Peppers Cable Glands **Product Catalogue**

www.cableglands.com

peppers

Peppers Cable Glands Limited
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Introduction to Peppers

For over 65 years, Peppers Cable Glands has been involved in the manufacture and sale of Cable Glands, giving the company a wealth of experience and expertise within the industry.

Operating from its UK base in Surrey, Peppers Cable Glands runs a satellite manufacturing system using group companies situated in the North of England. This provides an assured supply chain and when paired with their global distribution network, results in on-time deliveries. We believe quick deliveries are only part of the service. "It's all about the complete experience." We aim to give our customers excellent service not just in terms of our quick deliveries but from when the initial contact is made throughout the quotation, ordering and expediting process.

Peppers' customers can be sure that they are getting accurate advice, and if we are unable to meet your requirements, we will inform you. We don't bend the truth to secure orders. Peppers simply does not promise what it cannot deliver.

Peppers operates a quality management system, approved to ISO 9001:2008 and an Environmental System approved to ISO 14001:2004. All new employees are trained to recognise what it takes to meet these standards and staff assessments are undertaken regularly to ensure that the highest levels of customer service are maintained at all times.

Peppers has an extensive range of international approvals incorporating ATEX, IECEx, UL, CSA, GOST, INMETRO & NEPSI as well as marine type approvals by ABS (American Bureau of Shipping), RMRS (Russian Maritime) & Lloyd's Register. Our range of approved products are designed and tested for use in Ex d, Ex e, Ex nR and Ex t hazardous area protection concepts.

Peppers' range of glands incorporate some unique engineering features. The CR gland for armoured cable features a single orientation clamping system, "CROCLOCK®" allowing the clamping of all armour types with no mistakes being possible during installation. The advertising slogan "No reversible Components – No Mistakes" sums up this benefit. Due to ingenious design features Deluge is achieved without the use of additional sealing devices.

Peppers' barrier glands incorporate unique features that reduce installation times by using the Peppers T-1000 compound, which enables the conductors to be terminated within the equipment after one hour. At four hours, the compound chamber may be inspected and the equipment can be energized. Our innovative barrier chamber provides a cable acceptance that is on average 17% larger than other barrier gland designs allowing the use of smaller glands thereby significantly reducing cost.

Glands can be supplied in various materials including brass, aluminium, stainless steel and polyamide. We offer plating options for corrosion protection, including nickel, tin and zinc. Peppers also supply accessories, which include a comprehensive range of certified thread adaptors, reducers, stopping plugs and breather drains.

Peppers Engineering Team are constantly striving to improve the quality of our range whilst continually working to design and develop new and innovative products.

Peppers ... ***"a refreshing attitude to manufacturing"***

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Cable Gland Overview Guide

Elastomeric Seal Cable Glands
For use in Zone 1, Zone 2, Zone 21, Zone 22, Gas Groups IIA, IIB and IIC

Gland Type	Outer Seal	Inner Seal	Lead Option	Armour Clamp	Certification	Protection Concepts / Methods	IP Rating	Page No.
CR**	✓	✓	✓	✓ CROCLOCK ®	ATEX - IECEx - GOST - CSA - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex d - Ex e - Ex nR - Ex tD A21 Class I Div 2 Gr. ABCD, Class II Gr. EFG, Class III	IP66 - IP68 NEMA 4X - DELUGE	**1.1.0**
E**F***	✓	✓	✓	✓	ATEX - IECEx - GOST - CSA - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex d - Ex e - Ex nR - Ex tD A21 Class I Div 2 Gr. ABCD, Class II Gr. EFG, Class III	IP66 - IP68 NEMA 4X	**1.2.0**
C**E***	✓	✗	✗	✓	ATEX - IECEx - GOST - CSA - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex e - Ex tD A21 Class I Div 2 Gr. ABCD, Class II Gr. EFG, Class III	IP66 - NEMA 4X	**1.3.0**
A*L*F	✓	✗	✓	✗	ATEX - IECEx - GOST - CSA - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex d - Ex e - Ex nR - Ex tD A21 Class I Div 2 Gr. ABCD, Class II Gr. EFG, Class III	IP66 - IP68 NEMA 4X - DELUGE	**2.1.0**
A*LDS*F	✓	✗	✓	✗	ATEX - IECEx - GOST - CSA - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex d - Ex e - Ex nR - Ex tD A21 Class I Div 2 Gr. ABCD, Class II Gr. EFG, Class III	IP66 - IP68 NEMA 4X - DELUGE	**2.2.0**
A*LCF*F	✓	✗	✗	✗	ATEX - IECEx - GOST - CSA - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex d - Ex e - Ex nR - Ex tD A21 Class I Div 2 Gr. ABCD, Class II Gr. EFG, Class III	IP66 - IP68 NEMA 4X - DELUGE	**2.3.0**

Flat Cable Glands & Nylon Cable Glands
For use in Zone 1, Zone 2, Zone 21, Zone 22, Gas Groups IIA, IIB and IIC

Gland Type	Outer Seal	Inner Seal	Lead Option	Armour Clamp	Certification	Protection Concepts / Methods	IP Rating	Page No.
E8X*F	✓	✓	✗	✓	ATEX - IECEx - GOST - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex d - Ex e - Ex nR - Ex tD A21	IP66 - IP68	**3.1.0**
A8*F	✓	✗	✗	✗	ATEX - IECEx - GOST - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex d - Ex e - Ex nR - Ex tD A21	IP66 - IP68	**3.1.0**
PF (Nylon)	✓	✗	✗	✗	ATEX - IECEx - GOST - UL - CSA - VDE LLOYD'S	Ex e - Ex tD A21	IP66 - IP68	**3.2.0**

Barrier Glands
For use in Zone 1, Zone 2, Zone 21, Zone 22, Group I Mining, Gas Groups IIA, IIB and IIC and Dust Groups IIIA, IIIB, IIIC

Gland Type	Outer Seal	Inner Seal	Lead Option	Armour Clamp	Certification	Protection Concepts / Methods	IP Rating	Page No.
CR-C***	✓	✓ COMPOUND	✓	✓ CROCLOCK ®	ATEX - IECEx - GOST - CSA - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex d - Ex e - Ex nR - Ex ta Class I Div 2 Gr. ABCD, Class II Gr. EFG, Class III	IP66 - IP68 NEMA 4X - DELUGE	**4.1.0**
CR-X*	✗	✓ COMPOUND	✓	✗	ATEX - IECEx - GOST - CSA - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex d - Ex e - Ex nR - Ex ta Class I Div 2 Gr. ABCD, Class II Gr. EFG, Class III	IP66 - IP68 NEMA 4X - DELUGE	**4.2.0**
CR-U*	✓	✓ COMPOUND	✓	✗	ATEX - IECEx - GOST - CSA - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex d - Ex e - Ex nR - Ex ta Class I Div 2 Gr. ABCD, Class II Gr. EFG, Class III	IP66 - IP68 NEMA 4X - DELUGE	**4.2.1**
CR-S**	✗	✓ COMPOUND	✓	✗	ATEX - IECEx - GOST - CSA - NEPSI - INMETRO ABS - LLOYD'S - RMRS	Ex d - Ex e - Ex nR - Ex ta Class I Div 2 Gr. ABCD, Class II Gr. EFG, Class III	IP66 - IP68 NEMA 4X - DELUGE	**4.3.0**

Barrier Glands
For use in Class I Div 1 & 2, Zone 1, Zone 2, Zone 21, Zone 22, Group I Mining, Gas Groups IIA, IIB and IIC and Dust Groups IIIA, IIIB, IIIC

Gland Type	Outer Seal	Inner Seal	Lead Option	Armour Clamp	Certification	Protection Concepts / Methods	IP Rating	Page No.
UL-C**	✓	✓ COMPOUND	✗	✓ CROCLOCK ®	UL - ATEX - IECEx - GOST ABS - LLOYD'S	Ex d - Ex e - Ex nR - Ex ta Class I Div 1 ABCD	IP66 - IP68 NEMA 4X - DELUGE	**4.4.0**
UL-U*	✓	✓ COMPOUND	✗	✗	UL - ATEX - IECEx - GOST ABS - LLOYD'S	Ex d - Ex e - Ex nR - Ex ta Class I Div 2 ABCD	IP66 - IP68 NEMA 4X - DELUGE	**4.5.1**

Industrial Cable Glands

Gland Type	Outer Seal	Inner Seal	Lead Option	Armour Clamp	For Use In	Compliance	IP Rating	Page No.
A*L*	✓	✗	✓	✗	Safe Applications	EN 50262 & BS6121	IP66 - IP68 DELUGE	**5.1.0**
E***	✓	✓	✓	✓	Safe Applications	EN 50262 & BS6121	IP66 - IP68	**5.2.0**
C***	✓	✗	✗	✓	Safe Applications	EN 50262 & BS6121	IP66	**5.3.0**

Accessories

Cable Gland Accessories:	Locknuts - Earthtags - IP Washers - Serrated Washers - Shrouds	**7.4.1**
Enclosure Accessories:	Stopping (Blanking) Plugs - Adaptors and Reducers - Breather Drains	**7.5.1**

Technical Information

Entry Thread Reference Tables - Adaptor / Reducer Size Options	**TR-1**
CR-S*M... A New Concept - Peppers T1000 Sealing Compound - Bi-Metallic Corrosion - Installation - Material Specification - Thread Standard/Gauging	**TR-2**
IP Information - Temperature Classifications - Integral Earth Options - Is a Barrier Gland Required?	**TR-3**

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Cable Gland Type CR (featuring "CROCLOCK®") — Ex d : Ex e : Ex nR : Ex tD A21 : IP66 : IP68

Including type Nos:

C	R	*	1	B	*
		D	2	S	R
		O	3		
			4		

"CR" type glands, certified Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC. They provide a controlled Ex d & IP displacement seal on the cable inner sheath minimising damage to cables that exhibit "cold flow" characteristics, an environmental seal on the outer sheath and "CROCLOCK®", a unique non reversible multi clamping system for wire (W), braid (X) and tape (Z) armoured cables. The gland maintains IP66 & IP68 to 25 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP O-ring seal as standard on metric entry threads. Options are available for use with lead sheath, LSOH cables and extreme temperature applications.

Compliance Standard: EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 61241-0, EN 61241-1 IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 61241-0, IEC 61241-1 & IEC 60529

Certification:		
	ATEX	II 2 GD Ex d IIC / Ex e II / Ex tD A21 II 3 GD Ex nR II
	IECEx	Ex d IIC / Ex e II / Ex tD A21
	GOST-R	Ex d IICU / Ex e IIU
	CSA	Ex d IIC / Ex e II Class I Zone 1 Class I Division 2, Groups A, B, C & D Class II Division 2, Groups E, F & G Class III, Enclosure Types 3, 4 & 4X
	NEPSI	Ex d IIC / Ex e II
	INMETRO	BR - Ex d IIC / Ex e II / Ex nR II / Ex tD A21
	ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
	LLOYD'S	Enclosure Systems (Part 1B)
	RMRS	Part XI of Rules for sea-going ships (ed.2008)

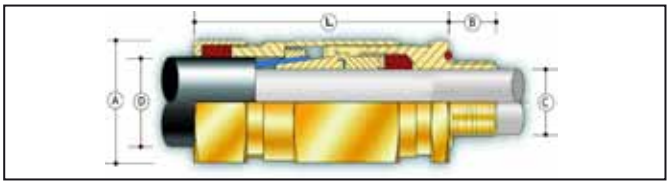
Certificate No.		
	ATEX	BAS 01ATEX2271X & SIRA 09ATEX1221X
	IECEx	SIR 07.0099X
	GOST-R	РОСС GB.Г506.B00853
	CSA	CSA 1356011
	NEPSI	GYJ06189X
	INMETRO	NCC 5877/09 X
	ABS	09-LD463991-PDA
	LLOYD'S	10/00056
	RMRS	09.00784.011

IP Rating: IP66 & IP68 (25 metres - 30 minutes), NEMA 4X & DTS01 1991

Operating Temperature: Neoprene Seals -20°C to +85°C; Silicone Seals -60°C to +180°C

Materials: Brass or Stainless Steel

Plating: Nickel - Zinc



Example Part Numbering (See below for details) CR-1BCK1/NP/20/050NPT

	CR	Type of gland featuring "CROCLOCK®", single orientation clamping
	1	Neoprene Seals (1) - Silicone (3) - Neoprene/Lead (2) - Silicone/Lead (4)
	B	Brass (B) - Stainless Steel (S)
Options	R	Reduced Bore Seal
	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut, Earth Tag & Nylon (K) or Fibre (V) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP) - Zinc Plated (ZP)
	20	Gland shell size
	050NPT	1/2"NPT Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
	Serrated Washer	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

Variations:	CR-O	Omission of Inner Seal (Ex e & Ex tD) (IP66)
	CR-D	Omission of Outer Seal

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range	Max Protrusion Length	Dimensions/Weight (Metric Versions)			Shroud Size
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]				Across Flats	Across Corners [A]	Weight Kgs	
	Metric	NPT		Min	Max	Min	Max	Min	Max						
16	M20 x 1.5	1/2" or 3/4"	16	3.4	8.4	9.0	13.5	6.7	10.3	0.15-1.25	78	25.4	28.0	0.178	EL24
20S	M20 x 1.5	1/2" or 3/4"	16	7.2	11.7	12.9	16.0	9.4	12.5	0.15-1.25	78	25.4	28.0	0.173	EL24
20	M20 x 1.5	1/2" or 3/4"	16	9.4	14.0	15.5	21.1	12.0	17.6	0.15-1.25	78	30.0	33.0	0.233	EL30
25	M25 x 1.5	3/4" or 1"	16	13.5	20.0	20.3	27.4	16.8	23.9	0.15-1.60	90	38.0	41.4	0.416	EL38
32	M32 x 1.5	1" or 1 1/4"	16	19.5	26.3	26.7	34.0	23.2	30.5	0.15-2.00	105	46.0	50.6	0.772	EL46
40	M40 x 1.5	1 1/4" or 1 1/2"	16	23.0	32.2	33.0	40.6	28.6	36.2	0.20-2.00	113	55.0	60.5	1.093	EL55
50S	M50 x 1.5	1 1/2" or 2"	16	28.1	38.2	39.4	46.7	34.8	42.4	0.20-2.50	125	65.0	71.5	1.400	EL65
50	M50 x 1.5	2"	16	33.1	44.1	45.7	53.2	41.1	48.5	0.30-2.50	125	65.0	71.5	1.255	EL65
63S	M63 x 1.5	2" or 2 1/2"	19	39.2	50.1	52.1	59.5	47.5	54.8	0.30-2.50	125	80.0	88.0	2.550	EL80
63	M63 x 1.5	2 1/2"	19	46.7	56.0	58.4	65.8	53.8	61.2	0.30-2.50	125	80.0	88.0	2.104	EL80
75S	M75 x 1.5	2 1/2" or 3"	19	52.1	62.0	64.8	72.2	60.2	68.0	0.30-2.50	131	90.0	99.0	2.916	EL90
75	M75 x 1.5	3"	19	58.0	68.0	71.1	78.0	66.5	73.4	0.30-2.50	131	90.0	99.0	2.315	EL90
80	M80 x 2	3" or 3 1/2"	25	62.2	72.0	77.0	84.0	71.9	79.4	0.45-3.15	170	104.0	115.2	4.953	EL104
80H	M80 x 2	3" or 3 1/2"	25	62.2	72.0	79.6	90.0	75.0	85.4	0.45-3.15	170	104.0	115.2	4.953	EL104
85	M85 x 2	3" or 3 1/2"	25	69.0	78.0	79.6	90.0	75.0	85.4	0.45-3.15	170	104.0	115.2	4.070	EL104
90	M90 x 2	3 1/2" or 4"	25	74.0	84.0	88.0	96.0	82.0	91.4	0.45-3.15	170	114.0	125.7	5.129	EL114
90H	M90 x 2	3 1/2" or 4"	25	74.0	84.0	92.0	102.0	87.4	97.4	0.45-3.15	170	114.0	125.7	5.129	EL114
100	M100 x 2	3 1/2" or 4"	25	82.0	90.0	92.0	102.0	87.4	97.4	0.45-3.15	170	114.0	125.7	4.368	EL114
110	M110 x 2	4"	25	92.0	102.0	104.0	117.0	-	-	0.45-3.15	165	135.0	148.5	7.327	-

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size.
* The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads. IP O-rings cannot be used in conjunction with a flat IP washer.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system.
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supply cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* The CR-O version is not suitable for Ex nR applications.
* All gland kits supplied with silicone seals will include a PTFE IP washer in order to maintain the temperature range.

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Cable Gland Type E - (Double Compression for Armoured Cables) Ex d : Ex e : Ex nR : Ex tD A21 : IP66 : IP68

Part Numbers:

E	1	W	B	*	F	*
	2	X	S	IE		R
	3	Z				
	4					

"E" type double compression glands, certified Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC. They provide a controlled Ex d & IP seal on the cable inner sheath, an environmental seal on the outer sheath and a detachable armour specific clamping system for wire (W), braid (X) or tape (Z) armoured cables. The gland has been tested to IP66 and IP68 to 35 metres and is available with an IP O-ring seal on metric entry threads. The "IE" version allows the gland to be used with HV cables where the fault load is greater than 10.4kA and options are available for use with lead sheath, LSOH cables and extreme temperature applications.

