peppers™

END—TO—END PERFORMANCE

PRODUCT GUIDE

CABLE GLANDS & ACCESSORIES 2021

WWW.PEPPERS.CO.UK

END TO END PERFORMANCE

Peppers specializes in the design and manufacture of a comprehensive line of cable glands and accessories. With over 70-years' experience, we have the reputation of delivering quality products with short lead times--always with the highest level of customer support.

Peppers products are used in hazardous locations defined by the International Electrotechnical Commission (IEC), the National Electric Code (NEC) and Canadian Electrical Code (CEC) codes. Our worldwide certifications include ATEX, IECEx, CSA & U/L and others.

Our technical experts work closely with our customers' engineers to understand the hazardous requirements of their unique environments and to select the right gland for the job.

Since Peppers' engineers support customers around the world, they provide in-depth technical knowledge of global certification requirements.

THE INNOVATORS

Peppers R&D Engineering Team is continually developing new designs for cutting edge products to benefit our customers.

ON-TIME

Peppers is famously fast when it comes to lead times and turnaround. This is partly due to a determination to protect that reputation - but also due to the structure of the business and smart manufacturing processes. A satellite manufacturing unit and global distribution network gives Peppers full control of the supply chain. Our clever "component manufacturing" process allows us to remain agile and react fast to customer demands.

KNOWLEDGEABLE AND TRUSTED

We are proud of our reputation for knowledge and expertise in the industry. When you're in the business of supplying products into hazardous areas, it's comforting for customers to know they're receiving accurate technical information they can rely on. Equally important is trust and integrity. We don't bend the truth to secure orders. We don't promise what we cannot deliver.

COMMITMENT TO QUALITY

Peppers maintains a quality management system approved to ISO 9001:2015, BS EN ISO/IEC 80079-34:2020. Application of quality systems for equipment manufacture and an Environmental System approved to ISO 14001:2015 as well as operating within Occupational Health and Safety Management (OHS) to ISO 45001.

Product Type	Outer Seal	Inner Seal	Compound	Lead Option	Armour Clamp	Conduit Connection	Ex db	Ex eb	Ex nR	Class 1 Div II	Class 1 Div I	IP Rating	Pg No.
CABLE GLANDS FOR ARMOURED CABLE													
CR	✓	✓	✗	✓	✓ CROCLOCK *	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	7
EU	✓	✓	✗	✓	✓ MULTI-ARMOUR	✗	✓	✓	✓	✗	✗	IP66 - IP68	8
CU	✓	✗	✗	✓	✓ MULTI-ARMOUR	✗	✗	✓	✗	✗	✗	IP66	9
E	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X	10
C	✓	✗	✗	✗	✓	✗	✓	✓	✗	✓	✗	IP66 - TYPE 4X	11
D	✗	✓	✗	✓	✓	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X	12
E8X	✓	✓	✗	✗	✓	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X	13
E8XCM	✓	✓	✗	✗	✓	FIXED MALE	✓	✓	✓	✗	✗	IP66 - IP68	14
E8XCF	✓	✓	✗	✗	✓	FIXED FEMALE	✓	✓	✓	✗	✗	IP66 - IP68	15
E*UCM	✓	✓	✗	✗	✓ MULTI-ARMOUR	FIXED MALE	✓	✓	✓	✗	✗	IP66 - IP68	16
E*UCF	✓	✓	✗	✗	✓ MULTI-ARMOUR	FIXED FEMALE	✓	✓	✓	✗	✗	IP66 - IP68	17
D8X	✗	✓	✗	✗	✓	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X	18
CABLE GLANDS FOR UNARMOURED CABLE													
PF	✓	✗	✗	✗	✗	✗	✗	✓	✗	✓	✗	IP66 - IP68	21
A*L	✓	✗	✗	✓	✗	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	22
A*LDS	✓	✗	✗	✓	✗	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	23
A*LCM	✓	✗	✗	✓	✗	FIXED MALE	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	24
A*LCF	✓	✗	✗	✓	✗	FIXED FEMALE	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	25
A*RCM	✓	✗	✗	✓	✗	ROTATING MALE	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	26
A*RCF	✓	✗	✗	✓	✗	ROTATING FEMALE	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	27
A*RCC	✓	✗	✗	✓	✗	ROTATING METALLIC CONDUIT	✓	✓	✓	✗	✗	IP66 / IP68 - DELUGE	28
A*LCH	✓	✓	✗	✓	✗	HOSE CONNECTION	✓	✓	✓	✗	✗	IP66 / IP68 - DELUGE	29
A8	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✗	IP66 - IP68	30
A8RC	✓	✗	✗	✗	✗	ROTATING METALLIC CONDUIT	✓	✓	✓	✗	✗	IP66 - IP68	31
A8CM	✓	✗	✗	✗	✗	FIXED MALE	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X	32
A8CF	✓	✗	✗	✗	✗	FIXED FEMALE	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X	33
ECLIPSE BARRIER GLANDS													
EC*C	✓	✓	✓	✓	✓ MULTI-ARMOUR	✗	✓	✓	✓	✗	✗	IP66 / IP68 / IP69 - DELUGE	37
EC*U	✓	✓	✓	✓	✗	✗	✓	✓	✓	✗	✗	P66 / IP68 / IP69 - DELUGE	38
EC*X	✗	✓	✓	✓	✗	✗	✓	✓	✓	✗	✗	P66 / IP68 / IP69 - DELUGE	39
EC*S*M	✗	✓	✓	✗	✗	FIXED MALE	✓	✓	✓	✗	✗	P66 / IP68 / IP69 - DELUGE	40
EC*S*F	✗	✓	✓	✗	✗	FIXED FEMALE	✓	✓	✓	✗	✗	P66 / IP68 / IP69 - DELUGE	41
EC*S*C	✗	✓	✓	✗	✗	ROTATING METALLIC CONDUIT	✓	✓	✓	✗	✗	P66 / IP68 / IP69 - DELUGE	42
BARRIER GLANDS													
CR-C	✓	✓	✓	✓	✓ CROCLOCK *	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	45
CR-U	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	46
CR-X	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	47
CR-S*M	✗	✓	✓	✗	✗	MALE UNION	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	48
CR-S*F	✗	✓	✓	✗	✗	FEMALE UNION	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	49
LT-C	✗	✓	✓	✗	✗	ROTATING METALLIC CONDUIT	✓	✓	✗	✗	✗	IP66 - IP68	50
UL-C	✓	✓	✓	✗	✓ CROCLOCK *	✗	✓	✓	✓	✓	✓	IP66 / IP68 - TYPE 4X - DELUGE	51
UL-U	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	52
UL-X	✗	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	IP66 / IP68 - TYPE 4X - DELUGE	53

ENCLOSURE ACCESSORIES		Pg No.
AR	Metallic Thread Conversion Adaptors & Reducers - Male-Female	57
ARMM / ARFF	Metallic Thread Conversion Adaptors & Reducers - Male-Male & Female-Female	58
ARMR / ARFR	Metallic 90 Degree / Right Angle Adaptors	59
RA	Metallic Rotating Thread Conversion Adaptors & Reducers - Male-Female, Male-Male & Female-Female	60
RA**90	Metallic 90 Degree Rotating / Right Angle Adaptors - Male-Female, Male-Male & Female-Female	61
SPMH & SPHH	Metallic Stopping Plugs - Dome Head / Hex Head	62
SPA & SPB	Blanking Plugs	63
ACDP	Metallic Breather Drains	64
SPMH*NE	Non-Metallic Stopping Plugs - Dome Head	65
ARN	Non-Metallic Thread Conversion Adaptors & Reducers - Male-Female	66

Product Type	Outer Seal	Inner Seal	Compound	Lead Option	Armour Clamp	Conduit Connection	Ex db	Ex eb	Ex nR	Class 1 Div II	Class 1 Div I	IP Rating	Pg No.
INDUSTRIAL GLANDS													
E*U	✓	✓	×	✓	✓ MULTI-ARMOUR	×	×	×	×	×	×	IP66 - IP68	69
E	✓	✓	×	✓	✓	×	×	×	×	×	×	IP66 - IP68	70
C	✓	×	×	×	✓	×	×	×	×	×	×	IP66	71
C*IE	✓	×	×	×	✓	×	×	×	×	×	×	IP66	72
A	✓	×	×	✓	×	×	×	×	×	×	×	IP66 - IP68	73
A*LDS	✓	×	×	✓	×	×	×	×	×	×	×	IP66 - IP68	74

GLAND ACCESSORIES		Pg No.
Locknuts	Brass, Brass Nickel Plated, Stainless Steel, Aluminium & Nylon	76
Earthtags	Brass, Brass Nickel Plated, Stainless Steel & Aluminium	76
IP Washers	Fibre, Nylon & PTFE	76
Serrated Washer	Stainless Steel	76
O-rings	Nitrile & Silicone	76
Shrouds	PVC, PCP & LSOH	76

PEPPERS APPROVAL PREFIX SYSTEM:

Due to ever changing requirements to product marking whether this is from adding a new approval to our range or updating to the latest requirements we had to come up with a simple solution to accomodate these on our range. As standard we will always mark our products with ATEX, IECEx and CSA (NEC&CEC) for any other marking requirements please see the table below:

Part Coding System								
	Approval Marked on the product							
Prefix:	ATEX	IECEx	CSA	EAC - Russia	INMETRO - Brazil	CCC - China	PESO - India	KOSHA - Korean
None	✓	✓	✓	×	✓	✓	×	×
EA	✓	✓	×	✓	×	×	×	×
IN*	✓	✓	✓	×	✓	×	×	×
PE	✓	✓	×	×	×	×	✓	×
KC	✓	✓	×	×	×	×	×	✓

* IN prefix is required to ensure the correct package labels are applied to the product.

peppers™

END—TO—END PERFORMANCE

GLANDS FOR ARMOURED CABLE

Peppers' range of armoured cable glands provide an extra layer of protection with a clamping system designed for use with armoured/shielded cable. These clamping systems protect the cable from being cut or abraded in areas exposed to the threat of mechanical damage.

