



# Accessories

Carefully selected accessories complement the Altech/Spelsberg Enclosure family. A full line, including connectors for wire, cable, or conduit; ground/neutral busbars, mounting plates and hardware, locks, hinge kits, DIN rails, terminal block assemblies and more are available to enhance the overall design capabilities.

Altech/Spelsberg has the right accessories to make your job easier.

- Liquid Tight Strain Relief connectors and connector assemblies
- Mounting plates
- DIN rail support racks
- DIN rails
- Enclosure mounting screws
- Key locksets
- Hinge kits
- Cover plates
- Combination kits, flange type
- Ground/neutral busbars



### Combination Kits

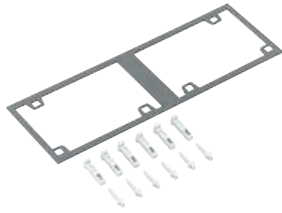
Used to combine series specific enclosures to make larger units. Connect horizontally or vertically.

#### Fitting Type Combination Kit

Threaded with locknut seal for connecting sidewalls. Fits standard Pg knockouts. Drilling template included to ensure enclosure ingress integrity.

#### Pin Type Combination Set

For combining AK and AKL Series Enclosures for 150mm and 300mm sides.



### Din Rails

DIN rails allow for mounting DIN Terminal Blocks and other control components. All required hardware included.

#### TS15x5 mm / for TK+Abox Series

#### TS15x5 mm / for TG Series

#### TS35x7.5 mm / for TK+Abox Series

#### TS35x7.5 mm / for TG Series

#### TS35x7.5 mm / Special Variants

#### TS35x7.5 mm / for AL Series

### Enclosure Mounting Screws

For mounting enclosures through corner holes.

#### Wood Screws

#### Machine Screws

### Component Mounting Screws

For mounting DIN rails, mounting plates, etc. into molded base holes.

- Select appropriate length
- Self tapping



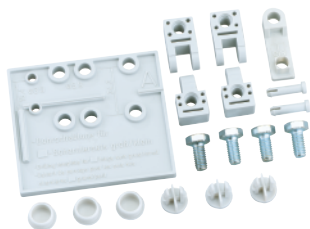
Type	Wall Thickness For Series	Cat. No.	Std. Pack
CK/M20	2x3 mm	192-020	1
CK/M25	2x3 mm	192-025	1
CK/M32	2x3.5 mm	192-032	1

CK/AKII	AK, AKL	791-001	1
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Type	For Series	Cat. No.	Std. Pack
TS15/49.5	TK77, 97	197-049	1
TS15/80	TK97, 99	197-080	1
TS15/92	TK1111	197-092	1
TS15/111	TK1309, 1313	197-111	1
TS15/154	TK1809	197-154	1
TS15/68	TG88	197-069	1
TS15/106	TG1208	197-107	1
TS15/110	TG1212	197-110	1
TS15/131	TG1608	197-131	1
TS15/146	TG1612	197-146	1
TS15/186	TG2012	197-186	1
TS15/170	TG2015	197-170	1
TS15/222	TG2516	197-222	1
TS15/285	TG3023	197-285	1
TS35/81	TK1111, Abox060	198-081	1
TS35/106	TK1309, 1313, Abox100, HP150	198-106	1
TS35/144	TK1809, 1811, 1818, HP190	198-144	1
TS35/144	Abox160	894-016	1
TS35/216	TK2518	198-216	1
TS35/216	Abox350	894-035	1
TS35/336	TK3625	198-336	1
TS35/68	TG88	198-068	1
TS35/106	TG1208	198-107	1
TS35/110	TG1212	198-110	1
TS35/131	TG1608	198-131	1
TS35/146	TG1612	198-146	1
TS35/186	TG2012	198-186	1
TS35/170	TG2015	198-170	1
TS35/222	TG2516	198-222	1
TS35/285	TG3023	198-285	1
CITS35/250	AKII, AKL	562-735	1
SMTS35/216	AKII, AKL, EK12, 24	562-035	1
TS35/110	AL1212	162-009	1
TS35/208	AL2212	162-010	1
TS35/145	AL1616	162-011	1
TS35/245	AL2616	162-012	1
TS35/345	AL3616	162-013	1
TS35/186	AL2023	162-014	1
TS35/266	AL2823	162-015	1
TS35/316	AL3323	162-016	1

Type	For Series	Cat. No.	Std. Pack
WS/4x35	TK, EK	194-035	100
MS/4x12	TK, EK	194-412	100
MS/4x25	TK, EK	194-425	100

Type	For Series	Cat. No.	Std. Pack
ST/3.9x9 mm	For	D-409	100
ST/3.9x13 mm	All Plastic	D-413	100
ST/3.9x17 mm	Series	D-417	100
ST/3.9x28 mm		D-428	100



### Hinge Kits

Attach the enclosure cover and base together for easy opening and closing of the enclosure. All required hardware and instructions are included.