Compliance Standard: EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 61241-0, EN 61241-1
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 61241-0, IEC 61241-1 & IEC 60529

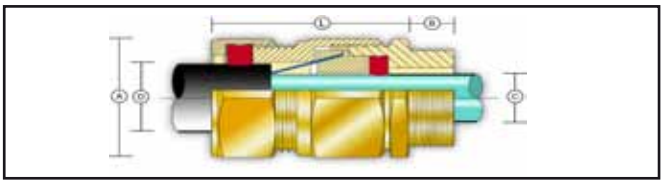
Certification:	ATEX	II 2 GD Ex d IIC / Ex e II / Ex tD A21 II 3 GD Ex nR II
	IECEx	Ex d IIC / Ex e II / Ex tD A21
	GOST-R	Ex d IICU / Ex e IIU
	CSA	Ex d IIC / Ex e II Class I Zone 1 Class I Division 2, Groups A, B, C & D Class II Division 2, Groups E, F & G Class III, Enclosure Types 3, 4 & 4X
	NEPSI	Ex d IIC / Ex e II
	INMETRO	BR - Ex d IIC / Ex e II / Ex nR II / Ex tD A21
	ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
	LLOYD'S	Enclosure Systems (Part 1B)
	RMRS	Part XI of Rules for sea-going ships (ed.2008)
Certificate No.	ATEX	SIRA 01ATEX1271X & SIRA 09ATEX1221X
	IECEx	SIR 07.0097X
	GOST-R	РОСС GB.ГБ06.B00853
	CSA	CSA 1356011
	NEPSI	GYJ06187X
	INMETRO	NCC 5878/09 X
	ABS	09-LD463991-PDA
	LLOYD'S	10/00056
	RMRS	09.00784.011

IP Rating: IP66 & IP68 (35 metres - 7 days), NEMA 4X

Operating Temperature: Neoprene Seals -20ºC to +85ºC
Silicone Seals -60ºC to +180ºC

Materials: Brass or Stainless Steel

Plating: Nickel - Zinc



Example Part Numbering (See below for details) E1WBFCK1/NP/20/050NPT

	E	Type of gland featuring armour specific clamping
	1	Neoprene Seals (1) - Silicone (3) - Neoprene/Lead (2) - Silicone/Lead (4)
	W	SWA (W) / SWB (X) or STA (Z)
	B	Brass (B) / Stainless Steel (S)
	IE	Integral Earth (see page TR-3)
	F	Multiple Certification
Options	R	Reduced Bore Seal
	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut, Earth Tag & Nylon (K) or Fibre (V) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP) - Zinc Plated (ZP)
	20	Gland shell size
	050NPT	1/2"NPT Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washer	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)
Variations:	D****F	Omission of Outer Seal

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Max Protrusion Length	Dimensions/Weight (Metric)			Shroud Size
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]					Across Flats	Across Corners [A]	Weight Kgs	
	Metric	NPT		Min	Max	Min	Max	Min	Max	W	XZ					
16	M20 x 1.5	1/2" or 3/4"	16	4.0	8.4	8.4	13.5	4.9	10.3	0.9	0.15-0.35	58	24.0	26.5	0.154	L24
20S	M20 x 1.5	1/2" or 3/4"	16	8.0	11.7	12.9	16.0	9.4	12.5	0.90-1.25	0.15-0.35	58	24.0	26.5	0.125	L24
20	M20 x 1.5	1/2" or 3/4"	16	6.7	14.0	15.5	21.1	12.0	17.6	0.90-1.25	0.15-0.50	58	30.0	33.0	0.180	L30
25	M25 x 1.5	3/4" or 1"	16	13.0	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.15-0.50	58	38.0	41.4	0.256	L38
32	M32 x 1.5	1" or 1 1/4"	16	19.0	26.3	26.7	34.0	23.2	30.5	1.60-2.00	0.15-0.55	65	46.0	50.6	0.400	L46
40	M40 x 1.5	1 1/4" or 1 1/2"	16	25.0	32.2	33.0	40.6	28.6	36.2	1.60-2.00	0.20-0.60	72	55.0	60.5	0.649	L55
50S	M50 x 1.5	1 1/2" or 2"	16	31.5	38.2	39.4	46.7	34.8	42.4	2.00-2.50	0.20-0.60	73	65.0	71.5	0.940	L65
50	M50 x 1.5	2"	16	36.5	44.1	45.7	53.2	41.1	48.5	2.00-2.50	0.30-0.80	73	65.0	71.5	0.707	L65
63S	M63 x 1.5	2" or 2 1/2"	19	42.5	50.1	52.1	59.5	47.5	54.8	2.5	0.30-0.80	76	80.0	88.0	1.369	L80
63	M63 x 1.5	2 1/2"	19	49.5	56.0	58.4	65.8	53.8	61.2	2.5	0.30-0.80	76	80.0	88.0	1.123	L80
75S	M75 x 1.5	2 1/2" or 3"	19	54.5	62.0	64.8	72.2	60.2	68.0	2.5	0.30-1.00	82	90.0	99.0	1.660	L90
75	M75 x 1.5	3"	19	60.5	68.0	71.1	78.0	66.5	73.4	2.5	0.30-1.00	82	90.0	99.0	1.310	L90
80	M80 x 2	3" or 3 1/2"	25	62.2	72.0	77.0	84.0	71.9	79.4	3.15	0.45-1.00	110	104.0	115.2	2.718	L104
80H	M80 x 2	3" or 3 1/2"	25	62.2	72.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.718	L104
85	M85 x 2	3" or 3 1/2"	25	69.0	78.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.326	L104
90	M90 x 2	3 1/2" or 4"	25	74.0	84.0	88.0	96.0	82.0	91.4	3.15	0.45-1.00	110	114.0	125.7	2.852	L114
90H	M90 x 2	3 1/2" or 4"	25	74.0	84.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	2.852	L114
100	M100 x 2	3 1/2" or 4"	25	82.0	90.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	2.496	L114

All dimensions in mm

Notes:
* Gland size does not necessarily equate to the entry thread size. Gland size 16 is also available with an M16 x 1.5 entry thread.
* The IP O-ring seal option is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system.
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* For gland size 20 the silicone inner seal has a minimum diameter of 11.0mm and NOT 6.7mm
* All gland kits supplied with silicone seals will include a PTFE IP washer in order to maintain the temperature range.

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Cable Gland Type C - (Single Compression for Armoured Cables) Ex e : Ex tD A21 : IP66

Part Numbers:

C	1	W	B	*	E	*
	3	X	S	IE		R
		Z				

"C" type single compression glands, certified Increased Safety Ex e are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Group II. The gland is suitable for cables that exhibit "cold flow" characteristics, whilst providing an IP66 environmental seal on the cable outer sheath and a detachable armour specific clamping system for wire (W), braid (X) or tape (Z) armoured cables. The "IE" version allows the gland to be used with HV cables where the fault load is greater than 10.4kA and options are available for use with LSOH cables and extreme temperature applications.

Compliance Standard: EN 60079-0, EN 60079-7, EN 60079-7, EN 61241-0, EN 61241-1
IEC 60079-0, IEC 60079-7, IEC 61241-0, IEC 61241-1 & IEC 60529

Certification:

ATEX	II 2 GD Ex e II / Ex tD A21
IECEx	Ex e II / Ex tD A21
GOST-R	Ex e IIU
CSA	Ex e II Class I Zone 1 Class I Division 2, Groups A, B, C & D Class II Division 2, Groups E, F & G Class III, Enclosure Types 3, 4 & 4X
NEPSI	Ex e II
INMETRO	BR - Ex e II / Ex tD A21
ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
LLOYD'S	Enclosure Systems (Part 1B)
RMRS	Part XI of Rules for sea-going ships (ed.2008)

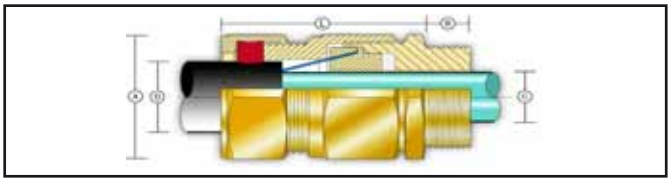
Certificate No.:

ATEX	SIRA01ATEX1271X
IECEx	SIR 07.0097X
GOST-R	POCC GB.ГБ06.B00853
CSA	CSA 1356011
NEPSI	GYJ06187X
INMETRO	NCC 5878/09 X
ABS	09-LD463991-PDA
LLOYD'S	10/00056
RMRS	09.00784.011

IP Rating: IP66 & NEMA 4X

Operating Temperature: Neoprene Seals -20ºC to +85ºC
Silicone Seals -60ºC to +180ºC

Materials: Brass or Stainless Steel
Plating: Nickel - Zinc



Example Part Numbering (See below for details) C1WBECK1/NP/20/050NPT

	C	Type of gland featuring armour specific clamping
	1	Neoprene Seals (1) - Silicone (3)
	W	SWA (W) / SWB (X) or STA (Z)
	B	Brass (B) / Stainless Steel (S)
	IE	Integral Earth (see page TR-3)
	E	Ex e Certification
Options	R	Reduced Bore Seal
	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut, Earth Tag & Nylon (K) or Fibre (V) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP) - Zinc Plated (ZP)
	20	Gland shell size
	050NPT	1/2"NPT Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washer	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Metric Thread Shroud Size
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]					Across Flats	Across Corners [A]	Weight Kgs	
	Metric	NPT		Min	Max	Min	Max	Min	Max	W	XZ					
16	M20 x 1.5	1/2" or 3/4"	16	-	8.4	8.4	13.5	4.9	10.0	0.9	0.15-0.35	60	24.0	26.5	0.139	L24
20S	M20 x 1.5	1/2" or 3/4"	16	-	11.7	12.9	16.0	9.4	12.5	0.90-1.25	0.15-0.35	60	24.0	26.5	0.125	L24
20	M20 x 1.5	1/2" or 3/4"	16	-	14.0	15.5	21.1	12.0	17.6	0.90-1.25	0.15-0.50	60	30.0	33.0	0.180	L30
25	M25 x 1.5	3/4" or 1"	16	-	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.15-0.50	60	37.6	41.4	0.252	L38
32	M32 x 1.5	1" or 1 1/4"	16	-	26.3	26.7	34.0	23.2	30.5	1.60-2.00	0.15-0.55	65	46.0	50.6	0.408	L46
40	M40 x 1.5	1 1/4" or 1 1/2"	16	-	32.2	33.0	40.6	28.6	36.2	1.60-2.00	0.20-0.60	75	55.0	60.5	0.642	L55
50S	M50 x 1.5	1 1/2" or 2"	16	-	38.2	39.4	46.7	34.8	42.4	2.00-2.50	0.20-0.60	75	65.0	71.5	0.947	L65
50	M50 x 1.5	2"	16	-	44.1	45.7	53.2	41.1	48.5	2.00-2.50	0.30-0.80	75	65.0	71.5	0.716	L65
63S	M63 x 1.5	2" or 2 1/2"	19	-	50.1	52.1	59.5	47.5	54.8	2.5	0.30-0.80	75	80.0	88.0	1.377	L80
63	M63 x 1.5	2 1/2"	19	-	56.0	58.4	65.8	53.8	61.2	2.5	0.30-0.80	75	80.0	88.0	1.073	L80
75S	M75 x 1.5	2 1/2" or 3"	19	-	62.0	64.8	72.2	60.2	68.0	2.5	0.30-1.00	85	90.0	99.0	1.661	L90
75	M75 x 1.5	3"	19	-	68.0	71.1	78.0	66.5	73.4	2.5	0.30-1.00	85	90.0	99.0	1.322	L90
80	M80 x 2	3" or 3 1/2"	25	-	72.0	77.0	84.0	71.9	79.4	3.15	0.45-1.00	110	104.0	115.2	2.874	L104
80H	M80 x 2	3" or 3 1/2"	25	-	72.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.874	L104
85	M85 x 2	3" or 3 1/2"	25	-	78.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.515	L104
90	M90 x 2	3 1/2" or 4"	25	-	84.0	88.0	96.0	82.0	91.4	3.15	0.45-1.00	110	114.0	125.7	3.117	L114
90H	M90 x 2	3 1/2" or 4"	25	-	84.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	3.117	L114
100	M100 x 2	3 1/2" or 4"	25	-	90.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	2.707	L114

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size. Gland size 16 is also available with an M16 x 1.5 entry thread.
* The IP O-ring seal option is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system.
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* All gland kits supplied with silicone seals will include a PTFE IP washer in order to maintain the temperature range.

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Cable Gland Type A - (Single Compression for any Cable)

Ex d : Ex e : Ex nR : Ex tD A21 : IP66 : IP68

Part Numbers:

A	1	L	B	F
	2		S	
	3		A	
	4			

"A" type glands, certified Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC. Commonly referred to as "stuffing glands" they provide a controlled pull resistant environmental displacement seal on the cable outer sheath, minimising damage to cables that exhibit "cold flow" characteristics. The gland maintains IP66 & IP68 to 25 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP O-ring seal as standard on metric entry threads. Options are available for use with LSOH cables and extreme temperature applications.

Compliance Standard: EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 61241-0, EN 61241-1
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 61241-0, IEC 61241-1 & IEC 60529

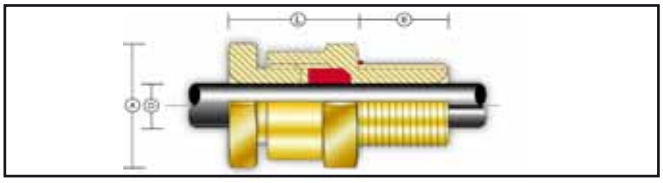
Certification:	ATEX	II 2 GD Ex d IIC / Ex e II / Ex tD A21 II 3 GD Ex nR II
	IECEx	Ex d IIC / Ex e II / Ex tD A21
	GOST-R	Ex d IICU / Ex e IIU
	CSA	Ex d IIC / Ex e II Class I Zone 1 Class I Division 2, Groups A, B, C & D Class II Division 2, Groups E, F & G Class III, Enclosure Types 3, 4 & 4X
	NEPSI	Ex d IIC / Ex e II
	INMETRO	BR - Ex d IIC / Ex e II / Ex nR II / Ex tD A21
	ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
	LLOYD'S	Enclosure Systems (Part 1B)
	RMRS	Part XI of Rules for sea-going ships (ed.2008)
Certificate No.	ATEX	SIRA 01ATEX1272X & SIRA 09ATEX1221X
	IECEx	SIR 07.0096X
	GOST-R	POCC GB.ГБ06.B00853
	CSA	CSA 1356011
	NEPSI	GYJ06186X
	INMETRO	NCC 5879/09 X
	ABS	09-LD463991-PDA
	LLOYD'S	10/00056
	RMRS	09.00784.011

IP Rating: IP66 & IP68 (25 metres - 30 minutes), NEMA 4X & DTS01 1991

Operating Temperature: Neoprene Seals -20ºC to +85ºC
Silicone Seals -60ºC to +180ºC

Materials: Brass, Stainless Steel or Aluminium

Plating: Nickel - Zinc



Example Part Numbering (See below for details) A2LBFCK1/NP/20/050NPT

	A	Type of gland featuring controlled displacement sealing
	2	Neoprene Seals (2) - Silicone (3) - Neoprene/Lead (1) - Silicone/Lead (4)
	L	Peppers Lightweight Design
	B	Brass (B) / Stainless Steel (S) / Aluminium (A)
	F	Multiple Certification
Options	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut & Nylon (K) or Fibre (V) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP) - Zinc Plated (ZP)
	20	Gland shell size
	050NPT	1/2"NPT Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washers	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Acceptance Details		Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)			Metric Thread Shroud Size
				Outer Sheath [D]			Across Flats	Across Corners [A]	Weight Kgs	
	Metric	NPT		Min	Max					
16	M20 x 1.5	1/2" or 3/4"	16	4.0	8.4	33	25.4	28.0	0.078	L24
20S	M20 x 1.5	1/2" or 3/4"	16	7.2	11.7	33	25.4	28.0	0.101	L24
20	M20 x 1.5	1/2" or 3/4"	16	9.4	14.0	33	30.0	33.0	0.127	L30
25	M25 x 1.5	3/4" or 1"	16	13.5	20.0	33	37.6	41.4	0.166	L38
32	M32 x 1.5	1" or 1 1/4"	16	19.5	26.3	33	46.0	50.6	0.244	L46
40	M40 x 1.5	1 1/4" or 1 1/2"	16	23.0	32.2	37	55.0	60.5	0.396	L55
50S	M50 x 1.5	1 1/2" or 2"	16	28.1	38.2	37	65.0	71.5	0.558	L65
50	M50 x 1.5	2"	16	33.1	44.1	37	65.0	71.5	0.438	L65
63S	M63 x 1.5	2" or 2 1/2"	19	39.2	50.1	37	80.0	88.0	0.832	L80
63	M63 x 1.5	2 1/2"	19	46.7	56.0	37	80.0	88.0	0.664	L80
75S	M75 x 1.5	2 1/2" or 3"	19	52.1	62.0	37	90.0	99.0	0.924	L90
75	M75 x 1.5	3"	19	58.0	68.0	37	90.0	99.0	0.714	L90
80	M80 x 2	3" or 3 1/2"	25	62.2	72.0	50	104.0	115.2	1.514	L104
85	M85 x 2	3" or 3 1/2"	25	69.0	78.0	50	104.0	115.2	1.332	L104
90	M90 x 2	3 1/2" or 4"	25	74.0	84.0	50	114.0	125.7	1.622	L114
100	M100 x 2	3 1/2" or 4"	25	82.0	90.0	50	114.0	125.7	1.523	L114

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size. Gland size 16 is also available with an M16 x 1.5 entry thread.
* The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
* Please ensure that the IP O-ring is not used in conjunction with a flat IP washer.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system..
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* All gland kits supplied with silicone seals will include a PTFE IP washer in order to maintain the temperature range.

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Cable Gland Type A*LDS - (Double Compression for any Cable) Ex d : Ex e : Ex nR : Ex tD A21 : IP66 : IP68

Part Numbers:

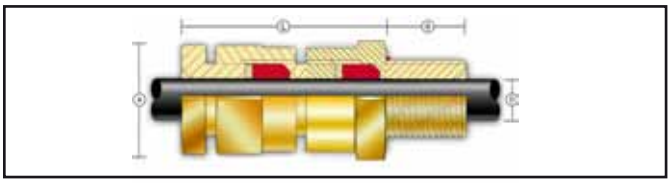
A	1	L	DS	B	F
	2			S	
	3			A	
	4				

"A*LDS" type glands, certified Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC. Commonly referred to as "double seal stuffing glands" they provide two controlled pull resistant environmental displacement seals on the cable outer sheath, minimising damage to cables that exhibit "cold flow" characteristics. The gland maintains IP66 & IP68 to 25 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP O-ring seal as standard on metric entry threads. Options are available for use with LSOH cables and extreme temperature applications.

