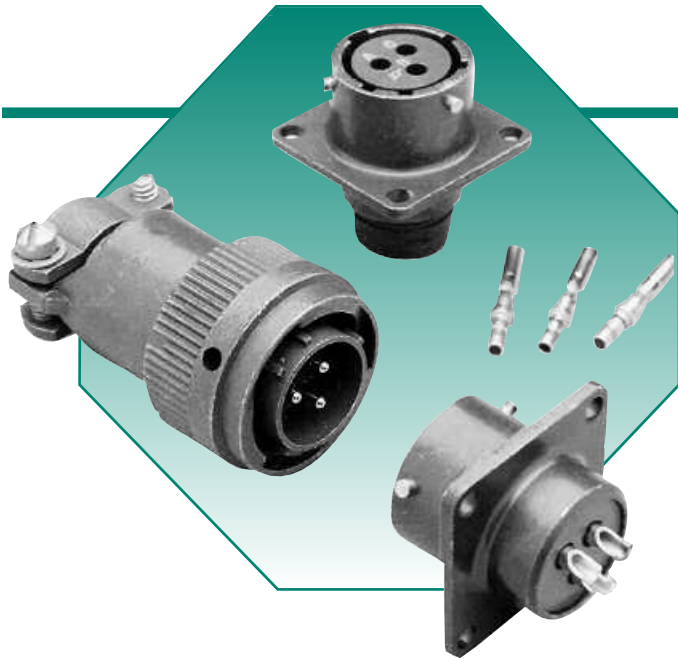


MIL-DTL-26482 Series 1



KPT & KPSE MIL-DTL-26482 Series I connectors offer high density contact arrangements in a miniature circular metal shell. The connector is environmentally sealed and comes in two versions: a solder contact version (KPT) and a high performance crimp contact version (KPSE). Both conform to MIL-DTL-26482 and are interchangeable, intermountable, and interchangeable with all MIL-DTL-26482 connectors, whether solder or crimp style is used. Both styles use a quick disconnect bayonet coupling for rapid positive mating and unmating of the connector. Both types meet all requirements of MIL-DTL-26482.

Applications

Military and Industrial environments requiring a miniature, high density, environmental connector.

- Power generators
- Engines
- Sensors
- Motion Control
- Off-road vehicles
- Earth moving equipment
- Ships
- Mobile equipment
- Industrial machinery
- Telecommunications

Features

Rugged Shell

Aluminum alloy shell and hardware create a rugged connector with minimal weight. These connectors have been used extensively in commercial, military, and aerospace environments. Standard shells accept all MIL-DTL-26482 accessories.

Environmentally Sealed

Complete moisture sealing is achieved by combining four seals: shell, peripheral, interfacial, and wire. Wire Seal is accomplished by multiple ripple design, exceeding the wire sealing requirements of MIL-DTL-26482.

Resistant to Military Environments

These connectors will operate in temperatures from -67° to +257°F (-55° to +125°C) under the harshest possible conditions.

Wide Range of Wire Gauges and Current Carrying Capability

Up to 22 amps with wire gauges from size 24 up to size 16 AWG wire.

Resilient Insulator & Grommet

A resilient polychloroprene insulator and integrated rear wire sealing grommet

guarantees a liquid tight assembly. Crimp contacts are available that can be inserted from the rear of the connector. Solder contacts are permanently bonded into the insulator.

Solder or Crimp Gold Plated Contacts

Both solder (KPT) and crimp (KPSE) contacts are available. Both are gold plated per MIL-G-45204 Type II. KPSE crimp contacts are re designed to MIL-C-39029 and can be crimped with the standard M22520/1 crimp tool. Socket contacts are closed to eliminate damage from test probes and to help correct misaligned pins during engagement. Contact insertion is from the rear of the connector. When the contact is fully inserted, it snaps securely into metal retention tines embedded in the insulator. Contact extraction is accomplished from the front with the proper extraction tool. Pressing the tool plunger pushes the contact out through the rear of the connector.

Agency Approvals

- MIL-DTL-26482
- VG95328

Technical Specifications

Materials & Finishes

Shell	Aluminum alloy
Plating	Olive drab chromate coating over cadmium plating, black zinc cobalt or electroless nickel
Contacts	Copper alloy
Platings	Gold plate, 50 microinches minimum per MIL-G-45204 Type II.
Insulator	Resilient polychloroprene (Neoprene). KPSE insulators also encase a tough plastic wafer which contains metal contact retention tines for high reliability retention of crimp contacts.

Electrical Data

Operating Voltage & Test Voltage:

SERVICE RATING*	TEST ALTITUDE	MAXIMUM OPERATING VOLTAGE		TEST VOLTAGE	
		DC	AC (RMS)	DC	AC (RMS)
I	Sea Level	850	600	2,100	1,500
II		1,275	1,000	3,200	2,300
I	70,000 feet	-	300	535	375
II		-	450	770	500

*Each insulator layout has a specific "Service Rating". The Service Ratings for each layout are listed on [pages 139-140](#).

Current Rating:

CONTACT SIZE	RATED CURRENT AMPS	TEST CURRENT AMPS	POTENTIAL DROP (MILLIVOLTS) INITIAL
20	7.5	7.5	< 55
16	22	13	< 50

Wire Range Sizes 24 to 16 AWG

Contact Resistance When tested to MIL-STD-1344 Method 3004, will not exceed voltage drops listed in table. Consult MIL-DTL-26482, 3.6.4 for details.

Insulation Resistance 5,000 Megohms minimum at 77°F (25°C)

MECHANICAL

Operating Temperature -67°F to +257°F (-55°C to +125°C)

Sealing 48 hours in 6 feet of water per MIL-DTL-26482 4.6.14. Meets 10- and 20-day 50 to 95% humidity testing per MIL-STD-1344 Method 1002.2 per MIL-DTL-26482.

Wire Sealing Range:

CONTACT SIZE	AWG WIRE SIZE	INSULATION OUTSIDE DIAMETER LIMITS: INCHES(mm)		
		MIN. (KPT)	MIN. (KPSE)	MAX. (KPT/KPSE)
20	24, 22, and 20	.060 (1.52)	.047 (1.19)	.083 (2.11)
16	20, 18, and 16	.066 (1.68)	.066 (1.68)	.109 (2.77)



Technical Specifications

Insulation Strip Lengths:

CONTACT SIZE	WIRE SIZE (AWG)	STRIP LENGTH INCHES (mm)
20	20-24	.375 (9.5)
16	16-20	.250 (6.35)

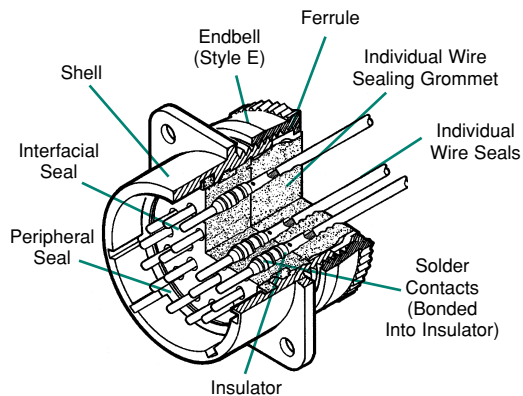
Mating Life	500 cycles minimum
Salt Spray	Unmated connectors and protective covers meet 48-hour exposure to MIL-STD-1344 Method 1001 per MIL-DTL-26482. (Cadmium Plating)
Heat	+347°F (+175°C) for 1,000 hours to MIL-STD-1344 Method 1005.1 per MIL-DTL-26482.
Chemical Resistance	20 hour full immersion unmated in hydraulic fluid and lubricating oil per MIL-DTL-26482.
Vibration	10 to 2,000Hz (15g's) 10 microseconds maximum discontinuity. To MIL-STD-1344 Method 2005 per MIL-DTL-26482.
Shock	50g's, 11ms duration, three major axes. 10 microseconds maximum discontinuity. To MIL-STD-1344 Method 2004 per MIL-DTL-26482.
Contact Type	Solder, crimp, printed circuit
Number of Circuits	KPT: 2 to 61; KPSE: 3 to 61
Contact Insertion (crimp)	Insertion from the rear of connector with simple hand tool. Front release with appropriate extraction tool.
Contact Retention	To MIL-STD-1344 Method 2007 per MIL-DTL-26482.