- Small Plastic
- Large Plastic
- TG Internal Plastic
- Metal

Type	For Series	Cat. No.	Std. Pack
HK1	TK77 - 1809, EK002	190-002	1
HK2	TK1811 - 3625, EK004 - 024, AK, AKL	190-005	1
TGISS	TGxx12 and TG2015-TG3023	182-001	1
HK-AL	AL1212 - AL3323	154-210	1

### Enclosure Lid Screws

Replacements for existing screws.



- Short-Gray
- Long-Gray
- Short-Black
- Long-Black

Type	For Series	Cat. No.	Std. Pack
TKLS-SG	TK - low cover, gray	190-010	1
TKLS-LG	TK - high cover, gray	190-011	1
TKLS-SB	TK - low cover, transparent	190-012	1
TKLS-LB	TK - high cover, transparent	190-013	1
TS	TK, EK, AK, AKL	190-001	1

### Thumb Screw Caps

### Locksets

Locksets prevent the unauthorized opening of enclosure lids or doors.



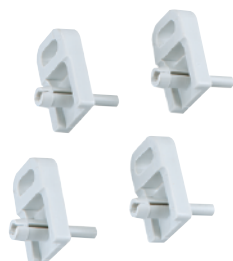
KL Locksets with two keys easily install into hinged transparent doors.

Enclosure Padlock and Hinge set with all mounting accessories.

Type	For Series	Cat. No.	Std. Pack
KL2	AK	706-102	1
PL	AK, AKL, TK1811 & up	190-100	1

### Mounting Tabs

Enables enclosure to be surface mounted. 1 set = 4 mounting tabs



- Plastic
- Metal

Type	For Series	Cat. No.	Std. Pack
MT1	TK, EK	194-001	1
TGABL	TG	182-002	1
MT2	AKL, AK14 and up	793-004	1
MT-AL1	AL66-3 to AL1010-8	154-004	1
MT-AL2	AL1212-8 to AL3323-11	154-006	1

### Snap In and Threaded Entry Spouts and Vents

#### Snap In Double Membrane Entry Seals

- Fits and seals removed Pg knockouts
- IP66
- Features two integral sealing membranes



#### Universal Snap In Entry Seal

- IP55
- Polyethylene
- Cut steps to fit desired cable size



#### Snap In Air Vents

- Allows moisture to escape from the enclosure
- Labyrinth seal to prevent water formation
- IPX4



#### Threaded Vent - M12x1.5

- Provides pressure compensation
- Air permeable and water-tight membrane
- Reduces condensation formation
- IP68



Mounting Hole Type	Cable Dia. mm (in.)	Cat. No.	Std. Pack
M16	5 - 9 (.20 - .35)	260-416	50
M20	7 - 12 (.28 - .47)	260-420	50
M25	9 - 16 (.35 - .63)	260-425	50
M32	14 - 21 (.55 - .83)	260-432	25
M20	5 - 16 (.20 - .63)	216-420	100
M25	5 - 21 (.20 - .83)	216-425	50
M32	13 - 26.5 (.51 - 1.04)	216-432	25
M20	N/A	262-420	100
M12	N/A	262-412	5