Compliance: EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 61241-0, EN 61241-1
Standard: IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 61241-0, IEC 61241-1 & IEC 60529

Certification:	ATEX	II 2 GD Ex d IIC / Ex e II / Ex tD A21 II 3 GD Ex nR II
	IECEx	Ex d IIC / Ex e II / Ex tD A21
	GOST-R	Ex d IICU / Ex e IIU
	CSA	Ex d IIC / Ex e II Class I Zone 1 Class I Division 2, Groups A, B, C & D Class II Division 2, Groups E, F & G Class III, Enclosure Types 3, 4 & 4X
	NEPSI	Ex d IIC / Ex e II
	INMETRO	BR - Ex d IIC / Ex e II / Ex nR II / Ex tD A21
	ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
	LLOYD'S	Enclosure Systems (Part 1B)
	RMRS	Part XI of Rules for sea-going ships (ed.2008)
Certificate No.	ATEX	SIRA 01ATEX1272X & SIRA 09ATEX1221X
	IECEx	SIR 07.0096X
	GOST-R	POCC GB.ГБ06.B00853
	CSA	CSA 1356011
	NEPSI	GYJ06186X
	INMETRO	NCC 5879/09 X
	ABS	09-LD463991-PDA
	LLOYD'S	10/00056
	RMRS	09.00784.011

IP Rating: IP66 & IP68 (25 metres - 30 minutes), NEMA 4X & DTS01 1991
Operating Temperature: Neoprene Seals -20ºC to +85ºC; Silicone Seals -60ºC to +180ºC
Materials: Brass, Stainless Steel or Aluminium
Plating: Nickel - Zinc



Example Part Numbering (See below for details) A2LDSBFCK1/NP/20/050NPT

	A	Type of gland featuring controlled displacement sealing
	2	Neoprene Seals (2) - Silicone (3) - Neoprene/Lead (1) - Silicone/Lead (4)
	L	Peppers Lightweight Design
	DS	Double Sealing
	B	Brass (B) / Stainless Steel (S) / Aluminium (A)
	F	Multiple Certification
Options	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut & Nylon (K) or Fibre (V) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP) - Zinc Plated (ZP)
	20	Gland shell size
	050NPT	1/2"NPT Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washers	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Acceptance Details		Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)			Metric Thread Shroud Size
				Outer Sheath [D]			Across Flats	Across Corners [A]	Weight Kgs	
	Metric	NPT		Min	Max					
16	M20 x 1.5	1/2" or 3/4"	16	4.0	8.4	48	25.4	28.0	0.133	L24
20S	M20 x 1.5	1/2" or 3/4"	16	7.2	11.7	48	25.4	28.0	0.209	L24
20	M20 x 1.5	1/2" or 3/4"	16	9.4	14.0	62	30.0	33.0	0.275	L30
25	M25 x 1.5	3/4" or 1"	16	13.5	20.0	62	37.6	41.4	0.408	L38
32	M32 x 1.5	1" or 1 1/4"	16	19.5	26.3	62	46.0	50.6	0.408	L46
40	M40 x 1.5	1 1/4" or 1 1/2"	16	23.0	32.2	68	55.0	60.5	0.666	L55
50S	M50 x 1.5	1 1/2" or 2"	16	28.1	38.2	68	65.0	71.5	0.896	L65
50	M50 x 1.5	2"	16	33.1	44.1	74	65.0	71.5	0.736	L65
63S	M63 x 1.5	2" or 2 1/2"	19	39.2	50.1	74	80.0	88.0	1.330	L80
63	M63 x 1.5	2 1/2"	19	46.7	56.0	74	80.0	88.0	1.114	L80
75S	M75 x 1.5	2 1/2" or 3"	19	52.1	62.0	74	90.0	99.0	1.493	L90
75	M75 x 1.5	3"	19	58.0	68.0	74	90.0	99.0	1.218	L90
80	M80 x 2	3" or 3 1/2"	25	62.2	72.0	100	104.0	115.2	2.322	L104
85	M85 x 2	3" or 3 1/2"	25	69.0	78.0	100	104.0	115.2	2.107	L104
90	M90 x 2	3 1/2" or 4"	25	74.0	84.0	100	114.0	125.7	2.539	L114
100	M100 x 2	3 1/2" or 4"	25	82.0	90.0	100	114.0	125.7	2.211	L114

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size. Gland size 16 is also available with an M16 x 1.5 entry thread.
* The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
* Please ensure that the IP O-ring is not used in conjunction with a flat IP washer.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* All gland kits supplied with silicone seals will include a PTFE IP washer in order to maintain the temperature range.

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Cable Gland Type A*LC - (Single Compression Conduit Gland)

Ex d : Ex e : Ex nR : Ex tD A21 : IP66 : IP68

Part Numbers:

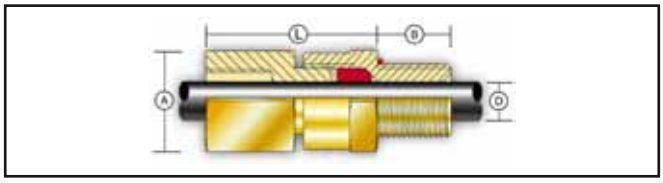
A	2	L	CF	B	F
	3		CM	S	
				A	

"A*LCF" type glands, certified Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC. They provide a controlled pull resistant environmental displacement seal on the cable outer sheath, minimising damage to cables that exhibit "cold flow" characteristics. The gland maintains IP66 & IP68 to 25 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP O-ring seal as standard on metric entry threads. The gland features a female conduit connection thread as standard with an option for a male connection thread.

Compliance Standard: EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 61241-0, EN 61241-1
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 61241-0, IEC 61241-1 & IEC 60529

Certification:	ATEX	II 2 GD Ex d IIC / Ex e II / Ex tD A21 II 3 GD Ex nR II
	IECEx	Ex d IIC / Ex e II / Ex tD A21
	GOST-R	Ex d IICU / Ex e IIU
	CSA	Ex d IIC / Ex e II Class I Zone 1 Class I Division 2, Groups A, B, C & D Class II Division 2, Groups E, F & G Class III, Enclosure Types 3, 4 & 4X
	NEPSI	Ex d IIC / Ex e II
	INMETRO	BR - Ex d IIC / Ex e II / Ex nR II / Ex tD A21
	ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
	LLOYD'S	Enclosure Systems (Part 1B)
	RMRS	Part XI of Rules for sea-going ships (ed.2008)
Certificate No.	ATEX	SIRA 01ATEX1272X & SIRA 09ATEX1221X
	IECEx	SIR 07.0096X
	GOST-R	POCC GB.ГБ06.B00853
	CSA	CSA 1356011
	NEPSI	GYJ06186X
	INMETRO	NCC 5879/09 X
	ABS	09-LD463991-PDA
	LLOYD'S	10/00056
	RMRS	09.00784.011

IP Rating: IP66 & IP68 (25 metres - 30 minutes), NEMA 4X & DTS01 1991
Operating Temperature: Neoprene Seals -20ºC to +85ºC
Silicone Seals -60ºC to +180ºC
Materials: Brass, Stainless Steel or Aluminium
Plating: Nickel - Zinc



Example Part Numbering (See below for details) A2LCFBF050NPT/NP/20/M20

A	Type of gland featuring controlled displacement sealing
2	Neoprene Seals (2) - Silicone (3)
L	Peppers Lightweight Design
CF	Female Conduit Connection Thread (CF) / Male Thread Option (CM)
B	Brass (B) / Stainless Steel (S) / Aluminium (A)
F	Multiple Certification
050NPT	1/2"NPT Female Conduit Connection Thread
NP	Nickel Plated (NP) - Zinc Plated (ZP)
20	Gland shell size
M20	M20 x 1.5 Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washers	Stainless Steel (ACSSW)

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Conduit Connection Thread		Cable Acceptance Outer Sheath [D]		Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions) Across Flats	Across Corners [A]	Weight Kgs (Metric)	Metric Thread Shroud Size
	Metric	NPT		Metric	NPT	Min	Max					
16	M20 x 1.5	1/2" or 3/4"	16	M20 x 1.5	1/2" or 3/4"	4.0	8.4	50	25.4	28.0	0.181	n/a
20S	M20 x 1.5	1/2" or 3/4"	16	M20 x 1.5	1/2" or 3/4"	7.2	11.7	55	25.4	28.0	0.282	n/a
20	M20 x 1.5	1/2" or 3/4"	16	M20 x 1.5	1/2" or 3/4"	9.4	14.0	55	30.0	33.0	0.390	n/a
25	M25 x 1.5	3/4" or 1"	16	M25 x 1.5	3/4" or 1"	13.5	20.0	55	37.6	41.4	0.570	n/a
32	M32 x 1.5	1" or 1 1/4"	16	M32 x 1.5	1" or 1 1/4"	19.5	26.3	55	46.0	50.6	0.570	n/a
40	M40 x 1.5	1 1/4" or 1 1/2"	16	M40 x 1.5	1 1/4" or 1 1/2"	23.0	32.2	55	55.0	60.5	0.876	n/a
50S	M50 x 1.5	1 1/2" or 2"	16	M50 x 1.5	1 1/2" or 2"	28.1	38.2	58	65.0	71.5	1.196	n/a
50	M50 x 1.5	2"	16	M50 x 1.5	2"	33.1	44.1	58	65.0	71.5	1.002	n/a
63S	M63 x 1.5	2" or 2 1/2"	19	M63 x 1.5	2" or 2 1/2"	39.2	50.1	58	80.0	88.0	1.822	n/a
63	M63 x 1.5	2 1/2"	19	M63 x 1.5	2 1/2"	46.7	56.0	58	80.0	88.0	1.556	n/a
75S	M75 x 1.5	2 1/2" or 3"	19	M75 x 1.5	2 1/2" or 3"	52.1	62.0	58	90.0	99.0	1.924	n/a
75	M75 x 1.5	3"	19	M75 x 1.5	3"	58.0	68.0	58	90.0	99.0	1.786	n/a
80	M80 x 2	3" or 3 1/2"	25	M80 x 2	3" or 3 1/2"	62.2	72.0	75	104.0	115.2	3.013	n/a
85	M85 x 2	3" or 3 1/2"	25	M85 x 2	3" or 3 1/2"	69.0	78.0	75	104.0	115.2	2.865	n/a
90	M90 x 2	3 1/2" or 4"	25	M90 x 2	3 1/2" or 4"	74.0	84.0	75	114.0	125.7	3.000	n/a
100	M100 x 2	3 1/2" or 4"	25	M100 x 2	3 1/2" or 4"	82.0	90.0	75	114.0	125.7	2.657	n/a

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size. Gland size 16 is also available with an M16 x 1.5 entry thread.
* The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
* Please ensure that the IP O-ring is not used in conjunction with a flat IP washer.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system.
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.

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Cable Gland Type *8 - (for Armoured & Unarmoured Flat Cables) Ex d : Ex e : Ex nR : Ex tD A21 : IP66 : IP68

Part Numbers (Armoured):

E	8	X	B	F
			S	

Part Numbers (Unarmoured):

A	8	B	F
		S	

E8 & A8 type glands, certified Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Groups IIA, IIB and IIC. Developed for flat cables they provide controlled Ex d, IP sealing and have been tested to IP66 and IP68 to 25 metres. The A8 version is designed to accommodate unarmoured cables whilst the E8 features an environmental seal on the outer sheath and a detachable armour specific clamping system.

Compliance Standard: EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 61241-0, EN 61241-1
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 61241-0, IEC 61241-1 & IEC 60529

Certification:

ATEX	II 2 GD Ex d IIC / Ex e II / Ex tD A21 II 3 G Ex nR II
IECEx	Ex d IIC / Ex e II / Ex tD A21
GOST-R	Ex d IICU / Ex e IIU
NEPSI	Ex d IIC / Ex e II
INMETRO	BR - Ex d IIC / Ex e II / Ex nR II / Ex tD A21
ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
LLOYD'S	Enclosure Systems (Part 1B)
RMRS	Part XI of Rules for sea-going ships (ed.2008)

Certificate No.

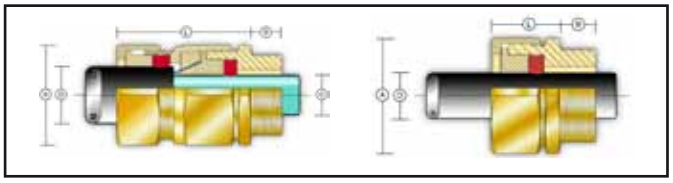
ATEX	SIRA 01ATEX1270X & SIRA 09ATEX1221X
IECEx	SIR 05.0020X
GOST-R	РОСС GB.ГБ06.B00853
NEPSI	GYJ06185X
INMETRO	NCC 5880/09 X
ABS	09-LD463991-PDA
LLOYD'S	10/00056
RMRS	09.00784.011

IP Rating: IP66 & IP68 (25 metres - 30 minutes)

Operating Temperature: Silicone Seals -60ºC to +180ºC

Materials: Brass, Stainless Steel

Plating: Nickel - Zinc



Example Part Numbering (See below for details)
E8XBF/20R/M20
A8BF/20/M20

E	Armoured Cables (E) - Unarmoured Cables (A)
8	Silicone for flat cables (8)
X	Braid Armour (X)
B	Brass (B) / Stainless Steel (S)
F	Multiple Certification
NP	Nickel Plated (NP) - Zinc Plated (ZP)
20R	Gland shell size
M20	M20 x 1.5 Entry Thread

Optional Accessories

Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
Serrated Washers	Stainless Steel (ACSSW)

CABLE GLAND SELECTION TABLE - E8XBF for Armoured Cables

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Inner Sheath [C]				Cable Outer Sheath [D]				Armour Acceptance Range	Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)			Metric Thread Shroud Size
				Width		Thickness		Width		Thickness				Across Flats	Across Corners [A]	Weight Kgs (Metric)	
	Metric	NPT		Min	Max	Min	Max	Min	Max	Min	Max						
20S	M20 x 1.5	1/2" or 3/4"	16	6.3	11.7	4.0	7.0	7.9	11.7	4.5	7.0	0.10-0.30	58	30.0	33.0	0.196	L30
20R	M20 x 1.5	1/2" or 3/4"	16	8.1	13.5	5.8	6.2	10.7	16.1	5.4	8.3	0.10-0.30	58	30.0	33.0	0.196	L30
20	M20 x 1.5	1/2" or 3/4"	16	10.3	13.5	5.6	9.0	11.0	13.5	4.5	9.0	0.10-0.30	58	30.0	33.0	0.207	L30

All dimensions in mm

CABLE GLAND SELECTION TABLE - A8BF for Unarmoured Cables

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Outer Sheath [D]				Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)			Metric Thread Shroud Size
				Width		Thickness			Across Flats	Across Corners [A]	Weight Kgs (Metric)	
	Metric	NPT		Min	Max	Min	Max					
20S	M20 x 1.5	1/2" or 3/4"	16	6.3	11.7	4.0	7.0	33	30.0	33.0	0.104	L30
20R	M20 x 1.5	1/2" or 3/4"	16	8.1	13.5	5.8	6.2	33	30.0	33.0	0.104	L30
20	M20 x 1.5	1/2" or 3/4"	16	10.3	13.5	5.6	9.0	33	30.0	33.0	0.103	L30

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system.
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.

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Cable Gland Type PF - (Single Compression Nylon Gland)

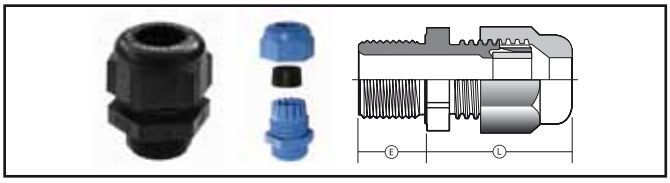
Ex e : Ex tD A21 : IP68

Peppers "PF" type glands, certified Increased Safety Ex e are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Group II. They are manufactured from polyamide and provide a controlled pull resistant displacement seal on the cable outer sheath providing both Ex e & IP protection. The gland has been tested to IP66 & IP68 to 50 metres and is fully compliant with the Ex e standard with no reduced impact restriction. Available in black or blue, in a range of thread forms complete with an IP flat washer on metric entry threads.

Compliance Standard: EN 60079-0, EN 60079-7, EN 61241-0, EN 61241-1
IEC 60079-0, IEC 60079-7, IEC 61241-0, IEC 61241-1 & IEC 60529

Certification:	ATEX	II 2 GD Ex e II / Ex tD A21
	IECEx	Ex e II / Ex tD A21
	GOST-R	Ex e IIU
	UL	ANSI/UL514B
	CSA	CAN/CSA C22.2
	VDE	DIN EN 50262 / VDE 0619
	LLOYD'S	Enclosure Systems (Part 1B)
Certificate No.	ATEX	LCIE 07ATEX6082X/02
	IECEx	LCI 10.0008X
	GOST	POCC FR M14.B00153
	UL	E306665
	CSA	E306665
	VDE	131210
	LLOYD'S	10/00056

Options: Colour - Black / Blue
Industrial Non-Ex version - Omit "E" from part number



Operating Temperature:	M16-M63	-35°C to +95°C
	M12	-20°C to +80°C

Materials: Polyamide

IP Rating: IP66 & IP68 (50 metres - 30 minutes)

Impact Resistance: 7Nm

Optional Accessories: Nylon Locknut / IP Washers

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size	Nominal Protrusion [L]	Cable Sealing Range		ISO Thread Length Standard [E]	Part Number (Standard Thread)		ISO Thread Length Long [E]	Part Number (Long Thread)		Dimensions/Weight		
			Min	Max		Blue	Black		Blue	Black	Across Flats	Across Corners	Weight Kgs
12	M12 x 1.5	23.0	4.0	6.5	8.0	PF7421200E	PF8021200E	15.0	PF7431200E	PF8031200E	15.0	16.5	0.003
16	M16 x 1.5	28.0	5.0	8.0	10.0	PF7421650E	PF8021650E	15.0	PF7431650E	PF8031650E	19.0	22.0	0.009
16	M16 x 1.5	28.0	5.0	10.0	10.0	PF7421600E	PF8021600E	15.0	PF7431600E	PF8031600E	22.0	24.5	0.009
20	M20 x 1.5	28.0	7.0	12.0	10.0	PF7422050E	PF8022050E	15.0	PF7432050E	PF8032050E	24.0	28.0	0.010
20	M20 x 1.5	28.0	10.0	14.0	10.0	PF7422000E	PF8022000E	15.0	PF7432000E	PF8032000E	27.0	30.3	0.010
25	M25 x 1.5	36.0	10.0	14.0	10.0	PF7422550E	PF8022550E	15.0	PF7432550E	PF8032550E	33.0	37.0	0.021
25	M25 x 1.5	36.0	12.0	18.0	10.0	PF7422500E	PF8022500E	15.0	PF7432500E	PF8032500E	33.0	37.0	0.021
32	M32 x 1.5	42.0	16.0	25.0	10.0	PF7423200E	PF8023200E	15.0	PF7433200E	PF8033200E	42.0	47.0	0.038
40	M40 x 1.5	52.5	22.0	32.0	10.0	PF7424000E	PF8024000E	16.0	PF7434000E	PF8034000E	53.0	59.8	0.078
50	M50 x 1.5	54.5	28.0	38.5	12.0	PF7425000E	PF8025000E	16.0	PF7435000E	PF8035000E	60.0	67.6	0.088
63	M63 x 1.5	55.5	40.0	48.0	12.0	PF7426300E	PF8026300E	16.0	PF7436300E	PF8036300E	70.0	78.3	0.128

All dimensions in mm

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size	Nominal Protrusion Length [L]	Cable Sealing Range		Thread Length	Part Number		Dimensions/Weight		
			Min	Max		Blue	Black	Across Flats	Across Corners	Weight Kgs
16	3/8" NPT	27.0	5.0	8.0	11	PF7440800E	PF8040800E	19.0	22.0	0.008
20	1/2" NPT	27.0	7.0	12.0	14	PF7441200E	PF8041200E	24.0	26.8	0.010
25	3/4" NPT	35.0	12.0	18.0	15	PF7442000E	PF8042000E	33.0	37.0	0.021
32	1" NPT	41.0	16.0	25.0	18	PF7442800E	PF8042800E	42.0	47.0	0.038

All dimensions in mm

Notes:

* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* If used in a threaded entry, NPT versions may protrude more than "L" length due to engagement of tapered threads.
* Industrial Non-Ex versions are not supplied with IP thread sealing washer.
* Industrial Non-Ex versions are only available in Black.

