



# Certificate of Compliance

**Certificate:** 2310046

**Master Contract:** 203679

**Project:** 80050144

**Date Issued:** February 14, 2022

**Issued To:** Peppers Cable Glands Ltd.  
Stanhope Rd  
Camberley, Surrey, GU15 3BT  
United Kingdom

**Attention:** Richard Ward

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.*



**Issued by:** Peter Lukacs.

## **PRODUCTS**

**Class 4418 03 - CONDUIT FITTINGS - For Hazardous Locations**

**Class I, Division 1 Groups A, B, C and D**

**Class II, Division 1 Groups E, F and G**

**Class III**

**Ex db IIC Gb**

**Ex eb IIC Gb**

**Ex ta IIIC Da**

**Type 4X and 6P**

**IP 66/68**

Mushroom Head Stopping Plugs – Models SPMH-a-b-c-d-e

Hexagon Head Stopping Plugs – Models SPHH-a-b-c-d-e

Type A Stopping Plug – Models SPA-a-b-c-d-e

Type B Stopping Plug – Models SPB-a-b-c-d-e



**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

Where:

a = IP Seal code and rated temperature

- 0 = No seal\* (Ta = - 60°C to +400°C)
- 1 = Nitrile O-ring (Ta = -30°C to +100°C)
- 2 = Neoprene O-ring (Ta = -35°C to +90°C)
- 3 = Silicone O-ring (Ta = -60°C to +200°C)
- 4 = Fluorosilicone O-ring (Ta = -55°C to +200°C)
- 5 = Viton O-ring (Ta = -20°C to +180°C)
- 6 = EPDM O-ring (Ta = -50°C to +110°C)

\* For metric threaded Stopping Plugs when no seal is fitted the rating is as follows:

**Class I, Division 1 Groups A, B, C and D**

**Class II, Division 1 Groups E, F and G**

**Class III**

**Ex db IIC Gb**

**Ex eb IIC Gb**

**Ex ta IIIC Da**

**IP66**

b = Material of manufacture

- A = Aluminum
- B = Brass
- S = Stainless Steel

c = Protection concept code

- D = Ex d, Ex e, Ex t, AEx d, AEx e, AEx t, Class I Div. 1, Class II Div. 1, Class III (models SPA and SPB only)
- E = Ex e, AEx e (models SPMH and SPHH only)
- F = Ex d, Ex e, Ex t, AEx d, AEx e, AEx t, Class I Div. 1, Class II Div. 1, Class III (models SPMH and SPHH only)

d = Plating

- OO = Not plated\*
- NP = Nickel Plated
- ZP = Zinc Plated
- TP = Tin Plated
- AN = Anodised

\* For unplated brass Stopping Plugs the rating is as follows:

**Class II, Division 1 Groups E, F and G**

**Class III**

**Ex db IIC Gb**

**Ex eb IIC Gb**

**Ex ta IIIC Da**

**Type 4X and 6P**



**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

---

**IP 66/68**

e = Thread type and size

Metric, M12 to M100 trade size \*

NPT, 1/4 to 4 inch trade size \*

\* Note: M12, 1/4" NPT and 5/8" NPT sizes are not manufactured in aluminum.

**Conditions of Acceptability:**

- Ambient temperature may not exceed auto-ignition temperature of gas per applicable hazardous area classification and may not exceed 200°C for Class II, Group EF/165°C for Class II, Group G applications.
- Stopping plugs must be installed into threaded holes for Ex d and Class I, Div 1 applications.
- For use in type Ex e enclosures, the device may be screwed, with or without a sealing ring, into the threaded wall of an enclosure or, with a sealing ring, into a clearance hole.
- The stopping plugs when installed with or without a sealing ring in threaded holes and in accordance with the manufacturer's instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP66.
- The SPHH and SPMH stopping plugs fitted with sealing rings, when installed in threaded holes or clearance holes and in accordance with the manufacturer's instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP 66 / IPX8 to 100 meters for 7 days.

**Class I, Division 1 Groups A, B, C and D**

**Class II, Division 1 Groups E, F and G**

**Class III**

**Ex db IIC Gb**

**Ex eb IIC Gb**

**Ex ta IIIC Da**

**Type 4X and 6P**

**IP 66/68**

Adaptors/Reducers – Models AR-a-b-c-d-e-f

Male to Male Adaptors/Reducers – Models ARMM-a-b-c-d-e-f

Male to Male 90° Adaptors/Reducers – Models ARMR-a-b-c-d-e-f

Female to Female Adaptors/Reducers – Models ARFF-a-b-c-d-e-f

Female to Female 90° Adaptors/Reducers – Models ARFR-a-b-c-d-e-f

Where:

a = IP Seal code and rated temperature

- 0 = No seal fitted\* (Ta = - 60°C to +400°C)
- 1 = Nitrile O-ring (Ta = -30°C to +100°C)
- 2 = Neoprene O-ring (Ta = -35°C to +90°C)
- 3 = Silicone O-ring (Ta = -60°C to +200°C)
- 4 = Fluorosilicone O-ring (Ta = -55°C to +200°C)
- 5 = Viton O-ring (Ta = -20°C to +180°C)
- 6 = EPDM O-ring (Ta = -50°C to +110°C)



**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

---

\* For metric threaded Adaptors/Reducers when no seal is fitted the rating is as follows:

**Class I, Division 1 Groups A, B, C and D**

**Class II, Division 1 Groups E, F and G**

**Class III**

**Ex db IIC Gb**

**Ex eb IIC Gb**

**Ex ta IIIC Da**

**IP66**

b = Material of manufacture

A = Aluminum

B = Brass

S = Stainless Steel

c = Protection concept code

E = Ex e, AEx e (models AR, ARMM and ARMR only)

