

Basic Data

Description

Grommets available in two different materials, EPDM and CR.

Suitable for

Untapped holes of material from 0.5 to 4 mm thickness. For completely dust and watertight cable and pipe inlets.

Advantages

- Fast installation – seals without tightening
- Permits vibration in cables and pipes without detracting from the seal
- The sealing diaphragm is punctured only when the cable is drawn through – acts as a blind plug and is ready for installation
- Approved for installation in ships
- Each size has a very wide sealing range
- High degree of protection – IP67

Material

TET: EPDM (ethylene-propylene) grey
TET C: CR (chloroprene) black
Material properties – see table.

Approvals

Approved by Lloyds Register of Shipping and Det Norske Veritas for marine and offshore use and the Swedish, Norwegian, Danish and Finnish national approval boards for watertight penetration.

Degree of protection

IP67 in accordance with IEC.

Temperature Range

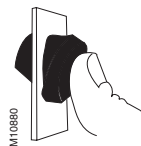
See table.

Packaging

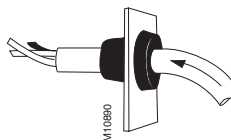
Plastic bag.



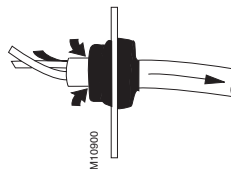
Application





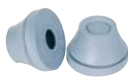



Press the grommet into the hole.



Puncture the diaphragm using a cross-head screwdriver or the wires from which the outer sheath has been removed. Pass the cable or pipe through the hole in the seal.



Pull the cable/pipe back slightly to seal the entry. Fitting is complete.

Range		Type	 Dimensions Ø/B mm	 Material thickness mm	Hole ¹⁾ Ø mm	Qty/Pack	Art. No.
EPDM with Pr hole dimensions, grey							
PE0848 	TET 3-5	20/13	0.5–3.0	12.5 ²⁾	50	3258 206	
	TET 5-7	21/18	1–4	16	50	3265 022	
	TET 7-10	24/20	1–4	19	50	3260 007	
	TET 10-14	28/22	1–4	23	50	3261 005	
	TET 14-20	35/25	1–4	29	50	3262 003	
	TET 20-26	46/30	1–4	38	25	3263 027	
	TET 26-35	58/35	1–4	48	25	3264 025	
EPDM with metric hole dimensions, grey							
PE0848 	TET M7-10	25/20	1–4	M20	50	3256 257	
	TET M10-14	29/22	1–4	M25	50	3256 267	
	TET M14-20	37.5/25	1–4	M32	50	3256 277	
	TET M20-26	48/30	1–4	M40	25	3256 297	
	TET M26-35	60/35	1–4	M50	25	3256 287	
CR with Pr hole dimensions, black							
PE0849 	TET 3-5C	20/13	0.5–3.0	12.5 ²⁾	50	3258 244	
	TET 5-7C	21/18	1–4	16	50	3265 048	
	TET 7-10C	24/20	1–4	19	50	3260 049	
	TET 10-14C	28/22	1–4	23	50	3261 047	
	TET 14-20C	35/25	1–4	29	50	3262 045	
	TET 20-26C	46/30	1–4	38	25	3263 043	
	TET 26-35C	58/35	1–4	48	25	3264 041	
CR with metric hole dimensions, black							
PE0849 	TET M7-10C	25/20	1–4	M20	50	3256 255	
	TET M10-14C	29/22	1–4	M25	50	3256 265	
	TET M14-20C	37.5/25	1–4	M32	50	3256 275	
	TET M20-26C	48/30	1–4	M40	25	3256 295	
	TET M26-35C	60/35	1–4	M50	25	3256 285	

