

# **FLP-H-R HOSE**

# Ex db I/IIC, Ex eb I/IIC, Ex ta IIIC, Ex nR IIC

# **COMPRESSION GLAND for Unarmoured Cable**

### **Features and Benefits**

- For Group I underground mines, Group II, III, Zone 1, 2, 21, and 22 hazardous areas.
- Fitted complete with a specially formulated elastomeric captive seal for Built-in Safety™.
- A hose tail provides for clamping a protective hose over the cable.
- Precision manufactured from high-quality brass (Marine Grade Electroless Nickel Plated™) available in stainless steel 316/316L on request.
- Supplied with a thread-sealing gasket (parallel threads only).

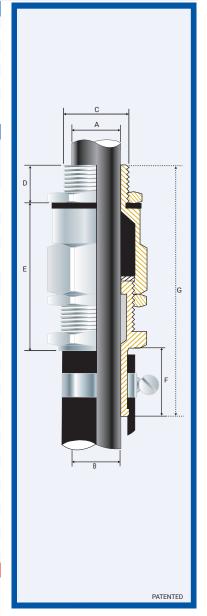






Technical Data	
Type:	FLP-H-R Hose
Gland Material:	Brass (Marine Grade Electroless Nickel Plated™), Stainless Steel 316/316L
Seal Material:	Thermoset Elastomer Standard or Extreme Temperature Seals
Sealing Gasket Material:	HDPE, Nylon 66 or PTFE
Cable Type:	Unarmoured
Sealing Area:	Outer Sheath
Optional Accessories:	Adaptor, Reducer and Shroud
Note:	The installer should ensure that the materials are suitable for the installation environment.
Standards and Certifications	3
Equipment Protection Levels:	IECEx: Ex db   Mb / Ex eb   Mb / Ex db   IC Gb / Ex eb   IC Gb / Ex nR   IC Gc / Ex ta   IIC Da  ATEX: (a)   M2, (b)   I 2/3G 1D, Ex db   Mb / Ex eb   Mb / Ex db   IC Gb / Ex eb   IC Gb, Ex nR   IC Gc, Ex ta   IIC Da

	Ex nR IIC Gc / Ex ta IIIC Da ATEX:							
Continuous Operating Temp:	Standard Seals: -60°C to +95°C/100°C (HDPE/Nylon Sealing Gasket) Extreme Temp. Seals: -60°C to +160°C (PTFE Sealing Gasket)							
Conformance:	Standards:	Certificate:						
IEC/BS EN	IEC/BS EN 62444	CML 14CA364						
IECEx	IEC 60079 Part 0, 1, 7, 15, 31	IECEx TSA 22.0011X						
ATEX	EN 60079 Part 0, 1, 7, 31	CML 16ATEX1001X						
	EN 60079 Part 0, 15	CML 16ATEX4002X						
SANS	SANS/IEC 60079 Part 0, 1, 7, 15, 31 SANS 808	MASC MS/22-9001X						
IP66/68 - Parallel IP65/66 - Tapered	SANS/IEC 60529	MASC MS/22-9001X						
IP68 - Tapered and approved grease	IEC 60529	IECEx TSA 22.0011X						
Deluge Protection	DTS-01	CML 14CA370-2						
Corrosion Protection	ASTM B117-11, BS EN ISO 3231	EXOVA N968667						

















The cable glands shall only be used where the temperature, at the point of entry, is between -60°C to +95°C (standard seal & HDPE sealing gasket), -60°C to +100°C (standard seal and Nylon sealing gasket) or -60°C to +160°C (extreme temp. seal & PTFE sealing gasket) depending on seal and gasket used.