F = Ex d, Ex e, Ex t, AEx d, AEx e, AEx t, Class I Div. 1, Class II Div. 1, Class III

d = Plating

O = Not plated\*

NP = Nickel Plated

ZP = Zinc Plated

AN = Anodised

\* For unplated brass Adaptors/Reducers the rating is as follows:

**Class II, Division 1 Groups E, F and G**

**Class III**

**Ex db IIC Gb**

**Ex eb IIC Gb**

**Ex ta IIIC Da**

**Type 4X and 6P**

**IP 66/68**

e = Male thread type and size

Metric, M16 to M100 trade size

NPT, ½ to 4 inch trade size

f = Female thread type and size

Metric, M16 to M100 trade size

NPT, ½ to 4 inch trade size

The following arrangements are permitted:



Certificate: 2310046  
Project: 80050144

Master Contract: 203679  
Date Issued: February 14, 2022

|             |        | Female thread |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|-------------|--------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|             |        | Metric        |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M16           | M20             | M25             | M32             | M40             | M50             | M63             | M75             | M80             | M85             | M90             | M100            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Male thread | Metric | M16           | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M20           | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M25           | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M32           | R               | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M40           | R               | R               | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M50           | R               | R               | R               | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M63           | R               | R               | R               | R               | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M75           | R               | R               | R               | R               | R               | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M80           | R               | R               | R               | R               | R               | R               | R               | A               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M85           | R               | R               | R               | R               | R               | R               | R               | R               | A               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M90           | R               | R               | R               | R               | R               | R               | R               | R               | R               | A               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | M100          | R               | R               | R               | R               | R               | R               | R               | R               | R               | R               | R               | R               | R               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             | NPT    | 1/2"          | R*              | A*              | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | 3/4"          | R*              | R*              | A*              | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | 1"            | R*              | R*              | R*              | A*              | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | 1 1/4"        | R*              | R*              | R*              | R*              | A*              | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | 1 1/2"        | R*              | R*              | R*              | R*              | R*              | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | 2"            | R*              | R*              | R*              | R*              | R*              | R*              | A               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | 2 1/2"        | R               | R               | R               | R               | R               | R               | R               | A               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 | A <sup>Δ</sup>  |                 |                 |
|             |        | 3"            | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | A*              | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | 3 1/2"        | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|             |        | 4"            | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> |

Sizes marked \* have a larger hexagon size where a sealing washer is required.  
 Sizes marked ++ are for AR series only  
 Sizes marked <sup>Δ</sup> are for AR\*\* 90 series only

|             |        | Female thread |      |    |        |        |    |        |    |        |    |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
|-------------|--------|---------------|------|----|--------|--------|----|--------|----|--------|----|---|--|--|--|--|--|--|--|--|--|--|-----------------|--|--|
|             |        | NPT           |      |    |        |        |    |        |    |        |    |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
|             |        | 1/2"          | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 3 1/2" | 4" |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
| Male thread | Metric | M16           | A    |    |        |        |    |        |    |        |    |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
|             |        | M20           | A    | A  | A      |        |    |        |    |        |    |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
|             |        | M25           | R    | A  | A      | A      |    |        |    |        |    |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
|             |        | M32           | R    | R  | A      | A      | A  |        |    |        |    |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
|             |        | M40           | R    | R  | R      | A      | A  |        |    |        |    |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
|             |        | M50           | R    | R  | R      | R      | A  | A      |    |        |    |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
|             |        | M63           | R    | R  | R      | R      | R  | A      | A  |        |    |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
|             |        | M75           | R    | R  | R      | R      | R  | R      | A  | A      | A  |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
|             |        | M80           | R    | R  | R      | R      | R  | R      | A  | A      | A  |   |  |  |  |  |  |  |  |  |  |  |                 |  |  |
|             |        | M85           | R    | R  | R      | R      | R  | R      | R  | A      | A  |   |  |  |  |  |  |  |  |  |  |  | A <sup>++</sup> |  |  |
|             |        | M90           | R    | R  | R      | R      | R  | R      | R  | R      | A  | A |  |  |  |  |  |  |  |  |  |  | A <sup>++</sup> |  |  |
|             |        | M100          | R    | R  | R      | R      | R  | R      | R  | R      | R  | A |  |  |  |  |  |  |  |  |  |  | A <sup>++</sup> |  |  |



**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

|            |        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                 |
|------------|--------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| <b>NPT</b> | 1/2"   | A*               | A                | A                |                  |                  |                  |                  |                  |                  |                  |                 |
|            | 3/4"   | R*               | A*               | A                | A                |                  |                  |                  |                  |                  |                  |                 |
|            | 1"     | R*               | R*               | A*               | A                | A                |                  |                  |                  |                  |                  |                 |
|            | 1 1/4" | R*               | R*               | R*               | A*               | A                | A                |                  |                  |                  |                  |                 |
|            | 1 1/2" | R*               | R*               | R*               | R*               | A                | A                | A                |                  |                  |                  |                 |
|            | 2"     | R*               | R*               | R*               | R*               | R*               | A                | A                | A <sup>++</sup>  |                  |                  |                 |
|            | 2 1/2" | R                | R                | R                | R                | R                | R                | A                | A                | A <sup>++</sup>  | A <sup>++</sup>  |                 |
|            | 3"     | R*               | R*               | R*               | R*               | R*               | R*               | R*               | A                | A                | A <sup>++</sup>  | A <sup>++</sup> |
|            | 3 1/2" | R*               | R*               | R*               | R*               | R*               | R*               | R*               | R*               | A                | A <sup>++</sup>  | A <sup>++</sup> |
|            | 4"     | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | A <sup>++</sup> |

