOLE DIA. | HEAD THICKNESS | DIAMETER B | THICKNESS C |
|-------------|-----------------------|-------------------|----------------|--------------|-------------|
| 62MP0875KOP | 7/8" Knock Out Plug | 0.875 (22,2) | 0.125 (3,18) | 1.016 (25,8) | .453 (11,5) |
| 62MP1093KOP | 1 1/8" Knock Out Plug | 1.093 (27,8) | 0.125 (3,18) | 1.218 (30,9) | .453 (11,5) |
| 62MP1375KOP | 1 3/8" Knock Out Plug | 1.375 (34,9) | 0.125 (3,18) | 1.500 (38,1) | .453 (11,5) |
| 62MP1750KOP | 1 3/4" Knock Out Plug | 1.750 (44,5) | 0.125 (3,18) | 1.925 (48,9) | .453 (11,5) |
| 62MP2000KOP | 2" Knock Out Plug | 2.000 (58,8) | 0.125 (3,18) | 2.140 (54,4) | .453 (11,5) |

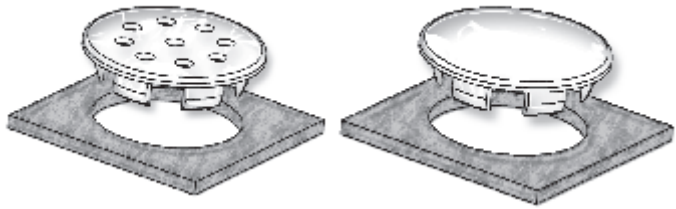
PANEL FASTENERS AND HOLE PLUGS

SECTION VI

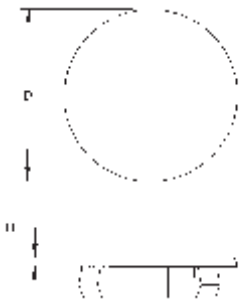
Economical snap-in Poly-Plugs will close unneeded chassis holes, wiring outlets, fill unused accessory openings, cover inspection and production access holes. They can be used

as tube end caps and protective bumpers. Poly Plugs are molded in Nylon 6/6 which is abrasion and vibration resistant

making them ideal for drawer glides and small appliance feet. Poly Plugs are designed with special flexible and tapered prongs which snugly lock in place with finger pressure but can be removed and reused when necessary.



HOLE PLUGS



METRIC Sizes
Also Available
Page 240

| ITEM NUMBER | HEAD STYLE | FINISH | HOLE SIZE | PANEL THICKNESS | HEAD HEIGHT +/- .010 TOLERANCE | | |
|-------------|------------|--------|--------------|-----------------------|--------------------------------|---------------|--|
| | | | | | HEAD SIZE D | HEAD HEIGHT H | |
| 62PP018BG14 | Binder | Smooth | .187 (4,75) | .031/.140 (0,79/3,56) | 11/32 (8,74) | .040 (1,02) | |
| 62PP018BM14 | Binder | Matte | .187 (4,75) | .031/.140 (0,79/3,56) | 11/32 (8,74) | .040 (1,02) | |
| 62PP022RG06 | Dome | Smooth | .218 (5,54) | .031/.062 (0,79/1,58) | 3/8 (9,53) | .250 (6,35) | |
| 62PP022RG09 | Dome | Smooth | .218 (5,54) | .031/.094 (0,79/2,39) | 3/8 (9,53) | .250 (6,35) | |
| 62PP025BG06 | Binder | Smooth | .250 (6,35) | .031/.062 (0,79/1,58) | 27/64 (10,72) | .040 (1,02) | |
| 62PP025BM06 | Binder | Matte | .250 (6,35) | .031/.062 (0,79/1,58) | 27/64 (10,72) | .040 (1,02) | |
| 62PP031BG14 | Binder | Smooth | .312 (7,93) | .031/.140 (0,79/3,56) | 29/64 (11,51) | .055 (1,40) | |
| 62PP031BM14 | Binder | Matte | .312 (7,93) | .031/.140 (0,79/3,56) | 29/64 (11,51) | .055 (1,40) | |
| 62PP012BG09 | Binder | Smooth | .125 (3,18) | .031/.094 (0,79/2,39) | 13/64 (5,16) | .040 (1,02) | |
| 62PP015BG09 | Binder | Smooth | .150 (3,81) | .031/.094 (0,79/2,39) | 1/4 (6,35) | .040 (1,02) | |
| 62PP037BG14 | Binder | Smooth | .375 (9,53) | .031/.140 (0,79/3,56) | 43/64 (17,07) | .062 (1,58) | |
| 62PP037BG31 | Binder | Smooth | .375 (9,53) | .031/.140 (0,79/3,56) | 37/64 (14,68) | .055 (1,40) | |
| 62PP037BM31 | Binder | Matte | .375 (9,53) | .031/.140 (0,79/3,56) | 37/64 (14,68) | .055 (1,40) | |
| 62PP043BG17 | Binder | Smooth | .437(11,10) | .031/.171 (0,79/4,34) | 39/64 (15,47) | .055 (1,40) | |
| 62PP043BM17 | Binder | Matte | .437(11,10) | .031/.171 (0,79/4,34) | 39/64 (15,47) | .055 (1,40) | |
| 62PP048BM12 | Binder | Matte | .480(12,19) | .031/.039 (0,79/0,99) | 37/64 (14,68) | .055 (1,40) | |
| 62PP050BG14 | Binder | Smooth | .500(12,70) | .031/.140 (0,79/3,56) | 43/64 (17,07) | .062 (1,58) | |
| 62PP050BM14 | Binder | Matte | .500(12,70) | .031/.140 (0,79/3,56) | 43/64 (17,07) | .062 (1,58) | |
| 62PP056BG14 | Binder | Smooth | .562(14,28) | .031/.140 (0,79/3,56) | 47/64 (18,64) | .062 (1,58) | |
| 62PP056BM14 | Binder | Matte | .562(14,28) | .031/.140 (0,79/3,56) | 47/64 (18,64) | .062 (1,58) | |
| 62PP062BG07 | Binder | Smooth | .625(15,88) | .031/.072 (0,79/1,83) | 51/64 (20,24) | .062 (1,58) | |
| 62PP062BM07 | Binder | Matte | .625(15,88) | .031/.072 (0,79/1,83) | 51/64 (20,24) | .062 (1,58) | |
| 62PP068BG10 | Binder | Smooth | .687(17,45) | .031/.109 (0,79/2,77) | 57/64 (22,63) | .062 (1,58) | |
| 62PP068BM10 | Binder | Matte | .687(17,45) | .031/.109 (0,79/2,77) | 57/64 (22,63) | .062 (1,58) | |
| 62PP075BG11 | Binder | Smooth | .750(19,05) | .031/.109 (0,79/2,77) | 63/64 (25,00) | .062 (1,58) | |
| 62PP075BM11 | Binder | Matte | .750(19,05) | .031/.109 (0,79/2,77) | 63/64 (25,00) | .062 (1,58) | |
| 62PP078BG09 | Binder | Smooth | .787(20,00) | .059/.080 (1,50/2,03) | 63/64 (25,00) | .062 (1,58) | |
| 62PP078BM09 | Binder | Matte | .787(20,00) | .059/.080 (1,50/2,03) | 63/64 (25,00) | .062 (1,58) | |
| 62PP081BG11 | Binder | Smooth | .812(20,63) | .031/.109 (0,79/2,77) | 1 1/32 (26,19) | .062 (1,58) | |
| 62PP081BM11 | Binder | Matte | .812(20,63) | .031/.109 (0,79/2,77) | 1 1/32 (26,19) | .062 (1,58) | |
| 62PP087BG11 | Binder | Smooth | .875(22,23) | .031/.109 (0,79/2,77) | 1 5/64 (27,38) | .062 (1,58) | |
| 62PP087BM11 | Binder | Matte | .875(22,23) | .031/.109 (0,79/2,77) | 1 5/64 (27,38) | .062 (1,58) | |
| 62PP100BG11 | Binder | Smooth | 1.000(25,40) | .031/.109 (0,79/2,77) | 1 7/32 (30,96) | .062 (1,58) | |
| 62PP100BM11 | Binder | Matte | 1.000(25,40) | .031/.109 (0,79/2,77) | 1 7/32 (30,96) | .062 (1,58) | |

VENT PLUGS



| ITEM NUMBER | HEAD STYLE | FINISH | HOLE SIZE A | PANEL THICKNESS B | HEAD HEIGHT +/- .010 TOLERANCE | |
|-------------|------------|--------|--------------|-----------------------|--------------------------------|---------------|
| | | | | | HEAD SIZE D | HEAD HEIGHT H |
| 62VP087BM11 | Binder | Matte | .875(22,23) | .031/.109 (0,79/2,77) | 1 5/64 (27,38) | .062 (1,58) |
| 62VP100BM11 | Binder | Matte | 1.000(25,40) | .031/.109 (0,79/2,77) | 1 7/32 (30,96) | .062 (1,58) |

PANEL FASTENERS AND HOLE PLUGS

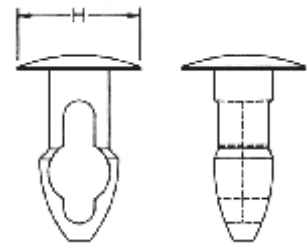
NYLON KEY-HOLE CLIPS

SECTION
VI

| PART NUMBER | "H" HEAD DIAMETER | HOLE SIZE | PANEL THICKNESS |
|--------------|-------------------|-------------|-----------------|
| 27KY1250093 | 1/4" (6,35) | .125 (3,18) | .093 (2,36) |
| 27KY1250125 | 1/4" (6,35) | .125 (3,18) | .125 (3,18) |
| 27KY1250156 | 1/4" (6,35) | .125 (3,18) | .156 (3,96) |
| 27KY1250187 | 1/4" (6,35) | .125 (3,18) | .188 (4,78) |
| 27KY1250219 | 1/4" (6,35) | .125 (3,18) | .219 (5,56) |
| 27KY1250250 | 1/4" (6,35) | .125 (3,18) | .250 (6,35) |
| 27KY1560093 | 5/16" (7,94) | .156 (3,96) | .093 (2,36) |
| 27KY1560125 | 5/16" (7,94) | .156 (3,96) | .125 (3,18) |
| 27KY1560156 | 5/16" (7,94) | .156 (3,96) | .156 (3,96) |
| 27KY1560187 | 5/16" (7,94) | .156 (3,96) | .187 (4,75) |
| 27KY1560218 | 5/16" (7,94) | .156 (3,96) | .218 (5,54) |
| 27KY1560250 | 5/16" (7,94) | .156 (3,96) | .250 (6,35) |
| 27KY1560281 | 5/16" (7,94) | .156 (3,96) | .281 (7,14) |
| 27KY1560312 | 5/16" (7,94) | .156 (3,96) | .312 (7,92) |
| 27KY1560343 | 5/16" (7,94) | .156 (3,96) | .343 (8,71) |
| 27KY1560375 | 5/16" (7,94) | .156 (3,96) | .375 (9,53) |
| 27KY1870093 | 5/16" (7,94) | .187 (4,75) | .093 (2,36) |
| 27KY1870125 | 5/16" (7,94) | .187 (4,75) | .125 (3,18) |
| 27KY1870156 | 5/16" (7,94) | .187 (4,75) | .156 (3,96) |
| 27KY1870187 | 5/16" (7,94) | .187 (4,75) | .187 (4,75) |
| 27KY1870219 | 5/16" (7,94) | .187 (4,75) | .219 (5,56) |
| 27KY1870250 | 5/16" (7,94) | .187 (4,75) | .250 (6,35) |
| 27KY18702507 | 15/32" (11,89) | .187 (4,75) | .250 (6,35) |
| 27KY1870281 | 5/16" (7,94) | .187 (4,75) | .281 (7,14) |
| 27KY1870312 | 5/16" (7,94) | .187 (4,75) | .312 (7,92) |
| 27KY1870343 | 5/16" (7,94) | .187 (4,75) | .344 (8,74) |
| 27KY1870375 | 5/16" (7,94) | .187 (4,75) | .375 (9,53) |
| 27KY2190093 | 11/32" (8,73) | .219 (5,56) | .093 (2,36) |
| 27KY2190343 | 11/32" (8,74) | .219 (5,56) | .343 (8,71) |
| 27KY2190375 | 11/32" (8,74) | .219 (5,56) | .375 (9,53) |
| 27KY2190125 | 11/32" (8,73) | .219 (5,56) | .125 (3,18) |
| 27KY2190156 | 11/32" (8,73) | .219 (5,56) | .156 (3,96) |
| 27KY2190187 | 11/32" (8,73) | .219 (5,56) | .187 (4,78) |
| 27KY2190219 | 11/32" (8,73) | .219 (5,56) | .219 (5,56) |
| 27KY2190250 | 11/32" (8,73) | .219 (5,56) | .250 (6,35) |
| 27KY2190281 | 11/32" (8,73) | .219 (5,56) | .281 (7,14) |
| 27KY2190312 | 11/32" (8,73) | .219 (5,56) | .312 (7,92) |
| 27KY2500093 | 1/2" (12,70) | .250 (6,35) | .093 (2,36) |
| 27KY2500125 | 1/2" (12,70) | .250 (6,35) | .125 (3,18) |
| 27KY2500156 | 1/2" (12,70) | .250 (6,35) | .156 (3,96) |
| 27KY2500187 | 1/2" (12,70) | .250 (6,35) | .187 (4,75) |
| 27KY2500219 | 1/2" (12,70) | .250 (6,35) | .219 (5,56) |
| 27KY2500250 | 1/2" (12,70) | .250 (6,35) | .250 (6,35) |
| 27KY2500281 | 1/2" (12,70) | .250 (6,35) | .281 (7,14) |
| 27KY2500312 | 1/2" (12,70) | .250 (6,35) | .312 (7,92) |
| 27KY2500343 | 1/2" (12,70) | .250 (6,35) | .343 (8,71) |
| 27KY2500375 | 1/2" (12,70) | .250 (6,35) | .375 (9,53) |
| 27KY2500406 | 1/2" (12,70) | .250 (6,35) | .406 (10,31) |
| 27KY2500437 | 1/2" (12,70) | .250 (6,35) | .437 (11,10) |
| 27KY2500468 | 1/2" (12,70) | .250 (6,35) | .468 (11,89) |
| 27KY2500500 | 1/2" (12,70) | .250 (6,35) | .500 (12,70) |



New Sizes



This panel fastener incorporates a new design. The key-hole shaped interior allows the part to collapse more completely for easy assembly with finger pressure. Tapered, bullet-style point slides into hole easily. Angled panel lock section takes up slack in panels to provide for a tight assembly. The design allows for a relatively large clip diameter to hole size ratio, resulting in higher retention force. Parts can be tooled for a large variety of hole and panel variations.

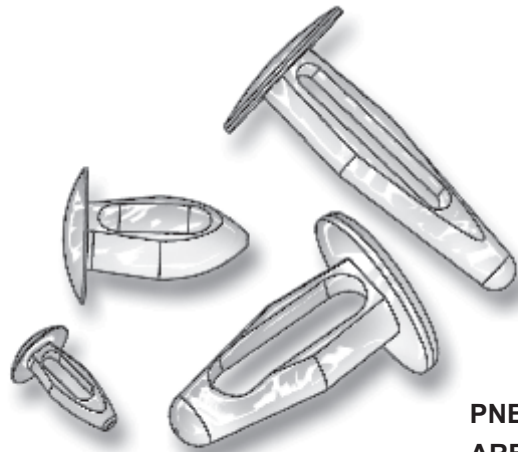


PANEL FASTENERS AND HOLE PLUGS

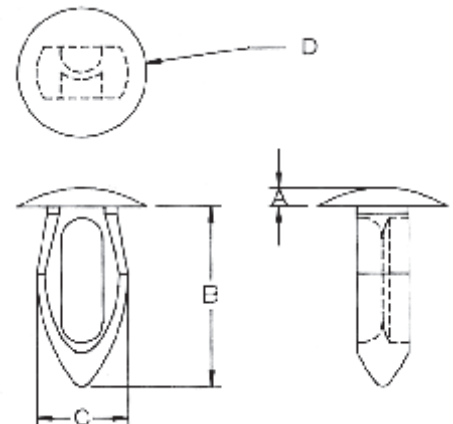
SECTION VI

NYLON ARROW CLIPS

Micro Plastics' Arrow Clips are reusable, molded nylon fasteners that feature an inexpensive fast method to hand assemble metal, wood, plastic, composition or other thin-gauge materials. The specially designed body compresses as it is forced through a prepunched hole and springs back to its original shape to lock the assembled parts securely. The versatile clips can be disassembled and reused again and again. They provide an economical, electrical insulating, vibration, abrasion, and corrosion resistant connection. The following are some of the more common sizes. Because of Micro Plastics' unique tooling approach, designs can be varied over a wide range. Request the size you need.



New Sizes



**PNEUMATIC POWER TOOLS
ARE AVAILABLE FOR VOLUME USERS.**

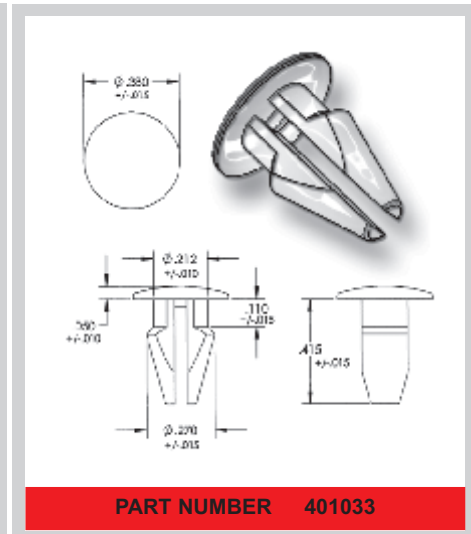
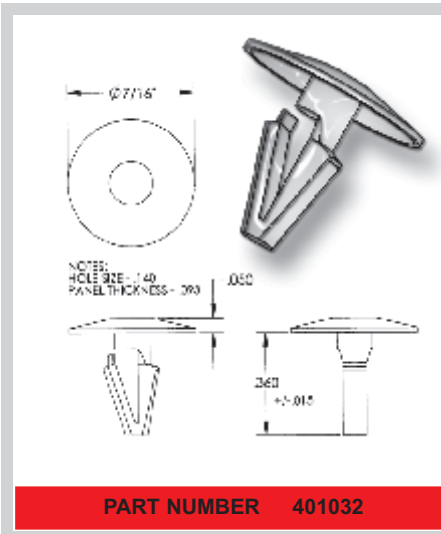
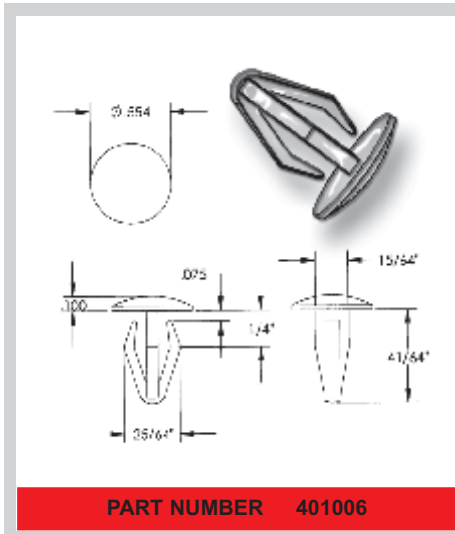
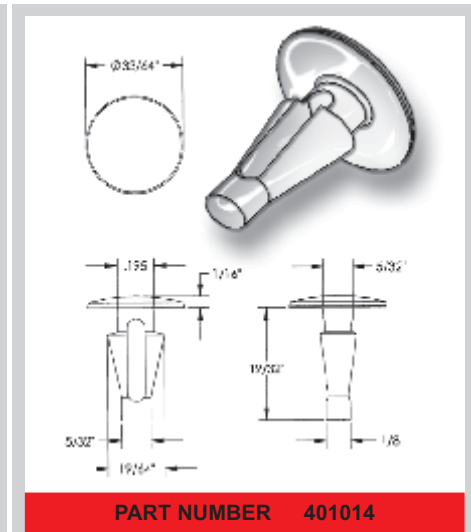
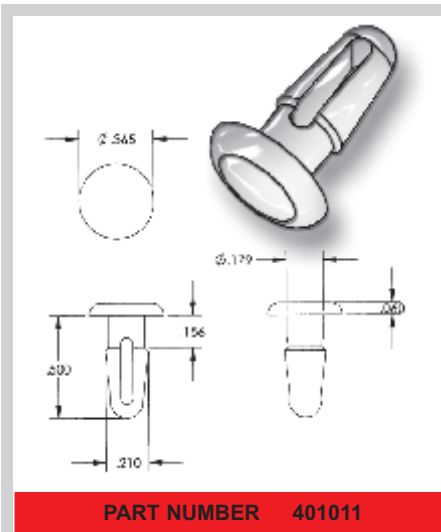
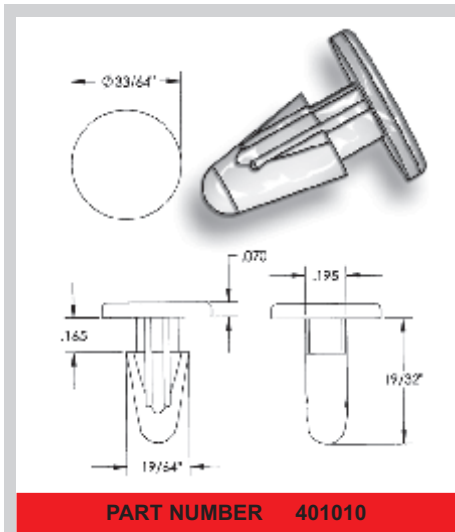
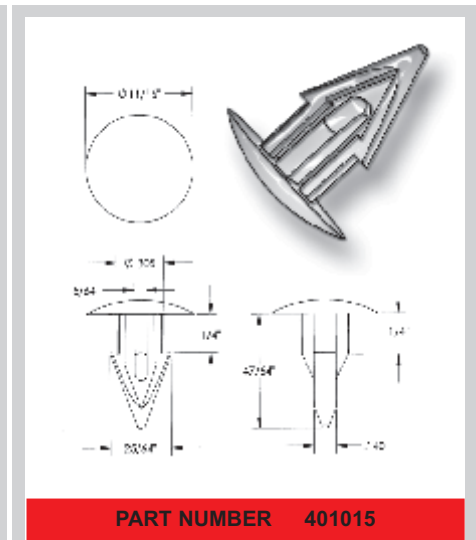
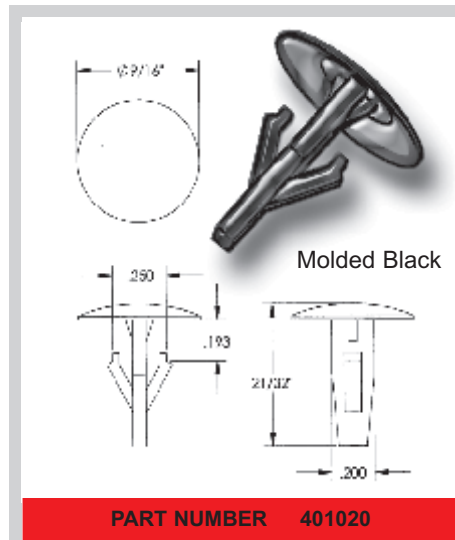
* $\pm .010$ Tolerance

| PART NUMBER | DESCRIPTION | HOLE SIZE | PANEL THK. RANGE | HEAD DIA. D | HEAD HEIGHT A | LENGTH B* | CLIP DIA. C |
|-------------|-------------|-----------------------|-----------------------|--------------|---------------|---------------|-------------|
| 27AC0001 | AC 1 | .182/.192 (4,62/4,88) | .062/.125 (1,57/3,18) | .360 (9,14) | .060 (1,52) | .400 (10,16) | .225 (5,72) |
| 27AC0002 | AC 2 | .131/.135 (3,33/3,43) | .062/.125 (1,57/3,18) | .270 (6,86) | .060 (1,52) | .395 (10,03) | .160 (4,06) |
| 27AC0003 | AC 3 | .151/.161 (3,84/4,09) | .062/.125 (1,57/3,18) | .280 (7,11) | .040 (1,02) | .390 (9,91) | .196 (4,98) |
| 27AC0004 | AC 4 | .151/.161 (3,84/4,09) | .062/.145 (1,57/3,68) | .280 (7,11) | .080 (2,03) | .400 (10,16) | .180 (4,57) |
| 27AC0005 | AC 5 | .213/.223 (5,41/5,66) | .125/.187 (3,18/4,75) | .370 (9,40) | .060 (1,52) | .540 (13,72) | .248 (6,30) |
| 27AC0006 | AC 6 | .182/.192 (4,62/4,88) | .310/.330 (7,87/8,38) | .370 (9,40) | .060 (1,52) | .540 (13,72) | .225 (5,72) |
| 27AC0007 | AC 7 | .213/.223 (5,41/5,66) | .062/.125 (1,57/3,18) | .370 (9,40) | .060 (1,52) | .450 (11,43) | .225 (5,72) |
| 27AC0009 | AC 9 | .250/.260 (6,39/6,60) | .125/.187 (3,18/4,75) | .484 (12,29) | .060 (1,52) | .575 (14,61) | .290 (7,37) |
| 27AC0010 | AC 10 | .062/.065 (1,57/1,65) | .010/.031 (0,25/0,79) | .100 (2,54) | .020 (0,51) | .125 (3,18) | .068 (1,73) |
| 27AC0011 | AC 11 | .182/.192 (4,62/4,88) | .165/.185 (4,19/4,70) | .375 (9,53) | .060 (1,52) | .525 (13,33) | .206 (5,23) |
| 27AC0012 | AC 12 | .195/.200 (4,95/5,08) | .035/.065 (0,89/1,65) | .370 (9,40) | .060 (1,52) | .350 (8,89) | .225 (5,72) |
| 27AC0013 | AC 13 | .130/.132 (3,30/3,35) | .125/.140 (3,18/3,56) | .270 (6,86) | .070 (1,78) | .310 (7,87) | .162 (4,11) |
| 27AC0014 | AC 14 | .145/.150 (3,68/3,71) | .290/.300 (7,37/7,62) | .270 (6,86) | .070 (1,78) | .530 (13,46) | .196 (4,98) |
| 27AC0015 | AC 15 | .118/.122 (3,00/3,10) | .062/.125 (1,57/3,18) | .280 (7,11) | .060 (1,52) | .390 (9,91) | .150 (3,71) |
| 27AC0016 | AC 16 | .250/.260 (6,35/6,60) | .360/.380 (9,14/9,65) | .615 (15,62) | .065 (1,65) | .810 (20,57) | .286 (7,26) |
| 27AC0017 | AC 17 | .320/.335 (8,38/8,50) | .062/.340 (1,57/8,63) | .683 (17,35) | .070 (1,78) | .900 (22,86) | .375 (9,52) |
| 27AC0018 | AC 18 | .160/.165 (4,06/4,19) | .032/.125 (0,81/3,18) | .280 (7,11) | .080 (2,03) | .400 (10,16) | .186 (4,72) |
| 27AC0019 | AC 19 | .330/.340 (8,38/8,64) | .125/.350 (3,18/8,88) | .685 (17,45) | .070 (0,75) | .895 (22,74) | .370 (9,40) |
| 27AC0020 | AC 20 | .120/.135 (3,02/3,43) | .062/.125 (1,58/3,18) | .270 (6,86) | .040 (1,01) | .330 (8,38) | .140 (3,56) |
| 27AC0021 | AC 21 | .250/.260 (6,35/6,57) | .125/.250 (3,18/6,35) | .500 (12,70) | .050 (1,27) | .630 (16,0) | .280 (7,12) |
| 27AC0022 | AC 22 | .085/.090 (2,16/2,29) | .032/.107 (0,81/2,72) | .125 (3,18) | .030 (0,76) | .187 (4,75) | .107 (2,72) |
| 27AC0023 | AC 23 | .335/.345 (8,51/8,76) | .062/.140 (1,57/3,56) | .866 (22,00) | .050 (1,27) | .450 (11,43) | .363 (9,22) |
| 27AC0024 | AC 24 | .250/.260 (6,25/6,60) | .500/.750 (12,7/19,1) | .610 (15,49) | .068 (1,73) | 1.135 (28,83) | .287 (7,29) |
| 27AC0026 | AC 26 | .240/.260 (6,10/6,60) | .095/.218 (2,41/5,54) | .750 (19,05) | .055 (1,40) | .632 (16,05) | .281 (7,14) |
| 27AC0027 | AC 27 | .062/.065 (1,57/1,65) | .010/.031 (0,25/0,79) | .100 (2,54) | .020 (0,51) | .187 (4,75) | .068 (1,73) |
| 27AC0028* | AC 28 | .192/.212 (4,88/5,38) | .062/.125 (1,57/3,17) | .375 (9,53) | .060 (1,52) | .450 (11,43) | .235 (5,97) |
| 27AC0029 | AC 29 | .330/.340 (8,38/8,64) | .125/.350 (3,18/8,89) | .475 (12,07) | .070 (1,78) | .895 (22,73) | .370 (9,40) |
| 27AC0030 | AC 30 | .160/.165 (4,06/4,19) | .032/.125 (8,81/3,18) | .300 (7,62) | .110 (2,79) | .400 (10,16) | .186 (4,72) |

* PART HAS NO WEBBING

NYLON "SPECIAL ITEMS" ARROW CLIPS

Micro Plastics' Special Item Arrow Clips are designed to provide unique fasteners for assembly applications where larger panel thicknesses and or mounting diameters combined with increased fastening strength is required. Molded from UL 94V-2 Nylon 66 for corrosion, abrasion and vibration resistance.

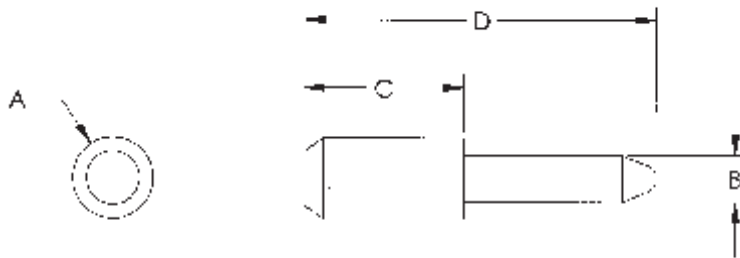
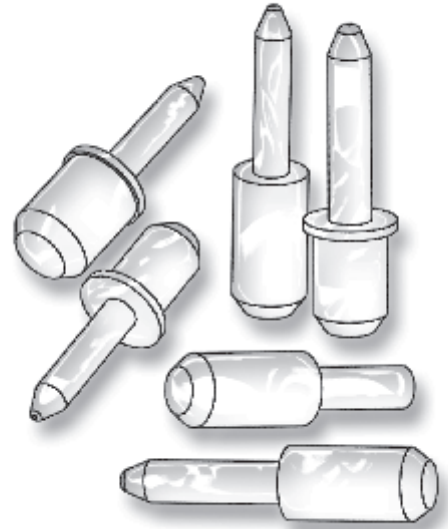
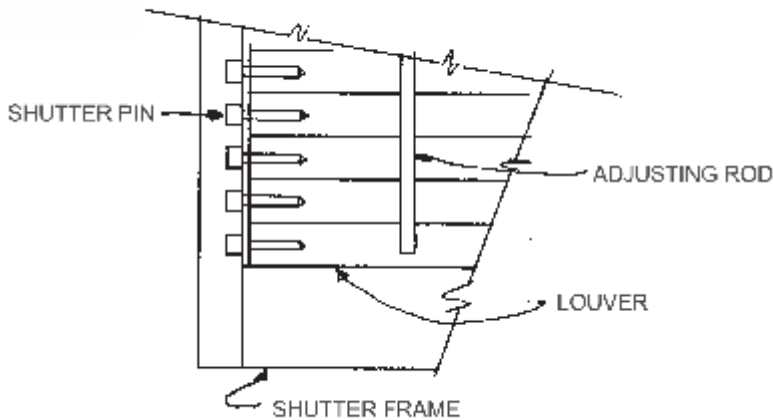


PANEL FASTENERS AND HOLE PLUGS

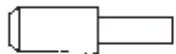
SECTION VI

SHUTTER PINS

Micro Plastics' SHUTTER PINS are used in the assembly of shutters. Molded in a Nylon 6/6 translucent off white color. Nylon 6/6 is a material which has excellent wear properties, low coefficient of friction, good chemical resistance and will not rust.



| PART NUMBER | A | B | C | D |
|-------------|-------------|-------------|---------------|----------------|
| 25WSP100 | .243 (6,17) | .140 (3,56) | 31/64 (12,29) | 1 1/16 (26,98) |



| | | | | |
|----------|-------------|-------------|---------------|-------------|
| 25WSP101 | .243 (6,17) | .140 (3,56) | 31/64 (12,29) | 7/8 (22,23) |
|----------|-------------|-------------|---------------|-------------|



| | | | | |
|----------|-------------|-------------|---------------|----------------|
| 25WSP102 | .243 (6,17) | .117 (2,97) | 31/64 (12,29) | 1 1/16 (26,98) |
|----------|-------------|-------------|---------------|----------------|



| | | | | |
|----------|-------------|-------------|------------|---------------|
| 25SSP100 | .215 (5,46) | .117 (2,97) | 3/8 (9,53) | 29/32 (23,01) |
|----------|-------------|-------------|------------|---------------|



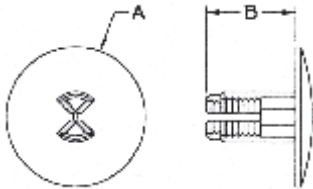
| | | | | |
|----------|-------------|-------------|------------|---------------|
| 25SSP101 | .280 (7,11) | .117 (2,97) | 3/8 (9,53) | 29/32 (23,01) |
|----------|-------------|-------------|------------|---------------|



| | | | | |
|----------|-------------|-------------|------------|----------------|
| 25LSP100 | .240 (6,10) | .140 (3,56) | 3/8 (9,53) | 1 1/32 (26,19) |
|----------|-------------|-------------|------------|----------------|

RATCHETING ACTION RIVETS

Ratcheting action rivets feature a rigid design which provides an outstanding bond created by the action of the interlocking gripper teeth. With the larger head diameter, Ratcheting action rivets make binding of soft materials a simple application.



- RATCHETING ACTION RIVETS ARE MOLDED IN NYLON 6/6 AND AVAILABLE IN BLACK OR NATURAL.
- PLEASE ADD A COLOR CODE TO THE END OF EACH PART NUMBER IDENTIFYING YOUR COLOR CHOICE.
- CODE **B** = BLACK CODE **N** = NATURAL

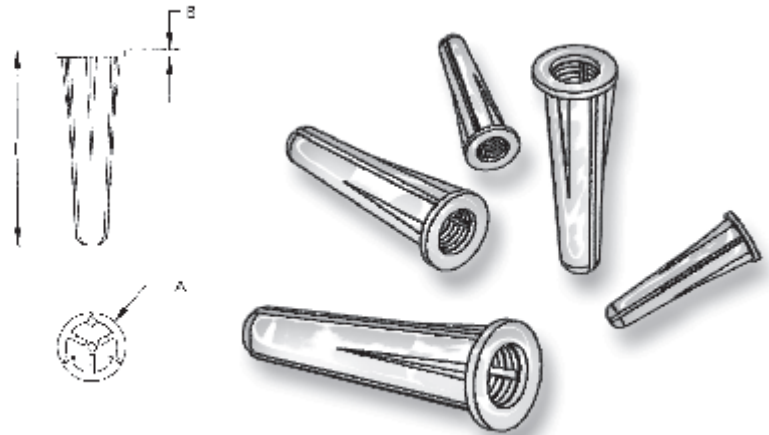


New Sizes

| ITEM NUMBER | *REF. DIM. HEAD DIA. A | *REF. DIM SHANK LENGTH B | HOLE DIA. | GRIP RANGE |
|-------------|------------------------|--------------------------|--------------|--------------------------|
| 27QB375250 | 3/8" (9,53) | 7/32" (5,5) | 1/4" (6,35) | .235/.297 (5,97/7,54) |
| 27QB375375 | 3/8" (9,53) | 11/32" (8,73) | 1/4" (6,35) | .346/.500 (8,79/12,70) |
| 27QB375750 | 3/8" (9,53) | 1/2" (12,70) | 1/4" (6,35) | .500/.812 (12,70/20,62) |
| 27QB371000 | 3/8" (9,53) | 3/4" (19,05) | 1/4" (6,35) | .780/1.375 (19,81/34,93) |
| 27QB400250 | .406 (10,31) | 7/32" (5,5) | 9/32" (7,14) | .235/.297 (5,97/7,54) |
| 27QB400375 | .406 (10,31) | 11/32" (8,73) | 9/32" (7,14) | .346/.500 (8,79/12,70) |
| 27QB400750 | .406 (10,31) | 1/2" (12,70) | 9/32" (7,14) | .500/.812 (12,70/20,62) |
| 27QB401000 | .406 (10,31) | 3/4" (19,05) | 9/32" (7,14) | .780/1.375 (19,81/34,93) |
| 27QB625250 | 5/8" (15,88) | 7/32" (5,5) | 1/4" (6,35) | .235/.297 (5,97/7,54) |
| 27QB625375 | 5/8" (15,88) | 11/32" (8,73) | 1/4" (6,35) | .346/.500 (8,79/12,70) |
| 27QB625750 | 5/8" (15,88) | 1/2" (12,70) | 1/4" (6,35) | .500/.812 (12,70/20,62) |
| 27QB621000 | 5/8" (15,88) | 3/4" (19,05) | 1/4" (6,35) | .780/1.375 (19,81/34,93) |
| 27QB700250 | 3/4" (19,05) | 7/32" (5,5) | 9/32" (7,14) | .235/.297 (5,97/7,54) |
| 27QB700375 | 3/4" (19,05) | 11/32" (8,73) | 9/32" (7,14) | .346/.500 (8,79/12,70) |
| 27QB700750 | 3/4" (19,05) | 1/2" (12,70) | 9/32" (7,14) | .500/.812 (12,70/20,62) |
| 27QB701000 | 3/4" (19,05) | 3/4" (19,05) | 9/32" (7,14) | .780/1.375 (19,81/34,93) |

NYLON SCREW ANCHORS

Multi-use, light duty Nylon Anchor for use with sheet metal or wood screws. Nylon Anchors can be used in wood, masonry block, concrete, tile, brick or sheet metal. Anchor has twist resisting flange for use in thin wall and hollow materials. Anchors can be color coded for size identification. Metal screw not included.



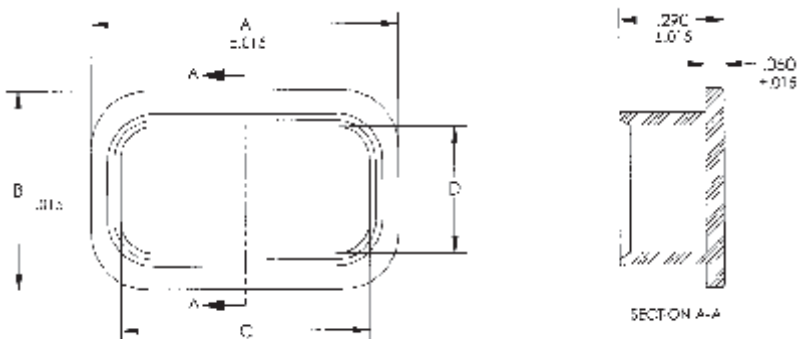
| ITEM NUMBER | SCREW SIZE | DRILL SIZE | A | B | L |
|-------------|------------|-------------|--------------|-------------|----------------|
| 61WA210875 | #6-8 | 3/16 (4,76) | 5/16 (7,94) | .037 (0,94) | 7/8 (22,22) |
| 61WA281700 | #10-12 | 1/4 (6,35) | 3/8 (9,53) | .037 (0,94) | 1-5/64 (27,38) |
| 61WA351385 | #14-16 | 5/16 (7,94) | 7/16 (11,11) | .037 (0,94) | 1 3/8 (31,93) |

PANEL FASTENERS AND HOLE PLUGS

SECTION VI

PORT COVER

Micro Plastics port covers are available in black Polyethylene. Used to cover 15 pin female or 9 pin male comm and video ports to prevent damage from foreign materials. Parts do not have to be oriented to angled side of wall of port.



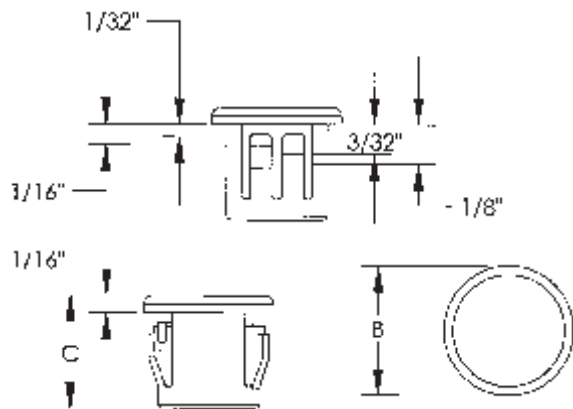
Watch Instructional Video
<https://www.microplastics.com/productvideos/PortCover.asf>



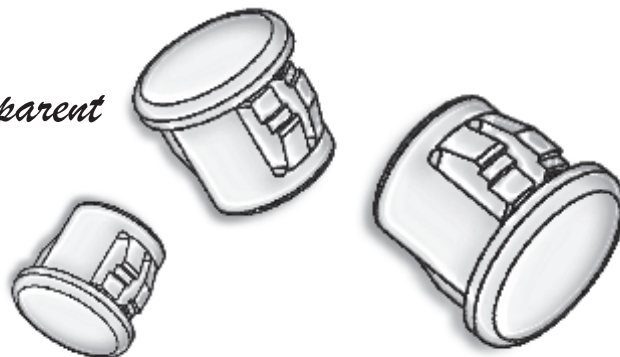
| PART NUMBER | DESCRIPTION | A | B | C | D |
|-------------|---------------------------------------|-------------|-------------|-------------|-------------|
| 62PC0009 | 9 PIN <u>Male</u> Port Cover BLACK | .850 (2,16) | .550 (14,0) | .690 (17,5) | .350 (8,89) |
| 62PC0015 | 15 PIN <u>Female</u> Port Cover BLACK | .825 (21,0) | .488 (12,4) | .632 (16,1) | .297 (7,54) |

copolyester WINDOW PLUGS

WINDOW PLUGS are molded in Clear Copolyester material. The headstyle is flat to minimize distortion



Transparent

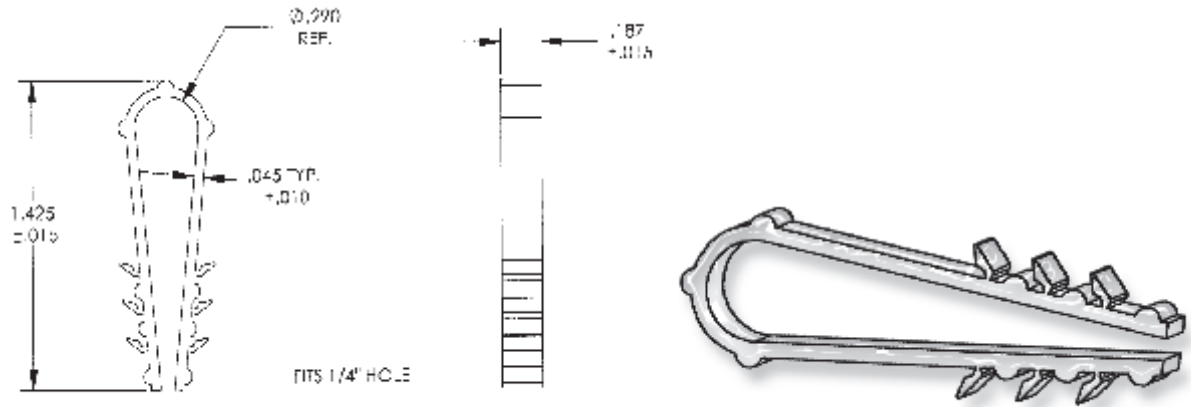


* MINIMUM ORDER QUANTITY 1,000 PIECES

| ITEM NUMBER | DESCRIPTION | HOLE DIAMETER | MAXIMUM PANEL THICKNESS | DIAMETER B +/- .015" | THICKNESS C +/- .015" |
|-------------|-------------------|---------------|-------------------------|-------------------------|--------------------------|
| * 62WP0187 | 3/16" Window Plug | .187 (4,8) | .062 (1,6) | .250 (6,4) | .234 (5,9) |
| * 62WP0250 | 1/4" Window Plug | .250 (6,4) | .062 (1,6) | .312 (8,0) | .312 (8,0) |
| * 62WP0312 | 5/16" Window Plug | .312 (8,0) | .062 (1,6) | .375 (9,5) | .312 (8,0) |
| * 62WP0375 | 3/8" Window Plug | .375 (9,5) | .125 (3,2) | .468 (12,0) | .406 (10,3) |
| * 62WP0437 | 7/16" Window Plug | .437 (11,0) | .125 (3,2) | .531 (13,5) | .406 (10,3) |
| * 62WP0500 | 1/2" Window Plug | .500 (12,7) | .125 (3,2) | .578 (14,6) | .406 (10,3) |
| 62WP0625 | 5/8" Window Plug | .625 (15,9) | .125 (3,2) | .718 (18,2) | .406 (10,3) |

LOOP FASTENER

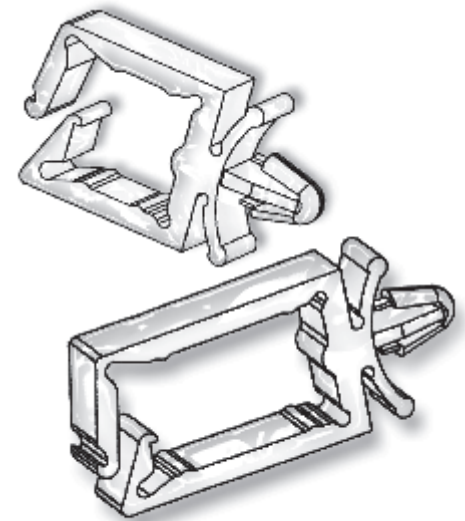
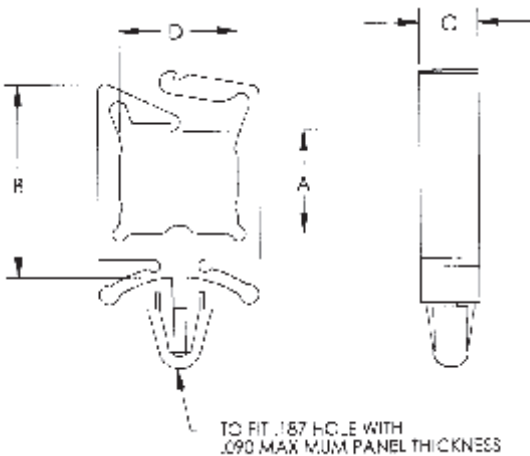
“U” shaped blind fastener for installation of pipes or cables on a wall or ceiling. Drill 1/4” diameter hole. Slip “U” shaped fastener over wire or tube and push into drilled hole. Fastener is molded in natural colored high density Polyethylene.



| ITEM NUMBER | DESCRIPTION |
|-------------|---------------|
| 22LF1425250 | LOOP FASTENER |

LOCKING WIRE/ CABLE HOLDER

Micro Plastics' Locking Wire and Cable Holder is molded in UL recognized Nylon 6/6. Used for routing wires and cables. Designed to fit a 3/16” diameter hole and variable panel thickness up to .090 inches. Lock is releasable by twisting open.



| ITEM NUMBER | DESCRIPTION | A (REF.) | B (REF.) | C | D |
|---------------|---------------------------|--------------|---------------|--------------|---------------|
| 22LGWH4500360 | LOCKING WIRE CABLE HOLDER | .378 (9,60) | .711 (18,06) | 7/32" (5,56) | 7/16" (11,11) |
| 22LGWH4500718 | LOCKING WIRE CABLE HOLDER | .660 (16,76) | 1.000 (25,40) | 7/32" (5,56) | 7/16" (11,11) |

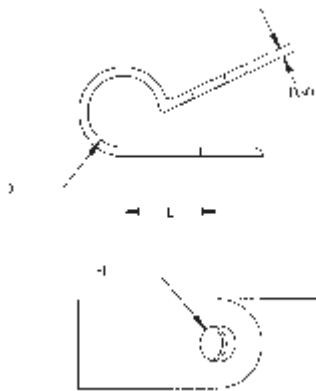
WIRE HANDLING HARDWARE

SECTION VII

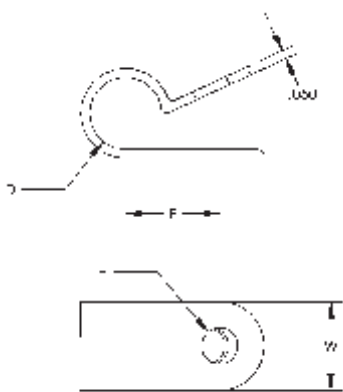
CABLE CLAMPS

Materials Available on Special Order

- Flame retardant Nylon 6/6
- 2% carbon black Nylon 6/6 (U.V. Resistant)
- Polypropylene



NOTE: H AND E DIMENSIONS ARE +/- .015" TOLERANCE.



Micro Plastics' molded nylon cable clamps secure, insulate and route cable, wiring, tubing, piping and fibre optics. These tough, durable chemical resistant nylon 6/6 cable clamps are perfect for applications in electronics, automotive, aircraft, appliance and many other industries. The *Heavy Duty Series* provides a full 1/2" wide contact area for all critical and heavy duty industrial and commercial applications, while the economical *Standard Series* has a 3/8" wide contact area and is designed for medium to lightweight applications. All contact edges have a full radius for product protection. Sizes are clearly marked on each clamp. The following are standard sizes available. Micro Plastics will tool non-standard sizes in suitable quantities.

MINIATURE



Assigned Code 1058

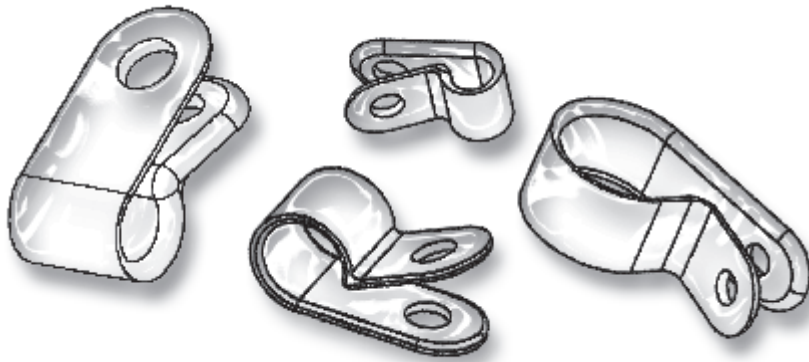
| ITEM NUMBER | D | W | H +/- .010 | E +/- .010 |
|-------------|-------------|-------------|-------------|--------------|
| 22CC16A0062 | 1/16 (0,79) | 5/32 (3,97) | .096 (2,44) | .187 (4,75) |
| 22CC16A0093 | 3/32 (2,38) | 5/32 (3,97) | .096 (2,44) | .203 (5,16) |
| 22CC16A0125 | 1/8 (3,18) | 5/32 (3,97) | .096 (2,44) | .217 (5,51) |
| 22CC16A0156 | 5/32 (3,97) | 5/32 (3,97) | .096 (2,44) | .233 (5,92) |
| 22CC16A0187 | 3/16 (4,76) | 5/32 (3,97) | .096 (2,44) | .250 (6,35) |
| 22CC28E0250 | 1/4 (6,35) | 9/32 (7,14) | .128 (3,25) | .337 (8,56) |
| 22CC28E0375 | 3/8 (9,52) | 9/32 (7,14) | .128 (3,25) | .400 (10,16) |

STANDARD

| ITEM NUMBER | D | W | H | E |
|--------------|--------------|------------|-------------|--------------|
| 22CC37B0125 | 1/8 (3,18) | 3/8 (9,53) | .140 (3,56) | .329 (8,36) |
| 22CC37C0125 | 1/8 (3,18) | 3/8 (9,53) | .167 (4,24) | .329 (8,36) |
| 22CC37D0125 | 1/8 (3,18) | 3/8 (9,53) | .203 (5,16) | .329 (8,36) |
| 22CC37B0187 | 3/16 (4,76) | 3/8 (9,53) | .140 (3,56) | .430 (10,92) |
| 22CC37C0187 | 3/16 (4,76) | 3/8 (9,53) | .167 (4,24) | .430 (10,92) |
| 22CC37D0187 | 3/16 (4,76) | 3/8 (9,53) | .203 (5,16) | .430 (10,92) |
| 22CC37B0187E | 3/16 (4,76) | 3/8 (9,53) | .140 (3,56) | .378 (9,60) |
| 22CC37C0187E | 3/16 (4,76) | 3/8 (9,53) | .167 (4,24) | .378 (9,60) |
| 22CC37D0187E | 3/16 (4,76) | 3/8 (9,53) | .203 (5,16) | .378 (9,60) |
| 22CC37B0250 | 1/4 (6,35) | 3/8 (9,53) | .140 (3,56) | .410 (10,41) |
| 22CC37C0250 | 1/4 (6,35) | 3/8 (9,53) | .167 (4,24) | .410 (10,41) |
| 22CC37D0250 | 1/4 (6,35) | 3/8 (9,53) | .203 (5,16) | .410 (10,41) |
| 22CC37B0312 | 5/16 (7,94) | 3/8 (9,53) | .140 (3,56) | .495 (12,57) |
| 22CC37C0312 | 5/16 (7,94) | 3/8 (9,53) | .167 (4,24) | .495 (12,57) |
| 22CC37D0312 | 5/16 (7,94) | 3/8 (9,53) | .203 (5,16) | .495 (12,57) |
| 22CC37B0375 | 3/8 (9,53) | 3/8 (9,53) | .140 (3,56) | .595 (15,11) |
| 22CC37C0375 | 3/8 (9,53) | 3/8 (9,53) | .167 (4,24) | .595 (15,11) |
| 22CC37D0375 | 3/8 (9,53) | 3/8 (9,53) | .203 (5,16) | .595 (15,11) |
| 22CC37B0437 | 7/16 (11,11) | 3/8 (9,53) | .140 (3,56) | .574 (14,58) |
| 22CC37C0437 | 7/16 (11,11) | 3/8 (9,53) | .167 (4,24) | .574 (14,58) |
| 22CC37D0437 | 7/16 (11,11) | 3/8 (9,53) | .203 (5,16) | .574 (14,58) |
| 22CC37B0500 | 1/2 (12,70) | 3/8 (9,53) | .140 (3,56) | .605 (15,37) |
| 22CC37C0500 | 1/2 (12,70) | 3/8 (9,53) | .167 (4,24) | .605 (15,37) |
| 22CC37D0500 | 1/2 (12,70) | 3/8 (9,53) | .203 (5,16) | .605 (15,37) |
| 22CC37D0562 | 9/16 (14,29) | 3/8 (9,53) | .203 (5,16) | .606 (15,39) |
| 22CC37D0625 | 5/8 (15,88) | 3/8 (9,53) | .203 (5,16) | .678 (17,22) |

WIRE HANDLING HARDWARE

SECTION
VII



Materials Available on Special Order

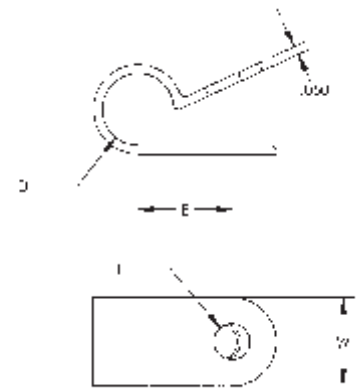
- Flame retardant Nylon 6/6
- 2% carbon black Nylon 6/6 (U.V. Resistant)
- Polypropylene

HEAVY DUTY

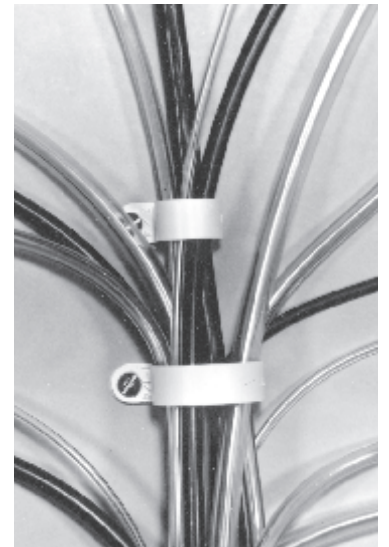


Assigned Code 1058

| ITEM NUMBER | D | W | H | E |
|-------------|----------------|-------------|-------------|---------------|
| 22CC50C0125 | 1/8 (3,18) | 1/2 (12,70) | .167 (4,24) | .315 (8,00) |
| 22CC50D0125 | 1/8 (3,18) | 1/2 (12,70) | .203 (5,16) | .315 (8,00) |
| 22CC50C0187 | 3/16 (4,76) | 1/2 (12,70) | .167 (4,24) | .425 (10,80) |
| 22CC50D0187 | 3/16 (4,76) | 1/2 (12,70) | .203 (5,16) | .425 (10,80) |
| 22CC50C0250 | 1/4 (6,35) | 1/2 (12,70) | .167 (4,24) | .410 (10,41) |
| 22CC50D0250 | 1/4 (6,35) | 1/2 (12,70) | .203 (5,16) | .410 (10,41) |
| 22CC50C0312 | 5/16 (7,94) | 1/2 (12,70) | .167 (4,24) | .500 (12,70) |
| 22CC50D0312 | 5/16 (7,94) | 1/2 (12,70) | .203 (5,16) | .500 (12,70) |
| 22CC50C0375 | 3/8 (9,53) | 1/2 (12,70) | .167 (4,24) | .530 (13,46) |
| 22CC50D0375 | 3/8 (9,53) | 1/2 (12,70) | .203 (5,16) | .530 (13,46) |
| 22CC50G0375 | 3/8 (9,53) | 1/2 (12,70) | .250 (6,35) | .585 (14,86) |
| 22CC50C0437 | 7/16 (11,11) | 1/2 (12,70) | .167 (4,24) | .560 (14,22) |
| 22CC50D0437 | 7/16 (11,11) | 1/2 (12,70) | .203 (5,16) | .560 (14,22) |
| 22CC50C0500 | 1/2 (12,70) | 1/2 (12,70) | .167 (4,24) | .595 (15,11) |
| 22CC50D0500 | 1/2 (12,70) | 1/2 (12,70) | .203 (5,16) | .595 (15,11) |
| 22CC50C0562 | 9/16 (14,29) | 1/2 (12,70) | .167 (4,24) | .606 (15,39) |
| 22CC50D0562 | 9/16 (14,29) | 1/2 (12,70) | .203 (5,16) | .606 (15,39) |
| 22CC50C0625 | 5/8 (15,88) | 1/2 (12,70) | .167 (4,24) | .655 (16,64) |
| 22CC50D0625 | 5/8 (15,88) | 1/2 (12,70) | .203 (5,16) | .655 (16,64) |
| 22CC50C0687 | 11/16 (17,46) | 1/2 (12,70) | .167 (4,24) | .755 (19,18) |
| 22CC50D0687 | 11/16 (17,46) | 1/2 (12,70) | .203 (5,16) | .755 (19,18) |
| 22CC50C0750 | 3/4 (19,05) | 1/2 (12,70) | .167 (4,24) | .780 (19,81) |
| 22CC50D0750 | 3/4 (19,05) | 1/2 (12,70) | .203 (5,16) | .780 (19,81) |
| 22CC50C0812 | 13/16 (20,64) | 1/2 (12,70) | .167 (4,24) | .815 (20,70) |
| 22CC50D0812 | 13/16 (20,64) | 1/2 (12,70) | .203 (5,16) | .815 (20,70) |
| 22CC50C0875 | 7/8 (22,22) | 1/2 (12,70) | .167 (4,24) | .845 (21,46) |
| 22CC50D0875 | 7/8 (22,22) | 1/2 (12,70) | .203 (5,16) | .845 (21,46) |
| 22CC50D1000 | 1 (25,40) | 1/2 (12,70) | .203 (5,16) | .910 (23,11) |
| 22CC50D1125 | 1 1/8 (28,58) | 1/2 (12,70) | .203 (5,16) | .970 (24,64) |
| 22CC50D1187 | 1 3/16 (30,16) | 1/2 (12,70) | .203 (5,16) | 1.000 (25,40) |
| 22CC50D1250 | 1 1/4 (31,75) | 1/2 (12,70) | .203 (5,16) | 1.060 (26,92) |
| 22CC50D1375 | 1 3/8 (34,93) | 1/2 (12,70) | .203 (5,16) | 1.125 (28,58) |
| 22CC50D1500 | 1 1/2 (38,10) | 1/2 (12,70) | .203 (5,16) | 1.190 (30,23) |



NOTE: H AND E DIMENSIONS ARE + / - .015" TOLERANCE.



EXTRA HEAVY DUTY

| ITEM NUMBER | D | W | H | E |
|-------------|----------------|-------------|-------------|---------------|
| 22CC87F0750 | 3/4 (19,05) | 7/8 (22,22) | .387 (9,83) | 1.000 (25,40) |
| 22CC87D1003 | 1 1/32 (26,19) | 7/8 (22,22) | .203 (5,16) | 1.125 (28,58) |
| 22CC87F1003 | 1 1/32 (26,19) | 7/8 (22,22) | .387 (9,83) | 1.125 (28,58) |

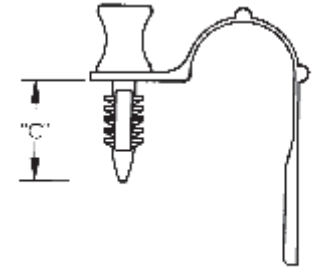
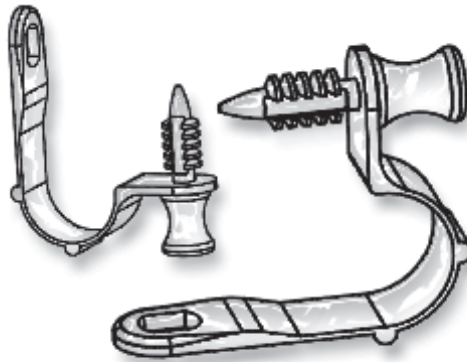
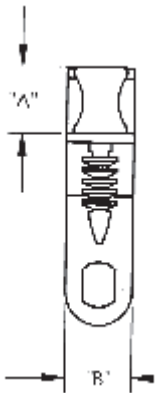


WIRE HANDLING HARDWARE

SECTION VII

QUICK CABLE CLAMPS

Quick cable clamps are designed for one-handed installation. The design features an integrated ratchet fastener which eliminates the need for a screw or other fastener. Quick cable clamps are self-aligning, and the built-in handle allows for quick and easy installation without tools. The parts are molded from Nylon 6/6 and are suitable for many different wire, cable, or tubing routing applications. Parts are designed to fit a 3/16" diameter hole.



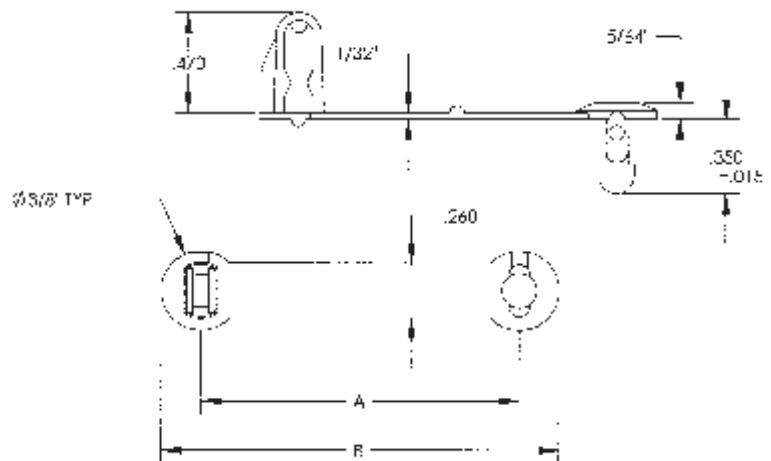
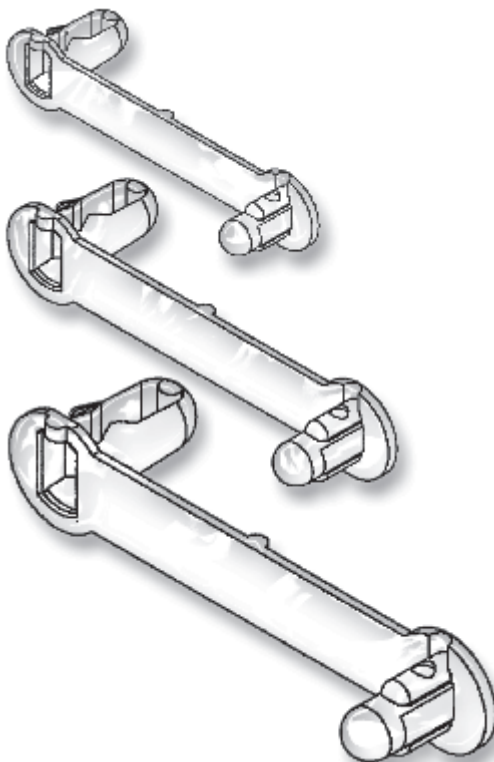
ALL DIMENSIONS +/- .015

| ITEM NUMBER | BUNDLE DIAMETER | KNOB LENGTH | WIDTH "B" | "C" CLIP LENGTH |
|-------------|-----------------|-------------|-------------|-----------------|
| 22QCC187250 | 1/4" (6,35) | .375 (9,53) | .375 (9,53) | .528 (13,41) |
| 22QCC187312 | 5/16" (7,94) | .375 (9,53) | .375 (9,53) | .528 (13,41) |
| 22QCC187375 | 3/8" (9,53) | .375 (9,53) | .375 (9,53) | .528 (13,41) |
| 22QCC187437 | 7/16" (11,1) | .375 (9,53) | .375 (9,53) | .528 (13,41) |



WIRE AND TUBE RETAINING STRAPS

Wire and tube retaining straps are designed to be pushed into a .250 dia. hole, the wire or tube can then be placed on the the strap, simply push the pin end into the receiver end and the wire or tube is secured in place. Part is molded in electrically insulating Nylon 6/6.

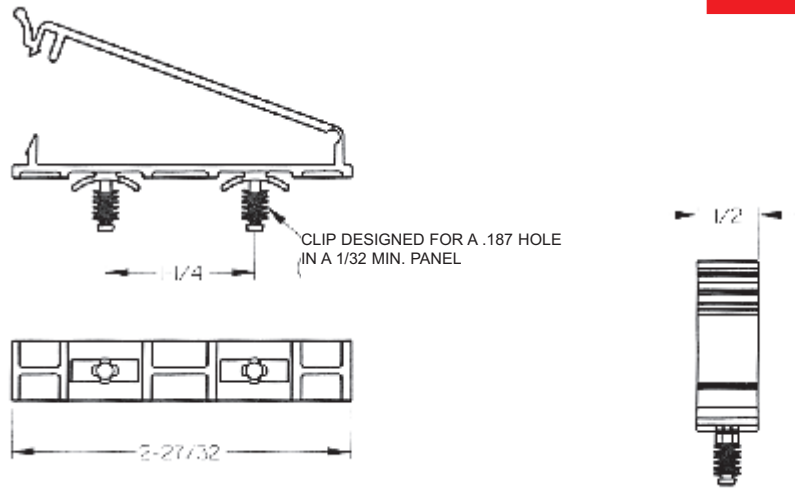
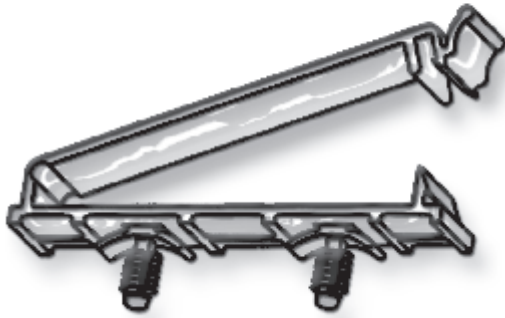


| ITEM NUMBER | BUNDLE DIAMETER | "A" REFERENCE | "B" REFERENCE |
|--------------|-----------------|---------------|---------------|
| 22WTR2500312 | .312 (7,93) | 1.530 (38,86) | 1.905 (48,39) |
| 22WTR2500375 | .375 (9,52) | 1.730 (43,94) | 2.105 (53,47) |
| 22WTR2500437 | .437 (11,10) | 1.930 (49,02) | 2.305 (58,55) |
| 22WTR2500500 | .500 (12,70) | 2.130 (54,10) | 2.528 (64,21) |
| 22WTR2500562 | .562 (14,28) | 2.360 (59,94) | 2.735 (69,47) |

RIBBON CLIP – fin clip base

ITEM NUMBER

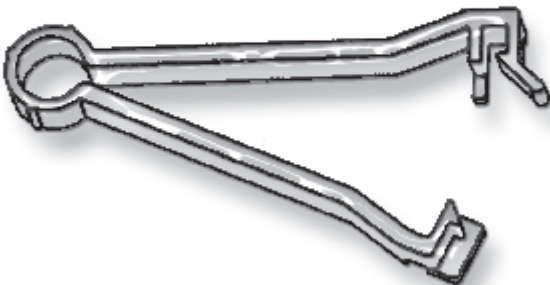
22FCC250237



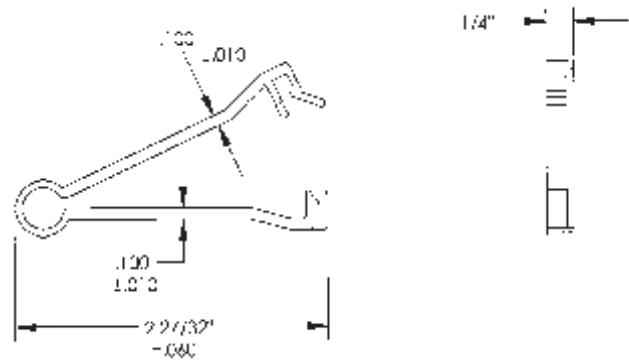
RIBBON CLIP – quick move

ITEM NUMBER

22RC200



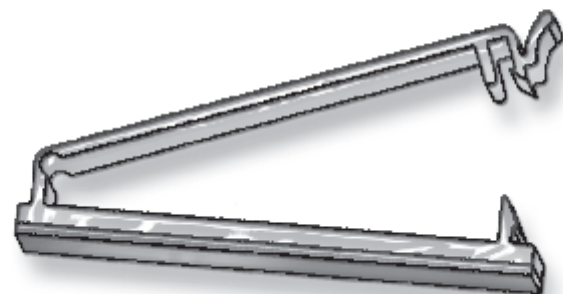
One Piece Ribbon Clip is molded in tough non-conductive nylon. This design allows for quick positive clamping of flat cable up to 50 conductors wide, without the need for securing the clip to a board or chassis. Ribbon Clips are releasable and reusable, and will not cut or abrade cable.