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Cable Gland Type CR-C (featuring "CROCLOCK®") — Ex d : Ex e : Ex nR : Ex ta : IP66 : IP68

Part Numbers:

C	R	C	*	B	*
			2	S	R

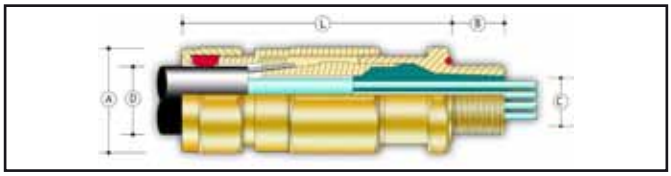
"CR-C" type glands, certified Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22, Group I Mining, Gas Groups IIA, IIB, IIC and Dust Groups IIIA, IIIB, IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex d & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics and an environmental seal on the outer sheath. The unique features include, "CROCLOCK®", the non reversible multi clamping system for wire (W), braid (X) and tape (Z) armoured cables and Peppers T-1000, the sealing compound that enables a quick and easy installation. The innovative barrier chamber provides a cable acceptance that is on average 17% greater than other designs. The gland maintains IP66 & IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP O-ring seal as standard on metric entry threads and options are available for use with lead sheath.

Compliance Standard: EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529

Certification:		
	ATEX	I M2 II 2GD Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da II 3GD Ex nR IIC Gc
	IECEx	Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da / Ex nR IIC Gc
	GOST-R	Ex d I & IICU / Ex e IIU
	CSA	Ex d I & IIC Class I Zone 1 AEx d IIC / AEx e II Class I Division 2, Groups A, B, C & D Class II Division 2, Groups E, F & G Class III, Enclosure Types 3, 4 & 4X
	NEPSI	Ex d IIC
	INMETRO	BR - Exd IIC / Ex nR II / Ex tD A21
	ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
	LLOYD'S	Enclosure Systems (Part 1B)
	RMRS	Part XI of Rules for sea-going ships (ed.2008)

Certificate No.		
	ATEX	SIRA 03ATEX1479X & SIRA 09ATEX4124X
	IECEx	SIR 07.0098X
	GOST-R	РОСС GB.ГБ06.B00853
	CSA	CSA 1356011
	NEPSI	GYJ06188X
	INMETRO	NCC 5881/09 X
	ABS	09-LD463991A-PDA
	LLOYD'S	10/00056
	RMRS	09.00784.011

IP Rating: IP66 & IP68 (100 metres - 7 Days), NEMA 4X & DTS01 1991
Temperature: -60°C to +135°C
Materials: Brass or Stainless Steel
Plating: Nickel - Zinc
Compound: Peppers T-1000 Sealing Compound



Example Part Numbering (See below for details) — CR-CBCK1/NP/20/M20

	CR-C	Type of gland featuring "CROCLOCK®", single orientation clamping, Compound (Barrier) Inner Seal & Silicone Elastomeric Outer Seal
	2	For Lead Sheath Cables
	B	Brass (B) / Stainless Steel (S)
Options	R	Reduced Bore Seal
	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut, Earth Tag & Nylon (K) or Fibre (V) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP) - Zinc Plated (ZP)
	20	Gland shell size
	M20	M20 Entry Thread

Optional Accessories		
	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washers	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

Curing Time: @ 21 °C
Conductor termination can be effected after 1 hour
The equipment can be energised after 4 hours
Compound chamber can be fully inspected after 4 hours

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Acceptance Details							Armour Acceptance Range	Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Metric Thread Shroud Size
				Cable Inner Sheath [C]			Cable Outer Sheath [D]									
							Standard		Reduced							
	Metric	NPT		Number of Cores	Max Ø Over Cores	Max Inner Sheath	Min	Max	Min	Max			Across Flats	Across Corners [A]	Weight Kgs	
16	M20 x 1.5	1/2" or 3/4"	16	15	10.4	11.7	9.0	13.5	6.7	10.3	0.15-1.25	79	25.4	28.0	0.177	EL24
20S	M20 x 1.5	1/2" or 3/4"	16	35	10.4	11.7	12.9	16.0	9.4	12.5	0.15-1.25	79	25.4	28.0	0.166	EL24
20	M20 x 1.5	1/2" or 3/4"	16	40	12.5	14.0	15.5	21.1	12.0	17.6	0.15-1.25	79	30.0	33.0	0.245	EL30
25	M25 x 1.5	3/4" or 1"	16	60	17.8	20.0	20.3	27.4	16.8	23.9	0.15-1.60	89	37.6	41.4	0.402	EL38
32	M32 x 1.5	1" or 1 1/4"	16	80	23.5	26.3	26.7	34.0	23.2	30.5	0.15-2.00	110	46.0	50.6	0.738	EL46
40	M40 x 1.5	1 1/4" or 1 1/2"	16	130	28.8	32.2	33.0	40.6	28.6	36.2	0.20-2.00	110	55.0	60.5	1.079	EL55
50S	M50 x 1.5	1 1/2" or 2"	16	200	34.2	38.2	39.4	46.7	34.8	42.4	0.20-2.50	125	65.0	71.5	1.455	EL65
50	M50 x 1.5	2"	16	400	39.4	44.1	45.7	53.2	41.1	48.5	0.20-2.50	125	65.0	71.5	1.366	EL65
63S	M63 x 1.5	2" or 2 1/2"	19	400	44.8	50.1	52.1	59.5	47.5	54.8	0.30-2.50	125	80.0	88.0	2.157	EL80
63	M63 x 1.5	2 1/2"	19	425	50.0	56.0	58.4	65.8	53.8	61.2	0.30-2.50	125	80.0	88.0	2.035	EL80
75S	M75 x 1.5	2 1/2" or 3"	19	425	55.4	62.0	64.8	72.2	60.2	68.0	0.30-2.50	130	90.0	99.0	2.399	EL90
75	M75 x 1.5	3"	19	425	60.8	68.0	71.1	78.0	66.5	73.4	0.30-2.50	130	90.0	99.0	2.313	EL90
80	M80 x 2	3" or 3 1/2"	25	425	64.4	72.0	77.0	84.0	71.9	79.4	0.45-3.15	162	104.0	115.2	4.763	EL104
85	M85 x 2	3" or 3 1/2"	25	425	69.8	78.0	79.6	90.0	75.0	85.4	0.45-3.15	162	104.0	115.2	4.122	EL104
90	M90 x 2	3 1/2" or 4"	25	425	75.1	84.0	88.0	96.0	82.0	91.4	0.45-3.15	162	114.0	125.7	5.114	EL114
100	M100 x 2	3 1/2" or 4"	25	425	80.5	90.0	92.0	102.0	87.4	97.4	0.45-3.15	162	114.0	125.7	4.356	EL114

All dimensions in mm

Notes:
* Gland size does not necessarily equate to the entry thread size.
* The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
* Please ensure that the IP O-ring is not used in conjunction with a flat IP washer.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system.
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supply cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
* Gland kits can be supplied with a PTFE IP washer in order to maintain the temperature range if required.

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Cable Gland Type CR-X (Single Compression for Unarmoured Cables)

Ex d : Ex e : Ex nR : Ex ta : IP66 : IP68

Part Numbers:

C	R	X	B
			S

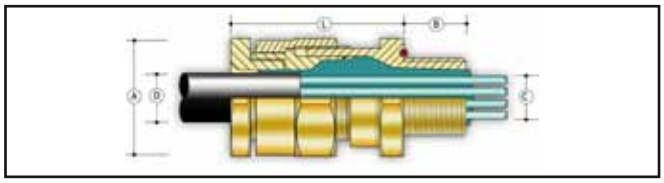
"CR-X" type glands, when used with any shape cable, are certified Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22, Group I Mining, Gas Groups IIA, IIB, IIC and Dust Groups IIIA, IIIB, IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex d & IP seal on the cable inner cores (or flying leads), eliminating damage to cables that exhibit "cold flow" characteristics. The unique features include, Peppers T-1000, the sealing compound that enables a quick and easy installation and an innovative barrier chamber that provides a cable acceptance that is on average 17% greater than other designs. The gland maintains IP66 & IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP O-ring seal as standard on metric entry threads.

Compliance Standard: EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529

Certification:	ATEX	I M2 II 2GD Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da II 3GD Ex nR IIC Gc
	IECEx	Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da / Ex nR IIC Gc
	GOST-R	Ex d I & IICU / Ex e IIU
	CSA	Ex d I & IIC Class I Zone 1 AEx d IIC / AEx e II Class I Division 2, Groups A, B, C & D Class II Division 2, Groups E, F & G Class III, Enclosure Types 3, 4 & 4X
	NEPSI	Ex d IIC
	INMETRO	BR - Ex d IIC / Ex nR II / Ex tD A21
	ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
	LLOYD'S	Enclosure Systems (Part 1B)
	RMRS	Part XI of Rules for sea-going ships (ed.2008)
Certificate No.	ATEX	SIRA 03ATEX1479X & SIRA 09ATEX4124X
	IECEx	SIR 07.0098X
	GOST-R	РОСС GB.ГБ06.B00853
	CSA	CSA 1356011
	NEPSI	GYJ06188X
	INMETRO	NCC 5881/09 X
	ABS	09-LD463991A-PDA
	LLOYD'S	10/00056
	RMRS	09.00784.011

IP Rating: IP66 & IP68 (100 metres - 7 Days), NEMA 4X & DTS01 1991

Temperature: -60°C to +135°C
Materials: Brass or Stainless Steel
Plating: Nickel - Zinc
Compound: Peppers T-1000 Sealing Compound



Example Part Numbering (See below for details) CR-XBCK1/NP/20/M20

	CR-X	Type of gland with Compound (Barrier) Seal
	B	Brass (B) / Stainless Steel (S)
Options	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut, & Nylon (K) or Fibre (V) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP) - Zinc Plated (ZP)
	20	Gland shell size
	M20	M20 Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washers	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

Curing Time: @ 21 °C
Conductor termination can be effected after 1 hour
The equipment can be energised after 4 hours
Compound chamber can be fully inspected after 4 hours

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Gland Seal Range - Cable Sheath & Cores			Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Metric Thread Shroud Size
	Metric	NPT		Number of Cores [C]	Max Ø Over Cores [C]	Max Outer Sheath [D]		Across Flats	Across Corners [A]	Weight Kgs	
20S	M20 x 1.5	1/2" or 3/4"	16	35	10.4	11.7	42	25.4	28.0	0.126	L24
20	M20 x 1.5	1/2" or 3/4"	16	40	12.5	14.0	44	30.0	33.0	0.167	L30
25	M25 x 1.5	3/4" or 1"	16	60	17.8	20.0	48	37.6	41.4	0.260	L38
32	M32 x 1.5	1" or 1 1/4"	16	80	23.5	26.3	53	46.0	50.6	0.396	L46
40	M40 x 1.5	1 1/4" or 1 1/2"	16	130	28.8	32.2	54	55.0	60.5	0.600	L55
50	M50 x 1.5	2"	16	400	39.4	44.1	54	65.0	71.5	0.710	L65
63	M63 x 1.5	2 1/2"	19	425	50.0	56.0	55	80.0	88.0	1.054	L80
75	M75 x 1.5	3"	19	425	60.8	68.0	60	90.0	99.0	1.318	L90
80	M80 x 2	3" or 3 1/2"	25	425	64.4	72.0	80	104.0	115.2	2.734	L104
85	M85 x 2	3" or 3 1/2"	25	425	69.8	78.0	80	104.0	115.2	2.282	L104
90	M90 x 2	3 1/2" or 4"	25	425	75.1	84.0	85	114.0	125.7	2.854	L114
100	M100 x 2	3 1/2" or 4"	25	425	80.5	90.0	85	114.0	125.7	2.453	L114

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size.
* The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
* Please ensure that the IP O-ring is not used in conjunction with a flat IP washer.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system.
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supply cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
* Gland kits can be supplied with a PTFE IP washer in order to maintain the temperature range if required.

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Cable Gland Type CR-U (Double Compression for Unarmoured Cables) Ex d : Ex e : Ex nR : Ex ta : IP66 : IP68

Part Numbers:

C	R	U	B
			S

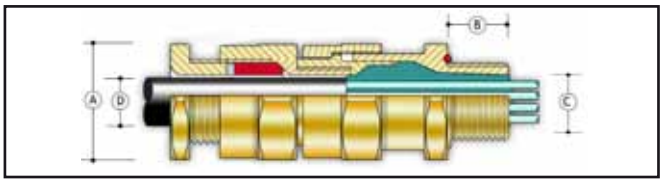
"CR-U" type glands, certified Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22, Group I Mining, Gas Groups IIA, IIB, IIC and Dust Groups IIIA, IIIB, IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex d & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics and an additional environmental seal on the outer sheath. The unique features include, Peppers T-1000, the sealing compound that enables a quick and easy installation and an innovative barrier chamber that provides a cable acceptance that is on average 17% greater than other designs. The gland maintains IP66 & IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP O-ring seal as standard on metric entry threads.

Compliance Standard: EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529

Certification:	ATEX	I M2 II 2GD Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da II 3GD Ex nR IIC Gc
	IECEx	Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da / Ex nR IIC Gc
	GOST-R	Ex d I & IICU / Ex e IIU
	CSA	Ex d I & IIC Class I Zone 1 CSA AEx d IIC / AEx e II Class I Division 2, Groups A, B, C & D Class II Division 2, Groups E, F & G Class III, Enclosure Types 3, 4 & 4X
	NEPSI	Ex d IIC
	INMETRO	BR - Ex d IIC / Ex nR II / Ex tD A21
	ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
	LLOYD'S	Enclosure Systems (Part 1B)
	RMRS	Part XI of Rules for sea-going ships (ed.2008)
Certificate No.	ATEX	SIRA 03ATEX1479X & SIRA 09ATEX4124X
	IECEx	SIR 07.0098X
	GOST-R	РОСС GB.ГБ06.B00853
	CSA	CSA 1356011
	NEPSI	GYJ06188X
	INMETRO	NCC 5881/09 X
	ABS	09-LD463991A-PDA
	LLOYD'S	10/00056
	RMRS	09.00784.011

IP Rating: IP66 & IP68 (100 metres - 7 Days), NEMA 4X & DTS01 1991

Temperature: -60°C to +135°C
Materials: Brass or Stainless Steel
Plating: Nickel - Zinc
Compound: Peppers T-1000 Sealing Compound



Example Part Numbering (See below for details) CR-UBCK1/NP/20/M20

	CR-U	Type of gland with Compound (Barrier) Inner Seal & Silicone Elastomeric Outer Seal
	B	Brass (B) / Stainless Steel (S)
Options	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut, & Nylon (K) or Fibre (V) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP) - Zinc Plated (ZP)
	20	Gland shell size
	M20	M20 Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washers	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

Curing Time: @ 21 °C
Conductor termination can be effected after 1 hour
The equipment can be energised after 4 hours
Compound chamber can be fully inspected after 4 hours

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Acceptance Details				Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Metric Thread Shroud Size
				Cable Inner Sheath [C]		Cable Outer Sheath [D]						
	Metric	NPT		Number of Cores	Max Ø Over Cores	Min	Max		Across Flats	Across Corners [A]	Weight Kgs	
16	M20 x 1.5	1/2" or 3/4"	16	15	10.4	3.4	8.4	73	25.4	28.0	0.192	EL24
20S	M20 x 1.5	1/2" or 3/4"	16	35	10.4	4.8	11.7	73	25.4	28.0	0.192	EL24
20	M20 x 1.5	1/2" or 3/4"	16	40	12.5	9.5	14.0	73	30.0	33.0	0.258	EL30
25	M25 x 1.5	3/4" or 1"	16	60	17.8	11.7	20.0	74	37.6	41.4	0.382	EL38
32	M32 x 1.5	1" or 1 1/4"	16	80	23.5	18.1	26.3	80	46.0	50.6	0.578	EL46
40	M40 x 1.5	1 1/4" or 1 1/2"	16	130	28.8	22.6	32.2	87	55.0	60.5	0.892	EL55
50S	M50 x 1.5	1 1/2" or 2"	16	200	34.2	28.2	38.2	87	65.0	71.5	1.172	EL65
50	M50 x 1.5	2"	16	400	39.4	33.1	44.1	87	65.0	71.5	1.036	EL65
63S	M63 x 1.5	2" or 2 1/2"	19	400	44.8	39.3	50.1	88	80.0	88.0	1.726	EL80
63	M63 x 1.5	2 1/2"	19	425	50.0	46.7	56.0	88	80.0	88.0	1.558	EL80
75S	M75 x 1.5	2 1/2" or 3"	19	425	55.4	52.3	62.0	97	90.0	99.0	1.882	EL90
75	M75 x 1.5	3"	19	425	60.8	58.0	68.0	97	90.0	99.0	1.672	EL90
80	M80 x 2	3" or 3 1/2"	25	425	64.4	61.9	72.0	123	104.0	115.2	3.826	EL104
85	M85 x 2	3" or 3 1/2"	25	425	69.8	69.1	78.0	123	104.0	115.2	3.238	EL104
90	M90 x 2	3 1/2" or 4"	25	425	75.1	74.1	84.0	123	114.0	125.7	4.063	EL114
100	M100 x 2	3 1/2" or 4"	25	425	80.5	81.8	90.0	123	114.0	125.7	3.492	EL114

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size.
* The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
* Please ensure that the IP O-ring is not used in conjunction with a flat IP washer.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system.
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supply cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
* Gland kits can be supplied with a PTFE IP washer in order to maintain the temperature range if required.

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Stanhope Road, Camberley, Surrey, GU15 3BT United Kingdom
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Email: **sales@peppers.co.uk** • Website: **www.cableglands.com**

Cable Gland Type CR-S (Single Compression for use with Conduit)

Ex d : Ex e : Ex nR : Ex ta : IP66 : IP68

Part Numbers:

C	R	S	B	F
			S	M

"CR-S" type glands, used in any orientation, are certified Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR, are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22, Group I Mining, Gas Groups IIA, IIB, IIC and Dust Groups IIIA, IIIB, IIIC. Commonly referred to as a "Conduit Stopper Box" they are suitable for use with conductors carried in conduit or as a line bushing for terminating flying leads. They provide a compound barrier Ex d & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics. The unique features include, Peppers T-1000, the sealing compound that enables a quick and easy installation and an innovative barrier chamber that provides a cable acceptance that is on average 17% greater than other designs. The gland maintains IP66 & IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP O-ring seal as standard on metric entry threads and options are available for use with LSOH cables. The gland is supplied with a female conduit connection thread as standard with an option for a male connection thread.