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### Combination Kits

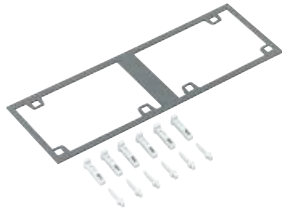
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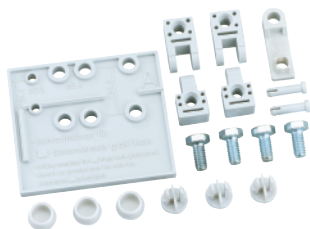
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TS35/106	TK1309, 1313, Abox100, HP150	198-106	1
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TS35/144	Abox160	894-016	1
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TS35/216	Abox350	894-035	1
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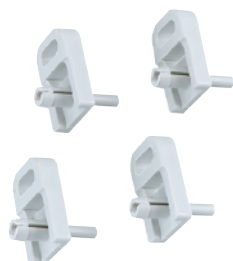
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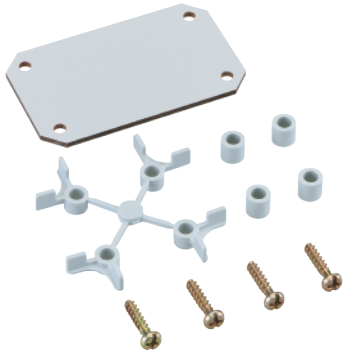


Mounting Hole Type	Cable Dia. mm (in.)	Cat. No.	Std. Pack
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M20	7 - 12 (.28 - .47)	260-420	50
M25	9 - 16 (.35 - .63)	260-425	50
M32	14 - 21 (.55 - .83)	260-432	25
M20	5 - 16 (.20 - .63)	216-420	100
M25	5 - 21 (.20 - .83)	216-425	50
M32	13 - 26.5 (.51 - 1.04)	216-432	25
M20	N/A	262-420	100
M12	N/A	262-412	5

### Mounting Plates

#### TK Series

Complete with screws.  
Hole patterns match mounting provisions in enclosure base.



**Plastic laminate** 2.5 mm (.10 in) thick.  
Color: Gray

**Steel** 2.0 mm (.08 in) thick.

#### TG Series\*

**Plastic laminate** 2.5 mm (.10 in) thick.  
Color: Gray



**Steel** 2.0 mm (0.08 in) thick.

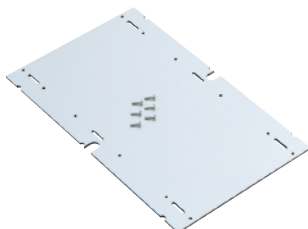
#### Abox Series

Plastic laminate  
Color: Gray



#### Aluminum Series

Steel plates for the mounting and installation of large / heavy devices and components.  
- For AL Series only