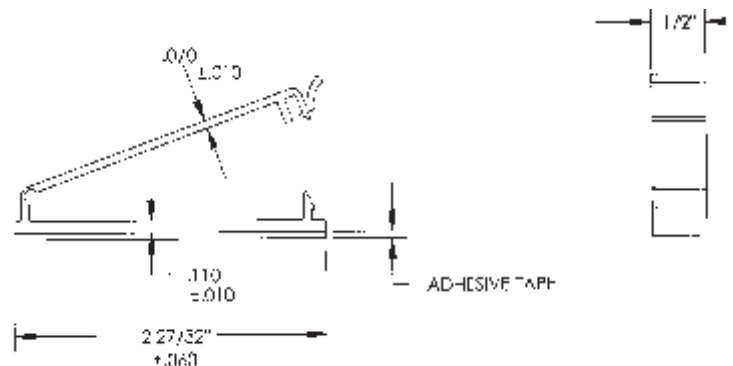
RIBBON CLIP – adhesive base

ITEM NUMBER

22ABC250237



Adhesive Base Ribbon Clip is molded in tough non-conductive nylon. Ribbon Clips are designed to hold flat cable up to 50 conductors wide. Ribbon Clips will not cut or abrade cable and are releasable. Easy mounting with peel and stick adhesive backing.



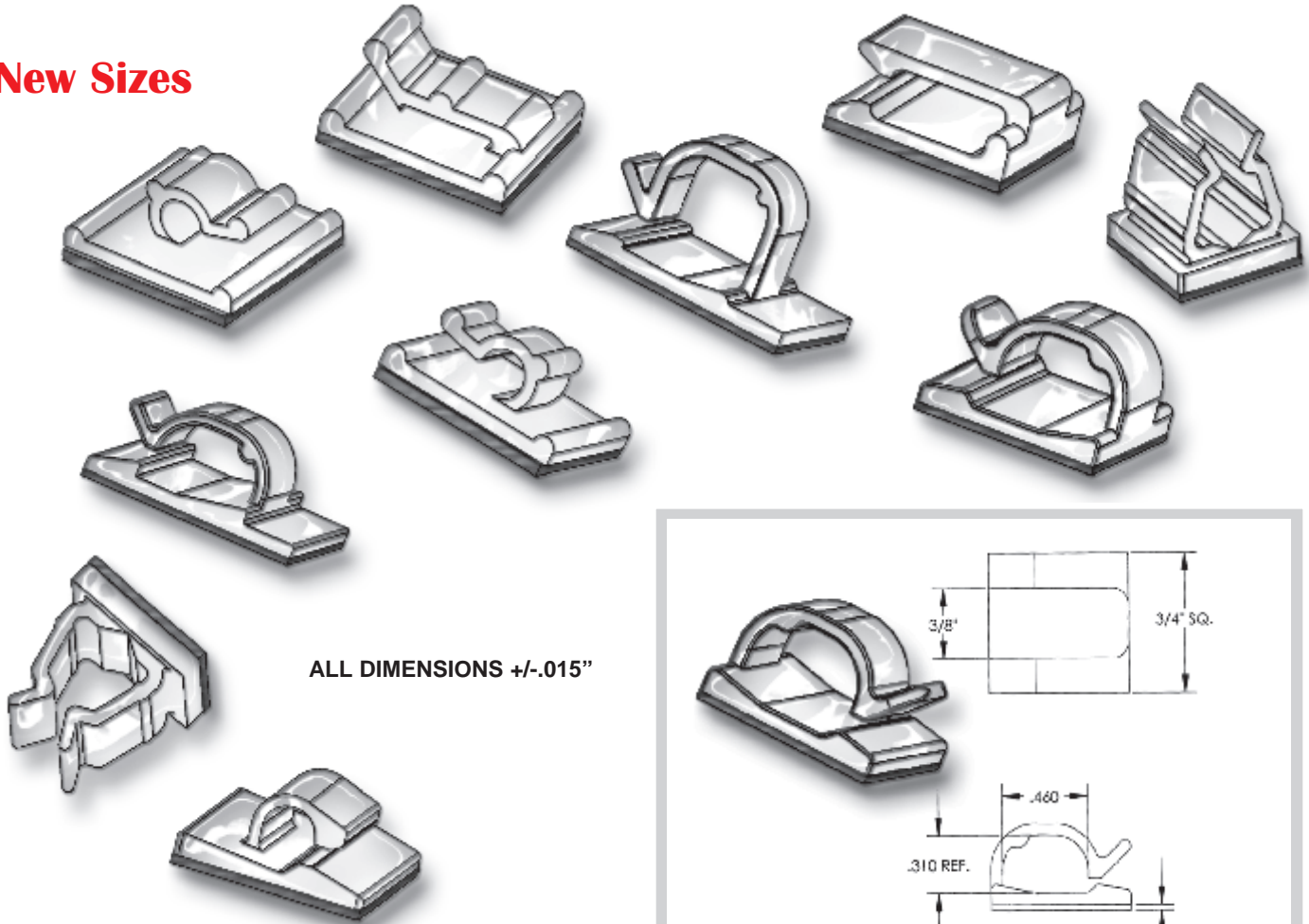
WIRE HANDLING HARDWARE

SECTION VII

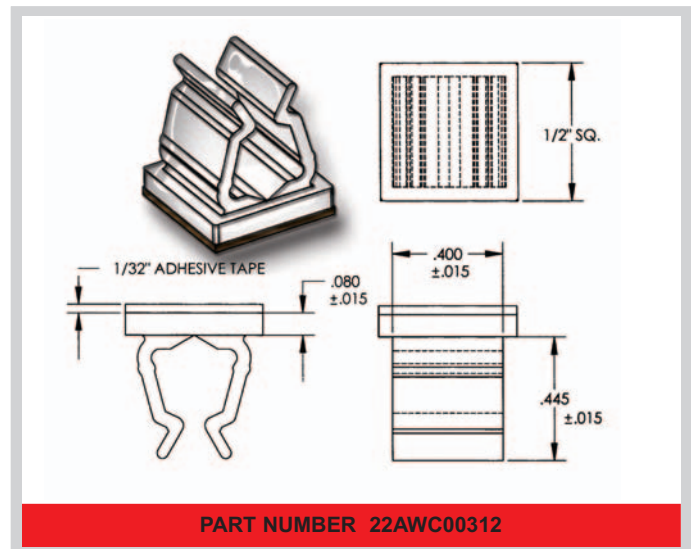
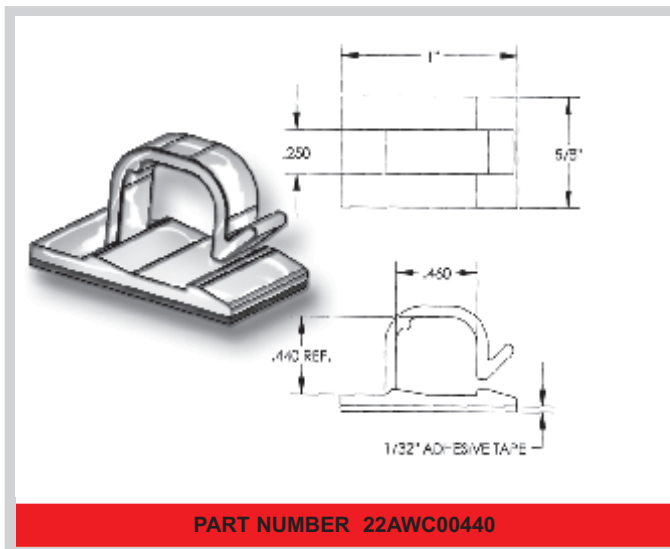
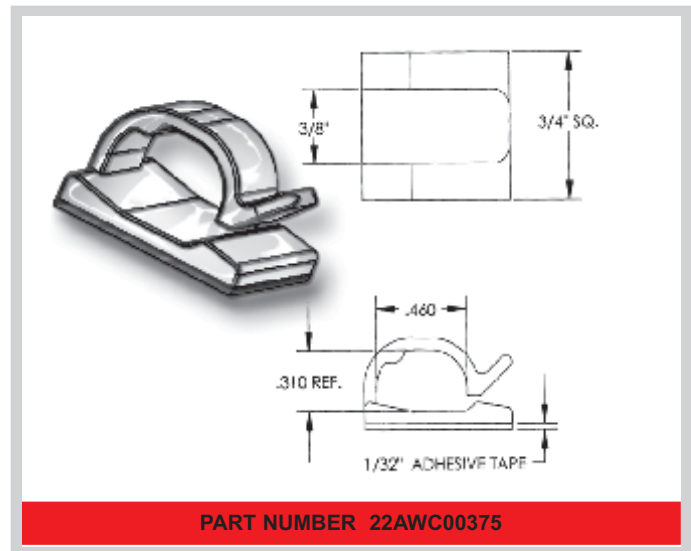
RELEASABLE ADHESIVE BACKED WIRE CLIPS

Micro Plastics' Adhesive Backed Nylon Wire and Cable Clips are used to route wires and cables. The parts are backed with Polyethylene foam tape, and feature a releasable clip so wires can be removed after assembly if desired. Parts are stocked in natural, when ordering black parts add the letter "B" to the end of the part number.

New Sizes



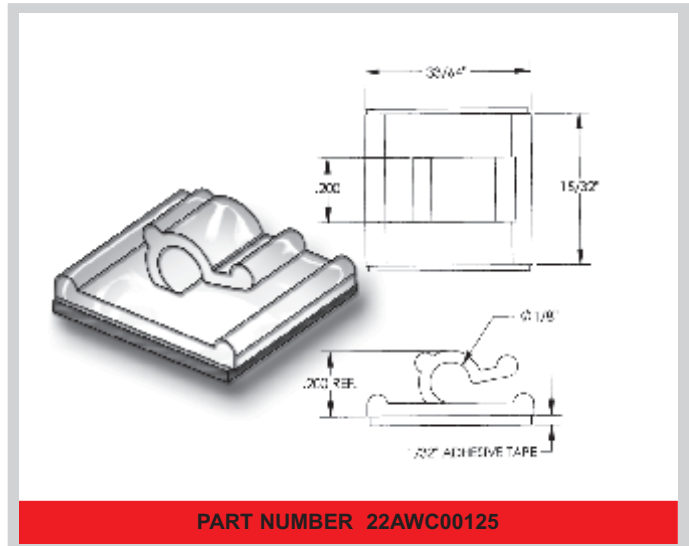
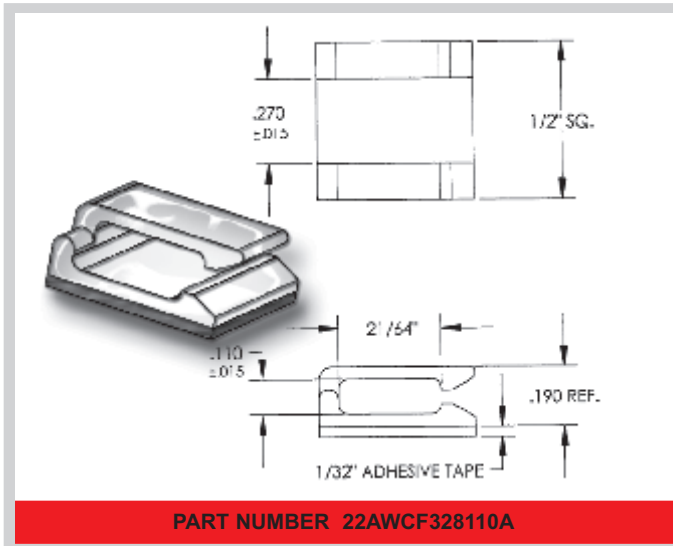
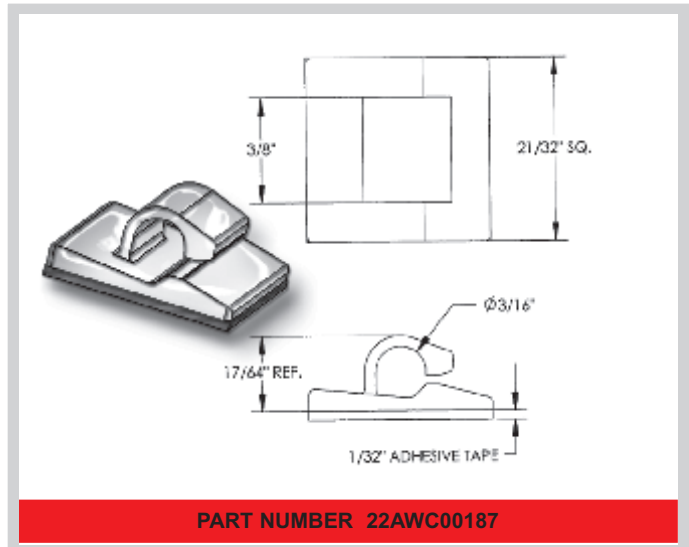
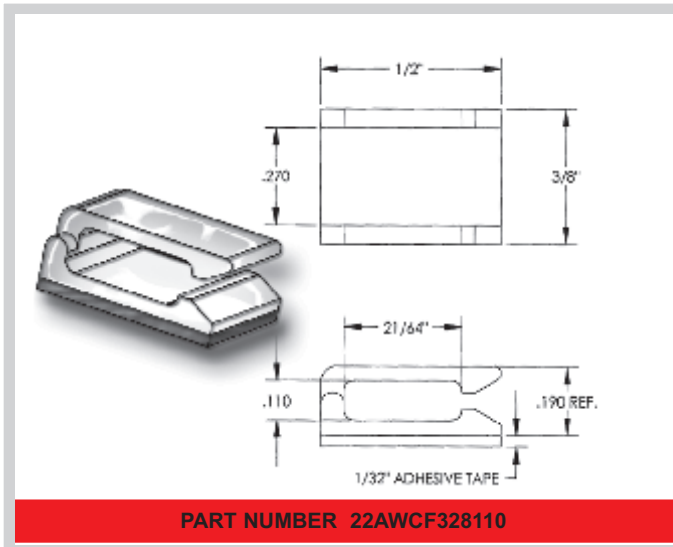
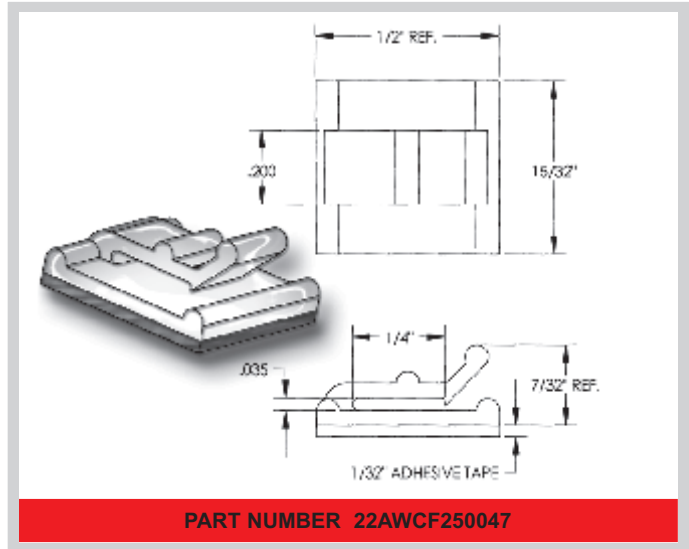
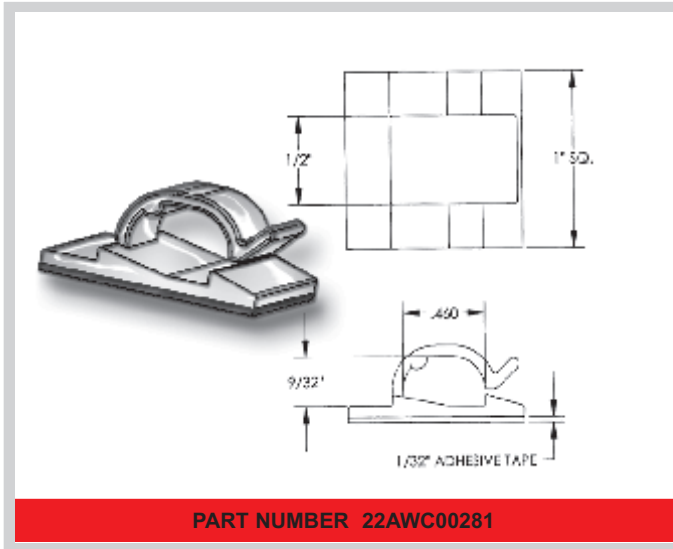
ALL DIMENSIONS +/- .015"



WIRE HANDLING HARDWARE

RELEASABLE ADHESIVE BACKED WIRE CLIPS

SECTION
VII

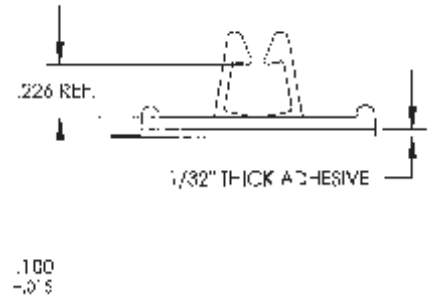
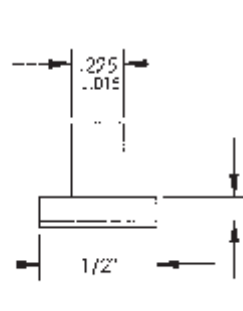
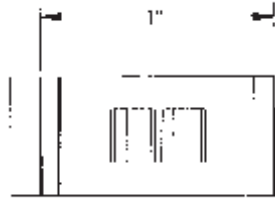
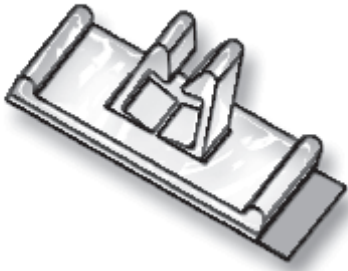


WIRE HANDLING HARDWARE

SECTION VII

WIRE CLIP WITH TAB ADHESIVE BACKED

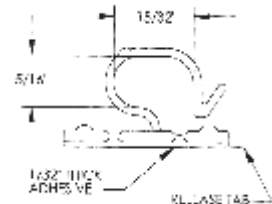
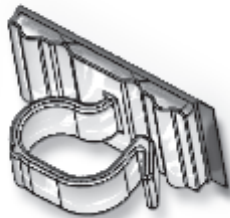
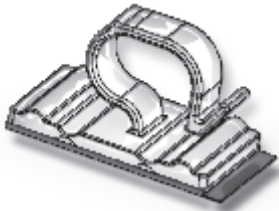
Micro Plastics' Adhesive Backed Wire Clip with handy release tab. Molded in natural colored Nylon 6/6 material. Clip is backed with double coated Polyethylene foam tape. Foam tape uses a strong and durable acrylic adhesive. Wire clip features a releasable clip design so wires can be removed after assembly.



| ITEM NUMBER | LENGTH | CLIP THICKNESS | MOUNTING THICKNESS WITHOUT ADHESIVE | WIDTH | ADHESIVE WITH TAB |
|----------------|------------|----------------|-------------------------------------|--------------|-------------------|
| 22AWC250220TAB | 1" (25,40) | .225 (5,72) | .100 (2,54) | 1/2" (12,70) | 1/32" (7,94) |

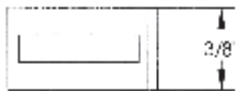
CONTOUR CLIP

Micro Plastics announces the "Contour Clip." The adhesive-backed part incorporates new design consisting of a hinge type movement in the base which flexes to fit convex or concave surfaces. This flexible base allows the part to be used on cylindrical surfaces such as pipes or tubing, and on irregular surfaces - even around corners. The part is molded from nylon and is applied with our standard adhesive-backed tape with an extended paper liner for easy removal of the liner. The part is also available with 3m's VHB (very high bond) tape which develops a high-strength, epoxy type bonding. Simply add "VHB" to the end of the part number.

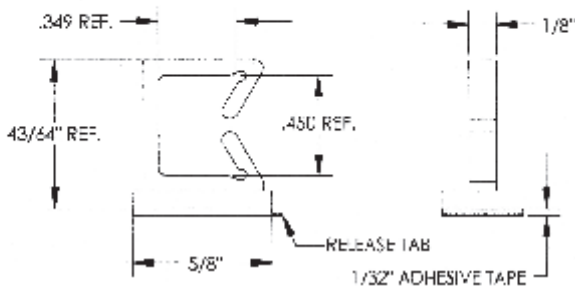


| ITEM NUMBER | DESCRIPTION |
|----------------|--------------|
| 22CAWC00440TAB | Contour Clip |

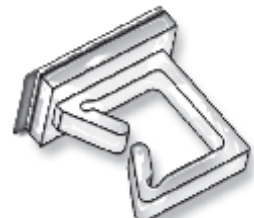
RELEASABLE ADHESIVE BACKED WIRE CLIPS



New Product Line



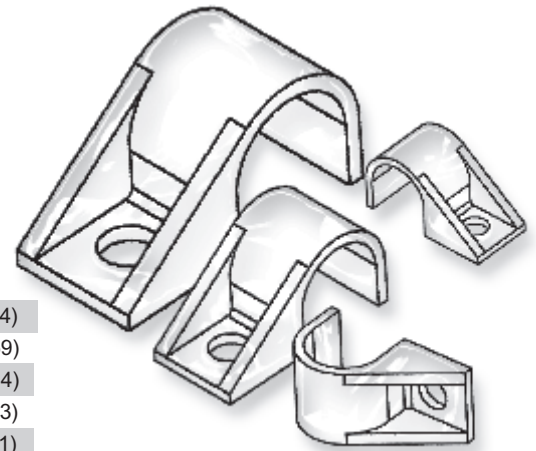
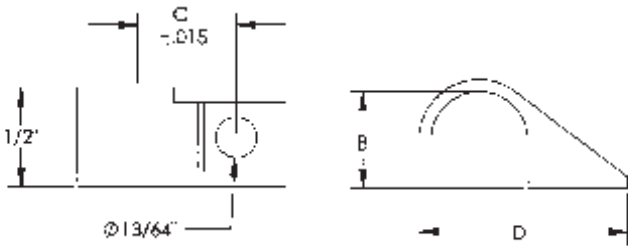
Micro Plastics Releasable Adhesive Backed Wire Clip with handy release tab is used to route wires and cables. Molded in UL recognized Nylon 6/6 with double coated Polyethylene foam tape. Clip has side entry for ease of wire installation.



| ITEM NUMBER | DESCRIPTION |
|----------------|--------------------------|
| 22AWC350450TAB | Releasable Adhesive Clip |

HEAVY DUTY CABLE CLIPS

Micro Plastics' Nylon Heavy Duty Cable Clips are designed for cable and wire applications involving greater than usual loads or connections of critical nature. The rugged clip has reinforced side flanges for additional strength and rigidity. Compact design allows this clip to be used on corners, edges or where space is limited. Clip has hole for screw mounting. Available in size range for 1/8" to 1/2" diameter cable.



| ITEM NUMBER | DESCRIPTION | "B" | "C" | "D" REF. |
|-------------|----------------------|--------------|--------------|---------------|
| 22HDCC1250 | 1/8" Hvy. dty. Clip | .115 (2,92) | .307 (7,80) | .675 (17,14) |
| 22HDCC1720 | 3/16" Hvy. dty. Clip | .172 (4,37) | .328 (8,33) | .732 (18,59) |
| 22HDCC2340 | 1/4" Hvy. dty. Clip | .234 (5,95) | .366 (9,30) | .793 (20,14) |
| 22HDCC2970 | 5/16" Hvy. dty. Clip | .297 (7,54) | .400 (10,16) | .859 (21,83) |
| 22HDCC3590 | 3/8" Hvy. dty. Clip | .359 (9,13) | .430 (10,92) | .910 (23,11) |
| 22HDCC4220 | 7/16" Hvy. dty. Clip | .422 (10,72) | .460 (11,68) | .980 (24,89) |
| 22HDCC4840 | 1/2" Hvy. dty. Clip | .484 (12,30) | .492 (12,50) | 1.044 (26,52) |

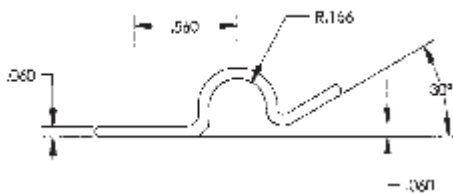


WIRE CLIP

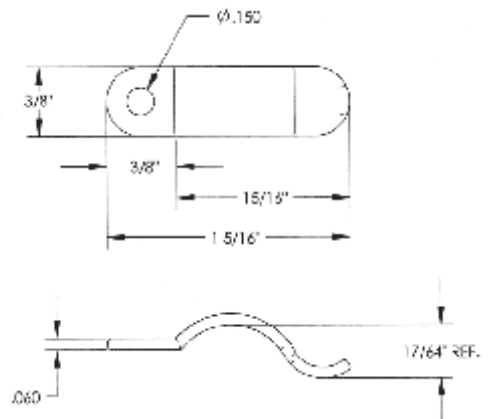
Micro Plastics' Nylon Wire Clip provide fast, secure assembly and routing of wires, standard round cable, flat cable and tubing. Micro Plastics' Nylon Spring Clips provide fast, secure assembly and routing of wires, standard round cable, flat cable and tubing. The Spring Clip can also be used to mount panels, glass, displays, or signs. To inspect, add or replace wires, simply pull back clip to allow placement. The tough, flexible nylon clip will spring back to hold the material securely. All contact edges are rounded for product protection.



SPRING CLIP



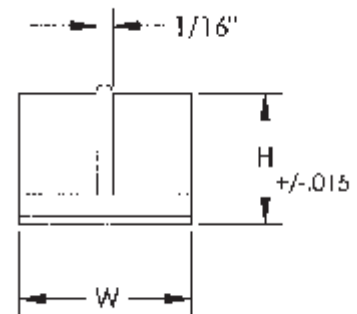
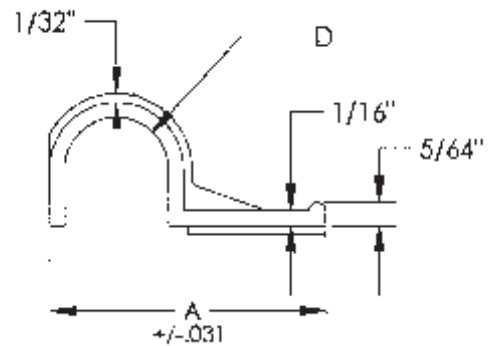
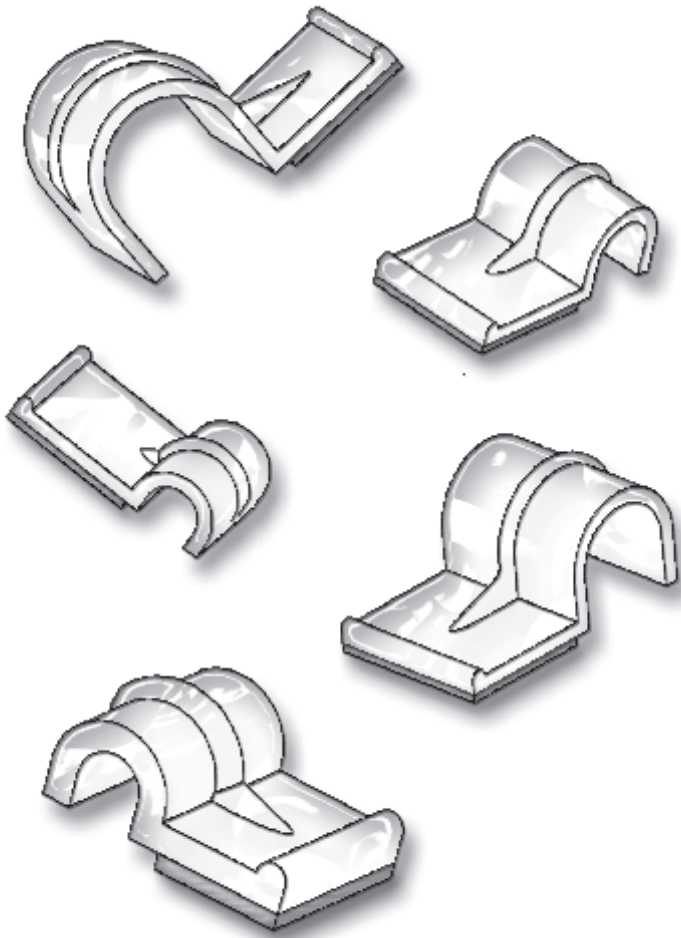
| ITEM NUMBER | DESCRIPTION |
|-------------|---------------------------|
| 22WC500312 | 1/2 (12,70) X .312 (7,94) |



| ITEM NUMBER | DESCRIPTION |
|-------------|--------------------------|
| 22SCP375132 | 3/8 (9,53) X .132 (3,35) |

SINGLE ADHESIVE BACKED NYLON CABLE CLIPS

Micro Plastics' nylon Single press clips are the convenient and fast way to install wires and cable to almost any surface. Tough, corrosion resistant nylon 6/6 clip is backed with a quality foam adhesive tape. The single clip is designed to be used in areas where space is limited or in corners or edges and are supplied on easy-to-use perforated liner strips in sets of 6 to 10 pieces. To install, simply pull the clip off of the liner strip and press into place. No holes to drill or screw to turn. Nylon press clips provide a low in-place assembly that is quick and permanent. Polyethylene foam tape has excellent conformability, high temperature and solvent resistance and high ultimate bond strength.

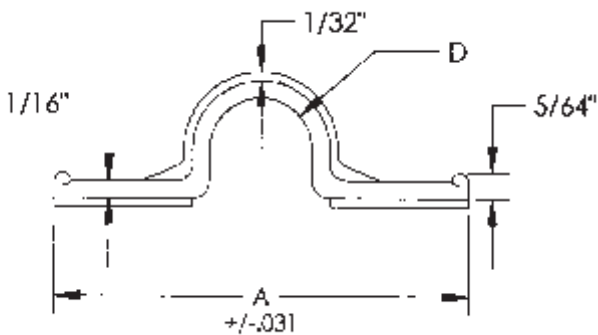
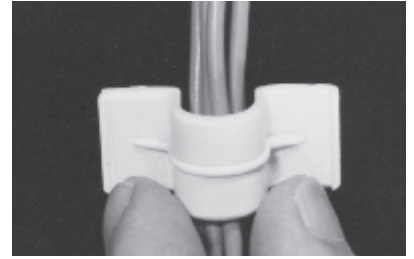


*Packaged 50 pcs. per roll
**Packaged 100 pcs. per roll

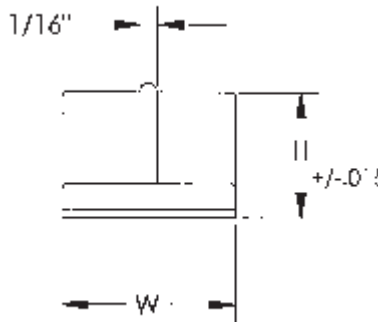
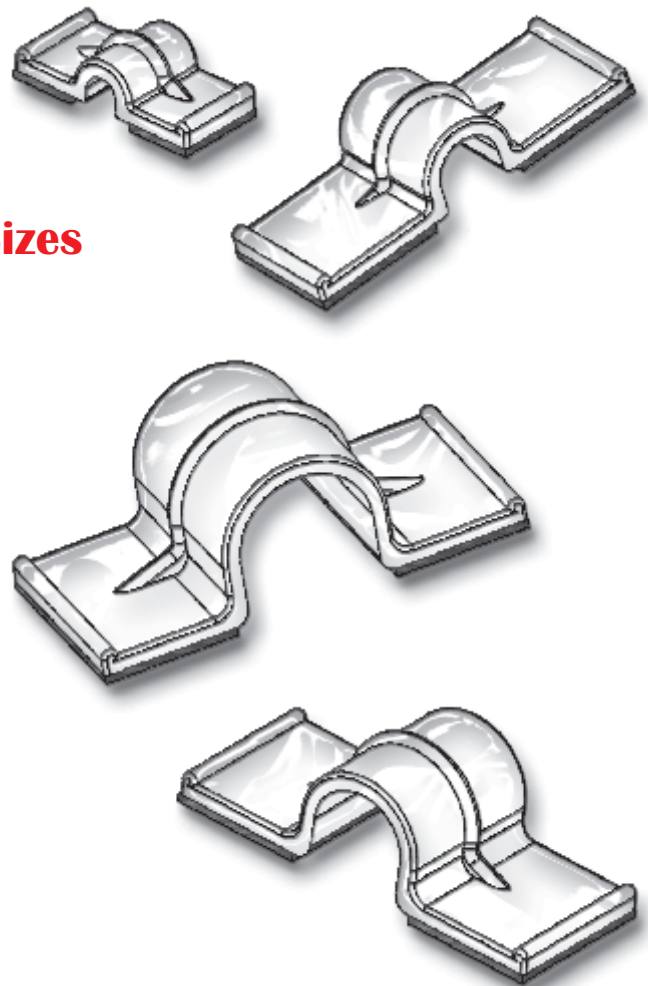
| ITEM NUMBER | DESCRIPTION | "D" | "A" * | "H" | "W" |
|---------------|------------------|---------------|---------------|--------------|--------------|
| ** 22SPC13037 | 1/8" SNGL CLIP | 1/8" (3,18) | .493 (12,52) | .217 (5,51) | 3/8" (9,53) |
| ** 22SPC20000 | 13/64" SNGL CLIP | 13/64" (5,16) | .808 (20,53) | .255 (6,48) | 1/2" (12,70) |
| ** 22SPC25550 | 1/4" SNGL CLIP | 1/4" (6,35) | .865 (21,97) | .343 (8,71) | 1/2" (12,70) |
| ** 22SPC38562 | 3/8" SNGL CLIP | 3/8" (9,53) | 1.000 (25,40) | .475 (12,07) | 5/8" (15,88) |
| * 22SPC50575 | 1/2" SNGL CLIP | 1/2" (12,70) | 1.125 (28,58) | .593 (15,06) | 3/4" (19,05) |

DOUBLE ADHESIVE BACKED NYLON CABLE CLIPS

Micro Plastics' nylon double press clips are the convenient and fast way to install wires and cable to almost any surface. Tough, corrosion resistant nylon 6/6 clip is backed with a quality foam adhesive tape. The double clip design develops greater shear loads and holding power and are supplied on easy-to-use perforated liner strips in sets of 6 to 10 pieces. To install, simply pull the clip off of the liner strip and press into place. No holes to drill or screw to turn. Nylon press clips provide a low in-place assembly that is quick and permanent. Polyethylene foam tape has excellent conformability, high temperature and solvent resistance and high ultimate bond strength.



New Sizes



*Packaged 50 pcs. per roll
**Packaged 100 pcs. per roll

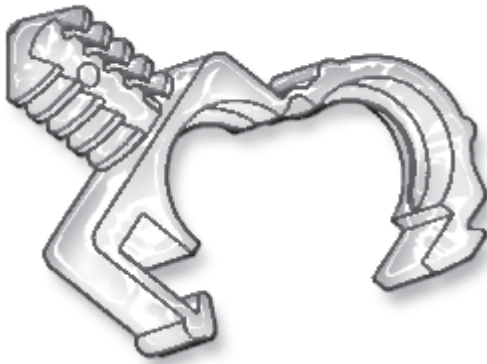
* "A" DIM. +/- .031

| ITEM NUMBER | DESCRIPTION | "D" | "A" * | "H" | "W" |
|---------------|-----------------|--------------|---------------|--------------|--------------|
| ** 22DPC13037 | 1/8" DBLE CLIP | 1/8" (3,18) | .760 (19,30) | .216 (5,49) | 3/8" (9,53) |
| ** 22DPC15637 | 5/32" DBLE CLIP | 5/32" (3,96) | 1.281 (32,54) | .248 (6,30) | 3/8" (9,53) |
| ** 22DPC25550 | 1/4" DBLE CLIP | 1/4" (6,35) | 1.380 (35,05) | .326 (8,28) | 1/2" (12,70) |
| * 22DPC38062 | 3/8" DBLE CLIP | 3/8" (9,53) | 1.505 (38,23) | .455 (11,56) | 5/8" (15,88) |
| * 22DPC50575 | 1/2" DBLE CLIP | 1/2" (12,70) | 1.600 (40,64) | .580 (14,73) | 3/4" (19,05) |

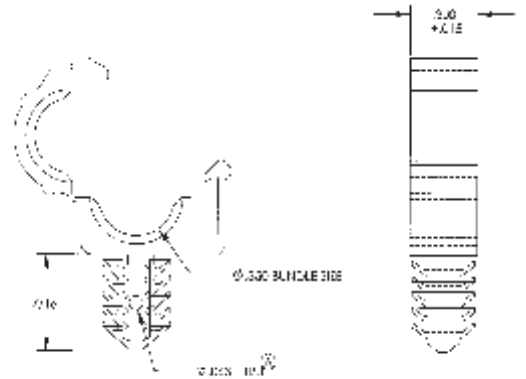
WIRE HANDLING HARDWARE

SECTION
VII

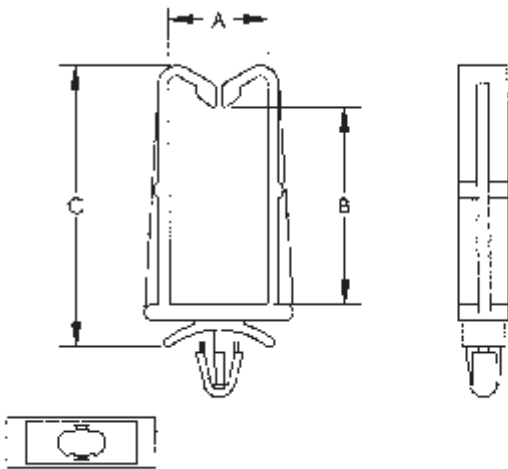
"SPECIAL ITEM" RELEASABLE CLAMP ON FIN CLIP BASE



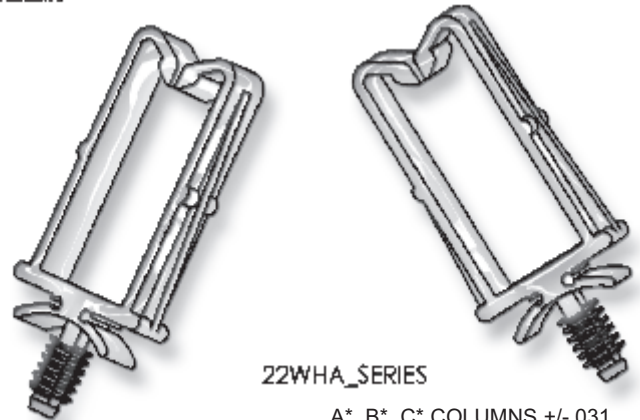
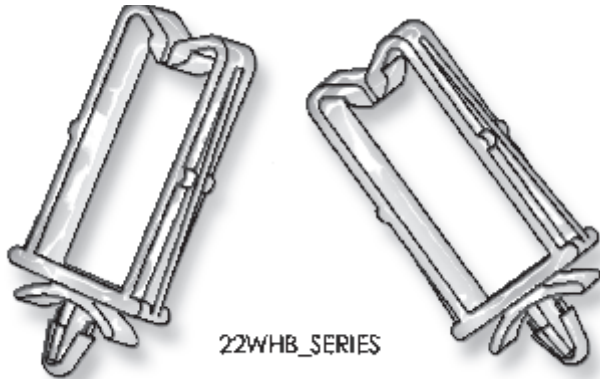
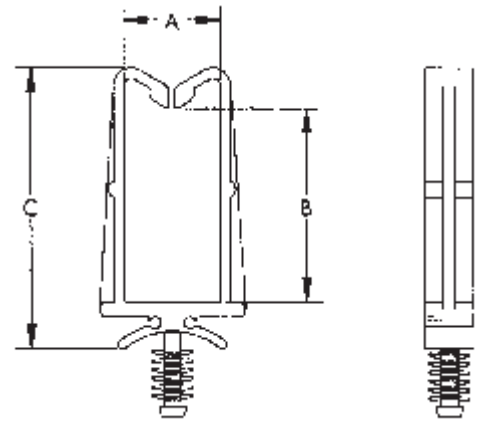
ITEM NUMBER
23RCFB035C



WIRE/CABLE HOLDERS



**METRIC Sizes
Also Available**
Page 240



A* ,B* , C* COLUMNS +/- .031

Micro Plastics' Wire/Cable Holders are designed to mount into 3/16 hole diameters. Wire/Cable Holders can be used in a variety of panel thicknesses and materials. Sizes are available to handle wire bundle diameters from .375" to .500".

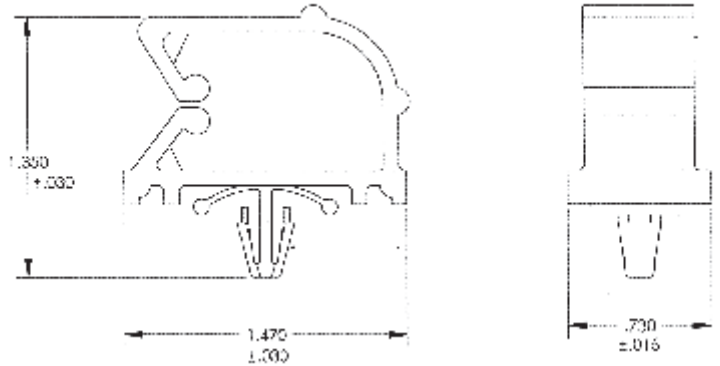
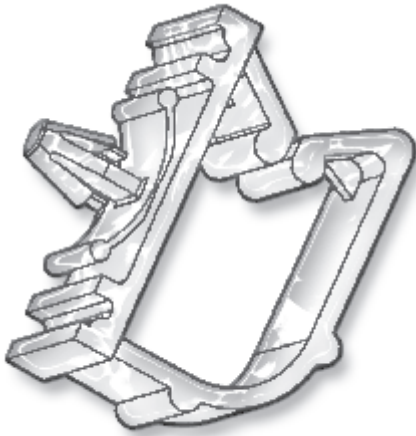
| ITEM NUMBER | A* | B* | C* | HOLE DIA. | PANEL RANGE |
|-------------|--------------|--------------|---------------|-------------|-------------------------|
| 22WHA375050 | .375 (9,53) | .500 (12,70) | .922 (23,42) | .187 (4,76) | VARIABLE |
| 22WHA375075 | .375 (9,53) | .750 (19,05) | 1.172 (25,40) | .187 (4,76) | VARIABLE |
| 22WHA500075 | .500 (12,70) | .750 (19,05) | 1.219 (30,46) | .187 (4,76) | VARIABLE |
| 22WHA500100 | .500 (12,70) | 1 (25,40) | 1.469 (37,31) | .187 (4,76) | VARIABLE |
| 22WHB375050 | .375 (9,53) | .500 (12,70) | .922 (23,42) | .187 (4,76) | .030 (0,76)/.040 (1,02) |
| 22WHB375075 | .375 (9,53) | .750 (19,05) | 1.172 (25,40) | .187 (4,76) | .030 (0,76)/.040 (1,02) |
| 22WHB500075 | .500 (12,70) | .750 (19,05) | 1.219 (30,96) | .187 (4,76) | .030 (0,76)/.040 (1,02) |
| 22WHB500100 | .500 (12,70) | 1 (25,40) | 1.500 (38,10) | .187 (4,76) | .030 (0,76)/.040 (1,02) |

WIRE HANDLING HARDWARE

SECTION
VII

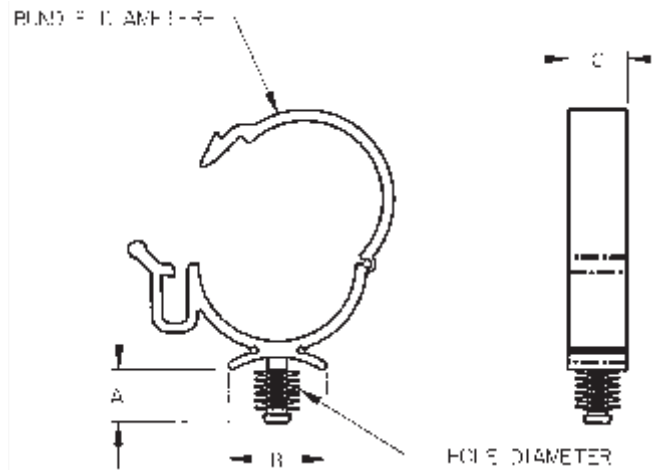
WIRE CLIP WITH PUSH-IN MOUNT

Micro Plastics side entry wire routing clip with push-in mount.



ITEM NUMBER
22SEWC750100

RELEASABLE CLAMP ON FIN CLIP BASE

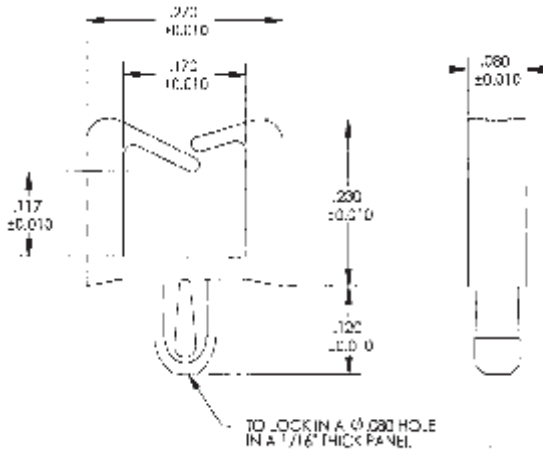


TOLERANCES +/- .015

| ITEM NUMBER | A | B | C | BUNDLE DIA. | HOLE DIA. | PANEL RANGE |
|-------------|-------------|--------------|-------------|--------------|-------------|-------------|
| 23RCFB037 | .344 (8,74) | .562 (14,27) | .187 (4,75) | .375 (9,53) | .187 (4,75) | VARIABLE |
| 23RCFB050 | .344 (8,74) | .562 (14,27) | .187 (4,75) | .500 (12,70) | .187 (4,75) | VARIABLE |
| 23RCFB05025 | .344 (8,74) | .562 (14,27) | .187 (4,75) | .500 (12,70) | .250 (6,35) | VARIABLE |
| 23RCFB100 | .344 (8,74) | .625 (15,88) | .375 (9,53) | 1 (25,40) | .250 (6,35) | VARIABLE |

MICRO WIRE CLIP

Micro Plastics micro wire clips are molded in Nylon 6/6 material. They can be used on densely packed PC boards or any other limited space applications. Holds up to ten 25 gauge wires (1/32 outside diameter). Wires install easily by pressing down on retaining arms which flex to accept wire then spring back into place.



Watch Instructional Video

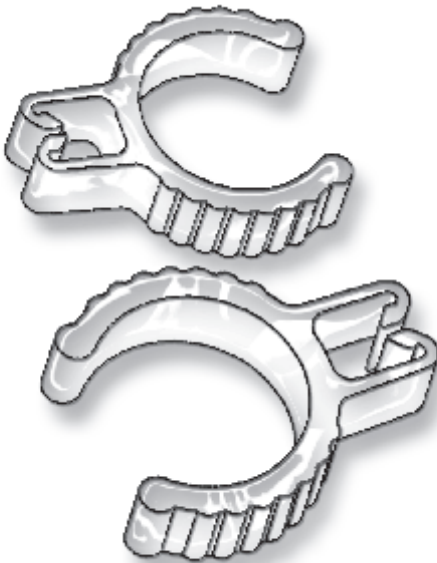
[mms://www.microplastics.com/productvideos/MicroWireClip.asf](https://www.microplastics.com/productvideos/MicroWireClip.asf)

ITEM NUMBER

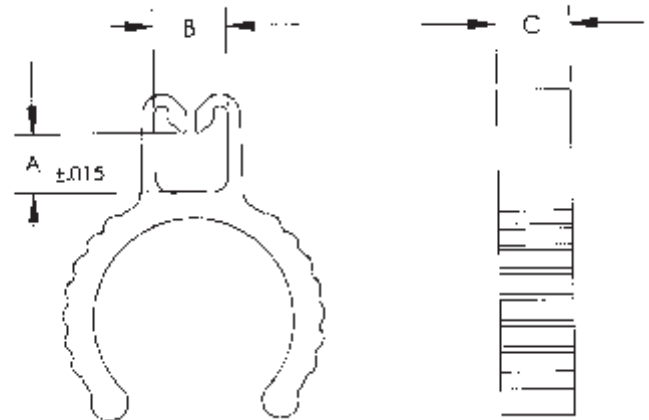
22MWC170120

CONDUIT CLIPS

Various wiring, such as telephone wire, is often routed with electrical conduit. "Conduit clips" are designed to snap onto electrical conduit. The integrated wire-holder on the clip allows wiring to be secured to the conduit. Installation is faster and easier than with a wire tie, which is often used for this purpose. The clip can be easily removed if necessary. Two sizes are available for 1/2" and 3/4" ID conduit, which will accommodate various wire sizes up to 5/16" diameter. Parts are molded in light weight, chemical and corrosion resistant nylon 6/6.



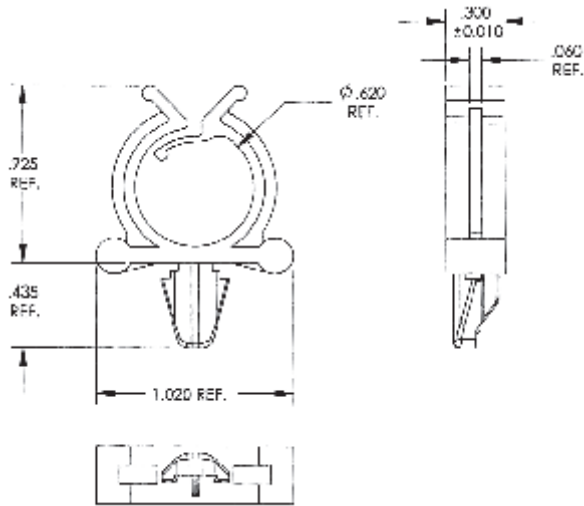
PATENTED



| ITEM NUMBER | DESCRIPTION | A | B | C | CONDUIT SIZE |
|-------------|-------------------|-------------|-------------|-------------|--------------|
| 23CDC05025 | 1/2" CONDUIT CLIP | .200 (5,08) | .250 (6,35) | .250 (6,35) | 1/2" (12,70) |
| 23CDC07531 | 3/4" CONDUIT CLIP | .312 (7,92) | .312 (7,92) | .250 (6,35) | 3/4" (19,05) |

CORD CLIP WITH PUSH MOUNT

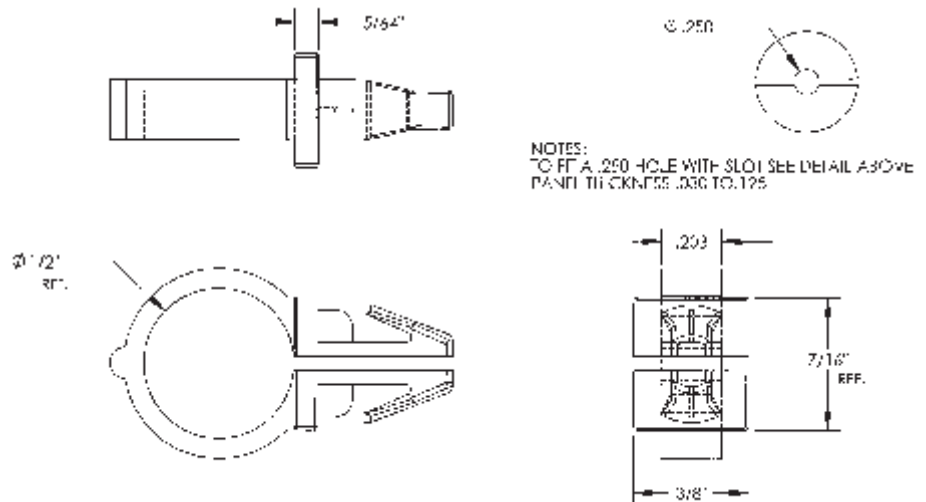
Micro Plastics cord clip is designed with a 5/8" (15,88) bundle diameter. To mount into a 1/4 (6,35) diameter hole. Cord clip is used to organize wires, cords and cables. Parts are molded in UL Recognized Nylon 6/6.



| PART NUMBER | DESCRIPTION |
|--------------|---------------------------|
| 22WCMP062250 | CORD CLIP WITH PUSH MOUNT |

SPLIT WIRE ROUTING CLIP

The split wire routing design allows loading of wires by separating the cup at the split and then inserting the prongs of the clip into a hole in the panel.



| PART NUMBER | DESCRIPTION |
|--------------|-------------------------|
| 23SWRC250500 | SPLIT WIRE ROUTING CLIP |

WIRE HANDLING HARDWARE

SECTION VII

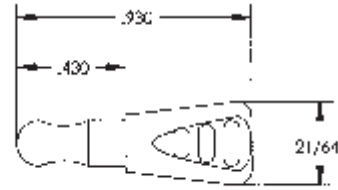
DUMMY PLUGS



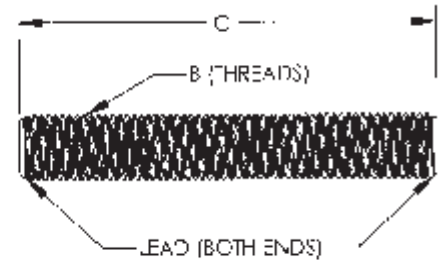
Micro Plastics' Dummy Plugs are designed to electrically isolate unused bullet type "female" terminals in wiring harnesses, to prevent short circuits due to harness movement. Molded of tough electrically insulating black Nylon, these plugs are easily inserted with normal hand pressure and removable for addition of electrical accessories.

ITEM NUMBER

DP401030



Ø 23/64" I.D. THRU



PARTS ARE MOLDED IN WHITE NYLON

NYLON THREADED TUBING

| ITEM NUMBER | ID | B | C |
|-------------|--------|------------|------------------|
| 04MP3500TT | 23/64" | 1/4-18 NPS | 3 1/2" +/- 1/16" |
| 04MP3250TT | 23/64" | 1/4-18 NPS | 3 1/4" +/- 1/16" |

NYLON FUEL LINE CLIP

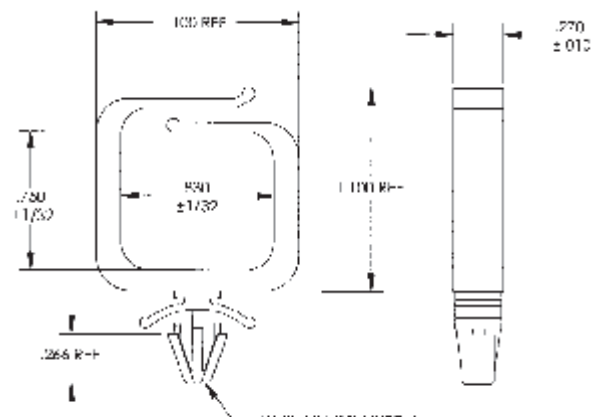
Micro Plastics' Fuel line Clip is molded Nylon 6/6 material that is resistant to oil and gasoline. Part snaps into a .031" to .079" panel thickness. Clip can be used for routing tubes and cables. Material is rated UL94-V2



New Product Line

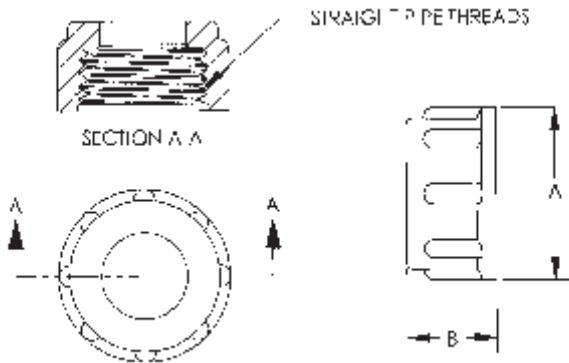
ITEM NUMBER

22FLC750830



TO SNAP LOCK INTO A
Ø .261 ± .003 HOLE - IN A
.031/.079 THICK PANEL.

Micro Plastics Threaded Lampcord Bushings are molded in tough Black Heat Stabilized Nylon (Underwriters Laboratories Rated 94V2, Temperature Index 105°C). Micro Plastics has available from stock the most popular sizes of Threaded Lampcord Bushings. These bushings are designed to protect the electrical lampcord from the knife-edge of the threaded pipe used in light fixtures. They will easily thread onto standard lamp fixture 1/8 NPS and 1/4 NPS threaded ends. Micro Plastics bushings will provide reliable, safe and insulated connections. Micro Plastics has available from stock the most popular sizes of Threaded Lampcord Bushings.



THREADED LAMPCORD BUSHINGS

| ITEM NUMBER | DESCRIPTION | A | B |
|-------------|-------------|-----------------|---------------|
| 04MP0125TLB | 1/8 NPS | 19/32" (15,08) | 9/32" (7,14) |
| 04MP0250TLB | 1/4 NPS | 23/32" (18,26) | 3/8" (9,53) |
| 04MP0375TLB | 3/8 NPS | 7/8" (22,23) | 7/16" (11,11) |
| 04MP0500TLB | 1/2 NPS | 1 1/16" (27,00) | 3/8" (9,53) |

04MP0500TLB



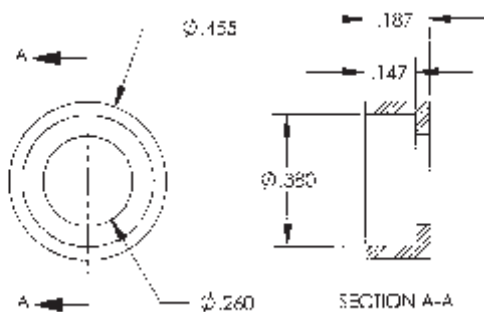
04MP0375TLB



04MP0250TLB



04MP0125TLB



Micro Plastics external lamp snap bushings are an economical approach to the protection of lampcord insulation, from the sharp and often burred ends of the standard threaded pipe used in lamp manufacture. Bushings are molded of Black Hi-density Polyethylene to allow flexibility for easy installation and durability for long lasting cord protection.



LAMP SNAP BUSHING "external" MINIMUM ORDER QUANTITY 1000 PCS.

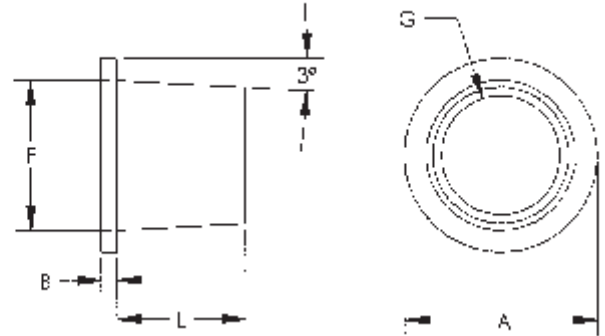
| ITEM NUMBER | OD | ID | THICKNESS | COUNTER BORE DIAMETER | COUNTER BORE DEPTH |
|--------------|--------------|-------------|-------------|-----------------------|--------------------|
| 04MP0125SBOD | .455 (11,56) | .260 (6,60) | .187 (4,75) | .380 (9,65) | .147 (3,73) |

WIRE HANDLING HARDWARE

SECTION VII

Micro Plastics Lamp Snap Bushings are an economical approach to the protection of lamp-cord insulation, from the sharp and often burred ends of the standard threaded pipe used in lamp manufacture. Bushings are molded of black Hi-density Polyethylene, to allow flexibility for easy installation, and durability for long lasting cord protection.

Minimum order quantity 1,000 pieces.

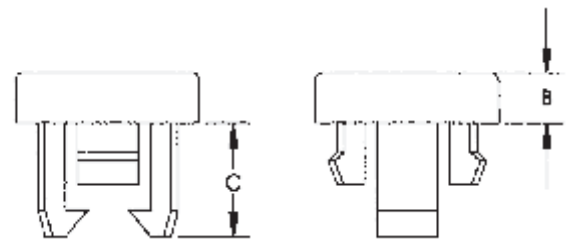
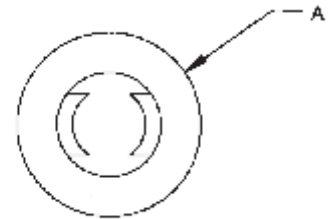


LAMP SNAP BUSHINGS "internal"

| ITEM NUMBER | DESCRIPTION | L | A | B | F | G |
|-------------|-------------|---------------|----------------|--------------|-------------|-------------|
| 04MP0125SB | 1/8" SNAP | 1/4" (6,35) | 3/8" (9,53) | 1/32" (0,79) | .290 (7,37) | .230 (5,84) |
| 04MP0250SB | 1/4" SNAP | 15/32" (11,9) | 27/64" (10,72) | 1/32" (0,79) | .375 (9,53) | .312 (7,94) |



Micro Plastics' LED Holders have been designed for standard T-1 3/4" LEDs. Snap LED Holder into the panel, then snap the LED into the holder. LED Holders are molded of black heat stabilized Nylon.

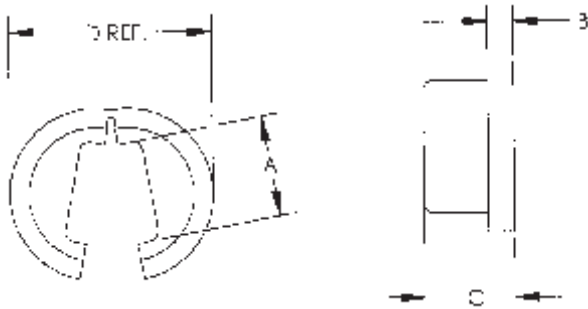


LED HOLDERS

FOR STANDARD LED T - 1 3/4

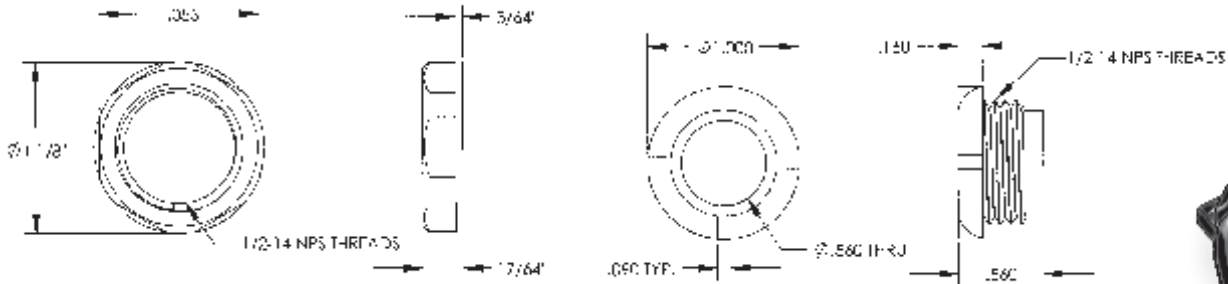
| ITEM NUMBER | A | B | C | HOLE SIZE | PANEL RANGE |
|-------------|-------------|-------------|-------------|-----------------------------|-------------|
| 27LEDH01 | .317 (8,05) | .025 (0,64) | .250 (6,35) | .240 / .247 (6,10) / (6,27) | .070 (1,78) |
| 27LEDH02 | .357 (9,07) | .098 (2,49) | .220 (5,59) | .281 / .287 (7,14) / (7,29) | .046 (1,17) |

Micro Plastics' exclusive anti-twist design was developed to eliminate the electrical cord from twisting inside the lamp. Anti-Twist Bushings' convenient opening allows it to slip easily around the cord. When the Lampcord Bushing is threaded over the cord the two bushings slip together allowing for easy installation onto any standard lamp fixture. Anti-Twist Bushing fits a 1/8" pipe thread and accommodates a standard cord size of SPT-1, 18,2. The bushing was designed to be used with Micro Plastics' standard 1/8" Lamp Cord Bushing. Other sizes will be tooled upon request.



ANTI-TWIST BUSHING

| ITEM NUMBER | DESCRIPTION | A | B | C | D Ref. |
|-------------|-----------------|-------------|-------------|-------------|--------------|
| 04MP0125ATB | 1/8" ANTI-TWIST | .195 (4,95) | .050 (1,27) | .175 (4,44) | .390 (9,91) |
| 04MP0250ATB | 1/4" ANTI-TWIST | .195 (4,95) | .050 (1,27) | .175 (4,44) | .500 (12,70) |



Micro Plastics' two piece Nylon threaded bushings are designed to protect wiring, cables, or hoses from sharp or raw edges in a panel. Two piece Nylon threaded bushings are molded of black Nylon 6/6.

2 PC. NYLON THREADED BUSHING

| ITEM NUMBER | THICKNESS | NUT DIMENSIONS | |
|-------------|---------------|-----------------|---------|
| | | WRENCHING FLATS | THREAD |
| 04MP0500TB | 17/64" (6,75) | 1-1/16" (27,00) | 1/2 NPS |



WIRE HANDLING HARDWARE

SECTION VII

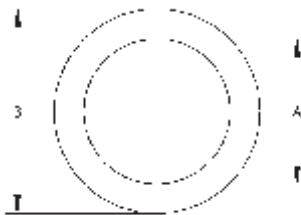
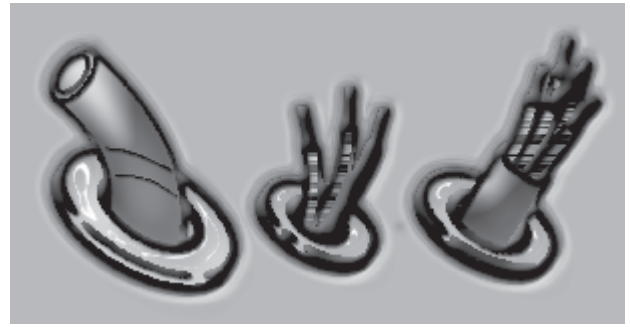
Micro Plastics bushings provide economical protection for wire, cable tubing, and hose from sharp, uneven drilled or punched holes in sheet metal.

The tough, resilient heat stabilized nylon bushings are easily and positively snapped into position without tools.

The bushings are the economical solution to insulate wire, cables, etc. from raw edges in compact designs where internal clearances are critical. Miniature bushings accommodate panels up to 1/16" thickness and require only 1/8" clearance.

- * MATERIAL HEAT STABILIZED NYLON UL 94V2
- * TEMPERATURE INDEX 105 ° C
- * STOCKED IN STANDARD BLACK
- * COLORS AVAILABLE ON REQUEST

NOTE: +/- .015" TOLERANCES on A, B and C DIMENSIONS.

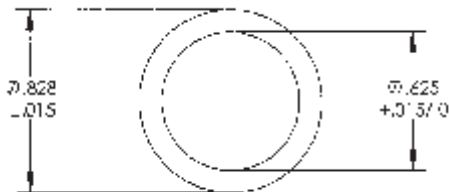


MINIATURE INSULATING BUSHINGS

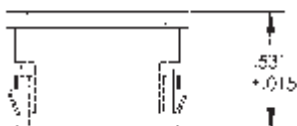
| PART NUMBER | INSIDE DIA. * "A" | HEAD DIA. * "B" | THICKNESS * "C" | HOLE DIA. (PANEL) |
|-------------|----------------------|--------------------|--------------------|----------------------|
| 22MP01010 | .125 (3,2) | .250 (6,4) | .234 (6,2) | .187 (4,8) |
| 22MP01015 | .250 (6,4) | .375 (9,5) | .234 (6,2) | .312 (8,0) |
| 22MP01020 | .343 (8,8) | .531 (13,5) | .250 (6,4) | .468 (11,9) |
| 22MP01030 | .375 (9,5) | .562 (14,3) | .250 (6,4) | .500 (12,7) |
| 22MP01040 | .406 (10,3) | .593 (15,2) | .250 (6,4) | .531 (13,5) |
| 22MP01050 | .500 (12,7) | .703 (17,9) | .250 (6,4) | .625 (15,9) |
| 22MP01060 | .625 (16,0) | .828 (21,0) | .250 (6,4) | .750 (19,0) |
| 22MP01070 | .625 (16,0) | .859 (21,5) | .250 (6,4) | .781 (19,9) |
| 22MP01080 | .750 (19,0) | .937 (23,8) | .250 (6,4) | .875 (22,2) |

ALL ITEMS PACKAGED 1,000 PER BAG

STANDARD INSULATING BUSHING



NOTE:
HOLE DIAMETER - .750
MAXIMUM THICKNESS - .250



New Product Line

PART NUMBER
22MP07525

WIRE HANDLING HARDWARE

SECTION
VII

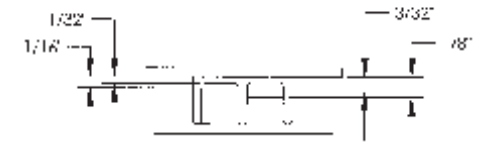
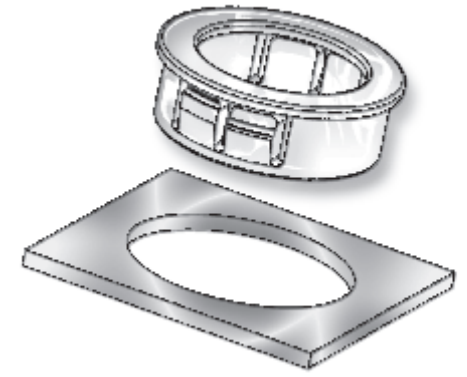
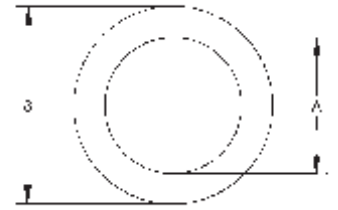
These bushings are available in a large selection of sizes from 1/4" to 2" in various inside diameter openings. Standard bushings are designed with multiple locks to positively snap in panels ranging from 1/32" to 1/8" thickness.

Standard bushings meet Underwriters Laboratories and Canadian Standards Association temperature and pull-out tests.

NOTE: +/- .015" TOLERANCES on A,B and C DIMENSIONS.

