



Certificate of Compliance

Certificate: 2310046

Master Contract: 203679

Project: 80144363

Date Issued: 2023-03-24

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: Jimmy Solanki
Jimmy Solanki



PRODUCTS

CLASS - C441803 - CONDUIT FITTINGS 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



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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* (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



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* 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

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)



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- 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

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



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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	R	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 ^Δ		
	3"	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*	R*									
4"	R**	R**	R**	R**	R**	R**	R**	R**	R**	R**	R**	R**	R**	R**	R**	R**	R**	R**	R**	R**			

Sizes marked * have a larger hexagon size where a sealing washer is required.
 Sizes marked ** are for AR series only
 Sizes marked ^Δ are for AR** 90 series only

Female thread
NPT



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		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 ⁺⁺
	M90	R	R	R	R	R	R	R	A	A	A ⁺⁺	
	M100	R	R	R	R	R	R	R	R	A	A ⁺⁺	
	NPT	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 ⁺⁺		
		2 1/2"	R	R	R	R	R	R	A	A	A ⁺⁺	A ⁺⁺
		3"	R*	R*	R*	R*	R*	R*	R*	A	A	A ⁺⁺
3 1/2"		R*	R*	R*	R*	R*	R*	R*	R*	A	A ⁺⁺	
4"		R ⁺⁺⁺	R ⁺⁺⁺	R ⁺⁺⁺	R ⁺⁺⁺	R ⁺⁺⁺	R ⁺⁺⁺	R ⁺⁺⁺	R ⁺⁺⁺	R ⁺⁺⁺	R ⁺⁺⁺	A ⁺⁺

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, 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 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



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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 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 = 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.

Ex db IIC Gb

Ex eb IIC Gb

Ex ta IIC Da

IP66/68 (2 m for 24 hours)



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Type 4X and 6P
Ts = -60°C to +135°C

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: A = ADAPT OR R = REDUC ER	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"	
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	



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	M6 3	R	R	R	R	R	R	R	A	A	A	A	R	R	R	R	R	R	R	A	A
	M7 5	R	R	R	R	R	R	R	R	A	A	A	R	R	R	R	R	R	R	R	A
	M8 0	R	R	R	R	R	R	R	R	A	A	A	R	R	R	R	R	R	R	R	A
	M8 5	R	R	R	R	R	R	R	R	R	A	A	R	R	R	R	R	R	R	R	R
	M9 0	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. (Manufacturer: Eriks
Material: VMQ Silicone 70 ,Compound code: 714177 Colour: red and Manufacturer: Ashton Group
Material: Silicone SIL 70 DURO RED Compound code: S7001R Colour: red)
- RA** Adaptors and Reducers are not intended for use with metallic cable applications.

CLASS - C441883 - CONDUIT FITTINGS Fittings - For Hazardous Locations - Certified to US Standards



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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

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)



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d = Plating

OO = Not plated*
NP = Nickel Plated
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, 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

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



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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)

* 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



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**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

f = Female thread type and size
 Metric, M16 to M100 trade size
 NPT, ½ 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	R	A	A	A										
		M85	R	R	R	R	R	R	R	R	R	A	A	A									
		M90	R	R	R	R	R	R	R	R	R	R	A	A	A								
	M100	R	R	R	R	R	R	R	R	R	R	R	A	A	A								
	NPT	½"	R*	A*	A	A																	
		¾"	R*	R*	A*	A	A																
		1"	R*	R*	R*	A*	A	A															
		1 ¼"	R*	R*	R*	R*	A*	A	A														
		1 ½"	R*	R*	R*	R*	R*	A	A	A													
		2"	R*	R*	R*	R*	R*	R*	A	A	A	A											
		2 ½"	R	R	R	R	R	R	R	A	A	A	A										
3"		R*	R*	R*	R*	R*	R*	R*	R*	R*	A*	A	A	A									
3 ½"		R*	R*	R*	R*	R*	R*	R*	R*	R*	R*	R*	R*	R*	A								
4"	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***			

Sizes marked * have a larger hexagon size where a sealing washer is required.



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Sizes marked ++ are for AR series only
Sizes marked ^ 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	A													
		M63	R	R	R	R	R	A	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										A++
	M90	R	R	R	R	R	R	R	A	A	A											
	M100	R	R	R	R	R	R	R	R	A	A											
	NPT	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++												
		2 1/2"	R	R	R	R	R	R	A	A	A++	A++										
3"		R*	R*	R*	R*	R*	R*	R*	A	A	A++	A++										
3 1/2"		R*	R*	R*	R*	R*	R*	R*	R*	A	A++	A++										
4"		R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	R***	A++									

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.



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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 = 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.



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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
Ts = -60°C to +135°C

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: A = ADAPTOR 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	A	



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	M90	R	R	R	R	R	R	R	R	R	R	A	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. (Manufacturer: Eriks
Material: VMQ Silicone 70 ,Compound code: 714177 Colour: red and Manufacturer: Ashton Group
Material: Silicone SIL 70 DURO RED Compound code: S7001R Colour: red)
- 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 (R2022)	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 <i>Second Edition (R2020)</i>	Enclosures for Electrical Equipment, Non-Environmental Considerations
CAN/CSA C22.2 No. 94.2:20 <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 E60079-7-03	Electrical apparatus for explosive gas atmospheres – Part 7: Equipment protection by increased safety “e”
CAN/CSA E60079-31-12	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure “t”
ANSI/UL 50-2020 <i>Thirteenth Edition</i>	Enclosures for Electrical Equipment, Non-Environmental Considerations
ANSI/UL 50E-2020 <i>Third Edition</i>	Enclosures for Electrical Equipment, Environmental Considerations



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ANSI/UL514B <i>Sixth Edition</i>	Conduit, Tubing, and Cable Fittings
ANSI/UL 1203-2018 <i>Fifth Edition</i>	Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations
ANSI/UL 60079-0-2013 <i>Sixth Edition (R2017)</i>	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
ANSI/UL 60079-1-2009 <i>Sixth Edition</i>	Electrical Apparatus for Explosive Gas Atmospheres - Part 1: Flameproof Enclosures “d”
ANSI/UL 60079-7-2008 <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)



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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, adaptors, breather drains.

Stopping plugs and adaptors/ reducers

- CSA mark, or the CSA mark with, or without 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 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.

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



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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 10CA2310046”
- 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

Notes:

Products certified under Class C441803, C441883 have been certified under CSA’s ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

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The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
80144363	2023-03-24	Update report 2310046 (last project 80024972) to update verbiage, formatting, and presentation of evidence of compliance.
80050144	2022-02-14	Variation to CSA certificate number 2310046 - Introduction of alternative O-ring material Silicone S7001R to be fitted on RA** Range of Rotating Adaptors Reducers and Elbows
80024972	2020-05-11	Update C of C and CSA Report 2310046 to include RA** range of Rotating Adaptors
80013961	2019-09-16	Update to CSA report 2310046 to update the following markings: Ex d = Ex db; Ex e = Ex eb; Ex tb = Ex ta; AEx d = AEx db; AEx e = AEx eb; AEx tb = AEx ta
2329940	2010-12-15	Update to Report 2310046 to include AR** 90deg adaptors/reducers per SIRA Report R22034A.
2310046	2010-09-28	CSA Certification of Stopping plugs, Adaptors/Reducers, Series SPMH, SPHH, SPA, SPB, AR for CL I, Grps ABCD, CI II, Grps EFG and Breather Drain Series ACDP for Ex e; per SIRA Report R19229A.