Peppers armoured cable glands support Dedicated Clamping and Muti-Armour Clamping.

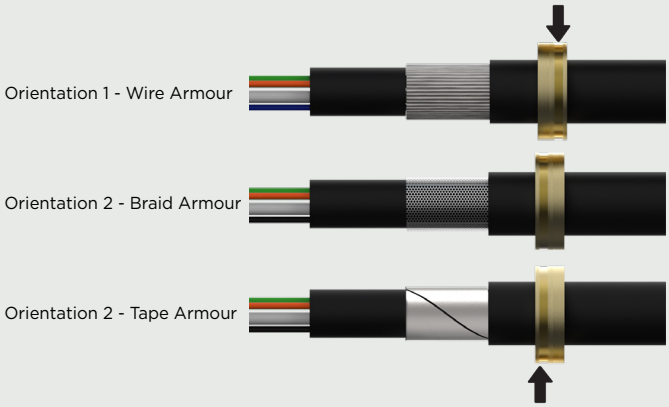
peppers MAC™
MULTI ARMOUR CLAMPING

Peppers Multi-armour clamping systems offer a simple solution for most armour types:

- Peppers New Multi Armour clamping system.
- Available in both elastomeric and barrier glands.
- Cost effective solution.

Compatible glands:

- E*U
- C*U
- E*UCM
- E*UCF
- EC*C



peppers CROCLOCK™
SINGLE ORIENTATION CLAMPING

Peppers Croclock™ range offers additional benefits:

- Single orientation clamping system.
- Deluge proof without the requirements of additional seals or boots.
- Built in interface seal with metric threads.
- Available in both elastomeric and barrier glands.
- Displacement seal on the cable inner sheath minimising damage to cables that exhibit "coldflow" characteristics.

Compatible glands:

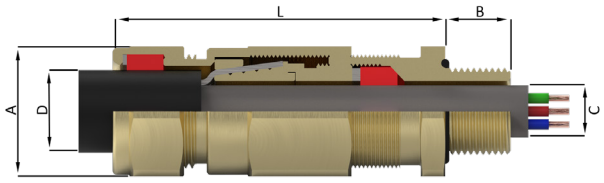
- CR-*
- CR-C

The Unique design of the Peppers Croclock™ range allows installation without any reversible components thereby eliminating installer error and reduce assembly time.

PRODUCT TYPE CR

Double Compression Gland for Armoured Cable featuring "CROCLOCK®"

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e : AEx ta



PART NUMBERS:

C	R	1	B	*
		2	S	R
		3		
		4		

EXAMPLE PART NUMBERING: CR-1B/NP/20/M20

	CR	Gland featuring "CROCLOCK®", single orientation clamping
	1	Neoprene Seal (1) - Silicone Seal (3) - Neoprene/Lead (2) - Silicone/Lead (4)
	B	Brass (B) - Stainless Steel (S)
OPTIONS	R	Reduced Bore Seal
OPTIONS	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
OPTIONS	K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
OPTIONS	NP	Nickel Plated
	20	Gland shell size
	M20	M20 x 1.5 Male 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 WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO)

IP RATING:	IP66 & IP68 (50 metres - 7 Days), Type 4X & DTS01:1991
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel

PRODUCT DESCRIPTION

"CR" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2, for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Also certified for Zone and Division installations for use with Marine Shipboard and Tray Cables under the NEC and CEC. They provide a controlled Ex db & 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, braid and tape armoured cables. The gland maintains IP66 & IP68 to 50 metres and is deluge proof without the use of an additional seal. 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. A termination suitable for EMC protection can be made using armoured cables with this gland.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7, ISA 60079-31

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class III, Type 4X Class I Zone 1 Ex d IIC / Ex e II
NEC - USA	Class II Division 1, Groups E, F & G Class III, Type 4X Class I Zone 1 AEx e IIC Gb Class II Zone 20 AEx ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
KCS-Korea	Ex d IIC / Ex e IIC
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1348X & CML 19ATEX4109X
IECEx	IECEx CML 19.0106X
CEC - Canada	CSA 1356011
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2185 X
CCC - China	2021312313000409
UKRAINE	СЦ 18.0326 X
CCoE - India	PESO P494321/8 & P494321/13
KCS - Korea	15-GA4BO-0669X & 15-GA4BO-0670X
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range	Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)			Shroud Size (Metric)
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]				Across Flats [A]	Across Corners	Weight (Kgs)	
	Metric	NPT		Min	Max	Min	Max	Min	Max						
16	M20 x 1.5	½" or ¾"	16	3.4	8.4	8.4	13.5	6.7	10.3	0.15-1.25	78	25.4	28.0	0.178	EL24*
16H	M20 x 1.5	½" or ¾"	16	3.4	8.4	11.5	16.0	9.4	12.5	0.15-1.25	78	25.4	28.0	0.173	EL24*
20S	M20 x 1.5	½" or ¾"	16	7.2	11.7	11.5	16.0	9.4	12.5	0.15-1.25	78	25.4	28.0	0.173	EL24*
20	M20 x 1.5	½" or ¾"	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	¾" or 1"	16	13.5	20.0	20.3	27.4	16.8	23.9	0.15-1.60	90	37.6	41.4	0.416	EL38
32	M32 x 1.5	1" or 1 ¼"	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 ¼" or 1 ½"	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 ½" or 2"	16	28.1	38.2	39.4	46.7	34.8	42.4	0.20-2.50	125	65.0	71.5	1.255	EL65
50H	M50 x 1.5	1 ½" or 2"	16	28.1	38.2	45.7	53.2	41.1	48.5	0.20-2.50	125	65.0	71.5	1.369	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	1.400	EL65
63S	M63 x 1.5	2" or 2 ½"	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
63H	M63 x 1.5	2" or 2 ½"	19	39.2	50.1	58.4	65.8	53.8	61.2	0.30-2.50	125	80.0	88.0	2.478	EL80
63	M63 x 1.5	2 ½"	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 ½" 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
75H	M75 x 1.5	2 ½" or 3"	19	52.1	62.0	71.1	78.0	66.5	73.4	0.30-2.50	131	90.0	99.0	2.808	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 2.0	3" or 3 ½"	25	62.2	72.0	77.0	84.0	71.9	79.4	0.45-3.15	170	90.0	115.2	4.953	EL104
80H	M80 x 2.0	3" or 3 ½"	25	62.2	72.0	79.6	90.0	75.0	85.4	0.45-3.15	170	104.0	115.2	4.740	EL104
85	M85 x 2.0	3" or 3 ½"	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 2.0	3 ½" 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 2.0	3 ½" or 4"	25	74.0	84.0	92.0	102.0	87.4	97.4	0.45-3.15	170	114.0	125.7	4.867	EL114
100	M100 x 2.0	3 ½" or 4"	25	82.0	90.0	92.0	102.0	87.4	97.4	0.45-3.15	170	114.0	125.7	4.362	EL114
110	M110 x 2.0	4"	25	92.0	102.0	104.0	117.0	-	-	0.45-3.15	165	135.0	148.5	7.327	-

NOTES

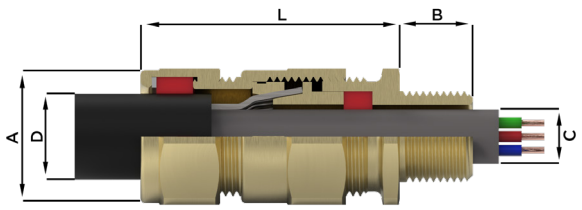
- Gland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* For gland sizes 16, 16H and 20S when used with 3/4" NPT entry thread an EL30 shroud would be required.

PRODUCT TYPE E*U

Double Compression Gland for Armoured Cable featuring Peppers MAC™

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68



PART NUMBERS:

E	1	U	B	*	F	*
	2		S	IE		R
	3					
	4					

EXAMPLE PART NUMBERING: E1UBF/NP/20/050NPT

	E	Gland featuring Peppers Multi-armour clamping system
	1	Neoprene Seal (1) - Silicone Seal (3) - Neoprene/Lead (2) - Silicone/Lead (4)
	U	SWA / SWB or STA
	B	Brass (B) / Stainless Steel (S)
	IE	Integral Earth (see page xx)
	F	Multiple Certification
	R	Reduced Bore Seal
	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
OPTIONS	**K-V-H**	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
	20	Gland shell size
	050NPT	½"NPT Male Entry Thread

PRODUCT DESCRIPTION

"E*U" type double compression glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dusts Groups IIIA, IIIB and IIIC. They provide a controlled Ex db & IP seal on the cable inner sheath, an environmental seal on the outer sheath and Peppers multi-armour clamping system for wire, braid and tape armoured cables. The gland has been tested to IP66 and IP68 to 50 metres. The Integral Earth "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. A termination suitable for EMC protection can be made using armoured cables with these glands.