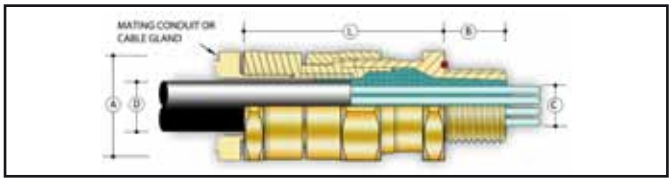
Compliance Standard: EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529

Certification:		
	ATEX	I M2 II 2GD Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da II 3GD Ex nR IIC Gc
	IECEx	Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da / Ex nR IIC Gc
	GOST-R	Ex d I & IICU / Ex e IIU
	CSA	Ex d I & IIC Class I Zone 1 Class I Division 2, Groups A, B, C & D Class II Division 2, Groups E, F & G Class III, Enclosure Types 3, 4 & 4X
	NEPSI	Ex d IIC
	INMETRO	BR - Ex d IIC / Ex nR II / Ex tD A21
	ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
	LLOYD'S	Enclosure Systems (Part 1B)
	RMRS	Part XI of Rules for sea-going ships (ed.2008)

Certificate No.		
	ATEX	SIRA 03ATEX1479X & SIRA 09ATEX4124X
	IECEx	SIR 07.0098X
	GOST-R	РОСС GB.ГБ06.B00853
	CSA	CSA 1356011
	NEPSI	GYJ06188X
	INMETRO	NCC 5881/09 X
	ABS	09-LD463991A-PDA
	LLOYD'S	10/00056
	RMRS	09.00784.011

IP Rating: IP66 & IP68 (100 metres - 7 Days), NEMA 4X & DTS01 1991

Temperature: -60°C to +135°C
Materials: Brass or Stainless Steel
Plating: Nickel - Zinc
Compound: Peppers T-1000 Sealing Compound



Example Part Numbering (See below for details) CR-SBF20/NP/M20/050NPT

CR-S	Type of gland with Compound (Barrier) Seal and male/female connection
B	Brass (B) / Stainless Steel (S)
F	Back End Configuration: Female (F) or Male (M)
20	Gland shell size
NP	Nickel Plated (NP) - Zinc Plated (ZP)
M20	Male Entry Thread - M20
050NPT	Connection Thread - 1/2"NPT

Optional Accessories		
	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washer	Stainless Steel (ACSSW)

Notes: A male back end option is available effectively enabling a certified male/male union (CR-SBM)

Curing Time: @ 21 °C
Conductor termination can be effected after 1 hour
The equipment can be energised after 4 hours
Compound chamber can be fully inspected after 4 hours

CABLE GLAND SELECTION TABLE

Gland Size	Male Entry Threads		Metric Entry Thread Length [B]	Female Entry Threads		Gland Seal Range - Cable Sheath & Cores			Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Metric Thread Shroud Size
	Metric	NPT		Metric	NPT	Number of Cores [C]	Max Ø Over Cores [C]	Max Outer Sheath [D]		Across Flats	Across Corners [A]	Weight Kgs	
20	M20 x 1.5	1/2" or 3/4"	16	M20 x 1.5	1/2" or 3/4"	40	12.5	14.0	57	30.0	33.0	0.324	n/a
25	M25 x 1.5	3/4" or 1"	16	M25 x 1.5	3/4" or 1"	60	17.8	20.0	63	37.6	41.4	0.513	n/a
32	M32 x 1.5	1" or 1 1/4"	16	M32 x 1.5	1" or 1 1/4"	80	23.5	26.3	67	46.0	50.6	0.726	n/a
40	M40 x 1.5	1 1/4" or 1 1/2"	16	M40 x 1.5	1 1/4" or 1 1/2"	130	28.8	32.2	68	55.0	60.5	1.088	n/a
50	M50 x 1.5	2"	16	M50 x 1.5	2"	400	39.4	44.1	68	65.0	71.5	1.328	n/a
63	M63 x 1.5	2 1/2"	19	M63 x 1.5	2 1/2"	425	50.0	56.0	72	80.0	88.0	2.022	n/a
75	M75 x 1.5	3"	19	M75 x 1.5	3"	425	60.8	68.0	78	90.0	99.0	2.314	n/a
80	M80 x 2	3" or 3 1/2"	25	M80 x 2	3" or 3 1/2"	425	64.4	72.0	103	104.0	115.2	4.262	n/a
85	M85 x 2	3" or 3 1/2"	25	M85 x 2	3" or 3 1/2"	425	69.8	78.0	103	104.0	115.2	3.748	n/a
90	M90 x 2	3 1/2" or 4"	25	M90 x 2	3 1/2" or 4"	425	75.1	84.0	104	114.0	125.7	4.791	n/a
100	M100 x 2	3 1/2" or 4"	25	M100 x 2	3 1/2" or 4"	425	80.5	90.0	104	114.0	125.7	4.103	n/a

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size. Dimension [L] relates to the female back end configuration only.
* The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
* Please ensure that the IP O-ring is not used in conjunction with a flat IP washer.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system.
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supply cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.

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Cable Gland Type UL-C (featuring "CROCLOCK®") — Class I Div 1 : Ex d : Ex e : Ex nR : Ex ta : IP66 : IP68

Part Numbers:

U	L	C	B	*
			S	R

"UL-C" type glands, certified Explosion Proof Class I Div 1, Gas Groups ABCD, Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22, Group I Mining, Gas Groups IIA, IIB, IIC and Dust Groups IIIA, IIIB, IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex d & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics and an environmental seal on the outer sheath. The gland is UL listed for Marine Shipboard Armoured, Jacketed or Non Jacketed cable. The unique features include, "CROCLOCK®", the non reversible multi clamping system for wire (W), braid (X) and tape (Z) armoured cables and Peppers T-1000, the sealing compound that enables a quick and easy installation. The gland is rated NEMA 4X, maintains IP66, IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot.

Compliance Standard: UL2225 & UL514B
EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529

Certification:		
	UL	Class I Division 1, Gas Groups ABCD
	ATEX	I M2 II 2GD Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da II 3GD Ex nR IIC Gc
	IECEx	Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da / Ex nR IIC Gc
	GOST-R	Ex d I & IICU / Ex e IIU
	ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
	LLOYD'S	Enclosure Systems (Part 1B)

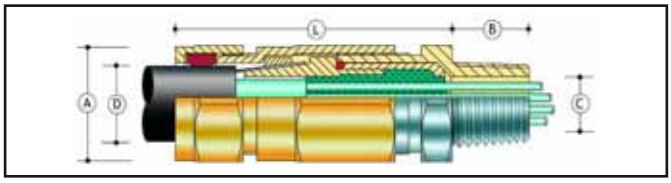
Certificate No.		
	UL	File No. E248936
	ATEX	SIRA 09ATEX1066X & SIRA 09ATEX4124X
	IECEx	SIR 09.0033X
	GOST-R	РОСС GB.ГБ06.B00853
	ABS	09-LD463991A-PDA
	LLOYD'S	10/00056

IP Rating: IP66 & IP68 (100 metres - 7 Days), NEMA 4X & DTS01 1991

Operating Temperature:		
	UL	-25°C to +85°C
	ATEX / IECEx	-60°C to +135°C

Materials: Brass or Stainless Steel
Plating: Nickel
Compound: Peppers T-1000 sealing compound

Curing Time: @ 21°C
Conductor termination can be effected after 1 hour
The equipment can be energised after 4 hours



Example Part Numbering (See below for details) — UL-CBCK1/NP/20/075NPT

	UL-C	Type of gland featuring "CROCLOCK®", single orientation clamping, Compound (Barrier) Inner Seal & Silicone Elastomeric Outer Seal
	B	Brass (B) / Stainless Steel (S)
Options	R	Reduced Bore Seal
	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut, Earth Tag & Nylon (K) or Fibre (V) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP)
	20	Gland shell size
	075NPT	3/4"NPT Entry Thread

Optional Accessories		
	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washers	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	NPT Thread Length [B]	Cable Acceptance Details							Armour Acceptance Range	Nominal Protrusion Length [L]	Dimensions/Weight (NPT Entry Thread Versions)			Metric Thread Shroud Size
					Cable Inner Sheath [C]			Cable Outer Sheath [D]									
					Number of Cores	Max Ø Over Cores	Max Inner Sheath	Standard		Reduced				Across Flats	Across Corners [A]	Weight (lbs)	
	Metric	NPT						Min	Max	Min	Max						
16	M20 x 1.5	1/2" or 3/4"	0.630	0.783	15	0.409	0.461	0.362	0.531	0.264	0.406	0.006-0.049	3.228	1.000	1.102	0.589	EL24
20S	M20 x 1.5	1/2" or 3/4"	0.630	0.783	35	0.409	0.461	0.508	0.630	0.370	0.492	0.006-0.049	3.228	1.000	1.102	0.606	EL24
20	M20 x 1.5	1/2" or 3/4"	0.630	0.783	40	0.492	0.551	0.610	0.831	0.563	0.693	0.006-0.049	3.268	1.180	1.299	0.721	EL30
25	M25 x 1.5	3/4" or 1"	0.630	0.795	60	0.701	0.787	0.799	1.079	0.689	0.941	0.006-0.063	3.661	1.480	1.630	1.290	EL38
32	M32 x 1.5	1" or 1 1/4"	0.630	0.985	80	0.925	1.035	1.051	1.339	0.984	1.201	0.006-0.079	4.331	1.810	1.992	2.083	EL46
40	M40 x 1.5	1 1/4" or 1 1/2"	0.630	1.008	130	1.134	1.268	1.299	1.598	1.154	1.425	0.008-0.079	4.528	2.170	2.382	2.900	EL55
50S	M50 x 1.5	2"	0.630	1.059	200	1.346	1.736	1.551	1.839	1.499	1.669	0.008-0.098	4.921	2.560	2.815	4.800	EL65
50	M50 x 1.5	2"	0.630	1.059	400	1.551	1.736	1.799	2.094	1.618	1.909	0.008-0.098	4.921	2.560	2.815	4.200	EL65
63S	M63 x 1.5	2 1/2"	0.748	1.571	400	1.764	2.205	2.051	2.343	1.846	2.157	0.012-0.098	4.921	3.150	3.465	7.740	EL80
63	M63 x 1.5	2 1/2"	0.748	1.571	425	1.969	2.205	2.299	2.591	2.118	2.409	0.012-0.098	4.921	3.150	3.465	6.810	EL80
75S	M75 x 1.5	3"	0.748	1.634	425	2.181	2.677	2.551	2.843	2.469	2.677	0.012-0.098	5.315	3.760	4.134	9.150	EL104
75	M75 x 1.5	3"	0.748	1.634	425	2.394	2.677	2.799	3.071	2.618	2.890	0.012-0.098	5.315	3.760	4.134	8.040	EL104

All dimensions in inches - [Convert to millimetres (mm) multiply by 25.4] - [Convert to kilograms (Kgs) multiply by 0.4536]

Notes:
* Gland size does not necessarily equate to the entry thread size.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system.
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supply cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
* Metric versions are supplied with an IP O-ring.
* All entry threads are nickel plated as standard.
* Gland kits can be supplied with a PTFE IP washer in order to maintain the temperature range if required.

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Cable Gland Type UL-U (for Unarmoured Cables)

Class I Div 2 : Ex d : Ex e : Ex nR : Ex ta : IP66 : IP68

Part Numbers:

U	L	U	B
			S

"UL-U" type glands, certified Explosion Proof Class I Div 2, Gas Groups ABCD, Flameproof Ex d, Increased Safety Ex e & Restricted Breathing Ex nR are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22, Group I Mining, Gas Groups IIA, IIB, IIC and Dust Groups IIIA, IIIB, IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex d & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics and an environmental seal on the outer sheath. The gland is UL listed for Marine Shipboard Unarmoured, Jacketed or Non Jacketed cable. The unique features include, Peppers T-1000, the sealing compound that enables a quick and easy installation. The gland is rated NEMA 4X, maintains IP66, IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot.

Compliance Standard: UL2225 & UL514B
EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529

Certification:

UL	Class I, Division 2, Gas Groups ABCD
ATEX	I M2 II 2GD Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da II 3GD Ex nR IIC Gc
IECEx	Ex d I Mb & IIC Gb / Ex e I Mb & IIC Gb / Ex ta IIIC Da / Ex nR IIC Gc
GOST-R	Ex d I & IICU / Ex e IIU
ABS	1-1-4/7.7, 4.8-3/1.7, 4-8-3/13 and 4-8-4/27.5 MODU Rules 4-3-3/9
LLOYD'S	Enclosure Systems (Part 1B)

Certificate No.:

UL	File No. E248936
ATEX	SIRA 09ATEX1066X & SIRA 09ATEX4124X
IECEx	SIR 09.0033X
GOST-R	РОСС GB.ГБ06.B00853
ABS	09-LD463991A-PDA
LLOYD'S	10/00056

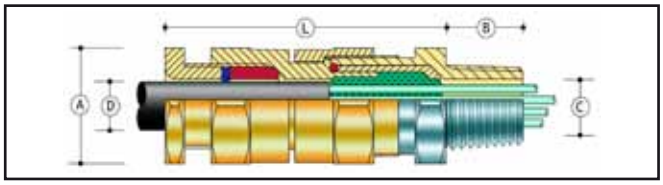
IP Rating: IP66 & IP68 (100 metres - 7 Days), NEMA 4X & DTS01 1991

Operating Temperature:

UL	-25°C to +85°C
ATEX / IECEx	-60°C to +135°C

Materials: Brass or Stainless Steel
Plating: Nickel
Compound: Peppers T-1000 sealing compound

Curing Time: @ 21°C
Conductor termination can be effected after 1 hour
The equipment can be energised after 4 hours–



Example Part Numbering (See below for details) UL-UBCK1/NP/20/075NPT

UL-U		Type of gland featuring a Compound (Barrier) Inner Seal & Silicone Elastomeric Outer Seal
B		Brass (B) / Stainless Steel (S)
Options	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut & Nylon (K) or Fibre (V) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP)
20		Gland shell size
075NPT		3/4"NPT Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washers	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	NPT Thread Length [B]	Cable Acceptance Details				Nominal Protrusion Length [L]	Dimensions/Weight (NPT Entry Thread Versions)			Shroud Size
					Cable Inner Sheath [C]		Cable Outer Sheath [D]						
	Metric	NPT			Number of Cores	Max Ø Over Cores	Min	Max		Across Flats	Across Corners [A]	Weight (lbs)	
16	M20 x 1.5	1/2" or 3/4"	0.630	0.783	15	0.409	0.134	0.331	2.717	1.000	1.102	0.602	EL24
20S	M20 x 1.5	1/2" or 3/4"	0.630	0.783	35	0.409	0.189	0.461	2.717	1.000	1.102	0.590	EL24
20	M20 x 1.5	1/2" or 3/4"	0.630	0.783	40	0.492	0.374	0.551	2.717	1.180	1.299	0.710	EL30
25	M25 x 1.5	3/4" or 1"	0.630	0.795	60	0.701	0.461	0.787	2.953	1.480	1.630	1.120	EL38
32	M32 x 1.5	1" or 1 1/4"	0.630	0.985	80	0.925	0.713	1.035	3.425	1.810	1.992	1.797	EL46
40	M40 x 1.5	1 1/4" or 1 1/2"	0.630	1.008	130	1.134	0.890	1.268	3.543	2.170	2.382	2.577	EL55
50S	M50 x 1.5	2"	0.630	1.059	200	1.346	1.110	1.504	3.937	2.560	2.815	3.770	EL65
50	M50 x 1.5	2"	0.630	1.059	400	1.551	1.303	1.736	3.937	2.560	2.815	3.263	EL65
63S	M63 x 1.5	2 1/2"	0.748	1.571	400	1.764	1.547	1.972	3.937	3.150	3.465	6.190	EL80
63	M63 x 1.5	2 1/2"	0.748	1.571	425	1.969	1.839	2.205	3.937	3.150	3.465	5.309	EL80
75S	M75 x 1.5	3"	0.748	1.634	425	2.181	2.059	2.441	3.937	3.760	4.134	6.960	EL104
75	M75 x 1.5	3"	0.748	1.634	425	2.394	2.283	2.677	3.937	3.760	4.134	6.490	EL104

All dimensions in inches - [Convert to millimetres (mm) multiply by 25.4] - [Convert to kilograms (Kgs) multiply by 0.4536]

Notes:

* Gland size does not necessarily equate to the entry thread size.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic Ex e enclosures they must be included within the earth circuit of the system.
* The user should seek expert advice if intending to combine flammable and combustible dust in one environment/installation.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supply cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
* Metric versions are supplied with an IP O-ring.
* All entry threads are nickel plated as standard.
* Gland kits can be supplied with a PTFE IP washer in order to maintain the temperature range if required.

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Cable Gland Type A - (Single Compression for any Cable)

EN 50262 : BS6121 : IP66 : IP68

Part Numbers:

A	1	L	B
	2		S
	3		A
	4		

"A" type glands commonly referred to as "stuffing glands", they provide a controlled pull resistant environmental displacement seal on the cable outer sheath, minimising damage to cables that exhibit "cold flow" characteristics. The gland maintains IP66 & IP68 to 35 metres and is deluge proof without the use of an additional seal or deluge boot. Options are available for use with LSOH cables and extreme temperature applications.