Sizes marked \* have a larger hexagon size where a sealing washer is required.  
 Sizes marked ++ are for AR series only

**Conditions of Acceptability:**

- For Division 1 applications, device must provide suitable connection for NPT conduit.
- Ambient temperature may not exceed auto-ignition temperature of gas per applicable hazardous area classification and may not exceed 200°C for Class II, Group EF/165°C for Class II, Group G applications.
- Only certain combinations of threads are permitted on AR, ARFF, ARMM and AR\*\* 90° Range adaptors.
- Adaptors and reducers must be installed into threaded holes for Ex d and Class I, Div 1 applications.
- For use in type Ex e enclosures, the device may be screwed, with or without a sealing ring, into the threaded wall of an enclosure or, with a sealing ring, into a clearance hole.
- The adaptors and reducers when installed with or without a sealing ring in threaded holes and in accordance with the manufacturer’s instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP66.
- The adaptors and reducers fitted with sealing rings, when installed in threaded holes or clearance holes and in accordance with the manufacturer’s instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP 66 / IPX8 to 100 meters for 7 days.
- ARFF and ARMM adaptors and reducers with tapered threads shall not be used with conduit systems for the coupling of conduits.

**Ex eb IIC Gb**  
**Ex ta IIIC Da**  
**IP66**

Breather Drains – Models ACDP-a-b-c-d-e-f

Where:

a = IP Seal code and rated temperature

- 0 = No seal fitted (Ta = - 60°C to +400°C)
- 1 = Nitrile O-ring (Ta = -30°C to +100°C)
- 2 = Neoprene O-ring (Ta = -35°C to +90°C)
- 3 = Silicone O-ring (Ta = -60°C to +200°C)
- 4 = Fluorosilicone O-ring (Ta = -55°C to +200°C)
- 5 = Viton O-ring (Ta = -20°C to +180°C)
- 6 = EPDM O-ring (Ta = -50°C to +110°C)



**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

b = Material of manufacture

- A = Aluminum
- B = Brass
- S = Stainless Steel

c = Protection concept code

- E = Ex e, Ex t, AEx e, AEx t

d = Plating

- OO = Not plated
- NP = Nickel Plated
- ZP = Zinc Plated
- AN = Anodised

e = Thread type and size

- Metric = M20, M25, M32
- NPT = 1/2", 3/4"

f = Locknut

- X = No locknut

**Conditions of Acceptability:**

- Series ACDP breather drains may be screwed, with or without a sealing ring, into the threaded wall of an enclosure or, with a sealing ring, into a through hole, being secured by a castellated locknut.
- Ambient temperature may not exceed auto-ignition temperature of gas per applicable hazardous area classification.

**Ex db IIC Gb**

**Ex eb IIC Gb**

**Ex ta IIC Da**

**IP66/68 (2 m for 24 hours)**

**Type 4X and 6P**

The Types and Model numbers of the RA\*\* Range of Rotating Adaptors Reducers and Elbows are as follows:

| Type    | Adaptors/Reducers      |
|---------|------------------------|
| RAFF    | Female to Female       |
| RAMF    | Male to Female         |
| RAMM    | Male to Male           |
| RAFF 90 | Female to Female Elbow |
| RAMF 90 | Male to Female Elbow   |
| RAMM 90 | Male to Male Elbow     |

The equipment comprises of two parts, linked together in which they can rotate whilst are interlocked. Once the parts are linked together, they form a cylindrical flameproof joint coupled with O-ring and snap ring to hold the two parts together. The internal or external threads at each end may be provided with the below thread options and



Certificate: 2310046  
Project: 80050144

Master Contract: 203679  
Date Issued: February 14, 2022

configurations. The assembly has been separately tested against the requirements of CAN/CSA C22.2 No. 60529 and ANSI/IEC 60529 and it meets IP66 and IP68.

The following arrangements are permitted:

| KEY:<br>A = ADAPTOR<br>R = REDUCER |        | METRIC |     |     |     |     |     |     |     |     |     |     | NPT  |      |      |      |    |        |        |    |        |
|------------------------------------|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|----|--------|--------|----|--------|
|                                    |        | M12    | M16 | M20 | M25 | M32 | M40 | M50 | M63 | M75 | M80 | M85 | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" | 2-1/2" |
| METRIC                             | M12    | A      | A   | A   |     |     |     |     |     |     |     |     | A    | A    | A    |      |    |        |        |    |        |
|                                    | M16    | R      | A   | A   | A   |     |     |     |     |     |     |     | A    | A    | A    | A    |    |        |        |    |        |
|                                    | M20    | R      | R   | A   | A   | A   |     |     |     |     |     |     | R    | A    | A    | A    | A  |        |        |    |        |
|                                    | M25    | R      | R   | R   | A   | A   | A   |     |     |     |     |     | R    | R    | R    | A    | A  | A      |        |    |        |
|                                    | M32    | R      | R   | R   | R   | A   | A   | A   |     |     |     |     | R    | R    | R    | R    | A  | A      | A      |    |        |
|                                    | M40    | R      | R   | R   | R   | R   | A   | A   | A   |     |     |     | R    | R    | R    | R    | R  | A      | A      | A  |        |
|                                    | M50    | R      | R   | R   | R   | R   | R   | A   | A   | A   |     |     | R    | R    | R    | R    | R  | R      | A      | A  | A      |
|                                    | M63    | R      | R   | R   | R   | R   | R   | R   | A   | A   | A   | A   | R    | R    | R    | R    | R  | R      | R      | A  | A      |
|                                    | M75    | R      | R   | R   | R   | R   | R   | R   | R   | A   | A   | A   | R    | R    | R    | R    | R  | R      | R      | R  | A      |
|                                    | M80    | R      | R   | R   | R   | R   | R   | R   | R   | A   | A   | A   | R    | R    | R    | R    | R  | R      | R      | R  | A      |
|                                    | M85    | R      | R   | R   | R   | R   | R   | R   | R   | R   | A   | A   | R    | R    | R    | R    | R  | R      | R      | R  | R      |
| M90                                | R      | R      | R   | R   | R   | R   | R   | R   | R   | R   | A   | R   | R    | R    | R    | R    | R  | R      | R      | R  |        |
| NPT                                | 1/4"   | A      | A   | A   |     |     |     |     |     |     |     |     | A    | A    | A    |      |    |        |        |    |        |
|                                    | 3/8"   | R      | A   | A   | A   |     |     |     |     |     |     |     | A    | A    | A    | A    |    |        |        |    |        |
|                                    | 1/2"   | R      | R   | A   | A   | A   |     |     |     |     |     |     | R    | A    | A    | A    | A  |        |        |    |        |
|                                    | 3/4"   | R      | R   | R   | A   | A   | A   |     |     |     |     |     | R    | R    | R    | A    | A  | A      |        |    |        |
|                                    | 1"     | R      | R   | R   | R   | A   | A   | A   |     |     |     |     | R    | R    | R    | R    | A  | A      | A      |    |        |
|                                    | 1-1/4" | R      | R   | R   | R   | R   | A   | A   | A   |     |     |     | R    | R    | R    | R    | R  | A      | A      | A  |        |
|                                    | 1-1/2" | R      | R   | R   | R   | R   | R   | A   | A   | A   |     |     | R    | R    | R    | R    | R  | R      | A      | A  | A      |
|                                    | 2"     | R      | R   | R   | R   | R   | R   | R   | A   | A   | A   | A   | R    | R    | R    | R    | R  | R      | R      | A  | A      |
|                                    | 2-1/2" | R      | R   | R   | R   | R   | R   | R   | R   | A   | A   | A   | R    | R    | R    | R    | R  | R      | R      | R  | A      |
|                                    | 3"     | R      | R   | R   | R   | R   | R   | R   | R   | R   | A   | A   | R    | R    | R    | R    | R  | R      | R      | R  | R      |

Conditions of Acceptability:

- The temperature range at the point mounting shall be -60°C to +135°C.
- RA\*\* Adaptors and Reducers are not intended for use with metallic cable applications.

**Class 4418 83 CONDUIT FITTINGS - For Hazardous Locations – To US Standards**

**Class I, Division 1 Groups A, B, C and D**

**Class II, Division 1 Groups E, F and G**





**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

**Class III**  
**Class I Zone 1 AEx db IIC Gb**  
**Class I Zone 1 AEx eb IIC Gb**  
**Zone 20 AEx ta IIIC Da**  
**Type 4X and 6P**  
**IP 66/68**

Mushroom Head Stopping Plugs – Models SPMH-a-b-c-d-e  
Hexagon Head Stopping Plugs – Models SPHH-a-b-c-d-e  
Type A Stopping Plug – Models SPA-a-b-c-d-e  
Type B Stopping Plug – Models SPB-a-b-c-d-e

Where:

a = IP Seal code and rated temperature

- 0 = No seal fitted\* (Ta = - 60°C to +400°C)
- 1 = Nitrile O-ring (Ta = -30°C to +100°C)
- 2 = Neoprene O-ring (Ta = -35°C to +90°C)
- 3 = Silicone O-ring (Ta = -60°C to +200°C)
- 4 = Fluorosilicone O-ring (Ta = -55°C to +200°C)
- 5 = Viton O-ring (Ta = -20°C to +180°C)
- 6 = EPDM O-ring (Ta = -50°C to +110°C)

\* For metric threaded Stopping Plugs when no seal is fitted the rating is as follows:

**Class I, Division 1 Groups A, B, C and D**  
**Class II, Division 1 Groups E, F and G**  
**Class III**  
**Class I Zone 1 AEx db IIC Gb**  
**Class I Zone 1 AEx eb IIC Gb**  
**Zone 20 AEx ta IIIC Da**  
**IP66**

b = Material of manufacture

- A = Aluminum
- B = Brass
- S = Stainless Steel

c = Protection concept code

- D = Ex d, Ex e, Ex t, AEx d, AEx e, AEx t, Class I Div. 1, Class II Div. 1, Class III (models SPA and SPB only)
- E = Ex e, AEx e (models SPMH and SSPHH only)
- F = Ex d, Ex e, Ex t, AEx d, AEx e, AEx t, Class I Div. 1, Class II Div. 1, Class III (models SPMH and SSPHH only)

d = Plating

- OO = Not plated\*
- NP = Nickel Plated



**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

ZP = Zinc Plated  
TN = Tin Plated  
AN = Anodised

\* For unplated brass Stopping Plugs the rating is as follows:

**Class II, Division 1 Groups E, F and G**

**Class III**

**Class I Zone 1 AEx db IIC Gb**

**Class I Zone 1 AEx eb IIC Gb**

**Zone 20 AEx ta IIIC Da**

**Type 4X and 6P**

**IP 66/68**

e = Thread type and size

Metric, M12 to M100 trade size \*

NPT, ¼ to 4 inch trade size \*

\* Note: M12, 1/4" NPT and 5/8" NPT sizes are not manufactured in aluminum.