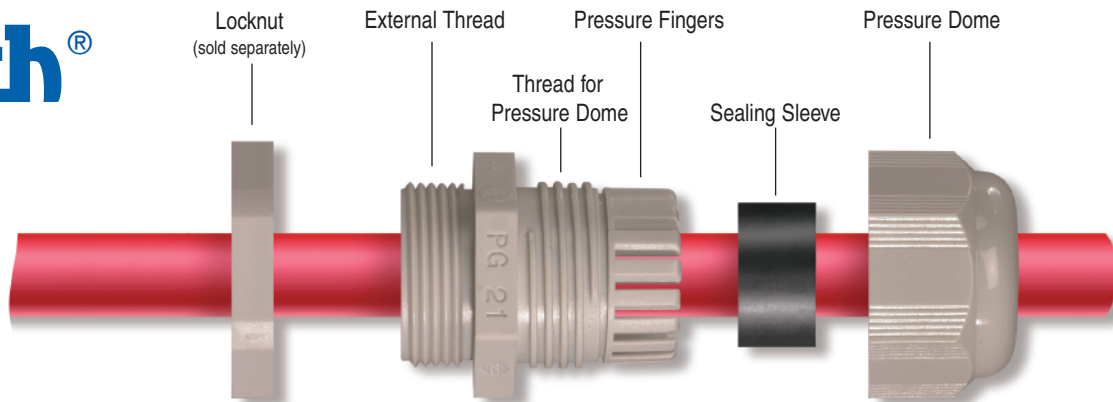
#### AK Series

**Plastic laminate** 4 mm (.16 in) thick  
Color: Gray

**Steel** 2.0 mm (0.08 in) thick.

Type	Enclosure Series	Size mm (in.)	Cat. No.	Std. Pack
TKMPI-55	TK55	46x44 (1.81x1.73)	195-055	5
TKMPI-75	TK75	59x44 (2.32x1.73)	195-075	5
TKMPI-77	TK77	45x45 (1.77x1.77)	195-001	1
TKMPI-97	TK97	74x45 (2.91x1.77)	195-002	1
TKMPI-99	TK99	74x74 (2.91x2.91)	195-003	1
TKMPI-1111	TK1111	90x90 (3.54x3.54)	195-004	1
TKMPI-1309	TK1309	110x74 (4.33x2.91)	195-009	1
TKMPI-1313	TK1313	110x110 (4.33x4.33)	195-005	1
TKMPI-1809	TK1809	160x74 (6.30x2.91)	195-010	1
TKMPI-1811	TK1811	150x90 (5.91x3.54)	195-006	1
TKMPI-1818	TK1818	150x150 (5.91x5.91)	195-007	1
TKMPI-2518	TK2518	220x150 (8.66x5.91)	195-008	1
TKMPI-3625	TK3625	331x220 (13.03x8.66)	195-012	1
TKMPS-77	TK77	45x45 (1.77x1.77)	197-001	1
TKMPS-97	TK97	75x45 (2.95x1.77)	197-002	1
TKMPS-99	TK99	74x74 (2.91x2.91)	197-003	1
TKMPS-1111	TK1111	90x90 (3.54x3.54)	197-004	1
TKMPS-1309	TK1309	110x74 (4.33x2.91)	197-009	1
TKMPS-1313	TK1313	110x110 (4.33x4.33)	197-005	1
TKMPS-1809	TK1809	160x74 (6.30x2.91)	197-010	1
TKMPS-1811	TK1811	150x90 (5.91x3.54)	197-006	1
TKMPS-1818	TK1818	150x150 (5.91x5.91)	197-007	1
TKMPS-2518	TK2518	220x150 (8.66x5.91)	197-008	1
TKMPS-3625	TK3625	331x220 (13.03x8.66)	197-012	1
TGMPI-88	TG88	73x73 (2.87x2.87)	186-003	1
TGMPI-1208	TG1208	91x73 (3.58x2.87)	186-004	1
TGMPI-1212	TG1212	113x93 (4.45x3.58)	186-005	1
TGMPI-1608	TG1608	131x73 (5.16x2.87)	186-006	1
TGMPI-1612	TG1612	131x113 (5.16x4.45)	186-007	1
TGMPI-2012	TG2012	171x113 (6.73x4.45)	186-008	1
TGMPI-2015	TG2015	171x143 (6.73x5.63)	186-009	1
TGMPI-2516	TG2516	220x152 (8.66x5.98)	186-012	1
TGMPI-3023	TG3023	270x220 (10.63x5.98)	186-013	1
TGMPS-88	TG88	73x73 (2.87x2.87)	187-003	1
TGMPS-1208	TG1208	91x73 (3.58x2.87)	187-004	1
TGMPS-1212	TG1212	113x93 (4.45x3.58)	187-005	1
TGMPS-1608	TG1608	131x73 (5.16x2.87)	187-006	1
TGMPS-1612	TG1612	131x113 (5.16x4.45)	187-007	1
TGMPS-2012	TG2012	171x113 (6.73x4.45)	187-008	1
TGMPS-2015	TG2015	171x143 (6.73x5.63)	187-009	1
TGMPS-2516	TG2516	220x152 (8.66x5.98)	187-012	1
TGMPS-3023	TG3023	270x220 (10.63x5.98)	187-013	1
MP060	Abox060	83x83 (3.27x3.27)	895-006	1
MP100	Abox100	109x109 (4.29x4.29)	895-010	1
MP160	Abox160	149x149 (5.87x5.87)	895-016	1
MP350	Abox350	217x217 (8.54x8.54)	895-035	1
ALMPS-88	AL88	68.8x64 (2.71x2.52)	155-005	1
ALMPS-1308	AL1308	114x68.8 (4.49x2.71)	155-006	1
ALMPS-1808	AL1808	164x68.8 (6.46x2.71)	155-007	1
ALMPS-1010	AL1010	88x88 (3.46x3.46)	155-008	1
ALMPS-1212	AL1212	109x107 (4.29x4.21)	155-009	1
ALMPS-2212	AL2212	207x107 (8.15x4.21)	155-010	1
ALMPS-1616	AL1616	145x143 (5.71x5.63)	155-011	1
ALMPS-2616	AL2616	245x143 (9.65x5.63)	155-012	1
ALMPS-3616	AL3616	345x143 (13.6x5.63)	155-013	1
ALMPS-2023	AL2023	214x184 (8.43x7.24)	155-014	1
ALMPS-2823	AL2823	264x214 (10.4x8.43)	155-015	1
ALMPS-3323	AL3323	314x214 (12.4x8.43)	155-016	1
AKMPI 1	AK, AKL	240x112 (9.45x4.41)	795-001	1
AKMPI 2	AK, AKL	240x240 (9.45x9.45)	795-002	1
AKMPI 3	AK, AKL	240x390 (9.45x15.35)	795-003	1
AKMPI 4	AK, AKL	240x540 (9.45x21.26)	795-004	1
AKMPS 2	AK, AKL	240x240 (9.45x9.45)	795-012	1
AKMPS 3	AK, AKL	240x390 (9.45x15.35)	795-013	1
AKMPS 4	AK, AKL	240x540 (9.45x21.26)	795-014	1