COMPLIANCE STANDARDS:

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

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

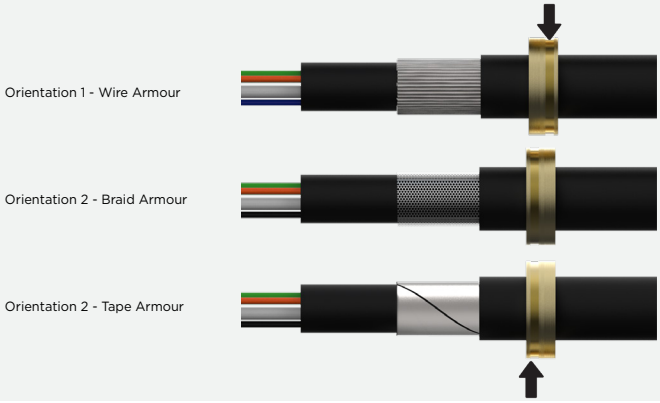
CERTIFICATION No:

ATEX	CML 19ATEX1106X & CML 19ATEX4109X
IECEx	IECEx CML 19.0031X
CCC - China	2021312313000406
CCoE - India	PESO P494321/4 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO)

IP RATING:	IP66 & IP68 (50 metres - 7 days)
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel



CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Shroud Size
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]								
	Metric	NPT		Min	Max	Min	Max	Min	Max	Orientation 1	Orientation 2		Across Flats [A]	Across Corners	Weight Kgs	
16	M16 x 1.5	⅜" or ½"	16	3.5	8.4	8.4	13.5	4.9	10.0	0.80-1.25	0.20-0.80	58	24.0	26.5	0.143	L24
16	M20 x 1.5	½" or ¾"	16	3.5	8.4	8.4	13.5	4.9	10.0	0.80-1.25	0.20-0.80	58	24.0	26.5	0.154	L24**
20S	M20 x 1.5	½" or ¾"	16	8.0	11.7	11.5	16.0	9.4	12.5	0.80-1.25	0.20-0.80	58	24.0	26.5	0.125	L24**
20	M20 x 1.5	½" or ¾"	16	6.7*	14.0	15.5	21.1	12.0	17.6	0.80-1.25	0.20-0.80	58	30.0	33.0	0.180	L30
25	M25 x 1.5	¾" or 1"	16	13.0	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.20-0.80	58	37.6	41.4	0.256	L38
32	M32 x 1.5	1" or 1 ¼"	16	19.0	26.3	26.7	34.0	23.2	30.5	1.60-2.00	0.30-1.20	65	46.0	50.6	0.400	L46
40	M40 x 1.5	1 ¼" or 1 ½"	16	25.0	32.2	33.0	40.6	28.6	36.2	1.60-2.00	0.30-1.20	72	55.0	60.5	0.649	L55
50S	M50 x 1.5	1 ½" or 2"	16	31.5	38.2	39.4	46.7	34.8	42.4	2.00-2.50	0.30-1.60	73	65.0	71.5	0.940	L65
50H	M50 x 1.5	1½" or 2"	16	31.5	38.2	45.7	53.2	41.1	48.5	2.00-2.50	0.30-1.60	73	65.0	71.5	0.849	L65
50	M50 x 1.5	2"	16	36.5	44.1	45.7	53.2	41.1	48.5	2.00-2.50	0.30-1.60	73	65.0	71.5	0.707	L65
63S	M63 x 1.5	2" or 2 ½"	19	42.5	50.1	52.1	59.5	47.5	54.8	2.00-2.50	0.30-1.60	76	80.0	88.0	1.369	L80
63H	M63 x 1.5	2" or 2 ½"	19	42.5	50.1	58.4	65.8	53.8	61.2	2.00-2.50	0.30-1.60	76	80.0	88.0	1.306	L80
63	M63 x 1.5	2 ½"	19	49.5	56.0	58.4	65.8	53.8	61.2	2.00-2.50	0.30-1.60	76	80.0	88.0	1.123	L80
75S	M75 x 1.5	2 ½" or 3"	19	54.5	62.0	64.8	72.2	60.2	68.0	2.00-2.50	0.50-1.60	82	90.0	99.0	1.661	L90
75H	M75 x 1.5	2 ½" or 3"	19	54.5	62.0	71.1	78.0	66.5	73.4	2.00-2.50	0.50-1.60	82	90.0	99.0	1.553	L90
75	M75 x 1.5	3"	19	60.5	68.0	71.1	78.0	66.5	73.4	2.00-2.50	0.50-1.60	82	90.0	99.0	1.310	L90
80	M80 x 2.0	3" or 3 ½"	25	62.2	72.0	77.0	84.0	71.9	79.4	3.15-4.00	0.50-1.60	110	104.0	115.2	2.718	L104
80H	M80 x 2.0	3" or 3 ½"	25	62.2	72.0	79.6	90.0	75.0	85.4	3.15-4.00	0.50-1.60	110	104.0	115.2	2.489	L104
85	M85 x 2.0	3" or 3 ½"	25	69.0	78.0	79.6	90.0	75.0	85.4	3.15-4.00	0.50-1.60	110	104.0	115.2	2.326	L104
90	M90 x 2.0	3 ½" or 4"	25	74.0	84.0	88.0	96.0	82.0	91.4	3.15-4.00	0.50-1.60	110	114.0	125.7	2.852	L114
90H	M90 x 2.0	3 ½" or 4"	25	74.0	84.0	92.0	102.0	87.4	97.4	3.15-4.00	0.50-1.60	110	114.0	125.7	2.629	L114
100	M100 x 2.0	3 ½" or 4"	25	82.0	90.0	92.0	102.0	87.4	97.4	3.15-4.00	0.50-1.60	110	114.0	125.7	2.496	L114

NOTES

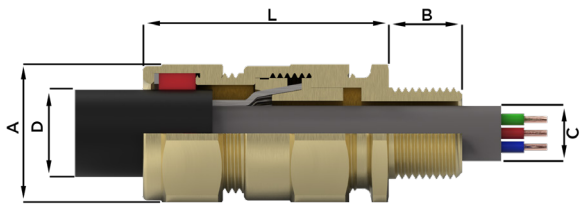
- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account. been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Orientation 2 Min ranges stated are for double layer braid and single layer tape.
- Where approval in addition to ATEX and IECEx is required, this must be clearly requested at the time of the request / order.

* For gland size 20 the silicone inner seal has a minimum diameter of 9.3mm and not 6.7mm
** For gland sizes 16 and 20S when used with a 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE C*U

Single Compression Gland for Armoured Cable featuring Peppers MAC™

Ex eb : Ex ta : IP66



PART NUMBERS:

C	1	U	B	*	E	*
	3		S	IE		R

EXAMPLE PART NUMBERING: C1UBE/NP/20/050NPT

	C	Gland featuring Peppers Multi-armour clamping system
	1	Neoprene Seal (1) - Silicone Seal (3)
	U	SWA / SWB or STA
	B	Brass (B) / Stainless Steel (S)
	IE	Integral Earth (see page 43)
	E	Ex e & Ex ta Certification
	R	Reduced Bore Seal
OPTIONS	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
OPTIONS	K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
	NP	Nickel Plated
	20	Gland shell size
	050NPT	½"NPT Male 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 WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO)

IP RATING:	IP66
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

PRODUCT DESCRIPTION

"C*U" type single compression glands are certified Increased Safety Ex eb and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. The gland is suitable for cables that exhibit "cold flow" characteristics, whilst providing an IP66 environmental seal on the cable outer sheath and Peppers multi-armour clamping system for wire, braid and tape 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. A termination suitable for EMC protection can be made using armoured cables with these glands.

COMPLIANCE STANDARDS:

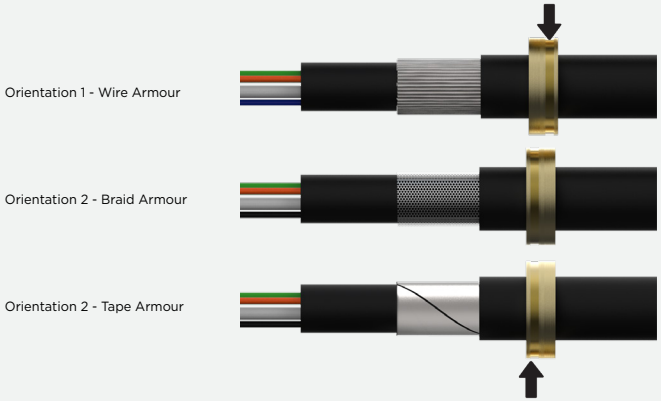
EN 60079-0, EN 60079-7, EN 60079-31
IEC 60079-0, IEC 60079-7, IEC 60079-31 & IEC 60529

CERTIFICATION:

ATEX	II 1D 2G Ex eb IIC Gb / Ex ta IIIC Da
IECEx	Ex eb IIC Gb / Ex ta IIIC Da
INMETRO - Brazil	Ex eb IIC Gb / Ex ta IIIC Da
CCC - China	Ex e IIC Gb / Ex tD A20
CCoE - India	Ex eb IIC Gb / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex eb IIC Gb / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1106X
IECEx	IECEx CML 19.0031X
INMETRO - Brazil	NCC 13.2186 X
CCC - China	2021312313000406
CCoE - India	PESO P494321/4
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA



CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Shroud Size (Metric)
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]								
	Metric	NPT		Min	Max	Min	Max	Min	Max	Orientation 1	Orientation 2		Across Flats [A]	Across Corners	Weight Kgs	
16	M16 x 1.5	⅜" or ½"	16	N/A	8.4	8.4	13.5	4.9	10.0	0.80-1.25	0.20-0.80	58	24.0	26.5	0.143	L24
16	M20 x 1.5	½" or ¾"	16	N/A	8.4	8.4	13.5	4.9	10.0	0.80-1.25	0.20-0.80	58	24.0	26.5	0.154	L24*
20S	M20 x 1.5	½" or ¾"	16	N/A	11.7	11.5	16.0	9.4	12.5	0.80-1.25	0.20-0.80	58	24.0	26.5	0.125	L24*
20	M20 x 1.5	½" or ¾"	16	N/A	14.0	15.5	21.1	12.0	17.6	0.80-1.25	0.20-0.80	58	30.0	33.0	0.180	L30
25	M25 x 1.5	¾" or 1"	16	N/A	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.20-0.80	58	37.6	41.4	0.256	L38
32	M32 x 1.5	1" or 1 ¼"	16	N/A	26.3	26.7	34.0	23.2	30.5	1.60-2.00	0.30-1.20	65	46.0	50.6	0.400	L46
40	M40 x 1.5	1 ¼" or 1 ½"	16	N/A	32.2	33.0	40.6	28.6	36.2	1.60-2.00	0.30-1.20	72	55.0	60.5	0.649	L55
50S	M50 x 1.5	1 ½" or 2"	16	N/A	38.2	39.4	46.7	34.8	42.4	2.00-2.50	0.30-1.60	73	65.0	71.5	0.940	L65
50H	M50 x 1.5	1 ½" or 2"	16	N/A	38.2	45.7	53.2	41.1	48.5	2.00-2.50	0.30-1.60	73	65.0	71.5	0.849	L65
50	M50 x 1.5	2"	16	N/A	44.1	45.7	53.2	41.1	48.5	2.00-2.50	0.30-1.60	73	65.0	71.5	0.707	L65
63S	M63 x 1.5	2" or 2 ½"	19	N/A	50.1	52.1	59.5	47.5	54.8	2.00-2.50	0.30-1.60	76	80.0	88.0	1.369	L80
63H	M63 x 1.5	2" or 2 ½"	19	N/A	50.1	58.4	65.8	53.8	61.2	2.00-2.50	0.30-1.60	76	80.0	88.0	1.306	L80
63	M63 x 1.5	2 ½"	19	N/A	56.0	58.4	65.8	53.8	61.2	2.00-2.50	0.30-1.60	76	80.0	88.0	1.123	L80
75S	M75 x 1.5	2 ½" or 3"	19	N/A	62.0	64.8	72.2	60.2	68.0	2.00-2.50	0.50-1.60	82	90.0	99.0	1.661	L90
75H	M75 x 1.5	2 ½" or 3"	19	N/A	62.0	71.1	78.0	66.5	73.4	2.00-2.50	0.50-1.60	82	90.0	99.0	1.553	L90
75	M75 x 1.5	3"	19	N/A	68.0	71.1	78.0	66.5	73.4	2.00-2.50	0.50-1.60	82	90.0	99.0	1.310	L90
80	M80 x 2.0	3" or 3 ½"	25	N/A	72.0	77.0	84.0	71.9	79.4	3.15-4.00	0.50-1.60	110	104.0	115.2	2.718	L104
80H	M80 x 2.0	3" or 3 ½"	25	N/A	72.0	79.6	90.0	75.0	85.4	3.15-4.00	0.50-1.60	110	104.0	115.2	2.489	L104
85	M85 x 2.0	3" or 3 ½"	25	N/A	78.0	79.6	90.0	75.0	85.4	3.15-4.00	0.50-1.60	110	104.0	115.2	2.326	L104
90	M90 x 2.0	3 ½" or 4"	25	N/A	84.0	88.0	96.0	82.0	91.4	3.15-4.00	0.50-1.60	110	114.0	125.7	2.852	L114
90H	M90 x 2.0	3 ½" or 4"	25	N/A	84.0	92.0	102.0	87.4	97.4	3.15-4.00	0.50-1.60	110	114.0	125.7	2.629	L114
100	M100 x 2.0	3 ½" or 4"	25	N/A	90.0	92.0	102.0	87.4	97.4	3.15-4.00	0.50-1.60	110	114.0	125.7	2.496	L114

NOTES

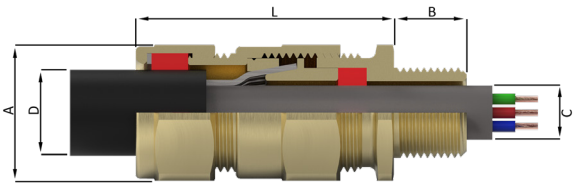
- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Orientation 2 Min ranges stated are for double layer braid and single layer tape.
- Where approval in addition toATEX and IECEx is required, this must be clearly requested at time of enquiry / order.

* For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE E

Double Compression Gland for Armoured Cable featuring Dedicated Armour Clamping

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 Class I Div 2 : AEx e : AEx ta



PART NUMBERS:

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

EXAMPLE PART NUMBERING: EIWBF/NP/20/050NPT

	E	Gland featuring armour specific clamping
	1	Neoprene Seal (1) - Silicone Seal (3) - Neoprene/Lead (2) - Silicone/Lead (4)
	W	SWA (W) / SWB or STA (X)
	B	Aluminium (A) / Brass (B) / Stainless Steel (S)
	IE	Integral Earth (see page 43)
	F	Multiple Certification
	R	Reduced Bore Seal
OPTIONS	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
OPTIONS	K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
OPTIONS	NP	Nickel Plated
	20	Gland shell size
	050NPT	½"NPT Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO)

IP RATING:	IP66 & IP68 (50 metres - 7 days), Type 4X
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

PRODUCT DESCRIPTION

"E" type double compression glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dusts Groups IIIA, IIIB and IIIC. Also certified for Zone and Division installations for use with Marine Shipboard and Tray Cables under the NEC and CEC. They provide a controlled Ex db & 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/tape (X) armoured cables. The gland has been tested to IP66 and IP68 to 50 metres. The Integral Earth "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. A termination suitable for EMC protection can be made using armoured cables with these glands.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7, ISA 60079-31

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D
	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 Ex d IIC / Ex e II
NEC - USA	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rule
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATE1106X & CML 19ATEX4109X
IECEx	IECEx CML 19.0031X
CEC - Canada	CSA 1356011
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2186 X
CCC - China	2021312313000406
UKRAINE	СЦ 18.0323 X
CCoE - India	PESO P494321/4 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Shroud Size (Metric)
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]								
	Metric	NPT		Min	Max	Min	Max	Min	Max	W	X		Across Flats [A]	Across Corners	Weight (Kgs)	
16	M16 x 1.5	½" or ¾"	16	3.5	8.4	8.4	13.5	4.9	10.0	0.90	0.15-0.35	58	24.0	26.5	0.143	L24
16	M20 x 1.5	½" or ¾"	16	3.5	8.4	8.4	13.5	4.9	10.0	0.90	0.15-0.35	58	24.0	26.5	0.154	L24**
20S	M20 x 1.5	½" or ¾"	16	8.0	11.7	11.5	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	½" or ¾"	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	¾" or 1"	16	13.0	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.15-0.50	58	37.6	41.4	0.256	L38
32	M32 x 1.5	1" or 1 ¼"	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 ¼" or 1 ½"	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 ½" 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
50H	M50 x 1.5	1 ½" or 2"	16	31.5	38.2	45.7	53.2	41.1	48.5	2.00-2.50	0.30-0.80	73	65.0	71.5	0.849	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 ½"	19	42.5	50.1	52.1	59.5	47.5	54.8	2.50	0.30-0.80	76	80.0	88.0	1.369	L80
63H	M63 x 1.5	2" or 2 ½"	19	42.5	50.1	58.4	65.8	53.8	61.2	2.50	0.30-0.80	76	80.0	88.0	1.306	L80
63	M63 x 1.5	2 ½"	19	49.5	56.0	58.4	65.8	53.8	61.2	2.50	0.30-0.80	76	80.0	88.0	1.123	L80
75S	M75 x 1.5	2 ½" or 3"	19	54.5	62.0	64.8	72.2	60.2	68.0	2.50	0.30-1.00	82	90.0	99.0	1.661	L90
75H	M75 x 1.5	2 ½" or 3"	19	54.5	62.0	71.1	78.0	66.5	73.4	2.50	0.30-1.00	82	90.0	99.0	1.553	L90
75	M75 x 1.5	3"	19	60.5	68.0	71.1	78.0	66.5	73.4	2.50	0.30-1.00	82	90.0	99.0	1.310	L90
80	M80 x 2.0	3" or 3 ½"	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 2.0	3" or 3 ½"	25	62.2	72.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.489	L104
85	M85 x 2.0	3" or 3 ½"	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 2.0	3 ½" 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 2.0	3 ½" 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	2.629	L114
100	M100 x 2.0	3 ½" 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

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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

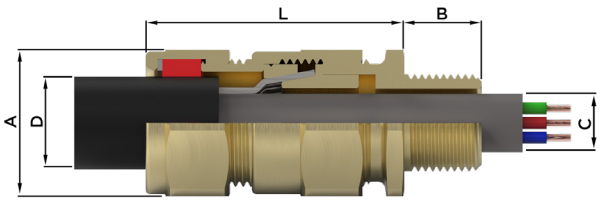
* For gland size 20 the silicone inner seal has a minimum diameter of 9.3mm and not 6.7mm

** For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE C

Single Compression Gland for Armoured Cable featuring Dedicated Armour Clamping

Ex eb : Ex ta : IP66 Class I Div 2 : AEx e : AEx ta



PART NUMBERS:

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

EXAMPLE PART NUMBERING: C1WBE/NP/20/050NPT

	C	Gland featuring armour specific clamping
	1	Neoprene Seal (1) - Silicone Seal (3)
	W	SWA (W) / SWB or STA (X)
	B	Aluminium (A) / Brass (B) / Stainless Steel (S)
	IE	Integral Earth
	E	Ex e & Ex ta Certification
	R	Reduced Bore Outer Sheath Seal
OPTIONS	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
OPTIONS	K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
OPTIONS	NP	Nickel Plated
	20	Gland shell size
	050NPT	½"NPT Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / St Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / St Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO)

IP RATING:	IP66, Type 4X
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

PRODUCT DESCRIPTION

"C" type single compression glands are certified Increased Safety Ex eb and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. 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/tape (X) 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. A termination suitable for EMC protection can be made using armoured cables with these glands.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-7, EN 60079-31
IEC 60079-0, IEC 60079-7, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/7
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7, ISA 60079-31

CERTIFICATION:

ATEX	II 1D 2G Ex eb IIC Gb / Ex ta IIIC Da
IECEx	Ex eb IIC Gb / Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D
	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 Ex e II
NEC - USA	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
EAC	1Ex e IIC Gb X / Ex ta IIIC Da X
INMETRO - Brazil	Ex eb IIC Gb / Ex ta IIIC Da
CCC - China	Ex e IIC Gb / Ex tD A20
UKRAINE	II 2G Ex eb IIC Gb / II 1D Ex ta IIIC Da
CCoE - India	Ex eb IIC Gb / Ex ta IIIC Da
ABS	Specified ABS Rule
LLOYD'S	Ex eb IIC Gb / Ex ta IIIC Da
RS - Russia	Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATE1106X
IECEx	IECEx CML 19.0031X
CEC - Canada	CSA 1356011
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2186 X
CCC - China	2021312313000406
UKRAINE	СЦ 18.0323 X
CCoE - India	PESO P494321/4
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Shroud Size (Metric)
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]								
	Metric	NPT		Min	Max	Min	Max	Min	Max	W	X		Across Flats [A]	Across Corners	Weight (Kgs)	
16	M16 x 1.5	½" or ¾"	16	N/A	8.4	8.4	13.5	4.9	10.0	0.90	0.15-0.35	58	24.0	26.5	0.143	L24
16	M20 x 1.5	½" or ¾"	16	N/A	8.4	8.4	13.5	4.9	10.0	0.90	0.15-0.35	58	24.0	26.5	0.154	L24*
20S	M20 x 1.5	½" or ¾"	16	N/A	11.7	11.5	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	½" or ¾"	16	N/A	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	¾" or 1"	16	N/A	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.15-0.50	58	37.6	41.4	0.256	L38
32	M32 x 1.5	1" or 1 ¼"	16	N/A	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 ¼" or 1 ½"	16	N/A	32.2	33.0	40.6	28.6	36.5	1.60-2.00	0.20-0.60	72	55.0	60.5	0.649	L55
50S	M50 x 1.5	1 ½" or 2"	16	N/A	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
50H	M50 x 1.5	1 ½" or 2"	16	N/A	38.2	45.7	53.2	41.1	48.5	2.00-2.50	0.30-0.80	73	65.0	71.5	0.849	L65
50	M50 x 1.5	2"	16	N/A	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 ½"	19	N/A	50.1	52.1	59.5	47.5	54.8	2.50	0.30-0.80	76	80.0	88.0	1.369	L80
63H	M63 x 1.5	2" or 2 ½"	19	N/A	50.1	58.4	65.8	53.8	61.2	2.50	0.30-0.80	76	80.0	88.0	1.306	L80
63	M63 x 1.5	2 ½"	19	N/A	56.0	58.4	65.8	53.8	61.2	2.50	0.30-0.80	76	80.0	88.0	1.123	L80
75S	M75 x 1.5	2 ½" or 3"	19	N/A	62.0	64.8	72.2	60.2	68.0	2.50	0.30-1.00	82	90.0	99.0	1.661	L90
75H	M75 x 1.5	2 ½" or 3"	19	N/A	62.0	71.1	78.0	66.5	73.4	2.50	0.30-1.00	82	90.0	99.0	1.553	L90
75	M75 x 2.0	3"	19	N/A	68.0	71.1	78.0	66.5	73.4	2.50	0.30-1.00	82	90.0	99.0	1.310	L90
80	M80 x 2.0	3" or 3 ½"	25	N/A	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 2.0	3" or 3 ½"	25	N/A	72.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.489	L104
85	M85 x 2.0	3" or 3 ½"	25	N/A	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 2.0	3 ½" or 4"	25	N/A	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 2.0	3 ½" or 4"	25	N/A	84.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	2.629	L114
100	M100 x 2.0	3 ½" or 4"	25	N/A	90.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	2.496	L114

NOTES

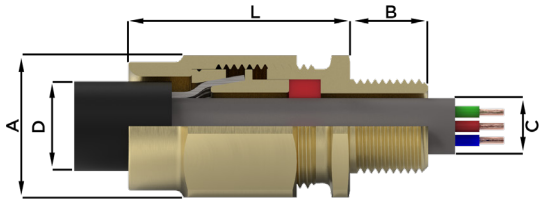
- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE D

Single Compression Gland for Armoured Cables featuring Dedicated Armour Clamping

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 Class I Div 2: AEx e : AEx ta



PART NUMBERS:

D	1	W	B	*	F
	2	X	S	IE	
	3		A		
	4				

PRODUCT DESCRIPTION

"D" type single compression glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Additionally certified for Class I Zone 1 & Class I Div 2 installations for use with Marine Shipboard & Tray Cables under NEC & CEC. They provide a controlled Ex db & IP seal on the cable inner sheath and a detachable armour specific clamping system for wire (W), braid/tape (X) armoured cables. The gland has been tested to IP66 and IP68 to 50 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. A termination suitable for EMC protection can be made using armoured cables with these glands.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
C22.2 (see certificate) CAN/CSA 60079-0/1/7
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7, ISA 60079-31

EXAMPLE PART NUMBERING: DIWBF/NP/20/050NPT

	D	Gland featuring armour specific clamping
	1	Neoprene Seal (1) - Silicone Seal (3) - Neoprene/Lead (2) - Silicone/Lead (4)
	W	SWA (W) / SWB or STA (X)
	B	Aluminium (A) / Brass (B) / Stainless Steel (S)
	IE	Integral Earth (see page 43)
	F	Multiple Certification
OPTIONS	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
OPTIONS	K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
OPTIONS	NP	Nickel Plated
	20	Gland shell size
	050NPT	½"NPT Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO)

IP RATING:	IP66 & IP68 (50 metres - 7 days), Type 4X
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D
	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 Ex d IIC / Ex e II
NEC - USA	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC / Ex tb IIIC

CERTIFICATION No:

ATEX	CML 19ATE1106X & CML 19ATEX4109X
IECEx	IECEx CML 19.0031X
CEC - Canada	CSA 1356011
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2186 X
CCC - China	2021312313000406
UKRAINE	СЦ 18.0323 X
CCoE - India	PESO P494321/4 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details			Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Shroud Size* (Metric)
				Inner Sheath [C]		Outer Sheath [D]							
	Metric	NPT		Min	Max	Max	W	X		Across Flats [A]	Across Corners	Weight (Kgs)	
16	M16 x 1.5	½" or ¾"	16	3.5	8.4	13.5	0.90	0.15-0.35	57	24.0	26.5	0.128	L24**
16	M20 x 1.5	½" or ¾"	16	3.5	8.4	13.5	0.90	0.15-0.35	59	24.0	26.5	0.139	L24**
20S	M20 x 1.5	½" or ¾"	16	8.0	11.7	16.0	0.90-1.25	0.15-0.35	56	24.0	26.5	0.116	L24**
20	M20 x 1.5	½" or ¾"	16	6.7*	14.0	21.0	0.90-1.25	0.15-0.50	56	30.0	33.0	0.158	L30
25	M25 x 1.5	¾" or 1"	16	13.0	20.0	27.5	1.25-1.60	0.15-0.50	56	38.0	41.4	0.237	L38
32	M32 x 1.5	1" or 1 ¼"	16	19.0	26.3	34.0	1.60-2.00	0.15-0.55	63	46.0	50.6	0.344	L46
40	M40 x 1.5	1 ¼" or 1 ½"	16	25.0	32.2	40.0	1.60-2.00	0.20-0.60	69	55.0	60.5	0.567	L55
50S	M50 x 1.5	1 ½" or 2"	16	31.5	38.2	53.0	2.00-2.50	0.20-0.60	71	65.0	71.5	0.776	L65
50	M50 x 1.5	2"	16	36.5	44.1	53.0	2.00-2.50	0.30-0.80	71	65.0	71.5	0.634	L65
63S	M63 x 1.5	2" or 2 ½"	19	42.5	50.1	65.5	2.50	0.30-0.80	71	80.0	88.0	1.186	L80
63	M63 x 1.5	2 ½"	19	49.5	56.0	65.5	2.50	0.30-0.80	71	80.0	88.0	1.003	L80
75S	M75 x 1.5	2 ½" or 3"	19	54.5	62.0	78.5	2.50	0.30-1.00	79	90.0	99.0	1.408	L90
75	M75 x 1.5	3"	19	60.5	68.0	78.5	2.50	0.30-1.00	79	90.0	99.0	1.163	L90
80	M80 x 2.0	3" or 3 ½"	25	62.2	72.0	84.0	3.15	0.45-1.00	102	104.0	115.2	2.392	L104
80H	M80 x 2.0	3" or 3 ½"	25	62.2	72.0	90.0	3.15	0.45-1.00	102	104.0	115.2	2.481	L104
85	M85 x 2.0	3" or 3 ½"	25	69.0	78.0	90.0	3.15	0.45-1.00	102	104.0	115.2	2.163	L104
90	M90 x 2.0	3 ½" or 4"	25	74.0	84.0	96.0	3.15	0.45-1.00	103	114.0	125.7	2.509	L114
90H	M90 x 2.0	3 ½" or 4"	25	74.0	84.0	102.0	3.15	0.45-1.00	103	114.0	125.7	2.501	L114
100	M100 x 2.0	3 ½" or 4"	25	82.0	90.0	102.0	3.15	0.45-1.00	104	114.0	125.7	2.199	L114

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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

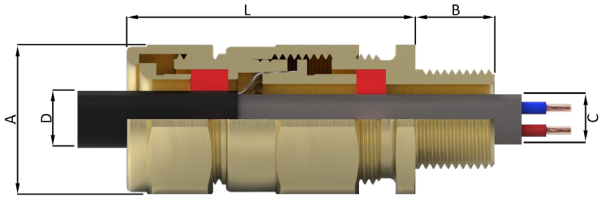
* For gland size 20 the silicone inner seal has a minimum diameter of 9.3 mm and NOT 6.7mm.