**Conditions of Acceptability:**

- Ambient temperature may not exceed auto-ignition temperature of gas per applicable hazardous area classification and may not exceed 200°C for Class II, Group EF/165°C for Class II, Group G applications.
- Stopping plugs must be installed into threaded holes for Ex d and Class I, Div 1 applications.
- For use in type Ex e enclosures, the device may be screwed, with or without a sealing ring, into the threaded wall of an enclosure or, with a sealing ring, into a clearance hole.
- The stopping plugs when installed with or without a sealing ring in threaded holes and in accordance with the manufacturer's instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP66.
- The SPHH and SPMH stopping plugs fitted with sealing rings, when installed in threaded holes or clearance holes and in accordance with the manufacturer's instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP 66 / IPX8 to 100 meters for 7 days.

**Class I, Division 1 Groups A, B, C and D**

**Class II, Division 1 Groups E, F and G**

**Class III**

**Class I Zone 1 AEx db IIC Gb**

**Class I Zone 1 AEx eb IIC Gb**

**Zone 20 AEx ta IIIC Da**

**Type 4X and 6P**

**IP 66/68**

Adaptors/Reducers – Models AR-a-b-c-d-e-f

Male to Male Adaptors/Reducers – Models ARMM-a-b-c-d-e-f

Male to Male 90° Adaptors/Reducers – Models ARMR-a-b-c-d-e-f

Female to Female Adaptors/Reducers – Models ARFF-a-b-c-d-e-f

Female to Female 90° Adaptors/Reducers – Models ARFR-a-b-c-d-e-f



**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

Where:

a = IP Seal code and rated temperature

- 0 = No seal fitted\* (Ta = - 60°C to +400°C)
- 1 = Nitrile O-ring (Ta = -30°C to +100°C)
- 2 = Neoprene O-ring (Ta = -35°C to +90°C)
- 3 = Silicone O-ring (Ta = -60°C to +200°C)
- 4 = Fluorosilicone O-ring (Ta = -55°C to +200°C)
- 5 = Viton O-ring (Ta = -20°C to +180°C)
- 6 = EPDM O-ring (Ta = -50°C to +110°C)

\* For metric threaded Adaptors/Reducers when no seal is fitted the rating is as follows:

**Class I, Division 1 Groups A, B, C and D**

**Class II, Division 1 Groups E, F and G**

**Class III**

**Class I Zone 1 AEx db IIC Gb**

**Class I Zone 1 AEx eb IIC Gb**

**Zone 20 AEx ta IIIC Da**

**IP66**

b = Material of manufacture

- A = Aluminum
- B = Brass
- S = Stainless Steel

c = Protection concept code

- E = Ex e, AEx e (models AR, ARMM and ARMR only)
- F = Ex d, Ex e, Ex t, AEx d, AEx e, AEx t, Class I Div. 1, Class II Div. 1, Class III

d = Plating

- O = Not plated\*
- NP = Nickel Plated
- ZP = Zinc Plated
- AN = Anodised

\* For unplated brass Adaptors/Reducers the rating is as follows:

**Class II, Division 1 Groups E, F and G**

**Class III**

**Class I Zone 1 AEx db IIC Gb**

**Class I Zone 1 AEx eb IIC Gb**

**Zone 20 AEx ta IIIC Da**

**Type 4X and 6P**

**IP 66/68**

e = Male thread type and size

- Metric, M16 to M100 trade size
- NPT, ½ to 4 inch trade size



Certificate: 2310046  
 Project: 80050144

Master Contract: 203679  
 Date Issued: February 14, 2022

f = Female thread type and size  
 Metric, M16 to M100 trade size  
 NPT, 1/2 to 4 inch trade size

The following arrangements are permitted:

|             |        | Female thread   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|-------------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|--|
|             |        | Metric          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | M16             | M20             | M25             | M32             | M40             | M50             | M63             | M75             | M80             | M85             | M90             | M100            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
| Male thread | Metric | M16             | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | M20             | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | M25             | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | M32             | R               | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | M40             | R               | R               | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | M50             | R               | R               | R               | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | M63             | R               | R               | R               | R               | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | M75             | R               | R               | R               | R               | R               | R               | R               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | M80             | R               | R               | R               | R               | R               | R               | R               | A               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | M85             | R               | R               | R               | R               | R               | R               | R               | R               | A               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | M90             | R               | R               | R               | R               | R               | R               | R               | R               | R               | A               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             | M100   | R               | R               | R               | R               | R               | R               | R               | R               | R               | R               | R               | R               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             | NPT    | 1/2"            | R*              | A*              | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | 3/4"            | R*              | R*              | A*              | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | 1"              | R*              | R*              | R*              | A*              | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | 1 1/4"          | R*              | R*              | R*              | R*              | A*              | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | 1 1/2"          | R*              | R*              | R*              | R*              | R*              | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | 2"              | R*              | R*              | R*              | R*              | R*              | R*              | A               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
|             |        | 2 1/2"          | R               | R               | R               | R               | R               | R               | R               | A               | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 | A <sup>Δ</sup> |  |
|             |        | 3"              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | A*              | A               | A               | A               |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
| 3 1/2"      |        | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | R*              | A               |                 |                 |                 |                 |                 |                 |                 |                 |                 |                |  |
| 4"          |        | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> | R <sup>++</sup> |                |  |