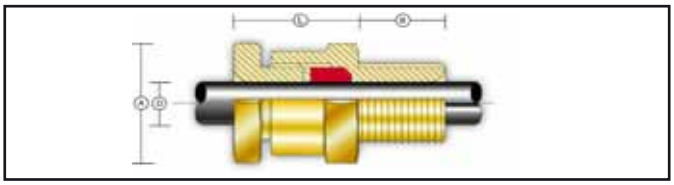
Compliance with: EN 50262, BS6121 & IEC 60529

IP Rating: IP66 & IP68
(35 metres - 7 days)

Materials: Brass
Stainless Steel
Aluminium

Plating: Nickel
Zinc

Operating Temperature: Neoprene Seals -30°C to +105°C
Silicone Seals -70°C to +200°C



Example Part Numbering (See below for details) A2LBCK1/NP/20/050NPT

	A	Type of gland featuring controlled displacement sealing
	2	Neoprene Seals (2) - Silicone (3) - Neoprene/Lead (1) - Silicone/Lead (4)
	L	Peppers Lightweight Design
	B	Brass (B) / Stainless Steel (S) / Aluminium (A)
Options	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut & Nylon (K) or Fibre (V) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP) - Zinc Plated (ZP)
	20	Gland shell size
	050NPT	1/2"NPT Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washer	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Acceptance Details		Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)			Metric Thread Shroud Size
				Outer Sheath [D]			Across Flats	Across Corners [A]	Weight Kgs	
	Metric	NPT		Min	Max					
16	M20 x 1.5	1/2" or 3/4"	16	4.0	8.4	33	25.4	28.0	0.078	L24
20S	M20 x 1.5	1/2" or 3/4"	16	7.2	11.7	33	25.4	28.0	0.101	L24
20	M20 x 1.5	1/2" or 3/4"	16	9.4	14.0	33	30.0	33.0	0.127	L30
25	M25 x 1.5	3/4" or 1"	16	13.5	20.0	33	37.6	41.4	0.166	L38
32	M32 x 1.5	1" or 1 1/4"	16	19.5	26.3	33	46.0	50.6	0.244	L46
40	M40 x 1.5	1 1/4" or 1 1/2"	16	23.0	32.2	37	55.0	60.5	0.396	L55
50S	M50 x 1.5	1 1/2" or 2"	16	28.1	38.2	37	65.0	71.5	0.558	L65
50	M50 x 1.5	2"	16	33.1	44.1	37	65.0	71.5	0.438	L65
63S	M63 x 1.5	2" or 2 1/2"	19	39.2	50.1	37	80.0	88.0	0.832	L80
63	M63 x 1.5	2 1/2"	19	46.7	56.0	37	80.0	88.0	0.664	L80
75S	M75 x 1.5	2 1/2" or 3"	19	52.1	62.0	37	90.0	99.0	0.924	L90
75	M75 x 1.5	3"	19	58.0	68.0	37	90.0	99.0	0.714	L90
80	M80 x 2	3" or 3 1/2"	25	62.2	72.0	50	104.0	115.2	1.514	L104
85	M85 x 2	3" or 3 1/2"	25	69.0	78.0	50	104.0	115.2	1.332	L104
90	M90 x 2	3 1/2" or 4"	25	74.0	84.0	50	114.0	125.7	1.622	L114
100	M100 x 2	3 1/2" or 4"	25	82.0	90.0	50	114.0	125.7	1.523	L114
110	M110 x 2	-	25	87.0	102.0	88	135.0	148.0	2.550	n/a
120	M120 x 2	-	25	97.0	112.0	88	145.0	159.0	3.200	n/a
130	M130 x 2	-	25	107.0	122.0	88	155.0	170.0	4.750	n/a

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size. Gland size 16 is also available with an M16 x 1.5 entry thread.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic enclosures they must be included within the earth circuit of the system.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* All gland kits supplied with silicone seals will include a PTFE IP washer in order to maintain the temperature range.

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Cable Gland Type E - (Double Compression for Armoured Cables) EN 50262 : BS6121 : IP66 : IP68

Part Numbers:

E	1	W	B	*	*
	2	X	S	IE	R
	3	Z	A		
	4				

"E" type double compression glands provide a controlled IP seal on the cable inner sheath, an environmental seal on the outer sheath and a detachable armour specific clamping system for wire (W), braid (X) or tape (Z) armoured cables. The gland has been tested to IP66 and IP68 to 35 metres. The "IE" version allows the gland to be used with HV cables where the fault load is greater than 10.4kA and options are available for use with lead sheath, LSOH cables and extreme temperature applications.

Compliance with: EN 50262, BS6121 & IEC 60529

IP Rating: IP66 & IP68
(35 metres - 7 days)

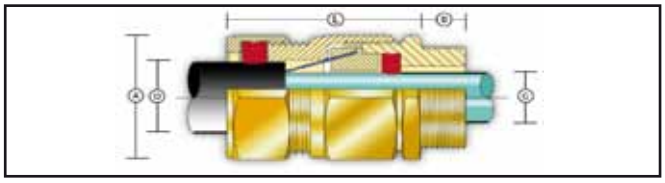
Operating Temperature: Neoprene Seals -30ºC to +105ºC
Silicone Seals -70ºC to +200ºC

Materials: Brass
Stainless Steel
Aluminium

Plating: Nickel - Zinc

Variations: D****F Omission of Outer Seal

Aluminium versions comply with UK Highways Agency Specifications
Brass versions to UK Highway Agency Specification available upon request



Example Part Numbering (See below for details) E1WBCK1/NP/20/050NPT

	E	Type of gland featuring armour specific clamping
	1	Neoprene Seals (1) - Silicone (3) - Neoprene/Lead (2) - Silicone/Lead (4)
	W	SWA (W) / SWB or STA (X)
	B	Brass (B) / Stainless Steel (S) / Aluminium (HA)
Options	IE	Integral Earth (see page TR-3)
	R	Reduced Bore Seal
	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut, Earth Tag & Nylon (K) or Fibre (V) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP) - Zinc Plated (ZP)
	20	Gland shell size
	050NPT	1/2"NPT Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washers	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Metric Thread Shroud Size
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]					Across Flats	Across Corners [A]	Weight Kgs	
	Metric	NPT		Min	Max	Min	Max	Min	Max	W	XZ					
16	M20 x 1.5	1/2" or 3/4"	16	4.0	8.4	8.4	13.5	4.9	10.0	0.9	0.15-0.35	60	24.0	26.5	0.139	L24
20S	M20 x 1.5	1/2" or 3/4"	16	8.0	11.7	12.9	16.0	9.4	12.5	0.90-1.25	0.15-0.35	60	24.0	26.5	0.125	L24
20	M20 x 1.5	1/2" or 3/4"	16	6.7	14.0	15.5	21.1	12.0	17.6	0.90-1.25	0.15-0.50	60	30.0	33.0	0.180	L30
25	M25 x 1.5	3/4" or 1"	16	13.0	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.15-0.50	60	37.6	41.4	0.252	L38
32	M32 x 1.5	1" or 1 1/4"	16	19.0	26.3	26.7	34.0	23.2	30.5	1.60-2.00	0.15-0.55	65	46.0	50.6	0.408	L46
40	M40 x 1.5	1 1/4" or 1 1/2"	16	25.0	32.2	33.0	40.6	28.6	36.2	1.60-2.00	0.20-0.60	75	55.0	60.5	0.642	L55
50S	M50 x 1.5	1 1/2" or 2"	16	31.5	38.2	39.4	46.7	34.8	42.4	2.00-2.50	0.20-0.60	75	65.0	71.5	0.947	L65
50	M50 x 1.5	2"	16	36.5	44.1	45.7	53.2	41.1	48.5	2.00-2.50	0.30-0.80	75	65.0	71.5	0.716	L65
63S	M63 x 1.5	2" or 2 1/2"	19	42.5	50.1	52.1	59.5	47.5	54.8	2.5	0.30-0.80	75	80.0	88.0	1.377	L80
63	M63 x 1.5	2 1/2"	19	49.5	56.0	58.4	65.8	53.8	61.2	2.5	0.30-0.80	75	80.0	88.0	1.073	L80
75S	M75 x 1.5	2 1/2" or 3"	19	54.5	62.0	64.8	72.2	60.2	68.0	2.5	0.30-1.00	85	90.0	99.0	1.661	L90
75	M75 x 1.5	3"	19	60.5	68.0	71.1	78.0	66.5	73.4	2.5	0.30-1.00	85	90.0	99.0	1.322	L90
80	M80 x 2	3" or 3 1/2"	25	62.2	72.0	69.0	84.0	71.9	79.4	3.15	0.45-1.00	110	104.0	115.2	2.874	L104
80H	M80 x 2	3" or 3 1/2"	25	62.2	72.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.874	L104
85	M85 x 2	3" or 3 1/2"	25	69.0	78.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.515	L104
90	M90 x 2	3 1/2" or 4"	25	74.0	84.0	88.0	96.0	82.0	91.4	3.15	0.45-1.00	110	114.0	125.7	3.117	L114
90H	M90 x 2	3 1/2" or 4"	25	74.0	84.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	3.117	L114
100	M100 x 2	3 1/2" or 4"	25	82.0	90.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	2.707	L114
110	M110 x 2	-	25	87.0	102.0	100.0	117.0	-	-	3.15	0.45-1.00	185	135.0	148.0	4.190	n/a
120	M120 x 2	-	25	97.0	112.0	110.0	127.0	-	-	3.15	0.45-1.00	185	145.0	159.0	5.750	n/a
130	M130 x 2	-	25	107.0	122.0	120.0	137.0	-	-	3.15	0.45-1.00	185	155.0	170.0	6.900	n/a

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size. Gland size 16 is also available with an M16 x 1.5 entry thread.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic enclosures they must be included within the earth circuit of the system.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* For gland size 20 the silicone inner seal has a minimum diameter of 11.0mm and NOT 6.7mm
* All gland kits supplied with silicone seals will include a PTFE IP washer in order to maintain the temperature range.

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Cable Gland Type C - (Single Compression for Armoured Cables) EN 50262 : BS6121 : IP66

Part Numbers:

C	1	W	B	*	*
	3	X	S	IE	R
		Z	A		

"C" type single compression glands are suitable for cables that exhibit "cold flow" characteristics, whilst providing an IP66 environmental seal on the cable outer sheath and a detachable armour specific clamping system for wire (W), braid (X) or tape (Z) armoured cables. The "IE" version allows the gland to be used with HV cables where the fault load is greater than 10.4kA and options are available for use with LSOH cables and extreme temperature applications.

Compliance with: EN 50262, BS6121 & IEC 60529

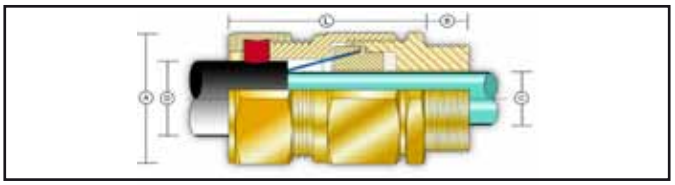
IP Rating: IP66

Operating Temperature: Neoprene Seals -30ºC to +105ºC
Silicone Seals -70ºC to +200ºC

Materials: Brass
Stainless Steel
Aluminium

Plating: Nickel
Zinc

Aluminium versions comply with UK Highways Agency Specifications
Brass versions to UK Highway Agency Specification available upon request



Example Part Numbering (See below for details) C1WBCK1/NP/20/050NPT

	C	Type of gland featuring armour specific clamping
	1	Neoprene Seals (C1) - Silicone (C3)
	W	SWA (W) / SWB or STA (X)
	B	Brass (B) / Stainless Steel (S) / Aluminium (A)
Options	IE	Integral Earth (see page TR-3)
	R	Reduced Bore Seal
	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
	K or V	Locknut, Earth Tag & Nylon (K) or Fibre (V) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated (NP) - Zinc Plated (ZP)
	20	Gland shell size
	050NPT	1/2"NPT Entry Thread

Optional Accessories	Locknut	Brass (ACBLN) / Stainless Steel (ACSLN)
	Earth tag	Brass (ACBET) / Stainless Steel (ACSET)
	IP Washers	Nylon (ACNSW) / Fibre (ACFSW)
	Serrated Washers	Stainless Steel (ACSSW)
	Shrouds	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

CABLE GLAND SELECTION TABLE

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Metric Thread Shroud Size
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]					Across Flats	Across Corners [A]	Weight Kgs	
	Metric	NPT		Min	Max	Min	Max	Min	Max	W	XZ					
16	M20 x 1.5	1/2" or 3/4"	16	-	8.4	8.4	13.5	4.9	10.3	0.9	0.15-0.35	60	24.0	26.5	0.139	L24
20S	M20 x 1.5	1/2" or 3/4"	16	-	11.7	12.9	16.0	9.4	12.5	0.90-1.25	0.15-0.35	60	24.0	26.5	0.125	L24
20	M20 x 1.5	1/2" or 3/4"	16	-	14.0	15.5	21.1	12.0	17.6	0.90-1.25	0.15-0.50	60	30.0	33.0	0.180	L30
25	M25 x 1.5	3/4" or 1"	16	-	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.15-0.50	60	38.0	41.4	0.252	L38
32	M32 x 1.5	1" or 1 1/4"	16	-	26.3	26.7	34.0	23.2	30.5	1.60-2.00	0.15-0.55	65	46.0	50.6	0.408	L46
40	M40 x 1.5	1 1/4" or 1 1/2"	16	-	32.2	33.0	40.6	28.6	36.2	1.60-2.00	0.20-0.60	75	55.0	60.5	0.642	L55
50S	M50 x 1.5	1 1/2" or 2"	16	-	38.2	39.4	46.7	34.8	42.4	2.00-2.50	0.20-0.60	75	65.0	71.5	0.947	L65
50	M50 x 1.5	2"	16	-	44.1	45.7	53.2	41.1	48.5	2.00-2.50	0.30-0.80	75	65.0	71.5	0.716	L65
63S	M63 x 1.5	2" or 2 1/2"	19	-	50.1	52.1	59.5	47.5	54.8	2.5	0.30-0.80	75	80.0	88.0	1.377	L80
63	M63 x 1.5	2 1/2"	19	-	56.0	58.4	65.8	53.8	61.2	2.5	0.30-0.80	75	80.0	88.0	1.073	L80
75S	M75 x 1.5	2 1/2" or 3"	19	-	62.0	64.8	72.2	60.2	68.0	2.5	0.30-1.00	85	90.0	99.0	1.661	L90
75	M75 x 1.5	3"	19	-	68.0	71.1	78.0	66.5	73.4	2.5	0.30-1.00	85	90.0	99.0	1.322	L90
80	M80 x 2	3" or 3 1/2"	25	-	72.0	69.0	84.0	71.9	79.4	3.15	0.45-1.00	110	104.0	115.2	2.874	L104
80H	M80 x 2	3" or 3 1/2"	25	-	72.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.874	L104
85	M85 x 2	3" or 3 1/2"	25	-	78.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.515	L104
90	M90 x 2	3 1/2" or 4"	25	-	84.0	88.0	96.0	82.0	91.4	3.15	0.45-1.00	110	114.0	125.7	3.117	L114
90H	M90 x 2	3 1/2" or 4"	25	-	84.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	3.117	L114
100	M100 x 2	3 1/2" or 4"	25	-	90.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	2.707	L114
110	M110 x 2	-	25	-	102.0	100.0	117.0	-	-	3.15	0.45-1.00	170	135.0	148.0	4.190	n/a
120	M120 x 2	-	25	-	112.0	110.0	127.0	-	-	3.15	0.45-1.00	170	145.0	159.0	5.750	n/a
130	M130 x 2	-	25	-	122.0	120.0	137.0	-	-	3.15	0.45-1.00	170	155.0	170.0	6.900	n/a

All dimensions in mm

Notes:

* Gland size does not necessarily equate to the entry thread size. Gland size 16 is also available with an M16 x 1.5 entry thread.
* Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
* Where glands are fitted into non-metallic enclosures they must be included within the earth circuit of the system.
* Assembly instructions must be read prior to installation and adhered to in full.
* Peppers supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* All gland kits supplied with silicone seals will include a PTFE IP washer in order to maintain the temperature range.

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Cable Gland Accessories

A complete range of locknuts, earthtags, IP washers, serrated washers and shrouds.

LOCKNUTS

Locknuts are recommended for securing external entry threads into equipment. They are available in various materials such as brass, plated brass, stainless steel, aluminium and nylon.

Order Code	Example
Brass	ACBLN/M20
Brass Nickel Plated	ACBLN/NP/M20
Stainless Steel	ACSLN/M20
Aluminium	ACALN/M20
Nylon	ACNLN/M20

Note: Dimensions shown are only applicable to metallic locknuts

ISO Thread Dia	Minimum Thickness	Minimum A/F	Minimum A/C	Weight (Kgs/100)	NPT Thread Dia	Minimum Thickness	Minimum A/F	Minimum A/C
M16 x 1.5	4.0	22.0	24.2	0.772	1/2"	3.2	27.0	29.7
M20 x 1.5	4.0	24.0	26.4	0.683	3/4"	4.0	30.5	33.5
M25 x 1.5	4.0	30.0	33.0	1.027	1"	5.0	38.1	41.9
M32 x 1.5	4.0	40.0	44.0	2.020	1-1/4"	5.5	50.0	55.0
M40 x 1.5	4.5	50.0	55.0	3.435	1-1/2"	6.0	60.0	66.0
M50 x 1.5	5.0	65.0	71.5	6.997	2"	7.0	75.0	82.5
M63 x 1.5	6.5	75.0	82.5	9.369	2-1/2"	9.0	90.0	99.0
M75 x 1.5	7.0	90.0	99.0	14.871	3"	9.0	104.8	115.3
M80 x 2	9.0	90.0	99.0	15.140	3-1/2"	10.0	114.3	125.7
M85 x 2	9.0	104.8	115.3	27.518	4"	10.0	140.0	152.4
M90 x 2	9.0	104.8	115.3	23.256	Sizes M110 to M130, PG7 to PG48 and BSPP / BSPT are available upon request			
M100 x 2	9.0	114.3	125.7	25.256				

All dimensions in mm - Weights are based on metric versions

EARTH TAGS

Earth tags are recommended for providing an earth bond connection for an entry component into the equipment. Earth tags are available in brass, plated brass, stainless steel and aluminium.

Order Code	Example
Brass	ACBET/M20
Brass Nickel Plated	ACBET/NP/M20
Stainless Steel	ACSET/M20
Aluminium	ACAET/M20

Peppers Earth tags are compliant with the Category B requirements of EN 50262: 1999

ISO Thread Dia	Minimum Thickness	Nominal Centres	Bolt Hole Dia	Weight (Kgs/100)	NPT Thread Dia	Minimum Thickness	Nominal Centres	Bolt Hole Dia
M16	1.5	31.8	6.9	0.746	1/2"	1.5	33.0	6.9
M20	1.5	33.0	6.9	0.672	3/4"	1.5	36.5	6.9
M25	1.5	36.5	6.9	0.797	1"	1.5	42.5	11.8
M32	1.5	42.5	11.8	1.476	1-1/4"	1.5	45.4	13.5
M40	1.5	45.4	13.5	2.089	1-1/2"	1.5	58.1	13.5
M50	1.5	58.1	13.5	3.729	2"	1.5	66.8	13.5
M63	1.5	66.8	13.5	4.898	2-1/2"	1.5	73.0	13.5
M75	1.5	73.0	13.5	5.220	3"	1.5	90.0	13.5
M80	1.5	73.0	13.5	4.647	3-1/2"	1.5	112.0	13.5
M85	1.5	90.0	13.5	7.658	4"	1.5	120.0	13.5
M90	1.5	90.0	13.5	6.669	Sizes M110 to M130, PG7 to PG48 and BSPP / BSPT are available upon request			
M100	1.5	112.0	13.5	10.305				

All dimensions in mm - Weights are based on metric versions

IP WASHERS

In order to maintain the integrity of an enclosure greater than IP54, washers are recommended to be installed at the gland entry interface.

