PENTAIR

The Ultimate Fire Survival Cable System

PYROTENAX PYRO MI FIRE SURVIVAL CABLE

COMPRESSION RING TYPE GLANDS FOR USE WITH ALL PYRO MI WIRING CABLES AND HEATING CABLE COLD LEADS - SAFE USE AND FITTING INSTRUCTIONS

CERTIFICATE Nos. **Baseefa 08ATEX0327X/3** CE **1180**

CODE Ex **II 2 GD** **Ex d IIC Gb (T_{amb} –60°C to +250°C)**

Ex tb IIIC Db

Example Reference: Cable type followed by and gland thread e.g. 2LL.5 20: 2 conductor Light duty cable with 1.5 mm² conductors 20 mm ISO metric thread
NOTE: For certain Heavy Duty cables the gland size increases when Pyro MI Earth Tail Seals are fitted.
Glands for Copper and Stainless Steel Sheathed Wiring Cables and Heating Element Cold Lead-in Cable usually use a two digit number (cable conductor cross section in mm²) as the Cable Size. Glands to fit Imperial sized cables use a three digit number which is the cable diameter in thousanths of an inch.The following instructions apply to all Brass and Stainless Steel Ring Type Glands for use in Hazardous Area Applications assessed to BS EN 50015:1998 & BS EN50018:2000 and compliance with ATEX Directive 2014/34/EU.

1. The Compression Ring Type Glands are supplied with the components assembled to fit the cable sizes as indicated on the Gland Nut.
2. Compression Ring Type Gland components of Brass and Stainless Steel and for different sizes of cable and materials shall not be mixed.
3. The Compression Ring Type Gland is only certified for use on the cable sizes as indicated on the Gland Nut. The cable sizes are shown on the table overleaf.
4. Where the lead-in thread is not ISO Metric the thread form and size is indicated on one of the hexagonal flats of the gland body.
5. The Compression Ring Type Glands may be used with apparatus group II dust and flammable gases and dust in an ambient temperature range –60°C to +250°C.
6. Installation shall be carried out by suitably trained personnel in accordance with the applicable code of practice e.g. EN 60079-14.
7. Inspection and maintenance of this equipment shall be carried out by suitably trained personnel in accordance with the applicable code of practice e.g. EN 60079-17.
8. Repairs to the Compression Ring Cable Glands are not practical; a damaged gland shall be replaced with a complete new gland. This work shall be carried out by suitably trained personnel in accordance with the applicable code of practice e.g. EN 600079-17.
9. If the Compression Ring Type Glands are likely to come into contact with aggressive substances, then it is the responsibility of the user to take suitable precautions to prevent them being adversely affected. It is essential to replace any covering removed to facilitate termination, by wrapping over the exposed gland and cable sheath with two full half laps up to the entry position. This is then covered by the gland shroud. (Corrosive environments /aggressive substances e.g. acidic liquids or gases).
10. Gland threads must be sealed in a dust environment with an approved, non setting sealing compound in accordance with the code of practice in EN 600079-14.
11. Stainless Steel and Brass Gland assemblies shall not be fitted directly on to a heating cable, they shall only be used on Copper, Cupro-Nickel, Inconel, Alloy 825 or Stainless Steel sheathed mineral insulated heating element cold lead-in cables, provided the maximum temperature attained by the lead-in cable sheath, when the cables are energised, will not exceed the T temperature rating of the area in which they are installed, the maximum cable gland temperature, or the maximum cable seal operating temperature, which ever is lowest.

The limits on diameters are shown in the table below:

Nominal Cable Diameter	Maximum Diameter Limit	Minimum Diameter Limit
Above 5.0 mm / 0.197 inch	+0.23 mm / 0.009 inch	+0.10 mm / +0.004 inch

Cable Size and Diameter

Wiring Cable Size	Bare Cable Diameter (mm)	Bare Cable Diameter (inch)
2L1	5,1	0,201
2L1.5	5,7	0,224
2L2.5	6,6	0,260
2L4	7,7	0,303
3L1.5	6,4	0,252
3L2.5	7,3	0,287
4L1	6,3	0,248
4L1.5	7,0	0,276
4L2.5	8,1	0,319
7L1	7,6	0,299
7L1.5	8,4	0,331
7L2.5	9,7	0,382
1H2.5	5,3	0,209
1H6	6,4	0,252
1H10	7,3	0,287
1H16	8,3	0,327
1H25	9,6	0,378
1H35	10,7	0,421
1H50	12,1	0,476
1H70	13,7	0,539
1H95	15,4	0,606
1H120	16,8	0,661
1H150	18,4	0,724
1H185	20,4	0,803
2H1.5	7,9	0,311
2H2.5	8,7	0,343
2H4	9,8	0,386
2H6	10,9	0,429
2H10	12,7	0,500
2H16	14,7	0,579
2H25	17,1	0,673
3H1.5	8,3	0,327
3H2.5	9,3	0,366
3H4	10,4	0,409
3H6	11,5	0,453
3H10	13,6	0,535
3H16	15,6	0,614
3H25	18,2	0,717
4H1.5	9,1	0,358
4H2.5	10,1	0,398
4H4	11,4	0,449
4H6	12,7	0,500
4H10	14,8	0,583
4H16	17,3	0,681
4H25	20,1	0,791
7H1.5	10,8	0,425
7H2.5	12,1	0,476

Heating Cable Cold Lead Size	Bare Cable Diameter (mm)	Bare Cable Diameter (inch)
CC1H2.5	5,3	0,209
DC1H2.5	5,3	0,209
SC1H2.5	5,3	0,209
IC1H2.5	5,3	0,209
AC1H2.5	5,3	0,209
CC1H6	6,4	0,252
DC1H6	6,4	0,252
SC1H6	6,4	0,252
IC1H6	6,4	0,252
AC1H6	6,4	0,252
CC1H10	7,3	0,287
DC1H10	7,3	0,287
CC1H16	8,3	0,327
DC1H16	8,3	0,327
AC1H16	8,3	0,327
CC1H25	9,6	0,378
AC1H25	10,0	0,394
CC1H35	10,7	0,421
AC2H1.0	7,3	0,287
DC2H2.5	6,6	0,260
SC2H2.5	6,6	0,260
AC2H2.5	8,7	0,343
AC2H6	14,0	0,551

Fitting Instructions

1. Slide the complete ring type gland onto the cable sheath before terminating the cable.
2. Assemble the completed termination into the terminal box entry.
3. Secure the gland body into the equipment by screwing it into a threaded entry by means of a spanner on the hexagon of the gland body.
4. Locate the seal pot in the desired position and fully tighten the back nut to swage down the compression ring onto the cable sheath. This secures the cable into the application.

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