STANDARD INSULATING BUSHINGS

| DESCRIPTION ITEM NUMBER | PART DIMENSIONS | | | | | | CHASSIS DIMENSIONS | | | |
|----------------------------|--------------------|------------------|------------------|--------------|------------|--|--------------------|--|--|--|
| | INSIDE DIA. "A" | HEAD DIA. "B" | THICKNESS "C" | | HOLE DIA. | | MAXIMUM THICKNESS | | | |
| *22MP02502 | .125 (3,2) | .312 (8,0) | .312 (8,0) | .250 (6,6) | .062 (1,6) | | | | | |
| *22MP03123 | .187 (4,8) | .375 (9,5) | .312 (8,0) | .312 (8,0) | .062 (1,6) | | | | | |
| *22MP03753 | .187 (4,8) | .468 (11,9) | .406 (10,3) | .375 (9,5) | .125 (3,2) | | | | | |
| *22MP03754 | .250 (6,4) | .468 (11,9) | .406 (10,3) | .375 (9,5) | .125 (3,2) | | | | | |
| *22MP04374 | .250 (6,4) | .531 (13,5) | .406 (10,3) | .437 (11,1) | .125 (3,2) | | | | | |
| *22MP04375 | .312 (8,0) | .531 (13,5) | .406 (10,3) | .437 (11,1) | .125 (3,2) | | | | | |
| *22MP04376 | .243 (6,2) | .531 (13,5) | .406 (10,3) | .437 (11,1) | .125 (3,2) | | | | | |
| *22MP05004 | .250 (6,4) | .578 (14,7) | .406 (10,3) | .500 (12,7) | .125 (3,2) | | | | | |
| *22MP05005 | .312 (8,0) | .578 (14,7) | .406 (10,3) | .500 (12,7) | .125 (3,2) | | | | | |
| *22MP05006 | .375 (9,5) | .578 (14,7) | .406 (10,3) | .500 (12,7) | .125 (3,2) | | | | | |
| *22MP05625 | .312 (8,0) | .656 (16,7) | .406 (10,3) | .562 (14,3) | .125 (3,2) | | | | | |
| *22MP05626 | .375 (9,5) | .656 (16,7) | .406 (10,3) | .562 (14,3) | .125 (3,2) | | | | | |
| *22MP05627 | .437 (11,1) | .656 (16,7) | .406 (10,3) | .562 (14,3) | .125 (3,2) | | | | | |
| *22MP06254 | .250 (6,4) | .718 (18,2) | .406 (10,3) | .625 (15,9) | .125 (3,2) | | | | | |
| *22MP06257 | .437 (11,1) | .718 (18,2) | .406 (10,3) | .625 (15,9) | .125 (3,2) | | | | | |
| *22MP06258 | .500 (12,7) | .718 (18,2) | .406 (10,3) | .625 (15,9) | .125 (3,2) | | | | | |
| *22MP06878 | .500 (12,7) | .781 (19,8) | .406 (10,3) | .687 (17,5) | .125 (3,2) | | | | | |
| *22MP06879 | .562 (14,3) | .781 (19,8) | .406 (10,3) | .687 (17,5) | .125 (3,2) | | | | | |
| *22MP07506 | .375 (9,5) | .843 (21,4) | .406 (10,3) | .750 (19,1) | .125 (3,2) | | | | | |
| *22MP07508 | .500 (12,7) | .843 (21,4) | .406 (10,3) | .750 (19,1) | .125 (3,2) | | | | | |
| *22MP07509 | .562 (14,3) | .843 (21,4) | .406 (10,3) | .750 (19,1) | .125 (3,2) | | | | | |
| *22MP07510 | .625 (15,9) | .843 (21,4) | .406 (10,3) | .750 (19,1) | .125 (3,2) | | | | | |
| *22MP08109 | .562 (14,3) | .890 (22,6) | .406 (10,3) | .812 (20,6) | .125 (3,2) | | | | | |
| *22MP08110 | .625 (15,9) | .890 (22,6) | .406 (10,3) | .812 (20,6) | .125 (3,2) | | | | | |
| **22MP08706 | .375 (9,5) | .953 (24,2) | .453 (11,5) | .875 (22,2) | .125 (3,2) | | | | | |
| **22MP08707 | .437 (11,1) | .953 (24,2) | .453 (11,5) | .875 (22,2) | .125 (3,2) | | | | | |
| **22MP08708 | .500 (12,7) | .953 (24,2) | .453 (11,5) | .875 (22,2) | .125 (3,2) | | | | | |
| **22MP08709 | .562 (14,3) | .953 (24,2) | .453 (11,5) | .875 (22,2) | .125 (3,2) | | | | | |
| **22MP08710 | .625 (15,9) | .953 (24,2) | .453 (11,5) | .875 (22,2) | .125 (3,2) | | | | | |
| **22MP08711 | .687 (17,4) | .953 (24,2) | .453 (11,5) | .875 (22,2) | .125 (3,2) | | | | | |
| **22MP10012 | .750 (19,0) | 1.125 (28,6) | .453 (11,5) | 1.000 (25,4) | .125 (3,2) | | | | | |
| **22MP10913 | .812 (20,6) | 1.218 (30,9) | .453 (11,5) | 1.093 (27,8) | .125 (3,2) | | | | | |
| **22MP10914 | .875 (22,2) | 1.218 (30,9) | .453 (11,5) | 1.093 (27,8) | .125 (3,2) | | | | | |
| **22MP10915 | .937 (23,8) | 1.218 (30,9) | .453 (11,5) | 1.093 (27,8) | .125 (3,2) | | | | | |
| ***22MP11815 | .937 (23,8) | 1.312 (33,3) | .453 (11,5) | 1.187 (30,2) | .125 (3,2) | | | | | |
| ***22MP12515 | .937 (23,8) | 1.359 (34,5) | .453 (11,5) | 1.250 (31,7) | .125 (3,2) | | | | | |
| ***22MP13716 | 1.000 (25,4) | 1.468 (37,3) | .453 (11,5) | 1.375 (34,9) | .125 (3,2) | | | | | |
| ***22MP15017 | 1.062 (27,0) | 1.609 (40,9) | .453 (11,5) | 1.500 (38,1) | .125 (3,2) | | | | | |
| ***22MP15018 | 1.125 (28,5) | 1.609 (40,9) | .453 (11,5) | 1.500 (38,1) | .125 (3,2) | | | | | |
| ***22MP15021 | 1.312 (33,3) | 1.609 (40,9) | .453 (11,5) | 1.500 (38,1) | .125 (3,2) | | | | | |
| ***22MP17522 | 1.375 (34,9) | 1.875 (47,6) | .453 (11,5) | 1.750 (44,4) | .125 (3,2) | | | | | |
| ***22MP20026 | 1.625 (41,2) | 2.125 (54,0) | .453 (11,5) | 2.000 (50,8) | .125 (3,2) | | | | | |

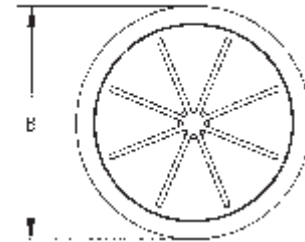


* Minimum order quantity 1,000 pieces.
 ** Minimum order quantity 500 pieces.
 *** Minimum order quantity 250 pieces.

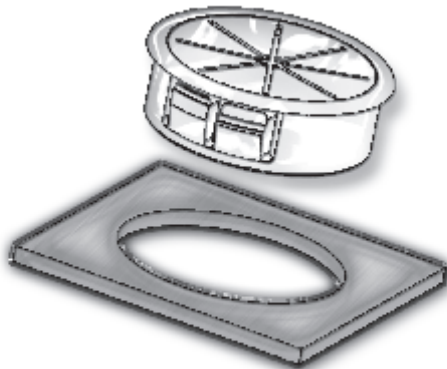
WIRE HANDLING HARDWARE

SECTION VII

Micro Plastics Nylon "ALL-FIT" Adjustable Bushings are designed to protect wire, cable, tubing or irregular shaped items from sharp, unfinished edges. The specially designed, resilient multiple supports absorb shock and vibration, and adjust to accept various diameters and shapes. The All-Fit Bushing is equipped with multiple locks to positively snap in panel thicknesses ranging from 1/32" to 1/8".



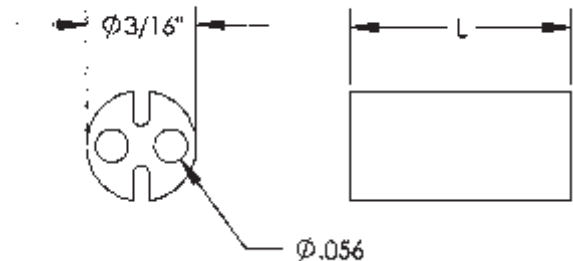
- * MATERIAL HEAT STABILIZED NYLON UL 94V2
- * TEMPERATURE INDEX 105 ° C
- * STOCKED IN STANDARD BLACK
- * WHITE AVAILABLE ON REQUEST



ALL-FIT ADJUSTABLE BUSHINGS

| DESCRIPTION ITEM NUMBER | CHASSIS HOLE DIA. | DIMENSIONS MAXIMUM THICKNESS | HEAD DIA. *B | PART DIMENSIONS THICKNESS *C | MAXIMUM I.D. |
|-------------------------------|-------------------------|------------------------------------|-----------------|------------------------------------|-----------------|
| 22AF0625 | .625 (15,9) | .125 (3,2) | .718 (18,2) | .406 (10,3) | .437 (11,1) |
| 22AF0750 | .750 (19,0) | .125 (3,2) | .859 (21,8) | .390 (9,9) | .500 (12,7) |
| 22AF0812 | .812 (20,6) | .125 (3,2) | .890 (22,6) | .390 (9,9) | .500 (12,7) |
| 22AF0875 | .875 (22,2) | .125 (3,2) | .937 (23,8) | .453 (11,5) | .562 (14,2) |
| 22AF1000 | 1.000 (25,4) | .125 (3,2) | 1.062 (26,9) | .453 (11,5) | .750 (19,0) |
| 22AF1093 | 1.093 (27,8) | .125 (3,2) | 1.156 (29,3) | .453 (11,5) | .812 (20,6) |
| 22AF1250 | 1.250 (31,75) | .125 (3,1) | 1.360 (34,5) | .453 (11,5) | .875 (22,2) |

MINIMUM ORDER QUANTITY 1,000 PIECES. * +/- .015 TOLERANCE



LED SPACER

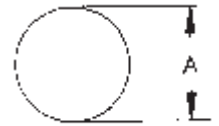
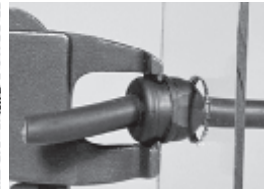
| ITEM NUMBER | OD | ID | LENGTH |
|--------------|--------------|--------------|--------------|
| 27LED2SP0250 | 3/16" (4,76) | .056" (1,42) | 1/4" (6,35) |
| 27LED2SP0375 | 3/16" (4,76) | .056" (1,42) | 3/8" (9,53) |
| 27LED2SP0500 | 3/16" (4,76) | .056" (1,42) | 1/2" (12,70) |

WIRE HANDLING HARDWARE

SECTION
VII

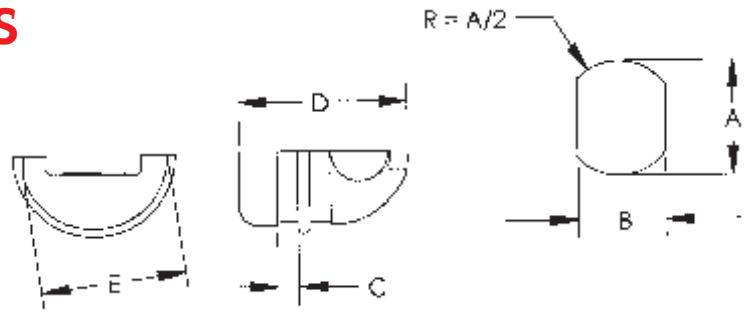
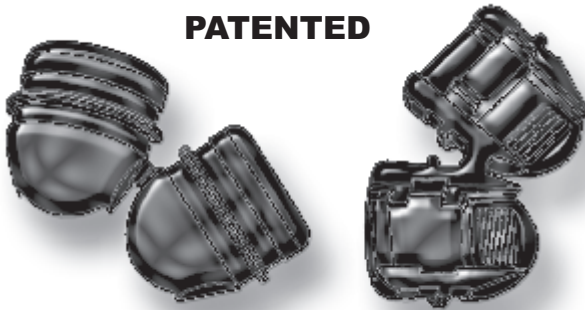
Micro Plastics New (**Patented**) "EZ" Strain Relief Bushing is designed to save money. This Strain Relief Bushing eliminates several costly and fatigue prone assembly steps. To install, the

"EZ" Bushing hinged halves are simply folded over the wire or cable. No special orientation or alignment is necessary! Conventional Strain Relief Pliers are applied to the specially designed gripped grooves and the bushing is inserted and locked in place in one smooth motion. The "EZ" Strain Relief Bushing design incorporates a bullet shaped, streamlined nose and does away with the large cumbersome straps that complicate the assembly of the conventional style bushing in confined areas. Micro Plastics "EZ" Strain Relief Bushings securely anchor, absorb and protect cables and wires from push/pull and twist forces and insulate them from irregular or sharp panel edges. These tough nylon bushings meet all Underwriters Laboratories stringent pull-out and temperature specifications. Stock sizes in black H.S. Nylon, temperature index 105° Centigrade (U.L. rated 94V2). Micro Plastics can tool other sizes upon request.



"EZ" STRAIN RELIEF BUSHINGS

PATENTED



***EASILY INSTALLED**
***SECURE IN USE**

***COMPETITIVELY PRICED**
***FULLY APPROVED**

DIMENSIONS

MOUNTING HOLE

BUSHINGS

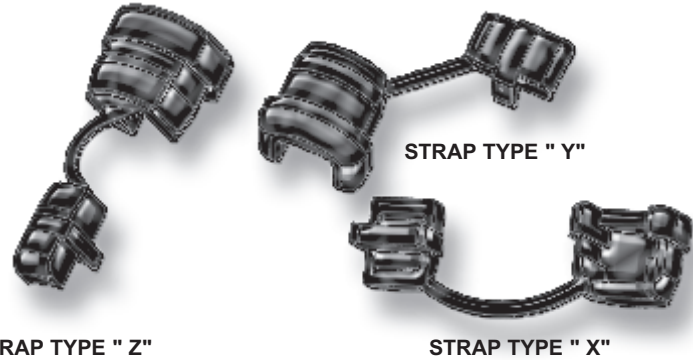
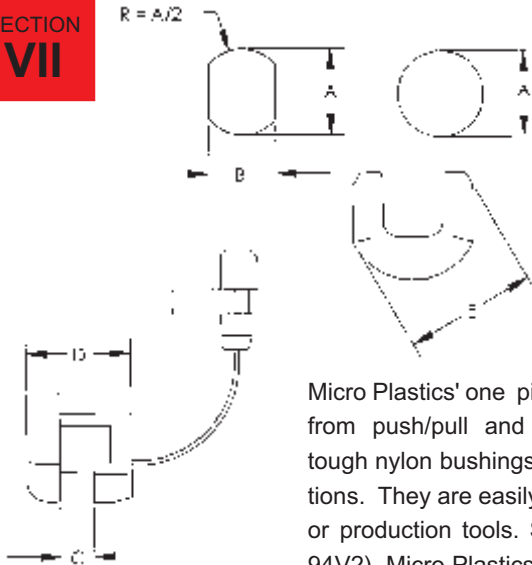
| ITEM NUMBER | UL/CSA DESCRIPTION | CROSS SECTION | CABLE SIZE | CABLE TYPE | GAUGE (AWG) | DIAMETER A | FLATS B | MAX PANEL THICKNESS C | LENGTH D | WIDTH E |
|--------------|--------------------|---------------|------------------------------|------------|-------------|-----------------|-----------------|-----------------------|-----------------|-----------------|
| 23MP04KEZS* | MP4KEZS | Flat | 0.150 X 0.280 (3,8 X 7,1) | SPT | 18/2 | 0.500 (12,7) | 0.465 (11,8) | 0.100 (2,5) | 0.580 (14,7) | 0.510 (12,9) |
| | | | 0.150 X 0.280 (3,8 X 7,1) | SPT | 16/2 | 0.500 (12,7) | 0.465 (11,8) | 0.100 (2,5) | | |
| 23MP04NEZH* | MP4NEZH | Flat | 0.150 X 0.280 (3,8 X 7,1) | HPN | 18/2 | 0.500 (12,7) | 0.465 (11,8) | 0.062 (1,6) | 0.550 (14,0) | 0.505 (12,8) |
| 23MP04NEZS* | MP4NEZS | Flat | 0.150 X .280 (3,8 X 7,1) | SPT | 18/2 | 0.500 (12,7) | 0.465 (11,8) | 0.062 (1,6) | 0.570 (14,4) | 0.500 (12,7) |
| | | | 0.160 X 0.300 (4,1 X 7,6) | SPT | 16/2 | 0.500 (12,7) | 0.465 (11,8) | 0.062 (1,6) | | |
| 23MP06N34EZ* | MP6N34EZ | Round | 0.300 (7,2) | SJT | 16/3 | 0.625 (15,9) | 0.550 (14,0) | 0.062 (1,6) | 0.655 (16,6) | 0.585 (14,9) |
| | | | 0.355 (9,0) | SJ | 16/3 | 0.625 (15,9) | 0.550 (14,0) | 0.062 (1,6) | | |
| | | | 0.405 (10,2) | SJT | 18/3 | 0.625 (15,9) | 0.550 (14,0) | 0.062 (1,6) | | |

*MINIMUM ORDER QUANTITY 1,000 PIECES. **MINIMUM ORDER QUANTITY 500 PIECES. ***MINIMUM ORDER QUANTITY 250 PIECES. ****MINIMUM ORDER QUANTITY 100



WIRE HANDLING HARDWARE

SECTION VII



Micro Plastics' one piece Strain Relief Bushings securely anchor, absorb and protect cables and wires from push/pull and twist forces and insulate them from irregular or sharp panel edges. These tough nylon bushings meet all Underwriters Laboratories' stringent pull-out and temperature specifications. They are easily and quickly installed with Micro Plastics special installation pliers or other hand or production tools. Stock sizes in black H.S. Nylon, temperature index 105° Centigrade (U.L. rated 94V2). Micro Plastics can tool other sizes upon request.

STRAIN RELIEF BUSHINGS

| DESCRIPTION | DIMENSIONS | | | | | | | | | | |
|-------------|--------------------|---------------|---|---------------------------------------|--------------------------------------|------------|-----------------|-----------------|-----------------------|-----------------|-----------------|
| | MOUNTING HOLE | | | | | | BUSHINGS | | | | |
| ITEM NUMBER | UL/CSA DESCRIPTION | CROSS SECTION | CABLE SIZE | CABLE TYPE | GAUGE (AWG) | STRAP TYPE | DIAMETER A | FLATS B | MAX PANEL THICKNESS C | LENGTH D | WIDTH E |
| 23MP02M40* | MP2M4 | Round | 0.156 X 0.187 (3,9 X 4,7) | AWN | 14 | "Y" | 0.375 (9,5) | .0330 (8,4) | 0.062 (1,6) | 0.410 (10,4) | 0.391 (9,9) |
| 23MP02M50* | MP2M5 | Round | 0.125 X 0.156 (3,2 X 3,9) | AWN | 16 | "Y" | 0.375 (9,5) | 0.330 (8,4) | 0.062 (1,6) | 0.410 (10,4) | 0.391 (9,9) |
| 23MP02L10* | MP2L1 | Flat | 0.120 X 0.220 (3,0 X 3,9) | SPT-1 | 18/2 | "Y" | 0.375 (9,5) | 0.330 (8,4) | 0.125 (3,2) | 0.410 (10,4) | 0.420 (10,7) |
| 23MP02P40* | MP2P4 | Flat | 0.120X0.220 (3,0 X 5,6) | SPT-1 | 18/2 | "Y" | .0375 (9,5) | 0.330 (8,4) | 0.062 (1,6) | 0.410 (10,4) | 0.420 (10,7) |
| 23MP03P40* | MP3P4 | Flat | 0.120 X 0.220 (3,0 X 5,6) | SP-1 SPT-1 | 18/2 18/2 | "Y" | 0.437 (11,1) | 0.390 (9,9) | 0.062 (1,6) | 0.410 (10,4) | 0.484 (12,3) |
| 23MP04K10* | MP4K1 | Flat | 0.150 X 0.400 (3,8 X 10,1) 0.160 X 0.300 (4,1 X 7,6) 0.160 X 0.300 (4,1 X 7,6) 0.150 X 0.280 (3,8 X 7,1) 0.150 X 0.280 (3,8 X 7,1) | SPT-2 HPN SPT-2 HPN SPT-2 | 18/3 16/2 16/2 18/2 18/2 | "Y" | 0.500 (12,7) | 0.460 (11,7) | 0.095 (2,4) | 0.495 (12,6) | 0.565 (14,4) |
| 23MP04K1Z* | MP4K1Z | Flat | 0.150 X 0.400 (3,8 X 10,1) 0.160 X 0.300 (4,1 X 7,6) 0.160 X 0.300 (4,1 X 7,6) 0.150 X 0.280 (3,8 X 7,1) 0.150 X 0.280 (3,8 X 7,1) | SPT-2 HPN SPT-2 HPN SPT-2 | 18/3 16/2 16/2 18/2 18/2 | "Z" | 0.500 (12,7) | 0.460 (11,7) | 0.095 (2,4) | 0.495 (12,6) | 0.565 (14,4) |
| 23MP04L10 | MP4L10 | Flat | 0.150 X 0.400 (3,8 X 10,1) 0.160 X 0.300 (4,1 X 7,6) 0.160 X 0.300 (4,1 X 7,6) 0.150 X 0.280 (3,8 X 7,1) 0.150 X 0.280 (3,8 X 7,1) | SPT-1 HPN SPT-2 HPN SPT-2 | 18/3 16/2 16/2 18/2 18/2 | "Z" | 0.500 (12,7) | 0.460 (11,7) | 0.187 (4,7) | 0.495 (12,6) | 0.565 (14,4) |

*MINIMUM ORDER QUANTITY 1,000 PIECES. **MINIMUM ORDER QUANTITY 500 PIECES. ***MINIMUM ORDER QUANTITY 250 PIECES. ****MINIMUM ORDER QUANTITY 100 PIECES.



WIRE HANDLING HARDWARE

SECTION
VII

STRAIN RELIEF BUSHINGS

| ITEM NUMBER | UL/CSA DESCRIPTION | CROSS SECTION | CABLE SIZE | CABLE TYPE | GAUGE (AWG) | STRAP TYPE | MOUNTING HOLE | | MAX PANEL THICKNESS C | LENGTH D | WIDTH E |
|-------------|--------------------|---------------|---|--------------------------------|--------------------------------------|------------|---|-----------------|-----------------------|-----------------|-----------------|
| | | | | | | | DIAMETER A | FLATS B | | | |
| 23MP04K40* | MP4K4 | Flat | 0.120 X 0.300 (3,0 X 7,6) | SPT-1 SPT-2 HPN | 18/3 18/2 18/2 | "Y" | 0.500 (12,7) | 0.465 (11,8) | 0.100 (2,5) | 0.406 (10,3) | 0.578 (14,7) |
| 23MP04L40* | MP4L4 | Flat | 0.120 X 0.300 (3,0 X 7,6) | SPT-1 SPT-2 HPN | 18/3 18/2 18/2 | "Y" | 0.500 (12,7) | 0.465 (11,8) | 0.156 (3,9) | 0.406 (10,3) | 0.578 (14,7) |
| 23MP04N40* | MP4N4 | Flat | 0.120 X 0.300 (3,0 X 7,6) | SPT-1 SPT-2 HPN | 18/3 18/2 18/2 | "Y" | 0.500 (12,7) | 0.465 (11,8) | 0.062 (1,6) | 0.406 (10,3) | 0.578 (14,7) |
| 23MP04J40* | MP4J4 | Flat | 0.120 X 0.300 (3,0 X 7,6) | SPT-1 SPT-2 HPN | 18/3 18/2 18/2 | "Y" | 0.500 (12,7) | 0.465 (11,8) | 0.032 (0,8) | 0.406 (10,3) | 0.578 (14,7) |
| 23MP05K40* | MP5K4 | Flat | 0.150 x .400 (3,8 x 10,1) | SPT-2 | 16/2 | "Y" | 0.562 (14,3) | 0.530 (13,5) | 0.125 (3,2) | 0.609 (15,5) | 0.625 (15,9) |
| 23MP05KN4* | MP5KN4 | Flat | 0.150 x 0.400 (3,8 x 10,1) 0.160 x 0.300 (4,1 x 7,6) | SPT-2 SPT-2 | 18/3 16/2 | "Y" "Y" | 0.562 (14,3) | 0.530 (13,5) | 0.062 (1,6) | 0.609 (15,5) | 0.625 (15,9) |
| 23MP05N40* | MP5N4 | Round | 0.250 (6,4) 0.255 (6,5) 0.290 (7,4) | SV SVT SV HPD | 18/2 18/2 18/3 16/2 | "Y" | 0.500 (12,7) 0.500 X 0.515 (12,7 X 13,1) 0.500 X 0.515 (12,7 X 13,1) | 0.450 (11,4) | 0.062 (1,6) | 0.438 (11,1) | 0.578 (14,7) |
| 23MP05P40* | MP5P4 | Round | 0.250 (6,4) 0.255 (6,5) 0.290 (7,4) | SV SVT SV HPD | 18/2 18/2 18/3 16/2 | "Y" | 0.500 (12,7) 0.500 X 0.515 (12,7 X 13,1) 0.500 X 0.515 (12,7 X 13,1) | 0.450 (11,4) | 0.100 (2,5) | 0.438 (11,1) | 0.578 (14,7) |
| 23MP05W10* | MP5W1 | Flat | 0.120 x 0.300 (3,0 x 7,6) 0.160 x 0.300 (4,1 x 7,6) 0.160 x 0.410 (4,1 x 10,4) 0.160 x 0.370 (4,1 x 9,4) | SPT-2 SPT-2 SPT-2 HPN | 18/3 16/2 16/3 16/3 | "Y" | 0.562 (14,3) | 0.530 (13,5) | 0.125 (3,2) | 0.609 (15,5) | 0.625 (15,9) |
| 23MP06N34* | MP6N34 | Round | 0.355 (9,0) 0.405 (10,2) 0.430 (10,9) | SJ SJT SJT | 16/3 18/3 16/3 | "Y" | 0.625 (15,9) | 0.550 (14,0) | 0.062 (1,6) | 0.580 (14,7) | 0.703 (17,9) |
| 23MP06N35* | MP6N35 | Round | 0.390 (9,9) 0.390 (9,9) 0.405 (10,3) .405 (10,3) 0.390 (9,9) | SJO SJ SJT SJO SJT | 18/2 18/2 16/2 18/2 18/2 | "Y" | 0.625 (15,9) | 0.550 (14,0) | 0.062 (1,6) | 0.580 (14,7) | 0.703 (17,9) |
| 23MP06N40** | MP6N4 | Round | 0.300 (7,2) | SJT SJO | 18/2 18/2 | "Y" | 0.625 (15,9) | 0.550 (14,0) | 0.062 (1,6) | 0.580 (14,7) | 0.703 (17,9) |
| 23MP06N44** | MP6N44 | Flat | 0.120 X 0.300 (3,0 X 7,6) | SPT-1 | 18/3 | "Y" | 0.625 (15,9) | 0.570 (14,4) | 0.062 (1,6) | 0.600 (15,2) | 0.690 (17,5) |

*MINIMUM ORDER QUANTITY 1,000 PIECES. **MINIMUM ORDER QUANTITY 500 PIECES. ***MINIMUM ORDER QUANTITY 250 PIECES. ****MINIMUM ORDER QUANTITY 100 PIECES.



WIRE HANDLING HARDWARE

SECTION VII

STRAIN RELIEF BUSHINGS

DESCRIPTION -----DIMENSIONS-----
MOUNTING HOLE -----BUSHINGS---

| ITEM NUMBER | UL/CSA DESCRIPTION | CROSS SECTION | CABLE SIZE | CABLE TYPE | GAUGE (AWG) | STRAP TYPE | DIAMETER A | FLATS B | MAX PANEL THICKNESS C | LENGTH D | WIDTH E |
|--------------------------|--------------------|---------------|--|---|--|------------|--|--|--|--|--|
| 23MP06N45 ** | MP6N45 | Flat | 0.120 X 0.300 (3,0 X 7,6) | SPT-1 | 18/3 | "Y" | 0.625 (15,9) | 0.545 (13,8) | 0.062 (1,6) | 0.600 (15,2) | 0.690 (17,5) |
| 23MP06P34 ** | MP6P34 | Round | 0.325 - 0.360 (8,3 - 9,1) | SJ SJT SJO | 18/3 16/3, 18/3 18/3 | "Y" | 0.625 (15,9) | 0.550 (14,0) | 0.125 (3,2) | 0.580 (14,7) | 0.703 (17,9) |
| 23MP06P35 ** | MP6P35 | Round | 0.325 - 0.360 (8,3 - 9,1) | SJ SJT SJO | 18/2, 18/3, 16/2 16/2, 18/2 18/2, 16,2, 18/3 | "Y" | 0.625 (15,9) | 0.550 (14,0) | 0.125 (3,2) | 0.580 (14,7) | 0.703 (17,9) |
| 23MP06L10 ** | MP6L1 | Round | 0.325 - 0.430 (8,3 - 10,9) | SJ SJT SJO | 18/2, 18/3 16/2, 16/3 | "Z" | 0.625 (15,9) | 0.550 (14,0) | 0.125 (3,2) | 0.666 (16,9) | 0.725 (18,4) |
| 23MP06P40 ** | MP6P4 | Round | 0.300 (7,6) | SJ SJT SJO | 18/2 18/2 18/2 | "Y" | 0.625 (15,9) | 0.550 (14,0) | 0.125 (3,2) | 0.580 (14,7) | 0.703 (17,9) |
| 23MP06W10 * | MP6W1 | Round | 0.300 (7,6) | SJ SJT SJO | 18/2 18/2 18/2 | "Y" | 0.500 (12,7) | 0.465 (11,8) | 0.090 (2,3) | 0.437 (11,1) | 0.563 (14,3) |
| 23MP07K20 *** | MP7K2 | Round | 0.325 X 0.360 (8,3 X 9,1) | SJ SJT SJO | 18/4, 16/2, 16/3, 14/2, 18/3, 16/3 14/2, 16/3, 18/4 | "Z" | 0.875 (22,2) | 0.770 (19,6) | 0.125 (3,2) | 0.750 (19,1) | 0.922 (23,4) |
| 23MP07P20 ** | MP7P2 | Round | 0.360 (9,1) 0.370 (9,4) 0.405 (10,3) 0.430 (10,9) 0.405 (10,3) 0.430 (10,9) 0.405 (10,3) 0.390 (9,9) 0.390 (9,9) 0.405 (10,3) | SJTO SJT S S STO STO S S STO STO | 18/4 14/3 18/3 16/3 18/3 16/3 16/2 18/2 18/2 16/2 | "X" | 0.750 (19,0) | 0.660 (16,8) | 0.125 (3,2) | 0.745 (18,9) | 0.830 (21,0) |
| 23MP07K30 *** | MP7K3 | Round | 0.325 - 0.360 (8,3 - 9,1) | SJ SJT SJO | 18/3, 16/2 16/2 18/3, 16/2 | "Z" | 0.875 (22,2) | 0.770 (19,6) | 0.125 (3,2) | 0.750 (19,1) | 0.922 (23,4) |
| 23MP07P30 ** | MP7P3 | Flat | 0.160 X 0.410 (4,1 X 10,4) | SPT-2 | 16/3 | "Z" | 0.736 (18,7) | 0.657 (16,7) | 0.125 (3,2) | 0.590 (14,9) | 0.785 (19,9) |
| 23MP07W20 *** | MP7W2 | Round | 0.370 - 0.425 (9,4 - 10,8) 0.390 - 0.430 (9,9 - 10,9) | SJT S STO | 14/3 12/3 18/3, 16/3 16/2, 16,3, 18/3 | "Z" | 0.875 (22,2) | 0.770 (19,6) | 0.125 (3,2) | 0.750 (19,1) | 0.922 (23,4) |
| 23MP08P20 *** | MP8P2 | Round | 0.530 - 0.600 (13,5 - 15,2) | S ST | 14/2, 14/3 12/2 | "Z" | 0.875 (22,2) | 0.840 (21,3) | 0.125 (3,2) | 0.812 (20,6) | 0.922 (23,4) |
| 23MP09P20 **** | MP9P2 | Round | 0.570 (14,4) 0.640 (16,3) 0.650 (16,5) 0.700 (17,7) | S S S S | 12/2 12/3 10/2 10/3 | "Y" | 1.093 (27,7) 1.125 (28,5) 1.093 (27,7) 1.187 (30,1) | 1.000 (25,4) 1.000 (25,4) 1.000 (25,4) 1.000 (25,4) | 0.281 (7,1) 0.281 (7,1) 0.281 (7,1) 0.281 (7,1) | 0.990 (25,1) 0.990 (25,1) 0.990 (25,1) 0.990 (25,1) | 1.215 (30,8) 1.215 (30,8) 1.215 (30,8) 1.215 (30,8) |

*MINIMUM ORDER QUANTITY 1,000 PIECES. **MINIMUM ORDER QUANTITY 500 PIECES. ***MINIMUM ORDER QUANTITY 250 PIECES. ****MINIMUM ORDER QUANTITY 100 PIECES.



STRAIN RELIEF BUSHINGS

| DESCRIPTION ----- | | | | | | | DIMENSIONS ----- | | | | |
|-------------------|--------------------|---------------|--------------------------------|------------|-------------|--------------------------------|--------------------------------|-----------------|-----------------------|-----------------|-----------------|
| ITEM NUMBER | UL/CSA DESCRIPTION | CROSS SECTION | CABLE SIZE | CABLE TYPE | GAUGE (AWG) | STRAP TYPE | MOUNTING HOLE ----- | | | BUSHINGS ----- | |
| | | | | | | | DIAMETER A | FLATS B | MAX PANEL THICKNESS C | LENGTH D | WIDTH E |
| 23MP30-10 *** | MP30-1 | Flat | 0.160 X 0.410 (4,1 X 10,4) | SPT-2 | 16/3 | "Z" | 0.730 (18,5) | 0.560 (14,2) | 0.125 (3,2) | 0.670 (17,0) | 0.750 (19,6) |
| | | | 0.120 X 0.300 (3,0 X 7,6) | SPT-1 | | | | | | | |
| 23MP03020 * | MP302 | Flat | 0.150 X 0.400 (32,8 X 10,1) | SPT-2 | 18/3 | "Z" | 0.625 X 0.375 (15,9 X 9,5) | 0.625 (15,9) | 0.100 (2,5) | 0.460 (11,6) | 0.660 (16,7) |
| | | | 0.160 X 0.410 (4,1 X 10,4) | SPT-2 | | | | | | | |
| | | | 0.320 X 0.650 (8,1 X 16,5) | SPT-3 | 16/3 | 0.625 X 0.375 (15,9 X 9,5) | 0.625 (15,9) | 0.100 (2,5) | 0.460 (11,6) | 0.660 (16,7) | |
| 23MP31-20 *** | MP31-2 | Flat | 0.425 - 0.475 (10,8 - 12,1) | SJT | 12/3 | "Z" | 0.875 (22,2) | 0.840 (21,3) | 0.125 (3,2) | 0.812 (20,6) | 0.922 (23,4) |
| | | Round | 0.180 X 0.425 (4,5 X 10,8) | SPT-3 | | | | | | | |
| 23MP33-10 ** | MP33-10 | Flat | 0.245 X 0.425 (6,2 X 10,8) | SPT-3 | 16/3 | "Z" | 0.750 X 0.875 (19,1 X 22,2) | 0.875 (22,2) | 0.125 (3,2) | 0.770 (19,5) | 0.895 (22,7) |
| | | | 0.240 X 0.420 (6,1 X 10,6) | SPT-3 | | | | | | | |
| | | | 0.240 X 0.525 (6,1 X 13,3) | HPN | 14/3 | 0.750 X 0.875 (19,1 X 22,2) | 0.875 (22,2) | 0.125 (3,2) | 0.770 (19,5) | 0.895 (22,7) | |
| 23MP34-2X *** | MP34-2X | Flat | 0.240 X 0.420 (6,1 X 10,7) | SPT-3 | 14/3 | "X" | 0.875 (22,2) | 0.840 (21,3) | 0.125 (3,2) | 0.812 (20,6) | 0.922 (23,4) |
| | | | 0.290 X 0.650 (7,4 X 16,5) | | | | | | | | |

90° ANGLE STRAIN RELIEF BUSHINGS

| | | | | | | | | | | | | | |
|-----------------|--------|-------|-------------------------------|-------|-----------|-----|-----------------|-----------------|----------------|-----------------|-----------------|--|--|
| 23MP13L10 * | MP13L1 | Flat | 0.120 X 0.220 (3,0 X 5,6) | SPT-1 | 18/2 | "Z" | 0.437 (11,1) | 0.390 (9,9) | 0.062 (1,6) | 0.500 (12,7) | 0.510 (12,9) | | |
| 23MP14L10 | MP14L1 | Flat | 0.150 X 0.280 (3,8 X 7,1) | SPT-2 | 18/2,16/2 | "Z" | 0.500 (12,7) | 0.450 (11,4) | 0.100 (2,5) | 0.687 (17,5) | 0.563 (14,3) | | |
| | | | 0.160 X 0.300 (4,1 X 7,6) | HPN | 16/2 | | | | | | | | |
| 23MP15L10 * | MP15L1 | Round | 0.250 X 0.265 (6,4 X 6,7) | SV | 8/2,18/3 | "Z" | 0.500 (12,7) | 0.450 (11,4) | 0.100 (2,5) | 0.687 (17,5) | 0.562 (14,3) | | |
| 23MP16L10 ** | MP16L1 | Flat | .150 X .400 (3/8) X (10,2) | SP-2 | 18/3 | "Z" | 0.562 (14,3) | 0.525 (13,3) | .125 (3,2) | 7/8 (22,2) | 5/8 (15,9) | | |
| | | | .160 X .370 (4,1) X (9,4) | HPN | 16/3 | | | | | | | | |
| | | | .190 X .350 (4,8) X (8,9) | SPT-3 | 18/2 | | | | | | | | |
| | | | .200 X .370 (5,1) X (9,4) | | 16/2 | | | | | | | | |

*MINIMUM ORDER QUANTITY 1,000 PIECES. **MINIMUM ORDER QUANTITY 500 PIECES. ***MINIMUM ORDER QUANTITY 250 PIECES. ****MINIMUM ORDER QUANTITY 100 PIECES.

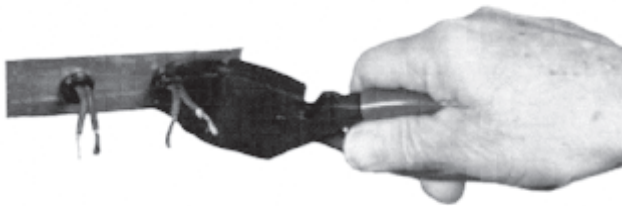


STRAIN RELIEF INSTALLATION TOOLS

STANDARD

ITEM NUMBER
23MPT0100

Micro Plastics' Standard adjustable Strain Relief Assembly Pliers. An indispensable tool for fast, accurate assembly of bushings.



ERGONOMIC

ITEM NUMBER
23MPET0100

Micro Plastics' Adjustable **Ergonomic** Strain Relief Tool has been carefully designed to help reduce the wrist fatigue associated with bushing installation. The handles are preset to a specified angle, allowing the hand and wrist of the operator to naturally align during normal use. This tool is fully adjustable and will install all sizes of Micro Plastics' strain relief bushings.



PNEUMATIC

ITEM NUMBER
23PMPT0100

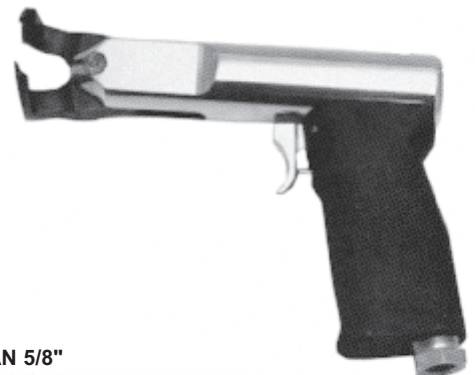
Micro Plastics' **Pneumatic** Strain Relief Installation Tool is designed to aid in rapid assembly of strain relief bushings. The easy finger tip actuation of this air tool greatly lessens the gripping power necessary to install bushings and reduces the hand and wrist fatigue generated during moderate to high volume manufacturing. The tool operates on standard shop air from 50 to 90 PSI. Low weight, only 24 ounces. Tools are configured prior to shipping. For specific sizes, please specify strain relief bushing sizes to be installed when ordering.



PNEUMATIC ERGONOMIC

ITEM NUMBER
23PMPET0100

Micro Plastics' **Pneumatic-Ergonomic** Strain Relief Installation Tool has been carefully designed to help reduce the wrist fatigue associated with the rapid assembly of strain relief bushings. The easy trigger-type actuation of this air tool, in combination with the ergonomic angle of the hand grip, allow natural alignment of the wrist and hand during normal bushing installation. The tool operates on standard shop air from 50-90 PSI. Lightweight, only 18 ounces. Tools are configured prior to shipping. Please specify strain relief bushing sizes to be installed when ordering.

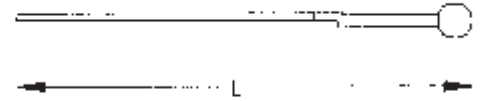
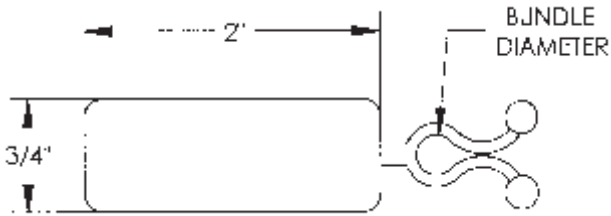


NOT AVAILABLE FOR
HOLE SIZES LARGER THAN 5/8"

WIRE HANDLING HARDWARE

SECTION
VII

Nylon "EZ" twist lock with integral label area for writing. Permanent ink pens, felt tip pens, pressure-sensitive adhesive labels, or even Post-it® notes can be used on polished label area.

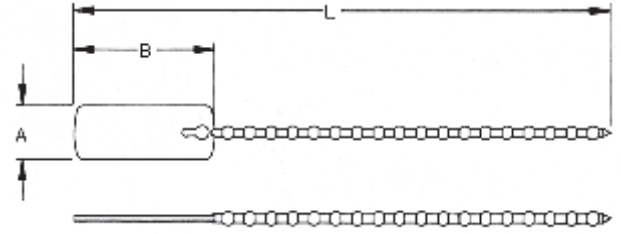
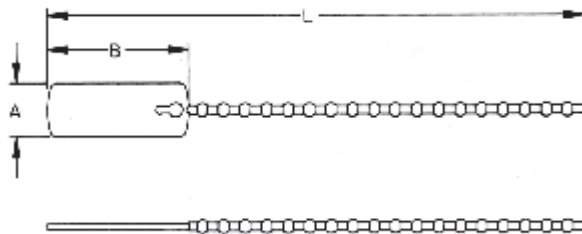


LABEL TWIST LOCK

| ITEM NUMBER | BUNDLE DIAMETER | L |
|-------------|-----------------|----------------|
| 23EZLB0250 | 1/4" (6,35) | 3-3/32 (78,59) |
| 23EZLB0375 | 3/8" (9,53) | 3-9/32 (83,34) |

LABEL BEADED TIE

Nylon beaded tie with integral label area for writing. Permanent ink pens, felt tip pens, pressure-sensitive adhesive labels, or even Post-it® notes can be used on polished label area. The "LP" pointed version can be used to pierce thin materials. The "LB" version has a blunt tip for general use.



"LB" VERSION

| ITEM NUMBER | A- WIDTH +/- 1/32" | B-LENGTH +/- 1/32" | L-OVERALL LENGTH +/- 1/8" |
|-------------|-----------------------|-----------------------|------------------------------|
| 23LB0400N | 1/2" (12,7) | 1-5/16" (33,32) | 4" |
| 23LB0600N | 1/2" (12,7) | 1-5/16" (33,32) | 6" |

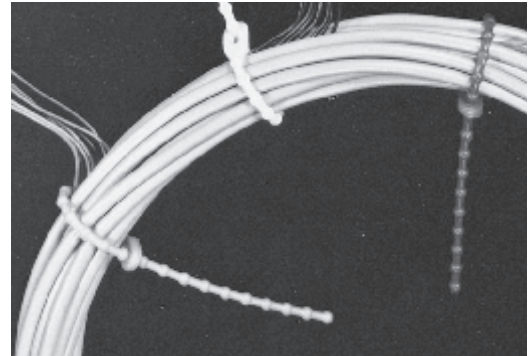
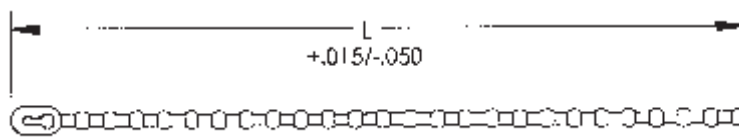
"LP" VERSION

| ITEM NUMBER | A- WIDTH +/- 1/32" | B-LENGTH +/- 1/32" | L-OVERALL LENGTH +/- 1/8" |
|-------------|-----------------------|-----------------------|------------------------------|
| 23LP0400N | 1/2" (12,7) | 1-5/16" (33,32) | 4" |
| 23LP0600N | 1/2" (12,7) | 1-5/16" (33,32) | 6" |

® Registered trade mark of the 3M Corporation.

WIRE HANDLING HARDWARE

SECTION VII



Micro Plastics Beaded Ties provide economical temporary or permanent bundling, harnessing, tagging and identification marking. Beaded Ties smooth, rounded configuration eliminates damage to wire and cable insulation. No tools are necessary. Ties can be disassembled and reused. Beaded Ties are available in Nylon and Polyethylene. Special colors are available upon request.

BEADED TIES TOLERANCES +.015 -.050

| ITEM NUMBER | DESCRIPTION | LENGTH |
|-------------|-------------|-------------|
| 230425N | 425 N | 4 1/4 (108) |
| 230600N | 600 N | 6 (152) |
| 230800N | 800 N | 8 (203) |
| 231000N | 1000 N | 10 (254) |

HEAVY DUTY POLYETHYLENE BEADED TIES

| ITEM NUMBER | DESCRIPTION | LENGTH |
|-------------|-------------|-------------|
| 230425P | 425 P | 4 1/4 (108) |
| 230600P | 600 P | 6 (152) |
| 230800P | 800 P | 8 (203) |
| 231000P | 1000 P | 10 (254) |

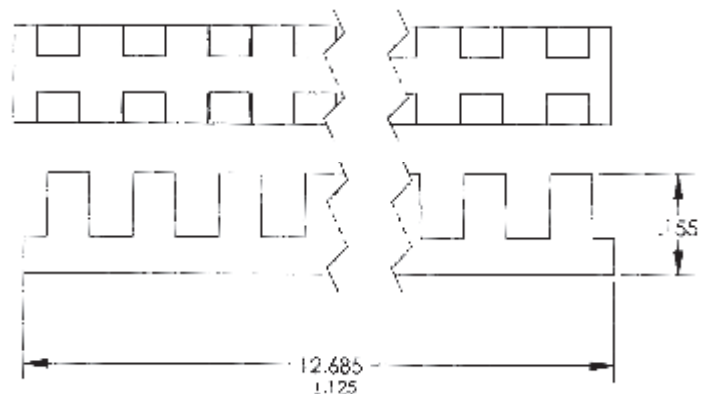
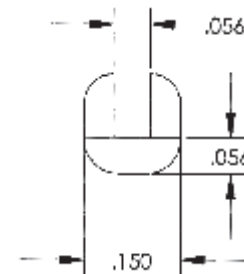
10" HEAVY DUTY POLYETHYLENE BEADED TIES ARE MOLDED IN UV RESISTANT YELLOW.

MOLDED GROMMETING



Molded Grommeting is used to protect wires and tubing from sharp panel edges and knock outs. The flexible grommeting can be used for round, square or irregular shaped panel holes.

Available in natural colored Nylon 6/6



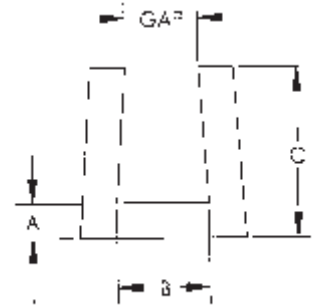
| ITEM NUMBER | OA WIDTH | SLOT WIDTH | OA HEIGHT | WALL THK. | PANEL THICKNESS | LENGTH |
|-------------|----------------------------|----------------------------|-------------------------|-------------|-------------------------|-----------------|
| 22MG052155 | .150 (3,81) +.015 -.005 | .056 (1,42) +.015 -.005 | .155 (3,94) +/- .015 | .056 (1,42) | .015 - .052 (0,38-1,32) | 12.685 (322,20) |

- CONTINUOUS, SOLID OR SERRATED.
- COLORS: NATURAL OR BLACK, CUSTOM COLORS AVAILABLE.
- CUSTOM LENGTHS AVAILABLE FOR VOLUME APPLICATIONS.
- FLEXIBILITY, FITS HOLES OF ANY SHAPE OR SIZE.
- AVAILABLE FROM STOCK IN COILS OF 100 FEET.
- MATERIAL: POLYETHYLENE.



PROTECT WIRES, CABLES, TUBING AND OTHER OBJECTS FROM SHARP PANEL EDGES.

Continuous Flexible Grommetting can be used for round, square and irregular shaped panels. Flexible grommetting is attached quickly and easily using no special tools. In addition to protecting routed cables, wires, tubing and other objects from chafing or unnecessary cuts, the installed grommetting also puts an attractive finished touch to a product. Continuous flexible grommetting is manufactured to fit over a range of panel thicknesses from .040" to .187". Sheet form materials can include glass, sheet metal and wood. In many cases flexible grommetting will grip the panel tightly and remain in place. Should the panel thickness vary to a point that the grommetting will not adhere tightly by itself, the problem can usually be corrected by a touch of epoxy to keep the grommetting tightly in place. Continuous flexible grommetting comes from the factory in polybagged rolls of 100 feet. Longer lengths can be made available by using bulk spools. Flexible grommetting can also be cut to lengths to meet customer needs.



ADD COLOR CODE TO THE END OF EACH PART NUMBER TO SPECIFY COLOR SELECTION: **BK** = BLACK **NA** = NATURAL

MINIMUM ORDER 100'
SOLD IN MULTIPLES OF 100'

POLYETHYLENE MATERIAL INFORMATION

POLYETHYLENE grommetting is a lightweight low cost material good for general indoor applications. Polyethylene is not affected by ordinary solvents and resistant to abrasion.

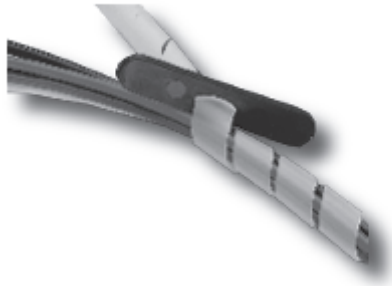
CONTINUOUS FLEXIBLE GROMMETTING – NATURAL OR BLACK

| ITEM NUMBER | MAX PANEL THICKNESS | GAP REF. | A REF. | B REF. | C REF. |
|--------------|-------------------------|-------------|-------------|-------------|----------------------|
| 22FGU0400P__ | .040/.070 (1,02)/(1,78) | .035 (0,89) | .028 (0,71) | .072 (1,83) | .190 (4,83) UNCUT |
| 22FGS0400P__ | .040/.070 (1,02)/(1,78) | .035 (0,89) | .028 (0,71) | .072 (1,83) | .190 (4,83) SERRATED |
| 22FGU0520P__ | .045/.070 (1,14)/(1,78) | .040 (1,02) | .028 (0,71) | .072 (1,83) | .190 (4,83) UNCUT |
| 22FGS0520P__ | .045/.070 (1,14)/(1,78) | .040 (1,02) | .028 (0,71) | .072 (1,83) | .190 (4,83) SERRATED |
| 22FGU0620P__ | .055/.075 (1,40)/(1,91) | .050 (1,27) | .040 (1,02) | .080 (2,03) | .200 (5,08) UNCUT |
| 22FGS0620P__ | .055/.075 (1,40)/(1,91) | .050 (1,27) | .040 (1,02) | .080 (2,03) | .200 (5,08) SERRATED |
| 22FGU0850P__ | .080/.085 (2,03)/(2,16) | .075 (1,91) | .040 (1,02) | .085 (2,16) | .190 (4,83) UNCUT |
| 22FGS0850P__ | .080/.085 (2,03)/(2,16) | .075 (1,91) | .040 (1,02) | .085 (2,16) | .190 (4,83) SERRATED |
| 22FGU100P__ | .100/.120 (2,54)/(3,05) | .095 (2,41) | .045 (1,14) | .120 (3,05) | .220 (5,59) UNCUT |
| 22FGS100P__ | .100/.120 (2,54)/(3,05) | .095 (2,41) | .045 (1,14) | .120 (3,05) | .220 (5,59) SERRATED |
| 22FGU125P__ | .115/.125 (2,92)/(3,18) | .112 (2,84) | .040 (1,02) | .125 (3,18) | .220 (5,59) UNCUT |
| 22FGS125P__ | .115/.125 (2,92)/(3,18) | .112 (2,84) | .040 (1,02) | .125 (3,18) | .220 (5,59) SERRATED |
| 22FGU187P__ | .182/.187 (4,62)/(4,75) | .180 (4,57) | .050 (1,27) | .187 (4,75) | .275 (6,99) UNCUT |
| 22FGS187P__ | .182/.187 (4,62)/(4,75) | .180 (4,57) | .050 (1,27) | .187 (4,75) | .275 (6,99) SERRATED |

WIRE HANDLING HARDWARE

SECTION VII

Spiral Wrap is an ideal covering used to bundle and protect tubing, wires and other types of conductors. Spiral wrap can be used on virtually any item with a diameter of 1/16" to 7". Polyethylene Natural Spiral Wrap is a lightweight low cost material that is good for general indoor applications. Polyethylene is not affected by ordinary solvents and is resistant to abrasion.



Polyethylene spiral wrap is easy to install, either during production or after final assembly. Ultra Violet UV Resistant Black Spiral Wrap is designed for outdoor use. Black UV Resistant Spiral Wrap has all of the fine qualities of Natural Spiral Wrap with the additional advantage of containing an ultraviolet absorber. Black UV Resistant Spiral Wrap will withstand direct sunlight for long periods of time.



FOUR PACKAGING METHODS ARE AVAILABLE FOR SPIRAL WRAP. REFER TO THE CHART ON THE OPPOSITE PAGE.

**MINIMUM ORDER 100'
SOLD IN MULTIPLES OF 100'**

NATURAL SPIRAL WRAP

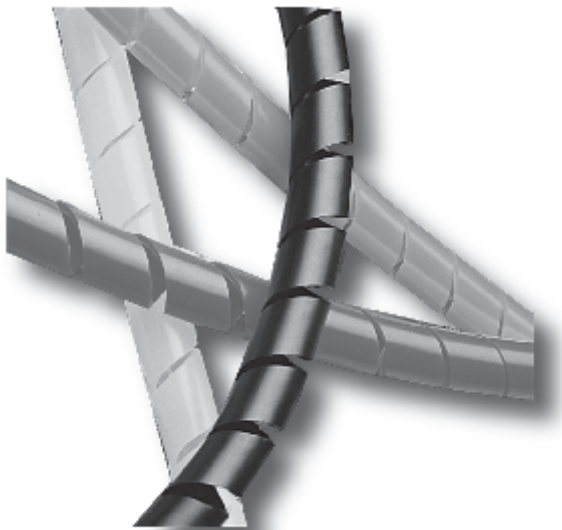
| ITEM NUMBER | O.D. | WALL THICKNESS | BUNDLE RANGE |
|-------------|------|----------------|----------------|
| 22SPW12NA | 1/8" | .032 | 1/16" to 1/4" |
| 22SPW24NA | 1/4" | .035 | 3/16" to 2" |
| 22SPW25NA | 1/4" | .040 | 3/16" to 2" |
| 22SPW36NA | 3/8" | .040 | 3/16" to 2" |
| 22SPW37NA | 3/8" | .052 | 5/16" to 3" |
| 22SPW38NA | 3/8" | .062 | 5/16" to 3" |
| 22SPW48NA | 1/2" | .030 | 3/8" to 3" |
| 22SPW49NA | 1/2" | .040 | 3/8" to 4" |
| 22SPW50NA | 1/2" | .062 | 3/8" to 4" |
| 22SPW51NA | 1/2" | .072 | 3/8" to 4" |
| 22SPW62NA | 5/8" | .062 | 5/8" to 4 1/2" |
| 22SPW75NA | 3/4" | .065 | 3/4" to 5" |
| 22SPW10NA | 1" | .070 | 1" to 7" |
| 22SPW11NA | 1" | .095 | 1" to 7" |

BLACK UV RESISTANT SPIRAL WRAP

| ITEM NUMBER | O.D. | WALL THICKNESS | BUNDLE RANGE |
|-------------|------|----------------|----------------|
| 22SPW12BK | 1/8" | .032 | 1/16" to 1/4" |
| 22SPW24BK | 1/4" | .035 | 1/16" to 2" |
| 22SPW25BK | 1/4" | .040 | 3/16" to 2" |
| 22SPW36BK | 3/8" | .040 | 5/16" to 3" |
| 22SPW37BK | 3/8" | .052 | 5/16" to 3" |
| 22SPW38BK | 3/8" | .062 | 5/16" to 3" |
| 22SPW48BK | 1/2" | .030 | 3/8" to 3" |
| 22SPW49BK | 1/2" | .040 | 3/8" to 4" |
| 22SPW50BK | 1/2" | .062 | 3/8" to 4" |
| 22SPW51BK | 1/2" | .072 | 3/8" to 4" |
| 22SPW62BK | 5/8" | .062 | 5/8" to 4 1/2" |
| 22SPW75BK | 3/4" | .065 | 3/4" to 5" |
| 22SPW10BK | 1" | .070 | 1" to 7" |
| 22SPW11BK | 1" | .095 | 1" to 7" |

WIRE HANDLING HARDWARE

SECTION
VII



Fluorescent Safety Wrap is an expandable plastic cable harness that can be used like tape. Designed with potentially hazardous situations in mind, Fluorescent Safety Wrap will help make loose wires, hanging cables, hoses and tubing more easily seen.

MINIMUM ORDER 100'
SOLD IN MULTIPLES OF 100'

*IMPROVES APPEARANCE, SAFETY AND DURABILITY
OF YOUR PRODUCTS.*

COLOR CODES:
ADD COLOR CODES TO THE END OF EACH ITEM
NUMBER TO SPECIFY COLOR SELECTION.

RD = FLUORESCENT RED * GR = FLUORESCENT GREEN *
YW = FLUORESCENT YELLOW

FLUORESCENT SAFETY WRAP

| ITEM NUMBER | O.D. | WALL THK. | BUNDLE RANGE |
|-------------|------|-----------|----------------|
| 22SPW12S__ | 1/8" | .032 | 1/16" to 1/4" |
| 22SPW24S__ | 1/4" | .035 | 3/16" to 2" |
| 22SPW25S__ | 1/4" | .040 | 3/16" to 2" |
| 22SPW36S__ | 3/8" | .040 | 5/16" to 3" |
| 22SPW37S__ | 3/8" | .052 | 5/16" to 3" |
| 22SPW49S__ | 1/2" | .040 | 3/8" to 4" |
| 22SPW50S__ | 1/2" | .062 | 3/8" to 4" |
| 22SPW62S__ | 5/8" | .062 | 5/8" to 4-1/2" |
| 22SPW75S__ | 3/4" | .065 | 3/4" to 5" |
| 22SPW10S__ | 1" | .070 | 1" to 7" |

FOUR PACKAGING METHODS ARE
AVAILABLE FOR SPIRAL WRAP.
REFER TO THE CHART BELOW.

FOR LARGE QUANTITY BULK SPOOL
ORDERS, ADD THE LETTERS SPL TO
THE END OF THE PART NUMBER.

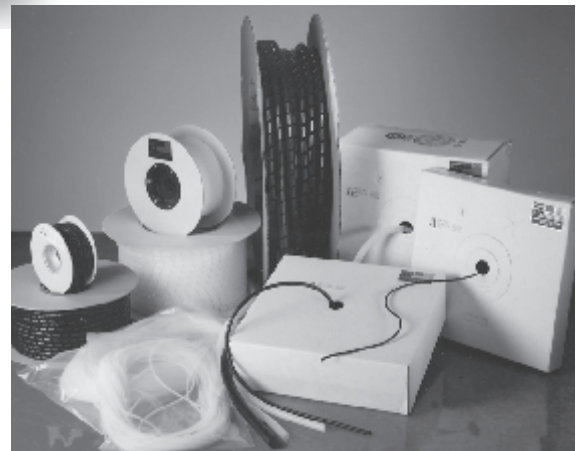
SPIRAL WRAP/FLUORESCENT SAFETY WRAP, STANDARD PACKAGING OPTIONS



MINIMUM ORDER 100'
SOLD IN MULTIPLES OF 100'

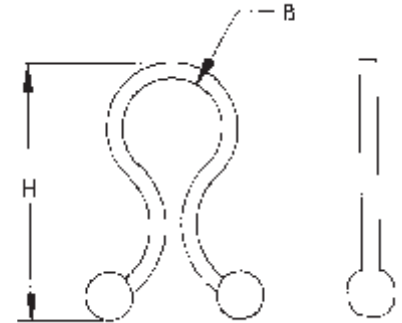
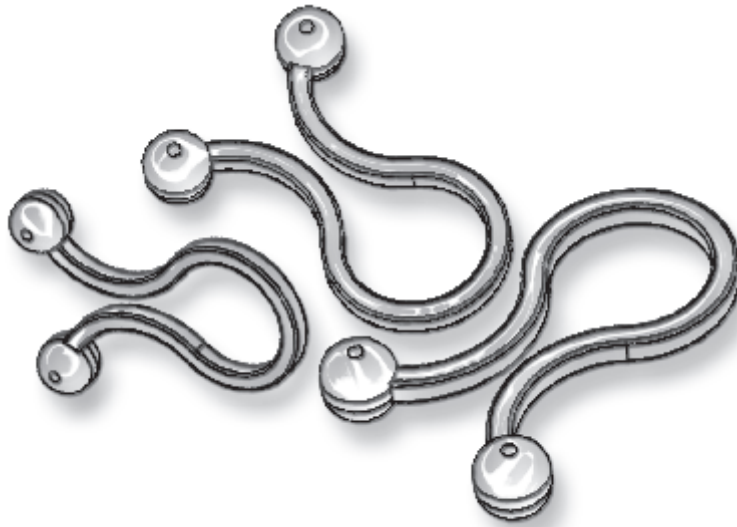
SPIRAL WRAP CAN BE CUT TO MEET SPECIAL
LENGTH REQUIREMENTS, CALL FOR DETAILS.

| OUTSIDE DIAMETER | FEET PER PAYOUT BOX | FEET PER POLYETHYLENE BAG | (Best Pricing For Volume Users) | |
|------------------|---------------------|---------------------------|---------------------------------|---------------------|
| | | | FEET PER SPOOL | FEET PER BULK SPOOL |
| 1/8' | 100' | 100' | 100' | 2500' |
| 1/4" | 100' | 100' | 100' | 1,000' |
| 3/8" | 100' OR 200' | 100' | 100' | 500' |
| 1/2" | 100' | 100' | 100' | 250' |
| 5/8" | 25' | 100' | 100' | 250' |
| 3/4" | 25' | 100' | 100' | 100' |
| 1" | | 100' | 100' | 100' |



WIRE HANDLING HARDWARE

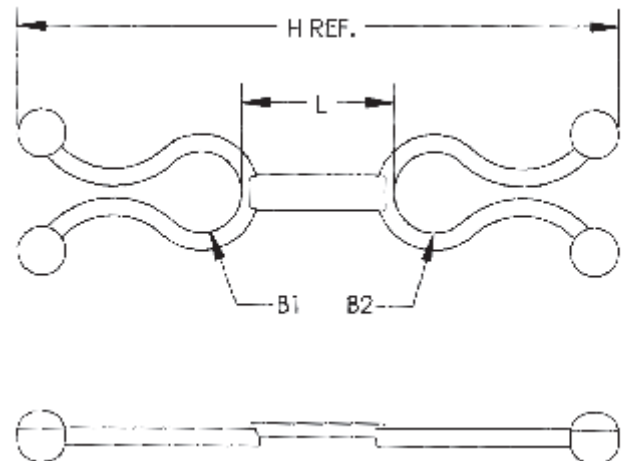
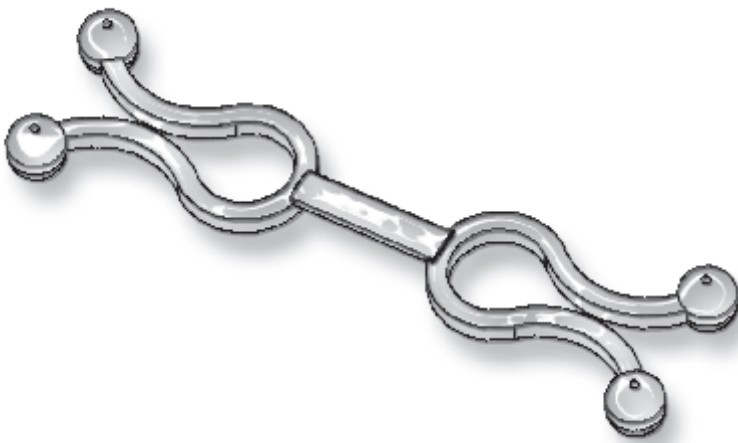
SECTION VII



Micro Plastics "EZ" Twist Lock Bundling Ties offers a fast, economical way to securely position and hold wire, cable or tubing. A single twist of the finger locks the bundle together. Another twist will open the lock to add or remove wire to the bundle. The reusable "EZ" Twist Lock is molded of tough, resilient Nylon 6/6 (UL 94V2). The following standard sizes are available from stock in natural nylon. Dyed colors can be furnished with a slight extra charge. Other sizes will be tooled on request.

"EZ" TWIST LOCKS

| ITEM NUMBER | DESCRIPTION | H | B |
|-------------|-------------|-------------|--------------------------|
| 23EZ0125N | 1/8" LOCK | .715 (18,1) | .11 / .14 (2,80 / 3,56) |
| 23EZ0250N | 1/4" LOCK | .875 (22,2) | .20 / .27 (5,08 / 6,86) |
| 23EZ0375N | 3/8" LOCK | 1.08 (27,4) | .30 / .40 (7,62 / 10,2) |
| 23EZ0500N | 1/2" LOCK | 1.20 (30,5) | .40 / .50 (10,2 / 12,7) |
| 23EZ0600N | 5/8" LOCK | 1.26 (32,0) | .55 / .65 (13,9 / 16,5) |
| 23EZ0750N | 3/4" LOCK | 1.55 (39,4) | .70 / .80 (17,8 / 20,3) |
| 23EZ0950N | 15/16" LOCK | 1.87 (47,5) | .90 / 1.00 (22,8 / 25,4) |
| 23EZ1125N | 1 1/8" LOCK | 2.17 (55,1) | 1.20/1.30 (30,5 / 33,0) |
| 23EZ1375N | 1 3/8" LOCK | 2.67 (67,8) | 1.45/1.55 (36,8 / 39,4) |
| 23EZ1500N | 1 1/2" LOCK | 2.93 (74,4) | 1.55/1.65 (39,4 / 41,9) |
| 23EZ1750N | 1 3/4" LOCK | 3.46 (87,9) | 1.90/2.00 (48,3 / 50,8) |



DOUBLE "EZ" TWIST LOCKS

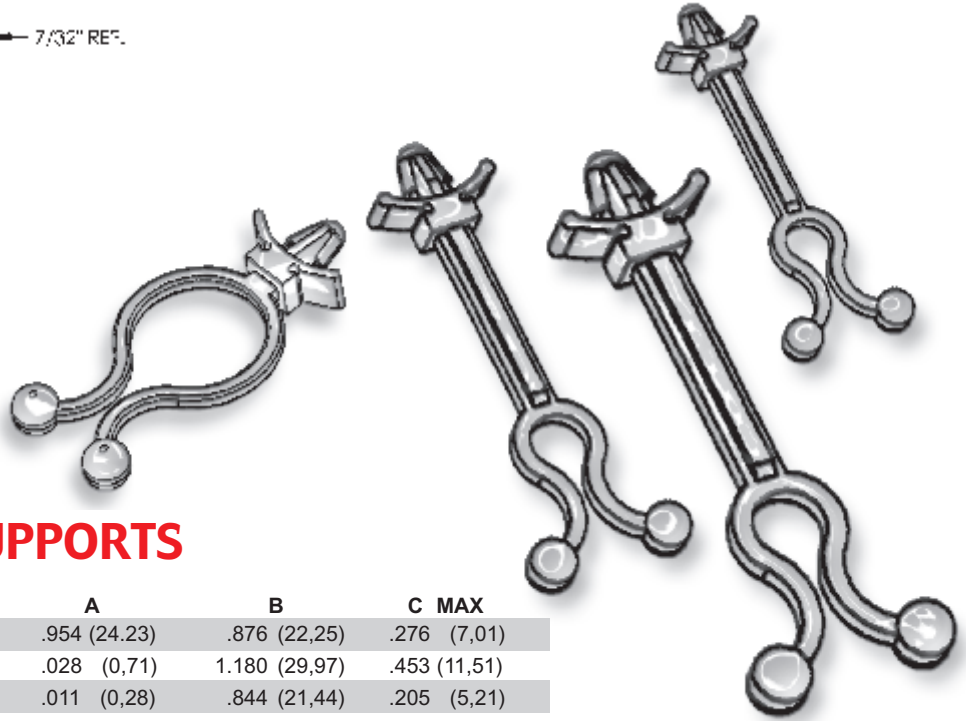
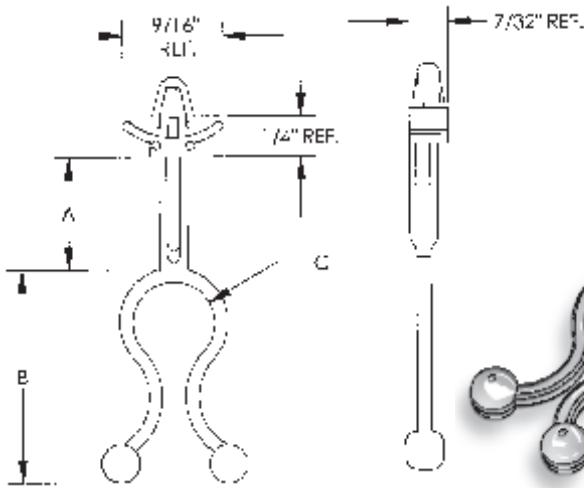
| ITEM NUMBER | H | L | B1 AND B2 |
|-------------|----------------|----------------|---------------------------|
| 23DBEZ001 | 2-3/4 (69,8) | 11/16" (17,46) | .30/.40 (7,62) / (10,16) |
| 23DBEZ002 | 2-31/32 (74,4) | 11/16" (17,46) | .40/.50 (10,16) / (12,70) |

WIRE HANDLING HARDWARE

SECTION
VII

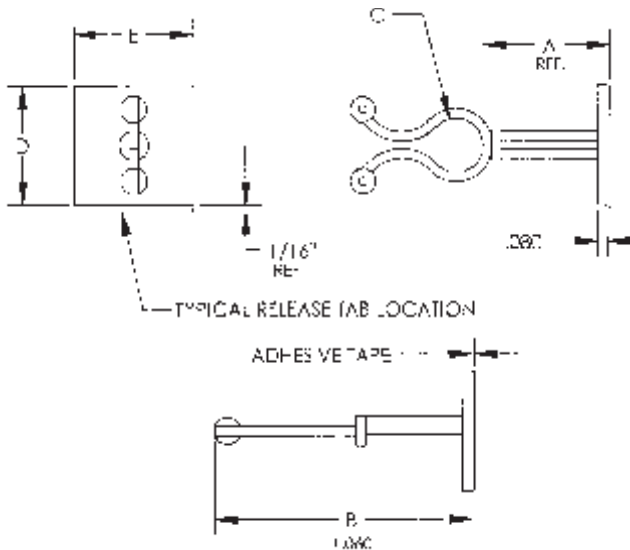
Micro Plastics "EZ" Twist Lock Printed Circuit Board Supports feature a uniquely designed locking base which is easily snapped into the chassis by hand. Cables and wires can be loaded and unloaded with a simple twist of the fingers, and are supported above the board eliminating possible contact with hot components. Parts are stocked in natural Nylon 6/6. Other colors can be furnished with a slight extra charge.