Sizes marked \* have a larger hexagon size where a sealing washer is required.  
 Sizes marked ++ are for AR series only  
 Sizes marked <sup>Δ</sup> are for AR\*\* 90 series only

|             |        | Female thread |      |    |        |        |    |        |    |        |    |  |  |  |  |  |  |  |  |  |  |
|-------------|--------|---------------|------|----|--------|--------|----|--------|----|--------|----|--|--|--|--|--|--|--|--|--|--|
|             |        | NPT           |      |    |        |        |    |        |    |        |    |  |  |  |  |  |  |  |  |  |  |
|             |        | 1/2"          | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 3 1/2" | 4" |  |  |  |  |  |  |  |  |  |  |
| Male thread | Metric | M16           | A    |    |        |        |    |        |    |        |    |  |  |  |  |  |  |  |  |  |  |
|             | M20    | A             | A    | A  |        |        |    |        |    |        |    |  |  |  |  |  |  |  |  |  |  |
|             | M25    | R             | A    | A  | A      |        |    |        |    |        |    |  |  |  |  |  |  |  |  |  |  |
|             | M32    | R             | R    | A  | A      | A      |    |        |    |        |    |  |  |  |  |  |  |  |  |  |  |



Certificate: 2310046  
Project: 80050144

Master Contract: 203679  
Date Issued: February 14, 2022

|     |        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                 |
|-----|--------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| NPT | M40    | R                | R                | R                | A                | A                |                  |                  |                  |                  |                  |                 |
|     | M50    | R                | R                | R                | R                | A                | A                | A                |                  |                  |                  |                 |
|     | M63    | R                | R                | R                | R                | R                | A                | A                |                  |                  |                  |                 |
|     | M75    | R                | R                | R                | R                | R                | R                | A                | A                | A                |                  |                 |
|     | M80    | R                | R                | R                | R                | R                | R                | A                | A                | A                |                  |                 |
|     | M85    | R                | R                | R                | R                | R                | R                | R                | A                | A                | A <sup>++</sup>  |                 |
|     | M90    | R                | R                | R                | R                | R                | R                | R                | A                | A                | A <sup>++</sup>  |                 |
|     | M100   | R                | R                | R                | R                | R                | R                | R                | R                | A                | A <sup>++</sup>  |                 |
|     | 1/2"   | A*               | A                | A                |                  |                  |                  |                  |                  |                  |                  |                 |
|     | 3/4"   | R*               | A*               | A                | A                |                  |                  |                  |                  |                  |                  |                 |
|     | 1"     | R*               | R*               | A*               | A                | A                |                  |                  |                  |                  |                  |                 |
|     | 1 1/4" | R*               | R*               | R*               | A*               | A                | A                |                  |                  |                  |                  |                 |
|     | 1 1/2" | R*               | R*               | R*               | R*               | A                | A                | A                |                  |                  |                  |                 |
|     | 2"     | R*               | R*               | R*               | R*               | R*               | A                | A                | A <sup>++</sup>  |                  |                  |                 |
|     | 2 1/2" | R                | R                | R                | R                | R                | R                | A                | A                | A <sup>++</sup>  | A <sup>++</sup>  |                 |
|     | 3"     | R*               | R*               | R*               | R*               | R*               | R*               | R*               | A                | A                | A <sup>++</sup>  |                 |
|     | 3 1/2" | R*               | R*               | R*               | R*               | R*               | R*               | R*               | R*               | A                | A <sup>++</sup>  |                 |
|     | 4"     | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | R <sup>+++</sup> | A <sup>++</sup> |

Sizes marked \* have a larger hexagon size where a sealing washer is required.  
Sizes marked ++ are for AR series only

**Conditions of Acceptability:**

- For Division 1 applications, device must provide suitable connection for NPT conduit.
- Ambient temperature may not exceed auto-ignition temperature of gas per applicable hazardous area classification and may not exceed 200°C for Class II, Group EF/165°C for Class II, Group G applications.
- Only certain combinations of threads are permitted on AR and AR\*\* 90° Range adaptors, see above.
- Adaptors and reducers must be installed into threaded holes for Ex d and Class I, Div 1 applications.
- For use in type Ex e enclosures, the device may be screwed, with or without a sealing ring, into the threaded wall of an enclosure or, with a sealing ring, into a clearance hole.
- The adaptors and reducers when installed with or without a sealing ring in threaded holes and in accordance with the manufacturer’s instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP66.
- The adaptors and reducers fitted with sealing rings, when installed in threaded holes or clearance holes and in accordance with the manufacturer’s instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP 66 / IPX8 to 100 metres for 7 days.



**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

---

**Class I Zone 1 AEx eb IIC Gb**  
**Zone 20 AEx ta IIIC Da**  
**IP66**

Breather Drains – Models ACDP-a-b-c-d-e-f

Where:

a = IP Seal code and rated temperature

- 0 = No seal fitted (Ta = - 60°C to +400°C)
- 1 = Nitrile O-ring (Ta = -30°C to +100°C)
- 2 = Neoprene O-ring (Ta = -35°C to +90°C)
- 3 = Silicone O-ring (Ta = -60°C to +200°C)
- 4 = Fluorosilicone O-ring (Ta = -55°C to +200°C)
- 5 = Viton O-ring (Ta = -20°C to +180°C)
- 6 = EPDM O-ring (Ta = -50°C to +110°C)

b = Material of manufacture

- A = Aluminum
- B = Brass
- S = Stainless Steel

c = Protection concept code

- E = Ex e, Ex ta, AEx e, AEx ta

d = Plating

- OO = Not plated
- NP = Nickel Plated
- ZP = Zinc Plated
- AN = Anodised

e = Thread type and size

- Metric = M20, M25, M32
- NPT = ½", ¾"

f = Locknut

- X = No locknut

**Conditions of Acceptability:**

- Series ACDP breather drains may be screwed, with or without a sealing ring, into the threaded wall of an enclosure or, with a sealing ring, into a through hole, being secured by a castellated locknut.
- Ambient temperature may not exceed auto-ignition temperature of gas per applicable hazardous area classification.