CONTACT SIZE	AXIAL LOAD MIN. NEWTONS (LBS)
20	66.7 (15)
16	111.2 (25)

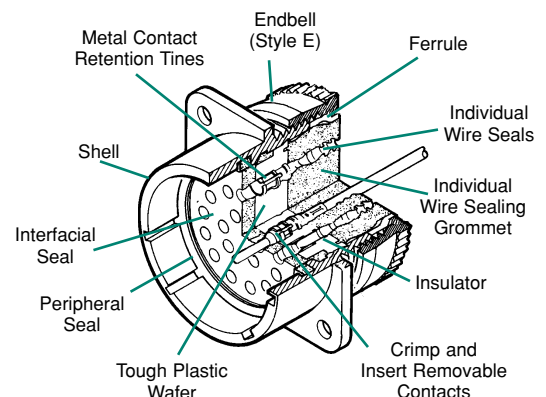
Polarization	Five keyway, three point bayonet with optional rotational polarization. See page 139.
Approvals	▪ MIL-DTL-26482 ▪ VG95328

Cross Sections

KPT (solder)

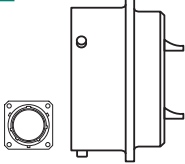
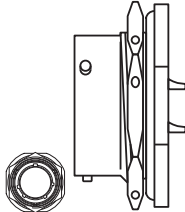
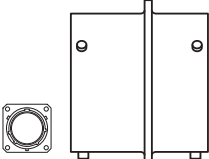
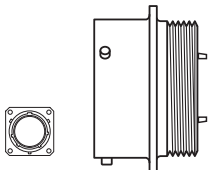
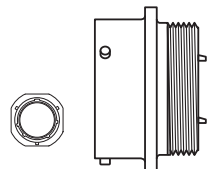
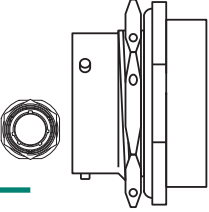
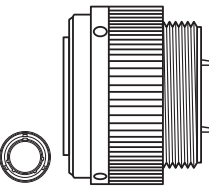
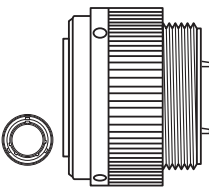


KPSE (crimp)



STEP 1

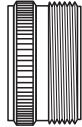
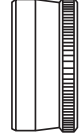
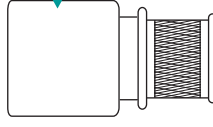
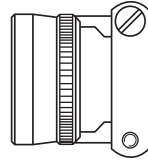
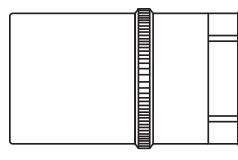

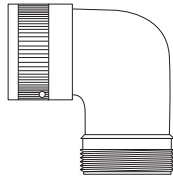
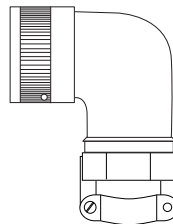
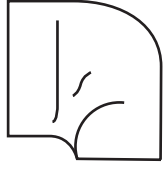
Select Shell Style, Plug or Receptacle

	<p>Solder Box Mount KPT02E* MS3112E° Crimp Style KPSE02E* MS3122E°</p>
	<p>Solder Jam Nut KPT07A* Crimp Style KPSE07A*</p>
	<p>Thru-Bulkhead KPTB* MS3119E°</p>
	<p>Solder Wall Mount KPT00* MS3110° KPT03A = KPT00 less rear accessories Crimp Style KPSE00* MS3120° KPSE03A = KPSE00 less rear accessories</p>
	<p>Solder Cable Mount KPT01* MS3111° KPT04A = KPT01 less rear accessories Crimp Style KPSE01* MS3121° KPSE04A = KPSE01 less rear accessories</p>
	<p>Solder Jam Nut KPT07* MS3114° Crimp Style KPSE07* MS3124°</p>
	<p>Solder Cable Plug KPT06* MS3116° KPT05A = KPT06 less rear accessories Crimp Style KPSE06* MS3126° KPSE05A = KPSE06 less rear accessories</p>
	<p>Solder Right Angle Cable Plug KPT08* Crimp Style KPSE08*</p>

Mates with

STEP 2

Choose Endbell

	<p>A* General Duty Threaded</p>
	<p>E*° Environmental no Clamp (mil)</p>
	<p>NEW!</p> <p>U* - potted (preferred) D* - uses grommets and ferrules Low Cost for Shielded or Unshielded Cable</p> <p>See pages 258-259 for overmold or heat shrink boots</p>
	<p>B* - Non-Environmental with Clamp F*° - military Environmental with Clamp (mil)</p>
	<p>J* Environmental with Clamp and Cable Jacket Gland Seal (mil for MS3116 only)</p>
	<p>P*° Environmental Potting (mil)</p> <p>See page 262 for epoxy potting compound.</p>
	<p>A* General Duty Non-Environmental E* Environmental (no clamp)</p>
	<p>B* Non-Environmental (with clamp) F* Environmental (with clamp)</p>
	<p>P* Environmental Potting Right Angle for KPT08 (Commercial)</p> <p>See page 262 for epoxy potting compound.</p>

PART NUMBER KEY:
 Commercial=(*) Military=(°)

KPT/KPSE MIL-DTL-26482 Series 1 - VG95328

STEP 3 Choose Layout

LAYOUT	KPT	KPSE	CONTACTS				ROTATIONS			
			RATING	TOTAL	20	16	W	X	Y	Z
8-2	△		I	2	2		58	122	-	-
8-3	△		I	3	3		60	210	-	-
8-3A	△	◆	I	3	3		60	210	-	-
8-4	△		I	4	4		45	-	-	-
8-33	△		I	3	3		90	-	-	-
10-6	△	◇	I	6	6		90	-	-	-
10-98	△		I	6	6		90	180	240	270
12-3	△	◇	II	3		3	-	-	180	-
12-8	△		I	8	8		90	112	203	292
12-10	△	◇	I	10	10		60	155	270	295
14-5	△	◇	II	5		5	40	92	184	273
14-12	△	◇	I	12	8	4	43	90	-	-
14-15	△	◇	I	15	14	1	17	110	155	234
14-18	△		I	18	18		15	90	180	270
14-19	△	◇	I	19	19		30	165	315	-
16-8	△	◇	II	8		8	54	152	180	331
16-23	△	◆	I	23	22	1	158	270	-	-
16-26	△	◇	I	26	26		60	-	275	338
16-99	△		I	23	21	2	66	156	223	340
18-11	△	◇	II	11		11	62	119	241	340
18-30	△		I	30	29	1	180	193	285	350
18-32	△	◇	I	32	32		85	138	222	265
20-16	△	◇	II	16		16	238	318	333	347
20-24	△		I	24	24		70	145	215	290
20-39	△	◇	I	39	37	2	63	144	252	333
20-41	△	◇	I	41	41		45	126	225	-
22-21	△	◇	II	21		21	16	135	175	349
22-32	△		I	32	32		72	145	215	288
22-34	△		I	34	34		62	142	218	298
22-36	▲		I	36	36		72	144	216	288
22-41	△		I	41	27	14	39	135	264	-
22-55	△	◇	I	55	55		30	142	226	314
24-61	△	◇	I	61	61		90	180	270	324