HOLE SIZE .187" • PANEL THICKNESS .030"/.078"

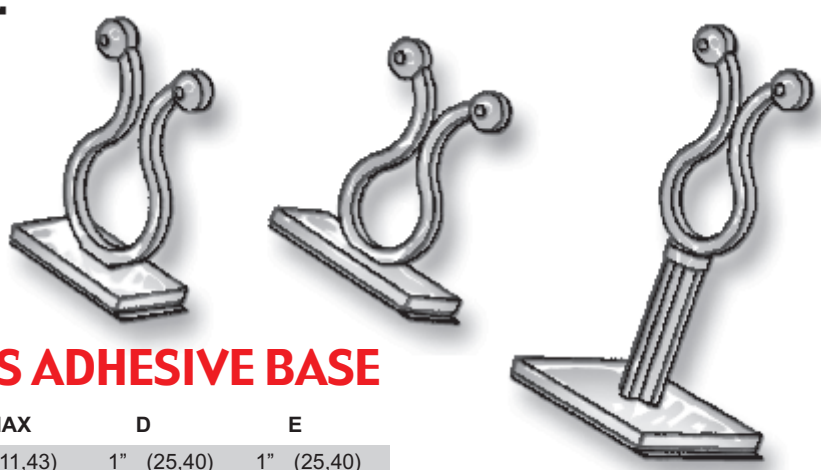


"EZ" TWIST LOCK SUPPORTS

| ITEM NUMBER | DESCRIPTION | A | B | C MAX |
|---------------|------------------|--------------|---------------|--------------|
| 23EZO250N0954 | .250 BUNDLE DIA. | .954 (24,23) | .876 (22,25) | .276 (7,01) |
| 23EZO450N0030 | .450 BUNDLE DIA. | .028 (0,71) | 1.180 (29,97) | .453 (11,51) |
| 23EZO200N0030 | .200 BUNDLE DIA. | .011 (0,28) | .844 (21,44) | .205 (5,21) |
| 23EZO375N0030 | .375 BUNDLE DIA. | .050 (1,27) | 1.066 (27,08) | .350 (8,89) |
| 23EZO450N0625 | .450 BUNDLE DIA. | .625 (15,88) | 1.184 (30,07) | .453 (11,51) |
| 23EZO625N0028 | .625 BUNDLE DIA. | .028 (0,71) | 1.270 (32,26) | .620 (15,75) |



Micro Plastics "EZ" Twist Lock Supports on Adhesive Base offer an economical way of routing wires with out the need for mounting holes or screws. Cables and wires can be loaded & unloaded with a simple twist of the fingers. Also includes a release tab for easy quick installation.

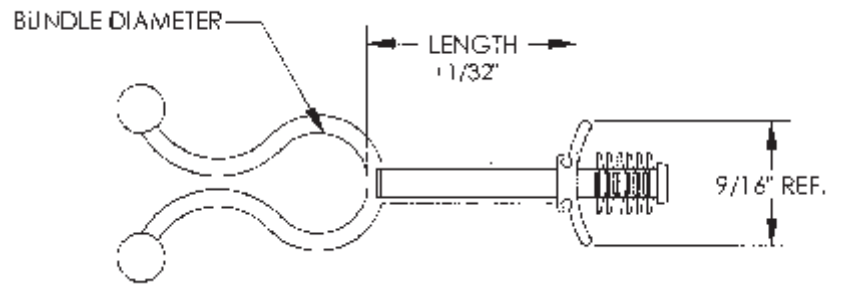
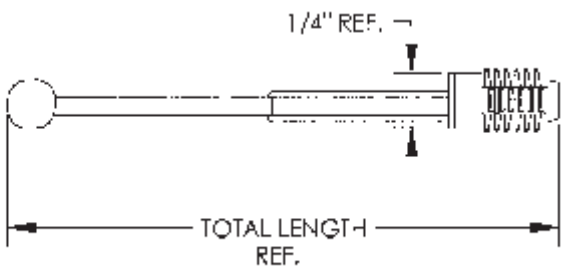
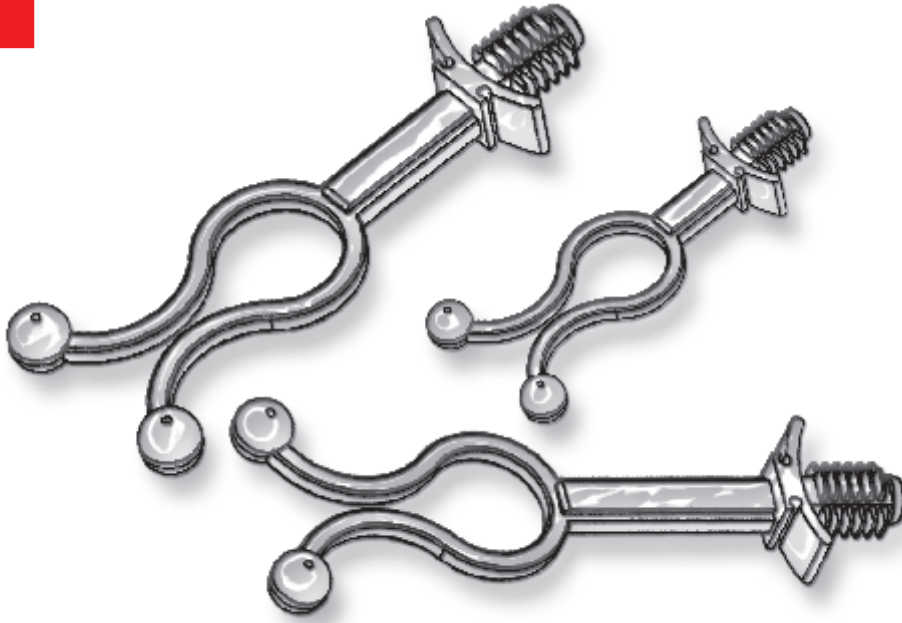


"EZ" TWIST LOCK SUPPORTS ADHESIVE BASE

| ITEM NUMBER | A | B | C MAX | D | E |
|---------------|---------------|---------------|--------------|--------------|--------------|
| 23EZABS450TAB | 1.070 (27,18) | 2.149 (54,58) | .450 (11,43) | 1" (25,40) | 1" (25,40) |
| 23EZAB450TAB | .190 (4,83) | 1.230 (31,24) | .450 (11,43) | 1" (25,40) | .520 (13,21) |
| 23EZAB580TAB | .190 (4,83) | 1.400 (35,56) | .580 (14,73) | .870 (22,10) | .520 (13,21) |

WIRE HANDLING HARDWARE

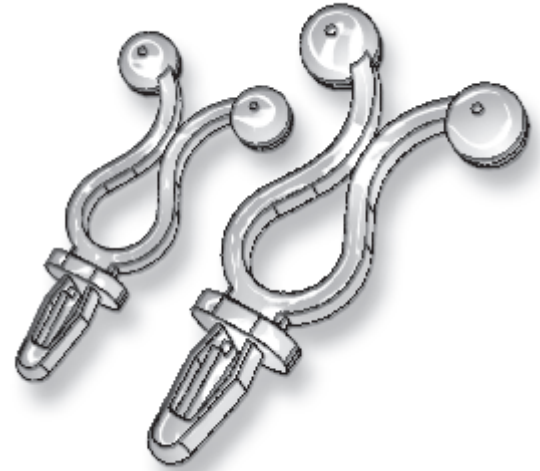
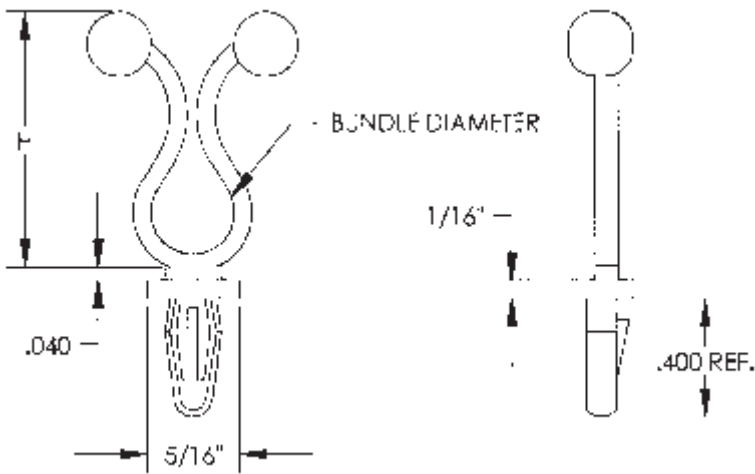
SECTION VII



"EZ" TWIST LOCK FIN CLIP BASE

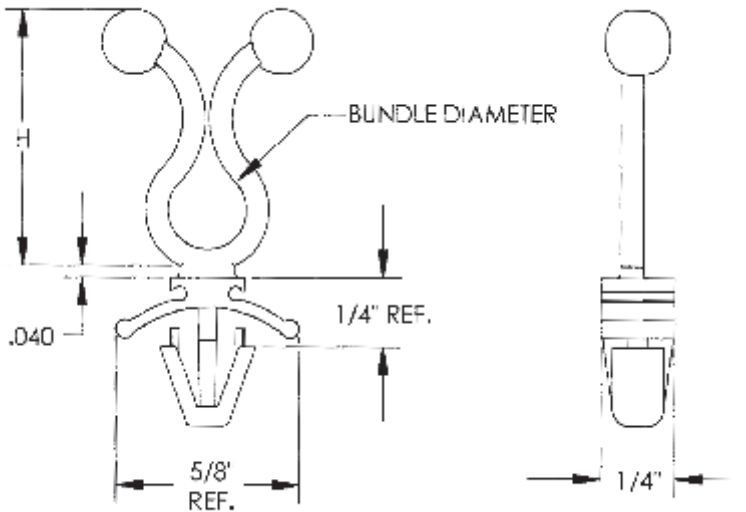
STANDARD LENGTH IS FROM BUNDLE DIAMETER TO TOP OF 1/32" PANEL

| ITEM NUMBER | BUNDLE DIAMETER | LENGTH | TOTAL LENGTH | MOUNTING HOLE | PANEL RANGE |
|--------------|-----------------|--------------|-----------------|---------------|--------------------------|
| 23EZF037B025 | 3/8" (9,53) | .200 (5,08) | 1-21/32 (42,06) | .187 (4,75) | 1/32 (0,79) - 1/4 (6,35) |
| 23EZF037B037 | 3/8" (9,53) | .315 (8,00) | 1-25/32 (45,24) | .187 (4,75) | 1/32 (0,79) - 1/4 (6,35) |
| 23EZF037B050 | 3/8" (9,53) | .437 (11,10) | 1-29/32 (48,41) | .187 (4,75) | 1/32 (0,79) - 1/4 (6,35) |
| 23EZF037B062 | 3/8" (9,53) | .555 (14,10) | 2-1/32" (51,59) | .187 (4,75) | 1/32 (0,79) - 1/4 (6,35) |
| 23EZF050C037 | 1/2" (12,70) | .318 (8,08) | 1-27/32 (46,81) | .250 (6,35) | 1/32 (0,79) - 1/4 (6,35) |
| 23EZF050C050 | 1/2" (12,70) | .447 (11,35) | 1-63/64 (50,39) | .250 (6,35) | 1/32 (0,79) - 1/4 (6,35) |
| 23EZF050C062 | 1/2" (12,70) | .596 (15,14) | 2-1/8 (53,98) | .250 (6,35) | 1/32 (0,79) - 1/4 (6,35) |
| 23EZF050C100 | 1/2" (12,70) | .942 (23,93) | 2-15/32 (62,71) | .250 (6,35) | 1/32 (0,79) - 1/4 (6,35) |
| 23EZF062C037 | 5/8" (15,88) | .319 (8,10) | 1-15/16 (49,21) | .250 (6,35) | 1/32 (0,79) - 1/4 (6,35) |
| 23EZF062C050 | 5/8" (15,88) | .442 (11,23) | 2-3/64 (51,99) | .250 (6,35) | 1/32 (0,79) - 1/4 (6,35) |
| 23EZF062C062 | 5/8" (15,88) | .595 (15,11) | 2-3/16 (55,56) | .250 (6,35) | 1/32 (0,79) - 1/4 (6,35) |
| 23EZF062C100 | 5/8" (15,88) | .935 (23,75) | 2-35/64 (64,69) | .250 (6,35) | 1/32 (0,79) - 1/4 (6,35) |



"EZ" TWIST LOCK SUPPORTS

| ITEM NUMBER | DESCRIPTION | PANEL THICKNESS | H | * REF. W |
|---------------|------------------|-----------------|------------------|----------------|
| 23EZO250C0040 | .250 BUNDLE DIA. | 1/16" (1,57) | 7/8" (22,23) | 23/32" (18,24) |
| 23EZO375C0040 | .375 BUNDLE DIA. | 1/16" (1,57) | 1-5/64" (27,37) | 3/4" (19,08) |
| 23EZO500C0040 | .500 BUNDLE DIA. | 1/16" (1,57) | 1-13/64" (30,56) | 7/8" (15,88) |



"EZ" TWIST LOCK SUPPORTS

| ITEM NUMBER | DESCRIPTION | PANEL THICKNESS | H | * REF. W |
|---------------|------------------|--------------------------|------------------|----------------|
| 23EZO250B0040 | .250 BUNDLE DIA. | .047 (1,19 / .109 (2,77) | 7/8" (22,23) | 23/32" (18,24) |
| 23EZO375B0040 | .375 BUNDLE DIA. | .047 (1,19 / .109 (2,77) | 1-5/64" (27,37) | 3/4" (19,08) |
| 23EZO500B0040 | .500 BUNDLE DIA. | .047 (1,19 / .109 (2,77) | 1-13/64" (30,56) | 7/8" (15,88) |

CIRCUIT BOARD HARDWARE

SECTION VIII

NYLON CAPACITOR MOUNTS



22CM0200

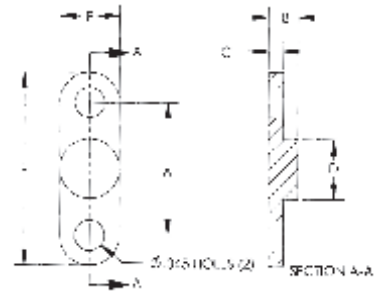


22CM0150



22CM0100

Accurately positions capacitors or discrete components on P.C. Board.

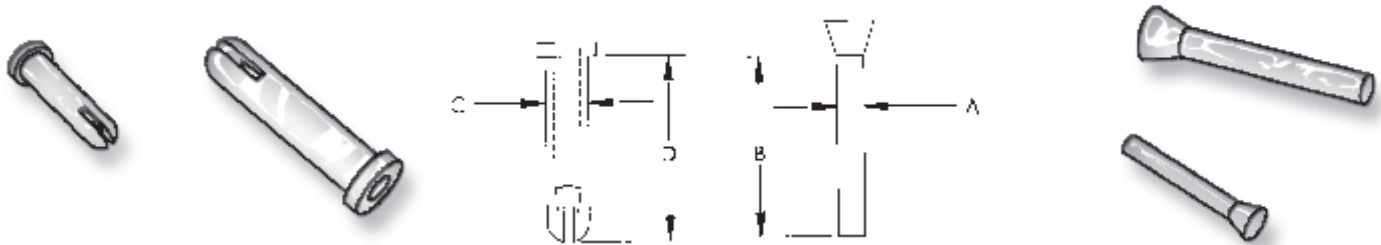


Material: Type 66 Nylon

| ITEM NUMBER | DESCRIPTION | A | B | C | D | E | F |
|-------------|-------------|-------------|-------------|-------------|-------------------------|-------------|-------------|
| 22CM0100 | CM-100 | .100 (2,54) | .045 (1,14) | .022 (0,56) | .050/.070 (1,27)/(1,78) | .180 (4,57) | .090 (2,29) |
| 22CM0150 | CM-150 | .150 (3,81) | .045 (1,14) | .022 (0,56) | .090/.125 (2,29)/(3,18) | .270 (6,86) | .125 (3,18) |
| 22CM0200 | CM-200 | .200 (5,08) | .045 (1,14) | .022 (0,56) | .090 (2,29) | .290 (7,37) | .090 (2,29) |

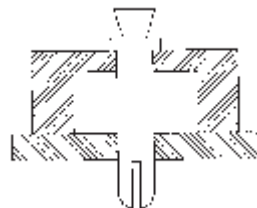
TWO - PIECE NYLON FASTENER FOR USE WITH EDGE CONNECTOR ASSEMBLY

Body Item "A" is inserted through the connector and through the chassis. Pin Item "B" then is pushed or tapped into the body to secure the connector to the chassis. Head design of the pin permits easy removal, connector then can be easily replaced.



BODY ITEM "A"

| ITEM NUMBER | C | D |
|-------------|-------------|--------------|
| 27TPF0001A | .109 (2,76) | .305 (7,74) |
| 27TPF0002A | .110 (2,79) | .350 (8,88) |
| 27TPF0003A | .110 (2,79) | .480 (12,19) |
| 27TPF0004A | .096 (2,43) | .340 (8,63) |

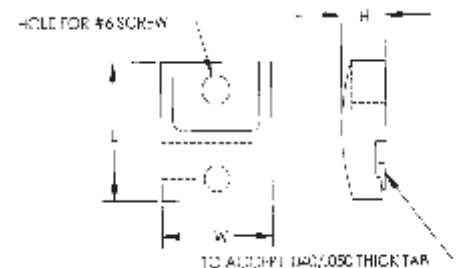
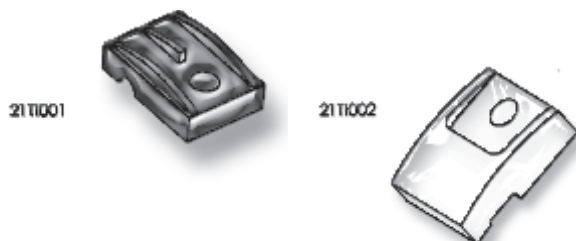


PIN ITEM "B"

| ITEM NUMBER | B | A |
|-------------|--------------|-------------|
| 27TPF0001B | .330 (8,38) | .069 (1,75) |
| 27TPF0002B | .360 (9,14) | .069 (1,75) |
| 27TPF0003B | .455 (11,55) | .069 (1,75) |
| 27TPF0004B | .340 (8,63) | .062 (1,57) |

TRANSISTOR INSULATORS

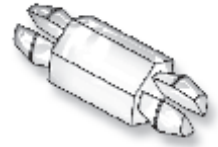
Transistor insulators are molded in Nylon 6/6 material. The insulators are designed to separate the mounting screw from the transistor. Parts are also available in black glassfilled nylon upon request.



| ITEM NUMBER | DESCRIPTION | LENGTH | WIDTH | HEIGHT |
|-------------|----------------------|--------------|--------------|-------------|
| 21TI001 | TRANSISTOR INSULATOR | .680 (17,27) | .476 (12,09) | .219 (5,56) |
| 21TI002 | TRANSISTOR INSULATOR | .735 (18,67) | .590 (14,99) | .240 (6,10) |

NYLON LOCKING HEX SPACERS

Economical Locking Spacers eliminate screws, nuts and lock washers in mounting P.C. boards on metal chassis or stacking in multiple tiers. Unique locking clips provide a mechanically secure, reusable connection in predrilled or punched holes while saving considerable assembly time.



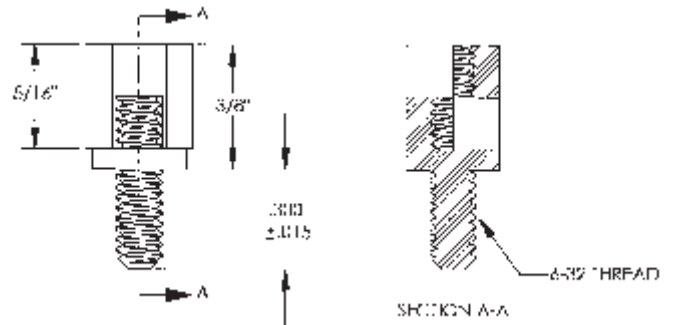
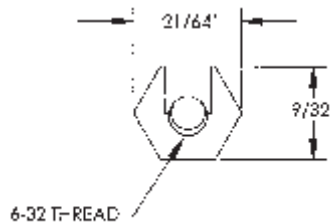
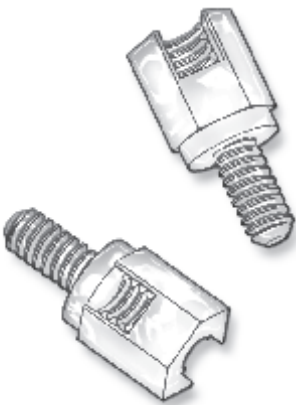
| ITEM NUMBER | DESCRIPTION | A |
|-------------|-------------|-------------|
| 27MPH00276 | MPH 276 | .276 (7,01) |

FITS HOLE SIZE OF $.152 \pm .002$ BOARD THICKNESS $1/16$

MALE-FEMALE CIRCUIT BOARD SUPPORT

Nylon 6/6 rated UL94V2 male/female thread with $3/8"$ board spacing.

New Product Line

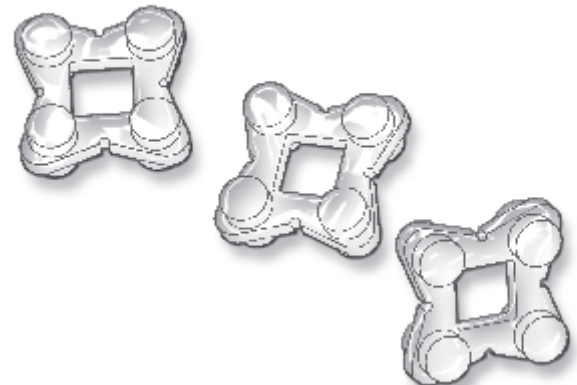
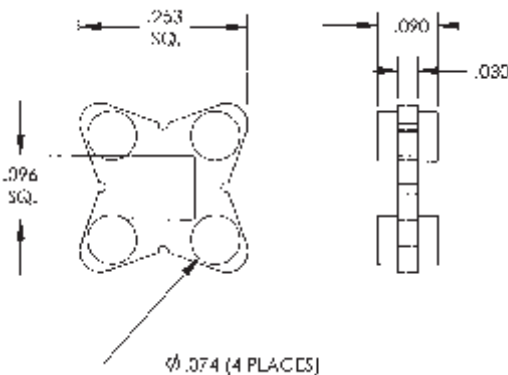


| ITEM NUMBER | DESCRIPTION |
|-------------|--|
| 27TMF0375 | $3/8"$ Male-Female Circuit Board Support |

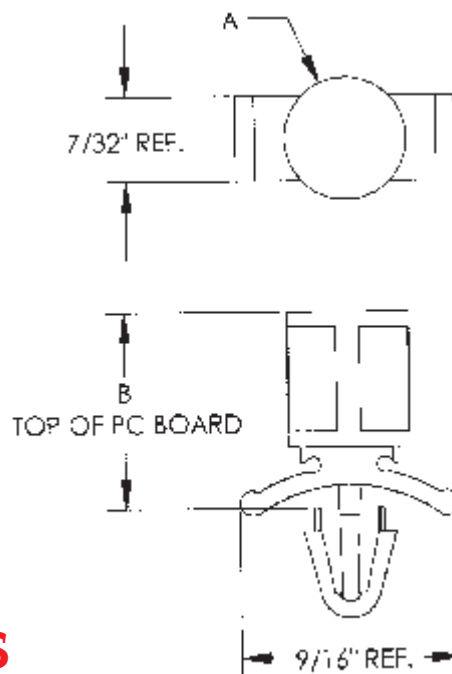
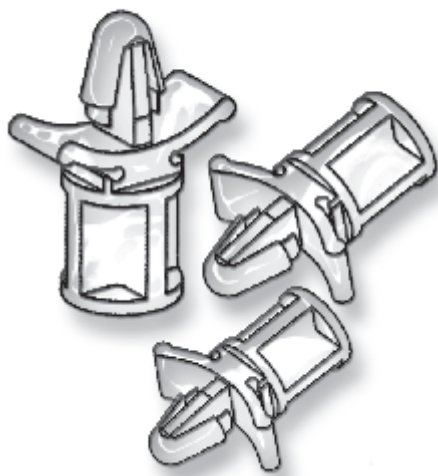
SQUARE STANDOFF LED MOUNT

LED Mount provides secure mounting of both two and three lead devices. Nylon mount provides protection from heat, shock and vibration. Symmetrical design with feet on both sides eliminating need for specific side rotation.

New Product Line

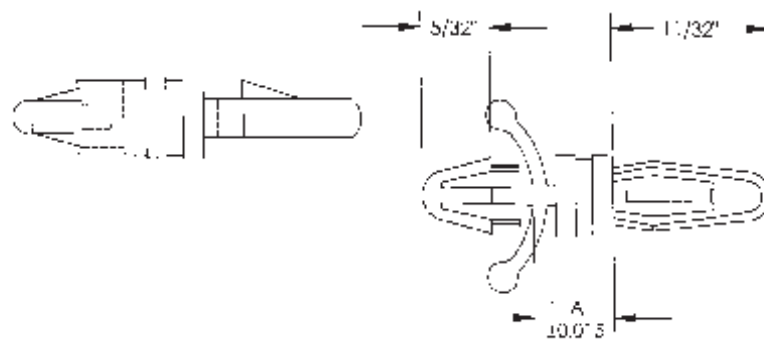


| ITEM NUMBER | DESCRIPTION |
|-------------|-------------|
| 18TRM001 | TRM 001 |



PUSH SPACERS

| ITEM NUMBER | A | B | PANEL THICKNESS | HOLE SIZE |
|-------------|-------------|---------------|-----------------|-------------|
| 27PS00250 | 9/32 (7,14) | 5/16 (7,93) | .062 (1,57) | .187 (4,75) |
| 27PS00500 | 5/16 (7,93) | 1/2 (12,70) | .093 (2,29) | .187 (4,75) |
| 27PS00500A | 5/16 (7,93) | 1/2 (12,70) | .062 (1,57) | .187 (4,75) |
| 27PS00625 | 9/32 (7,14) | 11/16 (17,46) | .062 (1,57) | .187 (4,75) |



BOTH ENDS
HOLE DIAMETER .125
PANEL THICKNESS 1/16"

NYLON P.C.B. SUPPORTS

| ITEM NUMBER | DESCRIPTION | A* * +/- .015" |
|-------------|-------------|-------------------|
| 27MLLP0187 | MLLP 187 | .187 (4,75) |
| 27MLLP0250 | MLLP 250 | .250 (6,35) |
| 27MLLP0375 | MLLP 375 | .375 (9,53) |
| 27MLLP0437 | MLLP 437 | .437 (11,10) |
| 27MLLP0500 | MLLP 500 | .500 (12,70) |
| 27MLLP0562 | MLLP 562 | .562 (14,27) |
| 27MLLP0625 | MLLP 625 | .625 (15,88) |

FEMALE NYLON CIRCUIT BOARD POSTS

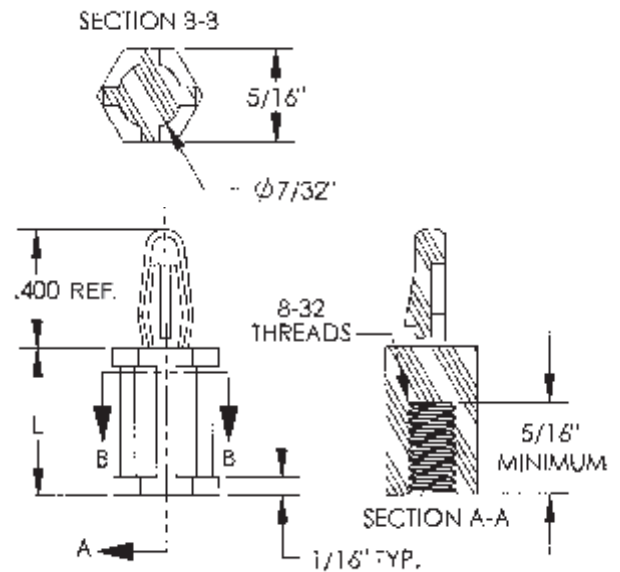
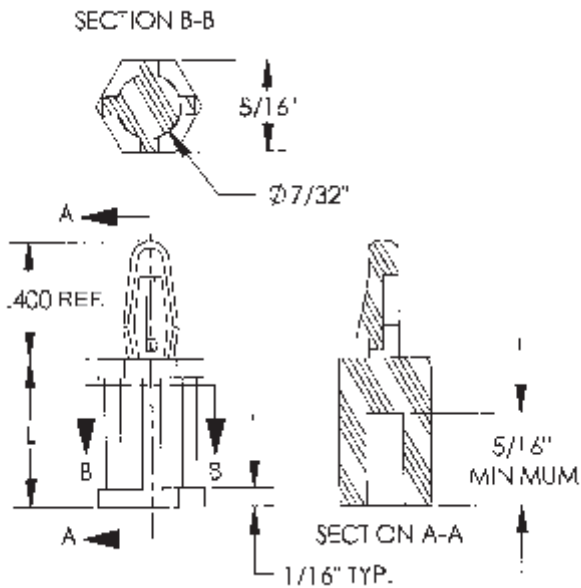


RECOMMENDED HOLE SIZE .156

NOTE: SELF-THREADING
POSTS ARE DESIGNED
FOR USE WITH A #6
SELF-TAPPING SCREW.

PANEL THICKNESS 1/16"

TOLERANCE ON "L" DIMENSION +/- .015



SELF-THREADING

| ITEM NUMBER | DESCRIPTION | "L" |
|--------------|-------------|---------------|
| 27FSTP00250* | FSTP 250 | .250 (6,35) |
| 27FSTP00375 | FSTP 375 | .375 (9,53) |
| 27FSTP00500 | FSTP 500 | .500 (12,70) |
| 27FSTP00625 | FSTP 625 | .625 (15,88) |
| 27FSTP00750 | FSTP 750 | .750 (19,05) |
| 27FSTP00875 | FSTP 875 | .875 (22,23) |
| 27FSTP01000 | FSTP 1000 | 1.000 (25,40) |
| 27FSTP01125 | FSTP 1125 | 1.125 (28,58) |
| 27FSTP01250 | FSTP 1250 | 1.250 (31,75) |
| 27FSTP01406 | FSTP 1406 | 1.406 (35,71) |

* 1/4" length

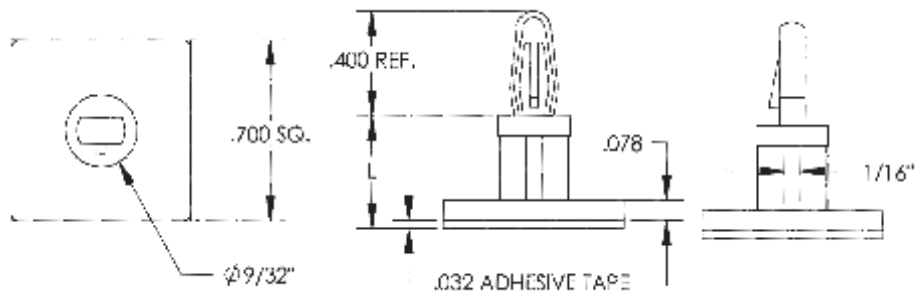
THREADED

| ITEM NUMBER | DESCRIPTION | "L" |
|-------------|-------------|---------------|
| 27FTP00250* | FTP 250 | .250 (6,35) |
| 27FTP00375 | FTP 375 | .375 (9,53) |
| 27FTP00500 | FTP 500 | .500 (12,70) |
| 27FTP00625 | FTP 625 | .625 (15,88) |
| 27FTP00750 | FTP 750 | .750 (19,05) |
| 27FTP00875 | FTP 875 | .875 (22,23) |
| 27FTP01000 | FTP 1000 | 1.000 (25,40) |
| 27FTP01125 | FTP 1125 | 1.125 (28,58) |
| 27FTP01250 | FTP 1250 | 1.250 (31,75) |
| 27FTP01406 | FTP 1406 | 1.406 (35,71) |

* 1/4" length

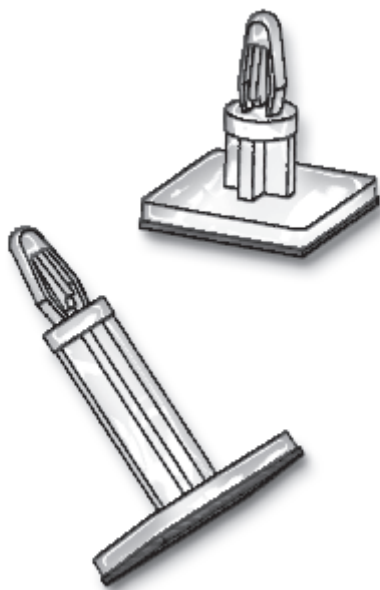
CIRCUIT BOARD HARDWARE

SECTION VIII



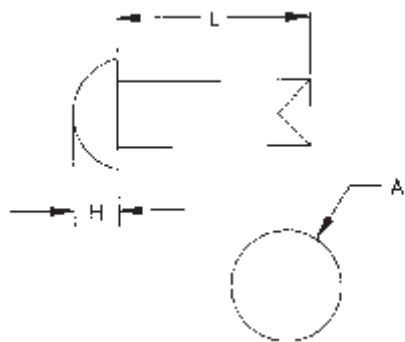
FITS RECOMMENDED HOLE SIZE OF .156 - PANEL THICKNESS 1/16"

NYLON LOCKING P.C.B. SUPPORT ON ADHESIVE BASE

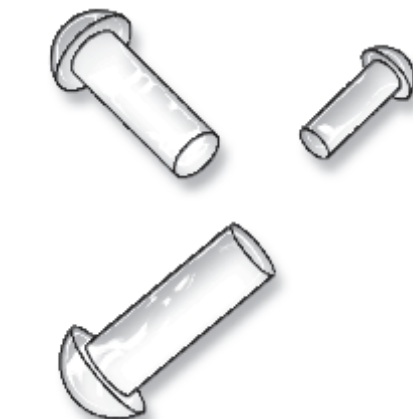


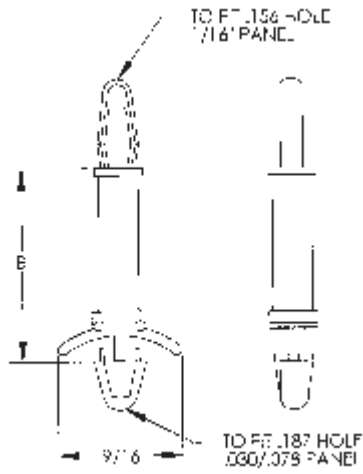
| ITEM NUMBER | DESCRIPTION | "L" |
|-------------|-------------|---------------|
| 27LAD0187 | LAD 187 | .187 (4,75) |
| 27LAD0250 | LAD 250 | .250 (6,35) |
| 27LAD0312 | LAD 312 | .312 (7,92) |
| 27LAD0375 | LAD 375 | .375 (9,53) |
| 27LAD0500 | LAD 500 | .500 (12,70) |
| 27LAD0625 | LAD 625 | .625 (15,88) |
| 27LAD0750 | LAD 750 | .750 (19,05) |
| 27LAD0875 | LAD 875 | .875 (22,23) |
| 27LAD1000 | LAD 1000 | 1.000 (25,40) |
| 27LAD1125 | LAD 1125 | 1.125 (28,56) |

MOLDED ACETAL RIVETS

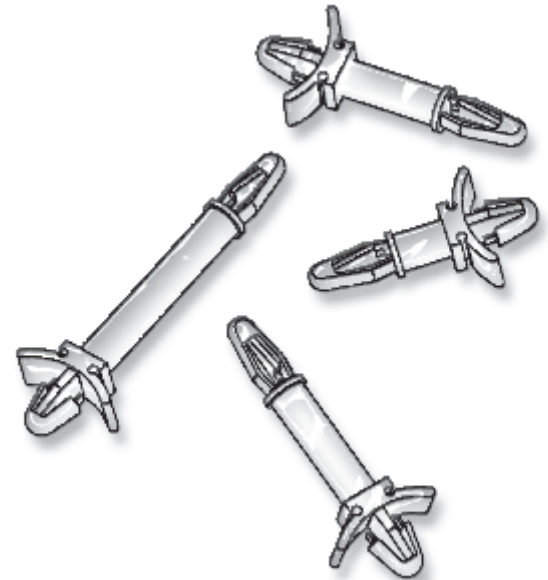
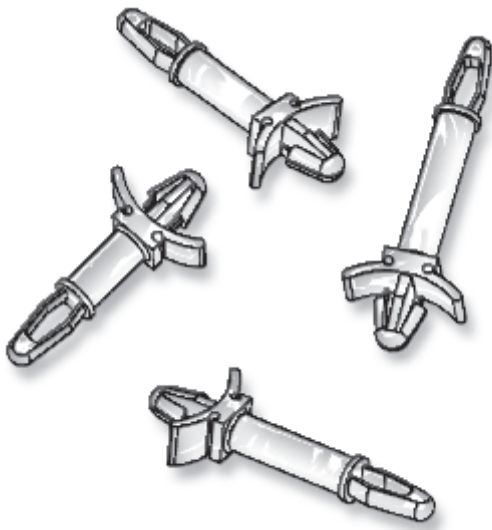
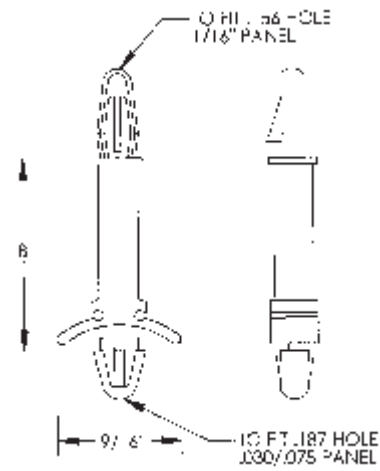


| ITEM NUMBER | DESCRIPTION | SHANK | A | H | LENGTH |
|-------------|-------------|-------------|-------------|-------------|---------------|
| 26RIV001 | RIV 1 | .085 (2,16) | .143 (3,63) | .058 (1,47) | 1/8 (3,18) |
| 26RIV002 | RIV 2 | .085 (2,16) | .143 (3,63) | .058 (1,47) | 3/16 (4,76) |
| 26RIV003 | RIV 3 | .085 (2,16) | .143 (3,63) | .058 (1,47) | 1/4 (6,35) |
| 26RIV004 | RIV 4 | .085 (2,16) | .143 (3,63) | .058 (1,47) | 5/16 (7,94) |
| 26RIV005 | RIV 5 | .085 (2,16) | .143 (3,63) | .058 (1,47) | 3/8 (9,53) |
| 26RIV006 | RIV 6 | .085 (2,16) | .143 (3,63) | .058 (1,47) | 7/16 (11,11) |
| 26RIV007 | RIV 7 | .085 (2,16) | .143 (3,63) | .058 (1,47) | 1/2 (12,70) |
| 26RIV011 | RIV11 | .125 (3,18) | .250 (6,35) | .068 (1,73) | 1/8 (3,18) |
| 26RIV012 | RIV12 | .125 (3,18) | .250 (6,35) | .068 (1,73) | 3/16 (4,76) |
| 26RIV013 | RIV13 | .125 (3,18) | .250 (6,35) | .068 (1,73) | 1/4 (6,35) |
| 26RIV014 | RIV14 | .125 (3,18) | .250 (6,35) | .068 (1,73) | 5/16 (7,94) |
| 26RIV015 | RIV15 | .125 (3,18) | .250 (6,35) | .068 (1,73) | 3/8 (9,53) |
| 26RIV016 | RIV16 | .125 (3,18) | .250 (6,35) | .068 (1,73) | 7/16 (11,11) |
| 26RIV017 | RIV17 | .125 (3,18) | .250 (6,35) | .068 (1,73) | 1/2 (12,70) |
| 26RIV018 | RIV18 | .125 (3,18) | .250 (6,35) | .068 (1,73) | 9/16 (14,29) |
| 26RIV019 | RIV19 | .125 (3,18) | .250 (6,35) | .068 (1,73) | 5/8 (15,88) |
| 26RIV020 | RIV20 | .125 (3,18) | .250 (6,35) | .068 (1,73) | 11/16 (17,46) |
| 26RIV021 | RIV21 | .125 (3,18) | .218 (5,54) | .090 (2,29) | 1/8 (3,18) |
| 26RIV022 | RIV22 | .125 (3,18) | .218 (5,54) | .090 (2,29) | 3/16 (4,76) |
| 26RIV023 | RIV23 | .125 (3,18) | .218 (5,54) | .090 (2,29) | 1/4 (6,35) |
| 26RIV024 | RIV24 | .125 (3,18) | .218 (5,54) | .090 (2,29) | 5/16 (7,94) |
| 26RIV025 | RIV25 | .125 (3,18) | .218 (5,54) | .090 (2,29) | 3/8 (9,53) |
| 26RIV026 | RIV26 | .125 (3,18) | .218 (5,54) | .090 (2,29) | 1/2 (12,70) |
| 26RIV050 | RIV50 | .125 (3,18) | .255 (6,48) | .051 (1,30) | 1/4 (6,35) |
| 26RIV055 | RIV55 | .125 (3,18) | .255 (6,48) | .051 (1,30) | 3/8 (9,53) |





Micro Plastics Circuit Board Supports eliminate screws, nuts, and lock-washers in mounting printed circuit boards on metal chassis or stacking in multiple tiers. Unique locking designs provide mechanically secure, reusable connection in pre-drilled or punched holes while saving considerable assembly time and expense.



NYLON P.C.B. SUPPORTS "LOCK/TENSION" SERIES

THE "LTP" SERIES IS DESIGNED TO SECURELY LOCK TO THE BOTTOM CHASSIS AND SNAP INTO TOP BOARD.

| ITEM NUMBER | DESCRIPTION | B |
|-------------|---------------------|---------------|
| 27LTP0187 | 3/16" LOCK/TENSION | .307 (7,80) |
| 27LTP0250 | 1/4" LOCK/TENSION | .365 (9,27) |
| 27LTP0375 | 3/8" LOCK/TENSION | .495 (12,57) |
| 27LTP0437 | 7/16" LOCK/TENSION | .557 (14,15) |
| 27LTP0500 | 1/2" LOCK/TENSION | .625 (15,88) |
| 27LTP0625 | 5/8" LOCK/TENSION | .745 (18,92) |
| 27LTP0750 | 3/4" LOCK/TENSION | .870 (22,10) |
| 27LTP0875 | 7/8" LOCK/TENSION | .995 (25,27) |
| 27LTP1000 | 1" LOCK/TENSION | 1.120 (28,45) |
| 27LTP1125 | 1 1/8" LOCK/TENSION | 1.245 (31,62) |
| 27LTP1250 | 1 1/4" LOCK/TENSION | 1.370 (34,80) |
| 27LTP1375 | 1 3/8" LOCK/TENSION | 1.495 (37,97) |
| 27LTP1750 | 1 3/4" LOCK/TENSION | 1.810 (45,97) |

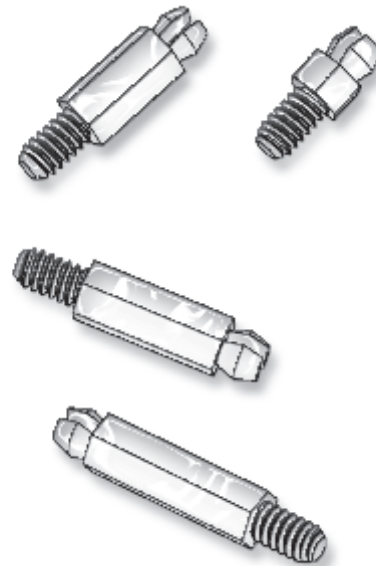
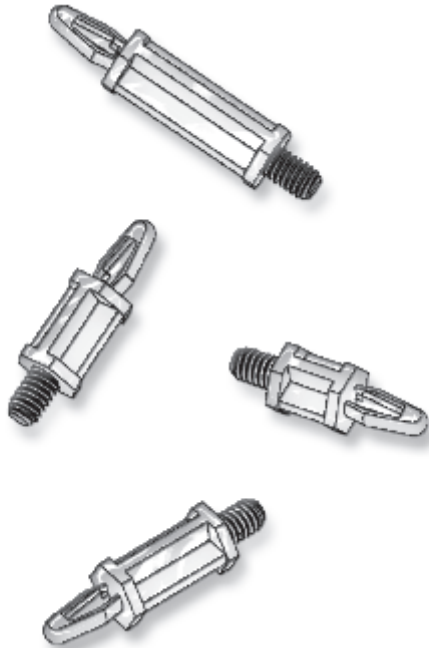
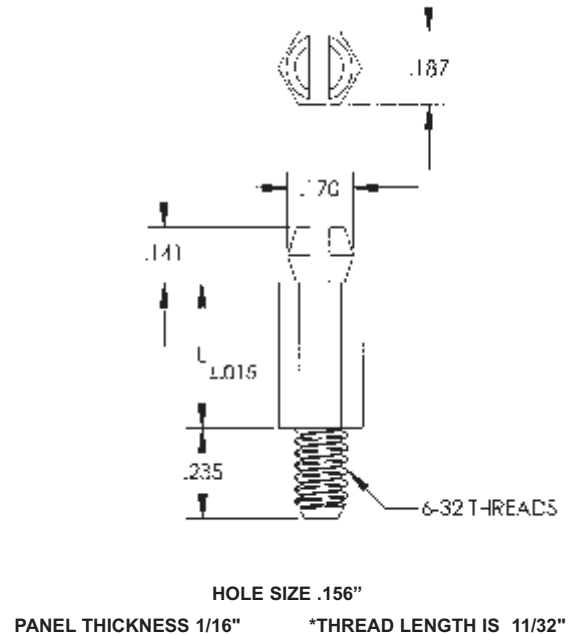
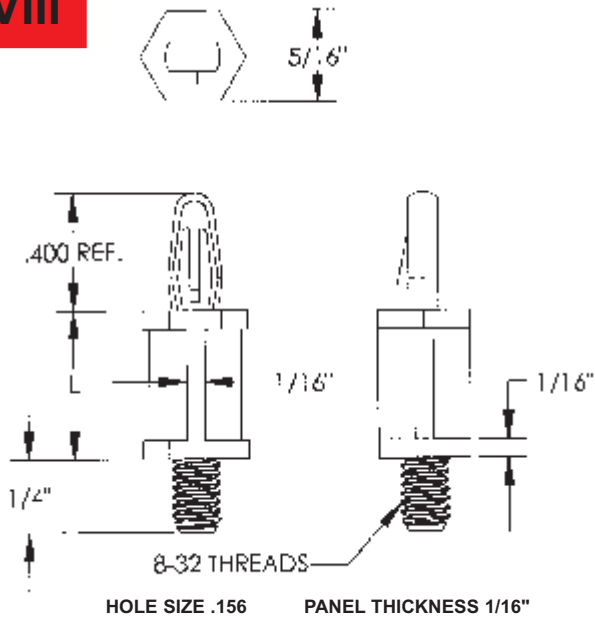
NYLON P.C.B. SUPPORTS "LOCK/LOCK" SERIES

THE "LLP" SERIES IS DESIGNED TO SECURELY LOCK BOTH THE CHASSIS END AND THE PRINTED CIRCUIT BOARD ON TOP.

| ITEM NUMBER | DESCRIPTION | B |
|-------------|------------------|---------------|
| 27LLP0125 | 1/8" LOCK/LOCK | .210 (5,33) |
| 27LLP0187 | 3/16" LOCK/LOCK | .307 (7,80) |
| 27LLP0250 | 1/4" LOCK/LOCK | .365 (9,27) |
| 27LLP0375 | 3/8" LOCK/LOCK | .495 (12,57) |
| 27LLP0437 | 7/16" LOCK/LOCK | .557 (14,15) |
| 27LLP0500 | 1/2" LOCK/LOCK | .625 (15,88) |
| 27LLP0625 | 5/8" LOCK/LOCK | .745 (18,92) |
| 27LLP0750 | 3/4" LOCK/LOCK | .870 (22,10) |
| 27LLP0875 | 7/8" LOCK/LOCK | .995 (25,27) |
| 27LLP1000 | 1" LOCK/LOCK | 1.120 (28,45) |
| 27LLP1125 | 1 1/8" LOCK/LOCK | 1.245 (31,62) |
| 27LLP1250 | 1 1/4" LOCK/LOCK | 1.370 (34,80) |
| 27LLP1375 | 1 3/8" LOCK/LOCK | 1.495 (37,97) |
| 27LLP1750 | 1 3/4" LOCK/LOCK | 1.810 (45,97) |

CIRCUIT BOARD HARDWARE

SECTION VIII



MALE PRINTED CIRCUIT BOARD SUPPORT POSTS "LOCKING LMTM" SERIES

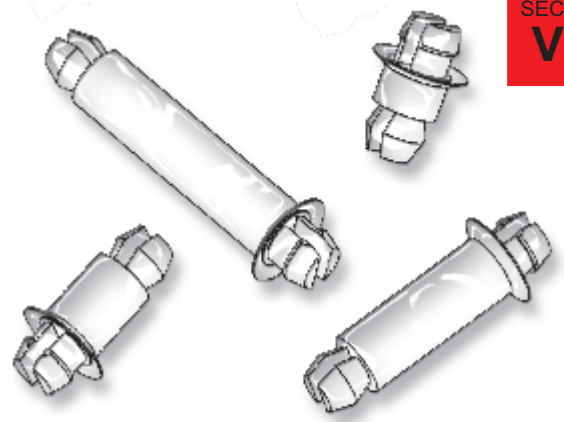
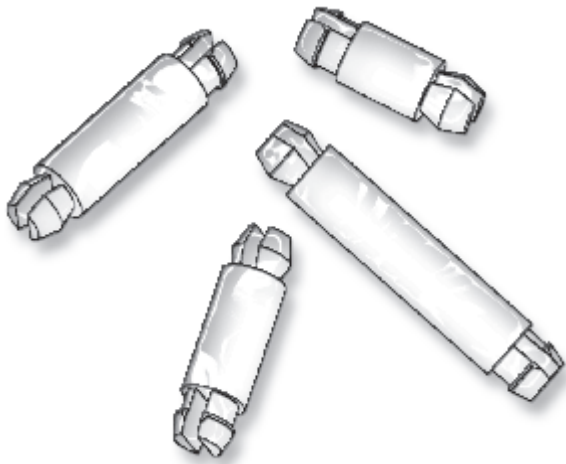
| ITEM NUMBER | DESCRIPTION | L |
|-------------|-------------|---------------|
| 27LMTP00250 | LMTM 250 | .250 (6,35) |
| 27LMTP00375 | LMTM 375 | .375 (9,53) |
| 27LMTP00500 | LMTM 500 | .500 (12,70) |
| 27LMTP00625 | LMTM 625 | .625 (15,88) |
| 27LMTP00750 | LMTM 750 | .750 (19,05) |
| 27LMTP00875 | LMTM 875 | .875 (22,23) |
| 27LMTP01000 | LMTM 1000 | 1.000 (25,40) |
| 27LMTP01125 | LMTM 1125 | 1.125 (28,58) |

MALE PRINTED CIRCUIT BOARD SUPPORT POSTS "MTP" SERIES

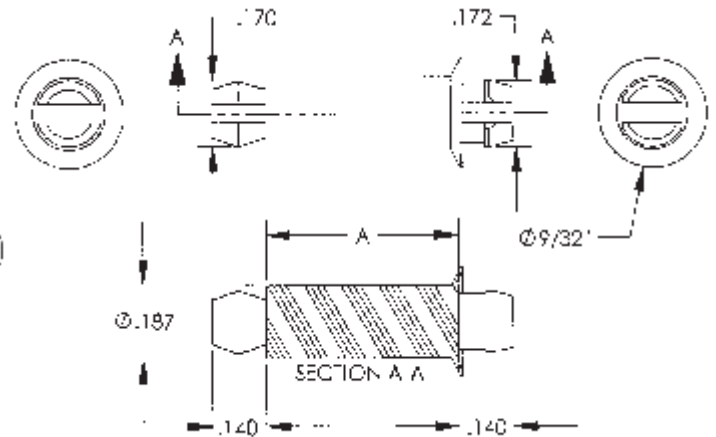
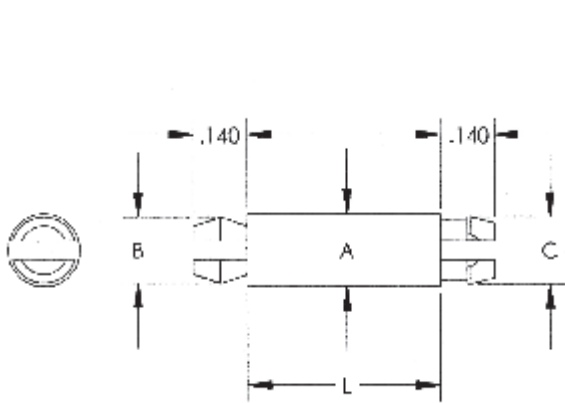
| ITEM NUMBER | DESCRIPTION | L +/- .015 |
|-------------|-------------|--------------|
| 27MTP00125 | MTP 125 | .125 (3,18) |
| 27MTP00187 | MTP 187 | .187 (4,75) |
| 27MTP00250 | MTP 250 | .250 (6,35) |
| 27MTP00375 | MTP 375 | .375 (9,53) |
| 27MTP00395* | MTP 395 | .395 (10,03) |
| 27MTP00500 | MTP 500 | .500 (12,70) |
| 27MTP00625 | MTP 625 | .625 (15,88) |
| 27MTP00750 | MTP 750 | .750 (19,05) |
| 27MTP00875 | MTP 875 | .875 (22,23) |

CIRCUIT BOARD HARDWARE

SECTION
VIII



Economical locking spacers eliminate screws, nuts and lock washers in mounting P.C. Boards on metal chassis or stacking in multiple tiers. Unique locking clips provide a mechanically secure, reusable connection in predrilled or punched holes while saving considerable assembly time. The new improved "MSP" series greatly increases stability and integrity of the printed circuit board assembly, while improving the pull-out strength of the connection.



RECOMMENDED HOLE SIZE .156" +/- .002"
PANEL THICKNESS 1/16"

PARTS CAN BE FURNISHED COLOR CODED FOR IDENTIFICATION.

NYLON P.C.B. POSTS "MP" SERIES

* FITS HOLE SIZE OF .093"

| ITEM NUMBER | DESCRIPTION | "L" | "A" | "B" | "C" |
|--------------|-------------|--------------|-------------|-------------|-------------|
| 27MP00125 | MP 125 | .125 (3,18) | .187 (4,75) | .170 (4,32) | .172 (4,37) |
| 27MP00197 | MP 197 | .197 (5,00) | .187 (4,75) | .170 (4,32) | .172 (4,37) |
| 27MP00250 | MP 250 | .250 (6,35) | .187 (4,75) | .170 (4,32) | .172 (4,37) |
| 27MP00312 | MP 312 | .312 (7,92) | .187 (4,75) | .170 (4,32) | .172 (4,37) |
| 27MP00375 | MP 375 | .375 (9,53) | .187 (4,75) | .170 (4,32) | .172 (4,37) |
| 27MP00437 | MP 437 | .437 (11,11) | .187 (4,75) | .170 (4,32) | .172 (4,37) |
| * 27MP00437S | MP 437S | .437 (11,11) | .125 (3,18) | .104 (2,64) | .108 (2,74) |
| 27MP00500 | MP 500 | .500 (12,70) | .187 (4,75) | .170 (4,32) | .172 (4,37) |
| 27MP00625 | MP 625 | .625 (15,88) | .187 (4,75) | .170 (4,32) | .172 (4,37) |
| 27MP00750 | MP 750 | .750 (19,05) | .187 (4,75) | .170 (4,32) | .172 (4,37) |
| 27MP00875 | MP 875 | .875 (22,23) | .187 (4,75) | .170 (4,32) | .172 (4,37) |
| 27MP01000 | MP1000 | 1.00 (25,40) | .187 (4,75) | .170 (4,32) | .172 (4,37) |
| 27MP01950 | MP1950 | 1.95 (49,53) | .187 (4,75) | .170 (4,32) | .172 (4,37) |

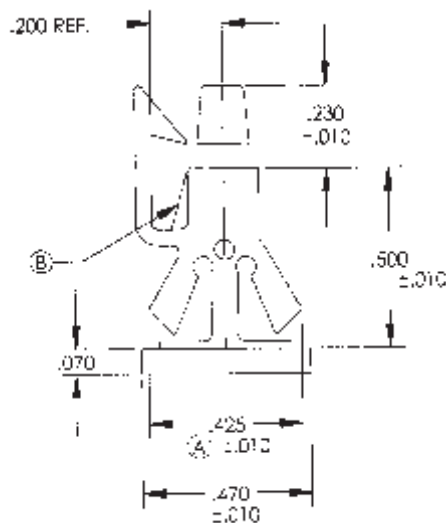
NYLON P.C.B. POSTS "MSP" SERIES

| ITEM NUMBER | DESCRIPTION | "A" |
|-------------|-------------|--------------|
| 27MSP00125 | MSP 125 | .125 (3,18) |
| 27MSP00156 | MSP 156 | .156 (3,96) |
| 27MSP00250 | MSP 250 | .250 (6,35) |
| 27MSP00276 | MSP 276 | .276 (7,00) |
| 27MSP00312 | MSP 312 | .312 (7,92) |
| 27MSP00375 | MSP 375 | .375 (9,53) |
| 27MSP00437 | MSP 437 | .437 (11,11) |
| 27MSP00472 | MSP 472 | .472 (12,00) |
| 27MSP00500 | MSP 500 | .500 (12,70) |
| 27MSP00625 | MSP 625 | .625 (15,88) |
| 27MSP00700 | MSP 700 | .700 (17,78) |
| 27MSP00750 | MSP 750 | .750 (19,05) |
| 27MSP00875 | MSP 875 | .875 (22,23) |
| 27MSP01000 | MSP1000 | 1.00 (25,40) |
| 27MSP01800 | MSP1800 | 1.80 (45,72) |

CIRCUIT BOARD HARDWARE

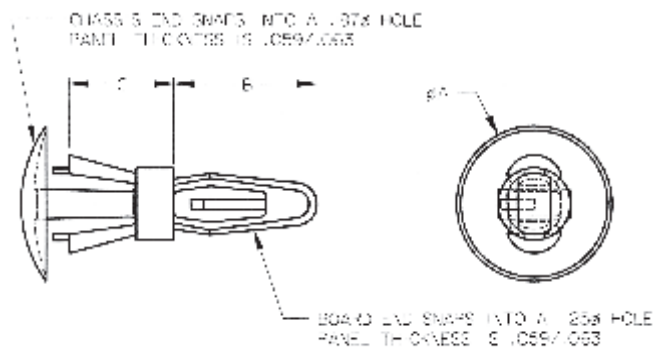
SECTION VIII

Heavy duty nylon 6/6 support snaps into P.C. board from bottom. Locking arm clips to the side of the pc board making for easy removal and replacement of pc boards. Support does not rotate in chassis or positioning holes. Board clearance may vary depending on chassis thickness. Parts are available in black and natural nylon.

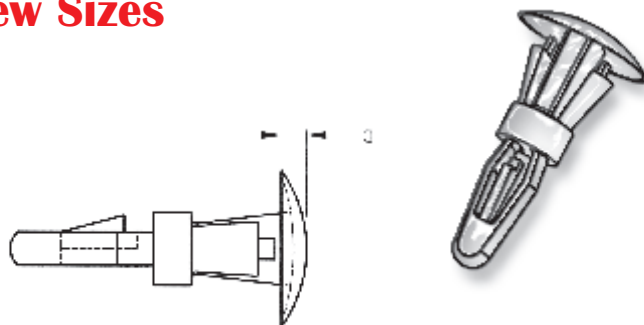


NYLON HEAVY DUTY P.C.B. SUPPORT

| ITEM NUMBER | BOARD CLEARANCE | --- CIRCUIT BOARD --- | | -----CHASSIS----- | | HOLE SIZE |
|-------------|-----------------------------|-----------------------|-------------|---------------------------|--------------------------|-----------|
| | | THICKNESS | HOLE DIA. | THICKNESS | | |
| 27HDEC00500 | .430 (10,92) - .460 (11,68) | .062 (1,57) | .157 (3,99) | .050 (1,27) - .060 (1,52) | .312 (7,92 X .375 (9,53) | |

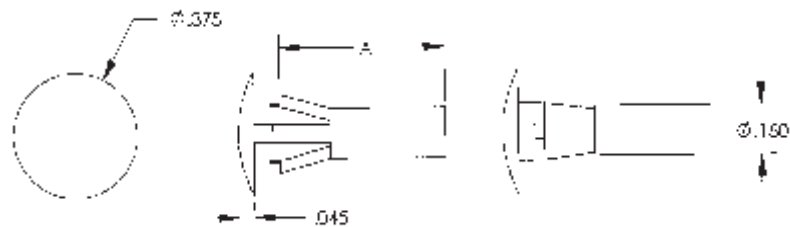


New Sizes



REVERSE LOCKING CIRCUIT BOARD SUPPORTS

| ITEM NUMBER | DESCRIPTION | A | B | C | D |
|-------------|-------------|--------------|----------------|--------------|-------------|
| 27RV00250 | RV 250 | .375 (9,53) | 11/32" (8,71) | .250 (6,35) | .060 (1,52) |
| 27RV00375 | RV 375 | .375 (9,53) | 11/32" (8,71) | .375 (9,53) | .060 (1,52) |
| 27RV00625 | RV 625 | 1/2" (12,70) | 13/32" (10,31) | 5/8" (15,88) | .063 (1,60) |



REVERSE LOCKING CIRCUIT BOARD SUPPORT STANDOFF

| ITEM NUMBER | DESCRIPTION | HEAD DIA. | BODY DIA. | HEAD HEIGHT | HOLE SIZE | A |
|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| 27RVS00500 | RVS 500 | .375 (9,53) | .150 (3,81) | .045 (1,14) | .178 (4,52) | .500 (12,70) |

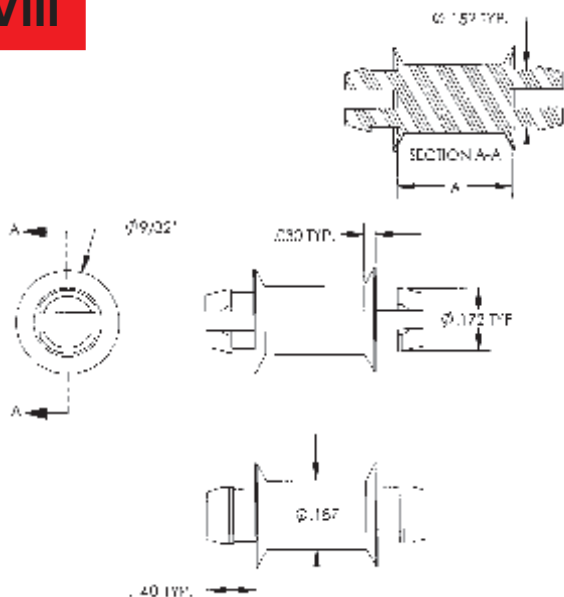
CIRCUIT BOARD HARDWARE

SECTION VIII

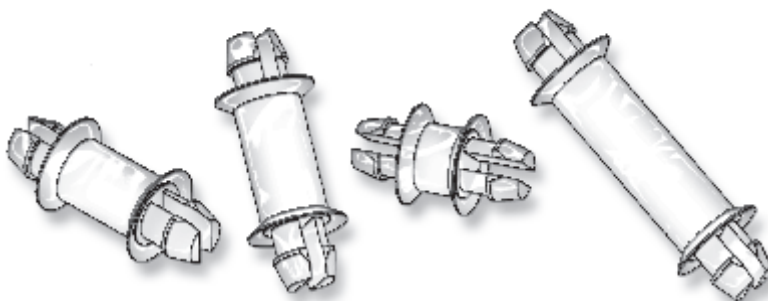
HOLE "DSP" SERIES - BOTH ENDS FITS A .156" HOLE
PANEL THICKNESS 1/16"

"DSP" SERIES

| ITEM NUMBER | DESCRIPTION | "A" * |
|-------------|-------------|---------------|
| 27DSP00125 | DSP 125 | .125 (3,18) |
| 27DSP00250 | DSP 250 | .250 (6,35) |
| 27DSP00260 | DSP 260 | .260 (6,60) |
| 27DSP00276 | DSP 276 | .276 (7,00) |
| 27DSP00312 | DSP 312 | .312 (7,92) |
| 27DSP00375 | DSP 375 | .375 (9,53) |
| 27DSP00437 | DSP 437 | .437 (11,11) |
| 27DSP00472 | DSP 472 | .472 (12,00) |
| 27DSP00500 | DSP 500 | .500 (12,70) |
| 27DSP00625 | DSP 625 | .625 (15,88) |
| 27DSP00750 | DSP 750 | .750 (19,05) |
| 27DSP00788 | DSP 788 | .788 (20,02) |
| 27DSP00875 | DSP 875 | .875 (22,23) |
| 27DSP01000 | DSP 1000 | 1.000 (25,40) |
| 27DSP01250 | DSP 1250 | 1.250 (31,75) |



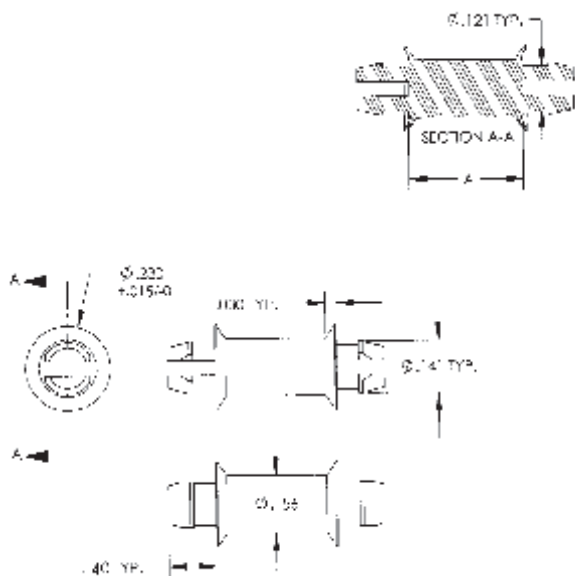
NYLON CIRCUIT BOARD POSTS



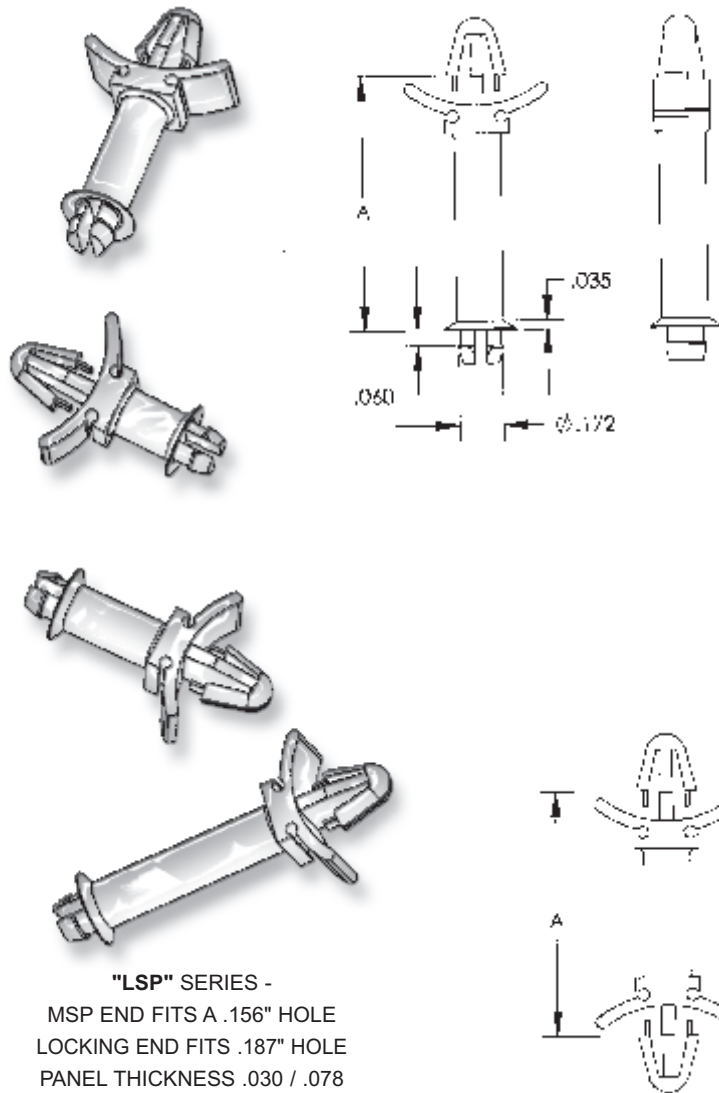
HOLE "DMSP" SERIES - BOTH ENDS FIT A .125" HOLE
PANEL THICKNESS 1/16"

"DMSP" SERIES

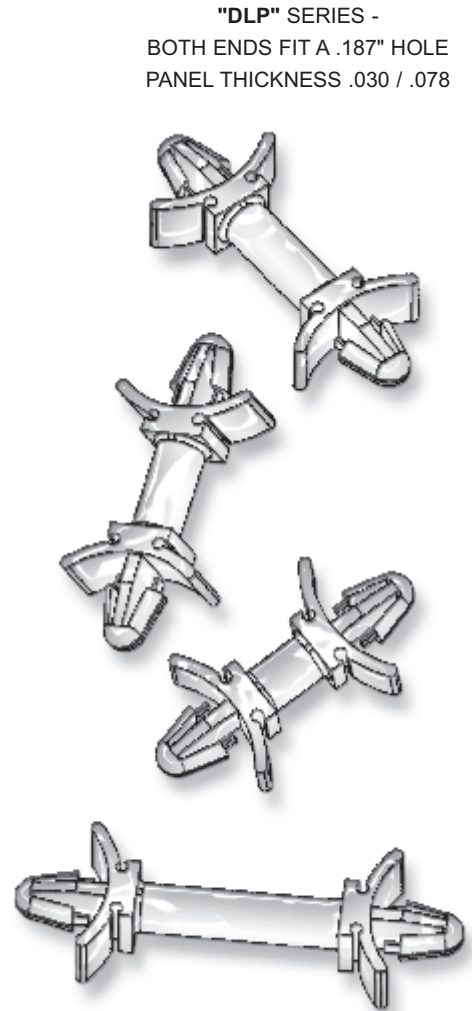
| ITEM NUMBER | DESCRIPTION | "A" * |
|-------------|-------------|---------------|
| 27DMSP00125 | DMSP 125 | .125 (3,18) |
| 27DMSP00250 | DMSP 250 | .250 (6,35) |
| 27DMSP00312 | DMSP 312 | .312 (7,92) |
| 27DMSP00375 | DMSP 375 | .375 (9,53) |
| 27DMSP00437 | DMSP 437 | .437 (11,11) |
| 27DMSP00500 | DMSP 500 | .500 (12,70) |
| 27DMSP00625 | DMSP 625 | .625 (15,88) |
| 27DMSP00720 | DMSP 720 | .720 (18,29) |
| 27DMSP00750 | DMSP 750 | .750 (19,05) |
| 27DMSP00820 | DMSP 820 | .820 (20,83) |
| 27DMSP00875 | DMSP 875 | .875 (22,23) |
| 27DMSP00950 | DMSP 950 | .950 (24,13) |
| 27DMSP01000 | DMSP 1000 | 1.000 (25,40) |