** For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE E8X

Double Compression Gland for Armoured Flat Cable featuring Dedicated Armour Clamping

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class II Div 1 : AEx e : AEx ta



PART NUMBERS:

E	8	X	B	F
			S	

PRODUCT DESCRIPTION

"E8X" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The E8X version is designed to accommodate armoured cables, sealing on the inner and outer sheaths and also incorporates a detachable armour specific clamping system. A termination suitable for EMC protection can be made using armoured cables with these glands.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7, ISA 60079-31

EXAMPLE PART NUMBERING: E8XBF/NP/20/050NPT

E		Gland designed for use with Armoured Cables
8		Silicone Seals for flat cables
X		Detachable Clamping for Braid Armour
B		Brass (B) / Stainless Steel (S)
F		Multiple Certification
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
20		Gland shell size
050NPT		½"NPT Male 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 WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 Days), Type 4X
OPERATING TEMP:	Silicone Seals -60°C to +180°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
NEC - USA	Class II Division 1, Groups E, F & G
	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
	Class III, Type 4X
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1346X & CML 19ATEX4109X
IECEx	IECEx CML 19.0104X
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2187 X
CCC - China	Certificate Pending
UKRAINE	СЦ 18.0321 X
CCoE - India	PESO P494321/7 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Cable Inner Sheath [C]				Cable Outer Sheath [D]				Armour Acceptance Range	Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)		
				Width		Thickness		Width		Thickness						
	Metric	NPT		Min	Max	Min	Max	Min	Max	Min	Max			Across Flats [A]	Across Corners	Weight (Kgs)
20S	M20 x 1.5	½" or ¾"	16	6.3	11.7	4.0	7.0	7.9	11.7	4.5	7.0	0.10-0.30	63	30.0	33.0	0.212
20R	M20 x 1.5	½" or ¾"	16	8.1	13.5	5.8	6.2	10.7	16.1	5.4	8.3	0.10-0.30	64	30.0	33.0	0.213
20	M20 x 1.5	½" or ¾"	16	10.3	13.5	5.6	9.0	11.0	13.5	4.5	9.0	0.10-0.30	63	30.0	33.0	0.212

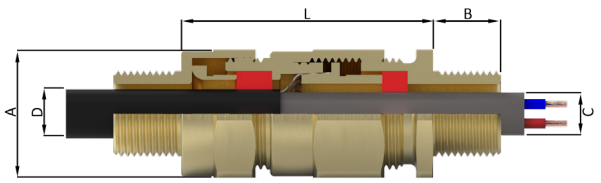
NOTES

- 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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PRODUCT TYPE E8XCM

Double Compression Gland for Armoured Flat Cable featuring a Male Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68



PART NUMBERS:

E	8	X	CM	B	F
				S	

PRODUCT DESCRIPTION

"E8XCM" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The "E8XCM" version is designed to accommodate armoured cables, sealing on the inner and outer sheaths and also incorporates a detachable armour specific clamping system. The gland features a male conduit connection thread as standard. A termination suitable for EMC protection can be made using armoured cables with these glands.

COMPLIANCE STANDARDS:

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

EXAMPLE PART NUMBERING: E8XCMBF050NPT/NP/20/M20

E		Gland designed for use with Armoured Cables
8		Silicone Seals for flat cables
X		Detachable Clamping for Braid Armour
CM		Male Conduit Connection Thread
B		Brass (B) / Stainless Steel (S)
F		Multiple Certification
OPTIONS	K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
050NPT		½"NPT Male Conduit Connection Thread
NP		Nickel Plated
20		Gland shell size
M20		M20 x 1.5 Male Entry Thread

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

CERTIFICATION No:

ATEX	CML 19ATEX1346X & CML 19ATEX4109X
IECEx	IECEx CML 19.0104X
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2187 X
CCC - China	Certificate Pending
UKRAINE	СЦ 18.0321 X
CCoE - India	PESO P494321/7 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

IP RATING:	IP66 & IP68 (50 metres - 7 Days)
OPERATING TEMP:	Silicone Seals -60°C to +180°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Conduit Connection Thread		Cable Inner Sheath [C]				Cable Outer Sheath [D]				Armour Acceptance Range	Nominal Protrusion Length [L] (Metric)	Dimensions/Weight (Metric Versions)		
						Width		Thickness		Width		Thickness						
	Metric	NPT		Metric	NPT	Min	Max	Min	Max	Min	Max	Min	Max			Across Flats [A]	Across Corners	Weight (Kgs)
20S	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	6.3	11.7	4.0	7.0	7.9	11.7	4.5	7.0	0.10-0.30	63	30.0	33.0	0.230
20R	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	8.1	13.5	5.8	6.2	10.7	16.1	5.4	8.3	0.10-0.30	64	30.0	33.0	0.231
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	10.3	13.5	5.6	9.0	11.0	13.5	4.5	9.0	0.10-0.30	63	30.0	33.0	0.230

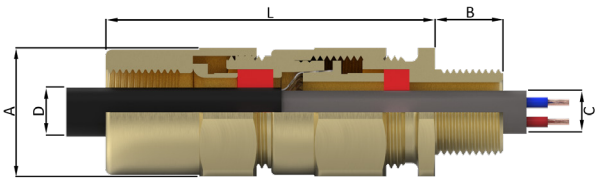
NOTES

- 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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PRODUCT TYPE E8XCF

Double Compression Gland for Armoured Flat Cable featuring a Female Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68



PART NUMBERS:

E	8	X	CF	B	F
				S	

PRODUCT DESCRIPTION

"E8XCF" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The "E8XCF" version is designed to accommodate armoured cables, sealing on the inner and outer sheaths and also incorporates a detachable armour specific clamping system. The gland features a female conduit connection thread as standard. A termination suitable for EMC protection can be made using armoured cables with these glands.

COMPLIANCE STANDARDS:

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

EXAMPLE PART NUMBERING:

E8XCFBF050NPT/NP/20/M20

E		Gland designed for use with Armoured Cables
8		Silicone Seal for flat cables
X		Detachable Clamping for Braid Armour
CF		Female Conduit Connection Thread
B		Brass (B) / Stainless Steel (S)
F		Multiple Certification
050NPT		½"NPT Female Conduit Connection Thread
OPTIONS	K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
050NPT		½"NPT Female Conduit Connection Thread
NP		Nickel Plated
20		Gland shell size
M20		M20 x 1.5 Male Entry Thread

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 Days)
OPERATING TEMP:	Silicone Seals -60°C to +180°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel

CERTIFICATION No:

ATEX	CML 19ATEX1346X & CML 19ATEX4109X
IECEx	IECEx CML 19.0104X
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2187 X
CCC - China	Certificate Pending
UKRAINE	СЦ 18.0321 X
CCoE - India	PESO P494321/7 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Conduit Connection Thread		Cable Inner Sheath [C]				Cable Outer Sheath [D]				Armour Acceptance Range	Nominal Protrusion Length [L] (Metric)	Dimensions/Weight (Metric Versions)		
						Width		Thickness		Width		Thickness				Across Flats [A]	Across Corners	Weight (Kgs)
	Metric	NPT		Metric	NPT	Min	Max	Min	Max	Min	Max	Min	Max					
20S	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	6.3	11.7	4.0	7.0	7.9	11.7	4.5	7.0	0.10-0.30	81	30.0	33.0	0.273
20R	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	8.1	13.5	5.8	6.2	10.7	16.1	5.4	8.3	0.10-0.30	82	30.0	33.0	0.274
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	10.3	13.5	5.6	9.0	11.0	13.5	4.5	9.0	0.10-0.30	81	30.0	33.0	0.273

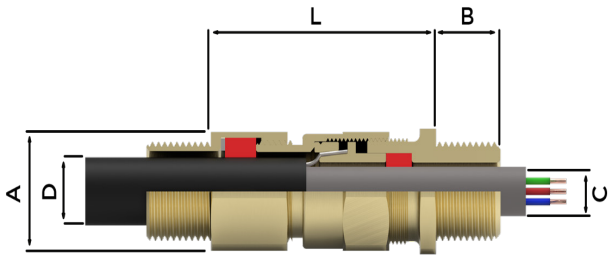
NOTES

- 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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PRODUCT TYPE E*UCM

Double Compression Gland for Armoured Cable featuring Peppers MAC™ with a Male Thread for Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68



PART NUMBERS:

E	1	U	CM	B	*	F	*
	2			S	IE		R
	3						
	4						

EXAMPLE PART NUMBERING: E1UCMBFM20/NP/20/M20

	E	Gland featuring Peppers Multi-armour clamping system
	1	Neoprene Seal (1) - Silicone Seal (3) - Neoprene/Lead (2) - Silicone/Lead (4)
	U	SWA / SWB or STA
	CM	Male Conduit Connection Thread
	B	Brass (B) / Stainless Steel (S)
	IE	Integral Earth (see page 43)
	F	Multiple Certification
	R	Reduced Bore Seal
	M20	M20 x 1.5mm Male Conduit Connection Thread
OPTIONS	K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
OPTIONS	NP	Nickel Plated
	20	Gland shell size
	M20	M20 x 1.5mm Male 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 WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 days)
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel

PRODUCT DESCRIPTION

"E*UCM" type double compression glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dusts Groups IIIA, IIIB and IIIC. They provide a controlled Ex db & IP seal on the cable inner sheath, an environmental seal on the outer sheath and Peppers multi-armour clamping system for wire, braid or tape armoured cables. The gland has been tested to IP66 and IP68 to 50 metres. The Integral Earth "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. The gland features a male conduit connection thread as standard.