SERIES LEGEND ▲ = Commercial Solder △ = Commercial & Military Solder
◆ = Commercial Crimp ◇ = Commercial & Military Crimp

Create your part number using these steps:

(Commercial example)

KPT06	E	16-26	P	W	
1 Shell Style	2 End Bells	3 Layout	4 Contact	5 Rotation	6 Modifier

(Military Solder example)

MS3116	F	16-26	P	W
1 Shell Style	2 End Bells	3 Layout	4 Contact	5 Rotation

(Military Crimp example)

MS3126	F	16-26	P	W
1 Shell Style	2 End Bells	3 Layout	4 Contact	5 Rotation

STEP 4 Choose Contact

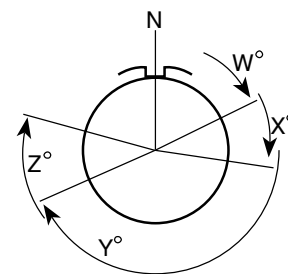
P = Pin
S = Socket
PS = KPT B
(omit for MS3119)

STEP 5 Choose Rotation

See chart at left
(omit for normal)

W, X, Y, Z

Mating Face view of pin inserts



STEP 6 Choose Modifier

(omit for normal)

A71 = Electroless Nickel

A206 = Conductive
Black Zinc

DN = Shrink Boot Adaptor



DZ = Shrink Boot Adaptor
for Shielded (Screened) Cable
(Includes shielding grounding
finger barrel)



Layouts by Number of Contacts

CONTACT LEGEND ○ = 20 ● = 16
Mating face view of pin inserts

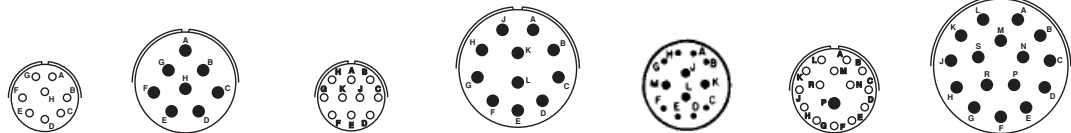
SERIES LEGEND ▲ = Commercial Solder △ = Commercial & Military Solder
◆ = Commercial Crimp ◇ = Commercial & Military Crimp

2 3 CONTACTS 4 CONTACTS 5 CONTACTS 6 CONTACTS



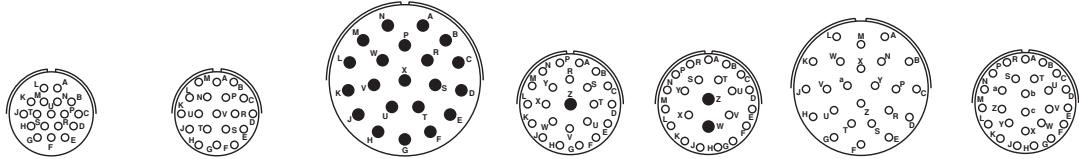
	2	3	3A	33	12-3	8-4	14-5	10-6	10-98
SHELL SIZE/LAYOUT	8-2	8-3	8-3A	8-33	12-3	8-4	14-5	10-6	10-98
# OF CONTACTS	2-#20	3-#20	3-#20	3-#20	3-#16	4-#20	5-#16	6-#20	6-#20
SERIES	△	△	△◆	△	△◇	△	△◇	△◇	△
SERVICE RATING	I	I	I	I	II	I	II	I	I

8 CONTACTS 10 11 CONTACTS 12 15 16 CONTACTS



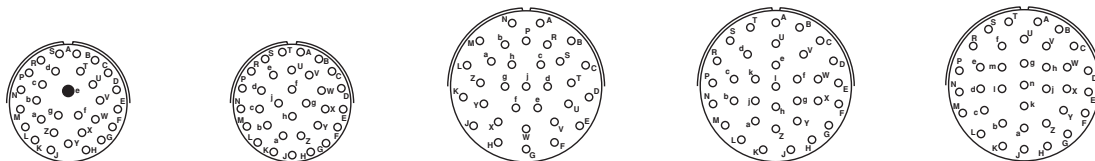
	8	10	11	12	15	16
SHELL SIZE/LAYOUT	12-8	16-8	12-10	18-11	14-12	20-16
# OF CONTACTS	8-#20	8-#16	10-#20	11-#16	8-#20 4-#16	16-#16
SERIES	△	△◇	△◇	△◇	△◇	△◇
SERVICE RATING	I	I	I	II	I	I

18 19 CONTACTS 21 CONTACTS 23 CONTACTS 24 CONTACTS 26 CONTACTS



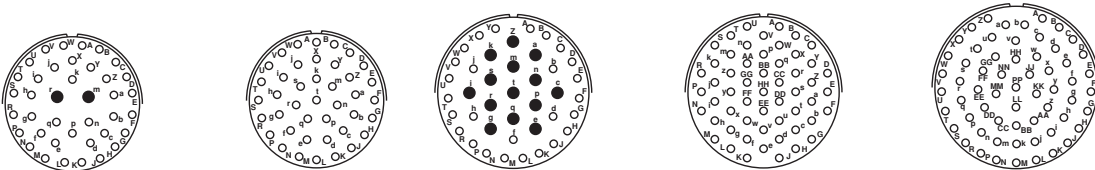
	18	19	21	23	24	26
SHELL SIZE/LAYOUT	14-18	14-19	22-21	16-23	16-99	20-24
# OF CONTACTS	18-#20	19-#20	21-#16	1-#16; 22-#20	2-#16; 21-#20	24-#20
SERIES	△	△◇	△◇	△◆	△	△
SERVICE RATING	I	I	II	I	I	I

30 CONTACTS 32 CONTACTS 34 CONTACTS 36 CONTACTS



	30	32	32	34	36
SHELL SIZE/LAYOUT	18-30	18-32	22-32	22-34	22-36
# OF CONTACTS	1-#16; 29-#20	32-#20	32-#20	34-#20	36-#20
SERIES	△	△◇	△	△	▲
SERVICE RATING	I	I	I	I	I

39 CONTACTS 41 CONTACTS 55 CONTACTS 61 CONTACTS



	39	41	41	55	61
SHELL SIZE/LAYOUT	20-39	20-41	22-41	22-55	24-61
# OF CONTACTS	2-#16; 37-#20	41-#20	14-#16; 27-#20	55-#20	61-#20
SERIES	△◇	△◇	△	△◇	△◇
SERVICE RATING	I	I	I	I	I

KPT/KPSE MIL-DTL-26482 Series 1 - VG95328

Pin & Socket Crimp Contacts

Pins

SIZE	WIRE SIZE AWG	PIN	COLOR BANDS			WIRE STRIP LENGTHS	WIRE SEALING RANGE		WIRE HOLE FILLER	CRIMP TOOLS	USE TURRET HEAD LOCATOR COLOR	INSERTION/EXTRACTION TOOL M81969
			1	2	3		MIN	MAX				
20	20-24	M39029/31-240	Red	Yellow	Black	.250 (6.4)	.047 (1.2)	.083 (2.1)	MS27488-20-2	AF8 Hand Tool WA27F Air Powered TH1A Turret Head	Red	/17-03 (INS) /19-07 (EXT)
16	16-20	M39029/31-228	Red	Red	Grey	.250 (6.4)	.066 (1.7)	.109 (2.7)	MS27488-16-2		Blue	/17-04 (INS) /19-08 (EXT)