Certificate: 2310046  
Project: 80050144

Master Contract: 203679  
Date Issued: February 14, 2022

**Class I Zone 1 AEx db IIC Gb**  
**Class I Zone 1 AEx eb IIC Gb**  
**Zone 20 AEx ta IIIC Da**  
**IP66/68 (2 m for 24 hours), 4X and 6P**

The Types and Model numbers of the RA\*\* Range of Rotating Adaptors Reducers and Elbows are as follows:

| Type    | Adaptors/Reducers      |
|---------|------------------------|
| RAFF    | Female to Female       |
| RAMF    | Male to Female         |
| RAMM    | Male to Male           |
| RAFF 90 | Female to Female Elbow |
| RAMF 90 | Male to Female Elbow   |
| RAMM 90 | Male to Male Elbow     |

The equipment comprises of two parts, linked together in which they can rotate whilst are interlocked. Once the parts are linked together, they form a cylindrical flameproof joint coupled with O-ring and snap ring to hold the two parts together. The internal or external threads at each end may be provided with the below thread options and configurations. The assembly has been separately tested against the requirements of CAN/CSA C22.2 No. 60529 and ANSI/IEC 60529 and it meets IP66 and IP68.

The following arrangements are permitted:

| KEY:<br>A = ADAPTOR<br>R = REDUCER |      | METRIC |     |     |     |     |     |     |     |     |     | NPT |      |      |      |      |    |        |        |    |        |
|------------------------------------|------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|----|--------|--------|----|--------|
|                                    |      | M12    | M16 | M20 | M25 | M32 | M40 | M50 | M63 | M75 | M80 | M85 | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" | 2-1/2" |
| METRIC                             | M12  | A      | A   | A   |     |     |     |     |     |     |     |     |      |      |      |      |    |        |        |    |        |
|                                    | M16  | R      | A   | A   | A   |     |     |     |     |     |     |     |      |      |      |      |    |        |        |    |        |
|                                    | M20  | R      | R   | A   | A   | A   |     |     |     |     |     |     |      |      |      |      |    |        |        |    |        |
|                                    | M25  | R      | R   | R   | A   | A   | A   |     |     |     |     |     |      |      |      |      |    |        |        |    |        |
|                                    | M32  | R      | R   | R   | R   | A   | A   | A   |     |     |     |     |      |      |      |      |    |        |        |    |        |
|                                    | M40  | R      | R   | R   | R   | R   | A   | A   | A   |     |     |     |      |      |      |      |    |        |        |    |        |
|                                    | M50  | R      | R   | R   | R   | R   | R   | A   | A   | A   |     |     |      |      |      |      |    |        |        |    |        |
|                                    | M63  | R      | R   | R   | R   | R   | R   | R   | A   | A   | A   | A   |      |      |      |      |    |        |        |    |        |
|                                    | M75  | R      | R   | R   | R   | R   | R   | R   | R   | A   | A   | A   |      |      |      |      |    |        |        |    |        |
|                                    | M80  | R      | R   | R   | R   | R   | R   | R   | R   | A   | A   | A   |      |      |      |      |    |        |        |    |        |
|                                    | M85  | R      | R   | R   | R   | R   | R   | R   | R   | R   | A   | A   |      |      |      |      |    |        |        |    |        |
| M90                                | R    | R      | R   | R   | R   | R   | R   | R   | R   | R   | A   |     |      |      |      |      |    |        |        |    |        |
| N P                                | 1/4" | A      | A   | A   |     |     |     |     |     |     |     |     |      |      |      |      |    |        |        |    |        |



**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

|        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/8"   | R | A | A | A |   |   |   |   |   |   | A | A | A | A |
| 1/2"   | R | R | A | A | A |   |   |   |   |   | R | A | A | A |
| 3/4"   | R | R | R | A | A | A |   |   |   |   | R | R | R | A |
| 1"     | R | R | R | R | A | A | A |   |   |   | R | R | R | R |
| 1-1/4" | R | R | R | R | R | A | A | A |   |   | R | R | R | R |
| 1-1/2" | R | R | R | R | R | R | A | A | A |   | R | R | R | R |
| 2"     | R | R | R | R | R | R | R | A | A | A | R | R | R | R |
| 2-1/2" | R | R | R | R | R | R | R | R | A | A | R | R | R | R |
| 3"     | R | R | R | R | R | R | R | R | R | A | R | R | R | R |

**Conditions of Acceptability:**

- The temperature range at the point mounting shall be -60°C to +135°C.
- RA\*\* Adaptors and Reducers are not intended for use with metallic cable applications.

**APPLICABLE REQUIREMENTS**

|  |   |
|--|---|
| CAN/CSA C22.2 No 0 – M91                                   | General Requirements - Canadian Electrical Code Part II.  |
| CAN/CSA C22.2 No 18.3-12 (R2017)                           | Conduit, Tubing and Cable Fittings  |
| CAN/CSA C22.2 No. 60529:05                                 | Degrees of protection provided by enclosures (IP Code)  |
| CSA C22.2 No 25 – 1966                                     | Enclosures for Use in Class II Groups E, F and G Hazardous Locations                                      |
| CAN/CSA C22.2 No. 30:20                                    | Explosion-Proof Enclosures for Use in Class I Hazardous Locations   |
| CAN/CSA C22.2 No. 94.1:15<br><i>Second Edition (R2020)</i> | Enclosures for Electrical Equipment, Non-Environmental Considerations                                     |
| CAN/CSA C22.2 No. 94.2:20<br><i>Third Edition</i>          | Enclosures for Electrical Equipment, Environmental Considerations   |
| CAN/CSA 22.2 No. 60079-0-11                                | Electrical apparatus for explosive gas atmospheres – Part 0: General Requirements                         |
| CAN/CSA 22.2 No. 60079-1-11                                | Electrical apparatus for explosive gas atmospheres – Part 1: Flameproof Enclosures “d”                    |
| CAN/CSA E 60079-7-03                                       | Electrical apparatus for explosive gas atmospheres – Part 7: Equipment protection by increased safety “e” |
| CAN/CSA E 60079-31-12                                      | Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure “t”                      |
| ANSI/UL 50-2020<br><i>Thirteenth Edition</i>               | Enclosures for Electrical Equipment, Non-Environmental Considerations                                     |
| ANSI/UL 50E-2020<br><i>Third Edition</i>                   | Enclosures for Electrical Equipment, Environmental Considerations   |
| ANSI/UL514B<br><i>Sixth Edition</i>                        | Conduit, Tubing, and Cable Fittings   |
| ANSI/UL 1203-2018<br><i>Fifth Edition</i>                  | Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations  |