NYLON P.C.B. SUPPORTS



"LSP" SERIES -
MSP END FITS A .156" HOLE
LOCKING END FITS .187" HOLE
PANEL THICKNESS .030 / .078



"DLP" SERIES -
BOTH ENDS FIT A .187" HOLE
PANEL THICKNESS .030 / .078

New Sizes

"LSP" SERIES

"A" * EQUAL TO
THE DISTANCE
OVER PANELS.

| ITEM NUMBER | DESCRIPTION | "A" * |
|-------------|-------------|---------------|
| 27LSP00187 | LSP 187 | .307 (7,80) |
| 27LSP00250 | LSP 250 | .365 (9,27) |
| 27LSP00375 | LSP 375 | .495 (12,57) |
| 27LSP00437 | LSP 437 | .557 (14,15) |
| 27LSP00500 | LSP 500 | .625 (15,88) |
| 27LSP00625 | LSP 625 | .745 (18,92) |
| 27LSP00750 | LSP 750 | .870 (22,10) |
| 27LSP00875 | LSP 875 | .995 (25,27) |
| 27LSP01000 | LSP 1000 | 1.120 (28,45) |
| 27LSP01125 | LSP 1125 | 1.245 (31,62) |
| 27LSP01250 | LSP 1250 | 1.370 (34,80) |
| 27LSP01375 | LSP 1375 | 1.495 (37,97) |

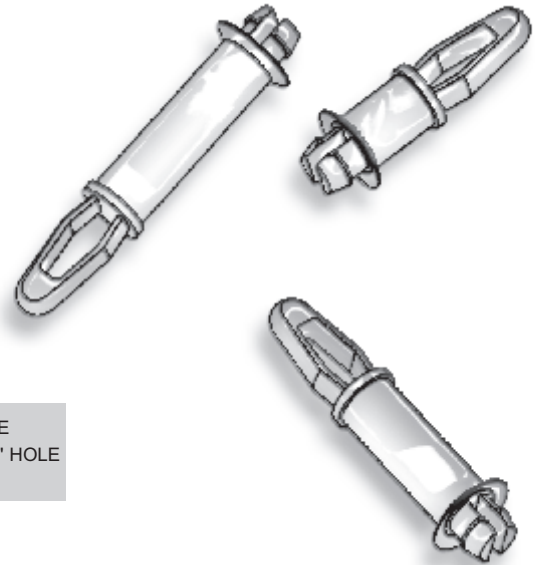
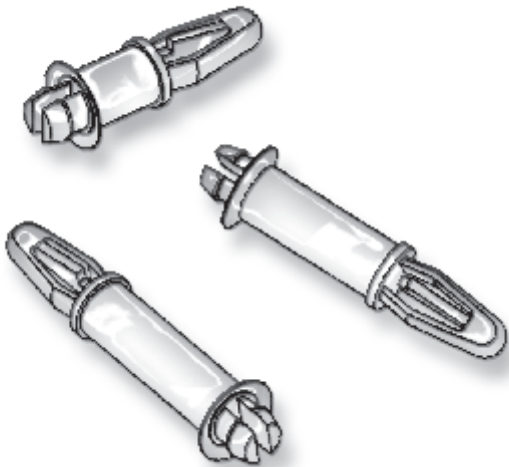
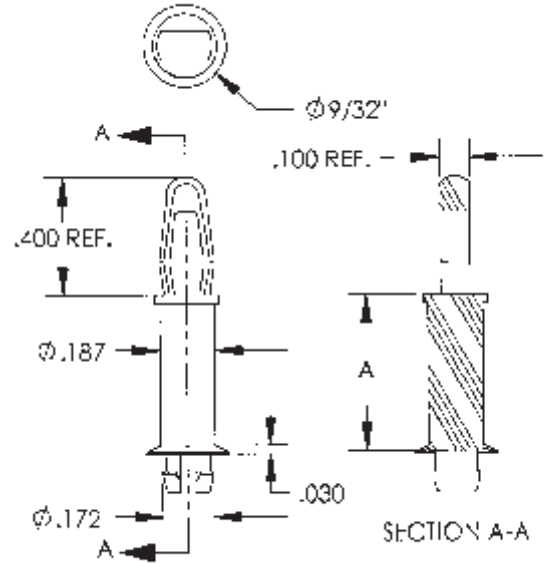
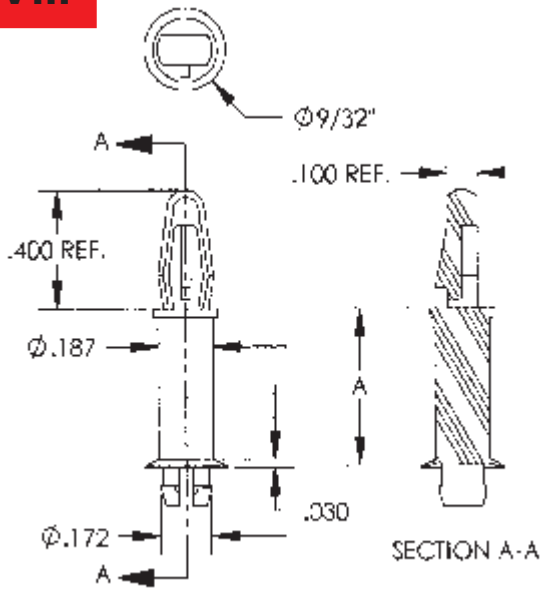
"DLP" SERIES

"A" * EQUAL TO
THE DISTANCE
OVER PANELS.

| ITEM NUMBER | DESCRIPTION | "A" * |
|-------------|-------------|---------------|
| 27DLP00187 | DLP 187 | .307 (7,80) |
| 27DLP00250 | DLP 250 | .365 (9,27) |
| 27DLP00295 | DLP 295 | .422 (10,72) |
| 27DLP00375 | DLP 375 | .495 (12,57) |
| 27DLP00437 | DLP 437 | .557 (14,15) |
| 27DLP00500 | DLP 500 | .625 (15,88) |
| 27DLP00625 | DLP 625 | .745 (18,92) |
| 27DLP00750 | DLP 750 | .870 (22,10) |
| 27DLP00875 | DLP 875 | .995 (25,27) |
| 27DLP01000 | DLP 1000 | 1.120 (28,45) |
| 27DLP01125 | DLP 1125 | 1.245 (31,62) |
| 27DLP01250 | DLP 1250 | 1.370 (34,80) |
| 27DLP01375 | DLP 1375 | 1.495 (37,97) |

CIRCUIT BOARD HARDWARE

SECTION VIII



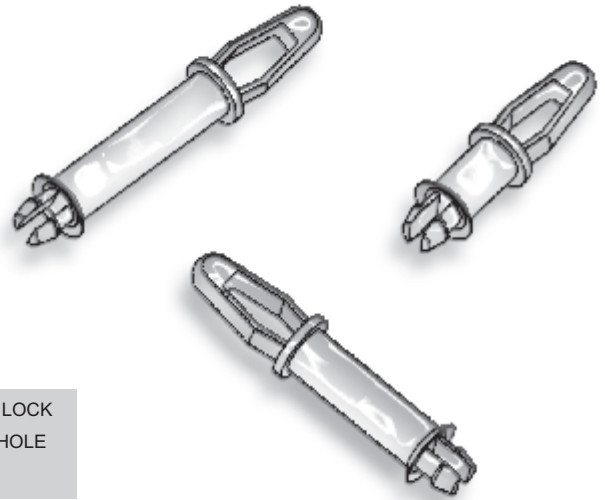
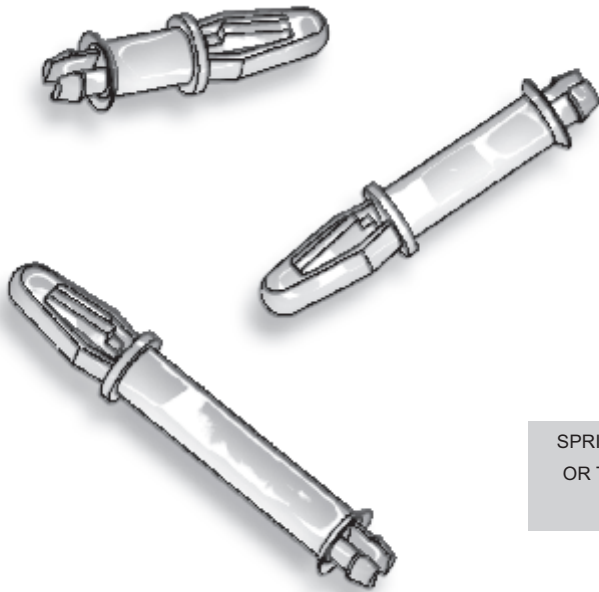
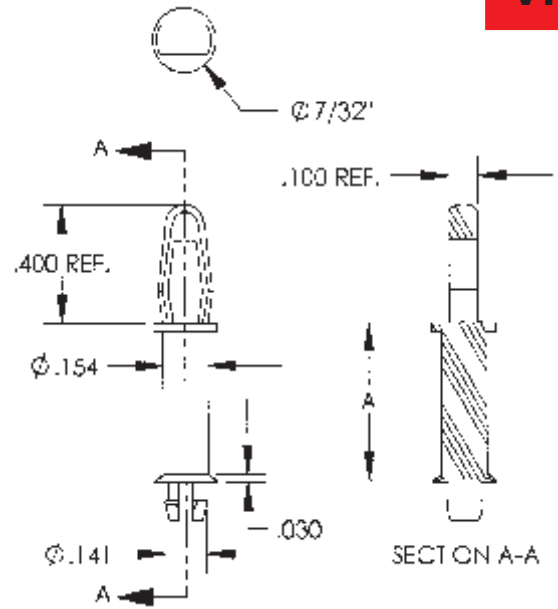
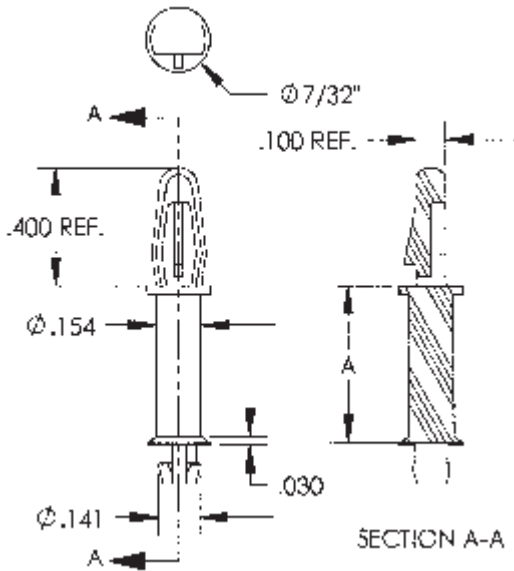
SPRING END FITS .156" HOLE
 LOCK OR TENSION END FITS .156" HOLE
 PANEL THICKNESS 1/16"

NYLON P.C.B. SUPPORTS "LCSP" SERIES

| ITEM NUMBER | DESCRIPTION | "A" |
|-------------|-------------|---------------|
| 27LCSP00125 | LCSP 125 | .125 (3,18) |
| 27LCSP00250 | LCSP 250 | .250 (6,35) |
| 27LCSP00312 | LCSP 312 | .312 (7,92) |
| 27LCSP00375 | LCSP 375 | .375 (9,53) |
| 27LCSP00437 | LCSP 437 | .437 (11,11) |
| 27LCSP00500 | LCSP 500 | .500 (12,70) |
| 27LCSP00625 | LCSP 625 | .625 (15,88) |
| 27LCSP00750 | LCSP 750 | .750 (19,05) |
| 27LCSP00875 | LCSP 875 | .875 (22,23) |
| 27LCSP01000 | LCSP 1000 | 1.000 (25,40) |

NYLON P.C.B. SUPPORTS "TCSP" SERIES

| ITEM NUMBER | DESCRIPTION | "A" |
|-------------|-------------|---------------|
| 27TCSP00125 | TCSP 125 | .125 (3,18) |
| 27TCSP00250 | TCSP 250 | .250 (6,35) |
| 27TCSP00312 | TCSP 312 | .312 (7,92) |
| 27TCSP00375 | TCSP 375 | .375 (9,53) |
| 27TCSP00437 | TCSP 437 | .437 (11,11) |
| 27TCSP00500 | TCSP 500 | .500 (12,70) |
| 27TCSP00625 | TCSP 625 | .625 (15,88) |
| 27TCSP00750 | TCSP 750 | .750 (19,05) |
| 27TCSP00875 | TCSP 875 | .875 (22,23) |
| 27TCSP01000 | TCSP 1000 | 1.000 (25,40) |



SPRING END FITS .156" HOLE LOCK
OR TENSION END FITS .125" HOLE
PANEL THICKNESS 1/16"

NYLON P.C.B. SUPPORTS "LMSP" SERIES

| ITEM NUMBER | DESCRIPTION | "A" |
|-------------|-------------|---------------|
| 27LMSP00125 | LMSP 125 | .125 (3,18) |
| 27LMSP00250 | LMSP 250 | .250 (6,35) |
| 27LMSP00312 | LMSP 312 | .312 (7,92) |
| 27LMSP00375 | LMSP 375 | .375 (9,53) |
| 27LMSP00437 | LMSP 437 | .437 (11,11) |
| 27LMSP00500 | LMSP 500 | .500 (12,70) |
| 27LMSP00625 | LMSP 625 | .625 (15,88) |
| 27LMSP00750 | LMSP 750 | .750 (19,05) |
| 27LMSP00875 | LMSP 875 | .875 (22,23) |
| 27LMSP01000 | LMSP 1000 | 1.000 (25,40) |

NYLON P.C.B. SUPPORTS "TMSP" SERIES

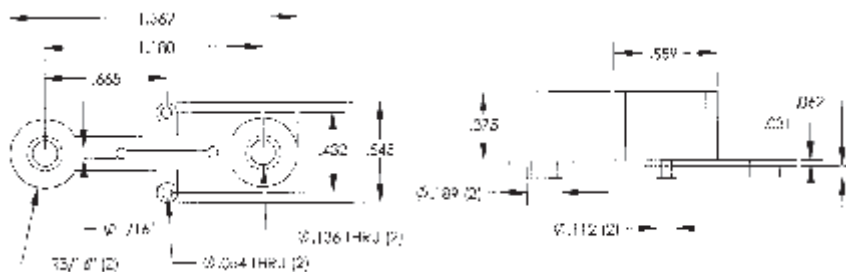
| ITEM NUMBER | DESCRIPTION | "A" |
|-------------|-------------|---------------|
| 27TMSP00125 | TMSP 125 | .125 (3,18) |
| 27TMSP00250 | TMSP 250 | .250 (6,35) |
| 27TMSP00312 | TMSP 312 | .312 (7,92) |
| 27TMSP00375 | TMSP 375 | .375 (9,53) |
| 27TMSP00437 | TMSP 437 | .437 (11,11) |
| 27TMSP00500 | TMSP 500 | .500 (12,70) |
| 27TMSP00625 | TMSP 625 | .625 (15,88) |
| 27TMSP00750 | TMSP 750 | .750 (19,05) |
| 27TMSP00875 | TMSP 875 | .875 (22,23) |
| 27TMSP01000 | TMSP 1000 | 1.000 (25,40) |

CIRCUIT BOARD HARDWARE

SECTION VIII

POWER TRANSISTOR MOUNTS

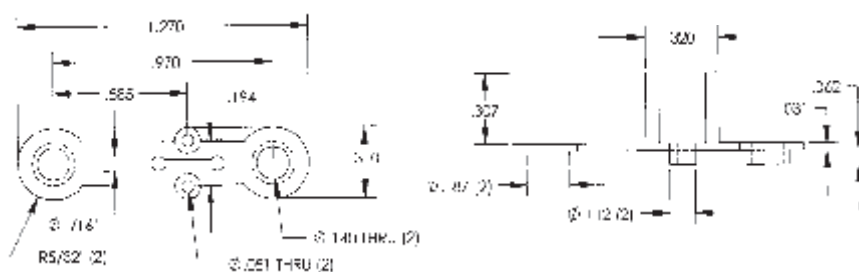
Simplify power transistor mountings and insulation, and improve thermal efficiency with molded insulators. These insulators are molded of Type 66 Nylon for regular applications and of Glass Filled Polyester for heavy-duty uses. They replace up to six pieces of conventional insulation required with previous mountings. They also increase the amount of interface surface between device and sink by minimizing clearance holes required for all feed-thru connectors. They also have a built-in barrier which not only eliminates need for sleeving of base and emitter connections but also serves as an assembly aid during installation.



PTI-1 for TO-3

| ITEM NUMBER | DESCRIPTION |
|-------------|-------------------|
| 19PT11 | PTI-1 |
| 18PT11WOB | PTI-1 W/O BARRIER |

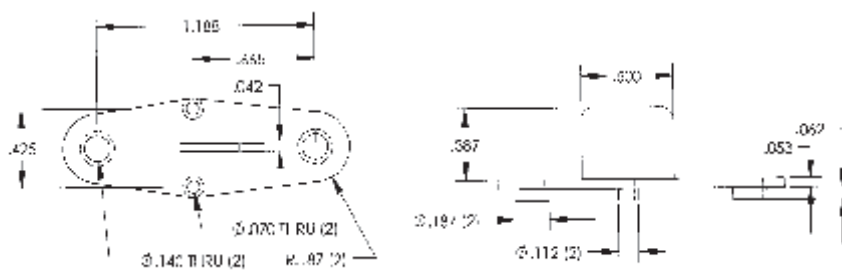
STANDARD



PTI-2 for TO-66

| ITEM NUMBER | DESCRIPTION |
|-------------|-------------------|
| 19PT12 | PTI-2 |
| 18PT12WOB | PTI-2 W/O BARRIER |

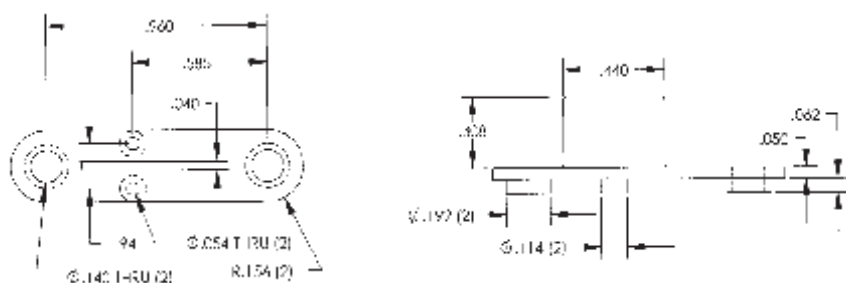
STANDARD



PTI-1-H for TO-3

| ITEM NUMBER | DESCRIPTION |
|-------------|----------------------|
| 20PT11HD | PTI-1 HD |
| 18PT11HDWOB | PTI-1 HD W/O BARRIER |

HEAVY DUTY



PTI-2-H for TO-66

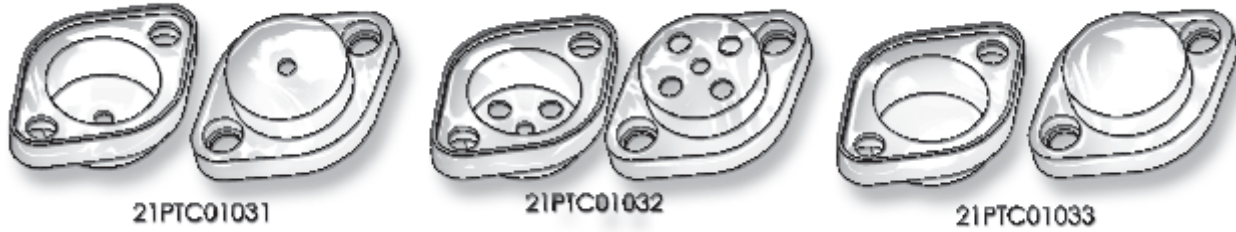
| ITEM NUMBER | DESCRIPTION |
|-------------|----------------------|
| 20PT12HD | PTI-2 HD |
| 18PT12HDWOB | PTI-2 HD W/O BARRIER |

HEAVY DUTY

CIRCUIT BOARD HARDWARE

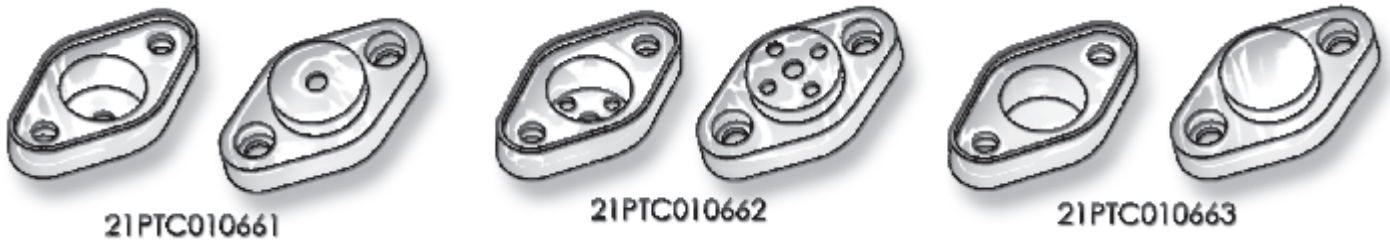
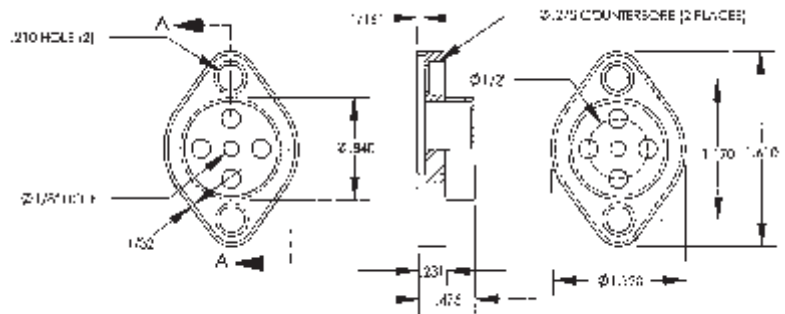
SECTION
VIII

Micro Plastics' Power Transistor Covers are available in both TO-3 and TO-66 configurations. Both 1 hole, 5 hole and no hole styles are offered. Transistor covers are stocked in Nylon 6/6. Other materials are available upon request.



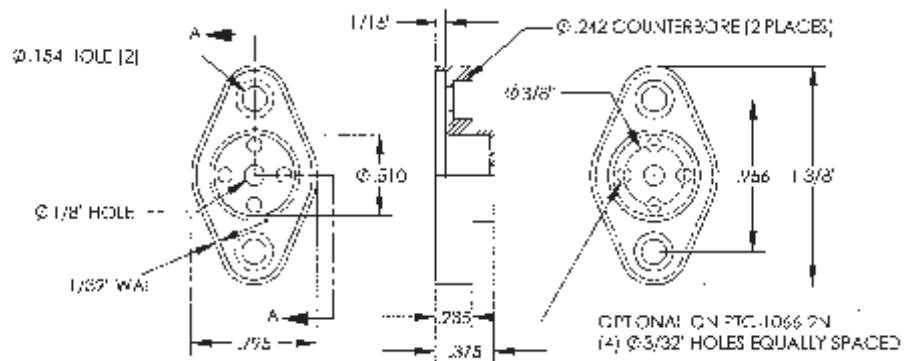
POWER TRANSISTOR COVERS TO-3

| ITEM NUMBER | DESCRIPTION |
|-------------|--------------------|
| 21PTC01031 | PTC 103-1N 1 HOLE |
| 21PTC01032 | PTC103-2N 5 HOLE |
| 21PTC01033 | PTC 103-ON NO HOLE |



POWER TRANSISTOR COVERS TO-66

| ITEM NUMBER | DESCRIPTION |
|-------------|--------------------|
| 21PTC010661 | PTC1066-1N 1-HOLE |
| 21PTC010662 | PTC1066-2N 5-HOLE |
| 21PTC010663 | PTC1066-ON NO HOLE |



HOSE CLAMPS AND INSTALLATION TOOLS

SECTION IX

- APPLIANCE -

Dishwashers, laundry, refrigerators, food preparation equipment.

- ELECTRICAL/ELECTRONIC -

Positioning and placement of components and wiring.

- R.V./BOATING -

Plumbing and Accessories.

- AUTOMOTIVE -

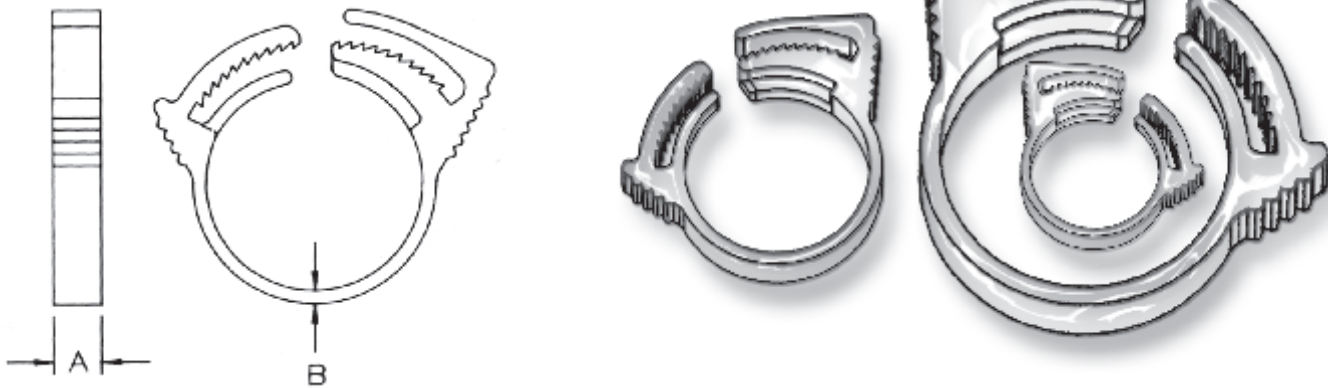
Underhood applications, Heat-Stabilized material is available, call for details.

Micro Plastics' Premium Nylon Hose Clamps provide a superior seal on hose or tubing through their Patented interlocking design by eliminating the leak path created by the overlapping ring design hose clamps. As interlocking grooves are ratcheted together the sealing diameter of the fastener is aligned in parallel, creating a uniform clamping surface. Clamps may be removed by separating the clamping halves in a perpendicular direction at the seal.

Easy installation on most liquid, gas, or vacuum lines.

Nylon clamps are tough, corrosion resistant and resilient.

Parts are removable and reusable.



PREMIUM NYLON HOSE CLAMPS

PATENTED INTERLOCKING DESIGN ELIMINATES LEAK

| ITEM NUMBER | DESCRIPTION | A | * +/- .015" | | CLAMPING RANGE | |
|-------------|---------------------|----------------|--------------|---------------|----------------|--|
| | | | B* | MIN. | MAX | |
| 22HC0250 | 1/4" Hose Clamp | 7/32" (5,56) | 3/64" (1,19) | .246 (6,25) | .290 (7,37) | |
| 22HC0312 | 5/16" Hose Clamp | 7/32" (5,56) | 1/16" (1,59) | .300 (7,62) | .350 (8,89) | |
| 22HC0344 | 11/32" Hose Clamp | 7/32" (5,56) | 1/16" (1,59) | .360 (9,14) | .406 (10,31) | |
| 22HC0406 | 13/32" Hose Clamp | 1/4" (6,35) | 1/16" (1,59) | .410 (10,41) | .468 (11,89) | |
| 22HC0468 | 15/32" Hose Clamp | 7/32" (5,56) | 1/16" (1,59) | .475 (12,07) | .536 (13,61) | |
| 22HC0531 | 17/32" Hose Clamp | 1/4" (6,35) | 1/16" (1,59) | .538 (13,67) | .608 (15,44) | |
| 22HC0593 | 19/32" Hose Clamp | 1/4" (6,35) | 1/16" (1,59) | .597 (15,16) | .665 (16,89) | |
| 22HC0672 | 43/64" Hose Clamp | 7/32" (5,56) | 1/16" (1,59) | .670 (17,02) | .780 (19,81) | |
| 22HC0750 | 3/4" Hose Clamp | 7/32" (5,56) | 1/16" (1,59) | .730 (18,54) | .830 (21,08) | |
| 22HC0813 | 13/16" Hose Clamp | .216" (5,49) | .062 (1,57) | .750(19,05) | .875 (22,23) | |
| 22HC0875 | 7/8" Hose Clamp | 7/32" (5,56) | 1/16" (1,59) | .870 (22,10) | .975 (24,77) | |
| 22HC0953 | 61/64" Hose Clamp | 1/4" (6,35) | 1/16" (1,59) | .953 (24,21) | 1.093 (27,76) | |
| 22HC1031 | 1-1/32" Hose Clamp | 5/16" (7,94) | 1/16" (1,59) | 1.031 (26,19) | 1.187 (30,15) | |
| 22HC1250 | 1-1/4" Hose Clamp | 5/16" (7,94) | 1/16" (1,59) | 1.250 (31,75) | 1.425 (36,20) | |
| 22HC1406 | 1-13/32" Hose Clamp | 11/32" (8,73) | 1/16" (1,59) | 1.406 (35,71) | 1.610 (40,89) | |
| 22HC1593 | 1-19/32" Hose Clamp | 11/32" (8,73) | 1/16" (1,59) | 1.593 (40,46) | 1.812 (46,02) | |
| 22HC1687 | 1-11/16" Hose Clamp | 11/32" (8,73)) | 1/16" (1,59) | 1.790 (45,47) | 2.110 (53,59) | |
| 22HC1875 | 1-7/8" Hose Clamp | 13/32" (10,32) | 1/16" (1,59) | 1.870 (47,50) | 2.125 (53,98) | |
| 22HC2125 | 2-1/8" Hose Clamp | 13/32" (10,32) | 1/16" (1,59) | 2.120 (53,85) | 2.390 (60,71) | |

HOSE CLAMPS AND INSTALLATION TOOLS

- APPLIANCE -

Dishwashers, laundry, refrigerators, food preparation equipment.

- ELECTRICAL/ELECTRONIC -

Positioning and placement of components and wiring.

- R.V./BOATING -

Plumbing and Accessories.

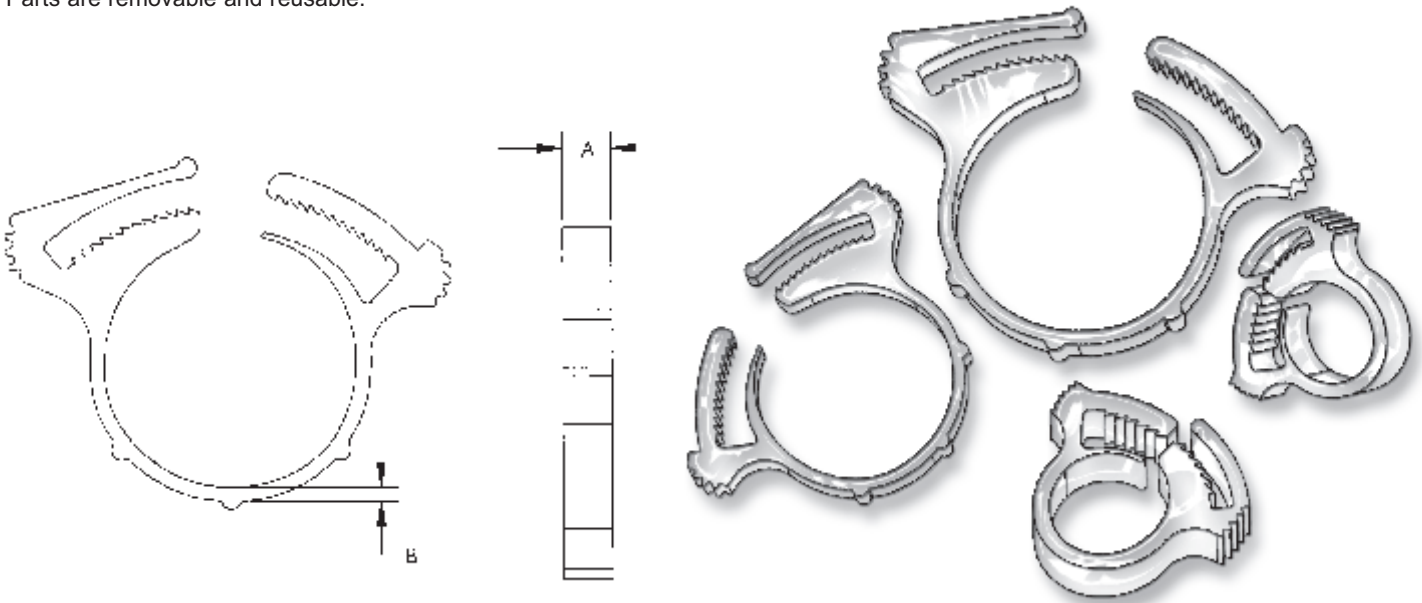
- AUTOMOTIVE -

Underhood applications, Heat-Stabilized material is available, call for details.

Micro Plastics' Standard Nylon Hose Clamps are based on the original design for this type of fastener. A overlapping tapered ring of nylon is fastened around the hose or tubing desired and secured to the required tightness by compressing interacting grooves in a ratcheting fashion, creating a tight sealing application. Clamps may be removed by separating the clamping halves in perpendicular direction at the seal.

Nylon clamps are tough, corrosion resistant and resilient.

Parts are removable and reusable.



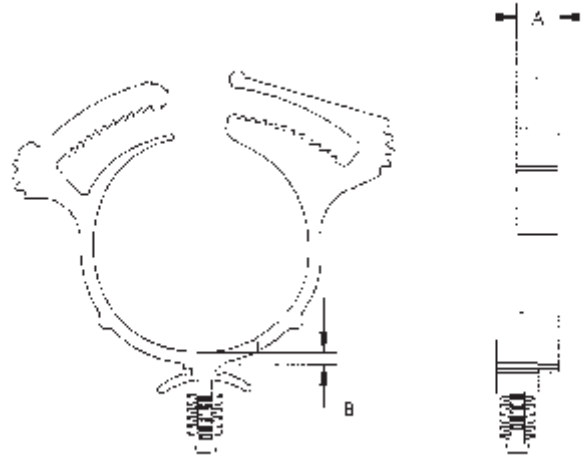
STANDARD NYLON HOSE CLAMPS

| ITEM NUMBER | DESCRIPTION | A | +/- .015" | | CLAMPING RANGE | |
|-------------|----------------|-------------|-------------|---------------|----------------|--|
| | | | B | MIN. | MAX | |
| 22HSC0010 | 1.0 Hose Clamp | .156 (3,96) | .040 (1,02) | .250 (6,35) | .281 (7,14) | |
| 22HSC0015 | 1.5 Hose Clamp | .150 (3,81) | .050 (1,27) | .307 (7,80) | .342 (8,69) | |
| 22HSC0020 | 2 Hose Clamp | .230 (5,84) | .070 (1,78) | .360 (9,14) | .395 (10,03) | |
| 22HSC0040 | 4 Hose Clamp | .230 (5,84) | .070 (1,78) | .404 (10,26) | .452 (11,48) | |
| 22HSC0060 | 6 Hose Clamp | .230 (5,84) | .070 (1,78) | .449 (11,70) | .511 (12,98) | |
| 22HSC0080 | 8 Hose Clamp | .230 (5,84) | .070 (1,78) | .513 (13,03) | .586 (14,88) | |
| 22HSC0100 | 10 Hose Clamp | .230 (5,84) | .070 (1,78) | .569 (14,45) | .650 (16,51) | |
| 22HSC0120 | 12 Hose Clamp | .230 (5,84) | .070 (1,78) | .616 (15,65) | .707 (17,96) | |
| 22HSC0140 | 14 Hose Clamp | .230 (5,84) | .070 (1,78) | .702 (17,83) | .801 (20,35) | |
| 22HSC0180 | 18 Hose Clamp | .230 (5,84) | .070 (1,78) | .779 (19,79) | .899 (22,83) | |
| 22HSC0190 | 19 Hose Clamp | .230 (5,84) | .070 (1,78) | .859 (21,82) | .989 (25,12) | |
| 22HSC0220 | 22 Hose Clamp | .250 (6,35) | .070 (1,78) | .928 (23,57) | 1.072 (27,23) | |
| 22HSC0240 | 24 Hose Clamp | .250 (6,35) | .070 (1,78) | .990 (25,15) | 1.135 (28,83) | |
| 22HSC0280 | 28 Hose Clamp | .280 (7,11) | .070 (1,78) | 1.123 (28,52) | 1.296 (32,92) | |

HOSE CLAMPS AND INSTALLATION TOOLS

SECTION IX

STANDARD HOSE CLAMPS FIN CLIP BASE



| ITEM NUMBER | A | B | CLAMPING RANGE | | HOLE SIZE | PANEL RANGE |
|--------------|-------------|-------------|----------------|---------------|-------------|---------------------------|
| | | | MIN. | MAX | | |
| 22HCFC037188 | .230 (5,84) | .070 (1,78) | .360 (9,14) | .395 (10,03) | .187 (4,75) | 1/32" (0,79) - 1/4 (6,35) |
| 22HCFC106188 | .250 (6,35) | .070 (1,78) | .990 (25,15) | 1.135 (28,83) | .187 (4,75) | 1/32" (0,79) - 1/4 (6,35) |

HOSE CLAMP INSTALLATION TOOLS

Micro Plastics' Pneumatic -Ergonomic Hose Clamp Installation Tool has been carefully designed to help reduce the wrist fatigue associated with the rapid assembly of Nylon Hose Clamps. The easy trigger-type actuation of this air tool, in combination with the ergonomic angle of the hand grip, allows natural alignment of the wrist and hand during normal clamp installation. The tool operates on standard shop air from 30-100 PSE. Lightweight, only 18 ounces. Tools are configured prior to shipping. Please specify Hose Clamp sizes to be installed when ordering.

NOT AVAILABLE FOR HOSE CLAMP SIZES LARGER THAN .953



**PNEUMATIC ERGONOMIC
HOSE CLAMP TOOL**
ITEM NUMBER
22PHCET0100

PATENTED



PATENTED

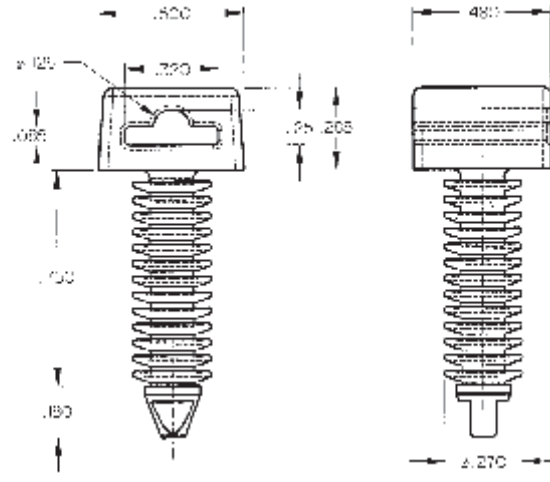
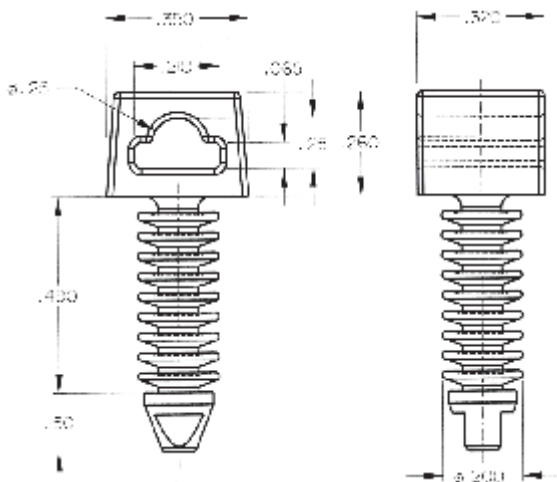
**PNEUMATIC
HOSE CLAMP TOOL**
ITEM NUMBER
22PHCT0100

CABLE TIE MOUNTING HARDWARE

SECTION
X

FIN CLIP PUSH MOUNTS

"Fin clip push mounts" are available in 2 sizes for 3/16" and 1/4" diameter holes. The special head configuration allows use with beaded ties, as well as conventional cable ties. Parts are molded in black U.V. stabilized high density polyethylene, and are suitable for use in pre-drilled holes in wood, masonry, and a variety of other materials.



TOLERANCE +/- .015"

| ITEM NUMBER | DESCRIPTION |
|-------------|-------------------------|
| 23FCPM18765 | 3/16" (4,76) PUSH MOUNT |

| ITEM NUMBER | DESCRIPTION |
|-------------|------------------------|
| 23FCPM25095 | 1/4" (6,35) PUSH MOUNT |

Watch Instructional Video

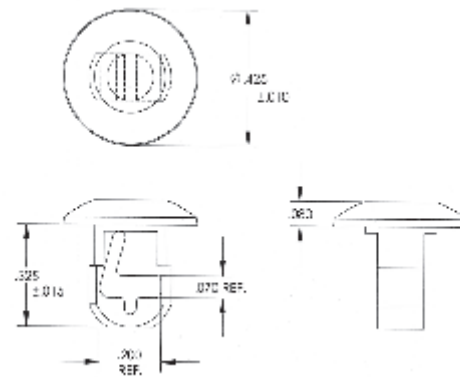
[mms://www.microplastics.com/productvideos/CableTieMount.asf](https://www.microplastics.com/productvideos/CableTieMount.asf)



Cable tie mount for use when both sides of the panel are accessible.

CABLE TIE MOUNT

| ITEM NUMBER | DESCRIPTION |
|-------------|-----------------|
| 23TA250125 | Cable Tie Mount |

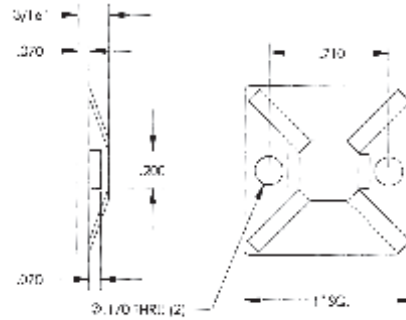
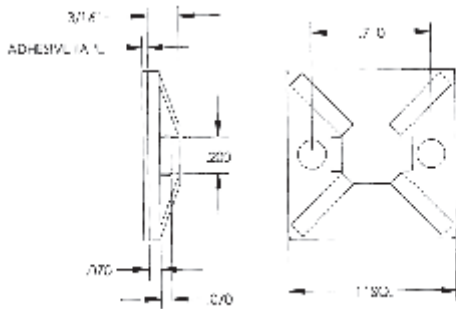
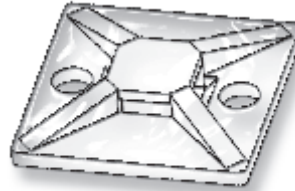
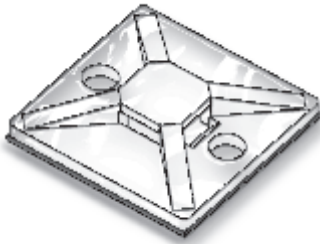


CABLE TIE MOUNTING HARDWARE

SECTION X

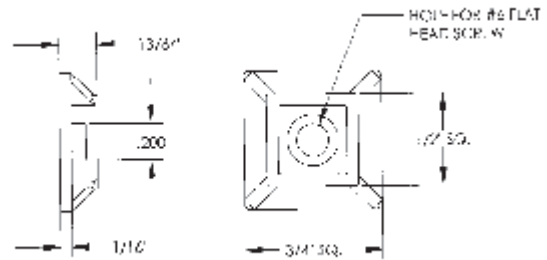
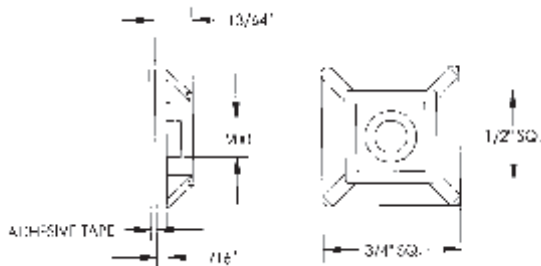
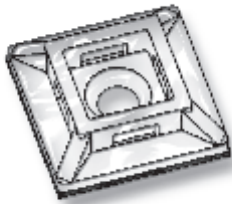
CRADLE MOUNTS

Cradle Mounts are used in applications where a low profile is necessary. Each mount offers a four way entry and is secured with either a screw or adhesive backing. 23TA00420 is secured with a #2 - #4 or #6 screw, 23TA00495 uses #6 Flat Head Screw. NOTE: the adhesive mounts have an acrylic foam backing that should be used on a smooth, clean, dry surface.



| ITEM NUMBER | DESCRIPTION |
|-------------|------------------------------------|
| 23TA00400 | 1" (25,40) CRADLE MOUNT (ADHESIVE) |

| ITEM NUMBER | DESCRIPTION |
|-------------|---------------------------------|
| 23TA00420 | 1" (25,40) CRADLE MOUNT (SCREW) |



| ITEM NUMBER | DESCRIPTION |
|-------------|--------------------------------------|
| 23TA00475 | 3/4" (19,05) CRADLE MOUNT (ADHESIVE) |

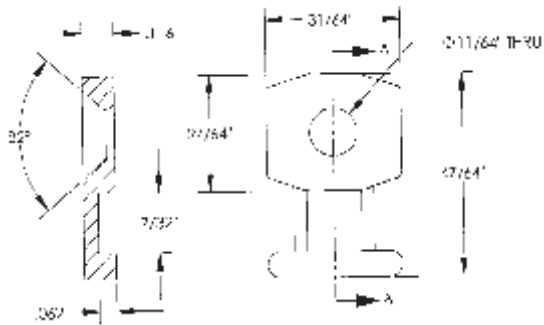
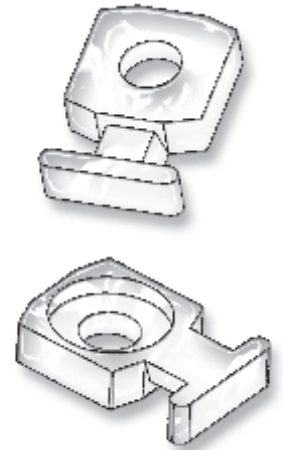
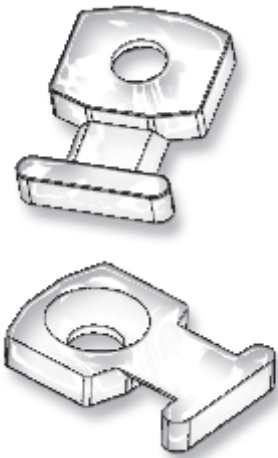
| ITEM NUMBER | DESCRIPTION |
|-------------|-----------------------------------|
| 23TA00495 | 3/4" (19,05) CRADLE MOUNT (SCREW) |

CABLE TIE MOUNTING HARDWARE

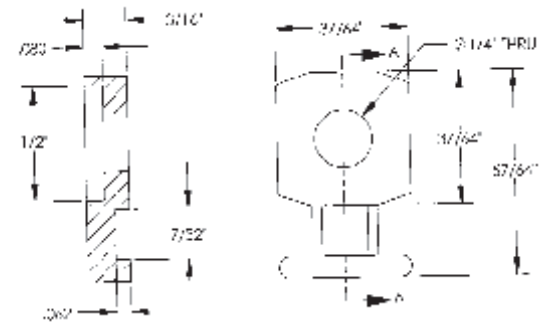
SECTION
X

SCREW TABS

Screw Tabs are designed for use where space is limited. Tabs are fastened with a screw to provide a low profile assembly.



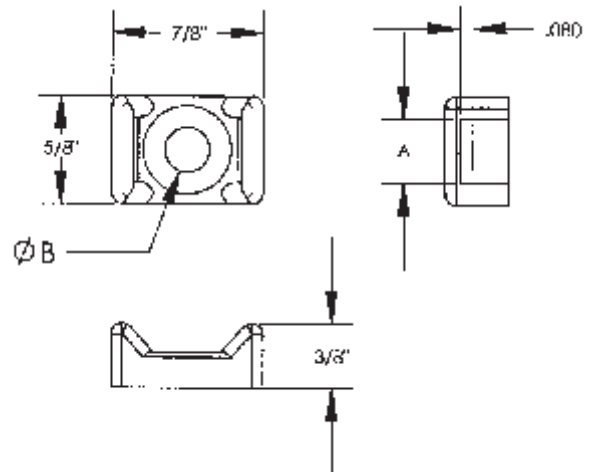
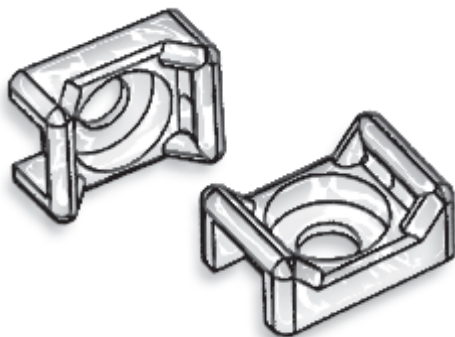
| ITEM NUMBER | DESCRIPTION |
|-------------|--------------|
| 23TA00200 | #8 SCREW TAB |



| ITEM NUMBER | DESCRIPTION |
|-------------|-----------------------|
| 23TA00250 | 1/4" (6,35) SCREW TAB |

CABLE TIE HOLDER

Screw mount tie holder offers a two way entry and is secured with a mounting screw. Molded in Nylon 6/6 natural color.



| ITEM NUMBER | A | B |
|-------------|-------------|----------------------------|
| 23TA00600 | .370 (9,40) | .260 (6,60) (1/4-20 SCREW) |
| 23TA00700 | .370 (9,40) | .195 (4,95) (10-32 SCREW) |

CABLE TIE MOUNTING HARDWARE

SECTION
X

CLIP MOUNTS

Clip Mounts are designed to securely connect a tie to a predrilled hole. Clip Mounts can be used in applications where the back of the panel is inaccessible.



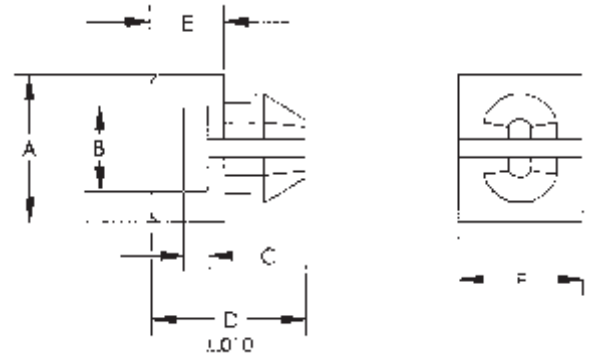
23TA00090



23TA00100



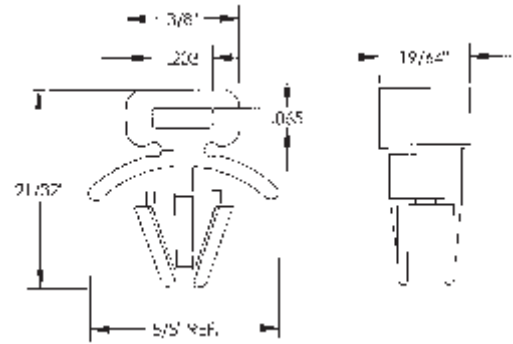
23TA00110



| ITEM NUMBER | A | B | C | D | E | F | HOLE SIZE | PANEL THICKNESS |
|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|-----------------|
| 23TA00090 | .320 (8,13) | .220 (5,59) | .050 (1,27) | .350 (8,89) | .150 (3,81) | .320 (8,13) | .187 (4,75) | .062 (1,57) |
| 23TA00100 | .380 (9,65) | .220 (5,59) | .065 (1,65) | .400 (10,16) | .190 (4,83) | .320 (8,13) | .187 (4,75) | .062 (1,57) |
| 23TA00110 | .380 (9,65) | .220 (5,59) | .065 (1,65) | .400 (10,16) | .190 (4,83) | .320 (8,13) | .250 (6,35) | .062 (1,57) |



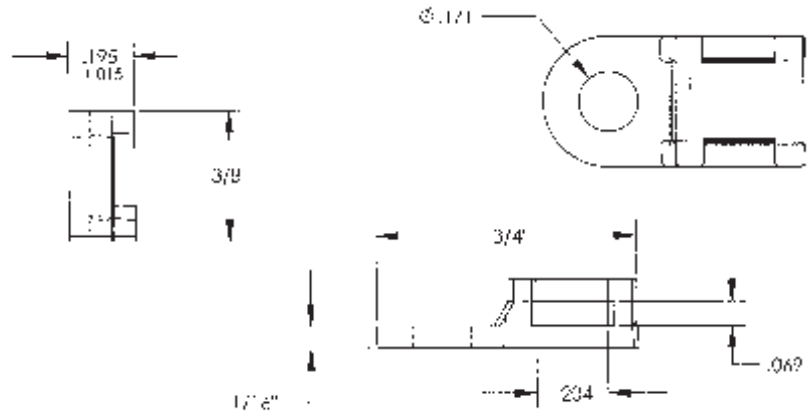
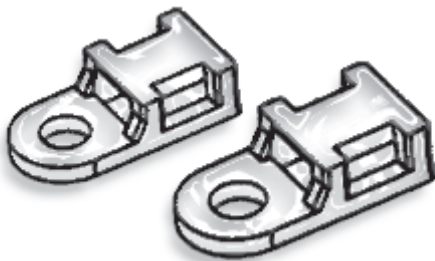
CLIP MOUNTS



| ITEM NUMBER | DESCRIPTION | HOLE SIZE | PANEL THICKNESS |
|-------------|------------------------|-------------|-----------------------|
| 23TA00120 | .250 (6,35) CLIP MOUNT | .250 (6,35) | .047-.108 (1,19/2,74) |

CLIP MOUNTS

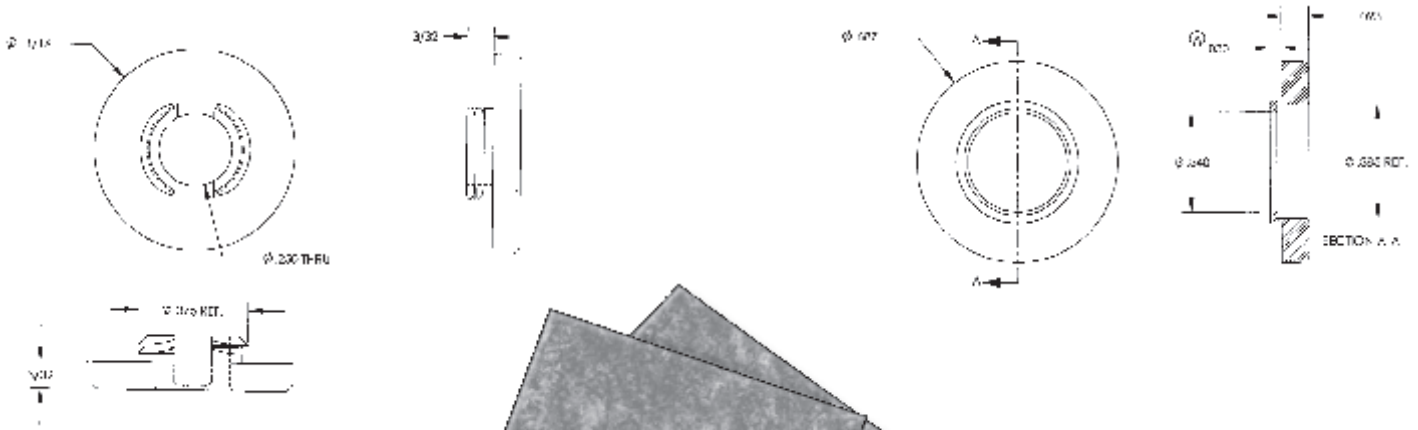
Screw clip mount tie holder offers a two way entry and is secured with a #8 mounting screw. Molded in Nylon 6/6 natural color.



| ITEM NUMBER | SCREW SIZE |
|-------------|-------------------|
| 23TA40170 | #8 MOUNTING SCREW |

TWO PIECE GROMMET

Two Piece Grommets are molded in corrosion resistant Nylon 6/6. The male and female parts are designed for easy hand assembly, simply press together. Male half has multiple latching details for approximate panel thickness of 1/32" and 1/16". Grommets can be used for reinforcing through holes and attaching samples of paper or cloth. Recommended hole size 7/16 diameter. Male and female grommets are packaged and sold separately.



ITEM
NUMBER

45GRMM250

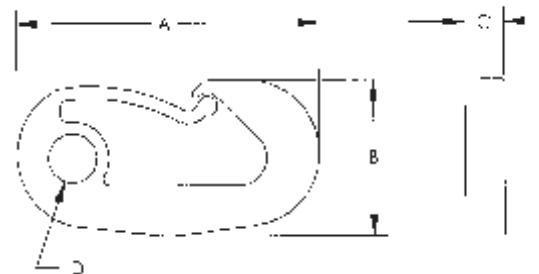
ITEM
NUMBER

45GRMF250

SNAP HOOKS



* +/- 1/16" TOLERANCE



Micro Plastics' Snap Hooks are ideal for light duty marine use, securing cargo to racks, miscellaneous automotive and home uses. The parts are made from UV resistant Nylon, which is perfect for outdoor use. The Snap Hooks will not scratch painted or decorative surfaces. Micro Plastics' design reduces the chance of accidental rope or eye release from snap end of hook.

| ITEM NUMBER | A* LENGTH | B* WIDTH | C THICKNESS | D HOLE DIA. | MAX. ROPE DIA. | MAX. LOAD |
|-------------|--------------|-------------|----------------|----------------|-------------------|--------------|
| 45SNHK250 | 1 19/32" | 27/32" | 5/16" | 1/4" | 1/4" | 5 LBS. |
| 45SNHK375 | 2 3/8" | 1 1/4" | 3/8" | 3/8" | 3/8" | 13 LBS. |
| 45SNHK500 | 3 5/32" | 1 21/32" | 13/32" | 1/2" | 1/2" | 40 LBS. |

MISCELLANEOUS PRODUCTS

SECTION XI

EXTENDIBLE POLE WITH THREADED END



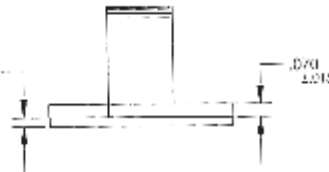
ITEM
NUMBER

45EXTPOLE

ADHESIVE CABLE CLIPS



.045 ADHESIVE TAPE
1mm



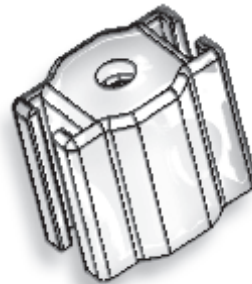
ITEM
NUMBER

45GUTADHCLIP

NOTE: CLIPS MUST BE PURCHASED IN MULTIPLES OF 25.

COMMERCIAL WIRE ROUTING KIT

- Elevated routing of wires and tubing without using a ladder.
- All component parts are molded in light weight impact resistant Nylon.



COMMERCIAL WIRE ROUTING KIT INCLUDES THE FOLLOWING

- 1 Nut that fits the extendible pole threads.
- 1 Applicator that snap fits into the nut and is used for applying adhesive backed wire clip to elevated surfaces.
- 1 Wiring hook that snaps into the nut for routing wire in elevated clips.
- 1 Instruction sheet.

NOTE: Adhesive backed clips and extension pole sold separately, (SEE ABOVE)



ITEM
NUMBER

DESCRIPTION

45INDWIREKIT Commercial Wiring Kit

EXPANDED COMMERCIAL WIRE ROUTING KIT

- Elevated routing of wires and tubing without using a ladder.
- Double backed foam adhesive on a Polyethylene clip.
- All component parts are molded in light weight impact resistant Nylon.
- Additional adhesive backed cable clips and extension poles sold separately, see page 210.



WIRING KIT INCLUDES THE FOLLOWING

- 1 One piece extendible pole with threaded end.
- 1 Nut that fits the extendible pole threads.
- 25 Adhesive backed wire routing cable clips.
- 1 Applicator that snap fits into the nut and is used for applying adhesive backed wire clip to elevated surfaces.
- 1 Wiring hook that snaps into the nut for routing wire in elevated clips.

| ITEM NUMBER | DESCRIPTION |
|-----------------|--------------------------------|
| 45EXPINDWIREKIT | Expanded Commercial Wiring Kit |

MISCELLANEOUS PRODUCTS

SECTION XI

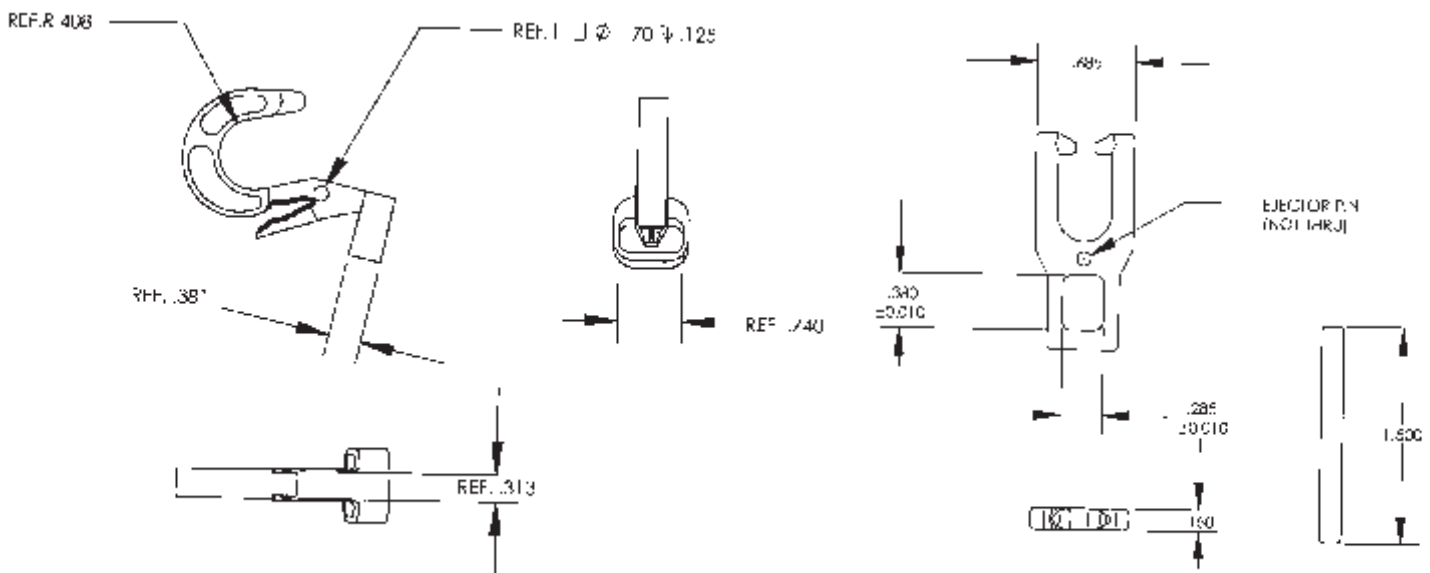
CORD HOOK AND RETAINER

Micro Plastics' cord hook is molded in U.V. resistant black impact modified nylon. Hook and retainer can be purchased separately or as a set not assembled. Hook is designed for use with 1/4 dia. thru 1/3 diameter cord. Simply loop the cord, insert through the guide area of the hook and pull down into the "V". Always tie a knot in the free end of the shock cord to prevent slippage. Cord assembly can be used for securing light cargo in cars, vans, trucks, and boats. The hooks will not scratch painted or decorative surfaces which makes it great for covers on boats and trailers.

THE FOLLOWING SAFETY PRECAUTIONS MUST BE FOLLOWED WHEN USING CORD

- Intended for light duty use only.
- Wear eye protection – end of cord could come loose and cause serious eye or bodily injury.
- Always tie a knot in the free end of the cord or rope.
- Do not exceed 20 lbs. total force on hook.
- Not recommended for use with shock cord.

Watch Instructional Video
<https://www.microplastics.com/productvideos/ShockCord.asf>

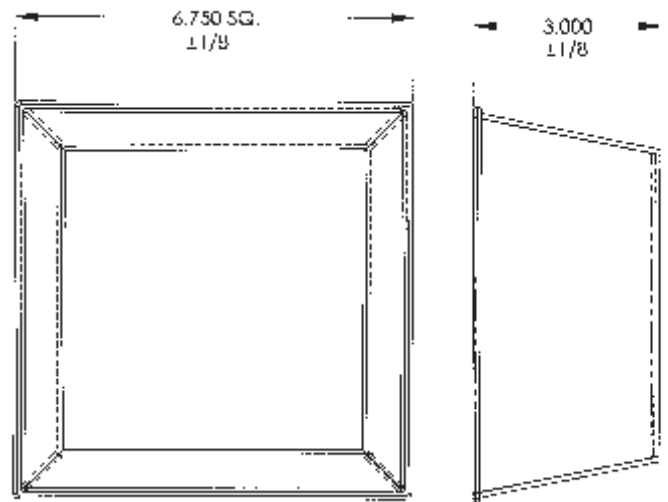
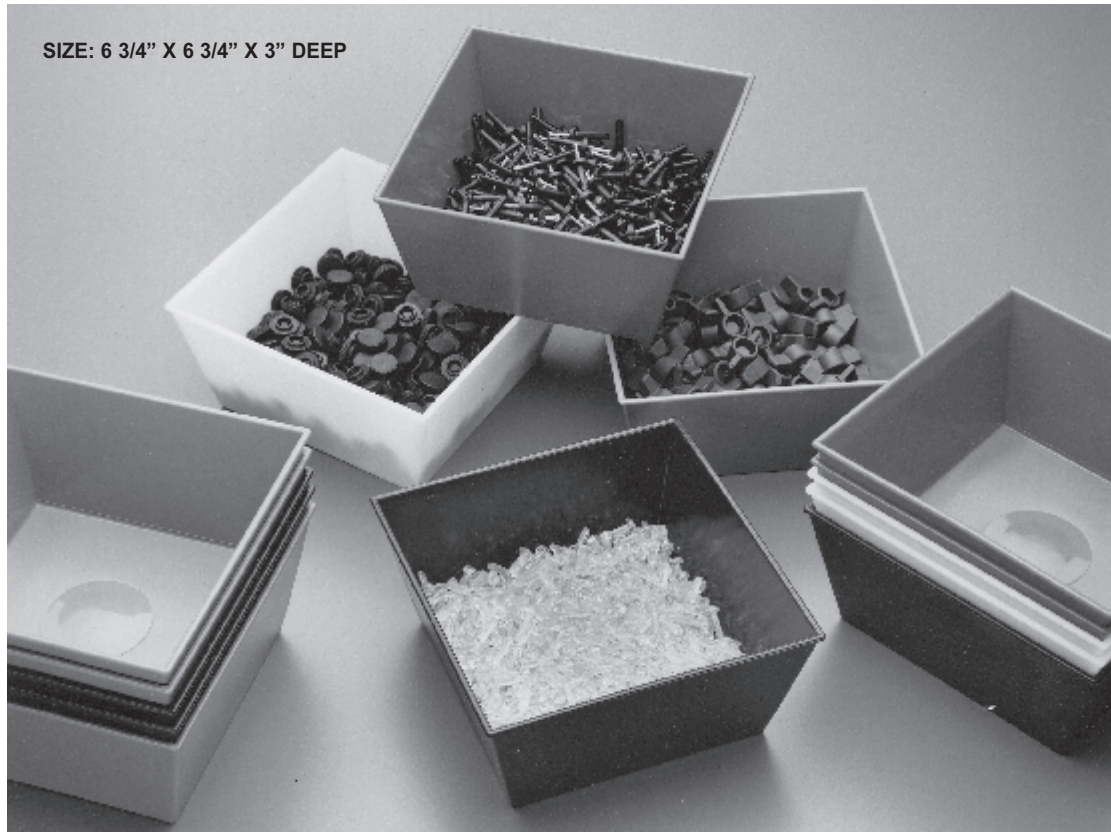


| ITEM NUMBER | DESCRIPTION |
|-------------|-------------|
| 45SKCDHK750 | CORD HOOK |

| ITEM NUMBER | DESCRIPTION |
|----------------|--------------------|
| 45SKCDHK750RET | CORD HOOK RETAINER |

NESTING CONTAINERS

- Durable nesting container is molded in impact modified polystyrene.
- Ideal for sorting and storing small parts.
- Useful in industrial applications and a variety of home or office projects.
- Tapered design allows containers to be easily stacked for compact storage.



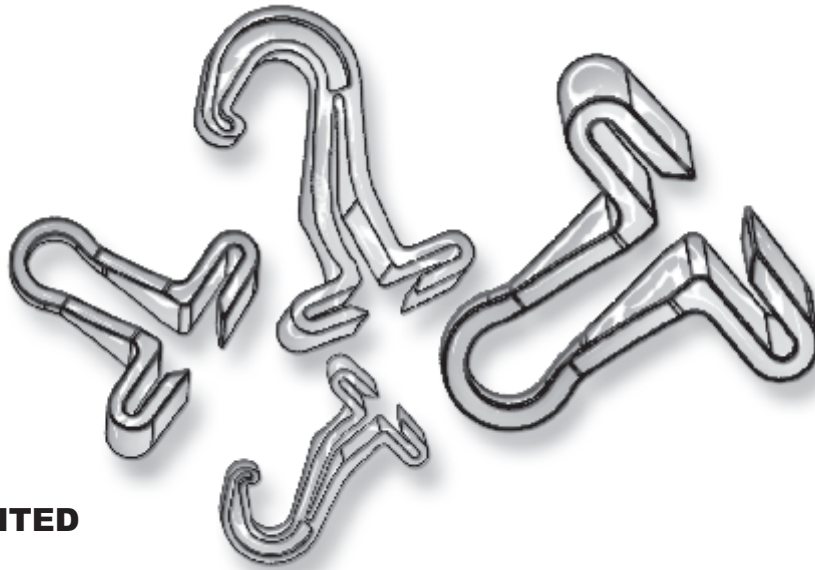
| ITEM NUMBER | COLOR |
|-------------|------------------|
| 401026 | NATURAL |
| 401028 | BLACK |
| 401027 | FLUORESCENT PINK |

SUSPENDED CEILING HOOKS

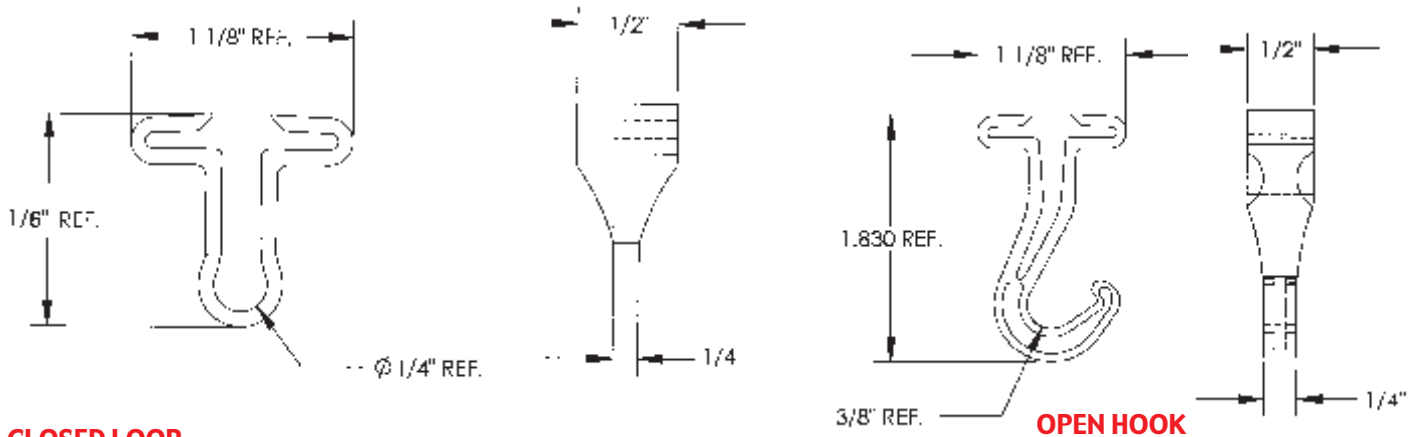
Micro Plastics' suspended ceiling hooks are designed for hanging very light articles from a suspended ceiling. We offer two designs, one with a closed loop, the other with an open hook. Parts can be ordered in natural Nylon (translucent off white) or clear Copolyester.