Sockets

SIZE	WIRE SIZE AWG	SOCKET	COLOR BANDS			WIRE STRIP LENGTHS	WIRE SEALING RANGE		WIRE HOLE FILLER	CRIMP TOOLS	USE TURRET HEAD LOCATOR COLOR	INSERTION/EXTRACTION TOOL M81969
			1	2	3		MIN	MAX				
20	20-24	M39029/32-259	Red	Green	White	.250 (6.4)	.047 (1.2)	.083 (2.1)	MS27488-20-2	AF8 Hand Tool WA27F Air Powered TH1A Turret Head	Red	/17-03 (INS) /19-07 (EXT)
16	16-20	M39029/32-247	Red	Yellow	Violet	.250 (6.4)	.066 (1.7)	.109 (2.7)	MS27488-16-2		Blue	/17-04 (INS) /19-08 (EXT)



KPSE Crimp Kit

Kit includes:

- Crimp Tool
- Locator
- Insertion Tools 16 + 20
- Extraction Tools 16 + 20
- Contact Insertion
- Lubricant
- Assembly Instructions
- Rugged Case

KPT/KPSE Dimensions

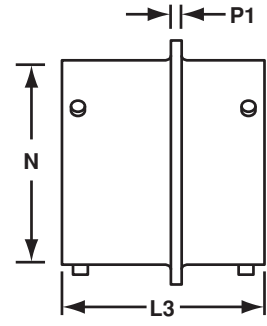
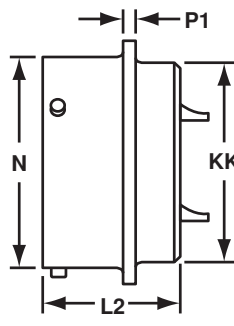
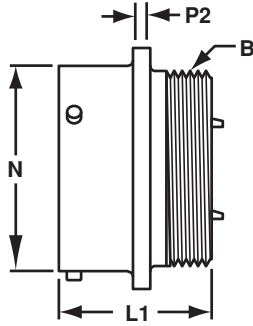
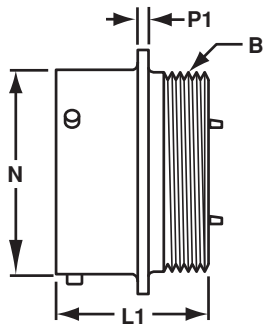
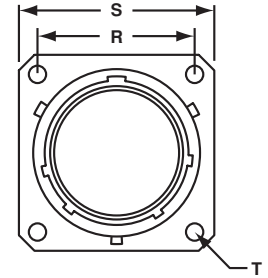
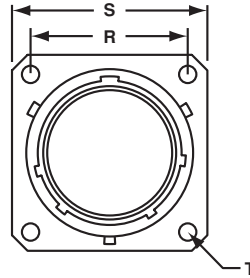
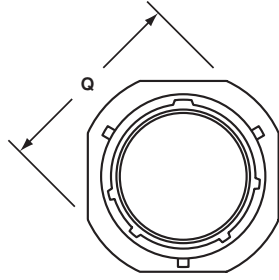
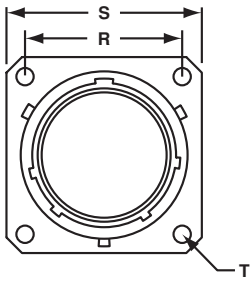
Receptacle Styles

KPT00
KPSE00
MS3110
MS3120
KP_03

KPT01
KPSE01
MS3111
MS3121
KP_04

KPT02
KPSE02
MS3112
MS3122

KPTB
MS3119

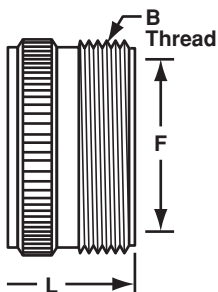


SHELL SIZE	ALL TYPES	00/02/B				01		00/01		02		B
	N DIA. +.003 (+/-0.1)	R (TP)	S MAX.	T DIA.	P1	P2	Q MAX.	L1 MAX.	B THREAD CLASS 2A	L2 MAX.	KK DIA. MAX.	L3 MAX.
8	0.471 (12.0)	0.594 (15.1)	0.828 (21.0)	0.120 (3.0)	0.062 (1.6)	0.094 (2.4)	0.958 (24.3)	0.850 (21.6)	.4375-28 UNEF	0.791 (20.1)	0.469 (11.9)	1.125 (38.6)
10	0.588 (14.9)	0.719 (18.3)	0.954 (24.2)	0.120 (3.0)	0.062 (1.6)	0.094 (2.4)	1.082 (27.5)	0.850 (21.6)	.5625-24 UNEF	0.791 (20.1)	0.593 (15.1)	1.125 (38.6)
12	0.748 (19.0)	0.812 (20.6)	1.047 (26.6)	0.120 (3.0)	0.062 (1.6)	0.094 (2.4)	1.176 (29.9)	0.850 (21.6)	.6875-24 UNEF	0.791 (20.1)	0.719 (18.3)	1.125 (38.6)
14	0.873 (22.2)	0.906 (23.0)	1.141 (29.0)	0.120 (3.0)	0.062 (1.6)	0.094 (2.4)	1.270 (32.3)	0.850 (21.6)	.8125-20 UNEF	0.791 (20.1)	0.843 (21.4)	1.125 (38.6)
16	0.998 (25.3)	0.969 (24.6)	1.234 (31.3)	0.120 (3.0)	0.062 (1.6)	0.094 (2.4)	1.364 (34.6)	0.850 (21.6)	.9375-20 UNEF	0.791 (20.1)	0.969 (24.6)	1.125 (38.6)
18	1.123 (28.5)	1.062 (27.0)	1.328 (33.7)	0.120 (3.0)	0.062 (1.6)	0.094 (2.4)	1.458 (37.0)	0.850 (21.6)	1.0625-18 UNEF	0.791 (20.1)	1.093 (27.8)	1.125 (38.6)
20	1.248 (31.7)	1.156 (29.4)	1.453 (36.9)	0.120 (3.0)	0.094 (2.4)	0.115 (2.9)	1.582 (40.2)	1.057 (26.8)	1.1875-18 UNEF	0.891 (22.6)	1.219 (31.0)	1.406 (35.7)
22	1.373 (34.9)	1.250 (31.8)	1.578 (40.1)	0.120 (3.0)	0.094 (2.4)	0.115 (2.9)	1.708 (43.4)	1.057 (26.8)	1.3125-18 UNEF	0.891 (22.6)	1.343 (34.1)	1.406 (35.7)
24	1.498 (38.0)	1.375 (34.9)	1.703 (43.3)	0.147 (3.7)	0.094 (2.4)	0.115 (2.9)	1.832 (46.5)	1.057 (26.8)	1.4375-18 UNEF	0.891 (22.6)	1.469 (37.3)	1.406 (35.7)

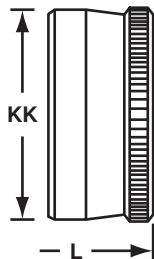
KPT/KPSE MIL-DTL-26482 Series 1 - VG95328

Endbell Styles

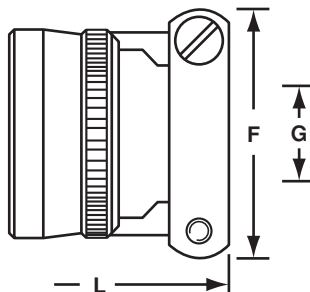
A (Not MS)



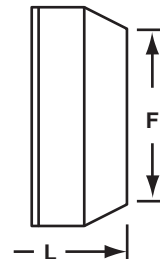
E (MS)