¹⁾ Tolerance if material thickness is more than 2 mm = +1, –0 mm

Tolerance if material thickness is less than 2 mm = ±1 mm

²⁾ Tolerance ±0.5 mm

Material properties

	TET	TET-C
Material	EPDM Ethylene/propylene rubber	CR Chloroprene rubber
Colour	Grey	Black
Halogen content	No	Yes
Density	1.35 g/cm ³	1.38 g/cm ³
Weather resistance	Weather and temperature resistant. Can be used both indoors and outdoors.	Weather and temperature resistant. Can be used both indoors and outdoors.
Temperature resistance	For continuous use between –40 °C and +100 °C (cf. natural rubber +70 °C). Slightly higher temperature for short periods (+130 °C for about one hour).	For continuous use between –25 °C and +95 °C. Slightly higher temperature for short periods.
Thermal aging	After 72 hours at +100 °C. Change in properties: Hardness +5° SH (+11 %) Breaking point –18 % Elongation at break –26 %	After 72 hours at +100 °C. Change in properties: Hardness +6° SH (+10 %) Breaking point –8 % Elongation at break –16 % After 72 hours at +125 °C. Change in properties: Hardness +13° SH (+13 %) Breaking point –12 % Elongation at break –35 %
Fire properties	Non self-extinguishing Combustion rate 2 cm/min approx.	Self-extinguishing. Tested to IEC standard. Approved for installation in ships in accordance with IEC Publ. No. 92-1 (1964). Electrical installations in ships, Part 1 General requirements.
Chemical resistance at –20 °C	<i>Normally resistant to:</i> <ul style="list-style-type: none"> • Detergents • Strongly oxidizing chemicals such as: <ul style="list-style-type: none"> • Ammonia • Dilute phosphoric acid • Dilute chromic acid • Dilute nitric acid • Dilute hydrochloric acid • Dilute sulphuric acid • Others, e.g.: <ul style="list-style-type: none"> • Developer • Glycol • Cooling fluid (emulsion) <i>Slightly affected by:</i> <ul style="list-style-type: none"> • Concentrated acids at room temperature 	<i>Normally resistant to:</i> <ul style="list-style-type: none"> • Aliphatic hydrocarbons • Alkalis • Alcohols • Dilute acids <i>Slightly affected by:</i> <ul style="list-style-type: none"> • Acetone • Ammonia • Freon • Glycol • Sodium hydroxide
Oil resistance	Not resistant to mineral oils, but withstands minor splashing such as that occurring in engine com- partments of vehicles, etc.	Good resistance to mineral oils. The effect of other petroleum products, such as solvents, lubricating grease and wax, is insignificant. Should not be used in direct contact with petrol (gasoline).

Being based on laboratory tests, all information should be regarded for guidance only. Temperature, duration of exposure, concentrations, etc., severely affect the properties.

Basic Data

Description

Cable gland with strain relief. With external metric or Pr threads.

Locknut with internal metric or Pr threads to be used together with cable glands in untapped holes.

Suitable for

Sealing and providing strain relief for cables in switches, devices, machines, etc. Used in threaded holes and unthreaded holes, in the latter case together with a locknut.

Advantages

- High degree of protection IP67
- Double sealing function, ensuring the IP67 rating and providing a safe function
- Strain relief and seals without tools
- Very quickly fitted
- Easily accessible, even in tight corners
- Each size has a very wide sealing range – rational, economic installation and stocking
- Sealing diaphragm is not perforated until the cable is pulled through it – use as a blind plug
- Halogen-free
- Suitable for outdoor use

Material

Housing, nut: PA, glass-fibre reinforced.

Seal: Thermoplastic elastomer SEBS.

Material properties

Normally resistant to:

- Alkalies
- Alcohols
- Cleaning agents
- Salt solutions
- Grease and wax

Slightly affected by:

- Aliphatic oils

Not to be used in direct contact with:

- Aromatic solvents
- Chlorinated hydrocarbons

Approvals

According to EN 50262, Metric cable glands for electrical installations. Impact category 3. Cable anchorage type A.

SEMKO, the Swedish Electrical Board for Testing and Approval of Electrical Equipment.