NOTE FOR LIGHT ARTICLES SUCH AS MOBILES, BANNERS & SIGNS. CEILING SUPPORT LOAD MUST BE VERIFIED BY MANUFACTURER OF THE CEILING SUPPORT AND THE INSTALLER.

NOTE DO NOT OVERLOAD CEILING SUPPORT.



PATENTED

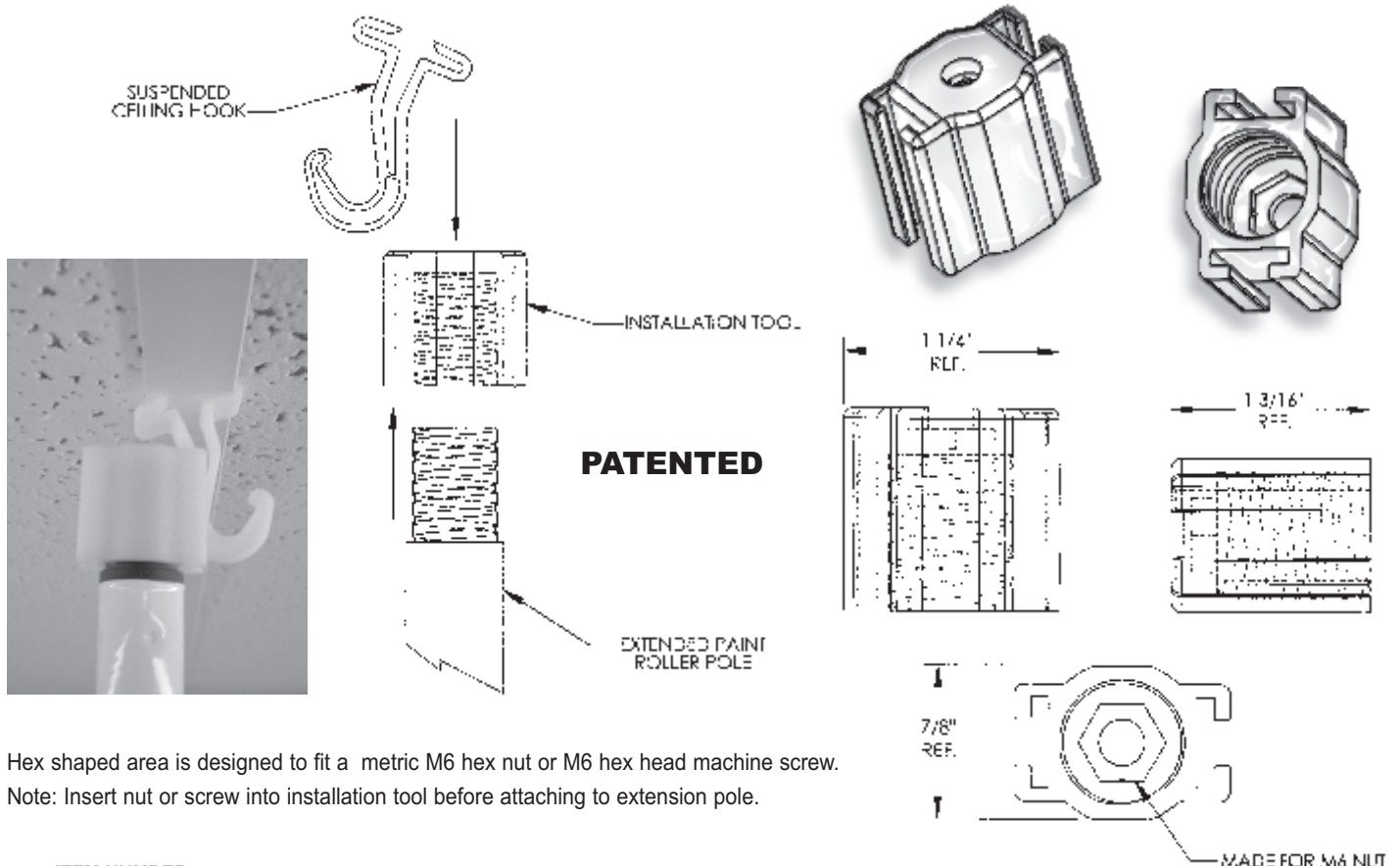


CLOSED LOOP

| ITEM NUMBER | MATERIAL | STYLE | COLOR |
|--------------|-------------|-------------|-----------|
| 45SCH025CH | NYLON 6/6 | CLOSED LOOP | OFF WHITE |
| 45SCH025CHCP | COPOLYESTER | CLOSED LOOP | CLEAR |
| 45SCH037OH | NYLON 6/6 | OPEN HOOK | OFF WHITE |
| 45SCH037OHCP | COPOLYESTER | OPEN HOOK | CLEAR |

CEILING HOOK INSTALLATION TOOL

Suspended ceiling hook installation tool is designed to install both type hooks without using a ladder. The tool threads on to most standard extended poles for paint rollers. Simply thread the Micro Plastics' tool on to the threaded end of the paint roller extension pole and you are ready to install the ceiling hooks. Tool may also be used for attaching accessories with a male or female M6 thread, (Nut and screw not included). This assembly may also be used to remove hooks.

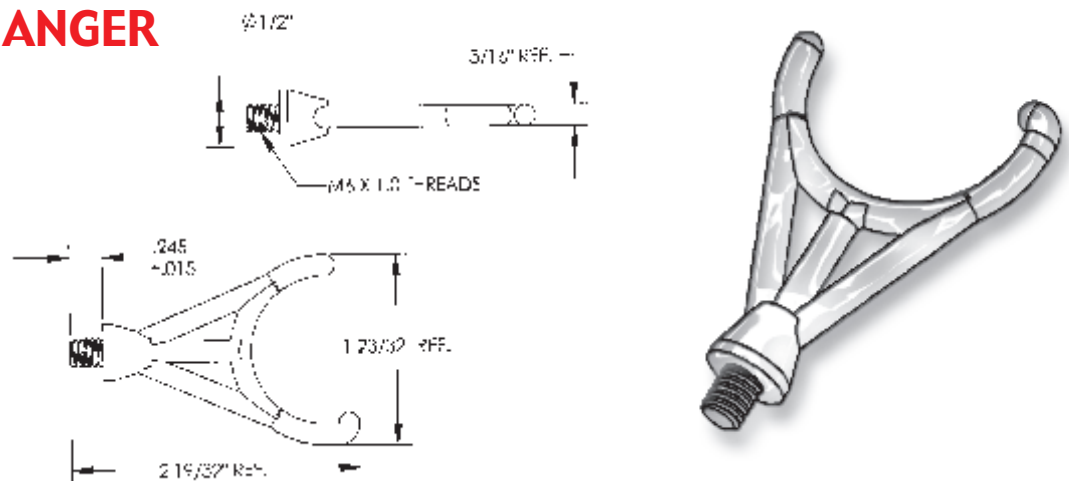


ITEM NUMBER

45SCHINSTL

HEAVY DUTY HANGER

The Micro Plastics heavy duty hanger is designed to fit our ceiling hook installation tool (45SCHINSTL) with a M6 X 1.0 hex nut (NOT INCLUDED) installed in the installation tool. Heavy duty hanger is used to hang articles on elevated pegs or hooks without the use of a ladder.



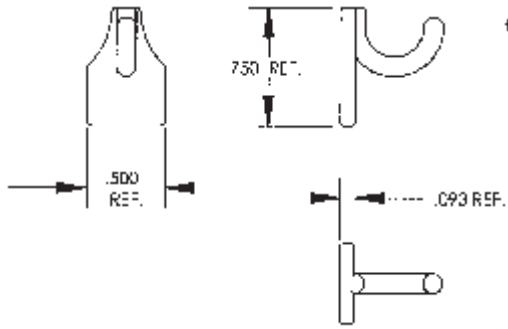
ITEM NUMBER

45HDH01

MISCELLANEOUS PRODUCTS

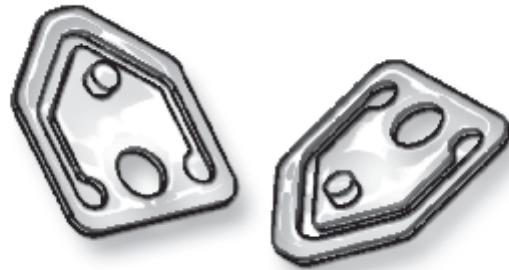
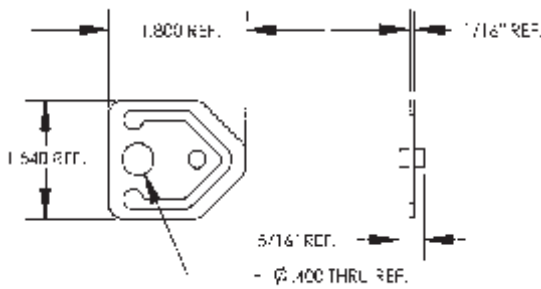
SECTION

XI SUSPENDED CEILING HANGING ACCESSORIES



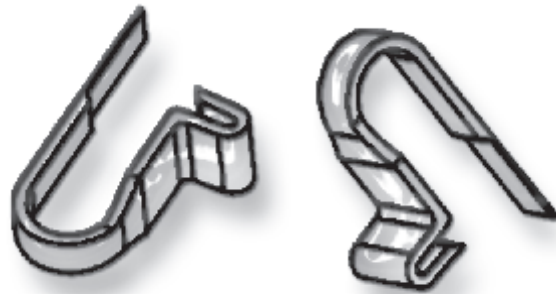
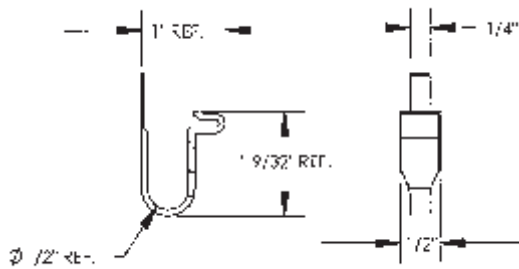
PATENTED

| ITEM NUMBER | DESCRIPTION |
|-------------|---------------------|
| 45INSTLHOOK | Ceiling Hanger Hook |



PATENTED

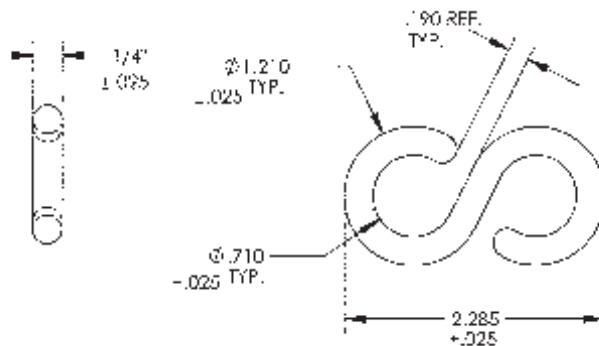
| ITEM NUMBER | DESCRIPTION |
|-------------|------------------------|
| 45SCHCLIP | Ceiling Accessory Clip |



PATENTED

| ITEM NUMBER | DESCRIPTION |
|-------------|-------------------|
| 45SCH050EH | Ceiling Edge Hook |

“S” HOOKS



| ITEM NUMBER |
|-------------|
| 45SHOK |

FASTENER ASSORTMENT KITS

SECTION
XII

MOLDED NYLON FASTENERS PROVIDE ELECTRICAL INSULATION, VIBRATION AND CORROSION RESISTANCE. HAVE A LOW THERMAL CONDUCTIVITY, ARE NON-MAGNETIC AND HAVE A HIGH STRENGTH-TO-WEIGHT RATIO. PACKAGED IN LARGE REUSABLE TRANSPARENT PLASTIC STORAGE BOXES.

IDEAL FOR:

- PROTOTYPE WORK** - Large working assortments.
- PRODUCT DESIGN** - Latest designs for increased productivity.
- MODEL MAKING** - Commercially available standard parts.
- SHOP AND MAINTENANCE** - Convenient selection.



04ASO475HC



PREMIUM HOSE CLAMPS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 50 - 22HC0250
- 45 - 22HC0344
- 40 - 22HC0406
- 40 - 22HC0468
- 40 - 22HC0531
- 40 - 22HC0593
- 35 - 22HC0750
- 30 - 22HC0875
- 30 - 22HC0953
- 25 - 22HC1031
- 20 - 22HC1250
- 15 - 22HC1406
- 20 - 22HC1593
- 15 - 22HC1687
- 15 - 22HC1875
- 10 - 22HC2125

04ASO075SR



STRAIN RELIEF BUSHINGS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 20 - 23MP02M40
- 16 - 23MP03P40
- 10 - 23MP04K40
- 10 - 23MP04N40
- 10 - 23MP05P40
- 4 - 23MP06N40
- 6 - 23MP06P34
- 12 - 23MP06W10
- 2 - 23MP07W20
- 2 - 23MP03020
- 8 - 23MP14L10
- 8 - 23MP15L10

04ASO180TCH



Over 100 Transistor Covers
Transistor and Capacitor Mounts in
17 Different Styles and Configurations

TRANSISTOR HARDWARE

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 12 - 19PT11
- 12 - 19PT12
- 12 - 19PT11HD
- 12 - 19PT12HD
- 12 - 19PT11WOB
- 12 - 19PT12WOB
- 12 - 19PT11HDWOB
- 12 - 19PT12HDWOB
- 4 - 21PTC01031
- 4 - 21PTC01032
- 4 - 21PTC01033
- 4 - 21PTC010661
- 4 - 21PTC010662
- 2 - 21PTC010663
- 20 - 22CM0100
- 20 - 22CM0150
- 20 - 22CM0200



FASTENER ASSORTMENT KITS

SECTION XII

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- SHOP AND MAINTENANCE** - Convenient selection.

04AS0750MSN



METRIC KIT page 241

Over 750 Nylon Fasteners
Over 35 Different Sizes and Types

SCREWS AND NUTS

ASSORTMENT CONSISTS OF APPROXIMATELY: ROUND, HEX, PAN, BINDER, AND FILLISTER HEADSTYLE MACHINE SCREWS. IN THE FOLLOWING SIZES;

- 100 - 440 X 1/4" to 1" LONG ASSORTED HEADSTYLES
- 100 - 623 X 1/4" to 5/8" LONG ASSORTED HEADSTYLES
- 100 - 832 X 1/4" to 3/4" LONG ASSORTED HEADSTYLES
- 100 - 1032 X 1/4" to 1/2" LONG ASSORTED HEADSTYLES
- 30 - 1/4-20 X 1/4" to 3/4" LONG ROUND and FILLISTER HEAD
- 100 - 440, 632, 832, 1032, & 1/4-20 SOCKET SET SCREWS
- 100 - 440, 632, 832, 1032, & 1/4-20 HEX NUTS
- 125 - #4, #6, #8, #10, & 1/4 FLATWASHERS



04AS0900FAS

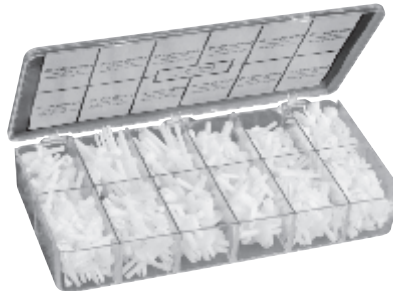


Over 900 Nylon Fasteners
Over 65 Different Sizes and Types.

FASTENERS

- 250 MOLDED NYLON SCREWS Assorted sizes and headstyles; Round, Pan, Fillister, Flat, Binder, Hex and Set.
- 100 - SOCKET SET SCREWS
- 50 - POLY DRIVE RIVETS
- 100 - FLAT WASHERS
- 100 - HEX NUTS
- 50 - LOCK NUTS
- 40 - CAP NUTS
- 10 - WING NUTS
- 50 - PUSH-IN FASTENERS
- 50 - ARROW CLIPS
- 100 - SCREW INSULATORS
- 20 - THUMB SCREWS

04AS0380PRT



Over 380 Assorted Nylon Drive Rivets
with Insertion Tool

POLY DRIVE RIVETS

- ASSORTMENT CONSISTS OF APPROXIMATELY:
- 40 - 61PR200000 .187 .156/.281
 - 40 - 61PR300000 .187 .312/.440
 - 50 - 61PR300100 .187 .062/.187
 - 40 - 61PR300300 .187 .078/.375
 - 40 - 61PR300800 .187 .375/.750
 - 30 - 61PR400500 .187 .375/.500
 - 40 - 61PR500500 .218 .031/.062
 - 40 - 61PR010000 .218 .187/.250
 - 40 - 61PR100000 .218 .093/.350
 - 20 - 61PR010100 .226 .125/.312
 - 1 - 61PRT0125 DRIVE RIVET INSERTION TOOL

04AS0320SWS



METRIC KIT page 241

All in Assorted Lengths and
Shoulder Height Combinations.

SHOULDER WASHERS

- ASSORTMENT CONSISTS OF APPROXIMATELY:
- 150 - SHOULDER WASHERS .093 to 1/4" ID
 - .125 to .500 OD
 - 30 - #2 SCREW INSULATORS
 - 30 - #4 SCREW INSULATORS
 - 25 - #6 SCREW INSULATORS
 - 25 - #8 SCREW INSULATORS
 - 25 - #10 SCREW INSULATORS
 - 25 - 1/4 SCREW INSULATORS
 - 10 - 5/16 SCREW INSULATORS

O4ASO162CA



Over 150 Cable Clips in 12 Popular Sizes Including; Nail-in Clips, Heavy Duty Clips, Wire Clips and Spring Clips.

CLIPS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 15 - 22NCC0450F
- 10 - 22NCC0900F
- 5 - 22NCC0800R
- 8 - 22NCC0700R
- 15 - 22NCC0400R
- 12 - 22WCO500312
- 25 - 22SPC375132
- 20 - 22HDCC4840
- 12 - 22HDCC4220
- 15 - 22HDCC3590
- 15 - 22HDCC2970
- 10 - 22NCC0500R

O4ASO34OSP



METRIC KIT page 241

SPACERS/STANDOFFS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 100 - ROUND SPACERS - PLAIN 3/16", 1/4", 3/8", 1/2" DIAMETERS, 1/8" to 1" Long.
- 80 - HEX SPACERS - PLAIN 1/4" to 1" Long.
- 35 - ROUND SPACERS - TAPPED 440, 632, 832, 1032, 1/4-20, 1/4", 5/16", 3/8", 1/2" Diameter, 1/4" to 1" Long.
- 30 - HEX SPACERS - TAPPED 440, 632, 832, Diameter, 1/4" to 1" Long.
- 45 - HEX MALE/FEMALE STANDOFFS - THREADED 440, 632, 832 Diameter, 1/4" to 1" Long.

O4ASO290CC



Over 290 Cable Clamps in 18 Popular Sizes.

CABLE CLAMPS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 40 - 1/8" X 1/8" CABLE CLAMPS
- 25 - 3/16" X 1/2" CABLE CLAMPS
- 1/4" X 1/2" CABLE CLAMPS
- 1/4" X 3/8" CABLE CLAMPS
- 20 - 5/16" X 3/8" CABLE CLAMPS
- 3/8" X 3/8" CABLE CLAMPS
- 7/16" X 3/8" CABLE CLAMPS
- 1/2" X 3/8" CABLE CLAMPS
- 15 - 5/16" X 1/2" CABLE CLAMPS
- 3/8" X 1/2" CABLE CLAMPS
- 7/16" X 1/2" CABLE CLAMPS
- 10 - 1/2" X 1/2" CABLE CLAMPS
- 9/16" X 1/2" CABLE CLAMPS
- 5/8" X 1/2" CABLE CLAMPS
- 3/4" X 1/2" CABLE CLAMPS
- 5 - 1" X 1/2" CABLE CLAMPS
- 3 - 1 1/4" X 1/2" CABLE CLAMPS
- 1 1/2" X 1/2" CABLE CLAMPS

O4ASO305MCS



Over 300 NYLON METAL CORE SCREWS Over 30 Different Sizes and Headstyles.

METAL CORE SCREWS

ASSORTMENT CONSISTS OF APPROXIMATELY: ALL IN ASSORTED ROUND, ROUND WASHER, FLAT AND FILLISTER HEADSTYLES.

- 130 - 632 X 1/4" to 1" METAL CORE SCREWS
- 75 - 832 X 3/8" to 1" METAL CORE SCREWS
- 60 - 1032 X 3/8" to 1" METAL CORE SCREWS
- 40 - 1/4-20 X 3/8" to 1 1/2" METAL CORE SCREWS

MOLDED NYLON FASTENERS PROVIDE ELECTRICAL INSULATION, VIBRATION AND CORROSION RESISTANCE. HAVE A LOW THERMAL CONDUCTIVITY, ARE NON-MAGNETIC AND HAVE A HIGH STRENGTH-TO-WEIGHT RATIO. PACKAGED IN LARGE REUSABLE TRANSPARENT PLASTIC STORAGE BOXES.

IDEAL FOR:

PROTOTYPE WORK - Large working assortments.

PRODUCT DESIGN - Latest designs for increased productivity.

MODEL MAKING - Commercially available standard parts.

SHOP AND MAINTENANCE - Convenient selection.

O4ASO107ABC



Over 100 Adhesive Backed Cable Clips in 10 Sizes including Single, Double and Releasable Styles.

ADHESIVE BACKED CLIPS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 10 - 22AWC00375
- 20 - 22AWC00125
- 10 - 22DPC25550
- 20 - 22DPC13037
- 4 - 22DPC38062
- 4 - 22SPC38562
- 3 - 22DPC50575
- 6 - 22SPC50575
- 20 - 22SPC13037
- 10 - 22SPC25550



FASTENER ASSORTMENT KITS

SECTION XII

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O4ASO48OCBS



CIRCUIT BOARD SUPPORTS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 25 - 27LTP1375
- 25 - 27LLP1375
- 15 - 27LTP1250
- 15 - 27LLP1250
- 15 - 27LTP1000
- 15 - 27LLP1000
- 25 - 27LTP0500
- 25 - 27LLP0500
- 25 - 27LTP0437
- 25 - 27LLP0437
- 25 - 27LTP0375
- 25 - 27LLP0375
- 25 - 27LTP0250
- 25 - 27LLP0250
- 25 - 27LTP0187
- 25 - 27LLP0187
- 20 - 27LTP0875
- 20 - 27LLP0875
- 20 - 27LTP0750
- 20 - 27LLP0750
- 20 - 27LTP0625
- 20 - 27LLP0625

O4ASO140CC



Over 140 Cable Clips
In 15 Different Styles & Sizes

CABLE CLIPS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 12 - 22DPC13037
- 10 - 22DPC25550
- 6 - 22DPC38062
- 4 - 22DPC50575
- 12 - 22SPC13037
- 10 - 22SPC25550
- 6 - 22SPC38062
- 4 - 22SPC50575
- 12 - 22HDCC1250
- 12 - 22HDCC1750
- 12 - 22HDCC2340
- 12 - 22HDCC2970
- 12 - 22HDCC3590
- 12 - 22HDCC4240
- 6 - 22HDCC4840

O4ASO70OECA



Over 700 Connectors
3 Different Body and Pin assemblies

2PC. EDGE CONNECTORS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 100 - 27TPF0003A
- 100 - 27TPF0003B
- 100 - 27TPF0004A
- 100 - 27TPF0004B
- 75 - 27TPF0002A
- 75 - 27TPF0002B
- 75 - 27TPF0001A
- 75 - 27TPF0001B

O4ASO368DHP



DELUXE HOLE PLUGS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 2 - 62MP2000
- 2 - 62MP1750
- 2 - 62MP1500
- 2 - 62MP1375
- 2 - 62MP1250
- 2 - 62MP1187
- 3 - 62MP1093
- 5 - 62MP1000
- 40 - 62MP0250
- 50 - 62MP0187
- 25 - 62MP0375
- 20 - 62MP0500
- 8 - 62MP0812
- 10 - 62MP0875
- 10 - 62MP0750
- 5 - 62MP1000V
- 8 - 62MP0875V
- 4 - 62VP100BM11
- 6 - 62PP100BG11
- 6 - 62PP087BG11
- 6 - 62PP087BM11
- 4 - 62PP081BG11
- 4 - 62PP081BM11
- 5 - 62PP075BG11
- 5 - 62PP075BM11
- 5 - 62PP062BG07
- 5 - 62PP062BM07
- 10 - 62PP050BM14
- 10 - 62PPO50BG14
- 10 - 62PP043BM17
- 10 - 62PP043BG17
- 10 - 62PP037BG31
- 10 - 62PP037BM31
- 10 - 62PP025BG06
- 10 - 62PP025BM06
- 15 - 62PP018BG14
- 15 - 62PP018BM14

FASTENER ASSORTMENT KITS

SECTION
XII

04AS0725MSP



P.C.B. POSTS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 100 - 27MSP00125
- 100 - 27MSP00250
- 95 - 27MSP00312
- 80 - 27MSP00375
- 70 - 27MSP00437
- 60 - 27MSP00500
- 50 - 27MSP00625
- 40 - 27MSP00750
- 75 - 27MSP00875
- 65 - 27MSP01000

04AS0036CG



P.C.B. CARD GUIDES

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 4 - 21CG00600 CARD GUIDES
- 4 - 21CG00550 CARD GUIDES
- 4 - 21CG00450 CARD GUIDES
- 6 - 21CG00400 CARD GUIDES
- 6 - 21CG00350 CARD GUIDES
- 6 - 21CG00300 CARD GUIDES
- 6 - 21CG00250 CARD GUIDES

04AS0120WAR



Over 115 Nylon Screw Anchors
in 12 Different Styles and Sizes.

WALL ANCHOR / RIVETS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 40 - #6 / #8 SCREW ANCHORS
- 24 - #10 / #12 SCREW ANCHORS
- 20 - #14 / #16 SCREW ANCHORS
- 4 - 3/16" X 3/4" 2 PIECE RIVET, STEEL
- 12 - 1/4" X 1" 2 PIECE RIVET, STEEL
- 4 - 1/4" X 3/4" 2 PIECE RIVET, NYLON
- 8 - 1/4" X 1 1/2" 2 PIECE RIVET, NYLON
- 4 - 1/4" X 1" 2 PIECE RIVET, NYLON

04AS0510FW



METRIC KIT page 241

All in Assorted Outside Diameters
and Thickness Ranges.

FLAT WASHERS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 50 - #2 FLATWASHERS
- 60 - #4 FLATWASHERS
- 60 - #6 FLATWASHERS
- 60 - #8 FLATWASHERS
- 60 - #10 FLATWASHERS
- 60 - 1/4" FLATWASHERS
- 40 - 3/8" FLATWASHERS
- 20 - 1/2" FLATWASHERS
- 100 - 9/16" to 3/4" FLATWASHERS

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IDEAL FOR:

PROTOTYPE WORK - Large working assortments.

PRODUCT DESIGN - Latest designs for increased productivity.

MODEL MAKING - Commercially available standard parts.

SHOP AND MAINTENANCE - Convenient selection.

04AS0190TLT



Over 180 Assorted Nylon Twist Lock Ties
in 6 Popular Sizes.

"EZ" TWIST LOCKS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 50 - 1/4" TWIST LOCK TIES
- 30 - 3/8" TWIST LOCK TIES
- 30 - 1/2" TWIST LOCK TIES
- 20 - 5/8" TWIST LOCK TIES
- 30 - 3/4" TWIST LOCK TIES
- 30 - 15/16" TWIST LOCK TIES

04AS0201AFB



ALL-FIT BUSHINGS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 15 - 22AF1000
- 15 - 22AF1093
- 30 - 22AF0875
- 36 - 22AF0812
- 45 - 22AFO750
- 60 - 22AF0625

Over 200 Nylon All-Fit Bushings
in 6 Popular Sizes

FASTENER ASSORTMENT KITS

SECTION XII

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04AS0150SB



04AS0130NHP



04AS0113LCA



Over 100 Lamp Accessories

LAMP ACCESSORIES

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 10 - 3 1/2" THREADED TUBING
- 25 - 1/8" LAMP SNAP BUSHING
- 8 - 1/8 NPS LAMPCORD BUSHING
- 6 - 1/4 NPS LAMPCORD BUSHING
- 4 - 3/8 NPS LAMPCORD BUSHING
- 3 - 1/2 NPS LAMPCORD BUSHING
- 3 - 1/2 NPS 2 PC. THREADED BUSHING
- 10 - 23MP04K10
- 10 - 23MP04L40
- 10 - 23MPO4N40
- 10 - 22MP05005
- 15 - 22MP01020

04AS0180WT



WIRE/CABLE TIES

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 144 - WIRE TIES 4" to 6 3/4" Natural & Black
- 40 - BEADED TIES 4 1/4" Long
- 26 - ASSORTED CLIPS, TABS AND MOUNTS

INSULATING BUSHINGS

ASSORTMENT CONSISTS OF APPROXIMATELY:

- 24 - 22MP01010
- 24 - 22MP01015
- 24 - 22MP01030
- 24 - 22MP01050
- 12 - 22MP01060
- 12 - 22MP01080
- 24 - 22MP03754
- 24 - 22MP05004
- 12 - 22MP05627
- 6 - 22MP06258
- 6 - 22MP07510
- 6 - 22MP10012

HOLE PLUGS

ASSORTMENT CONSISTS OF THE FOLLOWING HOLE PLUGS IN SMOOTH AND MATTE FINISH. APPROXIMATE COUNTS.

- 10 - 3/16" HOLE PLUGS
- 10 - 1/4" HOLE PLUGS
- 10 - 5/16" HOLE PLUGS
- 10 - 3/8" HOLE PLUGS
- 10 - 7/16" HOLE PLUGS
- 10 - 1/2" HOLE PLUGS
- 10 - 9/16" HOLE PLUGS
- 10 - 5/8" HOLE PLUGS
- 10 - 11/16" HOLE PLUGS
- 10 - 3/4" HOLE PLUGS
- 10 - 13/16" HOLE PLUGS
- 10 - 7/8" HOLE PLUGS
- 10 - 1" HOLE PLUGS

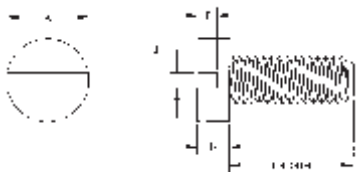
Over 130 Plugs in 13 Different Sizes and Types



METRIC SCREWS, BOLTS AND THREADED ROD

ALL DIMENSIONS ARE IN MILLIMETERS

SECTION
XIII



| Nominal Screw Length | Tolerance On Length mm |
|----------------------|------------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

All tolerances are plus and minus.

| THREAD SIZE | A | H | J | T |
|-------------|-------|------|------|------|
| M2 X 0.4 | 3.80 | 1.30 | 0.70 | 0.90 |
| M2.5 X 0.45 | 4.50 | 1.60 | 0.80 | 1.00 |
| M3 X 0.5 | 5.50 | 2.00 | 1.00 | 1.30 |
| M3.5 X 0.6 | 6.00 | 2.40 | 1.10 | 1.40 |
| M4 X 0.7 | 7.00 | 2.60 | 1.20 | 1.60 |
| M5 X .08 | 8.50 | 3.30 | 1.50 | 2.00 |
| M6 X 1.0 | 10.00 | 3.90 | 1.90 | 2.30 |
| M8 X 1.25 | 13.00 | 5.00 | 2.30 | 2.80 |
| M10 X 1.5 | 15.63 | 6.00 | 2.80 | 3.20 |

**CHEESE
SLOTTED**



New Sizes

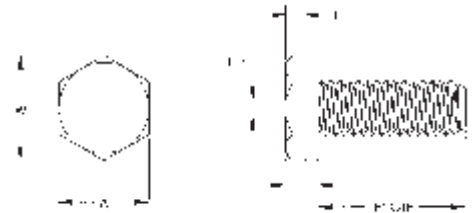


| ITEM NUMBER | DESCRIPTION | ITEM NUMBER | DESCRIPTION |
|---------------|-------------------------------|---------------|------------------------------|
| 50M020040D004 | M2 X .4 X 4MM Cheese Slot | 50M040070D020 | M4 X .7 X 20MM Cheese Slot |
| 50M020040D005 | M2 X .4 X 5MM Cheese Slot | 50M040070D025 | M4 X .7 X 25MM Cheese Slot |
| 50M020040D006 | M2 X .4 X 6MM Cheese Slot | 50M040070D030 | M4 X .7 X 30MM Cheese Slot |
| 50M020040D008 | M2 X .4 X 8MM Cheese Slot | 50M040070D035 | M4 X .7 X 35MM Cheese Slot |
| 50M020040D010 | M2 X .4 X 10MM Cheese Slot | 50M040070D040 | M4 X .7 X 40MM Cheese Slot |
| 50M020040D012 | M2 X .4 X 12MM Cheese Slot | 50M050080D006 | M5 X .8 X 6MM Cheese Slot |
| 50M020040D016 | M2 X .4 X 16MM Cheese Slot | 50M050080D008 | M5 X .8 X 8MM Cheese Slot |
| 50M020040D020 | M2 X .4 X 20MM Cheese Slot | 50M050080D010 | M5 X .8 X 10MM Cheese Slot |
| 50M020040D025 | M2 X .4 X 25MM Cheese Slot | 50M050080D012 | M5 X .8 X 12MM Cheese Slot |
| 50M025045D004 | M2.5 X .45 X 4MM Cheese Slot | 50M050080D016 | M5 X .8 X 16MM Cheese Slot |
| 50M025045D005 | M2.5 X .45 X 5MM Cheese Slot | 50M050080D020 | M5 X .8 X 20MM Cheese Slot |
| 50M025045D006 | M2.5 X .45 X 6MM Cheese Slot | 50M050080D025 | M5 X .8 X 25MM Cheese Slot |
| 50M025045D008 | M2.5 X .45 X 8MM Cheese Slot | 50M050080D030 | M5 X .8 X 30MM Cheese Slot |
| 50M025045D010 | M2.5 X .45 X 10MM Cheese Slot | 50M050080D035 | M5 X .8 X 35MM Cheese Slot |
| 50M025045D012 | M2.5 X .45 X 12MM Cheese Slot | 50M050080D040 | M5 X .8 X 40MM Cheese Slot |
| 50M025045D016 | M2.5 X .45 X 16MM Cheese Slot | 50M060100D005 | M6 X 1.0 X 5MM Cheese Slot |
| 50M025045D020 | M2.5 X .45 X 20MM Cheese Slot | 50M060100D008 | M6 X 1.0 X 8MM Cheese Slot |
| 50M025045D025 | M2.5 X .45 X 25MM Cheese Slot | 50M060100D010 | M6 X 1.0 X 10MM Cheese Slot |
| 50M030050D004 | M3 X .5 X 4MM Cheese Slot | 50M060100D012 | M6 X 1.0 X 12MM Cheese Slot |
| 50M030050D005 | M3 X .5 X 5MM Cheese Slot | 50M060100D016 | M6 X 1.0 X 16MM Cheese Slot |
| 50M030050D006 | M3 X .5 X 6MM Cheese Slot | 50M060100D020 | M6 X 1.0 X 20MM Cheese Slot |
| 50M030050D008 | M3 X .5 X 8MM Cheese Slot | 50M060100D025 | M6 X 1.0 X 25MM Cheese Slot |
| 50M030050D010 | M3 X .5 X 10MM Cheese Slot | 50M060100D030 | M6 X 1.0 X 30MM Cheese Slot |
| 50M030050D012 | M3 X .5 X 12MM Cheese Slot | 50M060100D035 | M6 X 1.0 X 35MM Cheese Slot |
| 50M030050D014 | M3 X .5 X 14MM Cheese Slot | 50M060100D040 | M6 X 1.0 X 40MM Cheese Slot |
| 50M030050D016 | M3 X .5 X 16MM Cheese Slot | 50M060100D045 | M6 X 1.0 X 45MM Cheese Slot |
| 50M030050D020 | M3 X .5 X 20MM Cheese Slot | 50M060100D050 | M6 X 1.0 X 50MM Cheese Slot |
| 50M030050D025 | M3 X .5 X 25MM Cheese Slot | 50M060100D060 | M6 X 1.0 X 60MM Cheese Slot |
| 50M030050D030 | M3 X .5 X 30MM Cheese Slot | 50M060100D065 | M6 X 1.0 X 65MM Cheese Slot |
| 50M030050D035 | M3 X .5 X 35MM Cheese Slot | 50M060100D070 | M6 X 1.0 X 70MM Cheese Slot |
| 50M030050D042 | M3 X .5 X 42MM Cheese Slot | 50M060100D075 | M6 X 1.0 X 75MM Cheese Slot |
| 50M035060D005 | M3.5 X .6 X 5MM Cheese Slot | 50M080125D010 | M8 X 1.25 X 10MM Cheese Slot |
| 50M035060D006 | M3.5 X .6 X 6MM Cheese Slot | 50M080125D016 | M8 X 1.25 X 16MM Cheese Slot |
| 50M035060D008 | M3.5 X .6 X 8MM Cheese Slot | 50M080125D020 | M8 X 1.25 X 20MM Cheese Slot |
| 50M035060D010 | M3.5 X .6 X 10MM Cheese Slot | 50M080125D025 | M8 X 1.25 X 25MM Cheese Slot |
| 50M035060D012 | M3.5 X .6 X 12MM Cheese Slot | 50M080125D030 | M8 X 1.25 X 30MM Cheese Slot |
| 50M035060D016 | M3.5 X .6 X 16MM Cheese Slot | 50M080125D035 | M8 X 1.25 X 35MM Cheese Slot |
| 50M035060D020 | M3.5 X .6 X 20MM Cheese Slot | 50M080125D050 | M8 X 1.25 X 50MM Cheese Slot |
| 50M035060D025 | M3.5 X .6 X 25MM Cheese Slot | 50M080125D070 | M8 X 1.25 X 70MM Cheese Slot |
| 50M035060D035 | M3.5 X .6 X 35MM Cheese Slot | 50M100150D016 | M10 X 1.5 X 16MM Cheese Slot |
| 50M035060D042 | M3.5 X .6 X 42MM Cheese Slot | 50M100150D020 | M10 X 1.5 X 20MM Cheese Slot |
| 50M040070D004 | M4 X .7 X 4MM Cheese Slot | 50M100150D025 | M10 X 1.5 X 25MM Cheese Slot |
| 50M040070D006 | M4 X .7 X 6MM Cheese Slot | 50M100150D030 | M10 X 1.5 X 30MM Cheese Slot |
| 50M040070D008 | M4 X .7 X 8MM Cheese Slot | 50M100150D035 | M10 X 1.5 X 35MM Cheese Slot |
| 50M040070D010 | M4 X .7 X 10MM Cheese Slot | 50M100150D050 | M10 X 1.5 X 50MM Cheese Slot |
| 50M040070D012 | M4 X .7 X 12MM Cheese Slot | 50M100150D060 | M10 X 1.5 X 60MM Cheese Slot |
| 50M040070D016 | M4 X .7 X 16MM Cheese Slot | | |

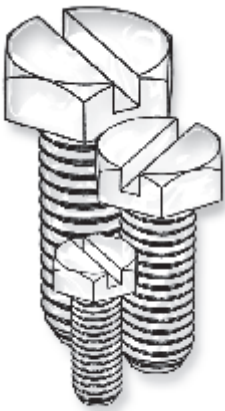
METRIC SCREWS, BOLTS AND THREADED ROD

SECTION XIII

| THREAD SIZE | A | W | H | J | T |
|-------------|---------------|-------|----------------|------|------|
| M2 | .302 - .320 | 3.38 | min. 1.3 - 1.6 | .60 | .46 |
| M2.5 | 3.82 - 4.00 | 4.28 | min. 1.8 - 2.1 | .80 | .99 |
| M3 | 4.82 - 5.00 | 5.40 | min. 2.0 - 2.3 | .99 | 1.30 |
| M3.5 | 5.32 - 5.50 | 5.96 | min. 2.3 - 2.6 | 1.20 | 1.28 |
| M4 | 6.78 - 7.00 | 7.59 | min. 2.6 - 3.0 | 1.24 | 1.28 |
| M5 | 7.78 - 8.00 | 8.71 | min. 3.3 - 3.8 | 1.30 | 1.40 |
| M6 | 9.78 - 10.00 | 10.95 | min. 4.1 - 4.7 | 1.70 | 2.24 |
| M8 | 12.73 - 13.00 | 14.26 | min. 5.2 - 6.0 | 2.15 | 2.27 |
| M10 | 15.73 - 16.00 | 17.62 | min. 6.5 - 7.5 | 2.38 | 2.90 |



HEX SLOTTED



| Nominal Screw Length | Tolerance On Length mm |
|----------------------|------------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

All tolerances are plus and minus.

| ITEM NUMBER | DESCRIPTION |
|---------------|--------------------------|
| 50M020040K004 | M2 X .4 X 4MM HEX SL |
| 50M020040K005 | M2 X .4 X 5MM HEX SL |
| 50M020040K006 | M2 X .4 X 6MM HEX SL |
| 50M020040K008 | M2 X .4 X 8MM HEX SL |
| 50M020040K010 | M2 X .4 X 10MM HEX SL |
| 50M020040K012 | M2 X .4 X 12MM HEX SL |
| 50M020040K016 | M2 X .4 X 16MM HEX SL |
| 50M020040K020 | M2 X .4 X 20MM HEX SL |
| 50M020040K025 | M2 X .4 X 25MM HEX SL |
| 50M025045K004 | M2.5 X .45 X 4MM HEX SL |
| 50M025045K005 | M2.5 X .45 X 5MM HEX SL |
| 50M025045K006 | M2.5 X .45 X 6MM HEX SL |
| 50M025045K008 | M2.5 X .45 X 8MM HEX SL |
| 50M025045K010 | M2.5 X .45 X 10MM HEX SL |
| 50M025045K012 | M2.5 X .45 X 12MM HEX SL |
| 50M025045K016 | M2.5 X .45 X 16MM HEX SL |
| 50M025045K020 | M2.5 X .45 X 20MM HEX SL |
| 50M025045K025 | M2.5 X .45 X 25MM HEX SL |
| 50M030050K004 | M3 X .5 X 4MM HEX SL |
| 50M030050K005 | M3 X .5 X 5MM HEX SL |
| 50M030050K006 | M3 X .5 X 6MM HEX SL |
| 50M030050K008 | M3 X .5 X 8MM HEX SL |
| 50M030050K010 | M3 X .5 X 10MM HEX SL |
| 50M030050K012 | M3 X .5 X 12MM HEX SL |
| 50M030050K016 | M3 X .5 X 16MM HEX SL |
| 50M030050K020 | M3 X .5 X 20MM HEX SL |
| 50M030050K025 | M3 X .5 X 25MM HEX SL |
| 50M030050K030 | M3 X .5 X 30MM HEX SL |
| 50M030050K035 | M3 X .5 X 35MM HEX SL |
| 50M030050K042 | M3 X .5 X 42MM HEX SL |
| 50M035060K005 | M3.5 X .6 X 5MM HEX SL |
| 50M035060K006 | M3.5 X .6 X 6MM HEX SL |
| 50M035060K007 | M3.5 X .6 X 7MM HEX SL |
| 50M035060K008 | M3.5 X .6 X 8MM HEX SL |
| 50M035060K010 | M3.5 X .6 X 10MM HEX SL |
| 50M035060K012 | M3.5 X .6 X 12MM HEX SL |
| 50M035060K016 | M3.5 X .6 X 16MM HEX SL |
| 50M035060K020 | M3.5 X .6 X 20MM HEX SL |
| 50M035060K025 | M3.5 X .6 X 25MM HEX SL |
| 50M035060K035 | M3.5 X .6 X 35MM HEX SL |
| 50M035060K042 | M3.5 X .6 X 42MM HEX SL |
| 50M040070K006 | M4 X .7 X 6MM HEX SL |
| 50M040070K008 | M4 X .7 X 8MM HEX SL |
| 50M040070K010 | M4 X .7 X 10MM HEX SL |
| 50M040070K012 | M4 X .7 X 12MM HEX SL |
| 50M040070K016 | M4 X .7 X 16MM HEX SL |

| ITEM NUMBER | DESCRIPTION |
|---------------|--------------------------|
| 50M040070K020 | M4 X .7 X 20MM HEX SL |
| 50M040070K025 | M4 X .7 X 25MM HEX SL |
| 50M040070K030 | M4 X .7 X 30MM HEX SL |
| 50M040070K035 | M4 X .7 X 35MM HEX SL |
| 50M040070K040 | M4 X .7 X 40MM HEX SL |
| 50M050080K006 | M5 X .8 X 6MM HEX SL |
| 50M050080K008 | M5 X .8 X 8MM HEX SL |
| 50M050080K010 | M5 X .8 X 10MM HEX SL |
| 50M050080K012 | M5 X .8 X 12MM HEX SL |
| 50M050080K016 | M5 X .8 X 16MM HEX SL |
| 50M050080K020 | M5 X .8 X 20MM HEX SL |
| 50M050080K025 | M5 X .8 X 25MM HEX SL |
| 50M050080K030 | M5 X .8 X 30MM HEX SL |
| 50M050080K035 | M5 X .8 X 35MM HEX SL |
| 50M050080K040 | M5 X .8 X 40MM HEX SL |
| 50M060100K005 | M6 X 1.00 X 5MM HEX SL |
| 50M060100K008 | M6 X 1.00 X 8MM HEX SL |
| 50M060100K010 | M6 X 1.00 X 10MM HEX SL |
| 50M060100K012 | M6 X 1.00 X 12MM HEX SL |
| 50M060100K016 | M6 X 1.00 X 16MM HEX SL |
| 50M060100K020 | M6 X 1.00 X 20MM HEX SL |
| 50M060100K025 | M6 X 1.00 X 25MM HEX SL |
| 50M060100K030 | M6 X 1.00 X 30MM HEX SL |
| 50M060100K035 | M6 X 1.00 X 35MM HEX SL |
| 50M060100K040 | M6 X 1.00 X 40MM HEX SL |
| 50M060100K045 | M6 X 1.00 X 45MM HEX SL |
| 50M060100K050 | M6 X 1.00 X 50MM HEX SL |
| 50M060100K060 | M6 X 1.00 X 60MM HEX SL |
| 50M060100K070 | M6 X 1.00 X 70MM HEX SL |
| 50M060100K075 | M6 X 1.00 X 75MM HEX SL |
| 50M080125K010 | M8 X 1.25 X 10MM HEX SL |
| 50M080125K016 | M8 X 1.25 X 16MM HEX SL |
| 50M080125K020 | M8 X 1.25 X 20MM HEX SL |
| 50M080125K025 | M8 X 1.25 X 25MM HEX SL |
| 50M080125K030 | M8 X 1.25 X 30MM HEX SL |
| 50M080125K035 | M8 X 1.25 X 35MM HEX SL |
| 50M080125K040 | M8 X 1.25 X 40MM HEX SL |
| 50M080125K050 | M8 X 1.25 X 50MM HEX SL |
| 50M080125K070 | M8 X 1.25 X 70MM HEX SL |
| 50M100150K016 | M10 X 1.50 X 16MM HEX SL |
| 50M100150K020 | M10 X 1.50 X 20MM HEX SL |
| 50M100150K025 | M10 X 1.50 X 25MM HEX SL |
| 50M100150K030 | M10 X 1.50 X 30MM HEX SL |
| 50M100150K035 | M10 X 1.50 X 35MM HEX SL |
| 50M100150K050 | M10 X 1.50 X 50MM HEX SL |
| 50M100150K060 | M10 X 1.50 X 60MM HEX SL |



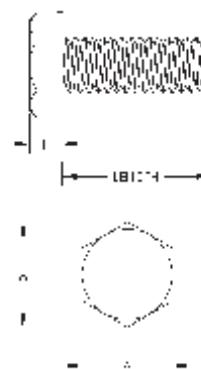
METRIC SCREWS, BOLTS AND THREADED ROD

ALL DIMENSIONS ARE IN MILLIMETERS

SECTION
XIII

| ITEM NUMBER | DESCRIPTION |
|---------------|-----------------------|
| 50M020040J004 | M2 X .4 X 4MM HEX |
| 50M020040J005 | M2 X .4 X 5MM HEX |
| 50M020040J006 | M2 X .4 X 6MM HEX |
| 50M020040J008 | M2 X .4 X 8MM HEX |
| 50M020040J010 | M2 X .4 X 10MM HEX |
| 50M020040J012 | M2 X .4 X 12MM HEX |
| 50M020040J016 | M2 X .4 X 16MM HEX |
| 50M020040J020 | M2 X .4 X 20MM HEX |
| 50M020040J025 | M2 X .4 X 25MM HEX |
| 50M025045J004 | M2.5 X .45 X 4MM HEX |
| 50M025045J005 | M2.5 X .45 X 5MM HEX |
| 50M025045J006 | M2.5 X .45 X 6MM HEX |
| 50M025045J008 | M2.5 X .45 X 8MM HEX |
| 50M025045J010 | M2.5 X .45 X 10MM HEX |
| 50M025045J012 | M2.5 X .45 X 12MM HEX |
| 50M025045J016 | M2.5 X .45 X 16MM HEX |
| 50M025045J020 | M2.5 X .45 X 20MM HEX |
| 50M025045J025 | M2.5 X .45 X 25MM HEX |
| 50M030050J004 | M3 X .5 X 4MM HEX |
| 50M030050J005 | M3 X .5 X 5MM HEX |
| 50M030050J006 | M3 X .5 X 6MM HEX |
| 50M030050J008 | M3 X .5 X 8MM HEX |
| 50M030050J010 | M3 X .5 X 10MM HEX |
| 50M030050J012 | M3 X .5 X 12MM HEX |
| 50M030050J016 | M3 X .5 X 16MM HEX |
| 50M030050J020 | M3 X .5 X 20MM HEX |
| 50M030050J025 | M3 X .5 X 25MM HEX |
| 50M030050J030 | M3 X .5 X 30MM HEX |
| 50M030050J035 | M3 X .5 X 35MM HEX |
| 50M030050J042 | M3 X .5 X 42MM HEX |
| 50M035060J005 | M3.5 X .6 X 5MM HEX |
| 50M035060J006 | M3.5 X .6 X 6MM HEX |
| 50M035060J007 | M3.5 X .6 X 7MM HEX |
| 50M035060J008 | M3.5 X .6 X 8MM HEX |
| 50M035060J010 | M3.5 X .6 X 10MM HEX |
| 50M035060J012 | M3.5 X .6 X 12MM HEX |
| 50M035060J016 | M3.5 X .6 X 16MM HEX |
| 50M035060J020 | M3.5 X .6 X 20MM HEX |
| 50M035060J025 | M3.5 X .6 X 25MM HEX |
| 50M035060J035 | M3.5 X .6 X 35MM HEX |
| 50M035060J042 | M3.5 X .6 X 42MM HEX |
| 50M040070J006 | M4 X .7 X 6MM HEX |
| 50M040070J008 | M4 X .7 X 8MM HEX |
| 50M040070J010 | M4 X .7 X 10MM HEX |
| 50M040070J012 | M4 X .7 X 12MM HEX |
| 50M040070J016 | M4 X .7 X 16MM HEX |
| 50M040070J020 | M4 X .7 X 20MM HEX |
| 50M040070J025 | M4 X .7 X 25MM HEX |
| 50M040070J030 | M4 X .7 X 30MM HEX |
| 50M040070J035 | M4 X .7 X 35MM HEX |
| 50M040070J040 | M4 X .7 X 40MM HEX |
| 50M050080J006 | M5 X .8 X 6MM HEX |

| ITEM NUMBER | DESCRIPTION |
|---------------|-----------------------|
| 50M050080J008 | M5 X .8 X 8MM HEX |
| 50M050080J010 | M5 X .8 X 10MM HEX |
| 50M050080J012 | M5 X .8 X 12MM HEX |
| 50M050080J014 | M5 X .8 X 14MM HEX |
| 50M050080J016 | M5 X .8 X 16MM HEX |
| 50M050080J020 | M5 X .8 X 20MM HEX |
| 50M050080J025 | M5 X .8 X 25MM HEX |
| 50M050080J030 | M5 X .8 X 30MM HEX |
| 50M050080J035 | M5 X .8 X 35MM HEX |
| 50M050080J040 | M5 X .8 X 40MM HEX |
| 50M050080J070 | M5 X .8 X 70MM HEX |
| 50M060100J005 | M6 X 1.00 X 5MM HEX |
| 50M060100J008 | M6 X 1.00 X 8MM HEX |
| 50M060100J010 | M6 X 1.00 X 10MM HEX |
| 50M060100J012 | M6 X 1.00 X 12MM HEX |
| 50M060100J016 | M6 X 1.00 X 16MM HEX |
| 50M060100J020 | M6 X 1.00 X 20MM HEX |
| 50M060100J025 | M6 X 1.00 X 25MM HEX |
| 50M060100J030 | M6 X 1.00 X 30MM HEX |
| 50M060100J035 | M6 X 1.00 X 35MM HEX |
| 50M060100J040 | M6 X 1.00 X 40MM HEX |
| 50M060100J045 | M6 X 1.00 X 45MM HEX |
| 50M060100J050 | M6 X 1.00 X 50MM HEX |
| 50M060100J060 | M6 X 1.00 X 60MM HEX |
| 50M060100J070 | M6 X 1.00 X 70MM HEX |
| 50M060100J075 | M6 X 1.00 X 75MM HEX |
| 50M080125J006 | M8 X 1.25 X 6MM HEX |
| 50M080125J010 | M8 X 1.25 X 10MM HEX |
| 50M080125J016 | M8 X 1.25 X 16MM HEX |
| 50M080125J020 | M8 X 1.25 X 20MM HEX |
| 50M080125J025 | M8 X 1.25 X 25MM HEX |
| 50M080125J030 | M8 X 1.25 X 30MM HEX |
| 50M080125J035 | M8 X 1.25 X 35MM HEX |
| 50M080125J040 | M8 X 1.25 X 40MM HEX |
| 50M080125J050 | M8 X 1.25 X 50MM HEX |
| 50M080125J070 | M8 X 1.25 X 70MM HEX |
| 50M100150J016 | M10 X 1.50 X 16MM HEX |
| 50M100150J020 | M10 X 1.50 X 20MM HEX |
| 50M100150J025 | M10 X 1.50 X 25MM HEX |
| 50M100150J030 | M10 X 1.50 X 30MM HEX |
| 50M100150J035 | M10 X 1.50 X 35MM HEX |
| 50M100150J050 | M10 X 1.50 X 50MM HEX |
| 50M100150J060 | M10 X 1.50 X 60MM HEX |
| 50M120125J012 | M12 X 1.25 X 12MM HEX |
| 50M120175J020 | M12 X 1.75 X 20MM HEX |
| 50M120175J025 | M12 X 1.75 X 25MM HEX |
| 50M120175J030 | M12 X 1.75 X 30MM HEX |
| 50M120175J035 | M12 X 1.75 X 35MM HEX |
| 50M120175J040 | M12 X 1.75 X 40MM HEX |
| 50M120175J050 | M12 X 1.75 X 50MM HEX |
| 50M120175J060 | M12 X 1.75 X 60MM HEX |



HEX



| Nominal Screw Length | Tolerance On Length mm |
|----------------------|------------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

All tolerances are plus and minus.

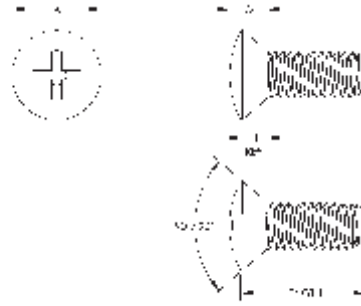
| THREAD SIZE | A | H | W |
|-------------|---------------|-----------|------------|
| M2 | 3.02 - 3.20 | 1.3 - 1.6 | 3.38 min. |
| M2.5 | 3.82 - 4.00 | 1.8 - 2.1 | 4.28 min. |
| M3 | 4.82 - 5.00 | 2.0 - 2.3 | 5.40 min. |
| M3.5 | 5.32 - 5.50 | 2.3 - 2.6 | 5.96 min. |
| M4 | 6.78 - 7.00 | 2.6 - 3.0 | 7.59 min. |
| M5 | 7.78 - 8.00 | 3.3 - 3.8 | 8.71 min. |
| M6 | 9.78 - 10.00 | 4.1 - 4.7 | 10.95 min. |
| M8 | 12.73 - 13.00 | 5.2 - 6.0 | 14.26 min. |
| M10 | 15.73 - 16.00 | 6.5 - 7.5 | 17.62 min. |
| M12 | 17.73 - 18.00 | 7.8 - 9.0 | 19.86 min. |



METRIC SCREWS, BOLTS AND THREADED ROD

SECTION
XIII

ALL DIMENSIONS ARE IN MILLIMETERS



OVAL PHILLIPS

| ITEM NUMBER | DESCRIPTION | | | |
|---------------|-------------|-------|--------|-----------|
| 50M025045M004 | M2.5 | X .45 | X 4MM | Oval Phil |
| 50M025045M005 | M2.5 | X .45 | X 5MM | Oval Phil |
| 50M025045M006 | M2.5 | X .45 | X 6MM | Oval Phil |
| 50M025045M008 | M2.5 | X .45 | X 8MM | Oval Phil |
| 50M025045M010 | M2.5 | X .45 | X 10MM | Oval Phil |
| 50M025045M012 | M2.5 | X .45 | X 12MM | Oval Phil |
| 50M025045M016 | M2.5 | X .45 | X 16MM | Oval Phil |
| 50M025045M020 | M2.5 | X .45 | X 20MM | Oval Phil |
| 50M025045M025 | M2.5 | X .45 | X 25MM | Oval Phil |
| 50M030050M005 | M3 | X .5 | X 5MM | Oval Phil |
| 50M030050M006 | M3 | X .5 | X 6MM | Oval Phil |
| 50M030050M008 | M3 | X .5 | X 8MM | Oval Phil |
| 50M030050M010 | M3 | X .5 | X 10MM | Oval Phil |
| 50M030050M012 | M3 | X .5 | X 12MM | Oval Phil |
| 50M030050M016 | M3 | X .5 | X 16MM | Oval Phil |
| 50M030050M020 | M3 | X .5 | X 20MM | Oval Phil |
| 50M030050M025 | M3 | X .5 | X 25MM | Oval Phil |
| 50M035060M005 | M3.5 | X .6 | X 5MM | Oval Phil |
| 50M035060M006 | M3.5 | X .6 | X 6MM | Oval Phil |
| 50M035060M008 | M3.5 | X .6 | X 8MM | Oval Phil |
| 50M035060M010 | M3.5 | X .6 | X 10MM | Oval Phil |
| 50M035060M012 | M3.5 | X .6 | X 12MM | Oval Phil |
| 50M035060M016 | M3.5 | X .6 | X 16MM | Oval Phil |
| 50M035060M020 | M3.5 | X .6 | X 20MM | Oval Phil |
| 50M035060M025 | M3.5 | X .6 | X 25MM | Oval Phil |
| 50M035060M035 | M3.5 | X .6 | X 35MM | Oval Phil |
| 50M040070M006 | M4 | X .7 | X 6MM | Oval Phil |
| 50M040070M008 | M4 | X .7 | X 8MM | Oval Phil |
| 50M040070M010 | M4 | X .7 | X 10MM | Oval Phil |
| 50M040070M012 | M4 | X .7 | X 12MM | Oval Phil |

| ITEM NUMBER | DESCRIPTION | | | |
|---------------|-------------|--------|--------|-----------|
| 50M040070M016 | M4 | X .7 | X 16MM | Oval Phil |
| 50M040070M020 | M4 | X .7 | X 20MM | Oval Phil |
| 50M040070M025 | M4 | X .7 | X 25MM | Oval Phil |
| 50M050080M006 | M5 | X .8 | X 6MM | Oval Phil |
| 50M050080M008 | M5 | X .8 | X 8MM | Oval Phil |
| 50M050080M010 | M5 | X .8 | X 10MM | Oval Phil |
| 50M050080M012 | M5 | X .8 | X 12MM | Oval Phil |
| 50M050080M016 | M5 | X .8 | X 16MM | Oval Phil |
| 50M050080M020 | M5 | X .8 | X 20MM | Oval Phil |
| 50M050080M025 | M5 | X .8 | X 25MM | Oval Phil |
| 50M050080M030 | M5 | X .8 | X 30MM | Oval Phil |
| 50M050080M040 | M5 | X .8 | X 40MM | Oval Phil |
| 50M060100M008 | M6 | X 1.00 | X 8MM | Oval Phil |
| 50M060100M010 | M6 | X 1.00 | X 10MM | Oval Phil |
| 50M060100M012 | M6 | X 1.00 | X 12MM | Oval Phil |
| 50M060100M016 | M6 | X 1.00 | X 16MM | Oval Phil |
| 50M060100M020 | M6 | X 1.00 | X 20MM | Oval Phil |
| 50M060100M025 | M6 | X 1.00 | X 25MM | Oval Phil |
| 50M060100M035 | M6 | X 1.00 | X 35MM | Oval Phil |
| 50M060100M045 | M6 | X 1.00 | X 45MM | Oval Phil |
| 50M080125M010 | M8 | X 1.25 | X 10MM | Oval Phil |
| 50M080125M016 | M8 | X 1.25 | X 16MM | Oval Phil |
| 50M080125M020 | M8 | X 1.25 | X 20MM | Oval Phil |
| 50M080125M025 | M8 | X 1.25 | X 25MM | Oval Phil |
| 50M080125M030 | M8 | X 1.25 | X 30MM | Oval Phil |
| 50M080125M050 | M8 | X 1.25 | X 50MM | Oval Phil |
| 50M100150M020 | M10 | X 1.5 | X 20MM | Oval Phil |
| 50M100150M025 | M10 | X 1.5 | X 25MM | Oval Phil |
| 50M100150M035 | M10 | X 1.5 | X 35MM | Oval Phil |



| THREAD SIZE | A | H | O |
|-------------|-------------|--------------|---------|
| M2 X 0.4 | 3.5 - 4.4 | 1.2 max ref. | 1.7 max |
| M2.5 X 0.45 | 4.4 - 5.5 | 1.5 max ref. | 2.1 max |
| M3 X 0.5 | 5.2 - 6.3 | 1.7 max ref. | 2.4 max |
| M3.5 X 0.6 | 6.9 - 8.2 | 2.3 max ref. | 3.1 max |
| M4 X 0.7 | 8.0 - 9.4 | 2.7 max ref. | 3.7 max |
| M5 X 0.8 | 8.9 - 10.4 | 2.7 max ref. | 3.9 max |
| M6 X 1 | 10.9 - 12.6 | 3.3 max ref. | 4.7 max |
| M8 X 1.25 | 15.4 - 17.3 | 4.6 max ref. | 6.6 max |
| M10 X 1.5 | 17.8 - 20.0 | 5.0 max ref. | 7.3 max |

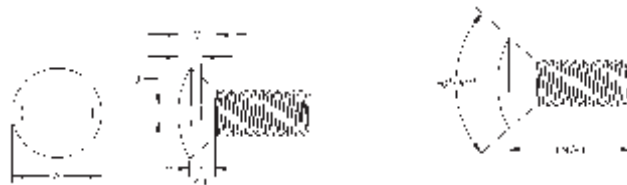
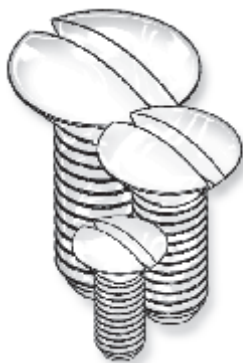
| Nominal Screw Length | Tolerance On Length |
|----------------------|---------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

All tolerances are plus and minus.

METRIC SCREWS, BOLTS AND THREADED ROD

ALL DIMENSIONS ARE IN MILLIMETERS

SECTION
XIII



OVAL SLOTTED

| Nominal Screw Length | Tolerance On Length |
|----------------------|---------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

All tolerances are plus and minus.

| THREAD SIZE | A | H | O | J | T |
|-------------|-------------|--------------|---------|-----------|-----------|
| M2 X 0.4 | 3.5 - 4.4 | 1.2 max ref. | 1.7 max | 0.5 - 0.7 | 0.8 - 1.0 |
| M2.5 X 0.45 | 4.4 - 5.5 | 1.5 max ref. | 2.1 max | 0.6 - 0.8 | 1.0 - 1.2 |
| M3 X 0.5 | 5.2 - 6.3 | 1.7 max ref. | 2.4 max | 0.8 - 1.0 | 1.2 - 1.5 |
| M3.5 X 0.6 | 6.9 - 8.2 | 2.3 max ref. | 3.1 max | 1.0 - 1.2 | 1.4 - 1.7 |
| M4 X 0.7 | 8.0 - 9.4 | 2.7 max ref. | 3.7 max | 1.2 - 1.5 | 1.6 - 1.9 |
| M5 X 0.8 | 8.9 - 10.4 | 2.7 max ref. | 3.9 max | 1.2 - 1.5 | 2.0 - 2.4 |
| M6 X 1 | 10.9 - 12.6 | 3.3 max ref. | 4.7 max | 1.6 - 1.9 | 2.4 - 2.8 |
| M8 X 1.25 | 15.4 - 17.3 | 4.6 max ref. | 6.6 max | 2.0 - 2.3 | 3.2 - 3.7 |
| M10 X 1.5 | 17.8 - 20.0 | 5.0 max ref. | 7.3 max | 2.5 - 2.8 | 3.8 - 4.4 |

ITEM NUMBER ----- DESCRIPTION -----

| | | | | |
|---------------|------|-------|--------|-----------|
| 50M020040L004 | M2 | X .4 | X 4MM | Oval Slot |
| 50M020040L005 | M2 | X .4 | X 5MM | Oval Slot |
| 50M020040L006 | M2 | X .4 | X 6MM | Oval Slot |
| 50M020040L008 | M2 | X .4 | X 8MM | Oval Slot |
| 50M020040L010 | M2 | X .4 | X 10MM | Oval Slot |
| 50M020040L011 | M2 | X .4 | X 11MM | Oval Slot |
| 50M020040L012 | M2 | X .4 | X 12MM | Oval Slot |
| 50M020040L016 | M2 | X .4 | X 16MM | Oval Slot |
| 50M020040L025 | M2 | X .4 | X 25MM | Oval Slot |
| 50M025045L004 | M2.5 | X .45 | X 4MM | Oval Slot |
| 50M025045L005 | M2.5 | X .45 | X 5MM | Oval Slot |
| 50M025045L006 | M2.5 | X .45 | X 6MM | Oval Slot |
| 50M025045L008 | M2.5 | X .45 | X 8MM | Oval Slot |
| 50M025045L010 | M2.5 | X .45 | X 10MM | Oval Slot |
| 50M025045L012 | M2.5 | X .45 | X 12MM | Oval Slot |
| 50M025045L016 | M2.5 | X .45 | X 16MM | Oval Slot |
| 50M025045L020 | M2.5 | X .45 | X 20MM | Oval Slot |
| 50M025045L025 | M2.5 | X .5 | X 25MM | Oval Slot |
| 50M030050L005 | M3 | X .5 | X 5MM | Oval Slot |
| 50M030050L006 | M3 | X .5 | X 6MM | Oval Slot |
| 50M030050L008 | M3 | X .5 | X 8MM | Oval Slot |
| 50M030050L010 | M3 | X .5 | X 10MM | Oval Slot |
| 50M030050L012 | M3 | X .5 | X 12MM | Oval Slot |
| 50M030050L015 | M3 | X .5 | X 15MM | Oval Slot |
| 50M030050L016 | M3 | X .5 | X 16MM | Oval Slot |
| 50M030050L020 | M3 | X .5 | X 20MM | Oval Slot |
| 50M030050L025 | M3 | X .5 | X 25MM | Oval Slot |
| 50M030050L030 | M3 | X .5 | X 30MM | Oval Slot |
| 50M030050L042 | M3 | X .5 | X 42MM | Oval Slot |
| 50M035060L005 | M3.5 | X .6 | X 5MM | Oval Slot |
| 50M035060L006 | M3.5 | X .6 | X 6MM | Oval Slot |
| 50M035060L008 | M3.5 | X .6 | X 8MM | Oval Slot |
| 50M035060L010 | M3.5 | X .6 | X 10MM | Oval Slot |
| 50M035060L016 | M3.5 | X .6 | X 16MM | Oval Slot |
| 50M035060L020 | M3.5 | X .6 | X 20MM | Oval Slot |
| 50M035060L025 | M3.5 | X .6 | X 25MM | Oval Slot |
| 50M035060L035 | M3.5 | X .6 | X 35MM | Oval Slot |
| 50M040070L006 | M4 | X .7 | X 6MM | Oval Slot |
| 50M040070L008 | M4 | X .7 | X 8MM | Oval Slot |
| 50M040070L010 | M4 | X .7 | X 10MM | Oval Slot |

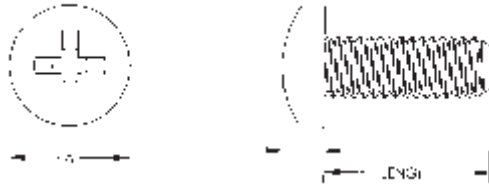
ITEM NUMBER ----- DESCRIPTION -----

| | | | | |
|---------------|-----|--------|--------|-----------|
| 50M040070L012 | M4 | X .7 | X 12MM | Oval Slot |
| 50M040070L015 | M4 | X .7 | X 15MM | Oval Slot |
| 50M040070L016 | M4 | X .7 | X 16MM | Oval Slot |
| 50M040070L020 | M4 | X .7 | X 20MM | Oval Slot |
| 50M040070L025 | M4 | X .7 | X 25MM | Oval Slot |
| 50M040070L030 | M4 | X .7 | X 30MM | Oval Slot |
| 50M040070L035 | M4 | X .7 | X 35MM | Oval Slot |
| 50M050080L006 | M5 | X .8 | X 6MM | Oval Slot |
| 50M050080L008 | M5 | X .8 | X 8MM | Oval Slot |
| 50M050080L010 | M5 | X .8 | X 10MM | Oval Slot |
| 50M050080L012 | M5 | X .8 | X 12MM | Oval Slot |
| 50M050080L015 | M5 | X .8 | X 15MM | Oval Slot |
| 50M050080L016 | M5 | X .8 | X 16MM | Oval Slot |
| 50M050080L020 | M5 | X .8 | X 20MM | Oval Slot |
| 50M050080L025 | M5 | X .8 | X 25MM | Oval Slot |
| 50M050080L030 | M5 | X .8 | X 30MM | Oval Slot |
| 50M050080L035 | M5 | X .8 | X 35MM | Oval Slot |
| 50M050080L040 | M5 | X .8 | X 40MM | Oval Slot |
| 50M060100L008 | M6 | X 1.00 | X 8MM | Oval Slot |
| 50M060100L010 | M6 | X 1.00 | X 10MM | Oval Slot |
| 50M060100L012 | M6 | X 1.00 | X 12MM | Oval Slot |
| 50M060100L016 | M6 | X 1.00 | X 16MM | Oval Slot |
| 50M060100L020 | M6 | X 1.00 | X 20MM | Oval Slot |
| 50M060100L025 | M6 | X 1.00 | X 25MM | Oval Slot |
| 50M060100L035 | M6 | X 1.00 | X 35MM | Oval Slot |
| 50M060100L040 | M6 | X 1.00 | X 40MM | Oval Slot |
| 50M060100L045 | M6 | X 1.00 | X 45MM | Oval Slot |
| 50M060100L050 | M6 | X 1.00 | X 50MM | Oval Slot |
| 50M080125L016 | M8 | X 1.25 | X 16MM | Oval Slot |
| 50M080125L020 | M8 | X 1.25 | X 20MM | Oval Slot |
| 50M080125L025 | M8 | X 1.25 | X 25MM | Oval Slot |
| 50M080125L030 | M8 | X 1.25 | X 30MM | Oval Slot |
| 50M080125L050 | M8 | X 1.25 | X 50MM | Oval Slot |
| 50M100150L020 | M10 | X 1.50 | X 20MM | Oval Slot |
| 50M100150L025 | M10 | X 1.50 | X 25MM | Oval Slot |
| 50M100150L030 | M10 | X 1.50 | X 30MM | Oval Slot |
| 50M100150L035 | M10 | X 1.50 | X 35MM | Oval Slot |
| 50M100150L060 | M10 | X 1.50 | X 60MM | Oval Slot |

METRIC SCREWS, BOLTS AND THREADED ROD

SECTION
XIII

ALL DIMENSIONS ARE IN MILLIMETERS



PAN PHILLIPS



| THREAD SIZE | A | H |
|-------------|-------------|-----------|
| M2 | 3.7 - 4.0 | 1.4 - 1.6 |
| M2.5 | 4.7 - 5.0 | 1.9 - 2.1 |
| M3 | 5.3 - 5.6 | 2.2 - 2.4 |
| M3.5 | 6.6 - 7.0 | 2.3 - 2.6 |
| M4 | 7.6 - 8.0 | 2.8 - 3.1 |
| M5 | 9.1 - 9.5 | 3.4 - 3.7 |
| M6 | 11.5 - 12.0 | 4.3 - 4.6 |
| M8 | 15.5 - 16.0 | 5.6 - 6.0 |
| M10 | 19.4 - 20.0 | 7.1 - 7.5 |

| Nominal Screw Length | Tolerance On Length |
|----------------------|---------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

All tolerances are plus and minus.