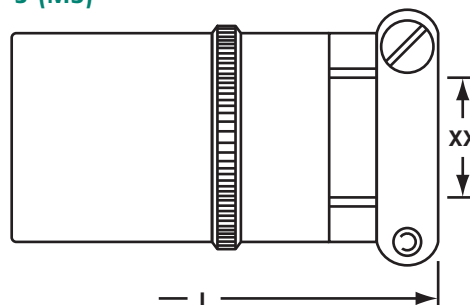
F (MS)
B (Not MS)



P (MS)



J (MS)



A ENDBELL		
F MIN.	L MAX.	B THREAD UNEF-2A
0.335 (8.5)	1.444 (36.7)	.5000-28
0.466 (11.8)	1.444 (36.7)	.6250-24
0.591 (15.0)	1.444 (36.7)	.7500-20
0.705 (17.9)	1.444 (36.7)	.8750-20
0.830 (21.1)	1.444 (36.7)	1.0000-20
0.948 (24.1)	1.444 (36.7)	1.1875-18
1.043 (26.5)	1.728 (43.9)	1.1875-18
1.198 (30.4)	1.728 (43.9)	1.4375-18
1.293 (32.8)	1.738 (44.1)	1.4375-18

E ENDBELL	
L MAX.	KK MAX.
1.328 (33.7)	0.608 (15.4)
1.328 (33.7)	0.734 (18.6)
1.328 (33.7)	0.858 (21.8)
1.328 (33.7)	0.984 (25.0)
1.328 (33.7)	1.110 (28.2)
1.328 (33.7)	1.234 (31.3)
1.531 (38.9)	1.360 (34.5)
1.531 (38.9)	1.484 (37.7)
1.594 (40.5)	1.610 (40.9)

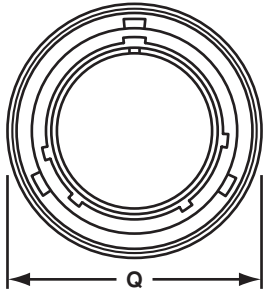
F/B ENDBELL		
F MIN.	G MIN.	L
0.828 (21.0)	0.115 (2.9)	1.922 (48.8)
0.891 (22.6)	0.178 (4.5)	1.922 (48.8)
1.016 (25.8)	0.302 (7.7)	1.922 (48.8)
1.141 (29.0)	0.365 (9.3)	1.922 (48.8)
1.203 (30.6)	0.490 (12.4)	2.047 (52.0)
1.469 (37.3)	0.615 (15.6)	2.078 (52.8)
1.469 (37.3)	0.615 (15.6)	2.344 (59.5)
1.656 (42.1)	0.740 (18.8)	2.344 (59.5)
1.750 (44.5)	0.790 (20.1)	2.406 (61.1)

P ENDBELL	
F	L MAX.
0.317 (8.1)	1.453 (36.9)
0.434 (11.0)	1.453 (36.9)
0.548 (13.9)	1.453 (36.9)
0.673 (17.1)	1.453 (36.9)
0.798 (20.3)	1.453 (36.9)
0.899 (22.8)	1.453 (36.9)
1.024 (26.0)	1.672 (42.5)
1.149 (29.2)	1.672 (42.5)
1.274 (32.4)	1.734 (44.0)

J ENDBELL		
L	XX MIN.	XX MAX.
2.271 (57.7)	0.168 (4.3)	0.230 (5.8)
2.271 (57.7)	0.205 (5.2)	0.312 (7.9)
2.411 (61.2)	0.338 (8.6)	0.442 (11.2)
2.599 (66.0)	0.416 (10.6)	0.539 (13.7)
2.943 (74.8)	0.550 (14.0)	0.616 (15.6)
3.172 (80.6)	0.600 (15.2)	0.672 (17.1)
3.610 (91.7)	0.635 (16.1)	0.747 (19.0)
3.766 (95.7)	0.670 (17.0)	0.846 (21.5)
3.985 (101.2)	0.740 (18.8)	0.894 (22.7)

Straight Plugs

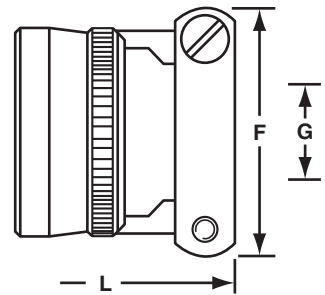
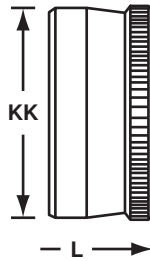
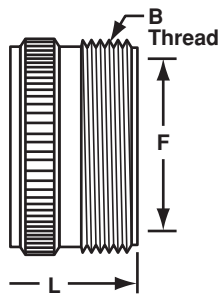
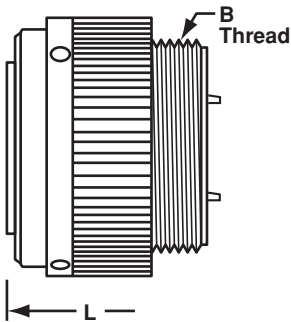
KPT06
 KPSE06
 MS3116
 MS3126
 KP_05



KPT06A
 KPSE06A

KPT06E
 KPSE06E
 MS3116E
 MS3126E

KPT06F
 KPSE06F
 MS3116F
 MS3126F



06			
SHELL SIZE	Q MAX.	L MAX.	B THREAD 2A
8	0.765 (19.4)	0.841 (21.4)	.4375-28 UNEF
10	0.840 (21.3)	0.841 (21.4)	.5625-24 UNEF
12	0.999 (25.4)	0.841 (21.4)	.6875-24 UNEF
14	1.139 (28.9)	0.841 (21.4)	.8125-20 UNEF
16	1.261 (32.0)	0.841 (21.4)	.9375-20 UNEF
18	1.337 (34.0)	0.841 (21.4)	1.0625-18 UNEF
20	1.477 (37.5)	0.986 (25.0)	1.1875-18 UNEF
22	1.602 (40.7)	0.986 (25.0)	1.3125-18 UNEF
24	1.723 (43.8)	0.986 (25.0)	1.4375-18 UNEF

06A		
F MIN.	L MAX.	B THREAD UNEF-2A
0.335 (8.5)	1.440 (36.6)	.5000-28
0.466 (11.8)	1.440 (36.6)	.6250-24
0.591 (15.0)	1.440 (36.6)	.7500-20
0.705 (17.9)	1.440 (36.6)	.8750-20
0.830 (21.1)	1.440 (36.6)	1.0000-20
0.948 (24.1)	1.662 (42.2)	1.1875-18
1.043 (26.5)	1.662 (42.2)	1.1875-18
1.198 (30.4)	1.662 (42.2)	1.4375-18
1.293 (32.8)	1.672 (42.5)	1.4375-18

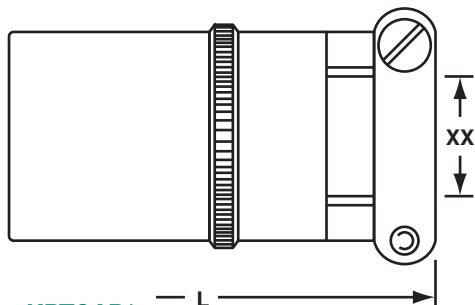
06E	
L MAX.	KK MAX.
1.328 (33.7)	0.608 (15.4)
1.328 (33.7)	0.734 (18.6)
1.328 (33.7)	0.858 (21.8)
1.328 (33.7)	0.984 (25.0)
1.328 (33.7)	1.110 (28.2)
1.328 (33.7)	1.234 (31.3)
1.453 (36.9)	1.360 (34.5)
1.453 (36.9)	1.484 (37.7)
1.510 (38.4)	1.610 (40.9)