Order Code	Example	Temperature
Fibre	ACFSW/M20	-40°C to +95°C
Nylon	ACNSW/M20	-40°C to +135°C
PTFE	ACPSW/M20	-200°C to +260°C

Colour		
Fibre	Metric = Red	NPT = Red
Nylon	Metric = Red	NPT = White
PTFE	Metric = White	NPT = White

ISO Thread Dia	Thickness Nylon	Thickness Fibre	Outside Diameter	Weight (Kgs/100)	NPT Thread Dia	Thickness Nylon	Thickness Fibre	Outside Diameter
M16	2.00	1.50	25.0	0.116	1/2"	2.0	1.50	30.0
M20	2.00	1.50	29.4	0.164	3/4"	2.0	1.50	38.0
M25	2.00	1.50	38.1	0.257	1"	2.0	1.50	46.3
M32	2.00	1.50	42.5	0.341	1-1/4"	2.0	1.50	55.5
M40	2.00	1.50	52.0	0.386	1-1/2"	2.0	1.50	60.0
M50	2.00	1.50	65.0	0.594	2"	2.0	1.50	79.4
M63	2.00	1.50	79.4	0.794	2-1/2"	2.0	1.50	90.5
M75	2.00	1.50	90.5	0.868	3"	2.0	1.50	114.3
M80	2.00	1.50	104.8	0.839	3-1/2"	2.0	1.50	114.3
M85	2.00	1.50	104.8	0.698	4"	2.0	1.50	146.0
M90	2.00	1.50	114.3	0.913	Sizes M110 to M130, PG7 to PG48 and BSPP / BSPT are available upon request			
M100	2.00	1.50	114.3	0.512				

All dimensions in mm - Weights are based on metric versions

SERRATED WASHERS

Serrated or "shake proof" washers act as an anti-vibration devices to prevent the cable gland, or other cable entry device and locknut arrangement from loosening. It can also be used as an earth enhancing device on painted enclosures. They are only available in Stainless Steel.

Order Code	Example
Stainless Steel	ACSSW/M20

ISO Thread Dia	Minimum Thickness	Outside Diameter	Weight (Kgs/100)	NPT Thread Dia	Minimum Thickness	Outside Diameter
M16	1.5	25.5	0.262	1/2"	1.5	35.4
M20	1.5	32.4	0.560	3/4"	1.5	43.4
M25	1.5	37.4	0.675	1"	1.5	52.0
M32	1.5	48.0	1.042	1-1/4"	1.5	59.5
M40	1.5	60.0	1.730	1-1/2"	1.5	71.0
M50	1.5	71.0	2.154	2"	1.5	87.0
M63	1.5	87.0	3.259	2-1/2"	1.5	102.0
M75	1.5	102.0	4.189	3"	1.5	125.0
M80	1.5	120.0	6.880	3-1/2"	1.5	140.0
M85	1.5	125.0	6.550	4"	1.5	155.0
M90	1.5	125.0	6.233	Sizes M110 to M130 are available upon request		
M100	1.5	140.0	7.985			

All dimensions in mm - Weights are based on metric versions

SHROUDS

Peppers manufacture a range of shrouds in various materials to complement our complete range of glands. Materials available are Polyvinylchloride (PVC), Polychloroprene (PCP) & Low Smoke Halogen Free Silicone (LS0H). Please note that the shrouds are manufactured to fit our glands and will not necessarily fit other manufacturer's products.
The shroud sizes are detailed on each of the product pages.

Order Code	Example	Temperature
PVC	ACSPVC/L24	-25°C to +70°C
PCP	ACSPCP/L24	-30°C to +100°C
LS0H	ACSSIO/L24	-60°C to +200°C

Please note that glands with larger than standard entry threads will require a larger shroud in order to fit over the gland hexagon body section

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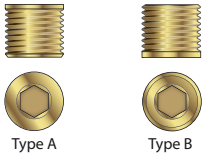
Enclosure Accessories

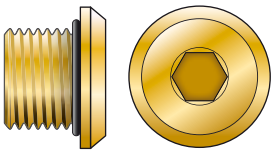
TYPE A & B PLUGS - METALLIC



"SPA" & "SPB" Series Certified Metallic Stopping (Blanking) Plugs provide a method of sealing unused entry threads in Ex equipment. They maintain Ex d method of explosion protection and IP66 for IEC type applications. In addition they are approved to Class I, Division 1 and NEMA 3 for CEC type applications. Type SPA are externally recessed and type SPB are tamperproof.

Certification:	ATEX	I M2 II 2GD Ex d I&IIC Mb Gb
		Ex tb IIIC Db
	IECEx	Ex d I&IIC Mb Gb / Extb IIIC Db
	CSA	Class I, Division 1 & 2; Groups A, B, C & D
		Class II, Groups E, F & G
	GOST -R	Ex d IICU
IP Rating:	IP64 & NEMA 3	
Materials:	Brass, Stainless Steel or Aluminium [Aluminium not suitable for Group I Applications]	
Plating:	Nickel - Zinc	

DOME HEAD TYPE PLUGS - METALLIC



"SPMH" Series Certified Metallic Stopping (Blanking) Plugs provide a method of sealing unused entries in Ex equipment. They maintain Ex d / Ex e methods of explosion protection and IP66, IP68 for IEC type applications. In addition they are approved to Class I, Division 1 and NEMA 4X for CEC type applications.

Certification:	ATEX	I M2 II 2GD Ex d I&IIC Mb Gb / Ex e I&IIC Mb Gb
		Ex tb IIIC Db
	IECEx	Ex d I&IIC Mb Gb / Ex e I&IIC Mb Gb / Ex tb IIIC Db
	CSA	Class I, Division 1 & 2; Groups A, B, C & D
		Class II, Groups E, F & G
	GOST -R	Ex d I&IICU / Ex e I&IICU
IP Rating:	IP66 & IP68 & NEMA 4X	
Materials:	Brass, Stainless Steel or Aluminium [Aluminium not suitable for Group I Applications]	
Plating:	Nickel - Zinc	

HEX HEAD TYPE PLUGS - METALLIC

"SPHH" Series Certified Metallic Stopping (Blanking) Plugs provide a method of sealing unused entries in Ex equipment. They maintain Ex d / Ex e methods of explosion protection and IP66, IP68 for IEC type applications. In addition they are approved to Class I, Division 1 and NEMA 4X for CEC type applications.

Certification:	ATEX	I M2 II 2GD Ex d I&IIC Mb Gb / Ex e I&IIC Mb Gb
		Ex tb IIIC Db
	IECEx	Ex d I&IIC Mb Gb / Ex e I&IIC Mb Gb / Ex tb IIIC Db
	CSA	Class I, Division 1 & 2; Groups A, B, C & D
		Class II, Groups E, F & G
	GOST -R	Ex d I&IICU / Ex e I&IICU
IP Rating:	IP66 & IP68 & NEMA 4X	
Materials:	Brass, Stainless Steel or Aluminium [Aluminium not suitable for Group I Applications]	
Plating:	Nickel - Zinc	

DOME HEAD TYPE PLUGS - NYLON

"SPMHN" Series Certified Nylon Stopping (Blanking) Plugs provide a method of sealing unused entries in Ex equipment. They maintain Ex e method of protection and IP66, IP68 for IEC type applications. In addition they are approved to Class I, Division 2 and NEMA 4X 6P for CEC type applications.

Certification:	ATEX	II 2GD Ex e II
		Ex tb IIIC Db
	CSA	Class I, Division 2; Groups A, B, C & D
		Class II, Groups E, F & G
	GOST -R	Ex e IIU
IP Rating:	IP66 & IP68	
Materials:	Glass Filled Nylon	
Impact Resistance:	4 Nm	

METALLIC ADAPTORS & REDUCERS

"AR" Series Dual Certified Adaptors & Reducers provide a method of matching electrical thread forms on Ex equipment whilst maintaining Ex d / Ex e methods of explosion protection. In addition they are approved to IP66 & IP68 for IEC type applications and Class I Division 1 and NEMA 4X for CEC type applications.

Certification:	ATEX	I M2 II 2GD Ex d I&IIC Mb Gb / Ex e I&IIC Mb Gb / Ex tb IIIC Db
	IECEx	Ex d I&IIC Mb Gb / Ex e I&IIC Mb Gb / Ex tb IIIC Db
	CSA	Class I, Division 1 & 2; Groups A, B, C & D
		Class II, Groups E, F & G
	GOST -R	Ex d I&IICU / Ex e I&IICU
IP Rating:	IP66 & IP68 & NEMA 4X	
Materials:	Brass, Stainless Steel or Aluminium [Aluminium not suitable for Group I Applications]	
Plating:	Nickel - Zinc	
Options:	Male x Male, Female x Female, Earth Lead, Nylon and Round Adaptors/Reducers and Insulated Adaptors. Please contact our sales team for further information as details may vary.	

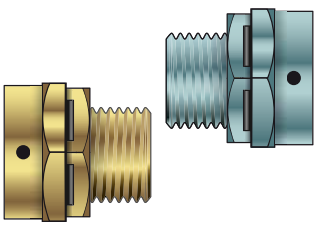
METALLIC 90 DEGREE ADAPTORS

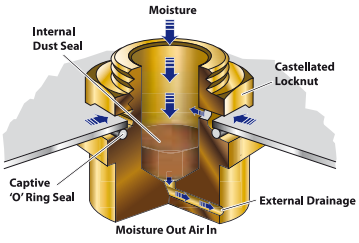
Flameproof Ex d Certified Right Angled Adaptors are designed to protect cables when installed in confined spaces where the cables are subjected to bending and / or stress. They maintain IP66 & IP68 for IEC type applications and Class I Division 1, NEMA 4X for CEC type applications.

Certification:	ATEX	I M2 II 2GD Ex d I&IIC Mb Gb / Ex e I&IIC Mb Gb / Ex tb IIIC Db
	IECEx	Ex d I&IIC Mb Gb / Ex e I&IIC Mb Gb / Ex tb IIIC Db
	CSA	Class I, Division 1 & 2; Groups A, B, C & D
		Class II, Groups E, F & G
	GOST -R	Ex d I&IICU / Ex e I&IICU
IP Rating:	IP66 & IP68 & NEMA 4X	
Materials:	Brass, Stainless Steel or Aluminium [Aluminium not suitable for Group I Applications]	
Plating:	Nickel - Zinc	
Options:	Female x Female. Please contact our sales team for further information as details may vary.	

BREATHER DRAINS

"ACDP" Series Breather Drain provides a method of effectively draining any moisture within an enclosure whilst allowing the air inside to breathe with the surrounding atmosphere. "ACDP" Series Breather Drains maintain Ex e method of protection and IP66 for IEC type applications. A Castellated Locknut is supplied with every Breather Drain.





Certification:	ATEX	I M2 II 2GD Ex e I&II Mb Gb/ Ex tb IIIC Db
	IECEx	Ex e I&IIC Mb Gb / Ex tb IIIC Db
	CSA	Class I Zone 1 Ex e II
	GOST -R	Ex e I&IIU
IP Rating:	IP66	
Materials:	Brass, Stainless Steel, Aluminium or Glass Filled Nylon	
Plating:	Nickel - Zinc	
Impact Resistance:	20Nm (7Nm - Aluminium / Glass Filled Nylon)	
Options:	Ex d version is also available. Please contact our sales team for further information as details may vary.	

Notes:

* Assembly instructions must be read prior to installation and adhered to in full.
* To maintain the specified IP rating, clearance holes must be in accordance with EN 50262 Table 1 and the entry device should be suitably secured.
* For Ex d applications female threads must comply with clause 5.3 of IEC 60079-1
* ATEX versions are supplied as standard. If additional approvals are required they must be requested at time of order.
* Where applicable the standard O-ring material is Nitrile. Other options are available upon request.

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Technical Information

Gland Entry "Thread Reference Tables"

Thread Type	Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Gland Min A/C	Max Clearance Hole Dia
ISO Metric IEC 60423	M16	M16	1.50	16.93	15.97	16.0	26.5	16.7
	M20	M20	1.50	16.93	19.97	16.0	33.0	20.7
	M25	M25	1.50	16.93	24.97	16.0	41.4	25.7
	M32	M32	1.50	16.93	31.97	16.0	50.6	32.7
	M40	M40	1.50	16.93	39.97	16.0	60.5	40.7
	M50	M50	1.50	16.93	40.97	16.0	71.5	50.7
	M63	M63	1.50	16.93	62.97	19.0	88.0	63.7
	M75	M75	1.50	16.93	74.97	19.0	99.0	75.7
	M80	M80	2.00	12.70	79.97	25.0	115.2	80.7
	M85	M85	2.00	12.70	84.97	25.0	115.2	85.7
	M90	M90	2.00	12.70	89.97	25.0	125.7	90.7
	M100	M100	2.00	12.70	99.97	25.0	125.7	100.7

Thread Type	Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Gland Min A/C	Max Clearance Hole Dia
NPT ANSI B1.20.1	1/2"	050NPT	1.81	14.0	21.34	19.9	26.5	22.04
	3/4"	075NPT	1.81	14.0	26.67	20.1	33.0	27.37
	1"	100NPT	2.20	11.5	33.40	25.0	41.4	34.10
	1-1/4"	125NPT	2.20	11.5	42.16	25.6	50.6	42.86
	1-1/2"	150NPT	2.20	11.5	48.26	26.0	60.5	48.96
	2"	200NPT	2.20	11.5	60.33	26.9	71.5	61.03
	2-1/2"	250NPT	3.18	8.0	73.03	39.9	88.0	73.73
	3"	300NPT	3.18	8.0	88.90	41.5	99.0	89.60
	3-1/2"	350NPT	3.18	8.0	101.60	42.8	115.2	102.30
	4"	400NPT	3.18	8.0	114.30	44.0	125.7	115.00

Thread Type	Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Gland Min A/C	Max Clearance Hole Dia
NPS ANSI B1.20.1	1/2"	050NPS	1.81	14.0	20.90	19.9	26.5	21.60
	3/4"	075NPS	1.81	14.0	26.26	20.1	33.0	26.96
	1"	100NPS	2.20	11.5	32.84	25.0	41.4	33.54
	1-1/4"	125NPS	2.20	11.5	41.61	25.6	50.6	42.31
	1-1/2"	150NPS	2.20	11.5	47.67	26.0	60.5	48.37
	2"	200NPS	2.20	11.5	59.72	26.9	71.5	60.42
	2-1/2"	250NPS	3.18	8.0	72.16	39.9	88.0	72.86
	3"	300NPS	3.18	8.0	88.06	41.5	99.0	88.76
	3-1/2"	350NPS	3.18	8.0	100.78	42.8	115.2	101.48
	4"	400NPS	3.18	8.0	113.43	44.0	125.7	114.13

Thread Type	Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Gland Min A/C	Max Clearance Hole Dia
PG DIN 40430	PG7	PG7	1.27	20.0	12.50	16.0	26.5	13.20
	PG9	PG9	1.41	18.0	15.20	16.0	26.5	15.90
	PG11	PG11	1.41	18.0	18.60	16.0	26.5	19.30
	PG13.5	PG13.5	1.41	18.0	20.40	16.0	26.5	21.10
	PG16	PG16	1.41	18.0	22.50	16.0	33.0	23.20
	PG21	PG21	1.59	16.0	28.30	16.0	41.4	29.00
	PG29	PG29	1.59	16.0	37.00	16.0	50.6	37.70
	PG36	PG36	1.59	16.0	47.00	16.0	60.5	47.70
	PG42	PG42	1.59	16.0	54.00	16.0	71.5	54.70
	PG48	PG48	1.59	16.0	59.30	16.0	88.0	60.00

Thread Type	Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Gland Min A/C	Max Clearance Hole Dia
ISO Pipe Parallel ISO R/7 BS2779 (BSPP, G, R & PF)	1/2"	050BSP	1.81	14.0	20.96	16.0	26.5	21.66
	3/4"	075BSP	1.81	14.0	26.44	16.0	33.0	27.14
	1"	100BSP	2.31	11.0	33.25	20.0	41.4	33.95
	1-1/4"	125BSP	2.31	11.0	41.91	20.0	50.6	42.61
	1-1/2"	150BSP	2.31	11.0	47.80	20.0	60.5	48.50
	2"	200BSP	2.31	11.0	59.61	20.0	71.5	60.31
	2-1/2"	250BSP	2.31	11.0	75.18	20.0	88.0	75.88
	3"	300BSP	2.31	11.0	87.88	20.0	99.0	88.58
	3-1/2"	350BSP	2.31	11.0	100.33	20.0	115.2	101.03
	4"	400BSP	2.31	11.0	113.03	20.0	125.7	113.73

Thread Type	Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Gland Min A/C	Max Clearance Hole Dia
ISO Pipe Taper ISO R/7 BS21 (BSPT & GK)	1/2"	050BST	1.81	14.0	20.96	19.9	26.5	21.66
	3/4"	075BST	1.81	14.0	26.44	20.1	33.0	27.14
	1"	100BST	2.31	11.0	33.25	25.0	41.4	33.95
	1-1/4"	125BST	2.31	11.0	41.91	25.6	50.6	42.61
	1-1/2"	150BST	2.31	11.0	47.80	26.0	60.5	48.50
	2"	200BST	2.31	11.0	59.61	26.9	71.5	60.31
	2-1/2"	250BST	2.31	11.0	75.18	39.9	88.0	75.88
	3"	300BST	2.31	11.0	87.88	41.5	99.0	88.58
	3-1/2"	350BST	2.31	11.0	100.33	42.8	115.2	101.03
	4"	400BST	2.31	11.0	113.03	44.0	125.7	113.73

Glands are available with Metric or NPT threads as standard. All other thread forms are manufactured to order.