\*Mounting hardware included with enclosure.



- Increased Cable Range - The specially designed pressure fingers allow for up to 60% wider cable range.
- IP68 achieved without seal rings - The redesigned integral sealing ridge obtains an IP68 protection rating without the use of seal rings.

**Material:**

- Body: Polyamide 6
- Seal: Neoprene

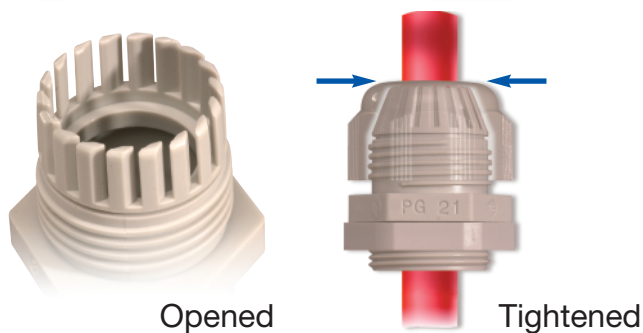
**Technical properties:**

- Maximum strain relief through clamping range
- IP68 achieved without seal rings (PG and metric only)

- Trapezoidal thread with high torque guarantees tight and permanent fit of the dome nut
- Gas- and watertight

**Applications:**

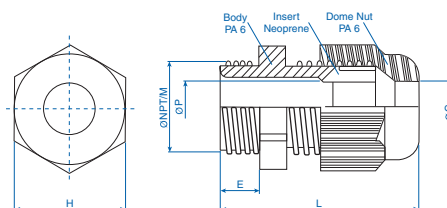
- Machines and devices



### Cable Gland, Polyamide, Metric Thread

Thread	Cable Range mm	Cat. No. Light grey	Cat. No. Black	Std. Pk.
M 12 x 1.5	1.5-5	5309612	5309712	100
M 12 x 1.5	2.5-6.5	5308950	5308940	100
M 16 x 1.5/9	1.5-6	5309615	5309715	50
M 16 x 1.5/11	2-7	5309616	5309716	50
M 16 x 1.5/9	2.5-8	5308958	5308948	50
M 16 x 1.5/11	3.5-10	5308951	5308941	50
M 20 x 1.5/13	3-9	5309619	5309719	50
M 20 x 1.5/16	5-12	5309620	5309720	50
M 20 x 1.5/13	5-12	5308959	5308949	50
M 20 x 1.5/16	7-14	5308952	5308942	50
M 25 x 1.5/16	5-12	5309624	5309724	50
M 25 x 1.5/21	7-16	5309625	5309725	25
M 25 x 1.5/16	7-14	5308960	5308962	50
M 25 x 1.5/21	9-18	5308953	5308943	25
M 32 x 1.5	11-21	5309632	5309732	20
M 32 x 1.5	14-25	5308954	5308944	20
M 40 x 1.5	13-26	5309640	5309740	10
M 40 x 1.5	18-32	5308955	5308945	10
M 50 x 1.5	17-31	5309650	5309750	5
M 50 x 1.5	24-38.5	5308956	5308946	5
M 63 x 1.5	26-39	5309663	5309763	5
M 63 x 1.5	35-48	5308957	5308947	5

Temperature Range	
PA6	Neoprene
-25 to 100°C (-13 to 212°F)	-25 to 100°C (-13 to 212°F)