**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

|  |  |
|--|--|
| ANSI/UL 60079-0-2013<br><i>Sixth Edition (R2017)</i> | Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements                  |
| ANSI/UL 60079-1-2009<br><i>Sixth Edition</i>         | Electrical Apparatus for Explosive Gas Atmospheres - Part 1: Flameproof Enclosures “d”             |
| ANSI/UL 60079-7-2008<br><i>Fourth Edition</i>        | Electrical Apparatus for Explosive Gas Atmospheres - Part 7: Increased Safety “e”                  |
| ANSI/ISA-60079-31 (12.10.03)-2013                    | Explosive Atmospheres – Part 31: Equipment Dust Ignition Protection by Enclosure “t” (Edition 1.1) |
| ANSI/IEC 60529:2004                                  | Degrees of Protection Provided by Enclosures (IP Code)   |

### **MARKINGS**

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Markings are permanently etched or stamped on the surface of the stopping plugs, adapters, breather drains.

### **Stopping plugs and adaptors/ reducers**

- CSA mark, or the CSA mark with adjacent indicators “C” and “US”, as shown on the Certificate of Compliance.
- Manufacturer’s name: “Peppers Cable Glands Ltd”, or “PEPPERS”, or CSA Master Contract number “203679” adjacent to the CSA mark in lieu of the manufacturer’s name.
- Model code/size as specified in the PRODUCTS section, above.
- Thread designation, as specified in the PRODUCTS section, above.
- Method of protection (Canadian Zones): “Ex db IIC Gb/ Ex eb IIC Gb / Ex ta IIIC Da”
- Method of protection (US Zones): “Class I Zone 1 AEx db IIC Gb / Class I Zone 1 AEx eb IIC Gb ~~Class II~~ Zone 20 AEx ta IIIC Da”. The word “Class” may be abbreviated “CL”, the word “Zone” may be abbreviated “ZN”.
- Hazardous location designation (Divisions): “Class I, Division 1 Groups A, B, C and D, Class II Division 1 Groups E, F and G, Class III”. The word “Class” may be abbreviated “CL”, the word “Division” may be abbreviated “DIV”, and the word “Groups” may be abbreviated “GRP” or “GP”.
- Ambient temperature range; as specified in the PRODUCTS section, above.
- The designation “CSA 10.2310046”, or “CSA 10CA2310046”
- Enclosure rating: “Type 4X 6P”
- Ingress protection (IP) rating, as defined in the PRODUCTS section, above.



**Certificate:** 2310046  
**Project:** 80050144

**Master Contract:** 203679  
**Date Issued:** February 14, 2022

Note: Where the size of the product limits the amount of marking that can be applied, the marking may be reduced with a repeat of the full marking detailed on the appropriate label and/or instructions supplied with the product. The following example shows abbreviated markings permitted for Series SPHH, SPMH, SPA and SPB Stopping plugs with NPT Threads due to space limitations:

CSA mark, as shown on the Certificate of Compliance.  
PEPPERS  
CL I Div 1 GP ABCD CL II Div 1 GP EFG CL III  
CSA 10.2310046  
Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da  
CL I ZN 1 AEx db IIC Gb/ CL I ZN 1 AEx eb IIC Gb/ ZN 20 AEx ta IIIC Da  
Type 4X 6P IP66/68  
Size and thread designation

#### **Breather drains**

- CSA mark, or the CSA mark with adjacent indicators “C” and “US”, as shown on the Certificate of Compliance.
- Manufacturer’s name: “Peppers Cable Glands Ltd”, or “PEPPERS”, or CSA Master Contract number “203679” adjacent to the CSA mark in lieu of the manufacturer’s name.
- Model code/size as specified in the PRODUCTS section, above.
- Thread designation, as specified in the PRODUCTS section, above.
- Method of protection (Canadian Zones): “Ex eb IIC Gb / Ex ta IIIC Da”
- Method of protection (US Zones): “Class I Zone 1 AEx eb IIC Gb/ Zone 20 AEx ta IIIC Da”. The word “Class” may be abbreviated “CL”, the word “Zone” may be abbreviated “ZN”.
- Ambient temperature range; as specified in the PRODUCTS section, above.
- The designation “CSA 10C.2310046”
- Ingress protection (IP) rating, as defined in the PRODUCTS section, above.

Note: Where the size of the product limits the amount of marking that can be applied, the marking may be reduced with a repeat of the full marking detailed on the appropriate label and/or instructions supplied with the product. The following example shows abbreviated markings permitted for Series ACDP Breather Drains due to space limitations:

CSA mark, as shown on the Certificate of Compliance.  
PEPPERS  
Ex eb IIC Gb / Ex ta IIIC Da  
CL I ZN 1 AEx eb IIC Gb/ ZN 20 AEx ta IIIC Da  
CSA 10.2310046  
Size and thread designation  
IP66