COMPLIANCE STANDARDS:

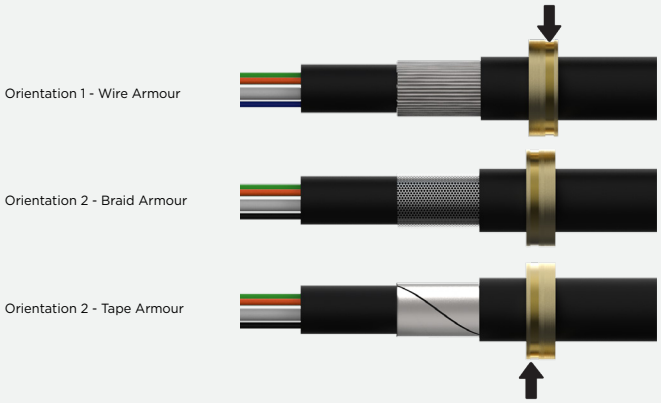
EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1106X & CML 19ATEX4109X
IECEx	IECEx CML 19.0031X
INMETRO - Brazil	NCC 13.2186 X
CCC - China	2021312313000406
CCoE - India	PESO P494321/4 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA



CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Connection Thread Size		Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)		
						Inner Sheath [C]		Outer Sheath [D]		Reduced [D]							
	Metric	NPT		Metric	NPT	Min	Max	Min	Max	Min	Max	Orientation 1	Orientation 2		Across Flats [A]	Across Corners	Weight Kgs
16	M16 x 1.5	⅜" or ½"	16	M16 x 1.5	½"	3.5	8.4	8.4	11.5	4.9	10.0	0.80-1.25	0.20-0.80	74	24.0	26.5	0.164
16	M20 x 1.5	½" or ¾"	16	M16 x 1.5	½"	3.5	8.4	8.4	11.5	4.9	10.0	0.80-1.25	0.20-0.80	74	24.0	26.5	0.180
20S	M20 x 1.5	½" or ¾"	16	M20 x 1.5	¾"**	8.0	11.7	11.5	15.7	9.4	12.5	0.80-1.25	0.20-0.80	74	24.0	26.5	0.151
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	¾"	6.7*	14.0	N/A	N/A	12.0	15.4	0.80-1.25	0.20-0.80	74	30.0	33.0	0.204
25	M25 x 1.5	¾" or 1"	16	M25 x 1.5	1"	13.0	20.0	N/A	N/A	16.8	20.4	1.25-1.60	0.20-0.80	74	37.6	41.4	0.300
32	M32 x 1.5	1" or 1 ¼"	16	M32 x 1.5	1 ¼"	19.0	26.3	N/A	N/A	23.2	26.5	1.60-2.00	0.30-1.20	81	46.0	50.6	0.474
40	M40 x 1.5	1 ¼" or 1 ½"	16	M40 x 1.5	1 ½"	25.0	32.2	N/A	N/A	28.6	34.5	1.60-2.00	0.30-1.20	88	55.0	60.5	0.731
50S	M50 x 1.5	1 ½" or 2"	16	M50 x 1.5	2"	34.5	38.2	39.4	44.5	34.8	42.4	2.00-2.50	0.30-1.60	89	65.0	71.5	1.048
50H	M50 x 1.5	1½" or 2"	16	M50 x 1.5	2"	34.5	38.2	N/A	N/A	41.1	44.5	2.00-2.50	0.30-1.60	89	65.0	71.5	0.965
50	M50 x 1.5	2"	16	M50 x 1.5	2"	36.5	44.1	N/A	N/A	41.1	44.5	2.00-2.50	0.30-1.60	89	65.0	71.5	0.833
63S	M63 x 1.5	2" or 2 ½"	19	M63 x 1.5	2 ½"	42.5	50.1	52.1	57.5	47.5	54.8	2.00-2.50	0.30-1.60	95	80.0	88.0	1.528
63H	M63 x 1.5	2" or 2 ½"	19	M63 x 1.5	2 ½"	42.5	50.1	N/A	N/A	53.8	57.5	2.00-2.50	0.30-1.60	95	80.0	88.0	1.474
63	M63 x 1.5	2 ½"	19	M63 x 1.5	2 ½"	49.5	56.0	N/A	N/A	53.8	57.5	2.00-2.50	0.30-1.60	95	80.0	88.0	1.283
75S	M75 x 1.5	2 ½" or 3"	19	M75 x 1.5	3"	54.5	62.0	64.8	69.0	60.2	68.0	2.00-2.50	0.50-1.60	107	90.0	99.0	1.916
75H	M75 x 1.5	2 ½" or 3"	19	M75 x 1.5	3"	54.5	62.0	N/A	N/A	66.5	69.4	2.00-2.50	0.50-1.60	107	90.0	99.0	1.813
75	M75 x 1.5	3"	19	M75 x 1.5	3"	60.5	68.0	N/A	N/A	66.5	69.4	2.00-2.50	0.50-1.60	107	90.0	99.0	1.561
80	M80 x 2.0	3" or 3 ½"	25	M80 x 2.0	3"	62.2	72.0	N/A	N/A	71.9	74.0	3.15-4.00	0.50-1.60	135	104.0	115.2	3.347
80H	M80 x 2.0	3" or 3 ½"	25	M85 x 2.0	3 ½"	62.2	72.0	N/A	N/A	75.0	79.0	3.15-4.00	0.50-1.60	135	104.0	115.2	3.175
85	M85 x 2.0	3" or 3 ½"	25	M85 x 2.0	3 ½"	69.0	78.0	N/A	N/A	75.0	79.0	3.15-4.00	0.50-1.60	135	104.0	115.2	2.881
90	M90 x 2.0	3 ½" or 4"	25	M90 x 2.0	3 ½"	74.0	84.0	N/A	N/A	82.0	84.0	3.15-4.00	0.50-1.60	135	114.0	125.7	3.542
90H	M90 x 2.0	3 ½" or 4"	25	M100 x 2.0	4"**	74.0	84.0	N/A	N/A	87.4	92.0	3.15-4.00	0.50-1.60	135	114.0	125.7	3.362
100	M100 x 2.0	3 ½" or 4"	25	M100 x 2.0	4"**	82.0	90.0	N/A	N/A	87.4	92.0	3.15-4.00	0.50-1.60	135	114.0	125.7	3.151

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.
- 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 general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Orientation 2 Min ranges stated are for double layer braid and single layer tape.

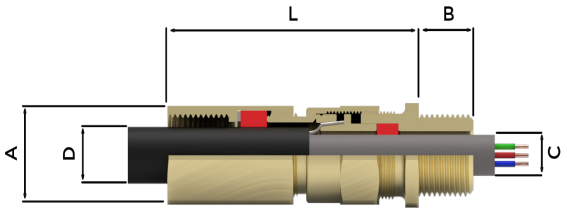
* For gland size 20 the silicone inner seal has a minimum diameter of 9.3 mm and NOT 6.7mm

** Larger Hexagon Required for these sizes. Contact Peppers for further advice

PRODUCT TYPE E*UCF

Double Compression Gland for Armoured Cable featuring Peppers MAC™ with a Female Thread for Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68



PART NUMBERS:

E	1	U	CF	B	*	F	*
	2			S	IE		R
	3						
	4						

PRODUCT DESCRIPTION

"E*UCF" type double compression glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dusts Groups IIIA, IIIB and IIIC. They provide a controlled Ex db & IP seal on the cable inner sheath, an environmental seal on the outer sheath and Peppers multi-armour clamping system for wire, braid or tape armoured cables. The gland has been tested to IP66 and IP68 to 50 metres. The Integral Earth "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. The gland features a female conduit connection thread as standard.