Thread Size	Dimensions					
	H mm	E mm	L mm	ØC mm	ØP mm	ØThread mm
M12x1.5	15	8	32	6.7	6.8	12.0
M16x1.5/9	19	10	37	8.5	8.5	16.0
M16x1.5/11	22	10	39	10.5	10.5	16.0
M20x1.5/13	24	10	40	12.5	12.5	20.0
M20x1.5/16	27	10	43	14.5	14.5	20.0
M25x1.5/16	27	10	45	14.5	14.5	25.0
M25x1.5/21	33	10	49	18.5	18.5	25.0
M32x1.5	42	10	52	25.5	25.5	32.0
M40x1.5	53	10	62	32.5	32.5	40.0
M50x1.5	60	12	67	39.0	39.0	50.0
M63x1.5	70	12	68	48.5	48.5	63.0

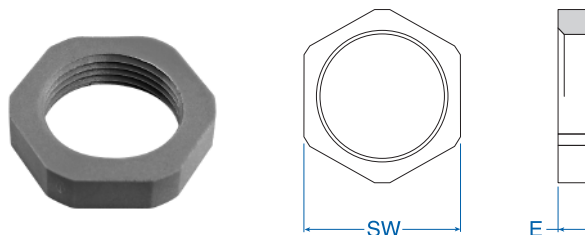
### Lock Nuts, Polyamide, Metric Thread

**Material:**

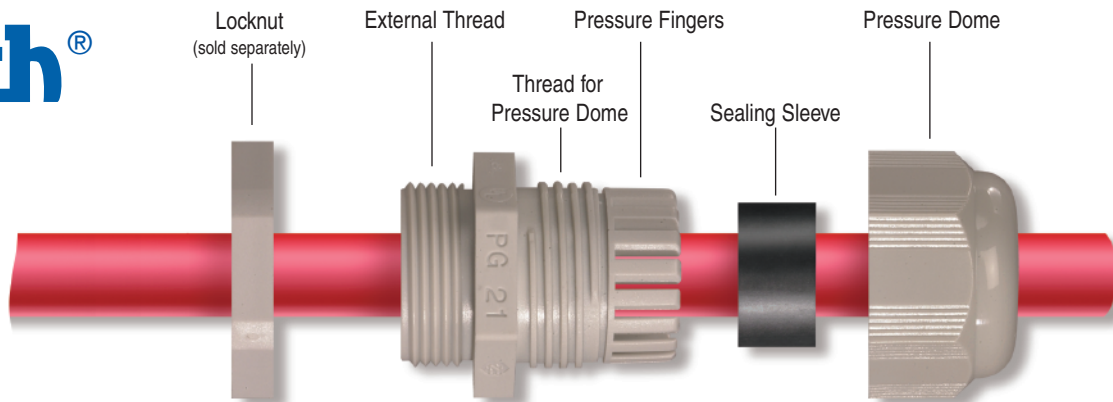
- Polyamide 6
- 25 % Glass fiber Reinforced

Thread	Thickness (E) mm	SW mm	Cat. No. Light grey	Cat. No. Black	Std. Pk.
<b>Metric</b>					
M 12 x 1.5	5	19	7211979	7211974	50
M 16 x 1.5	5	22	7211980	7211975	50
M 20 x 1.5	5	24	7211981	7211976	50
M 25 x 1.5	6	30	7211982	7211977	50
M 32 x 1.5	7.5	38	7211983	7211978	50
M 40 x 1.5	8	50	7211984	7211990	20
M 50 x 1.5	9	60	7211985	7211991	10
M 63 x 1.5	10	75	7211986	7211992	5

Temperature Range PA
-30 to 120°C (-22 to 248°F)







- Increased Cable Range - The specially designed pressure fingers allow for up to 60% wider cable range.
- IP68 achieved without seal rings - The redesigned integral sealing ridge obtains an IP68 protection rating without the use of seal rings.