ITEM NUMBER ----- DESCRIPTION ----

| | | | | |
|----------------|------|-------|--------|----------|
| 50M020040P004 | M2 | X .4 | X 4MM | Pan Phil |
| 50M020040P005 | M2 | X .4 | X 5MM | Pan Phil |
| 50M020040P006 | M2 | X .4 | X 6MM | Pan Phil |
| 50M020040P008 | M2 | X .4 | X 8MM | Pan Phil |
| 50M020040P010 | M2 | X .4 | X 10MM | Pan Phil |
| 50M020040P012 | M2 | X .4 | X 12MM | Pan Phil |
| 50M020040P016 | M2 | X .4 | X 16MM | Pan Phil |
| 50M020040P020 | M2 | X .4 | X 20MM | Pan Phil |
| 50M020040P025 | M2 | X .4 | X 25MM | Pan Phil |
| 50M025045P004 | M2.5 | X .45 | X 4MM | Pan Phil |
| 50M025045P005 | M2.5 | X .45 | X 5MM | Pan Phil |
| 50M025045P006 | M2.5 | X .45 | X 6MM | Pan Phil |
| 50M025045P008 | M2.5 | X .45 | X 8MM | Pan Phil |
| 50M025045P010 | M2.5 | X .45 | X 10MM | Pan Phil |
| 50M025045P012 | M2.5 | X .45 | X 12MM | Pan Phil |
| 50M025045P016 | M2.5 | X .45 | X 16MM | Pan Phil |
| 50M025045P020 | M2.5 | X .45 | X 20MM | Pan Phil |
| 50M025045P025 | M2.5 | X .45 | X 25MM | Pan Phil |
| 50M030050 P003 | M3 | X .5 | X 3MM | Pan Phil |
| 50M030050P004 | M3 | X .5 | X 4MM | Pan Phil |
| 50M030050P005 | M3 | X .5 | X 5MM | Pan Phil |
| 50M030050P006 | M3 | X .5 | X 6MM | Pan Phil |
| 50M030050P008 | M3 | X .5 | X 8MM | Pan Phil |
| 50M030050P010 | M3 | X .5 | X 10MM | Pan Phil |
| 50M030050P012 | M3 | X .5 | X 12MM | Pan Phil |
| 50M030050P016 | M3 | X .5 | X 16MM | Pan Phil |
| 50M030050P020 | M3 | X .5 | X 20MM | Pan Phil |
| 50M030050P025 | M3 | X .5 | X 25MM | Pan Phil |
| 50M030050P030 | M3 | X .5 | X 30MM | Pan Phil |
| 50M030050P035 | M3 | X .5 | X 35MM | Pan Phil |
| 50M030050P042 | M3 | X .5 | X 42MM | Pan Phil |
| 50M035060P005 | M3.5 | X .6 | X 5MM | Pan Phil |
| 50M035060P006 | M3.5 | X .6 | X 6MM | Pan Phil |
| 50M035060P007 | M3.5 | X .6 | X 7MM | Pan Phil |
| 50M035060P008 | M3.5 | X .6 | X 8MM | Pan Phil |
| 50M035060P010 | M3.5 | X .6 | X 10MM | Pan Phil |
| 50M035060P012 | M3.5 | X .6 | X 12MM | Pan Phil |
| 50M035060P016 | M3.5 | X .6 | X 16MM | Pan Phil |
| 50M035060P020 | M3.5 | X .6 | X 20MM | Pan Phil |
| 50M035060P025 | M3.5 | X .6 | X 25MM | Pan Phil |
| 50M035060P035 | M3.5 | X .6 | X 35MM | Pan Phil |
| 50M035060P042 | M3.5 | X .6 | X 42MM | Pan Phil |
| 50M040070P003 | M4 | X .7 | X 3MM | Pan Phil |
| 50M040070P006 | M4 | X .7 | X 6MM | Pan Phil |
| 50M040070P008 | M4 | X .7 | X 8MM | Pan Phil |
| 50M040070P010 | M4 | X .7 | X 10MM | Pan Phil |
| 50M040070P012 | M4 | X .7 | X 12MM | Pan Phil |
| 50M040070P016 | M4 | X .7 | X 16MM | Pan Phil |
| 50M040070P020 | M4 | X .7 | X 20MM | Pan Phil |

ITEM NUMBER ----- DESCRIPTION ----

| | | | | |
|---------------|-----|--------|--------|----------|
| 50M040070P025 | M4 | X .7 | X 25MM | Pan Phil |
| 50M040070P030 | M4 | X .7 | X 30MM | Pan Phil |
| 50M040070P035 | M4 | X .7 | X 35MM | Pan Phil |
| 50M040070P040 | M4 | X .7 | X 40MM | Pan Phil |
| 50M050080P006 | M5 | X .8 | X 6MM | Pan Phil |
| 50M050080P008 | M5 | X .8 | X 8MM | Pan Phil |
| 50M050080P010 | M5 | X .8 | X 10MM | Pan Phil |
| 50M050080P012 | M5 | X .8 | X 12MM | Pan Phil |
| 50M050080P015 | M5 | X .8 | X 15MM | Pan Phil |
| 50M050080P016 | M5 | X .8 | X 16MM | Pan Phil |
| 50M050080P020 | M5 | X .8 | X 20MM | Pan Phil |
| 50M050080P025 | M5 | X .8 | X 25MM | Pan Phil |
| 50M050080P030 | M5 | X .8 | X 30MM | Pan Phil |
| 50M050080P035 | M5 | X .8 | X 35MM | Pan Phil |
| 50M050080P040 | M5 | X .8 | X 40MM | Pan Phil |
| 50M060100P005 | M6 | X 1.00 | X 5MM | Pan Phil |
| 50M060100P008 | M6 | X 1.00 | X 8MM | Pan Phil |
| 50M060100P010 | M6 | X 1.00 | X 10MM | Pan Phil |
| 50M060100P012 | M6 | X 1.00 | X 12MM | Pan Phil |
| 50M060100P016 | M6 | X 1.00 | X 16MM | Pan Phil |
| 50M060100P020 | M6 | X 1.00 | X 20MM | Pan Phil |
| 50M060100P022 | M6 | X 1.00 | X 22MM | Pan Phil |
| 50M060100P025 | M6 | X 1.00 | X 25MM | Pan Phil |
| 50M060100P030 | M6 | X 1.00 | X 30MM | Pan Phil |
| 50M060100P035 | M6 | X 1.00 | X 35MM | Pan Phil |
| 50M060100P040 | M6 | X 1.00 | X 40MM | Pan Phil |
| 50M060100P045 | M6 | X 1.00 | X 45MM | Pan Phil |
| 50M060100P050 | M6 | X 1.00 | X 50MM | Pan Phil |
| 50M060100P060 | M6 | X 1.00 | X 60MM | Pan Phil |
| 50M060100P070 | M6 | X 1.00 | X 70MM | Pan Phil |
| 50M060100P075 | M6 | X 1.00 | X 75MM | Pan Phil |
| 50M080125P010 | M8 | X 1.25 | X 10MM | Pan Phil |
| 50M080125P016 | M8 | X 1.25 | X 16MM | Pan Phil |
| 50M080125P020 | M8 | X 1.25 | X 20MM | Pan Phil |
| 50M080125P025 | M8 | X 1.25 | X 25MM | Pan Phil |
| 50M080125P030 | M8 | X 1.25 | X 30MM | Pan Phil |
| 50M080125P035 | M8 | X 1.25 | X 35MM | Pan Phil |
| 50M080125P050 | M8 | X 1.25 | X 50MM | Pan Phil |
| 50M080125P070 | M8 | X 1.25 | X 70MM | Pan Phil |
| 50M100150P013 | M10 | X 1.50 | X 13MM | Pan Phil |
| 50M100150P016 | M10 | X 1.50 | X 16MM | Pan Phil |
| 50M100150P019 | M10 | X 1.50 | X 19MM | Pan Phil |
| 50M100150P020 | M10 | X 1.50 | X 20MM | Pan Phil |
| 50M100150P025 | M10 | X 1.50 | X 25MM | Pan Phil |
| 50M100150P030 | M10 | X 1.50 | X 30MM | Pan Phil |
| 50M100150P035 | M10 | X 1.50 | X 35MM | Pan Phil |
| 50M100150P050 | M10 | X 1.50 | X 50MM | Pan Phil |
| 50M100150P060 | M10 | X 1.50 | X 60MM | Pan Phil |

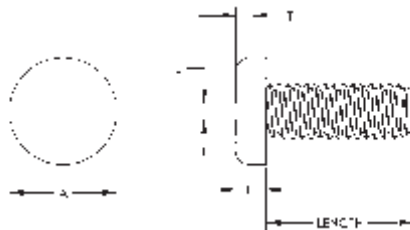


METRIC SCREWS, BOLTS AND THREADED ROD

ALL DIMENSIONS ARE IN MILLIMETERS

SECTION
XIII

New Sizes



PAN SLOTTED



| ITEM NUMBER | DESCRIPTION |
|---------------|----------------------------|
| 50M020040N004 | M2 X .4 X 4MM Pan Slot |
| 50M020040N003 | M2 X .4 X 3MM Pan Slot |
| 50M020040N005 | M2 X .4 X 5MM Pan Slot |
| 50M020040N006 | M2 X .4 X 6MM Pan Slot |
| 50M020040N008 | M2 X .4 X 8MM Pan Slot |
| 50M020040N010 | M2 X .4 X 10MM Pan Slot |
| 50M020040N012 | M2 X .4 X 12MM Pan Slot |
| 50M020040N016 | M2 X .4 X 16MM Pan Slot |
| 50M020040N020 | M2 X .4 X 20MM Pan Slot |
| 50M020040N025 | M2 X .4 X 25MM Pan Slot |
| 50M025045N004 | M2.5 X .45 X 4MM Pan Slot |
| 50M025045N005 | M2.5 X .45 X 5MM Pan Slot |
| 50M025045N006 | M2.5 X .45 X 6MM Pan Slot |
| 50M025045N008 | M2.5 X .45 X 8MM Pan Slot |
| 50M025045N010 | M2.5 X .45 X 10MM Pan Slot |
| 50M025045N012 | M2.5 X .45 X 12MM Pan Slot |
| 50M025045N016 | M2.5 X .45 X 16MM Pan Slot |
| 50M025045N020 | M2.5 X .45 X 20MM Pan Slot |
| 50M025045N025 | M2.5 X .45 X 25MM Pan Slot |
| 50M030050N004 | M3 X .5 X 4MM Pan Slot |
| 50M030050N005 | M3 X .5 X 5MM Pan Slot |
| 50M030050N006 | M3 X .5 X 6MM Pan Slot |
| 50M030050N008 | M3 X .5 X 8MM Pan Slot |
| 50M030050N010 | M3 X .5 X 10MM Pan Slot |
| 50M030050N012 | M3 X .5 X 12MM Pan Slot |
| 50M030050N016 | M3 X .5 X 16MM Pan Slot |
| 50M030050N020 | M3 X .5 X 20MM Pan Slot |
| 50M030050N025 | M3 X .5 X 25MM Pan Slot |
| 50M030050N030 | M3 X .5 X 30MM Pan Slot |
| 50M030050N035 | M3 X .5 X 35MM Pan Slot |
| 50M030050N042 | M3 X .5 X 42MM Pan Slot |
| 50M035060N005 | M3.5 X .6 X 5MM Pan Slot |
| 50M035060N006 | M3.5 X .6 X 6MM Pan Slot |
| 50M035060N007 | M3.5 X .6 X 7MM Pan Slot |
| 50M035060N008 | M3.5 X .6 X 8MM Pan Slot |
| 50M035060N010 | M3.5 X .6 X 10MM Pan Slot |
| 50M035060N012 | M3.5 X .6 X 12MM Pan Slot |
| 50M035060N016 | M3.5 X .6 X 16MM Pan Slot |
| 50M035060N020 | M3.5 X .6 X 20MM Pan Slot |
| 50M035060N025 | M3.5 X .6 X 25MM Pan Slot |
| 50M035060N035 | M3.5 X .6 X 35MM Pan Slot |
| 50M035060N042 | M3.5 X .6 X 42MM Pan Slot |
| 50M040070N003 | M4 X .7 X 3MM Pan Slot |
| 50M040070N006 | M4 X .7 X 6MM Pan Slot |
| 50M040070N008 | M4 X .7 X 8MM Pan Slot |
| 50M040070N010 | M4 X .7 X 10MM Pan Slot |
| 50M040070N012 | M4 X .7 X 12MM Pan Slot |
| 50M040070N016 | M4 X .7 X 16MM Pan Slot |
| 50M040070N020 | M4 X .7 X 20MM Pan Slot |

| ITEM NUMBER | DESCRIPTION |
|---------------|----------------------------|
| 50M040070N025 | M4 X .7 X 25MM Pan Slot |
| 50M040070N030 | M4 X .7 X 30MM Pan Slot |
| 50M040070N035 | M4 X .7 X 35MM Pan Slot |
| 50M040070N040 | M4 X .7 X 40MM Pan Slot |
| 50M050080N006 | M5 X .8 X 6MM Pan Slot |
| 50M050080N008 | M5 X .8 X 8MM Pan Slot |
| 50M050080N010 | M5 X .8 X 10MM Pan Slot |
| 50M050080N012 | M5 X .8 X 12MM Pan Slot |
| 50M050080N015 | M5 X .8 X 15MM Pan Slot |
| 50M050080N016 | M5 X .8 X 16MM Pan Slot |
| 50M050080N020 | M5 X .8 X 20MM Pan Slot |
| 50M050080N025 | M5 X .8 X 25MM Pan Slot |
| 50M050080N030 | M5 X .8 X 30MM Pan Slot |
| 50M050080N035 | M5 X .8 X 35MM Pan Slot |
| 50M050080N040 | M5 X .8 X 40MM Pan Slot |
| 50M060100N005 | M6 X 1.00 X 5MM Pan Slot |
| 50M060100N008 | M6 X 1.00 X 8MM Pan Slot |
| 50M060100N010 | M6 X 1.00 X 10MM Pan Slot |
| 50M060100N012 | M6 X 1.00 X 12MM Pan Slot |
| 50M060100N016 | M6 X 1.00 X 16MM Pan Slot |
| 50M060100N020 | M6 X 1.00 X 20MM Pan Slot |
| 50M060100N022 | M6 X 1.00 X 22MM Pan Slot |
| 50M060100N025 | M6 X 1.00 X 25MM Pan Slot |
| 50M060100N030 | M6 X 1.00 X 30MM Pan Slot |
| 50M060100N035 | M6 X 1.00 X 35MM Pan Slot |
| 50M060100N040 | M6 X 1.00 X 40MM Pan Slot |
| 50M060100N045 | M6 X 1.00 X 45MM Pan Slot |
| 50M060100N050 | M6 X 1.00 X 50MM Pan Slot |
| 50M060100N060 | M6 X 1.00 X 60MM Pan Slot |
| 50M060100N070 | M6 X 1.00 X 70MM Pan Slot |
| 50M060100N075 | M6 X 1.00 X 75MM Pan Slot |
| 50M080125N010 | M8 X 1.25 X 10MM Pan Slot |
| 50M080125N016 | M8 X 1.25 X 16MM Pan Slot |
| 50M080125N020 | M8 X 1.25 X 20MM Pan Slot |
| 50M080125N025 | M8 X 1.25 X 25MM Pan Slot |
| 50M080125N030 | M8 X 1.25 X 30MM Pan Slot |
| 50M080125N035 | M8 X 1.25 X 35MM Pan Slot |
| 50M080125N050 | M8 X 1.25 X 50MM Pan Slot |
| 50M080125N070 | M8 X 1.25 X 70MM Pan Slot |
| 50M100150N013 | M10 X 1.50 X 13MM Pan Slot |
| 50M100150N016 | M10 X 1.50 X 16MM Pan Slot |
| 50M100150N019 | M10 X 1.50 X 19MM Pan Slot |
| 50M100150N020 | M10 X 1.50 X 20MM Pan Slot |
| 50M100150N025 | M10 X 1.50 X 25MM Pan Slot |
| 50M100150N030 | M10 X 1.50 X 30MM Pan Slot |
| 50M100150N035 | M10 X 1.50 X 35MM Pan Slot |
| 50M100150N050 | M10 X 1.50 X 50MM Pan Slot |
| 50M100150N060 | M10 X 1.50 X 60MM Pan Slot |

| THREAD SIZE | A | H | J | T |
|-------------|-------------|-----------|-----------|----------|
| M2 | 3.7 - 4.0 | 1.1 - 1.3 | 0.5 - 0.7 | 0.5 min. |
| M2.5 | 4.7 - 5.0 | 1.3 - 1.5 | 0.6 - 0.8 | 0.6 min. |
| M3 | 5.3 - 5.6 | 1.6 - 1.8 | 0.8 - 1.0 | 0.7 min. |
| M3.5 | 6.6 - 7.0 | 1.9 - 2.1 | 1.0 - 1.2 | 0.8 min. |
| M4 | 7.6 - 8.0 | 2.2 - 2.4 | 1.2 - 1.5 | 1.0 min. |
| M5 | 9.1 - 9.5 | 2.7 - 3.0 | 1.2 - 1.5 | 1.2 min. |
| M6 | 11.5 - 12.0 | 3.3 - 3.6 | 1.6 - 1.9 | 1.4 min. |
| M8 | 15.5 - 16.0 | 4.5 - 4.8 | 2.0 - 2.3 | 1.9 min. |
| M10 | 19.4 - 20.0 | 5.7 - 6.0 | 2.5 - 2.8 | 2.4 min. |

| Nominal Screw Length | Tolerance On Length mm |
|----------------------|------------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

All tolerances are plus and minus.



METRIC SCREWS, BOLTS AND THREADED ROD

SECTION
XIII

ALL DIMENSIONS ARE IN MILLIMETERS



FILLISTER PHILLIPS



| THREAD SIZE | A | H |
|-------------|------|------|
| M2 X 0.4 | 3.8 | 1.60 |
| M2.5 X 0.45 | 5.0 | 2.00 |
| M3 X 0.5 | 6.0 | 2.40 |
| M3.5 X 0.6 | 7.0 | 2.70 |
| M4 X 0.7 | 8.0 | 3.10 |
| M5 X 0.8 | 10.0 | 3.80 |
| M6 X 1.0 | 12.0 | 4.60 |
| M8 X 1.25 | 16.0 | 6.00 |
| M10 X 1.5 | 18.0 | 7.00 |

| Nominal Screw Length | Tolerance On Length |
|----------------------|---------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

All tolerances are plus and minus.

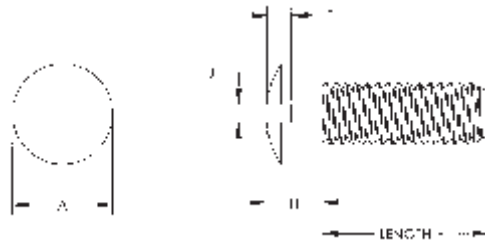


| ITEM NUMBER | ----- | DESCRIPTION | ----- | ITEM NUMBER | ----- | DESCRIPTION | ----- | |
|---------------|-------|-------------|--------|-------------|---------------|-------------|---------------|-----------|
| 50M020040G004 | M2 | X .4 | X 4MM | Fill Phil | 50M040070G025 | M4 | X .7 X 25MM | Fill Phil |
| 50M020040G005 | M2 | X .4 | X 5MM | Fill Phil | 50M040070G030 | M4 | X .7 X 30MM | Fill Phil |
| 50M020040G006 | M2 | X .4 | X 6MM | Fill Phil | 50M040070G035 | M4 | X .7 X 35MM | Fill Phil |
| 50M020040G008 | M2 | X .4 | X 8MM | Fill Phil | 50M040070G040 | M4 | X .7 X 40MM | Fill Phil |
| 50M020040G010 | M2 | X .4 | X 10MM | Fill Phil | 50M050080G006 | M5 | X .8 X 6MM | Fill Phil |
| 50M020040G012 | M2 | X .4 | X 12MM | Fill Phil | 50M050080G008 | M5 | X .8 X 8MM | Fill Phil |
| 50M020040G016 | M2 | X .4 | X 16MM | Fill Phil | 50M050080G010 | M5 | X .8 X 10MM | Fill Phil |
| 50M020040G020 | M2 | X .4 | X 20MM | Fill Phil | 50M050080G012 | M5 | X .8 X 12MM | Fill Phil |
| 50M020040G025 | M2 | X .4 | X 25MM | Fill Phil | 50M050080G015 | M5 | X .8 X 15MM | Fill Phil |
| 50M025045G004 | M2.5 | X .45 | X 4MM | Fill Phil | 50M050080G016 | M5 | X .8 X 16MM | Fill Phil |
| 50M025045G005 | M2.5 | X .45 | X 5MM | Fill Phil | 50M050080G020 | M5 | X .8 X 20MM | Fill Phil |
| 50M025045G006 | M2.5 | X .45 | X 6MM | Fill Phil | 50M050080G025 | M5 | X .8 X 25MM | Fill Phil |
| 50M025045G008 | M2.5 | X .45 | X 8MM | Fill Phil | 50M050080G030 | M5 | X .8 X 30MM | Fill Phil |
| 50M025045G010 | M2.5 | X .45 | X 10MM | Fill Phil | 50M050080G035 | M5 | X .8 X 35MM | Fill Phil |
| 50M025045G012 | M2.5 | X .45 | X 12MM | Fill Phil | 50M050080G040 | M5 | X .8 X 40MM | Fill Phil |
| 50M025045G016 | M2.5 | X .45 | X 16MM | Fill Phil | 50M060100G005 | M6 | X 1.0 X 5MM | Fill Phil |
| 50M025045G020 | M2.5 | X .45 | X 20MM | Fill Phil | 50M060100G008 | M6 | X 1.00 X 8MM | Fill Phil |
| 50M025045G025 | M2.5 | X .45 | X 25MM | Fill Phil | 50M060100G010 | M6 | X 1.00 X 10MM | Fill Phil |
| 50M030050G004 | M3 | X .5 | X 4MM | Fill Phil | 50M060100G012 | M6 | X 1.00 X 12MM | Fill Phil |
| 50M030050G005 | M3 | X .5 | X 5MM | Fill Phil | 50M060100G016 | M6 | X 1.00 X 16MM | Fill Phil |
| 50M030050G006 | M3 | X .5 | X 6MM | Fill Phil | 50M060100G020 | M6 | X 1.00 X 20MM | Fill Phil |
| 50M030050G008 | M3 | X .5 | X 8MM | Fill Phil | 50M060100G022 | M6 | X 1.00 X 22MM | Fill Phil |
| 50M030050G010 | M3 | X .5 | X 10MM | Fill Phil | 50M060100G025 | M6 | X 1.00 X 25MM | Fill Phil |
| 50M030050G012 | M3 | X .5 | X 12MM | Fill Phil | 50M060100G030 | M6 | X 1.00 X 30MM | Fill Phil |
| 50M030050G016 | M3 | X .5 | X 16MM | Fill Phil | 50M060100G035 | M6 | X 1.00 X 35MM | Fill Phil |
| 50M030050G020 | M3 | X .5 | X 20MM | Fill Phil | 50M060100G040 | M6 | X 1.00 X 40MM | Fill Phil |
| 50M030050G025 | M3 | X .5 | X 25MM | Fill Phil | 50M060100G045 | M6 | X 1.00 X 45MM | Fill Phil |
| 50M030050G030 | M3 | X .5 | X 30MM | Fill Phil | 50M060100G050 | M6 | X 1.00 X 50MM | Fill Phil |
| 50M030050G035 | M3 | X .5 | X 35MM | Fill Phil | 50M060100G060 | M6 | X 1.00 X 60MM | Fill Phil |
| 50M030050G042 | M3 | X .5 | X 42MM | Fill Phil | 50M060100G070 | M6 | X 1.00 X 70MM | Fill Phil |
| 50M035060G005 | M3.5 | X .6 | X 5MM | Fill Phil | 50M060100G075 | M6 | X 1.00 X 75MM | Fill Phil |
| 50M035060G006 | M3.5 | X .6 | X 6MM | Fill Phil | 50M080125G010 | M8 | X 1.25 X 10MM | Fill Phil |
| 50M035060G007 | M3.5 | X .6 | X 7MM | Fill Phil | 50M080125G016 | M8 | X 1.25 X 16MM | Fill Phil |
| 50M035060G008 | M3.5 | X .6 | X 8MM | Fill Phil | 50M080125G020 | M8 | X 1.25 X 20MM | Fill Phil |
| 50M035060G010 | M3.5 | X .6 | X 10MM | Fill Phil | 50M080125G025 | M8 | X 1.25 X 25MM | Fill Phil |
| 50M035060G012 | M3.5 | X .6 | X 12MM | Fill Phil | 50M080125G030 | M8 | X 1.25 X 30MM | Fill Phil |
| 50M035060G016 | M3.5 | X .6 | X 16MM | Fill Phil | 50M080125G035 | M8 | X 1.25 X 35MM | Fill Phil |
| 50M035060G020 | M3.5 | X .6 | X 20MM | Fill Phil | 50M080125G050 | M8 | X 1.25 X 50MM | Fill Phil |
| 50M035060G025 | M3.5 | X .6 | X 25MM | Fill Phil | 50M080125G070 | M8 | X 1.25 X 70MM | Fill Phil |
| 50M035060G035 | M3.5 | X .6 | X 35MM | Fill Phil | 50M100150G013 | M10 | X 1.50 X 13MM | Fill Phil |
| 50M035060G042 | M3.5 | X .6 | X 42MM | Fill Phil | 50M100150G016 | M10 | X 1.50 X 16MM | Fill Phil |
| 50M040070G003 | M4 | X .7 | X 3MM | Fill Phil | 50M100150G019 | M10 | X 1.50 X 19MM | Fill Phil |
| 50M040070G006 | M4 | X .7 | X 6MM | Fill Phil | 50M100150G020 | M10 | X 1.50 X 20MM | Fill Phil |
| 50M040070G008 | M4 | X .7 | X 8MM | Fill Phil | 50M100150G025 | M10 | X 1.50 X 25MM | Fill Phil |
| 50M040070G010 | M4 | X .7 | X 10MM | Fill Phil | 50M100150G030 | M10 | X 1.50 X 30MM | Fill Phil |
| 50M040070G012 | M4 | X .7 | X 12MM | Fill Phil | 50M100150G035 | M10 | X 1.50 X 35MM | Fill Phil |
| 50M040070G016 | M4 | X .7 | X 16MM | Fill Phil | 50M100150G050 | M10 | X 1.50 X 50MM | Fill Phil |
| 50M040070G020 | M4 | X .7 | X 20MM | Fill Phil | 50M100150G060 | M10 | X 1.50 X 60MM | Fill Phil |

METRIC SCREWS, BOLTS AND THREADED ROD

ALL DIMENSIONS ARE IN MILLIMETERS

SECTION
XIII



FILLISTER SLOTTED



| ITEM NUMBER | DESCRIPTION |
|---------------|-----------------------------|
| 50M020040F004 | M2 X .4 X 4MM Fill Slot |
| 50M020040F005 | M2 X .4 X 5MM Fill Slot |
| 50M020040F006 | M2 X .4 X 6MM Fill Slot |
| 50M020040F008 | M2 X .4 X 8MM Fill Slot |
| 50M020040F010 | M2 X .4 X 10MM Fill Slot |
| 50M020040F012 | M2 X .4 X 12MM Fill Slot |
| 50M020040F016 | M2 X .4 X 16MM Fill Slot |
| 50M020040F020 | M2 X .4 X 20MM Fill Slot |
| 50M020040F025 | M2 X .4 X 25MM Fill Slot |
| 50M025045F004 | M2.5 X .45 X 4MM Fill Slot |
| 50M025045F005 | M2.5 X .45 X 5MM Fill Slot |
| 50M025045F006 | M2.5 X .45 X 6MM Fill Slot |
| 50M025045F008 | M2.5 X .45 X 8MM Fill Slot |
| 50M025045F010 | M2.5 X .45 X 10MM Fill Slot |
| 50M025045F012 | M2.5 X .45 X 12MM Fill Slot |
| 50M025045F016 | M2.5 X .45 X 16MM Fill Slot |
| 50M025045F020 | M2.5 X .45 X 20MM Fill Slot |
| 50M025045F025 | M2.5 X .45 X 25MM Fill Slot |
| 50M030050F004 | M3 X .5 X 4MM Fill Slot |
| 50M030050F005 | M3 X .5 X 5MM Fill Slot |
| 50M030050F006 | M3 X .5 X 6MM Fill Slot |
| 50M030050F008 | M3 X .5 X 8MM Fill Slot |
| 50M030050F010 | M3 X .5 X 10MM Fill Slot |
| 50M030050F012 | M3 X .5 X 12MM Fill Slot |
| 50M030050F016 | M3 X .5 X 16MM Fill Slot |
| 50M030050F020 | M3 X .5 X 20MM Fill Slot |
| 50M030050F025 | M3 X .5 X 25MM Fill Slot |
| 50M030050F030 | M3 X .5 X 30MM Fill Slot |
| 50M030050F035 | M3 X .5 X 35MM Fill Slot |
| 50M030050F042 | M3 X .5 X 42MM Fill Slot |
| 50M035060F005 | M3.5 X .6 X 5MM Fill Slot |
| 50M035060F006 | M3.5 X .6 X 6MM Fill Slot |
| 50M035060F007 | M3.5 X .6 X 7MM Fill Slot |
| 50M035060F008 | M3.5 X .6 X 8MM Fill Slot |
| 50M035060F010 | M3.5 X .6 X 10MM Fill Slot |
| 50M035060F012 | M3.5 X .6 X 12MM Fill Slot |
| 50M035060F016 | M3.5 X .6 X 16MM Fill Slot |
| 50M035060F020 | M3.5 X .6 X 20MM Fill Slot |
| 50M035060F025 | M3.5 X .6 X 25MM Fill Slot |
| 50M035060F035 | M3.5 X .6 X 35MM Fill Slot |
| 50M035060F042 | M3.5 X .6 X 42MM Fill Slot |
| 50M040070F003 | M4 X .7 X 3MM Fill Slot |
| 50M040070F006 | M4 X .7 X 6MM Fill Slot |
| 50M040070F008 | M4 X .7 X 8MM Fill Slot |
| 50M040070F010 | M4 X .7 X 10MM Fill Slot |
| 50M040070F012 | M4 X .7 X 12MM Fill Slot |
| 50M040070F016 | M4 X .7 X 16MM Fill Slot |
| 50M040070F020 | M4 X .7 X 20MM Fill Slot |

| ITEM NUMBER | DESCRIPTION |
|---------------|-----------------------------|
| 50M040070F025 | M4 X .7 X 25MM Fill Slot |
| 50M040070F030 | M4 X .7 X 30MM Fill Slot |
| 50M040070F035 | M4 X .7 X 35MM Fill Slot |
| 50M040070F040 | M4 X .7 X 40MM Fill Slot |
| 50M050080F006 | M5 X .8 X 6MM Fill Slot |
| 50M050080F008 | M5 X .8 X 8MM Fill Slot |
| 50M050080F010 | M5 X .8 X 10MM Fill Slot |
| 50M050080F012 | M5 X .8 X 12MM Fill Slot |
| 50M050080F015 | M5 X .8 X 15MM Fill Slot |
| 50M050080F016 | M5 X .8 X 16MM Fill Slot |
| 50M050080F020 | M5 X .8 X 20MM Fill Slot |
| 50M050080F025 | M5 X .8 X 25MM Fill Slot |
| 50M050080F030 | M5 X .8 X 30MM Fill Slot |
| 50M050080F035 | M5 X .8 X 35MM Fill Slot |
| 50M050080F040 | M5 X .8 X 40MM Fill Slot |
| 50M060100F005 | M6 X 1.00 X 5MM Fill Slot |
| 50M060100F008 | M6 X 1.00 X 8MM Fill Slot |
| 50M060100F010 | M6 X 1.00 X 10MM Fill Slot |
| 50M060100F012 | M6 X 1.00 X 12MM Fill Slot |
| 50M060100F016 | M6 X 1.00 X 16MM Fill Slot |
| 50M060100F020 | M6 X 1.00 X 20MM Fill Slot |
| 50M060100F022 | M6 X 1.00 X 22MM Fill Slot |
| 50M060100F025 | M6 X 1.00 X 25MM Fill Slot |
| 50M060100F030 | M6 X 1.00 X 30MM Fill Slot |
| 50M060100F035 | M6 X 1.00 X 35MM Fill Slot |
| 50M060100F040 | M6 X 1.00 X 40MM Fill Slot |
| 50M060100F045 | M6 X 1.00 X 45MM Fill Slot |
| 50M060100F050 | M6 X 1.00 X 50MM Fill Slot |
| 50M060100F060 | M6 X 1.00 X 60MM Fill Slot |
| 50M060100F070 | M6 X 1.00 X 70MM Fill Slot |
| 50M060100F075 | M6 X 1.00 X 75MM Fill Slot |
| 50M080125F010 | M8 X 1.25 X 10MM Fill Slot |
| 50M080125F016 | M8 X 1.25 X 16MM Fill Slot |
| 50M080125F020 | M8 X 1.25 X 20MM Fill Slot |
| 50M080125F025 | M8 X 1.25 X 25MM Fill Slot |
| 50M080125F030 | M8 X 1.25 X 30MM Fill Slot |
| 50M080125F035 | M8 X 1.25 X 35MM Fill Slot |
| 50M080125F050 | M8 X 1.25 X 50MM Fill Slot |
| 50M080125F070 | M8 X 1.25 X 70MM Fill Slot |
| 50M100150F013 | M10 X 1.50 X 13MM Fill Slot |
| 50M100150F016 | M10 X 1.50 X 16MM Fill Slot |
| 50M100150F019 | M10 X 1.50 X 19MM Fill Slot |
| 50M100150F020 | M10 X 1.50 X 20MM Fill Slot |
| 50M100150F025 | M10 X 1.50 X 25MM Fill Slot |
| 50M100150F030 | M10 X 1.50 X 30MM Fill Slot |
| 50M100150F035 | M10 X 1.50 X 35MM Fill Slot |
| 50M100150F050 | M10 X 1.50 X 50MM Fill Slot |
| 50M100150F060 | M10 X 1.50 X 60MM Fill Slot |

| THREAD SIZE | A | H | J | T |
|-------------|------|------|------|------|
| M2 X 0.4 | 3.8 | 1.60 | 0.60 | 0.90 |
| M2.5 X 0.45 | 5.0 | 2.00 | 0.70 | 1.10 |
| M3 X 0.5 | 6.0 | 2.40 | 1.00 | 1.30 |
| M3.5 X 0.6 | 7.0 | 2.70 | 1.10 | 1.40 |
| M4 X 0.7 | 8.0 | 3.10 | 1.20 | 1.60 |
| M5 X 0.8 | 9.4 | 3.80 | 1.50 | 2.00 |
| M6 X 1.0 | 12.0 | 4.60 | 1.90 | 2.30 |
| M8 X 1.25 | 16.0 | 6.00 | 2.30 | 2.80 |
| M10 X 1.5 | 20.0 | 7.50 | 2.80 | 3.20 |

| Nominal Screw Length | Tolerance On Length |
|----------------------|---------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

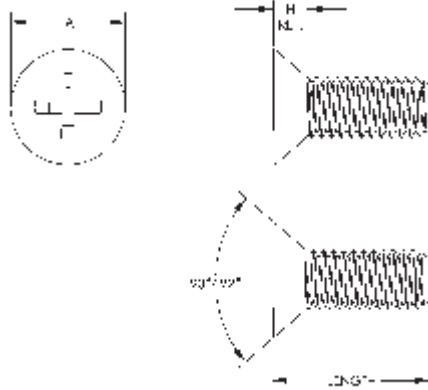
All tolerances are plus and minus.



METRIC SCREWS, BOLTS AND THREADED ROD

SECTION
XIII

ALL DIMENSIONS ARE IN MILLIMETERS



| THREAD SIZE | A | * H |
|-------------|-------------|--------------|
| M2 X 0.4 | 3.5 - 4.4 | 1.2 max ref. |
| M2.5 X 0.45 | 4.4 - 5.5 | 1.5 max ref. |
| M3 X 0.5 | 5.2 - 6.3 | 1.7 max ref. |
| M3.5 X 0.6 | 6.9 - 8.2 | 2.3 max ref. |
| M4 X 0.7 | 8.0 - 9.4 | 2.7 max ref. |
| M5 X 0.8 | 8.9 - 10.4 | 2.7 max ref. |
| M6 X 1 | 10.9 - 12.6 | 3.3 max ref. |
| M8 X 1.25 | 15.4 - 17.3 | 4.6 max ref. |
| M10 X 1.5 | 17.8 - 20.0 | 5.0 max ref. |

* H Dimension is a reference dimension only.

FLAT PHILLIPS



ITEM NUMBER ----- DESCRIPTION -----

| | | |
|---------------|-------------------|-----------|
| 50M025045I004 | M2.5 X .45 X 4MM | Flat Phil |
| 50M025045I005 | M2.5 X .45 X 5MM | Flat Phil |
| 50M025045I006 | M2.5 X .45 X 6MM | Flat Phil |
| 50M025045I008 | M2.5 X .45 X 8MM | Flat Phil |
| 50M025045I010 | M2.5 X .45 X 10MM | Flat Phil |
| 50M025045I012 | M2.5 X .45 X 12MM | Flat Phil |
| 50M025045I016 | M2.5 X .45 X 16MM | Flat Phil |
| 50M025045I020 | M2.5 X .45 X 20MM | Flat Phil |
| 50M025045I025 | M2.5 X .45 X 25MM | Flat Phil |
| 50M030050I005 | M3 X .5 X 5MM | Flat Phil |
| 50M030050I006 | M3 X .5 X 6MM | Flat Phil |
| 50M030050I008 | M3 X .5 X 8MM | Flat Phil |
| 50M030050I010 | M3 X .5 X 10MM | Flat Phil |
| 50M030050I012 | M3 X .5 X 12MM | Flat Phil |
| 50M030050I016 | M3 X .5 X 16MM | Flat Phil |
| 50M030050I020 | M3 X .5 X 20MM | Flat Phil |
| 50M030050I025 | M3 X .5 X 25MM | Flat Phil |
| 50M035060I005 | M3.5 X .6 X 5MM | Flat Phil |
| 50M035060I006 | M3.5 X .6 X 6MM | Flat Phil |
| 50M035060I008 | M3.5 X .6 X 8MM | Flat Phil |
| 50M035060I010 | M3.5 X .6 X 10MM | Flat Phil |
| 50M035060I012 | M3.5 X .6 X 12MM | Flat Phil |
| 50M035060I016 | M3.5 X .6 X 16MM | Flat Phil |
| 50M035060I020 | M3.5 X .6 X 20MM | Flat Phil |
| 50M035060I025 | M3.5 X .6 X 25MM | Flat Phil |
| 50M035060I035 | M3.5 X .6 X 35MM | Flat Phil |
| 50M040070I006 | M4 X .7 X 6MM | Flat Phil |
| 50M040070I008 | M4 X .7 X 8MM | Flat Phil |
| 50M040070I010 | M4 X .7 X 10MM | Flat Phil |
| 50M040070I012 | M4 X .7 X 12MM | Flat Phil |

ITEM NUMBER ----- DESCRIPTION -----

| | | |
|---------------|-------------------|-----------|
| 50M040070I016 | M4 X .7 X 16MM | Flat Phil |
| 50M040070I020 | M4 X .7 X 20MM | Flat Phil |
| 50M040070I025 | M4 X .7 X 25MM | Flat Phil |
| 50M050080I006 | M5 X .8 X 6MM | Flat Phil |
| 50M050080I008 | M5 X .8 X 8MM | Flat Phil |
| 50M050080I010 | M5 X .8 X 10MM | Flat Phil |
| 50M050080I012 | M5 X .8 X 12MM | Flat Phil |
| 50M050080I016 | M5 X .8 X 16MM | Flat Phil |
| 50M050080I020 | M5 X .8 X 20MM | Flat Phil |
| 50M050080I025 | M5 X .8 X 25MM | Flat Phil |
| 50M050080I030 | M5 X .8 X 30MM | Flat Phil |
| 50M050080I040 | M5 X .8 X 40MM | Flat Phil |
| 50M060100I008 | M6 X 1.00 X 8MM | Flat Phil |
| 50M060100I010 | M6 X 1.00 X 10MM | Flat Phil |
| 50M060100I012 | M6 X 1.00 X 12MM | Flat Phil |
| 50M060100I016 | M6 X 1.00 X 16MM | Flat Phil |
| 50M060100I020 | M6 X 1.00 X 20MM | Flat Phil |
| 50M060100I025 | M6 X 1.00 X 25MM | Flat Phil |
| 50M060100I035 | M6 X 1.00 X 35MM | Flat Phil |
| 50M060100I045 | M6 X 1.00 X 45MM | Flat Phil |
| 50M080125I010 | M8 X 1.25 X 10MM | Flat Phil |
| 50M080125I016 | M8 X 1.25 X 16MM | Flat Phil |
| 50M080125I020 | M8 X 1.25 X 20MM | Flat Phil |
| 50M080125I025 | M8 X 1.25 X 25MM | Flat Phil |
| 50M080125I030 | M8 X 1.25 X 30MM | Flat Phil |
| 50M080125I050 | M8 X 1.25 X 50MM | Flat Phil |
| 50M100150I020 | M10 X 1.50 X 20MM | Flat Phil |
| 50M100150I025 | M10 X 1.50 X 25MM | Flat Phil |
| 50M100150I035 | M10 X 1.50 X 35MM | Flat Phil |

| Nominal Screw Length | Tolerance On Length |
|----------------------|---------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

All tolerances are plus and minus.

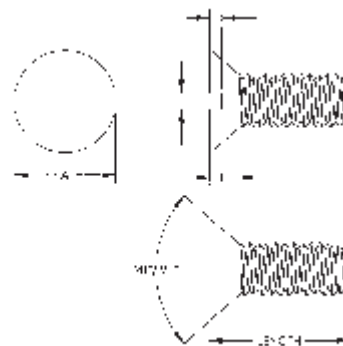


METRIC SCREWS, BOLTS AND THREADED ROD

ALL DIMENSIONS ARE IN MILLIMETERS

SECTION
XIII

| THREAD SIZE | A | H | J | T |
|-------------|-------------|--------------|-----------|-----------|
| M2 X 0.4 | 3.5 - 4.4 | 1.2 max ref. | 0.5 - 0.7 | 0.4 - 0.6 |
| M2.5 X 0.45 | 4.4 - 5.5 | 1.5 max ref. | 0.6 - 0.8 | 0.5 - 0.7 |
| M3 X 0.5 | 5.2 - 6.3 | 1.7 max ref. | 0.8 - 1.0 | 0.6 - 0.9 |
| M3.5 X 0.6 | 6.9 - 8.2 | 2.3 max ref. | 1.0 - 1.2 | 0.9 - 1.2 |
| M4 X 0.7 | 8.0 - 9.4 | 2.7 max ref. | 1.2 - 1.5 | 1.0 - 1.3 |
| M5 X 0.8 | 8.9 - 10.4 | 2.7 max ref. | 1.2 - 1.5 | 1.1 - 1.4 |
| M6 X 1 | 10.9 - 12.6 | 3.3 max ref. | 1.6 - 1.9 | 1.2 - 1.6 |
| M8 X 1.25 | 15.4 - 17.3 | 4.6 max ref. | 2.0 - 2.3 | 1.8 - 2.3 |
| M10 X 1.5 | 17.8 - 20.0 | 5.0 max ref. | 2.5 - 2.8 | 2.0 - 2.6 |



| ITEM NUMBER | DESCRIPTION |
|---------------|-----------------------------|
| 50M020040H004 | M2 X .4 X 4MM Flat Slot |
| 50M020040H005 | M2 X .4 X 5MM Flat Slot |
| 50M020040H006 | M2 X .4 X 6MM Flat Slot |
| 50M020040H008 | M2 X .4 X 8MM Flat Slot |
| 50M020040H010 | M2 X .4 X 10MM Flat Slot |
| 50M020040H011 | M2 X .4 X 11MM Flat Slot |
| 50M020040H012 | M2 X .4 X 12MM Flat Slot |
| 50M020040H016 | M2 X .4 X 16MM Flat Slot |
| 50M020040H025 | M2 X .4 X 25MM Flat Slot |
| 50M025045H004 | M2.5 X .45 X 4MM Flat Slot |
| 50M025045H005 | M2.5 X .45 X 5MM Flat Slot |
| 50M025045H006 | M2.5 X .45 X 6MM Flat Slot |
| 50M025045H008 | M2.5 X .45 X 8MM Flat Slot |
| 50M025045H010 | M2.5 X .45 X 10MM Flat Slot |
| 50M025045H012 | M2.5 X .45 X 12MM Flat Slot |
| 50M025045H016 | M2.5 X .45 X 16MM Flat Slot |
| 50M025045H020 | M2.5 X .45 X 20MM Flat Slot |
| 50M025045H025 | M2.5 X .45 X 25MM Flat Slot |
| 50M030050H005 | M3 X .5 X 5MM Flat Slot |
| 50M030050H006 | M3 X .5 X 6MM Flat Slot |
| 50M030050H008 | M3 X .5 X 8MM Flat Slot |
| 50M030050H010 | M3 X .5 X 10MM Flat Slot |
| 50M030050H012 | M3 X .5 X 12MM Flat Slot |
| 50M030050H015 | M3 X .5 X 15MM Flat Slot |
| 50M030050H016 | M3 X .5 X 16MM Flat Slot |
| 50M030050H020 | M3 X .5 X 20MM Flat Slot |
| 50M030050H025 | M3 X .5 X 25MM Flat Slot |
| 50M030050H030 | M3 X .5 X 30MM Flat Slot |
| 50M030050H042 | M3 X .5 X 42MM Flat Slot |
| 50M035060H005 | M3.5 X .6 X 5MM Flat Slot |
| 50M035060H006 | M3.5 X .6 X 6MM Flat Slot |
| 50M035060H008 | M3.5 X .6 X 8MM Flat Slot |
| 50M035060H010 | M3.5 X .6 X 10MM Flat Slot |
| 50M035060H016 | M3.5 X .6 X 16MM Flat Slot |
| 50M035060H025 | M3.5 X .6 X 25MM Flat Slot |
| 50M035060H035 | M3.5 X .6 X 35MM Flat Slot |
| 50M040070H006 | M4 X .7 X 6MM Flat Slot |
| 50M040070H008 | M4 X .7 X 8MM Flat Slot |

| ITEM NUMBER | DESCRIPTION |
|---------------|-----------------------------|
| 50M040070H010 | M4 X .7 X 10MM Flat Slot |
| 50M040070H012 | M4 X .7 X 12MM Flat Slot |
| 50M040070H015 | M4 X .7 X 15MM Flat Slot |
| 50M040070H016 | M4 X .7 X 16MM Flat Slot |
| 50M040070H020 | M4 X .7 X 20MM Flat Slot |
| 50M040070H025 | M4 X .7 X 25MM Flat Slot |
| 50M040070H030 | M4 X .7 X 30MM Flat Slot |
| 50M040070H035 | M4 X .7 X 35MM Flat Slot |
| 50M050080H006 | M5 X .8 X 6MM Flat Slot |
| 50M050080H008 | M5 X .8 X 8MM Flat Slot |
| 50M050080H010 | M5 X .8 X 10MM Flat Slot |
| 50M050080H012 | M5 X .8 X 12MM Flat Slot |
| 50M050080H015 | M5 X .8 X 15MM Flat Slot |
| 50M050080H016 | M5 X .8 X 16MM Flat Slot |
| 50M050080H020 | M5 X .8 X 20MM Flat Slot |
| 50M050080H025 | M5 X .8 X 25MM Flat Slot |
| 50M050080H030 | M5 X .8 X 30MM Flat Slot |
| 50M050080H040 | M5 X .8 X 40MM Flat Slot |
| 50M060100H008 | M6 X 1.00 X 8MM Flat Slot |
| 50M060100H010 | M6 X 1.00 X 10MM Flat Slot |
| 50M060100H012 | M6 X 1.00 X 12MM Flat Slot |
| 50M060100H016 | M6 X 1.00 X 16MM Flat Slot |
| 50M060100H020 | M6 X 1.00 X 20MM Flat Slot |
| 50M060100H025 | M6 X 1.00 X 25MM Flat Slot |
| 50M060100H035 | M6 X 1.00 X 35MM Flat Slot |
| 50M060100H040 | M6 X 1.00 X 40MM Flat Slot |
| 50M060100H045 | M6 X 1.00 X 45MM Flat Slot |
| 50M060100H050 | M6 X 1.00 X 50MM Flat Slot |
| 50M080125H016 | M8 X 1.25 X 16MM Flat Slot |
| 50M080125H020 | M8 X 1.25 X 20MM Flat Slot |
| 50M080125H025 | M8 X 1.25 X 25MM Flat Slot |
| 50M080125H030 | M8 X 1.25 X 30MM Flat Slot |
| 50M080125H050 | M8 X 1.25 X 50MM Flat Slot |
| 50M100150H020 | M10 X 1.50 X 20MM Flat Slot |
| 50M100150H025 | M10 X 1.50 X 25MM Flat Slot |
| 50M100150H030 | M10 X 1.50 X 30MM Flat Slot |
| 50M100150H035 | M10 X 1.50 X 35MM Flat Slot |
| 50M100150H060 | M10 X 1.50 X 60MM Flat Slot |

FLAT SLOTTED



| Nominal Screw Length | Tolerance On Length |
|----------------------|---------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

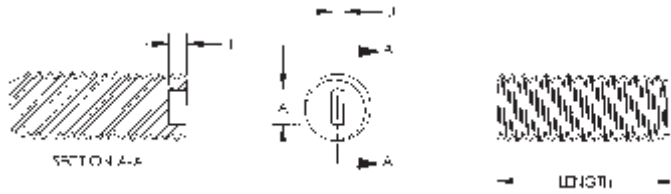
All tolerances are plus and minus.



METRIC SCREWS, BOLTS AND THREADED ROD

SECTION
XIII

ALL DIMENSIONS ARE IN MILLIMETERS



GRUB SLOTTED



| THREAD SIZE | A | J | T |
|-------------|-----|-----|-----|
| M4 X 0.7 | 2.0 | .64 | .76 |
| M5 X 0.8 | 3.3 | .89 | 1.3 |
| M6 X 1.0 | 4.1 | 1.0 | 1.5 |
| M8 X 1.25 | 5.2 | 1.6 | 2.4 |
| M10 X 1.5 | 6.6 | 1.5 | 2.5 |

| Nominal Screw Length | Tolerance On Length |
|----------------------|---------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

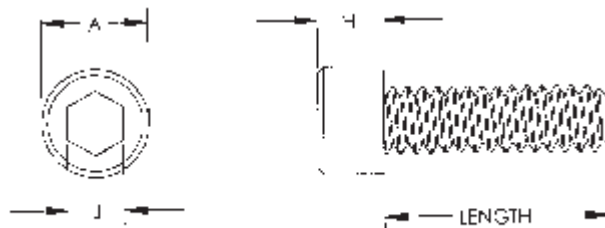
All tolerances are plus and minus.

| ITEM NUMBER | DESCRIPTION |
|---------------|----------------------------|
| 50M040070R003 | M4 X .7 X 3MM Grub Slot |
| 50M040070R004 | M4 X .7 X 4MM Grub Slot |
| 50M040070R006 | M4 X .7 X 6MM Grub Slot |
| 50M040070R008 | M4 X .7 X 8MM Grub Slot |
| 50M040070R010 | M4 X .7 X 10MM Grub Slot |
| 50M040070R012 | M4 X .7 X 12MM Grub Slot |
| 50M040070R016 | M4 X .7 X 16MM Grub Slot |
| 50M040070R020 | M4 X .7 X 20MM Grub Slot |
| 50M040070R025 | M4 X .7 X 25MM Grub Slot |
| 50M040070R030 | M4 X .7 X 30MM Grub Slot |
| 50M040070R035 | M4 X .7 X 35MM Grub Slot |
| 50M040070R040 | M4 X .7 X 40MM Grub Slot |
| 50M050080R006 | M5 X .8 X 6MM Grub Slot |
| 50M050080R008 | M5 X .8 X 8MM Grub Slot |
| 50M050080R010 | M5 X .8 X 10MM Grub Slot |
| 50M050080R012 | M5 X .8 X 12MM Grub Slot |
| 50M050080R016 | M5 X .8 X 16MM Grub Slot |
| 50M050080R020 | M5 X .8 X 20MM Grub Slot |
| 50M050080R025 | M5 X .8 X 25MM Grub Slot |
| 50M050080R030 | M5 X .8 X 30MM Grub Slot |
| 50M050080R040 | M5 X .8 X 40MM Grub Slot |
| 50M060100R005 | M6 X 1.00 X 5MM Grub Slot |
| 50M060100R008 | M6 X 1.00 X 8MM Grub Slot |
| 50M060100R010 | M6 X 1.00 X 10MM Grub Slot |
| 50M060100R012 | M6 X 1.00 X 12MM Grub Slot |
| 50M060100R016 | M6 X 1.00 X 16MM Grub Slot |
| 50M060100R020 | M6 X 1.00 X 20MM Grub Slot |

New Sizes

| ITEM NUMBER | DESCRIPTION |
|---------------|-----------------------------|
| 50M060100R022 | M6 X 1.00 X 22MM Grub Slot |
| 50M060100R025 | M6 X 1.00 X 25MM Grub Slot |
| 50M060100R030 | M6 X 1.00 X 30MM Grub Slot |
| 50M060100R035 | M6 X 1.00 X 35MM Grub Slot |
| 50M060100R045 | M6 X 1.00 X 45MM Grub Slot |
| 50M060100R050 | M6 X 1.00 X 50MM Grub Slot |
| 50M060100R060 | M6 X 1.00 X 60MM Grub Slot |
| 50M060100R070 | M6 X 1.00 X 70MM Grub Slot |
| 50M060100R075 | M6 X 1.00 X 75MM Grub Slot |
| 50M080125R008 | M8 X 1.25 X 8MM Grub Slot |
| 50M080125R010 | M8 X 1.25 X 10MM Grub Slot |
| 50M080125R016 | M8 X 1.25 X 16MM Grub Slot |
| 50M080125R020 | M8 X 1.25 X 20MM Grub Slot |
| 50M080125R025 | M8 X 1.25 X 25MM Grub Slot |
| 50M080125R030 | M8 X 1.25 X 30MM Grub Slot |
| 50M080125R035 | M8 X 1.25 X 35MM Grub Slot |
| 50M080125R050 | M8 X 1.25 X 50MM Grub Slot |
| 50M100150R013 | M10 X 1.50 X 13MM Grub Slot |
| 50M100150R016 | M10 X 1.50 X 16MM Grub Slot |
| 50M100150R019 | M10 X 1.50 X 19MM Grub Slot |
| 50M100150R020 | M10 X 1.50 X 20MM Grub Slot |
| 50M100150R025 | M10 X 1.50 X 25MM Grub Slot |
| 50M100150R030 | M10 X 1.50 X 30MM Grub Slot |
| 50M100150R035 | M10 X 1.50 X 35MM Grub Slot |
| 50M100150R050 | M10 X 1.50 X 50MM Grub Slot |
| 50M100150R060 | M10 X 1.50 X 60MM Grub Slot |

HEX SOCKET HEAD CAP SCREW



| ITEM NUMBER | DESCRIPTION |
|---------------|---------------------------|
| 50M100150S013 | M10 X 1.50 X 13MM Hex Soc |
| 50M100150S016 | M10 X 1.50 X 16MM Hex Soc |
| 50M100150S019 | M10 X 1.50 X 19MM Hex Soc |
| 50M100150S020 | M10 X 1.50 X 20MM Hex Soc |
| 50M100150S025 | M10 X 1.50 X 25MM Hex Soc |
| 50M100150S030 | M10 X 1.50 X 30MM Hex Soc |
| 50M100150S035 | M10 X 1.50 X 35MM Hex Soc |
| 50M100150S050 | M10 X 1.50 X 50MM Hex Soc |
| 50M100150S060 | M10 X 1.50 X 60MM Hex Soc |

| Nominal Screw Size | M1.6 thru M10 | M12 thru M20 | Over M20 |
|----------------------|-------------------------|--------------|----------|
| | | | |
| Nominal Screw Length | Tolerance on Length, mm | | |
| to 16 mm, incl. | 0.3 | 0.3 | -- |
| over 16 to 50 mm | 0.4 | 0.4 | 0.7 |
| over 50 to 120 mm | 0.7 | 1.0 | 1.5 |
| over 120 to 200mm | 1.0 | 1.5 | 2.0 |
| over 200 mm | 2.0 | 2.5 | 3.0 |

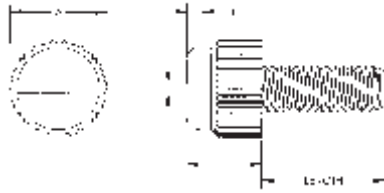
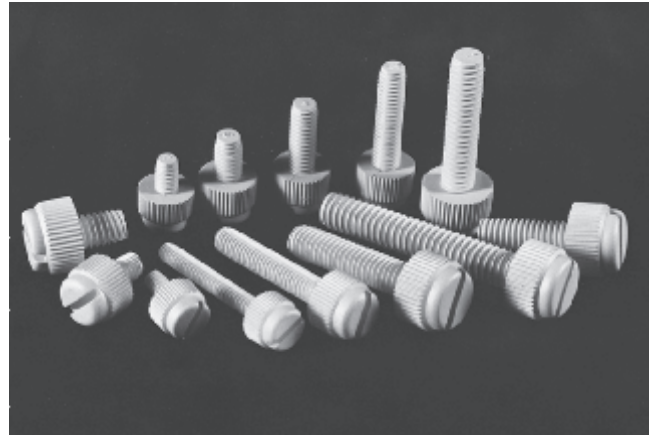
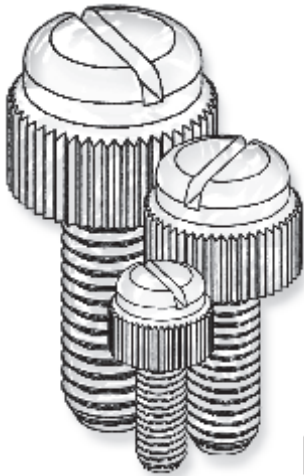
All tolerances are plus and minus.

| THREAD SIZE | A | H | J | HEX DEPTH |
|-------------|---------------|--------------|----------|-----------|
| M 10 | 15.67 - 16.00 | 9.81 - 10.00 | 8.0 nom. | 5.00 min. |

METRIC SCREWS, BOLTS AND THREADED ROD

ALL DIMENSIONS ARE IN MILLIMETERS

SECTION
XIII



ECONOMY GRADE THUMB SCREW

A* +/- .26mm TOLERANCE

| Nominal Screw Length | Tolerance On Length |
|----------------------|---------------------|
| to 3 mm incl. | 0.2 |
| over 3 to 10 mm | 0.3 |
| over 10 to 16 mm | 0.4 |
| over 16 to 50 mm | 0.5 |
| over 50 mm | 1.0 |

All tolerances are plus and minus.

| THREAD SIZE | THREAD | | | |
|----------------|--------|-------|------|------|
| | H | A* | J | T |
| M3 X .5 | 5.2 | 7.6 | 1.0 | 1.1 |
| M3.5 X .6 | 6.1 | 8.5 | 1.1 | 1.3 |
| M4 X .7 | 7.1 | 9.70 | .90 | 1.15 |
| M5 X .8 | 7.75 | 10.04 | 1.02 | 1.52 |
| M6 X 1.0 | 7.75 | 12.21 | 1.14 | 1.53 |

| ITEM NUMBER | DESCRIPTION | | | |
|---------------|-------------|------|--------|-------------|
| 50M030050T004 | M3 | X .5 | X 4MM | Thumb Screw |
| 50M030050T005 | M3 | X .5 | X 5MM | Thumb Screw |
| 50M030050T006 | M3 | X .5 | X 6MM | Thumb Screw |
| 50M030050T008 | M3 | X .5 | X 8MM | Thumb Screw |
| 50M030050T010 | M3 | X .5 | X 10MM | Thumb Screw |
| 50M030050T012 | M3 | X .5 | X 12MM | Thumb Screw |
| 50M030050T016 | M3 | X .5 | X 16MM | Thumb Screw |
| 50M030050T020 | M3 | X .5 | X 20MM | Thumb Screw |
| 50M030050T025 | M3 | X .5 | X 25MM | Thumb Screw |
| 50M030050T030 | M3 | X .5 | X 30MM | Thumb Screw |
| 50M030050T035 | M3 | X .5 | X 35MM | Thumb Screw |
| 50M030050T042 | M3 | X .5 | X 42MM | Thumb Screw |
| 50M035060T005 | M3.5 | X .6 | X 5MM | Thumb Screw |
| 50M035060T006 | M3.5 | X .6 | X 6MM | Thumb Screw |
| 50M035060T008 | M3.5 | X .6 | X 8MM | Thumb Screw |
| 50M035060T010 | M3.5 | X .6 | X 10MM | Thumb Screw |
| 50M035060T012 | M3.5 | X .6 | X 12MM | Thumb Screw |
| 50M035060T016 | M3.5 | X .6 | X 16MM | Thumb Screw |
| 50M035060T020 | M3.5 | X .6 | X 20MM | Thumb Screw |
| 50M035060T025 | M3.5 | X .6 | X 25MM | Thumb Screw |
| 50M035060T035 | M3.5 | X .6 | X 35MM | Thumb Screw |
| 50M035060T042 | M3.5 | X .6 | X 42MM | Thumb Screw |
| 50M040070T003 | M4 | X .7 | X 3MM | Thumb Screw |
| 50M040070T006 | M4 | X .7 | X 6MM | Thumb Screw |
| 50M040070T008 | M4 | X .7 | X 8MM | Thumb Screw |
| 50M040070T010 | M4 | X .7 | X 10MM | Thumb Screw |
| 50M040070T012 | M4 | X .7 | X 12MM | Thumb Screw |
| 50M040070T016 | M4 | X .7 | X 16MM | Thumb Screw |

| ITEM NUMBER | DESCRIPTION | | | |
|---------------|-------------|--------|--------|-------------|
| 50M040070T020 | M4 | X .7 | X 20MM | Thumb Screw |
| 50M040070T025 | M4 | X .7 | X 25MM | Thumb Screw |
| 50M040070T030 | M4 | X .7 | X 30MM | Thumb Screw |
| 50M040070T035 | M4 | X .7 | X 35MM | Thumb Screw |
| 50M040070T040 | M4 | X .7 | X 40MM | Thumb Screw |
| 50M050080T006 | M5 | X .8 | X 6MM | Thumb Screw |
| 50M050080T008 | M5 | X .8 | X 8MM | Thumb Screw |
| 50M050080T010 | M5 | X .8 | X 10MM | Thumb Screw |
| 50M050080T012 | M5 | X .8 | X 12MM | Thumb Screw |
| 50M050080T016 | M5 | X .8 | X 16MM | Thumb Screw |
| 50M050080T020 | M5 | X .8 | X 20MM | Thumb Screw |
| 50M050080T025 | M5 | X .8 | X 25MM | Thumb Screw |
| 50M050080T030 | M5 | X .8 | X 30MM | Thumb Screw |
| 50M050080T040 | M5 | X .8 | X 40MM | Thumb Screw |
| 50M060100T005 | M6 | X 1.00 | X 5MM | Thumb Screw |
| 50M060100T008 | M6 | X 1.00 | X 8MM | Thumb Screw |
| 50M060100T010 | M6 | X 1.00 | X 10MM | Thumb Screw |
| 50M060100T012 | M6 | X 1.00 | X 12MM | Thumb Screw |
| 50M060100T016 | M6 | X 1.00 | X 16MM | Thumb Screw |
| 50M060100T020 | M6 | X 1.00 | X 20MM | Thumb Screw |
| 50M060100T022 | M6 | X 1.00 | X 22MM | Thumb Screw |
| 50M060100T025 | M6 | X 1.00 | X 25MM | Thumb Screw |
| 50M060100T035 | M6 | X 1.00 | X 35MM | Thumb Screw |
| 50M060100T040 | M6 | X 1.00 | X 40MM | Thumb Screw |
| 50M060100T045 | M6 | X 1.00 | X 45MM | Thumb Screw |
| 50M060100T050 | M6 | X 1.00 | X 50MM | Thumb Screw |
| 50M060100T060 | M6 | X 1.00 | X 60MM | Thumb Screw |
| 50M060100T070 | M6 | X 1.00 | X 70MM | Thumb Screw |
| 50M060100T075 | M6 | X 1.00 | X 75MM | Thumb Screw |

METRIC SCREWS, BOLTS AND THREADED ROD

SECTION
XIII

ALL DIMENSIONS ARE IN MILLIMETERS



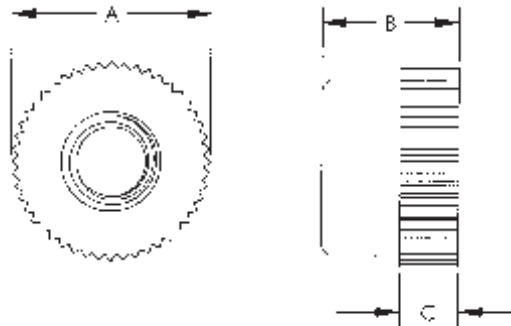
This versatile threaded rod stock is easily cut to size, resistant to most chemicals, electrically insulating, non-magnetic, light-weight, low thermal conductivity, vibration and abrasion resistant. Stock length is 1 meter. We can furnish cut to your length with a nominal cutting charge. Other plastic materials can be furnished on special order.