06F		
F MAX	G MIN	L MAX
0.828 (21.0)	0.115 (2.9)	1.906 (48.4)
0.891 (22.6)	0.178 (4.5)	1.906 (48.4)
1.016 (25.8)	0.302 (7.7)	1.906 (48.4)
1.141 (29.0)	0.365 (9.3)	1.906 (48.4)
1.203 (30.6)	0.490 (12.4)	2.047 (52.0)
1.469 (37.3)	0.615 (15.6)	2.078 (52.8)
1.469 (37.3)	0.615 (15.6)	2.250 (57.2)
1.656 (42.1)	0.740 (18.8)	2.250 (57.2)
1.750 (44.5)	0.790 (20.1)	2.312 (58.7)

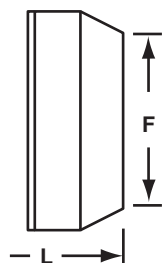
KPT/KPSE MIL-DTL-26482 Series 1 - VG95328

Straight Plugs

KPT06J
KPSE06J
MS3116J



KPT06P*
KPSE06P*
MS3116P*
MS3126P*



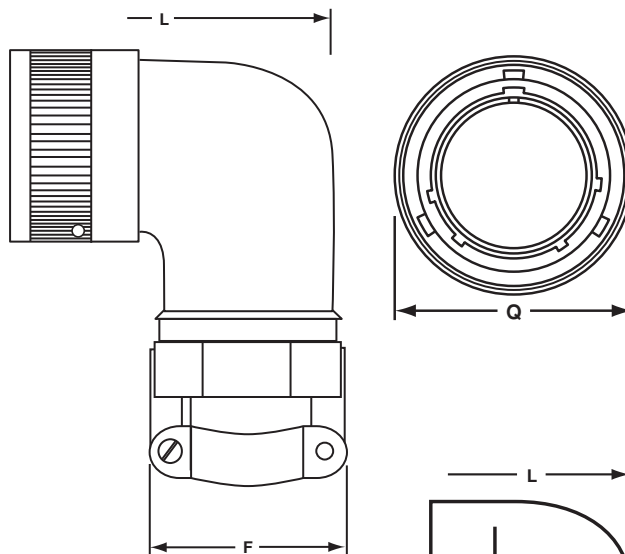
06P	
F	L MIN.
0.317 (8.1)	1.500 (38.1)
0.434 (11.0)	1.500 (38.1)
0.548 (13.9)	1.500 (38.1)
0.673 (17.1)	1.500 (38.1)
0.798 (20.3)	1.500 (38.1)
0.899 (22.8)	1.500 (38.1)
1.024 (26.0)	1.609 (40.9)
1.149 (29.2)	1.609 (40.9)
1.274 (32.4)	1.687 (42.8)

06J		
L	CABLE Q0	
	XX MIN.	XX MAX.
2.271 (57.7)	0.168 (4.3)	0.230 (5.8)
2.271 (57.7)	0.205 (5.2)	0.312 (7.9)
2.411 (61.2)	0.338 (8.6)	0.442 (11.2)
2.599 (66.0)	0.416 (10.6)	0.539 (13.7)
2.943 (74.8)	0.550 (14.0)	0.616 (15.6)
3.172 (80.6)	0.600 (15.2)	0.672 (17.1)
3.610 (91.7)	0.635 (16.1)	0.747 (19.0)
3.766 (95.7)	0.670 (17.0)	0.846 (21.5)
3.985 (101.2)	0.740 (18.8)	0.849 (21.6)

Right Angle Plugs

KPT08A, B, E, F
KPSE08A, B, E, F

KPT08P
KPSE08P



08 STYLE	WITH CLAMP	WITH WIRE SEAL & FERRULE
A		
B	●	
E		●
F	●	●

08E/A/B/F			
SHELL SIZE	Q MAX.	F MAX.	L MAX.
8	0.765 (19.4)	0.812 (20.6)	1.842 (46.8)
10†	0.840 (21.3)	0.875 (22.2)	1.937 (49.2)
12	0.999 (25.4)	1.062 (27.0)	1.937 (49.2)
14	1.139 (28.9)	1.156 (29.4)	2.124 (53.9)
16	1.261 (32.0)	1.250 (31.8)	2.203 (56.0)
18	1.337 (34.0)	1.469 (37.3)	2.380 (60.5)
20	1.477 (37.5)	1.469 (37.3)	2.629 (66.8)
22	1.602 (40.7)	1.680 (42.7)	2.629 (66.8)
24†	1.723 (43.8)	1.688 (42.9)	2.895 (73.5)

08P	
F MAX.	L MIN.
-	-
0.252 (6.4)	1.380 (35.1)
0.252 (6.4)	1.567 (39.8)
0.283 (7.2)	1.567 (39.8)
0.355 (9.0)	1.567 (39.8)
0.530 (13.5)	1.755 (44.6)
0.562 (14.3)	1.782 (45.3)
0.562 (14.3)	1.782 (45.3)
0.610 (15.5)	2.087 (53.0)

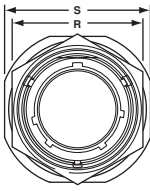
➔ *See **page 262** for epoxy potting compound.

