

## Peppers Cable Glands Limited

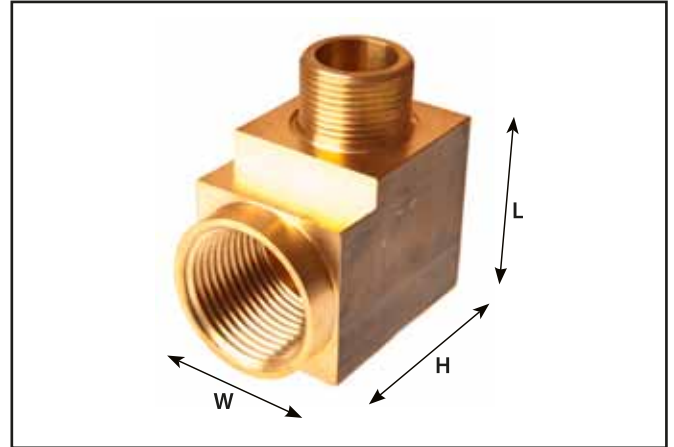
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### ARMR & ARFR Series Metallic 90 Degree Adaptors

"ARMR" & "ARFR" Series Dual Certified Right Angled Adaptors are designed to protect cables when installed in confined spaces where the cable may otherwise be subject to excessive bending and or stress. The Series is available with Male/Female or Female/Female connection threads. They are approved for Ex d, Ex e, Ex tb and Ex nR methods of explosion protection whilst maintaining IP66, IP68 for IEC type applications and Class I Division 1, and NEMA 4X for NEC/CEC type applications. All external parallel threads are fitted with a nitrile O-ring as standard.

|                             |   |  |
|-----------------------------|---|--|
| <b>Compliance Standard:</b> | EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31<br>IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & 60529 |  |
| <b>Certification:</b>       | ATEX I M2 II 2GD Ex d I&II C Mb Gb / Ex e I&II C Mb Gb / Ex tb IIIC Db<br>II 3G Ex nR IIC Gc  |  |
|                             | IECEX Ex d I&II C / Ex e I&II C / Ex tb IIIC / Ex nR IIC  |  |
|                             | CSA Class I, Division 1 & 2; Groups A, B, C & D<br>Class II, Groups E, F & G  |  |
| <b>Certificate No.</b>      | ATEX SIRA 10ATEX1132U & SIRA 10ATEX4133U<br>IECEX SIR 10.0068U<br>CSA 2310046   |  |
| <b>IP Rating:</b>           | IP66 & IP68 (100 metres for 7 days) & NEMA 4X 6P  |  |
| <b>Impact Resistance:</b>   | 20Nm (Aluminium 7Nm)  |  |
| <b>Temperature:</b>         | O-ring - None -100°C to +400°C<br>O-ring - Silicone -60°C to +200°C<br>O-ring - Nitrile -30°C to +100°C                                   |  |
| <b>Materials:</b>           | Brass, Stainless Steel or Aluminium   |  |
| <b>Plating:</b>             | Nickel - Zinc   |  |



**Example Part Numbering** ARMR1BF/NP/M20/M20  
 (See below for details)

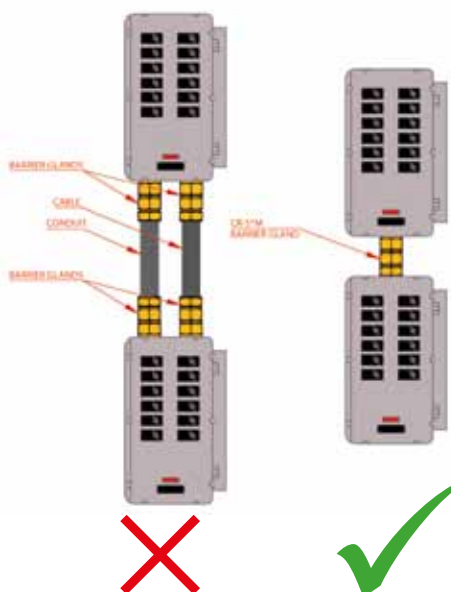
|             |  |
|-------------|--|
| <b>ARMR</b> | 90 Degree Adaptor Male/Female (Right Angled)                           |
| <b>OR</b>   |  |
| <b>ARFR</b> | 90 Degree Adaptor Female/Female (Right Angled)                         |
| <b>1</b>    | No IP O-ring (0) - Nitrile (1) - Silicone (3) (Only available on ARMR) |
| <b>B</b>    | Brass (B) - Stainless Steel (S) - Aluminium (A)                        |
| <b>F</b>    | Ex d & Ex e certification  |
| <b>NP</b>   | Nickel Plated (NP) - Zinc Plated (ZP)                                  |
| <b>M20</b>  | Male Entry Thread  |
| <b>M20</b>  | Female Entry Thread  |

| Size                 | Bore | Height | Length | Width |
|----------------------|------|--------|--------|-------|
| M16 x M16            | 10.0 | 38.1   | 27.0   | 25.4  |
| M20 x M20            | 14.0 | 38.1   | 27.0   | 25.4  |
| M25 x M25            | 18.0 | 44.4   | 37.0   | 31.8  |
| M32 x M32            | 24.0 | 50.8   | 45.0   | 38.1  |
| M40 x M40            | 32.0 | 63.5   | 52.0   | 50.8  |
| M50 x M50            | 41.0 | 72.0   | 67.0   | 60.0  |
| M63 x M63            | 53.0 | 90.0   | 83.0   | 75.0  |
| M75 x M75            | 64.0 | 102.0  | 94.0   | 88.0  |
| All dimensions in mm |      |        |        |       |

- Notes:**
- \* Differing threads and thread forms are available upon request
  - \* 90 Degree Adaptors are approved and available up to size M100
  - \* Aluminium versions are not suitable for Group I Mining application
  - \* When used in an Ex nR application ARMR & ARFR adaptors must be fitted with an appropriate seal.

### CR-S\*M - A NEW CONCEPT

#### Connecting Ex d Junction Boxes



#### So how do you connect two Ex d – Flameproof enclosures?

Most installations do not call for enclosures to be connected together but what do you do if you need to connect two (or more) Ex d enclosures within a Zone 1 hazardous area?

Traditional practice has been to use a compound barrier gland mounted at the entry of both enclosures with a length of cable or conduit. In the event of an ignition or explosion inside one of the enclosures this practice prevents the transmission of the explosion to the other enclosure. Whilst this will maintain the integrity of the installation it carries significant cost implications.

Peppers can now provide a substantially more cost effective solution for this type of installation. Peppers CR-S\*M range of barrier glands can now be installed directly between two Ex d enclosures. Tested in accordance with IEC / EN 60079-1 the gland is capable of maintaining the integrity of the installation having passed pressure and sealing tests from both directions to simulate the event of an explosion in either enclosure. Supplied with two male threads, the gland allows conductors to pass through the compound ensuring that a flameproof seal is maintained for each enclosure. In the event of an explosion within one enclosure the CR-S\*M gland will prevent any transmission to the second enclosure or the surrounding atmosphere.