NYLON THREADED ROD

| ITEM NUMBER | DESCRIPTION |
|-------------|-------------------------|
| 38M030050TR | M 3 X .5 THREADED ROD |
| 38M040070TR | M 4 X .7 THREADED ROD |
| 38M050080TR | M 5 X .8 THREADED ROD |
| 38M060100TR | M 6 X 1.0 THREADED ROD |
| 38M080125TR | M 8 X 1.25 THREADED ROD |

METRIC NUTS

SECTION
XIV



NYLON THUMB NUTS TOLERANCE +/- .26 mm

| ITEM NUMBER | DESCRIPTION | A | B | C |
|-------------|-------------|------|-----|-----|
| 08M040070TN | M4 X 0.7 | 10.8 | 7.7 | 3.5 |

METRIC NUTS

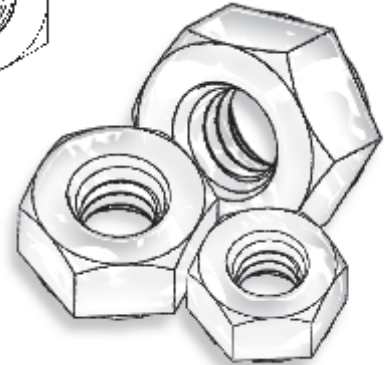
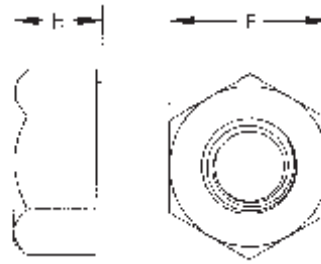
ALL DIMENSIONS ARE IN MILLIMETERS

SECTION
XIV

NYLON HEX NUTS

TOLERANCE +/- .26 mm

| ITEM NUMBER | DESCRIPTION | F | H |
|-------------|-------------|-------|-------|
| 04M020040HN | M2 X 0.4 | 3.9 | 1.2 |
| 04M025045HN | M2.5 X 0.45 | 4.9 | 1.8 |
| 04M030050HN | M3 X 0.5 | 5.4 | 2.2 |
| 04M035060HN | M3.5 X 0.6 | 6.9 | 2.7 |
| 04M040070HN | M4 X 0.7 | 6.9 | 3.0 |
| 04M050080HN | M5 X 0.8 | 7.9 | 4.3 |
| 04M060100HN | M6 X 1.0 | 10.0 | 5.4 |
| 04M080125HN | M8 X 1.25 | 12.9 | 6.4 |
| 04M100150HN | M10 X 1.50 | 14.8 | 9.8 |
| 04M120175HN | M12 X 1.75 | 17.74 | 10.54 |

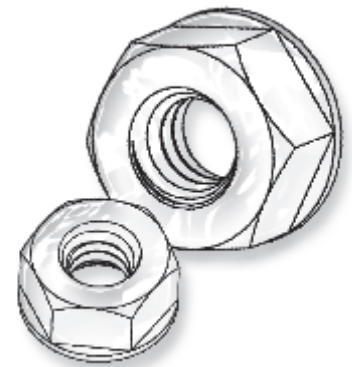
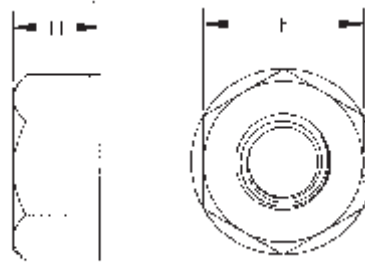


DESIGNED FOR STEEL SCREWS

NYLON LOCK NUTS

TOLERANCE +/- .26 mm

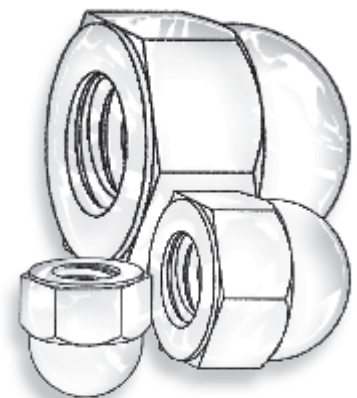
| ITEM NUMBER | DESCRIPTION | F | H |
|-------------|-------------|------|-----|
| 07M060100LN | M6 X 1.0 | 10.9 | 6.7 |



NYLON CAP NUTS

TOLERANCE +/- .26 mm

| ITEM NUMBER | DESCRIPTION | F | H * REF. |
|-------------|-------------|------|----------|
| 05M040070CN | M4 X 0.7 | 7.0 | 8.0 |
| 05M050080CN | M5 X 0.8 | 8.0 | 10.0 |
| 05M060100CN | M6 X 1.0 | 10.0 | 12.0 |
| 05M080125CN | M8 X 1.25 | 13.0 | 15.0 |
| 05M100150CN | M10 X 1.5 | 17.0 | 18.0 |
| 05M120175CN | M12 X 1.75 | 18.9 | 20.5 |
| 05M160200CN | M16 X 2.0 | 23.7 | 24.8 |
| 05M200250CN | M20 X 2.5 | 26.7 | 29.1 |



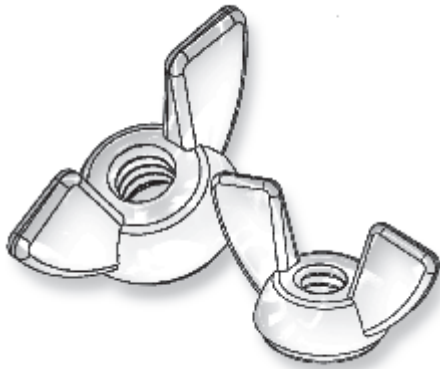
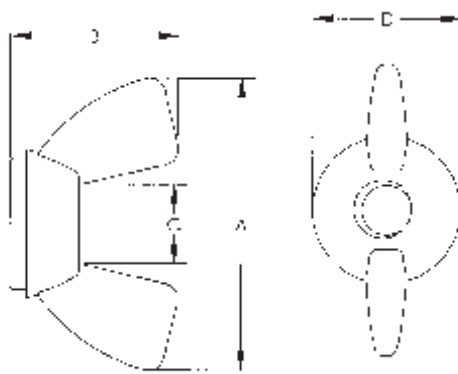
LOCKING CAP NUTS

| | | | |
|--------------|----------|------|------|
| 05M040070LCN | M4 X 0.7 | 7.0 | 8.0 |
| 05M050080LCN | M5 X 0.8 | 8.0 | 10.0 |
| 05M060100LCN | M6 X 1.0 | 10.0 | 12.0 |

METRIC NUTS

SECTION
XIV

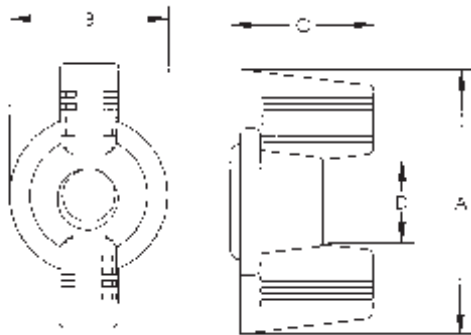
ALL DIMENSIONS ARE IN MILLIMETERS



NYLON WING NUTS

TOLERANCE +/- .26 mm

| ITEM NUMBER | DESCRIPTION | A | B | C | D |
|-------------|-------------|------|------|------|------|
| 06M030050WN | M3 X 0.5 | 22.9 | 12.2 | 5.8 | 10.2 |
| 06M040070WN | M4 X 0.7 | 22.8 | 12.2 | 5.8 | 10.2 |
| 06M050080WN | M5 X 0.8 | 22.8 | 12.2 | 5.8 | 10.2 |
| 06M060100WN | M6 X 1.0 | 28.0 | 16.0 | 7.6 | 14.2 |
| 06M080125WN | M8 X 1.25 | 34.8 | 18.3 | 9.6 | 16.2 |
| 06M100150WN | M10 X 1.5 | 34.8 | 18.3 | 9.6 | 16.2 |
| 06M120175WN | M12 X 1.7 | 44.7 | 22.7 | 15.0 | 21.1 |



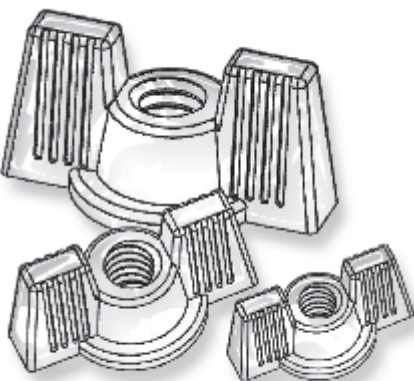
DECO WING NUTS

TOLERANCE +/- .26 mm

| ITEM NUMBER | DESCRIPTION | A | B | C | D |
|--------------|-------------|------|------|------|-----|
| 06M030050DWN | M3 X 0.5 | 16.0 | 9.5 | 8.0 | 6.0 |
| 06M040070DWN | M4 X 0.7 | 16.0 | 9.5 | 8.0 | 6.0 |
| 06M050080DWN | M5 X 0.8 | 22.2 | 12.7 | 11.1 | 7.9 |
| 06M060100DWN | M6 X 1.0 | 29.7 | 15.8 | 13.4 | 9.5 |

DECO LOCKING WING NUTS

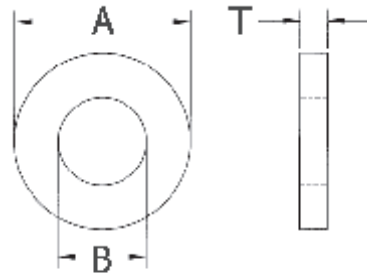
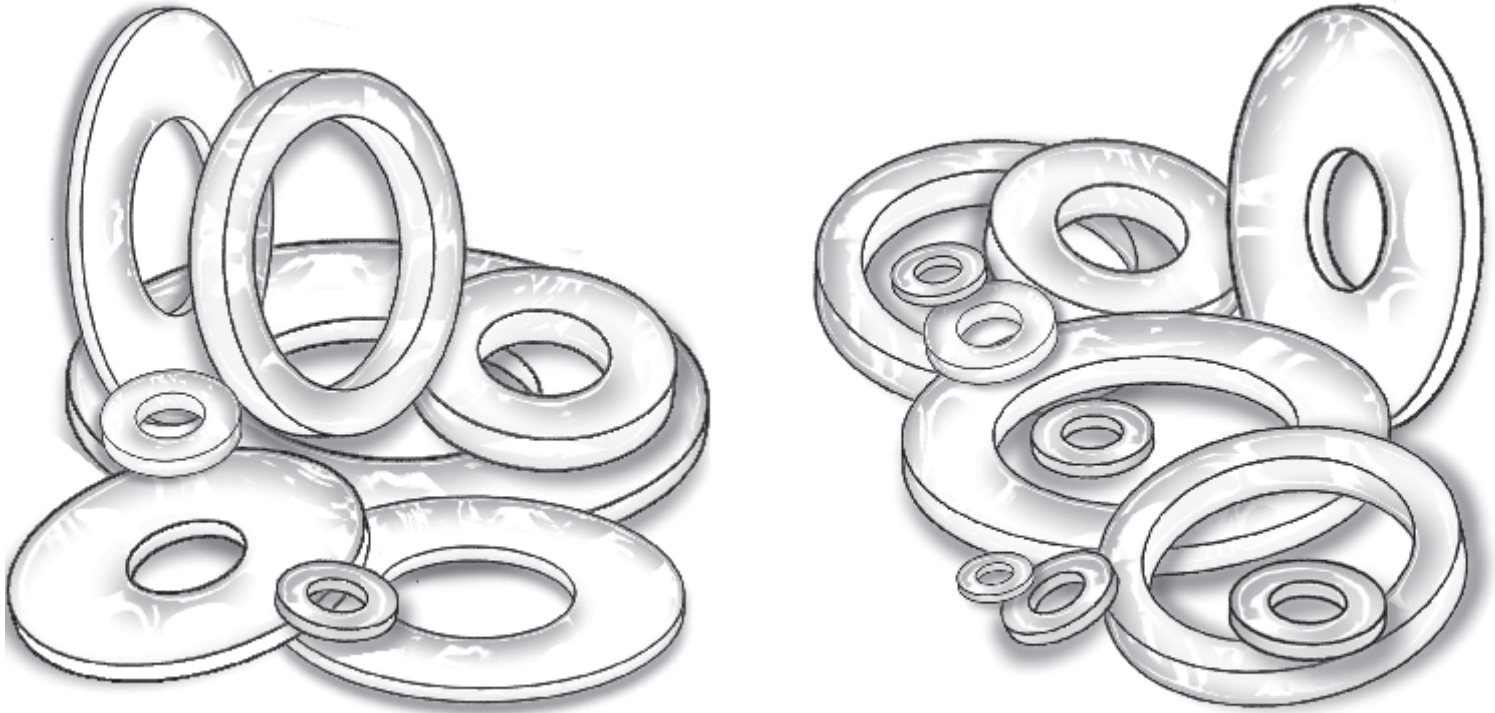
| ITEM NUMBER | DESCRIPTION | A | B | C | D |
|---------------|-------------|------|------|------|-----|
| 06M030050DLWN | M3 X 0.5 | 16.0 | 9.5 | 8.0 | 6.0 |
| 06M040070DLWN | M4 X 0.7 | 16.0 | 9.5 | 8.0 | 6.0 |
| 06M050080DLWN | M5 X 0.8 | 22.2 | 12.7 | 11.1 | 7.9 |
| 06M060100DLWN | M6 X 1.0 | 29.7 | 15.8 | 13.4 | 9.5 |



METRIC WASHERS AND SCREW INSULATORS

ALL DIMENSIONS ARE IN MILLIMETERS

SECTION
XV



TOLERANCE +/- .13 mm

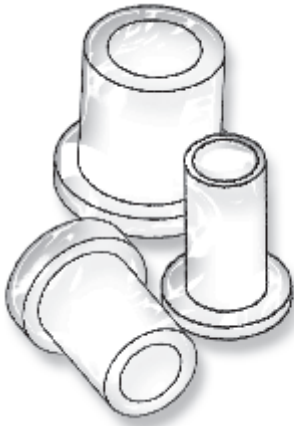
NYLON FLAT WASHERS

| ITEM NUMBER | DESCRIPTION | A | B | T |
|-------------|-----------------|----------|----------|---------|
| 16M02050080 | M2 FLATWASHER | 5.00 MM | 2.15 MM | 0.80 MM |
| 16M02556080 | M2.5 FLATWASHER | 5.60 MM | 2.65 MM | 0.80 MM |
| 16M03080080 | M3 FLATWASHER | 8.00 MM | 3.20 MM | 0.80 MM |
| 16M03580080 | M3.5 FLATWASHER | 8.00 MM | 3.70 MM | 0.80 MM |
| 16M04090080 | M4 FLATWASHER | 9.00 MM | 4.30 MM | 0.80 MM |
| 16M05011100 | M5 FLATWASHER | 11.00 MM | 5.30 MM | 1.00 MM |
| 16M06012150 | M6 FLATWASHER | 12.00 MM | 6.40 MM | 1.50 MM |
| 16M08018200 | M8 FLATWASHER | 18.00 MM | 8.40 MM | 2.00 MM |
| 16M08525200 | M8.5 FLATWASHER | 25.00 MM | 8.50 MM | 2.00 MM |
| 16M10022250 | M10 FLATWASHER | 22.00 MM | 10.50 MM | 2.50 MM |
| 16M12025200 | M12 FLATWASHER | 25.14 MM | 13.43 MM | 2.53 MM |
| 16M12034250 | M12 FLATWASHER | 33.64 MM | 13.40 MM | 3.06 MM |

METRIC WASHERS AND SCREW INSULATORS

SECTION
XV

ALL DIMENSIONS ARE IN MILLIMETERS

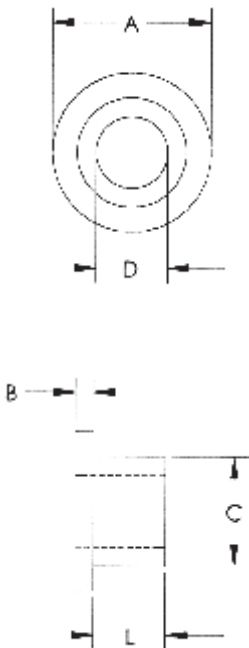


Nylon Screw Insulators are used to isolate metal screws electrically as well as to reduce corrosion. They can be used as light load bearings in many applications. Specials can be made to order for small tool charge. Specify the screw size and length when ordering.

SIZES NOT SHOWN WILL BE TOOLED UPON REQUEST

NYLON SCREW INSULATORS

| ITEM NUMBER | DESCRIPTION | L | A | B | C | D |
|-------------|-------------|-------|---------|--------|---------|--------|
| 10SCM002003 | SCM 2 X 3 | 3 MM | 4.2 MM | 1.0 MM | 3.0 MM | 2.1 MM |
| 10SCM002004 | SCM 2 X 4 | 4 MM | 4.2 MM | 1.0 MM | 3.0 MM | 2.1 MM |
| 10SCM002005 | SCM 2 X 5 | 5 MM | 4.2 MM | 1.0 MM | 3.0 MM | 2.1 MM |
| 10SCM002006 | SCM 2 X 6 | 6 MM | 4.2 MM | 1.0 MM | 3.0 MM | 2.1 MM |
| 10SCM003002 | SCM 3 X 2 | 2 MM | 6.2 MM | 1.0 MM | 4.0 MM | 3.1 MM |
| 10SCM003003 | SCM 3 X 3 | 3 MM | 6.2 MM | 1.0 MM | 4.0 MM | 3.1 MM |
| 10SCM003004 | SCM 3 X 4 | 4 MM | 6.2 MM | 1.0 MM | 4.0 MM | 3.1 MM |
| 10SCM003005 | SCM 3 X 5 | 5 MM | 6.2 MM | 1.0 MM | 4.0 MM | 3.1 MM |
| 10SCM003006 | SCM 3 X 6 | 6 MM | 6.2 MM | 1.0 MM | 4.0 MM | 3.1 MM |
| 10SCM003007 | SCM 3 X 7 | 7 MM | 6.2 MM | 1.0 MM | 4.0 MM | 3.1 MM |
| 10SCM003008 | SCM 3 X 8 | 8 MM | 6.2 MM | 1.0 MM | 4.0 MM | 3.1 MM |
| 10SCM003009 | SCM 3 X 9 | 9 MM | 6.2 MM | 1.0 MM | 4.0 MM | 3.1 MM |
| 10SCM003010 | SCM 3 X 10 | 10 MM | 6.2 MM | 1.0 MM | 4.0 MM | 3.1 MM |
| 10SCM004003 | SCM 4 X 3 | 3 MM | 8.4 MM | 1.5 MM | 6.0 MM | 4.1 MM |
| 10SCM004004 | SCM 4 X 4 | 4 MM | 8.4 MM | 1.5 MM | 6.0 MM | 4.1 MM |
| 10SCM004005 | SCM 4 X 5 | 5 MM | 8.4 MM | 1.5 MM | 6.0 MM | 4.1 MM |
| 10SCM004007 | SCM 4 X 7 | 7 MM | 8.4 MM | 1.5 MM | 6.0 MM | 4.1 MM |
| 10SCM004009 | SCM 4 X 9 | 9 MM | 8.4 MM | 1.5 MM | 6.0 MM | 4.1 MM |
| 10SCM005003 | SCM 5 X 3 | 3 MM | 10.2 MM | 2.0 MM | 7.0 MM | 5.1 MM |
| 10SCM005004 | SCM 5 X 4 | 4 MM | 10.2 MM | 2.0 MM | 7.0 MM | 5.1 MM |
| 10SCM005005 | SCM 5 X 5 | 5 MM | 10.2 MM | 2.0 MM | 7.0 MM | 5.1 MM |
| 10SCM005007 | SCM 5 X 7 | 7 MM | 10.2 MM | 2.0 MM | 7.0 MM | 5.1 MM |
| 10SCM005009 | SCM 5 X 9 | 9 MM | 10.2 MM | 2.0 MM | 7.0 MM | 5.1 MM |
| 10SCM006004 | SCM 6 X 4 | 4 MM | 12.2 MM | 2.0 MM | 8.0 MM | 6.1 MM |
| 10SCM006006 | SCM 6 X 6 | 6 MM | 12.2 MM | 2.0 MM | 8.0 MM | 6.1 MM |
| 10SCM006008 | SCM 6 X 8 | 8 MM | 12.2 MM | 2.0 MM | 8.0 MM | 6.1 MM |
| 10SCM006010 | SCM 6 X 10 | 10 MM | 12.2 MM | 2.0 MM | 8.0 MM | 6.1 MM |
| 10SCM006012 | SCM 6 X 12 | 12 MM | 12.2 MM | 2.0 MM | 8.0 MM | 6.1 MM |
| 10SCM008004 | SCM 8 X 4 | 4 MM | 14.2 MM | 2.5 MM | 10.0 MM | 8.1 MM |
| 10SCM008006 | SCM 8 X 6 | 6 MM | 14.2 MM | 2.5 MM | 10.0 MM | 8.1 MM |
| 10SCM008008 | SCM 8 X 8 | 8 MM | 14.2 MM | 2.5 MM | 10.0 MM | 8.1 MM |
| 10SCM008010 | SCM 8 X 10 | 10 MM | 14.2 MM | 2.5 MM | 10.0 MM | 8.1 MM |
| 10SCM008012 | SCM 8 X 12 | 12 MM | 14.2 MM | 2.5 MM | 10.0 MM | 8.1 MM |

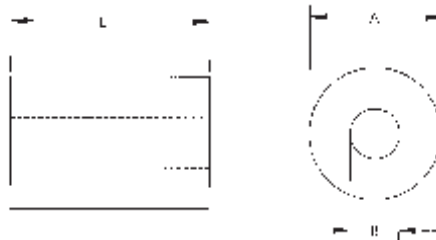


TOLERANCE +/- .26 mm

METRIC SPACERS

ALL DIMENSIONS ARE IN MILLIMETERS

SECTION
XVI



METRIC NYLON SPACERS

| ITEM NUMBER | DESC. | A | B | L |
|-------------|-------|-------|--------|--------|
| 13ME001 | ME 1 | 4 MM | 2.6 MM | 2 MM |
| 13ME002 | ME 2 | 4 MM | 2.6 MM | 3 MM |
| 13ME003 | ME 3 | 4 MM | 2.6 MM | 5 MM |
| 13ME004 | ME 4 | 4 MM | 2.6 MM | 7.5 MM |
| 13ME005 | ME 5 | 4 MM | 2.6 MM | 10 MM |
| 13ME006 | ME 6 | 4 MM | 2.6 MM | 15 MM |
| 13ME007 | ME 7 | 4 MM | 2.6 MM | 20 MM |
| 13ME010 | ME 10 | 5 MM | 2.6 MM | 2 MM |
| 13ME011 | ME 11 | 5 MM | 2.6 MM | 3 MM |
| 13ME012 | ME 12 | 5 MM | 2.6 MM | 5 MM |
| 13ME013 | ME 13 | 5 MM | 2.6 MM | 7.5 MM |
| 13ME014 | ME 14 | 5 MM | 2.6 MM | 10 MM |
| 13ME015 | ME 15 | 5 MM | 2.6 MM | 15 MM |
| 13ME016 | ME 16 | 5 MM | 2.6 MM | 20 MM |
| 13ME019 | ME 19 | 5 MM | 3.2 MM | 2 MM |
| 13ME020 | ME 20 | 5 MM | 3.2 MM | 3 MM |
| 13ME021 | ME 21 | 5 MM | 3.2 MM | 5 MM |
| 13ME022 | ME 22 | 5 MM | 3.2 MM | 7.5 MM |
| 13ME023 | ME 23 | 5 MM | 3.2 MM | 10 MM |
| 13ME024 | ME 24 | 5 MM | 3.2 MM | 15 MM |
| 13ME025 | ME 25 | 5 MM | 3.2 MM | 20 MM |
| 13ME028 | ME 28 | 6 MM | 3.2 MM | 3 MM |
| 13ME029 | ME 29 | 6 MM | 3.2 MM | 5 MM |
| 13ME030 | ME 30 | 6 MM | 3.2 MM | 7.5 MM |
| 13ME031 | ME 31 | 6 MM | 3.2 MM | 10 MM |
| 13ME032 | ME 32 | 6 MM | 3.2 MM | 15 MM |
| 13ME033 | ME 33 | 6 MM | 3.2 MM | 20 MM |
| 13ME036 | ME 36 | 8 MM | 3.2 MM | 3 MM |
| 13ME037 | ME 37 | 8 MM | 3.2 MM | 5 MM |
| 13ME038 | ME 38 | 8 MM | 3.2 MM | 7.5 MM |
| 13ME039 | ME 39 | 8 MM | 3.2 MM | 10 MM |
| 13ME040 | ME 40 | 8 MM | 3.2 MM | 15 MM |
| 13ME041 | ME 41 | 8 MM | 3.2 MM | 20 MM |
| 13ME044 | ME 44 | 6 MM | 3.6 MM | 3 MM |
| 13ME045 | ME 45 | 6 MM | 3.6 MM | 5 MM |
| 13ME046 | ME 46 | 6 MM | 3.6 MM | 7.5 MM |
| 13ME047 | ME 47 | 6 MM | 3.6 MM | 10 MM |
| 13ME048 | ME 48 | 6 MM | 3.6 MM | 15 MM |
| 13ME049 | ME 49 | 6 MM | 3.6 MM | 20 MM |
| 13ME052 | ME 52 | 8 MM | 4.3 MM | 3 MM |
| 13ME053 | ME 53 | 8 MM | 4.3 MM | 5 MM |
| 13ME054 | ME 54 | 8 MM | 4.3 MM | 7.5 MM |
| 13ME055 | ME 55 | 8 MM | 4.3 MM | 10 MM |
| 13ME056 | ME 56 | 8 MM | 4.3 MM | 15 MM |
| 13ME057 | ME 57 | 8 MM | 4.3 MM | 20 MM |
| 13ME060 | ME 60 | 10 MM | 5.3 MM | 3 MM |
| 13ME061 | ME 61 | 10 MM | 5.3 MM | 5 MM |
| 13ME062 | ME 62 | 10 MM | 5.3 MM | 7.5 MM |
| 13ME063 | ME 63 | 10 MM | 5.3 MM | 10 MM |
| 13ME064 | ME 64 | 10 MM | 5.3 MM | 15 MM |
| 13ME065 | ME 65 | 10 MM | 5.3 MM | 20 MM |
| 13ME068 | ME 68 | 10 MM | 6.3 MM | 3 MM |

| ITEM NUMBER | DESC. | A | B | L |
|-------------|-------|-------|--------|--------|
| 13ME069 | ME 69 | 10 MM | 6.3 MM | 5 MM |
| 13ME070 | ME 70 | 10 MM | 6.3 MM | 7.5 MM |
| 13ME071 | ME 71 | 10 MM | 6.3 MM | 10 MM |
| 13ME072 | ME 72 | 10 MM | 6.3 MM | 15 MM |
| 13ME073 | ME 73 | 10 MM | 6.3 MM | 20 MM |
| 13ME074 | ME 74 | 10 MM | 6.3 MM | 25 MM |
| 13ME075 | ME 75 | 10 MM | 6.3 MM | 30 MM |
| 13ME076 | ME 76 | 15 MM | 6.5 MM | 3 MM |
| 13ME077 | ME 77 | 15 MM | 6.5 MM | 5 MM |
| 13ME078 | ME 78 | 15 MM | 6.5 MM | 7.5 MM |
| 13ME079 | ME 79 | 15 MM | 6.5 MM | 10 MM |
| 13ME080 | ME 80 | 15 MM | 6.5 MM | 15 MM |
| 13ME081 | ME 81 | 15 MM | 6.5 MM | 20 MM |
| 13ME083 | ME 83 | 15 MM | 6.5 MM | 30 MM |
| 13ME084 | ME 84 | 12 MM | 8.3 MM | 3 MM |
| 13ME085 | ME 85 | 12 MM | 8.3 MM | 5 MM |
| 13ME086 | ME 86 | 12 MM | 8.3 MM | 7.5 MM |
| 13ME087 | ME 87 | 12 MM | 8.3 MM | 10 MM |
| 13ME088 | ME 88 | 12 MM | 8.3 MM | 15 MM |
| 13ME089 | ME 89 | 12 MM | 8.3 MM | 20 MM |
| 13ME091 | ME 91 | 12 MM | 8.3 MM | 30 MM |
| 13ME092 | ME 92 | 18 MM | 8.3 MM | 3 MM |
| 13ME093 | ME 93 | 18 MM | 8.3 MM | 5 MM |
| 13ME094 | ME 94 | 18 MM | 8.3 MM | 7.5 MM |
| 13ME095 | ME 95 | 18 MM | 8.3 MM | 10 MM |
| 13ME096 | ME 96 | 18 MM | 8.3 MM | 15 MM |
| 13ME097 | ME 97 | 18 MM | 8.3 MM | 20 MM |
| 13ME098 | ME 98 | 18 MM | 8.3 MM | 25 MM |
| 13ME099 | ME 99 | 18 MM | 8.3 MM | 30 MM |
| 13ME100 | ME100 | 15 MM | 10.4MM | 3 MM |
| 13ME101 | ME101 | 15 MM | 10.4MM | 5 MM |
| 13ME102 | ME102 | 15 MM | 10.4MM | 7.5 MM |
| 13ME103 | ME103 | 15 MM | 10.4MM | 10 MM |
| 13ME104 | ME104 | 15 MM | 10.4MM | 15 MM |
| 13ME105 | ME105 | 15 MM | 10.4MM | 20 MM |
| 13ME108 | ME108 | 22 MM | 10.4MM | 5 MM |
| 13ME109 | ME109 | 22 MM | 10.4MM | 10 MM |
| 13ME110 | ME110 | 22 MM | 10.4MM | 15 MM |
| 13ME111 | ME111 | 22 MM | 10.4MM | 20 MM |
| 13ME118 | ME118 | 18 MM | 13.3MM | 3 MM |
| 13ME119 | ME119 | 18 MM | 13.3MM | 5 MM |
| 13ME120 | ME120 | 18 MM | 13.3MM | 7.5 MM |
| 13ME121 | ME121 | 18 MM | 13.3MM | 10 MM |
| 13ME122 | ME122 | 18 MM | 13.3MM | 15 MM |
| 13ME123 | ME123 | 18 MM | 13.3MM | 20 MM |
| 13ME124 | ME124 | 18 MM | 13.3MM | 25 MM |
| 13ME126 | ME126 | 25 MM | 13.3MM | 5 MM |
| 13ME127 | ME127 | 25 MM | 13.3MM | 10 MM |
| 13ME128 | ME128 | 25 MM | 13.3MM | 15 MM |
| 13ME129 | ME129 | 25 MM | 13.3MM | 20 MM |
| 13ME132 | ME132 | 10 MM | 6.3 MM | 28 MM |

MATERIAL:
HEAT STABILIZED
BLACK NYLON



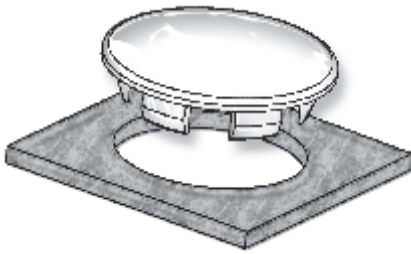
TOLERANCE ON A AND L DIMENSIONS ARE +/- .38 mm • TOLERANCE ON B DIMENSION IS +/- .26 mm

METRIC HOLE PLUGS

SECTION XVII

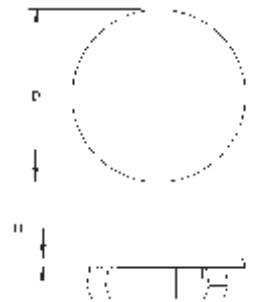
ALL DIMENSIONS ARE IN MILLIMETERS

Micro Plastics economical metric snap-in poly-plugs will close unneeded holes, wiring, outlets, fill unused accessory openings, cover inspection and production access holes. They can be used as tube end caps and protective bumpers. Metric poly plugs are molded in Nylon 6/6 which is corrosion, abrasion and vibration resistant, making them ideal for drawer glides and small appliance feet. Poly plugs are designed with special flexible and tapered prongs which snugly lock in place with finger pressure but can be removed and reused when necessary. Poly plugs have a dull matte finish and are stocked in natural nylon. Dyed and molded colors are available in volume requirements.



METRIC HOLE PLUGS

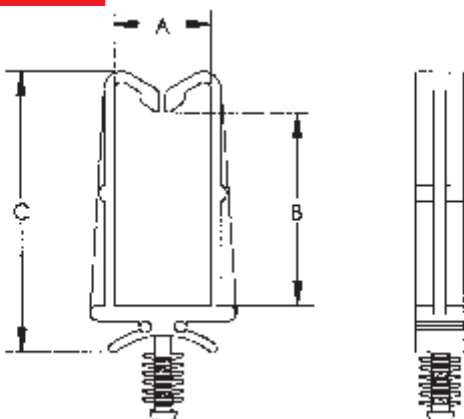
| ITEM NUMBER | HEAD STYLE | FINISH | HOLE SIZE | PANEL THICKNESS | HEAD SIZE D | HEAD HEIGHT H | +/- .26MM on H dimension |
|-------------|------------|--------|-----------|-----------------|-------------|---------------|--------------------------|
| 62PPM06BM16 | Binder | Matte | 6 MM | 0.8-1.6 MM | 10.0 MM | 2.0 MM | |
| 62PPM08BM35 | Binder | Matte | 8 MM | 0.8-3.5 MM | 12.0 MM | 2.0 MM | |
| 62PPM10BM35 | Binder | Matte | 10 MM | 0.8-3.5 MM | 14.0 MM | 2.0 MM | |
| 62PPM12BM35 | Binder | Matte | 12 MM | 0.8-3.5 MM | 16.0 MM | 2.0 MM | |
| 62PPM14BM35 | Binder | Matte | 14 MM | 0.8-3.5 MM | 18.0 MM | 2.0 MM | |
| 62PPM16BM35 | Binder | Matte | 16 MM | 0.8-3.5 MM | 20.0 MM | 2.0 MM | |
| 62PPM18BM40 | Binder | Matte | 18 MM | 0.8-4.0 MM | 22.0 MM | 2.0 MM | |
| 62PPM20BM40 | Binder | Matte | 20 MM | 0.8-4.0 MM | 26.0 MM | 2.0 MM | |
| 62PPM22BM40 | Binder | Matte | 22 MM | 0.8-4.0 MM | 27.8 MM | 2.0 MM | |
| 62PPM24BM40 | Binder | Matte | 24 MM | 0.8-4.0 MM | 28.0 MM | 2.0 MM | |
| 62PPM26BM40 | Binder | Matte | 26 MM | 0.8-4.0 MM | 30.0 MM | 2.0 MM | |



METRIC WIRE HANDLING HARDWARE

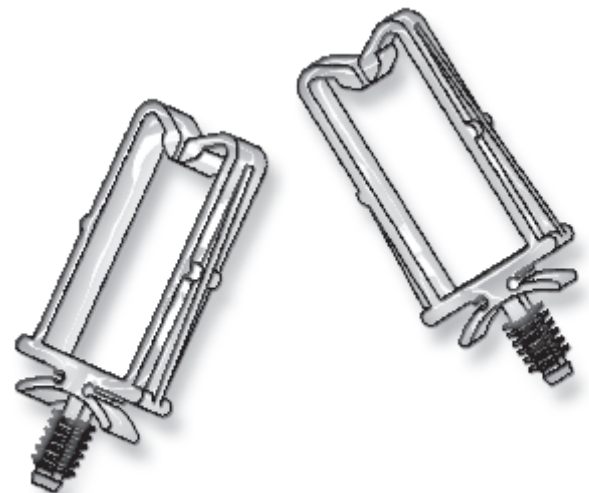
SECTION XVIII

Micro Plastics' Wire/Cable Holders are designed to mount into 5mm hole diameters. Wire/Cable Holders can be used in a variety of panel thicknesses and materials. Sizes are available to handle wire bundle diameters from 9.5mm to 12.7mm.



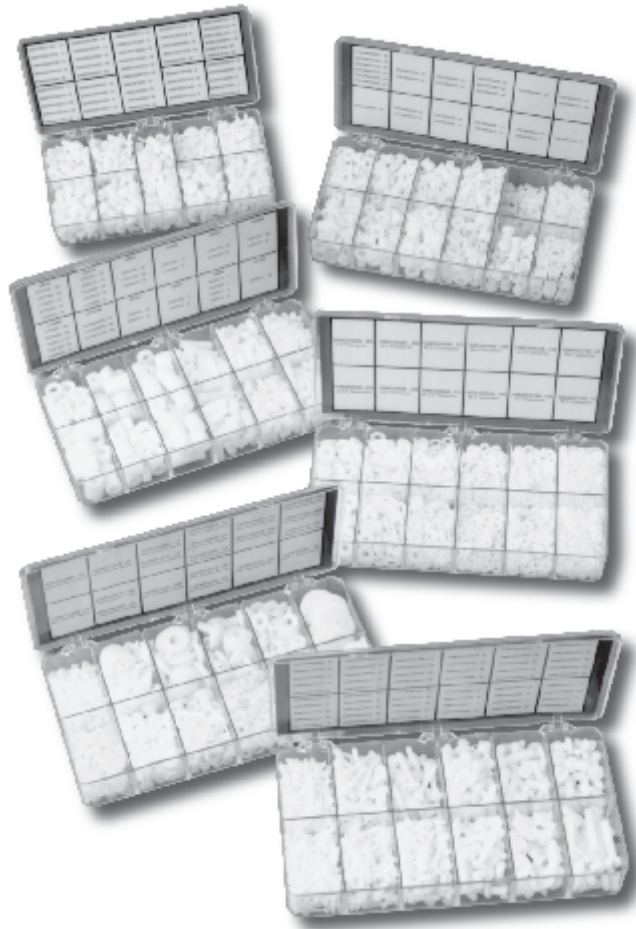
WIRE/CABLE HOLDERS

| ITEM NUMBER | A | B | C | HOLE DIA. | PANEL RANGE |
|--------------|------|------|------|-----------|-------------|
| 22MWWA095127 | 9.5 | 12.7 | 23.4 | 5MM | VARIABLE |
| 22MWWA095190 | 9.5 | 19.0 | 29.8 | 5MM | VARIABLE |
| 22MWWA127190 | 12.7 | 19.0 | 31.0 | 5MM | VARIABLE |
| 22MWWA127254 | 12.7 | 25.4 | 37.3 | 5MM | VARIABLE |



METRIC FASTENER ASSORTMENT KITS

SECTION
XIX



MOLDED NYLON FASTENERS PROVIDE ELECTRICAL INSULATION, VIBRATION AND CORROSION RESISTANCE. HAVE A LOW THERMAL CONDUCTIVITY, ARE

NON-MAGNETIC AND HAVE A HIGH STRENGTH-TO-WEIGHT RATIO. PACKAGED IN LARGE REUSABLE TRANSPARENT PLASTIC STORAGE BOXES.

IDEAL FOR:

PROTOTYPE WORK - Large working assortments.

PRODUCT DESIGN - Latest designs for increased productivity.

MODEL MAKING - Commercially available standard parts.

SHOP AND MAINTENANCE - Convenient selection.

O4AS0965MSM MACHINE SCREWS

**OVER 950 NYLON FASTENERS
OVER 60 DIFFERENT
SIZES AND TYPES**

Assortment Kit Consists of Approximately:

| | |
|------------|--------------------|
| 220 - M2 | X 4MM to 25MM Long |
| 170 - M2.5 | X 4MM to 25MM Long |
| 115 - M3 | X 5MM to 25MM Long |
| 110 - M3.5 | X 5MM to 25MM Long |
| 130 - M4 | X 6MM to 25MM Long |
| 135 - M4 | X 6MM to 25MM Long |
| 85 - M6 | X 5MM to 25MM Long |

O4AS04115FWM FLAT WASHERS

OVER 700 NYLON FASTENERS

Assortment Kit Consists of Approximately:

| | |
|------------|--------------|
| 900 - M2 | Flat Washers |
| 825 - M2.5 | Flat Washers |
| 700 - M3 | Flat Washers |
| 650 - M3.5 | Flat Washers |
| 570 - M4 | Flat Washers |
| 300 - M5 | Flat Washers |
| 170 - M6 | Flat Washers |

O4AS0690SPM SPACERS

**OVER 600 NYLON FASTENERS
OVER 30 DIFFERENT SIZES AND**

Assortment Kit Consists of Approximately:

| | |
|------------|--------------------|
| 105 - M2 | X 3MM to 25MM Long |
| 95 - M2.5 | X 3MM to 25MM Long |
| 80 - M3 | X 3MM to 25MM Long |
| 150 - M3.5 | X 3MM to 10MM Long |
| 110 - M4 | X 3MM to 25MM Long |
| 50 - M5 | X 3MM to 25MM Long |
| 55 - M6 | X 3MM to 25MM Long |

O4AS0655MMN MACHINE SCREWS & NUTS

**OVER 655
NYLON FASTENERS
OVER 30 DIFFERENT
SIZES AND TYPES**

Slotted Cheese Head, Hex Head, Fillister Head and 90° Flat Head Styles, MACHINE SCREWS in sizes;

Assortment Kit Consists of Approximately:

| | | |
|-----------------------------|--------|-------------|
| 100 - M3 | X 5 | X 6 to 25MM |
| 100 - M3.5 | X 6 | X 5 to 25MM |
| 100 - M4 | X 7 | X 6 to 16MM |
| 100 - M5 | X 8 | X 6 to 16MM |
| 30 - M6 | X 1.00 | X 8 to 16MM |
| 200 - Metric Nuts & Washers | | |

O4AS0705SCM SCREW INSULATORS

**OVER 700
NYLON FASTENERS
OVER 20 DIFFERENT
SIZES AND TYPES**

Assortment Kit Consists of Approximately:

| | |
|----------|------------------|
| 150 - M2 | Screw Insulators |
| 125 - M3 | Screw Insulators |
| 200 - M4 | Screw Insulators |
| 125 - M5 | Screw Insulators |
| 105 - M6 | Screw Insulators |

O4AS0700SWSM SHOULDER WASHERS

**OVER 1000
NYLON FASTENERS
OVER 20 DIFFERENT
SIZES AND TYPES**

Assortment Kit Consists of Approximately:

| | |
|----------|------------------|
| 315 - M2 | Shoulder Washers |
| 245 - M3 | Shoulder Washers |
| 180 - M4 | Shoulder Washers |
| 225 - M5 | Shoulder Washers |
| 105 - M6 | Shoulder Washers |



MICRO PLASTICS' MOLDED NYLON 6/6 FASTENERS

MECHANICAL TEST DATA - UNC - UNF

SECTION
XX
INFORMATION

Nylon 6/6 meets MIL-M20693B "A" Type 1, LP410A, and ASTM D789-66 Type 1, GDE 2
All test performed per ASTM specifications. Parts molded in Nylon 6/6, dry as molded, unmoisturized, at 73° F/23° C. Results are average of random parts tested. Data listed is for informational purposes only shall not be used to establish specifications limits or used alone as the basis of design.

MACHINE SCREWS

| SIZE | MAX TORQUE | | TENSILE TEST | | DOUBLE SHEAR | |
|--------|-----------------|--------------------|--------------|------------|-------------------|-------|
| | ULTIMATE TORQUE | BEFORE DEFORMATION | YIELD LBS. | BREAK LBS. | YIELD LBS. | BREAK |
| 256 | ---- NO TEST | ----- NO TEST --- | 16 | 19 | -----NO TEST ---- | |
| 440 | 24 In Oz. | 12-16 In Oz. | 38 | 41 | 45 | 50 |
| 632 | 30 In Oz. | 18-20 In Oz. | 65 | 69 | 91 | 97 |
| 832 | 5 In Lbs. | 2-3 In Lbs. | 99 | 108 | 158 | 164 |
| 1024 | 6 In Lbs. | 2-4 In Lbs. | 139 | 149 | 187 | 257 |
| 1032 | 7 In Lbs. | 3-4 In Lbs. | 155 | 165 | 234 | 241 |
| 1/4-20 | 13 In Lbs. | 9-10 In Lbs. | 296 | 312 | 413 | 432 |

HEX NUTS

| SIZE | # 1 TENSILE LBS. | # 2 TENSILE TORQUE | RECOMMENDED TORQUE BEFORE DEFORMATION |
|---|---------------------|--|--|
| 440 | 85 | 2 In Lbs. | 1.5 In Lbs. |
| 632 | 135 | 5.2 In Lbs. | 4 In Lbs. |
| 832 | 172 | 6.8 In Lbs. | 5 In Lbs. |
| 1024 | 211 | 7 In Lbs. | 5.5 In Lbs. |
| 1032 | 276 | 8 In Lbs. | 6.5 In Lbs. |
| 1/4-20 | 311 | 19.3 In Lbs. | 17 In Lbs. |
| 5/16-18 | 877 | 44.3 In Lbs. | 42 In Lbs. |
| 3/8-16 | 994 | 74 In Lbs. | 72 In Lbs. |
| 1/2-13 | 2,367 | 15.7 Ft Lbs. | 13 Ft Lbs. |
| 5/8-11 | 3,487 | 31.7 Ft.Lbs. | 30 Ft Lbs. |
| Test #1 Pull Test -Nylon Nut on Metal Screw | | Test #2 Torque on Nylon Nut on Metal Screw | |

CAP SCREWS

| SIZE | MAX TORQUE | | TENSILE TEST | | DOUBLE SHEAR | |
|---------|-----------------|--------------------|--------------|------------|--------------|------------|
| | ULTIMATE TORQUE | BEFORE DEFORMATION | YIELD LBS. | BREAK LBS. | YIELD LBS. | BREAK LBS. |
| 1/4-20 | 19 In Lbs. | 15-16 In Lbs. | 200 | 228 | 413 | 432 |
| 5/16-18 | 37 In Lbs. | 32-34 In Lbs. | 403 | 424 | 866 | 880 |
| 3/8-16 | 49 In Lbs. | 45-46 In Lbs. | 480 | 513 | 1108 | 1173 |
| 1/2-13 | 11 Ft. Lbs. | 7-8 Ft. Lbs. | 1393 | 1425 | 2276 | 2313 |
| 5/8-11 | 22 Ft. Lbs. | 18-19 Ft. Lbs. | 2260 | 2303 | 3340 | 3410 |

MICRO PLASTICS' MOLDED NYLON 6/6 FASTENERS MECHANICAL TEST DATA - METRIC

SECTION
XX
INFORMATION

Data listed is for informational purposes only shall not be used to establish specifications limits or used alone as the basis of design

MACHINE SCREWS

| SIZE | ULTIMATE TORQUE | MAX TORQUE BEFORE DEFORMATION | TENSILE TEST | | DOUBLE SHEAR | |
|------------|-----------------|-------------------------------|--------------|------------|--------------|------------|
| | | | YIELD LBS. | BREAK LBS. | YIELD LBS. | BREAK LBS. |
| M2 X .4 | NO TEST | NO TEST | 7.12 N. | N/B | 89 N. | 116 N. |
| M2.5 X .45 | NO TEST | NO TEST | 8.9 N. | N/B | 156 N. | 169 N. |
| M3 X .5 | .32 Nm. | .2-.26 Nm. | 22 N. | N/B | 294 N. | 329 N. |
| M3.5 X .6 | .43 N. | .28-.34 Nm. | 53 N. | N/B | 378 N. | 405 N. |
| M4 X .7 | .45Nm. | .36-.43 Nm. | 214 N. | N/B | 600 N. | 636 N. |
| M5 X .8 | .93 Nm. | .73-.79 Nm. | 271 N. | N/B | 1081 N. | 1134 N. |
| M6 X .1 | 1.83 Nm. | 1.41-1.47 Nm. | 845 N. | 912 N. | 1806 N. | 1877 N. |
| M8 X 1.25 | 3.39 Nm. | 2.45-2.82 Nm. | 1.677 N. | 1744 N. | 2980 N. | 3034 N. |
| M10 X 1.50 | 5.31 Nm. | 4.52 - 4.86 Nm. | 2749 N. | N/B | 5026 N. | 5280 N. |

HEX NUTS

| SIZE | TENSILE | ULTIMATE TORQUE |
|------|------------|-----------------|
| M2 | NO TEST | NO TEST |
| M2.5 | 135.23 N. | NO TEST |
| M3 | 142.34 N. | NO TEST |
| M3.5 | 369.20 N. | 2.3 CM/KG |
| M4 | 451.94 N. | 4.5 CM/KG |
| M5 | 940.35 N. | 8.3 |
| M6 | 1556.65 N. | 17.6 CM/KG |
| M8 | 2597.76 N. | 56.2 CM/KG |
| M10 | 6283.11 N. | 89.93 CM/KG |

PLASTIC MATERIALS PRINCIPAL PROPERTIES

SECTION
XX
INFORMATION

FOR ADDITIONAL MATERIAL INFORMATION SEE OUR WEBSITE

<http://www.microplastics.com/Materials/Material%20list.htm>

NYLON 6/6 POLYAMIDE (PA)

General-purpose nylon 6/6 has good toughness, tensile strength, and resistance to creep, particularly in the high temperature range. Nylon has excellent wear properties, low coefficient of friction, and exceptional chemical resistance particularly to aromatic hydrocarbons, greases, and oils. Nylon is a hygroscopic material. Moisture acts as a plasticizer reducing the tensile strength, stiffness, and increasing elongation, impact strength, and energy absorbing characteristics. Outdoor weathering can be improved by the addition of carbon black. Nylon will perform well in long range service in most applications at temperatures as high as 185° F (85° C). Nylon is a translucent off white color.

APPLICATIONS

Fasteners - Bearings - Gears - Cams - Gaskets - Printed Circuit Board Hardware - Washers - Spacers - Insulators - Spiral Wrap - Flexible Grommeting - Wire Ties - Electronic Components - Bushings - Wiring Clips - Cable Clamps - Hole Plugs - Hose Clamps

QUALIFICATIONS

Mil - M20693B "A" Type 1

LP410A

ASTM D4066 Type 1 Grade 2 Per ASTM D789

NYLON 6/6 HEAT STABILIZED

Nylon 6/6 heat stabilized has the same mechanical properties as general purpose nylon 6/6 with the additional advantage of heat stabilization this material can withstand 250° F (121° C) temperature in long range service in most applications. Heat stabilized nylon is off white in color.

APPLICATIONS

Fasteners - Bearings - Gears - Cams - Printed Circuit Board Hardware - Washers - Spacers - Insulators - Electronic Components - Bushings - Strain Relief - Hole Plugs - Wiring Clips - Hose Clamps.

NYLON 6/6 IMPACT MODIFIED

Nylon 6/6 impact modified has the additional advantage of very high impact strength at low temperatures and enhanced resistance to heat distortion over general purpose nylon 6/6. Impact nylon 6/6 is off white in color.

APPLICATIONS

Fasteners - Bearings - Gears - Cams - Printed Circuit Board Hardware - Washers - Spacers - Insulators - Electronic Components - Bushings - Requiring additional impact resistance.

NYLON 6/6 33 % GLASSFILLED

Glass-Reinforced nylon has outstanding property improvements over unreinforced compositions. Improvements include greater tensile strength, deflection temperature, shear strength, improved creep resistance, better dimensional stability, and lower moisture absorption and thermal expansion. The good wear resistance, electrical properties and low coefficient of friction of nylon 6/6 un-reinforced are retained. 33% glass-filled nylon is opaque tan in color.

APPLICATIONS

Fasteners - Washers - Spacers - Insulators - Circuit Board Hardware - Requiring greater stiffness and strength.

NYLON 46 POLYAMIDE

High temperature nylon, which bridges the price performance gap between traditional nylons and high performance materials. Nylon 46 has excellent short term and long term heat resistance, high stiffness at elevated temperatures, high creep resistance, outstanding toughness, excellent fatigue behavior, good chemical resistance, and higher continuous-use temperature. Nylon 46 is translucent off white in color.

APPLICATIONS

Fasteners - Bearings - Cams - Gears - Printed Circuit Board Hardware - Washers - Spacers - Insulators - Electronic Components - Bushings - Wiring Clips - Cable Clamps - Hose Clamps.

NYLATRON GS

Nylon 66 with molybdenum disulphide (MOS2) solid lubricant added. Nylatron GS offers superior tensile and compressive strength, lower surface friction, higher heat resistance and greater dimensional stability than general purpose nylon 6/6. Nylatron is dark charcoal grey in color.

APPLICATIONS

Bushings - Bearings - Gears - Guides - Rollers - Washers

PLASTIC MATERIALS PRINCIPAL PROPERTIES

FOR ADDITIONAL MATERIAL INFORMATION SEE OUR WEBSITE

<http://www.microplastics.com/Materials/Material%20list.htm>

SECTION
XX
INFORMATION

NYLON 66/6 COPOLYMER FLAME RETARDANT

Flame retardant nylon 66/6 has similar properties to general purpose 66 nylon with flame retardant additives for UL94V0 rating. Flame retardant nylon 6/6 is opaque off white in color.

APPLICATIONS

Fasteners - Printed Circuit Board Hardware - Washers - Spacers - Insulators - Electric Components - Bushings - Strain Reliefs - Cable Clamps - Wiring Clips.

ACETAL COPOLYMER (POM)

Acetal resins are characterized by their strength, stiffness, and hardness and are stable over a wide range of temperatures, humidity, environments, and stress. Acetal has high load bearing characteristics, excellent creep resistance, and low coefficient of friction. Acetal absorbs little water, minimizing the effect of moisture on its physical properties. Acetal resists neutral oils, grease, petroleum-based fuels, many organic solvents, and alkalis. Oxidizing agents and acids, organic and inorganic, with PH less than four attack acetals. Compared to nylon acetal has better fatigue resistance, creep resistance, stiffness and water resistance, but lower impact strength and abrasion resistance. Acetal is translucent off white in color. Acetal is widely used in plumbing and irrigation because it resists scale build-up and has excellent thread strength, creep resistance, and torque retention.

APPLICATIONS

Fasteners - Bearings - Gears - Cams - Washers - Spacers - Dowel Pins - Actuators

QUALIFICATIONS

NSF and FDA Approved.

HIGH-DENSITY POLYETHYLENE (HDPE)

Polyethylene is among the lowest density plastics and therefore is one of the lowest cost per cubic measure compared to other plastics. High density polyethylene has good toughness, excellent electrical properties, and chemical resistance, good low temperature brittleness and very low water absorption. Polyethylene is essentially inert, unaffected by strong and weak acids, alkalis, detergents, alcohols, and ketones. Polyethylene has low tensile strength and is subject to considerable creep and stress relaxation under load. Polyethylene will swell with chlorinated and aromatic hydrocarbons including gasoline and oils.

APPLICATIONS

Washers - Spacers - Beaded Ties - Insulators - Wire Clips - Protective Caps - Plugs - Spiral Wrap Flexible Grommeting

POLYCARBONATE (PC)

Polycarbonate is one of the toughest, most dimensionally stable thermoplastics over wide temperature range. Polycarbonate has exceptionally high impact strength. PC is unaffected by water below 140°F and can be used in boiling water on a limited basis. PC is unaffected by greases, oils, detergents, aliphatic hydrocarbons, most mineral acids, and the higher alcohols. It is attacked by chlorinated hydrocarbons, and most aromatic solvents, esters, and ketones. PC has white water transparency with a 90% light transmission.

APPLICATIONS

Fasteners, Washers, Spacers, Lenses, Housings.

POLYPROPYLENE (PP)

Polypropylene has a good combination of rigidity and toughness, high rigidity at elevated temperatures, can be steam sterilized, good abrasion resistance and low coefficient of friction, nonhygroscopic, excellent electrical properties, unique flex properties, good chemical resistance without stress cracking, one of the lowest densities, and high surface gloss. PP has the highest tensile strength of the olefins, high tensile modulus, and relatively low impact resistance. PP has good fatigue resistance, excellent abrasion resistance and very low coefficient of friction comparable to nylon. However, lubricating nylon surfaces reduces the friction much more than for polypropylene. Polypropylene has excellent chemical resistance to dilute acids, concentrated acids (except oxidizing acids) alkalis, alcohols, detergents, and water. PP resists aromatic hydrocarbons, chlorinated hydrocarbons, greases, and oils at room temperature but is attacked at about 140° F.

APPLICATIONS

Fasteners-Spacers-Washers-Insulators-Hinge Applications-Containers-Battery Cases-Pump Parts

IMPORTANT

While the descriptions, applications, data, and information contained in the above specifications are presented in good faith and believed to be accurate, it is provided for guidance only. Because many factors affect application and use we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use.

PLASTIC MATERIALS PRINCIPAL PROPERTIES

SECTION
XX
INFORMATION

| Nylon 46 | | Nylon 6/6 Flame Ret. | | Nylatron GS | | Acetal Copolymer | | HDPE | | Polycarbonate | | Polypropylene | |
|------------------|------------------|----------------------|---------|-------------|------------------|------------------|--------------------|---------|--|---------------|--|---------------|--|
| Dry | Moist | Dry | Moist | | | | | | | | | | |
| 14,400 | 9,400 | 11,600 | 6,500 | 13,500 | 8,800 | 2,470 | 10,300 | 4,700 | | | | | |
| | | | | 110 | 70 | | 220 | | | | | | |
| 435,000 | 145,000 | 520,000 | 290,000 | 550,000 | 410,000 | | 340,000 | 165,000 | | | | | |
| 30/25 | 280/250 | | 10 | 15 | 60 | 700 | 150 | 9 | | | | | |
| | | | | 10,500 | 7,700 | | 7 | | | | | | |
| 460,000 | 145,000 | 250,000 | | 460,000 | 375,000 | 146,000 | 350,000 | 210,000 | | | | | |
| 1.8 | 7.5 | 1.5 | | 0.7 | 1.3 | 2.3 | 16 | 0.6 | | | | | |
| | | | | 0.26 | | | | | | | | | |
| | | | | 0.25 | 0.15 | | | | | | | | |
| | | 435 | | | 316 | | 275 | 220 | | | | | |
| 320 | | 195 | | 210 | 230 | | 260 | 120 | | | | | |
| | | | | | | 256 | 309 | 305 | | | | | |
| 563 | | 470 | | 480 | 329 | 270 | 309 | 320 | | | | | |
| 425 | | | | | | | | | | | | | |
| 311 | | 220 | | | 220 | | | | | | | | |
| 1.18 | | 1.16 | | 1.16 | 1.41 | 0.954 | 1.2 | 0.905 | | | | | |
| 3.7 | | 2.6 | | 0.9 | 0.22 | | 0.15 | 0.3 | | | | | |
| R123 | R107 | M52 | | R119 | M80 | D62 | R118 | R95 | | | | | |
| 94V2 | | 94V0 | | Self Ext | 94HB | | 94V2 | | | | | | |
| 600 | | 2000 | | | 500 | | 420 | 425/550 | | | | | |
| 3.8 | 5 | 3.6 | | | 3.7 | | 2.93 | | | | | | |
| 10 ¹⁶ | 10 ¹⁴ | 10 ¹⁵ | | | 10 ¹⁴ | | 2X10 ¹⁷ | | | | | | |

PLASTIC MATERIALS PRINCIPAL PROPERTIES

| Property | ASTM Method | Units | Nylon 6/6 | | Nylon 6/6 Impact Modified | | Nylon 6/6 33% Glassfilled | |
|----------------------------|-------------|-----------------------|------------------|------------------|---------------------------|------------------|---------------------------|---------|
| | | | Dry | Moist | Dry | Moist | Dry | Moist |
| Mechanical | | | | | | | | |
| Tensile Strength | D638 | PSI | 12,000 | 11,000 | 7,900 | | 28,000 | 22,000 |
| Tensile Impact Strength | D1822 | FT LB/IN ² | | | | | | |
| Tensile Modulus | D638 | PSI | 232,000 | | 232,000 | | | |
| Elongation | D638 | % | | | | | | |
| Break | | | 40-60 | 300 | 150 | 170 | 4 | 5 |
| Yield | | | | | | | | |
| Shear Strength | D732 | PSI | 9,500 | 8,200 | 6,900 | | 13,000 | 10,100 |
| Flexural Modulus | D790 | PSI | 410,000 | 185,000 | 220,000 | 100,000 | 1,300,000 | 900,000 |
| Impact Strength | D256 | FT LB/IN | 1 | 2.1 | 17 | NO BRK | 2.2 | 2.6 |
| Coefficient of Friction | | | | | | | | |
| Static | | | 0.31 | | | | | |
| Dynamic | | | 0.17 | | | | | |
| Thermal | | | | | | | | |
| Deflection Temperature | D648 | °F | | | | | | |
| 66PSI | | | 470 | | 340 | | 495 | |
| 264 PSI | | | 170 | | 140 | | 485 | |
| Softening Point | D1525 | °F | | | | | | |
| Melting Point | D789 | °F | 500 | | 500 | | 505 | |
| Peak Temperature | | °F | | | | | | |
| Continuous Use Temperature | | °F | 185 | | | | | |
| Physical | | | | | | | | |
| Specific Gravity | D792 | | 1.14 | | 1.07 | | 1.38 | |
| Water Absorption | D570 | % | 1.5 | | 2.3 | | 1 | |
| Hardness | D785 | | M80 | M61 | M60 | M50 | M100 | M82 |
| Underwriters Lab. Rating | BUL 94 | | 94V2 | | 94HB | | 94HB | |
| Dielectric Strength | D149 | V/MIL | 600 | | 2250 | 1300 | | 400 |
| Dielectric Constant | D150 | 1000 HZ | 5.3 | | 3.1 | 3.6 | 4 | |
| Volume Resistivity | D257 | OHM/CM | 10 ¹⁴ | 10 ¹³ | 4X10 ¹⁴ | 10 ¹² | 10 ¹⁴ | |
| Electrical | | | | | | | | |

Important: While the descriptions, applications, data, and information contained in the above specifications are presented in good faith and believed to be accurate, it is provided for guidance only. Because many factors affect application and use we recommend that you make tests to determine the suitability of a product for particular purpose prior to use.

TOLERANCES AND QUALITY OF INJECTION MOLDED NYLON SCREWS

Micro Plastics' molded nylon components are accurately molded of Type 6/6 Nylon. They are tough, resistant to corrosion, light weight and good electrical insulators. Nylon components conform to irregular surfaces, provide vibration dampening, and offer an inexpensive alternative to more expensive metal parts. Molded threads approximate UNC/UNF 2A and 2B. Metric approximate 6g/6H.

Tolerances are generally held to Industrial Fasteners Institute Standards for inch and metric screws. However, it is often more sensible to try samples or small order quantities before changing from one product to another. Plastic molding has varying degrees of quality. It often involves small amounts of flash, knockout pin marks, gates, sinks, and other slight imperfections. Screws and bolts are gated on the threaded end. It is possible for the gate to leave an extra projection of up to .025"

Nylon screws have been available for many years commercially. They are either machined on a screw machine or injection molded. The machined parts are made from extruded nylon rod stock and can be held to relatively close tolerances during the machining process. Nylon, however, has the unfortunate property of absorbing moisture from its environment which causes significant changes in its dimensions. So even though parts may have been accurately machined, a moist atmosphere can cause fit problems. Conversely, parts that have been moisture conditioned can "lose" moisture causing dimensional problems. If the overall length of a screw grows, it obviously affects the threads per inch thus causing a tight fit. Changes in the moisture content can also have an effect on the outside diameter, pitch diameter and the root diameter.

Injection molded nylon screws also suffer from moisture problems but in addition, have inherent tooling problems. All molded nylon screws come from mold cavities parted along the length of the screw. These cavities have two halves that must be matched exactly to produce a perfect part. The cavity halves are doweled together with leader pins when the mold closes to provide the match required. Other locking devices are also employed to hold the halves of the mold in alignment. In the course of molding production quantities, these leader pins and locks suffer some wear. The mold base holding the cavities wears. The molding machine wears causing slight press platen misalignment. Small amounts of dirt on the mold can cause slight mismatch. From the time the tooling begins to run in production, the entire process begins to work against perfect alignment. Mold temperature changes from room temperature to production temperature causes the mismatch condition to worsen. At some point in time, the various factors affecting mismatch reach a condition that causes the molded screw to be unsatisfactory for the user. Then it is necessary to rework the mold to bring it up to its original condition. Since nylon is somewhat flexible, generally molded nylon screws are not held to as quite close tolerances as metal screws. A slight mismatch and minor flash at the parting line is not as serious as it would be in a metal part. End users who submit nylon screws to go-no go gages without trying the fastener in its actual functional application are generally causing unnecessary difficulties for themselves and their supplier. The fact is that because of the many areas of potential process variables, nylon screws made by injection molding are simply not measurable by the same methods as metal screws. They just are not capable of being manufactured to as close tolerances as metal screws.

The development of the tooling for nylon screws, plus the molded conditions, is a carefully kept secret. Tooling such as this is an evolutionary process. The quality of parts being manufactured today with today's tooling is obviously superior to those made in the beginning. Slight improvements have gradually been made over the years. Since we have production tooling for nearly 3,000 sizes, if we make tooling improvements it is not practical to go back and remake 3,000 molds each time we make an improvement. We do, however, rework and replace as we go along any obviously unsatisfactory tooling. This is a continual process with new sizes being added constantly and at the same time remaking tooling whenever the circumstances require it.

Occasionally, a few unacceptable parts may escape our quality control procedures. If you receive unsuitable parts, let us know immediately. We will do whatever we can to correct them.

All nylon screws are molded in a natural color resin. If you require black color, or some other identifying color (not a color match) these parts are made by dyeing the nylon screw with "RIT" dye in a water solution held at about 200 ° F which adds color but also moisture to the nylon. As stated previously, nylon screws change considerably with the loss or gain of moisture. Nylon screw, as they come from the molding machine contain about .5% moisture, After dyeing in a "RIT" dye, the moisture content increases to about 3-4%. Low moisture nylon is more rigid than moisture conditioned material. Impact strength and toughness increases with moisture addition. Flexibility also increases with higher moisture content which causes difficulties for the user on occasion. If you need a solid molded color, a closer than normal tolerance a special grade of nylon or other plastic material, we can furnish whatever variation or specialty using special molds and set up. This, of course, adds considerably to the cost. We are here to serve you, so tell us what you need.

TOLERANCES OF INJECTION MOLDED NYLON STANDARD COMPONENTS

+/- .005 ON DIMENSIONS THRU .625

+/- .008 ON DIMENSIONS FROM .626 THRU 1.000

+/- .010 ON DIMENSIONS FROM 1.001 THRU 1.500

+/- .015 ON DIMENSIONS LARGER THAN 1.500

+/- .015 ON FRACTIONAL DIMENSIONS

+/- .13MM ON DIMENSIONS THRU 15.88MM

+/- .20MM ON DIMENSIONS FROM 15.89MM THRU 25.41MM

+/- .25MM ON DIMENSIONS FROM 25.42MM THRU 38.10MM

+/- .38MM ON DIMENSIONS LARGER THAN 38.10MM



MINIMUM ORDER \$50.00
MINIMUM LINE CHARGE \$10.00

**PLEASE MARK ALL TELEPHONE ORDERS
"CONFIRMING" TO AVOID POSSIBLE DUPLICATION.**

General - 1% 10 net 30. FOB Flippin, Arkansas, No transportation allowed. Shipping method to be at seller's discretion unless buyer specifies routing. Shipments will not be insured unless requested by buyer. Buyer will bear cost of insurance and any other unusual transportation cost. Orders will be acknowledged with our standard terms of sale current at the time order is placed.

Prices - Quantity prices apply only to orders for parts which can be produced in one production run and are scheduled for release within a 60 day period from the first scheduled production run.

Prices - We reserve the right to increase prices when a careful review of our costs indicates a need for additional revenue.

Tooling - We will maintain tooling for a reasonable time in accordance with good industry practice. Molds that will not produce acceptable parts after reasonable maintenance will be subject to negotiation.

Tooling is not insured unless specifically requested. In those cases an additional charge will be made for insurance cost. Delivery - Unless otherwise specifically provided in writing, delivery of the products hereunder shall be FOB point of shipment. In all cases, risk of loss or damage to goods in transit shall fall upon the purchaser, whose responsibility it shall be to file claims with the carrier.

Shipping dates are approximate and are based upon the prompt receipt of all necessary information. We shall not be liable for delay in delivery due to causes beyond our reasonable control.

Cancellation - Orders are not subject to cancellation, change, reduction in amount, or suspension of deliveries except with our consent and upon terms which protect us from loss.

Patents - The Purchaser shall hold us harmless against any expense or loss resulting from infringement of patents or trademarks arising from compliance with Purchaser's designs or specifications or instructions. Quantity - All parts are accurately counted on sophisticated electronic scales compensated for slight weight variations due to minor mold cavity differentials. Custom part shipments are subject to a +/- 10% order quantity variation.

Returned Material Authorization - If parts are found to deviate beyond tolerances, mail samples back to us with your report, we will then, upon our findings issue a RMA number.

NO MATERIAL will be accepted for credit without a RMA. Unauthorized returns will be shipped back and invoiced with a minimum handling charge of \$50.00 added.

Claims - Inspect all shipments within 15 days of the date of shipment. Failure to advise us of defects on shipments within the 15-day period will constitute acceptance of the shipment.

Any purchase order with terms or clauses which are in conflict with the terms listed above, and/or any order with terms other than those listed herein is voidable by Micro Plastics, Inc. We reserve the right to discontinue items, change specifications or design at any time without notice and without incurring any obligations.

CAUTION: All shipments are moisture packed." Do not open sealed package until use, reseal after opening.



ALPHABETICAL INDEX

SECTION
XX
INFORMATION

A

ABC PAGE 151
AC 142
AF 168
AMR, AMRO 117
APF 137
APM 137
APR 137
APT 137
ASM 137
ASO 18,28,84,215-220, 241
ASR 137
AST 137
ATB 165
AWC-TAB 152-154
AWCF-A 153

C

CAWC PAGE 154
CC 148,149
CDC 160
CGS-WS 193
CINCH 115
CM 184
CN 43,235
CW 86

D

DBEZ PAGE 181
DECOWN 51
DLP 195
DLWN 51, 236
DM 114
DMSP 194
DP 162
DPC 157
DSP 194
DWN 236

E

EXTPOLE PAGE 208
EXPINDWIRE KIT 209
EZ 180
EZAB, EZABS 181
EZF 182
EZLB 175
EZS 181, 183

F

F PAGE 16
FCC 151
FCPM 203
FGS 177

F

FGU 177
FLC 162
FSTP 187
FTP 187
FW 53
FWRT 52

G

GRMF PAGE 207
GRMM 207
GUTADHCLIP 208

H

HC PAGE 200
HCFC 202
HDCC 155
HDEC 192
HDH 213
HDN 46
HFN 46
HHJN 47
HJN 47
HN 48, 235
HNPC 48
HNS 48
HSC 201
HSP 110
HTSP 111

I

INSTLHOOK PAGE 214
INDWIREKIT 208

K

KY PAGE 141
KYP 193

L

LAD PAGE 188
LB 175
LCN 43, 235
LCSP 196
LED 168
LEDH 164
LF 147
LGWH 147
LLP 189
LMSP 197
LMTP 190
LN 235
LP 35,175
LPN 35

L

LPNS 35
LSP 144-195
LTP 189
LTS 96

M

M PAGE 17, 236
ME 239
MF 88
MG 176
MLLP 186
MP 138-139, 162-167
MP 169-173, 191
MPET 174
MPH 185
MP-KOP 139
MPS 139
MPT 174
MRF 115, 116
MRM 115, 116
MSP 191
MTP 190
MWC 160
MWhA 240

N

N PAGE 176
NPT 117

P

PC PAGE 144
PHCET 202
PHCT 202
PIF 126, 128
PJN 47
PMF 133
PMPET 174
PMPT 174
PP 140
PPM 240
PPRT 134
PR 132-133
PRT 134
PS 186
PSS 133
PTC 199
PTI 198

Q

QB PAGE 144
QCC 150

R

R PAGE 17
RC 151
RCFB 159
RCFB-C 158
RIV 188
RN 15
RR 136
RS 97-107
RT 136
RV 192
RVS 192

S

SB PAGE 164
SBOD 163
SC 85, 135
SCH 212, 214
SCHCLIP 214
SCINSTL 213
SCM 238
SCN 45
SCP 155
SEWC 159
SFW 52
SGC 123
SGN 35, 119-122
SGN LPS 35
SHOK 214
SJN 47
SKCDHK-RET 210
SLN 49
SNC 129
SNHK 207
SP 89-95
SPC 156
SPG 123
SPNN 45
SPNP 45
SPRT 112-113
SPW 178-179
SR 130,131
SS 87
SSP 144
STF 114
STM 114
STMB 114
SW 86
SWRC 161
SWS 70-84

T

TA PAGE 203-206

T

TB 165
TC 118
TCSP 196
TEG 30
TI 185
TLB 163
TM 114
TMF 185
TMSP 197
TN 44, 234
TNA 44
TPF 184
TRM 185
TSP 108-109
TT 162

V

V PAGE 31
VP 140

W

W PAGE 16, 54-69
WA 145
WC 155
WCPM 161
WHA 158
WHB 158
WN 15, 50, 236
WNA 50
WNC 50
WTR 150
WP 146
WSP 144

Misc

01 ABTS PAGE 39
01 B 20
01 CD 42
01 F 21
01 FHWS 39
01 G 34
01 H 23
01 LP 35
01 P 24
01 P C 40-41
01 R 25
01 S 26
01 T 27
01 WF 28
01 W-ZP 35
01 X 22
02 A 36

Misc

02 B 35
03 32
09 T 31
09 TEG 30
09 V 31
16 M 237
23 N-P 176
25 87
29 F 16
29 M 17
29 R 17
29 RN 15
29 TL 18
29 W 16
29 WNO 15
32 33
32 W 33
33 A 37
34 29
36 MF 88
38 TR 38, 234
38 SD 38
39 A 19
39 F 19
39 R 19
39 W 19
40 32, 36, 118
40 124, 125, 143
40 129, 211
50M D 221
50M F 229
50M G 228
50M H 231
50M I 230
50M J 223
50M K 222
50M L 225
50M M 224
50M N 227
50M P 226
50M R 232
50M S 232
50M T 233

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- ▶ Over 40 years of experience in molding and mold-making.
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