**Material:**

- Body: Polyamide 6
- Seal: Neoprene

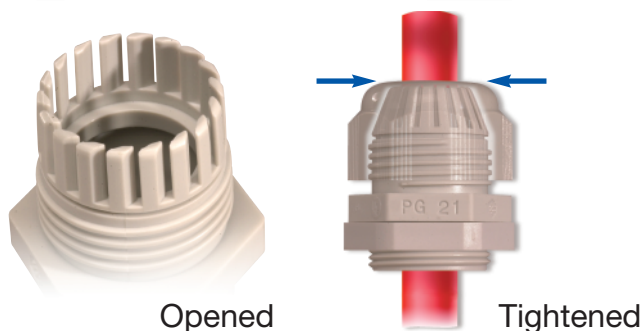
**Technical properties:**

- Maximum strain relief through clamping range
- IP68 achieved without seal rings (PG and metric only)

- Trapezoidal thread with high torque guarantees tight and permanent fit of the dome nut
- Gas- and watertight

**Applications:**

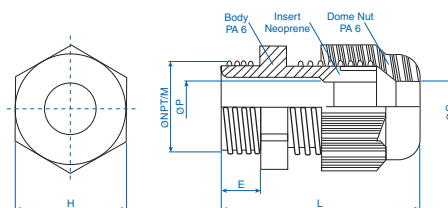
- Machines and devices



### Cable Gland, Polyamide, Metric Thread

Thread	Cable Range mm	Cat. No. Light grey	Cat. No. Black	Std. Pk.
M 12 x 1.5	1.5-5	5309612	5309712	100
M 12 x 1.5	2.5-6.5	5308950	5308940	100
M 16 x 1.5/9	1.5-6	5309615	5309715	50
M 16 x 1.5/11	2-7	5309616	5309716	50
M 16 x 1.5/9	2.5-8	5308958	5308948	50
M 16 x 1.5/11	3.5-10	5308951	5308941	50
M 20 x 1.5/13	3-9	5309619	5309719	50
M 20 x 1.5/16	5-12	5309620	5309720	50
M 20 x 1.5/13	5-12	5308959	5308949	50
M 20 x 1.5/16	7-14	5308952	5308942	50
M 25 x 1.5/16	5-12	5309624	5309724	50
M 25 x 1.5/21	7-16	5309625	5309725	25
M 25 x 1.5/16	7-14	5308960	5308962	50
M 25 x 1.5/21	9-18	5308953	5308943	25
M 32 x 1.5	11-21	5309632	5309732	20
M 32 x 1.5	14-25	5308954	5308944	20
M 40 x 1.5	13-26	5309640	5309740	10
M 40 x 1.5	18-32	5308955	5308945	10
M 50 x 1.5	17-31	5309650	5309750	5
M 50 x 1.5	24-38.5	5308956	5308946	5
M 63 x 1.5	26-39	5309663	5309763	5
M 63 x 1.5	35-48	5308957	5308947	5

Temperature Range	
PA6	Neoprene
-25 to 100°C (-13 to 212°F)	-25 to 100°C (-13 to 212°F)



Thread Size	Dimensions					
	H mm	E mm	L mm	ØC mm	ØP mm	ØThread mm
M12x1.5	15	8	32	6.7	6.8	12.0
M16x1.5/9	19	10	37	8.5	8.5	16.0
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M20x1.5/13	24	10	40	12.5	12.5	20.0
M20x1.5/16	27	10	43	14.5	14.5	20.0
M25x1.5/16	27	10	45	14.5	14.5	25.0
M25x1.5/21	33	10	49	18.5	18.5	25.0
M32x1.5	42	10	52	25.5	25.5	32.0
M40x1.5	53	10	62	32.5	32.5	40.0
M50x1.5	60	12	67	39.0	39.0	50.0
M63x1.5	70	12	68	48.5	48.5	63.0

### Lock Nuts, Polyamide, Metric Thread

**Material:**

- Polyamide 6
- 25 % Glass fiber Reinforced

Thread	Thickness (E) mm	SW mm	Cat. No. Light grey	Cat. No. Black	Std. Pk.
<b>Metric</b>					
M 12 x 1.5	5	19	7211979	7211974	50
M 16 x 1.5	5	22	7211980	7211975	50
M 20 x 1.5	5	24	7211981	7211976	50
M 25 x 1.5	6	30	7211982	7211977	50
M 32 x 1.5	7.5	38	7211983	7211978	50
M 40 x 1.5	8	50	7211984	7211990	20
M 50 x 1.5	9	60	7211985	7211991	10
M 63 x 1.5	10	75	7211986	7211992	5

Temperature Range PA
-30 to 120°C (-22 to 248°F)