† A 2-piece backshell maybe used, call for details

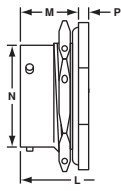
KPT/KPSE Dimensions

Jam Nut Receptacles

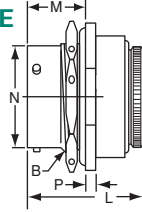
KPT07



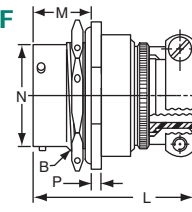
KPT07A



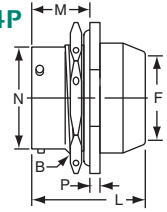
KPT07E
MS31_4E



KPT07F
MS31_4F



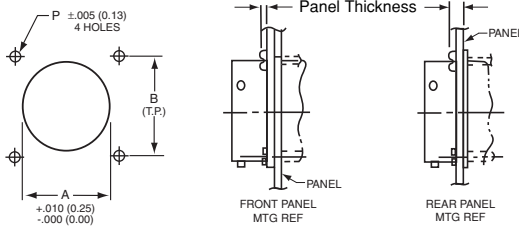
KPT07P
MS31_4P



SHELL SIZE	07							07A		07E/F		07P	
	B THREAD UNEF -2A	M +/-0.031 (0.79)	N +/-0.003 (0.08)	P +/-0.020 (0.51)	R	S MAX.	PANEL THICKNESS		L MAX.	STYLE E L MAX.	STYLE F L MAX.	F	L
							MIN.	MAX.					
8	.5625-24	0.691 (17.6)	0.471 (12.0)	0.117 (3.0)	0.750 (19.1)	0.954 (24.2)	0.062 (1.6)	0.125 (3.2)	0.889 (22.6)	1.344 (34.1)	1.906 (48.4)	0.317 (8.1)	1.391 (35.3)
10	.6875-24	0.691 (17.6)	0.588 (14.9)	0.117 (3.0)	0.875 (22.2)	1.078 (27.4)	0.062 (1.6)	0.125 (3.2)	0.889 (22.6)	1.344 (34.1)	1.906 (48.4)	0.434 (11.0)	1.391 (35.3)
12	.8750-20	0.691 (17.6)	0.748 (19.0)	0.117 (3.0)	1.062 (27.0)	1.266 (32.2)	0.062 (1.6)	0.125 (3.2)	0.889 (22.6)	1.344 (34.1)	1.906 (48.4)	0.548 (13.9)	1.391 (35.3)
14	1.0000-20	0.691 (17.6)	0.873 (22.2)	0.117 (3.0)	1.188 (30.2)	1.391 (35.3)	0.062 (1.6)	0.125 (3.2)	0.889 (22.6)	1.344 (34.1)	1.906 (48.4)	0.673 (17.1)	1.391 (35.3)
16	1.1250-18	0.691 (17.6)	0.988 (25.1)	0.117 (3.0)	1.312 (33.3)	1.516 (38.5)	0.062 (1.6)	0.125 (3.2)	0.889 (22.6)	1.344 (34.1)	2.047 (52.0)	0.798 (20.3)	1.391 (35.3)
18	1.2500-18	0.691 (17.6)	1.123 (28.5)	0.117 (3.0)	1.438 (36.5)	1.641 (41.7)	0.062 (1.6)	0.125 (3.2)	0.889 (22.6)	1.344 (34.1)	2.078 (52.8)	0.899 (22.8)	1.391 (35.3)
20	1.3750-18	0.879 (22.3)	1.248 (31.7)	0.148 (3.8)	1.562 (39.7)	1.828 (46.4)	0.062 (1.6)	0.250 (6.4)	1.108 (28.1)	1.594 (40.5)	2.328 (59.1)	1.024 (26.0)	1.641 (41.7)
22	1.5000-18	0.879 (22.3)	1.373 (34.9)	0.148 (3.8)	1.688 (42.9)	1.954 (49.6)	0.062 (1.6)	0.250 (6.4)	1.108 (28.1)	1.594 (40.5)	2.328 (59.1)	1.149 (29.2)	1.641 (41.7)
24	1.6250-18	0.912 (23.2)	1.498 (38.0)	0.148 (3.8)	1.812 (46.0)	2.078 (52.8)	0.062 (1.6)	0.250 (6.4)	1.141 (29.0)	1.641 (41.7)	2.453 (62.3)	1.274 (32.4)	1.703 (43.3)

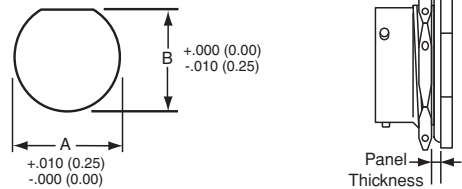
Panel Cutouts/Thickness

KPT00
KPT02
KPTB



SHELL SIZE	A	B	P +/- .005	SCREW SIZE	PANEL THICKNESS	
					KPT/KPSE 00/02	KPTB
8	0.618 (15.7)	0.594 (15.1)	0.125 (3.2)	#4	0.087 (2.2)	0.218 (5.5)
10	0.735 (18.7)	0.719 (18.3)	0.125 (3.2)	#4	0.087 (2.2)	0.218 (5.5)
12	0.859 (21.8)	0.812 (20.6)	0.125 (3.2)	#4	0.087 (2.2)	0.218 (5.5)
14	0.985 (25.0)	0.906 (23.0)	0.125 (3.2)	#4	0.087 (2.2)	0.218 (5.5)
16	1.113 (28.3)	0.969 (24.6)	0.125 (3.2)	#4	0.087 (2.2)	0.218 (5.5)
18	1.235 (31.4)	1.062 (27.0)	0.125 (3.2)	#4	0.087 (2.2)	0.218 (5.5)
20	1.361 (34.6)	1.156 (29.4)	0.125 (3.2)	#4	0.212 (5.4)	0.334 (8.5)
22	1.485 (37.7)	1.250 (31.8)	0.125 (3.2)	#4	0.212 (5.4)	0.334 (8.5)
24	1.611 (40.9)	1.375 (34.9)	0.155 (3.9)	#6	0.212 (5.4)	0.311 (7.9)
























KPT07



SHELL SIZE	A +010-.000 (+.25-.00)	B +0.000-.010 (+.00-.25)	PANEL THICKNESS	
			MIN.	MAX.
8	0.578 (14.7)	0.540 (13.7)	0.062 (1.6)	0.125 (3.2)
10	0.703 (17.9)	0.665 (16.9)	0.062 (1.6)	0.125 (3.2)
12	0.890 (22.6)	0.828 (21.0)	0.062 (1.6)	0.125 (3.2)
14	1.015 (25.8)	0.952 (24.2)	0.062 (1.6)	0.125 (3.2)
16	1.140 (29.0)	1.076 (27.3)	0.062 (1.6)	0.125 (3.2)
18	1.265 (32.1)	1.201 (30.5)	0.062 (1.6)	0.125 (3.2)
20	1.390 (35.3)	1.326 (33.7)	0.062 (1.6)	0.250 (6.4)
22	1.515 (38.5)	1.451 (36.9)	0.062 (1.6)	0.250 (6.4)
24	1.640 (41.7)	1.576 (40.0)	0.062 (1.6)	0.250 (6.4)

KPT/KPSE MIL-DTL-26482 Series 1 - VG95328

Components

	Components			
	Plugs		Receptacles	
	KPT	KPSE	KPT	KPSE
O-Ring				
Barrel/ Shell				
Wave Spring				
Coupling Nut				
Insert/ Insulator				
Contacts				
Wire Sealing Grommet				
Ferrule/ Compression Ring				
Endbell/ Cable Clamp				

FLANGE MOUNT RECEPTACLE ACCESSORIES

Gasket



Nut Plate



Sealing Screws



Dummy Receptacle



DUST CAPS

Plug Dust Cap



Receptacle Flange Dust Cap



Receptacle Jam Nut Dust Cap



Cable Clamp



Standard plating is anodized

FLANGE MOUNT RECEPTACLE ACCESSORIES

DUST CAPS

SHELL SIZE	GASKET	NUT PLATE	SEALING SCREWS	DUMMY RECEPTACLE	PLUGS	RECEPTACLES		CABLE CLAMP FOR A ENDBELLS
						FLANGED	JAM NUT	
8	CMD02-8*	M85528/2-8A	S440-1/2	MS3115-8**	MS3180-8CA	MS3181-8CA	MS3181-8NA	MS3057-3A
10	CMD02-10*	M85528/2-10A	S440-1/2	MS3115-10**	MS3180-10CA	MS3181-10CA	MS3181-10NA	MS3057-4A
12	CMD02-12*	M85528/2-12A	S440-1/2	MS3115-12**	MS3180-12CA	MS3181-12CA	MS3181-12NA	MS3057-6A
14	CMD02-14*	M85528/2-14A	S440-1/2	MS3115-14**	MS3180-14CA	MS3181-14CA	MS3181-14NA	MS3057-8A
16	CMD02-16*	M85528/2-16A	S440-1/2	MS3115-16**	MS3180-16CA	MS3181-16CA	MS3181-16NA	MS3057-10A
18	CMD02-18*	M85528/2-18A	S440-1/2	MS3115-18**	MS3180-18CA	MS3181-18CA	MS3181-18NA	MS3057-12A
20	CMD02-20*	M85528/2-20A	S440-1/2	MS3115-20**	MS3180-20CA	MS3181-20CA	MS3181-20NA	MS3057-12A
22	CMD02-22*	M85528/2-22A	S440-1/2	MS3115-22**	MS3180-22CA	MS3181-22CA	MS3181-22NA	MS3057-16A
24	CMD02-24*	M85528/2-24B	S632-1/2	MS3115-24**	MS3180-24CA	MS3181-24CA	MS3181-24NA	MS3057-16A