Adaptor / Reducer Options

MALE SIZE	METRIC FEMALE SIZES													
Metric	M16	M20	M25	M32	M40	M50	M63	M75	M80	M85	M90	M100	M110	M120
M16	A01	A01												
M20	R02	A02	A03	A05										
M25	R05	R05	A04	A05	A06									
M32	R07	R07	R07	A05	A06	A08								
M40	R09	R09	R09	R09	A07	A08	A11							
M50	R12	R12	R12	R12	R12	A09	A11	A12						
M63	R14	R14	R14	R14	R14	R14	A11	A12	A13	A14				
M75	R16	R16	R16	R16	R16	R16	R16	A12	A13	A14	A14	A15		
M80	R16	R16	R16	R16	R16	R16	R16	A12	A13	A14	A14	A15		
M85	R17	R17	R17	R17	R17	R17	R17	R17	A13	A14	A14	A15		
M90	R17	R17	R17	R17	R17	R17	R17	R17	R17	A14	A14	A15	A16	
M100	R18	R18	R18	R18	R18	R18	R18	R18	R18	R18	R18	A15	A16	A17
M110	R19	R19	R19	R19	R19	R19	R19	R19	R19	R19	R19	R19	A16	A17
M120	R20	R20	R20	R20	R20	R20	R20	R20	R20	R20	R20	R20	R20	A17
NPT														
½"	R01*	A01*	A03	A05										
¾"	R03*	R03*	A03*	A05	A06									
1"	R06*	R06*	R06*	A05*	A06	A08								
1¼"	R08*	R08*	R08*	R08*	A06*	A08	A11							
1½"	R10*	R10*	R10*	R10*	R10*	A08*	A11	A12						
2"	R13	R13	R13	R13	R13	R13	A11	A12	A13	A14				
2½"	R15	R15	R15	R15	R15	R15	R15	A12	A13	A14	A14			
3"	R16*	R16*	R16*	R16*	R16*	R16*	R16*	R16*	A13*	A14	A14	A15	A16	A17
3 ½"	R17*	R17*	R17*	R17*	R17*	R17*	R17*	R17*	R17*	R17*	R17*	A15	A16	A17
4"	R19*	R19*	R19*	R19*	R19*	R19*	R19*	R19*	R19*	R19*	R19*	R19*	A16	A17
5"	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*
PG														
PG9	A01	A01												
PG11	A01	A02	A03											
PG13.5	R02	A02	A03	A05										
PG16	R04	A03	A03	A05										
PG21	R07	R07	A05	A05	A06									
PG29	R08	R08	R08	R08	A06	A08								
PG36	R11	R11	R11	R11	R11	A08	A11							
PG42	R13	R13	R13	R13	R13	A10	A11	A12						
PG48	R14	R14	R14	R14	R14	R14	A11	A12						

NPT FEMALE SIZES										
½"	¾"	1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"
A18										
A19	A20	A22								
R05	A21	A22	A23							
R07	R07	A22	A23	A24						
R09	R09	R09	A23	A24	A26					
R12	R12	R12	R12	A24	A26	A27				
R14	R14	R14	R14	R14	A26	A27				
R16	R16	R16	R16	R16	R16	A28	A29	A30		
R16	R16	R16	R16	R16	R16	R16	A29	A30		
R17	R17	R17	R17	R17	R17	R17	A29	A30		
R17	R17	R17	R17	R17	R17	R17	A29	A30	A31	
R18	R18	R18	R18	R18	R18	R18	R18	A30	A31	
R19	R19	R19	R19	R19	R19	R19	R19	R19	A31	A33
R20	R20	R20	R20	R20	R20	R20	R20	R20	A32	A33
A18*	A20	A22								
R03*	A20*	A22	A23							
R06*	R06*	A22*	A23	A24						
R08*	R08*	R08*	A23*	A24	A26					
R10*	R10*	R10*	R10*	A24*	A26	A27				
R13	R13	R13	R13	R13	A26	A27	A29			
R15	R15	R15	R15	R15	R15	A27	A29	A30		
R16*	R16*	R16*	R16*	R16*	R16*	R16*	A29	A30	A31	
R17*	R17*	R17*	R17*	R17*	R17*	R17*	R17*	A30	A31	
R19*	R19*	R19*	R19*	R19*	R19*	R19*	R19*	R19*	A31	A33
R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*	A33
A18										
A19	A20									
A19	A20	A22								
A20	A20	A22								
R07	A22	A22	A23							
R08	R08	A23	A23	A24						
R11	R11	R11	A24	A24	A26					
R13	R13	R13	R13	R13	A26	A27				
R14	R14	R14	R14	R14	A26	A27				

A = Certified Adaptor / R = Certified Reducer
All blank options are available as an industrial version

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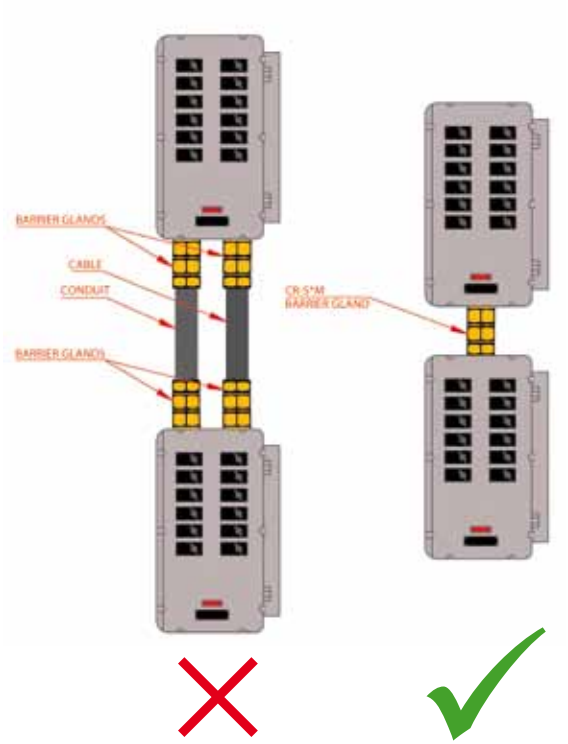
CR-S*M - A NEW CONCEPT

Connecting Ex d Junction Boxes

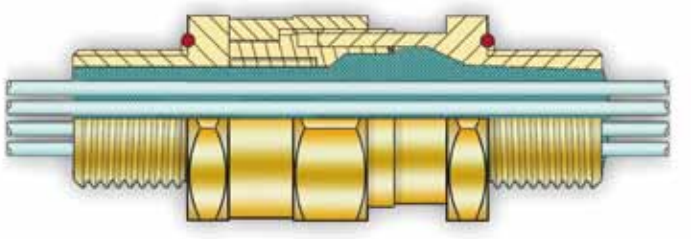


So how do you connect two Ex d – Flameproof enclosures?

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

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

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



PEPPERS T-1000 Barrier/Sealing Compound

PEPPERS T-1000 COMPOUND is a hand-mixable, UL-approved, epoxy putty sealing compound that mixes easily in minutes and cures in one hour to provide water, dust and vapour-tight seals for cable fittings and electrical connectors. PEPPERS T-1000 COMPOUND is in a handy concentric putty stick form with the curing agent encapsulated in the contrasting colour base material. Its dough-like consistency eliminates drips and runs for a "no mess" application with no tools required for use. PEPPERS T-1000 COMPOUND cures to a hard rigid material that is resistant to hydrocarbons, ketones, esters and alcohols with excellent adhesion to most substrates including metals and ceramics.

PEPPERS T-1000 COMPOUND complies with the Underwriters Laboratory requirements for sealing compounds, Class I, Groups A, B, C and D; Class II, Groups E, F and G, in cable sealing fittings or lead seals for use in hazardous locations, UL File E334661. The product complies with Class I requirements following exposure to acetone, ammonium hydroxide, ethyl acetate, acetic acid, ASTM Reference Fuel C, benzene, nhexane, furfural, 2-nitropropane, methanol, methylethyl ketone, ethylenedichloride and diethylether. For additional health and safety information please consult the available Material Safety Data Sheet.

Bi-Metallic Corrosion

Bi-metallic Corrosion (or Galvanic Corrosion) is the process by which metals, when in contact with each other, oxidize or corrode. In order for Bi-metallic Corrosion to occur there are three conditions that must exist or the process of corrosion will not begin:-

1. There must be two electrochemically dissimilar metals present but not necessarily in direct contact with each other.
2. There must be an electrically conductive path between the two metals.
3. There must be an electrolyte to allow the metal ions to conduct along the provided path from the more anodic metal to the more cathodic metal.

If any one of these three conditions does not exist, bi-metallic corrosion will not occur.

Installation

Installation of cable glands intended for use in an explosive atmosphere should only be carried out by competent personnel, skilled in the installation of cable glands and in accordance with the appropriate national or international standards and/or codes of practice. Cable Glands should not be installed whilst circuits are live and should only be installed in accordance with the provided assembly instructions. Cable Gland components are not interchangeable with other manufacturers and any modification to the cable gland will invalidate the certification.

Material Specifications

Peppers use a standard range of materials and finishes that are in accordance with the following specification:-

Brass to EN12165 Grade CW617N CuZn40Pb2
Brass to EN12168 Grade CW614N CuZn38Pb4
Stainless Steel to EN 10088-5 Grade 316L
Aluminium to EN 573-3 Grade AW6082

Plating is applied as requested in accordance with:
Zinc Plated to BS EN 12329:2000
Electro Nickel Plated to BS EN ISO 4526:2004
Electroless Nickel Plated to BS EN ISO 4527:2003
Electroplated Tin to BS1872:1984 and/or BS 3382 Pts 5 & 6:1967

Thread Standard/Gauging

ISO M IEC 60423, 6g fit - M16 to M75 1.5mm pitch, M80 to M100 2.0mm pitch

NPT ANSI/ASME B1.20.1, 1983, Gauging to Clause 8

NPSM ANSI/ASME B1.20.1, 1983, Gauging to Clause 9

BSPT BS21, 1985 (ISO 7/1), Standard Threads Only (Clause 5.4), Gauging to Clause 5a, System A

BSPP BS EN ISO 228-1:2003, Class A Full Form External Threads

PG DIN 40430, 1971

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Technical Information

Ingress Protection

It is essential when selecting cable glands and / or accessories to ensure that the products will maintain the IP rating of the equipment and the integrity of the installation. All Peppers' products have been tested in accordance with the requirements of IEC 60529 and as such the pressure applied during the IPX8 testing is a static pressure.

Please note that clearance holes must be drilled in accordance with EN 50262 table 1 and any gland without an integral O-ring must have a suitable IP washer fitted in order to maintain greater than IP54. If in doubt about the installation please contact Peppers for installation guidance.

INGRESS PROTECTION (IP) CODE IEC 60529

First Numeral	Second Numeral
Protection against solid objects	Protection against water
0 - No special protection	0 - No special protection
1 - Objects > 50mm diameter (e.g. part of a hand)	1 - Vertically dripping water
2 - Objects > 12.5mm diameter (e.g. finger)	2 - Vertically dripping water when enclosure tilted by 15°
3 - Objects > 2.5mm diameter (e.g. tool)	3 - Sprayed water up to 60° from the vertical
4 - Objects >1.0mm diameter (e.g. wire)	4 - Sprayed water from all directions
5 - Dust protected	5 - Water jets
6 - Dust tight	6 - Powerful water jets
	7 - Temporary submersion to a depth of 1m
	8 - Extended submersion to a depth >1m

NEMA TESTING APPROXIMATE EQUIVALENT TO IPXX

NEMA TYPE	IP
NEMA 1	IP10
NEMA 2	IP11
NEMA 3	IP54
NEMA 3R	IP14
NEMA 3S	IP54
NEMA 4 and 4X	IP55
NEMA 5	IP52
NEMA 6 and 6P	IP67
NEMA 12 and 12K	IP52
NEMA 13	IP54

This table cannot be used to convert IP codes to NEMA ratings

Temperature Classification

The equipment must be selected so that its maximum surface temperature will not reach the ignition temperature of any gas or vapour that may be present.

Generally, T-class is based on fault conditions or, at the very least, worst case normal operating conditions. When selecting equipment, the T-class must be below the auto-ignition temperature of the gas.

As glands do not generate heat they are classified as passive and not subject to a T rating.

TEMPERATURE CLASS (GROUP II)

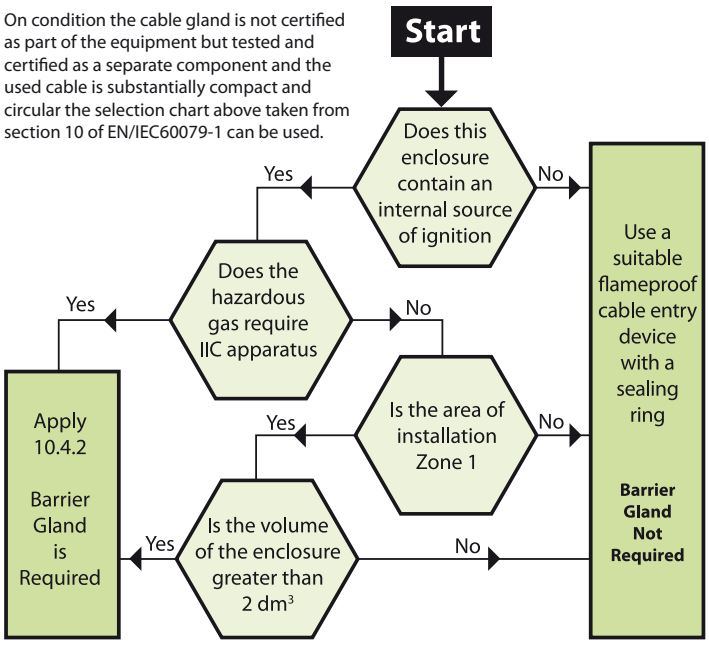
Maximum Surface Temperature	T Class
450°C	T1
300°C	T2
200°C	T3
135°C	T4
100°C	T5
85°C	T6

N.B. For Group I applications, apparatus has rigid 150°C (coal dust) and 450°C (methane) limits rather than T classes.

IS A BARRIER GLAND REQUIRED?

Selection chart for cable entry devices into flameproof enclosures for cables complying with item b) of Section 10.4.2.b.

On condition the cable gland is not certified as part of the equipment but tested and certified as a separate component and the used cable is substantially compact and circular the selection chart above taken from section 10 of EN/IEC60079-1 can be used.



It has become a common problem that glands featuring an elastomeric Ex d seal are used where a barrier gland is required. This is easy to understand, if you consider the specification of a typical gland featuring an elastomeric Ex d seal it will confirm that the gland is suitable for use in ATEX categories 2G (Zones 1 & 2), gas group IIC and as passive components they have no temperature classification limitations. However when the installation code: IEC 60079-14 Electrical Apparatus for Explosive Gas Atmospheres Part 14 Electrical Installations in Hazardous Areas (other than mines) 3rd Edition 2002-10, is considered it is clear that a more detailed examination of the application should be made. Our "CR" range of barrier glands have unique features that include, "CROCLOCK®", the non reversible multi clamping system for armoured cables, Peppers T-1000, the sealing compound that enables a quick and easy installation and an innovative barrier chamber that provides a cable acceptance that is on average 17% greater than other designs.

INTEGRAL EARTH GLANDS

Cable Glands with an integral earth connection are recommended for use with high voltage systems. The earth connection on these glands has been successfully tested in accordance with the 43kA short-circuit test specified in BS 6121, Part 5, 1992.

Ex Standards do not cover the requirements of cable glands for HV cable. BS6121 Part 5 Section 4.6.2 for non integral earth connections suggests that if the short circuit for 1 second is more than 10.4 kA we then revert to section 4.6.3 "Integral Earth Connection" where the short circuit rating for 1 second is between 26 & 43kA.

EMC

Terminations suitable for EMC protection can be made using armoured cables with our armour clamping glands. Following tests, Peppers has been informed by ERA Technology Ltd that our glands do not significantly reduce the ability of an enclosure to which they are attached to withstand electromagnetic interference . We conclude that the effectiveness of a cable entry in EMC terms will generally be limited by the cable, including the cable armour or screen. Braid screens are not necessarily the most effective means of EMC protection. Tape armours can give the best results. Since a Peppers cable gland makes a 360° clamp on cable armour, it will not inhibit the EMC protection of the cable entry.

The cable gland standard BS EN 50262 states that cable glands are EMC neutral. This is taken to mean that cable glands are neither affected by electro-magnetic radiation nor will cause any electro-magnetic interference in other equipment.

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General Information

HEALTH & SAFETY
When used and installed as recommended within the assembly instructions provided, Peppers Cable Glands products will not cause any danger or hazard to the health or safety of persons, animals or property. The products should be installed by suitably trained / skilled personnel and in full accordance with the relevant legislative regulations (including the UK's wiring regulations) and the accepted rules for the industry concerned.

WARNING
Peppers' cable glands should not be used within any application other than those specified for each product, unless Peppers Cable Glands issue a statement in writing that the product is suitable for the specified application. For further information on each product, we refer you to the specific assembly Instructions and General Arrangement drawings, which are available on request. Using the links on our web site, catalogue pages and instructions may be downloaded. Peppers Cable Glands take no responsibility for any damage, injury or other consequential loss caused where the glands are not installed or used according to our Instructions.

HAZARDOUS AREA INSTALLATION
When selecting equipment for use in hazardous areas the appropriate national or international standards or codes of practice must be considered.

GENERAL SUITABILITY FOR THE INSTALLATION ENVIRONMENT
Peppers' cable glands are designed for normal industrial environments with regard to temperature, humidity and vibration. Construction materials include steel, brass, aluminium alloys, neoprene, nitrile and silicone rubbers. To minimise galvanic corrosion, the metallic gland components are made from similar materials. Material compatibility under chemical corrosion or attack by aggressive substances must be considered before installation.

SPARE PARTS
The nature of the product is such that spare parts are not applicable. If part of a gland needs to be replaced for any reason, the user should refer back to the manufacturer and seek advice. No special tools are required for the commissioning and service of our products.

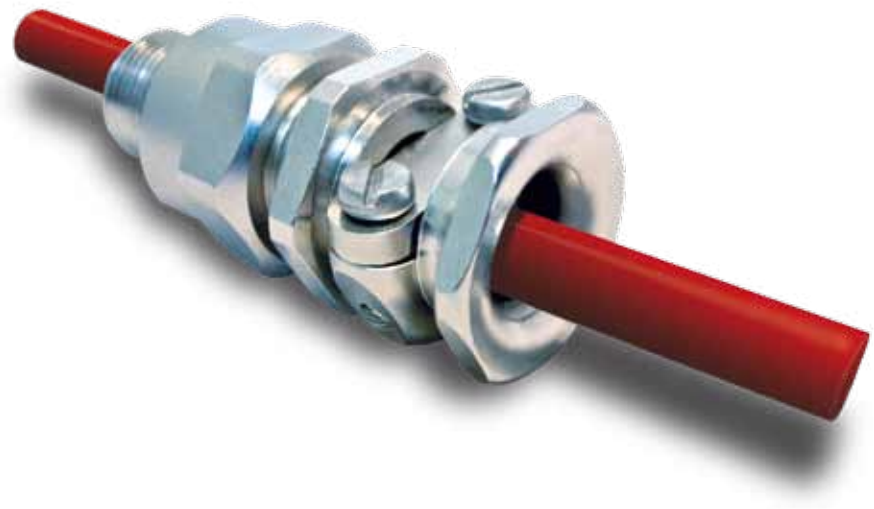
DIMENSIONAL DATA
The dimensions shown within this catalogue may vary due to material availability.

CE CONFORMITY
Copies of Peppers CE declarations regarding LVD, EMC and ATEX directives are available upon request. BS EN 50262 classification with regard to mechanical and electrical properties of cable glands is available upon request.

RoHS / WEEE Directives
Peppers Cable Glands can confirm that its full product range either complies or is outside the scope of these directives. Further documentation is available upon request.

DISCLAIMER
Whilst every care has been taken in the compilation of this catalogue, and every attempt made to present up-to-date and accurate information, we cannot guarantee that inaccuracies will not occur. Peppers Cable Glands Ltd will not be held responsible for any loss, damage or inconvenience caused as a result of any inaccuracy or errors. If you discover any information in our pages which you believe to be inaccurate or inappropriate, please notify us by e-mailing sales@peppers.co.uk.

TERMS & CONDITIONS
Full terms and conditions of sale are available upon request.



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Notes

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