Standards

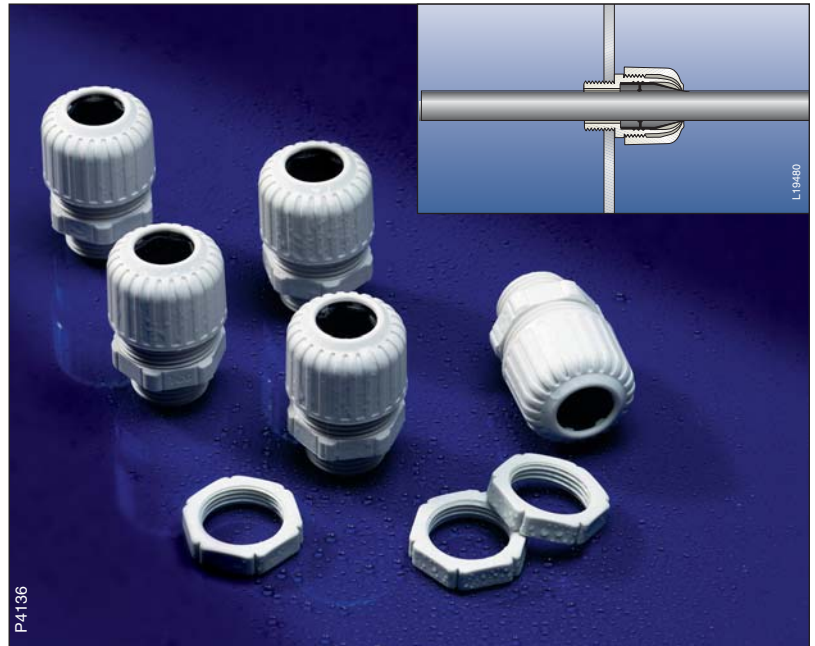
EN 60529, EN 50262, EN 60695-2-1/1.

Degree of protection

IP67 (TCG-PR 37 = IP54) in accordance with IEC.

Fire resistance

Tested according to Glow wire test EN 60695-2-1/1 at 650 °C.



Temperature Range

-20 °C to +65 °C

Packaging

Cardboard carton.

Technical data

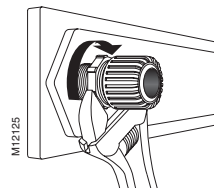
TCG size

M16, PR 15.2
M20, PR 18.6, PR 22.5
M25, PR 28.3

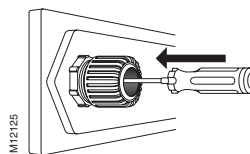
Torque

1–2 Nm
1.5–3 Nm
3–5 Nm

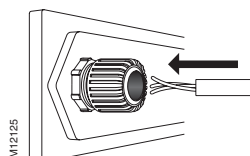
Application



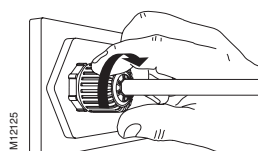
Tighten the cable gland in the hole.



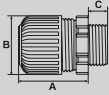




Puncture the diaphragm with a crosshead screwdriver.



Twist the conductors together. Insert the cable or the pipe.



Tighten the upper part of the gland to achieve strain relief and double sealing function. For torque, see “Technical data”.

Range						
Type	Colour	Cable range	Dimensions A/B/C mm		Qty/Pack	Art. No.
Cable gland with metric threads						
 <small>PG0505</small>	TCG-M16	Grey	5–10	30/23/9	20	3270 000
	TCG-M20	Grey	7.5–14	32/29/9.5	20	3270 010
	TCG-M25	Grey	13.5–19	35/35/11	20	3270 020
Cable gland with Pr threads						
 <small>PR0505</small>	TCG-PR 15.2	Grey	5–10	30/23/9	20	3270 220
	TCG-PR 18.6	Grey	7.5–14	32/29/9.5	20	3270 230
	TCG-PR 22.5	Grey	7.5–14	32/29/9.5	20	3270 240
	TCG-PR 28.3	Grey	13.5–19	35/35/11	20	3270 250
	TCG-PR 37	Grey	15–25	53/43/11	10	3270 253
Locknut with metric threads						
 <small>PG0826</small>	TFM M16	Grey	—	—	50	3272 015
	TFM M20	Grey	—	—	50	3272 061
	TFM M25	Grey	—	—	50	3272 160
Locknut with Pr threads						
 <small>PG0826</small>	TFM 15.2	Grey	—	—	50	3272 002
	TFM 18.6	Grey	—	—	50	3272 051
	TFM 22.5	Grey	—	—	50	3272 150
	TFM 28.3	Grey	—	—	50	3272 200
	TFM 37.0	Grey	—	—	25	3272 259