Product Code	Gland Size Reference	Metric Entry Thread		NPT Entry Thread		Cable Detail		To Suit Hose Size (Nom)			Max	Coupler	Max.	Hex. Detail		
		,C,	Min 'D'	,C,	Min 'D'	Min 'A'	Max 'A'	Metric 'B'	Imperial 'B'	Detail Min Dia 'B'	Length 'E'	Length Min 'F'	Overall Length 'G'	Max 'Flats'	Max 'Crns'	Torque Value Nm
052700-16-R	00-16ss	M16x1.5	15.0	-	-	3.0	8.0	15.0	-	15.0	51.5	16.0	91.0	24.0	27.0	50.0
052700-R	00-20ss	M20x1.5	15.0	1/2 / 3/4	15.0	3.0	8.0	15.0	-	15.0	49.0	16.0	91.0	24.0	27.0	50.0
0527-0-R	0-20s	M20x1.5	15.0	1/2 / 3/4	15.0	8.0	11.5	15.0	1/2	15.0	50.0	16.0	86.0	24.0	27.0	50.0
052701-R	1-20	M20x1.5	15.0	1/2 / 3/4	15.0	11.5	14.0	17.5	3/4	17.5	50.8	21.0	86.0	27.0	30.0	50.0
052702-R	2-25	M25x1.5	15.0	3/4 / 1	15/19	14.0	20.2	25.9	1	25.9	57.0	27.0	100.0	35.0	39.0	60.0
052703-R	3-32	M32x1.5	15.0	1 / 11/4	19.0	20.0	26.5	32.2	11/4	33.2	66.3	30.0	125.0	42.0	47.0	80.0
052704-R	4-40	M40x1.5	15.0	11/4 /1 1/2	19/21	26.5	34.0	39.2	11/2	39.2	59.0	35.0	140.0	52.0	59.0	85.0
052755-R	5s-50s	M50x1.5	15.0	1½/2	21.0	32.5	38.0	45.0	13/4	45.0	65.5	40.0	150.0	65.0	73.0	10.0
052705-R	5-50	M50x1.5	15.0	1½/2	21.0	38.0	44.5	51.0	2	51.0	65.5	40.0	150.0	65.0	73.0	100.0
052766-R	6s-63s	M63x1.5	15.0	2 / 21/2	21 /30	44.5	50.0	63.0	21/4	63.0	65.3	45.0	160.0	80.0	90.0	120.0
052706-R	6-63	M63x1.5	15.0	2 / 21/2	21/30	50.0	56.0	63.0	21/2	63.0	68.3	45.0	160.0	80.0	90.0	120.0
052707-R	7-75	M75x1.5	15.0	2½/3	30/32	56.0	65.0	76.2	3	76.2	96.0	50.0	170.0	96.0	102.0	120.0

All dimensions except NPT are in mm. Intermediate thread sizes are available on request. NPT threads should be tightened "wrench tight".

## FITTING INSTRUCTIONS

## **Metric Illustration**



# FLP-H-R Hose Compression Gland

### ENCLOSURES AND EQUIPMENT TO WHICH CABLE GLANDS ARE FITTED:-

- Must be made from materials which are compatible with the cable gland materials. Have a sealing area around the cable gland entry point with a surface roughness
- Ra 6.3 μm.
- Have entries that are perpendicular to the enclosure face in the area where the cable gland will seal to within 2.5°.
- Are sealed using the supplied sealing gasket (parallel threads) or by fully tightening into a threaded entry (tapered threads). Note that for tapered threads the IP rating can be improved to IP68 with the use of a suitable thread sealant.

#### MUST HAVE THREADED ENTRIES

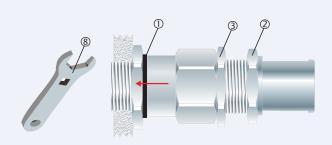
- The same thread size as the cable gland. (Thread adapters should be used to correct
- any mismatch). With a thread tolerance of metric class '6H' or equivalent.
- Where the thread length is a minimum of 10mm for Ex d applications or 3mm for all other applications

#### OR CLEARANCE HOLES (not Ex d)

- Where the hole size is the thread nominal size with a tolerance of +0.1 to +0.7mm. (e.g. the clearance hole for an M20 thread will have a diameter between 20.1mm and
- Through material that is between 1mm and 12mm thick. (Thicker materials can be accommodated using glands with extended entry threads.)

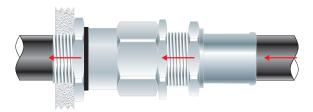


For accurate sizing, use a CCG Dimension Tape  ${}^{\circledR}$  on the outer cable sheath.

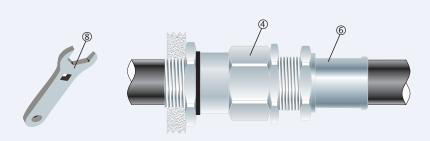


If the gland has NPT entry threads fitted to a threaded entry then IP68 (2m) can be achieved by applying one of the following tested and approved grease types to the thread:- Renolit Lubrene CA700 or LX220 EP2, Renolit LC-WP2 or Moly LX2, or Dow Corning 4 Electrical Compound.

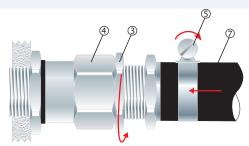
To maintain IP66/68, ensure the gasket ① is in place. Screw the gland unit into the apparatus. Tighten the inner ② to the installation torque using a CCG Spanner ®. Ensure the locknut ® is screwed up against the gland inner ®.



Pass the cable end through the gland assembly.



Tighten the outer nut ④ to the installation torque using a CCG Spanner ® to produce a seal and grip on the cable.



Slide the protective hose ⑦ over the hose tail ⑥ and tighten the hose clamp ⑤. Tighten locknut ③ up against the outer nut ④.