* Add C for conductive type

** Select Plating

W = Olive drab over cadmium

A = Anodized

L = Electroless nickel

KPT Solder Contacts

- Slide the rear accessories over the wire bundle in the proper sequence for re-assembly: cable clamp and/or endbell first, then ferrule, and (if used) the coupling nut.
- Insert individual wires through the proper holes in the grommet.
- Solder wires to appropriate contacts on the rear of the connector. ITT Cannon document RPI234 covers standard soldering practices and is available upon request by fax or mail. Please call.
- Fixture the connector for re-assembly using the endbell assembly tools on [page 266](#) or a mating connector with contacts installed.
- Slide the grommet down the wires (lubricating the grommet with isopropyl alcohol will help).
- Fill all unused grommet cavities with a wire hole filler to maintain the sealing integrity of the connector.
- Slide coupling nut, ferrule, and endbell accessories over rear of the connector and tighten. Torque as follows:

SIZE	TORQUE (INCH/LBS)
8, 10, 12, 14	10 - 15
16, 18	15- 25
20, 22, 24	25 - 35

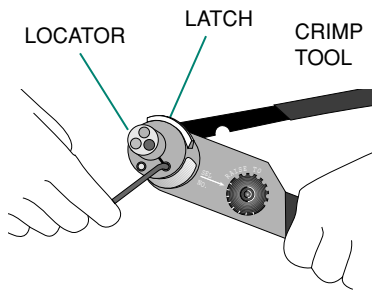
KPSE Crimp Tool Operation

Hand Crimp Tool

- Strip the wires to the appropriate length.

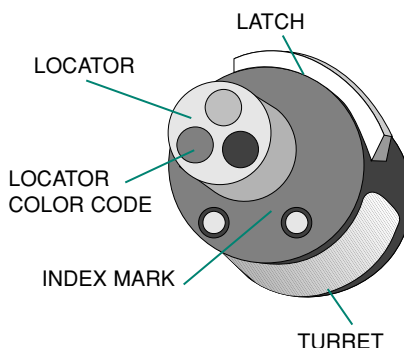
CONTACT SIZE	STRIP LENGTH
20	1/4" (6.4mm)
16	1/4" (6.4mm)

- Open the AF8 (M22520/1-01) crimp tool by squeezing the handles. Push the latch on TH1A (M22520/1-02) to pop up the locator on the turret. Attach the turret to the AF8 crimp tool using the two captive hex bolts in the turret.

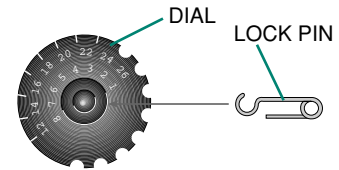


- Select the proper locator position for your contact by rotating the locator until the proper color is aligned with the index mark. Push locator back down until it snaps into position.

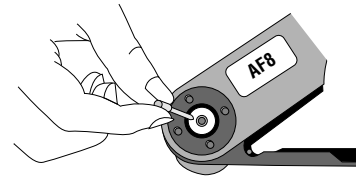
CONTACT SIZE	LOCATOR COLOR
20	RED
16	BLUE



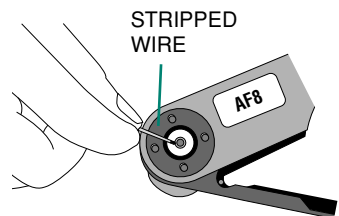
- Adjust dial for proper wire gauge. To change the dial setting remove the lock pin and lift center of dial. Turn to the desired wire gauge. Replace lock pin on dial.



- Cycle the tool before inserting the contact to be sure the tool is in the open position. Drop the contact, mating end first, into the crimp cavity of the tool. Squeeze the tool handle just enough to grip the contact without actually crimping it.

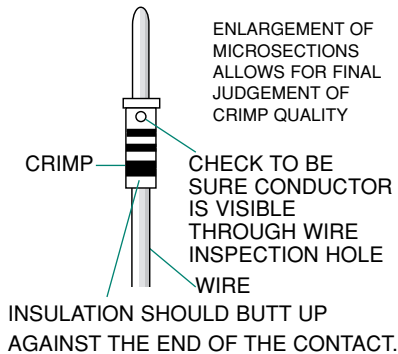


- Insert the stripped wire into the contact with a slight twisting motion. Be sure all wire strands are inside the contact. Squeeze the handle to cycle the tool. The handle will not release until the contact is completely crimped.



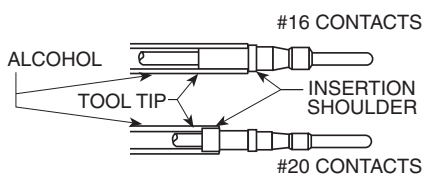
Crimp Tool Operation (continued)

- Remove the crimped contact. Pull on the wire slightly to be sure it is properly crimped. Be sure the contact is not bent or damaged in any way. Visually inspect the crimp:



Insertion of Contacts

- Slide the rear accessories over the wire bundle in the proper sequence for re-assembly: cable clamp and/or endbell first, then ferrule, and coupling nut.
- Using the proper insertion tool from the chart on [page 141](#), slide the tool over the wire side of the contact until the tool bottoms on the contact.

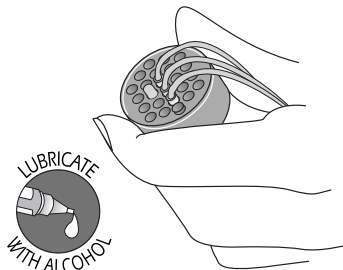


The tool for size 16 contacts butts against the shoulder of the contact. The rear, or insulation support, of the size 20 contacts butts against an internal shoulder in the tool tip.

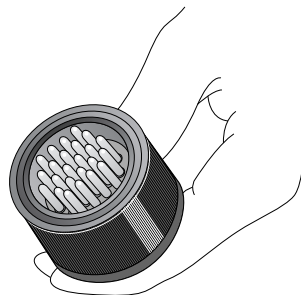
- Dip the contact and tool tip in isopropyl alcohol (do not use any lubricant other than isopropyl alcohol). Hold the tool perpendicular to the rear of the connector. Beginning with the center cavity and working outward in a circular

Insertion of Contacts (continued)

pattern, insert the wired contact into the rear of the connector until the contact snaps into place. A light pull on the wire will assure that the contact is locked securely.



- Fill any unused cavities with contacts. A wire hole filler must be inserted into the grommet behind the unused contacts to maintain the sealing integrity of the connector. Trim off excess.
- Check the mating face of the connector to insure that all the same size contacts are on the same plane (fully inserted). If not, the contact is not fully inserted. Remove the contact using the proper extraction tool and procedure and re-insert. Do not attempt to reinsert the insertion tool to correct the problem.



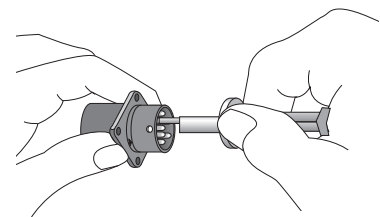
- Fixture the connector for re-assembly using the endbell assembly tools on [page 266](#) or a mating connector with contacts installed. Slide the connector accessories back down the cable over the rear of the

connector and tighten. Torque as follows:

SIZE	TORQUE (INCH/LBS)
8, 10, 12, 14	10 - 15
16, 18	15 - 25
20, 22, 24	25 - 35

Extraction of Contacts

- Remove the endbell accessories and slide them back over the wires.
- Use the proper extraction tool from the chart on [page 141](#).
- On the mating face of the connector, insert the tool over the contact and into the insulator until the tool bottoms. While keeping an even pressure against the tool, push the plunger on the tool shaft forward with your thumb and index finger. This will release the contact from the retention tine and push it toward the rear of the connector.



- Carefully remove extraction tool from the connector. Pull the wire by hand to completely remove the contact from the rear of the connector.