COMPLIANCE STANDARDS:

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

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
INMETRO - Brazil	Ex db IIC Db / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1106X & CML 19ATEX4109X
IECEx	IECEx CML 19.0031X
INMETRO - Brazil	NCC 13.2186 X
CCC - China	2021312313000406
CCoE - India	PESO P494321/4 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

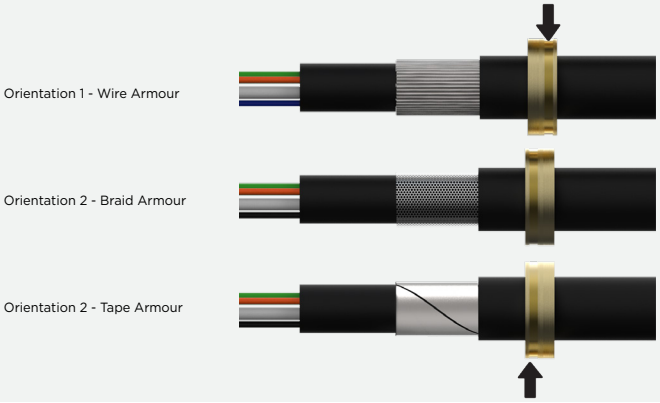
EXAMPLE PART NUMBERING: E1UCFBFM20/NP/20/M20

E		Gland featuring Peppers Multi-armour clamping system
1		Neoprene Seal (1) - Silicone Seal (3) - Neoprene/Lead (2) - Silicone/Lead (4)
U		SWA / SWB or STA
CF		Female Conduit Connection Thread
B		Brass (B) / Stainless Steel (S)
IE		Integral Earth (see page 43)
F		Multiple Certification
R		Reduced Bore Seal
M20		M20 x 1.5mm Female Conduit Connection Thread
OPTIONS	**K-V-H**	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
20		Gland shell size
M20		M20 x 1.5mm Male 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 WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 days)
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel



CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Connection Thread Size		Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)		
						Inner Sheath [C]		Outer Sheath [D]		Reduced [D]							
	Metric	NPT		Metric	NPT	Min	Max	Min	Max	Min	Max	Orientation 1	Orientation 2		Across Flats [A]	Across Corners	Weight Kgs
16	M16 x 1.5	⅜" or ½"	16	M16 x 1.5	½"	3.5	8.4	8.4	13.5	4.9	10.0	0.80-1.25	0.20-0.80	76	24.0	26.5	0.199
16	M20 x 1.5	½" or ¾"	16	M16 x 1.5	½"	3.5	8.4	8.4	13.5	4.9	10.0	0.80-1.25	0.20-0.80	76	24.0	26.5	0.216
20S	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½"	8.0	11.7	11.5	16.0	9.4	12.5	0.80-1.25	0.20-0.80	76	24.0	26.5	0.169
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	¾"	6.7*	14.0	15.5	18.3	12.0	17.6	0.80-1.25	0.20-0.80	76	30.0	33.0	0.261
25	M25 x 1.5	¾" or 1"	16	M25 x 1.5	1"	13.0	20.0	20.3	23.3	16.8	23.3	1.25-1.60	0.20-0.80	76	37.6	41.4	0.393
32	M32 x 1.5	1" or 1 ¼"	16	M32 x 1.5	1 ¼"	19.0	26.3	26.7	30.3	23.2	30.3	1.60-2.00	0.30-1.20	83	46.0	50.6	0.587
40	M40 x 1.5	1 ¼" or 1 ½"	16	M40 x 1.5	1 ½"	25.0	32.2	33.0	38.3	28.6	36.2	1.60-2.00	0.30-1.20	90	55.0	60.5	0.884
50S	M50 x 1.5	1 ½" or 2"	16	M50 x 1.5	2"	34.5	38.2	39.4	46.7	34.8	42.4	2.00-2.50	0.30-1.60	91	65.0	71.5	1.262
50H	M50 x 1.5	1½" or 2"	16	M50 x 1.5	2"	34.5	38.2	45.7	48.3	41.1	48.3	2.00-2.50	0.30-1.60	91	65.0	71.5	1.175
50	M50 x 1.5	2"	16	M50 x 1.5	2"	36.5	44.1	45.7	48.3	41.1	48.3	2.00-2.50	0.30-1.60	91	65.0	71.5	1.043
63S	M63 x 1.5	2" or 2 ½"	19	M63 x 1.5	2 ½"	42.5	50.1	52.1	59.5	47.5	54.8	2.00-2.50	0.30-1.60	97	80.0	88.0	1.893
63H	M63 x 1.5	2" or 2 ½"	19	M63 x 1.5	2 ½"	42.5	50.1	58.4	61.3	53.8	61.2	2.00-2.50	0.30-1.60	97	80.0	88.0	1.835
63	M63 x 1.5	2 ½"	19	M63 x 1.5	2 ½"	49.5	56.0	58.4	61.3	53.8	61.2	2.00-2.50	0.30-1.60	97	80.0	88.0	1.644
75S	M75 x 1.5	2 ½" or 3"	19	M75 x 1.5	3"**	54.5	62.0	64.8	72.2	60.2	68.0	2.00-2.50	0.50-1.60	109	90.0	99.0	2.420
75H	M75 x 1.5	2 ½" or 3"	19	M80 x 2.0	3"**	54.5	62.0	71.1	78.0	66.5	73.4	2.00-2.50	0.50-1.60	109	90.0	99.0	2.175
75	M75 x 1.5	3"	19	M80 x 2.0	3"**	60.5	68.0	71.1	78.0	66.5	73.4	2.00-2.50	0.50-1.60	109	90.0	99.0	1.923
80	M80 x 2.0	3" or 3 ½"	25	M85 x 2.0	3 ½"**	62.2	72.0	77.0	82.8	71.9	79.4	3.15-4.00	0.50-1.60	137	104.0	115.2	4.078
80H	M80 x 2.0	3" or 3 ½"	25	M90 x 2.0	3 ½"**	62.2	72.0	79.6	87.8	75.0	85.4	3.15-4.00	0.50-1.60	137	104.0	115.2	3.705
85	M85 x 2.0	3" or 3 ½"	25	M90 x 2.0	3 ½"**	69.0	78.0	79.6	87.8	75.0	85.4	3.15-4.00	0.50-1.60	137	104.0	115.2	3.412
90	M90 x 2.0	3 ½" or 4"	25	M100 x 2.0	4"**	74.0	84.0	88.0	96.0	82.0	91.4	3.15-4.00	0.50-1.60	137	114.0	125.7	4.143
90H	M90 x 2.0	3 ½" or 4"	25	M100 x 2.0	4"**	74.0	84.0	92.0	97.8	87.4	97.4	3.15-4.00	0.50-1.60	137	114.0	125.7	3.936
100	M100 x 2.0	3 ½" or 4"	25	M100 x 2.0	4"**	82.0	90.0	92.0	97.8	87.4	97.4	3.15-4.00	0.50-1.60	137	114.0	125.7	3.726

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.
- 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 general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Orientation 2 Min ranges stated are for double layer braid and single layer tape.

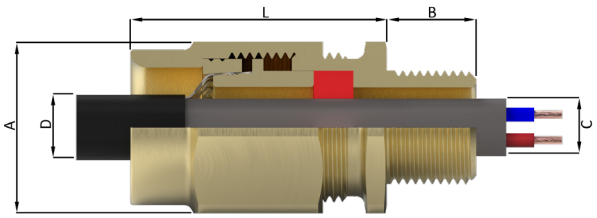
* For gland size 20 the silicone inner seal has a minimum diameter of 9.3 mm and NOT 6.7mm

** Larger Hexagon Required for these sizes. Contact Peppers for further advice

PRODUCT TYPE D8X

Single Compression Gland for Armoured Flat Cable featuring Dedicated Armour Clamping

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class II Div 1 : AEx eb : AEx ta



PART NUMBERS:

D	8	X	B	F
			S	

EXAMPLE PART NUMBERING: D8XBF/NP/20/050NPT

	D	Gland designed for use with Armoured Cables
	8	Silicone Seal for flat cables
	X	Detachable Clamping for Braid Armour
	B	Brass (B) / Stainless Steel (S)
	F	Multiple Certification
OPTIONS	K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
OPTIONS	NP	Nickel Plated
	20	Gland shell size
	050NPT	½"NPT Male 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 WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 Days), Type 4X
OPERATING TEMP:	Silicone Seals -60°C to +180°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel

PRODUCT DESCRIPTION

"D8X" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The "D8X" version is designed to accommodate armoured cables, sealing on the inner sheath and also incorporates a detachable armour specific clamping system. A termination suitable for EMC protection can be made using armoured cables with these glands.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7, ISA 60079-31

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
NEC - USA	Class II Division 1, Groups E, F & G
	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
	Class III, Type 4X
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1346X & CML 19ATEX4109X
IECEx	IECEx CML 19.0104X
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2187 X
CCC - China	Certificate Pending
UKRAINE	СЦ 18.0321 X
CCoE - India	PESO P494321/7 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Cable Inner Sheath [D]				Cable Outer Sheath [D]		Armour Acceptance Range	Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)		
				Width		Thickness		Width	Thickness					
	Metric	NPT		Min	Max	Min	Max	Max	Max			Across Flats [A]	Across Corners	Weight (Kgs)
20S	M20 x 1.5	½" or ¾"	16	6.3	11.7	4.0	7.0	15.5	N/A	0.10-0.30	48	30.0	33.0	0.165
20R	M20 x 1.5	½" or ¾"	16	8.1	13.5	5.8	6.2	20.5	N/A	0.10-0.30	49	30.0	33.0	0.166
20	M20 x 1.5	½" or ¾"	16	10.3	13.5	5.6	9.0	20.5	N/A	0.10-0.30	48	30.0	33.0	0.165

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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

peppers™

END—TO—END PERFORMANCE

GLANDS FOR UNARMOURED CABLE

Cable glands for unarmoured cable are designed for use with unarmoured/shielded cable, also known as stuffing glands. Unarmoured cable may be used in conjunction with electrical conduit. There are several different types of conduit used commonly:

- Rigid metal conduit or RMC, is heavy-duty galvanized steel tubing that is installed with threaded fittings.
- Electrical metal tubing or EMT, which is most commonly made of galvanized steel but can also be aluminium.
- Flexible metallic conduit or FMC is made by the helical coiling of a self-interlocked ribbed strip of aluminium or steel, forming a hollow tube through which wires can be pulled.
- Liquid-tight flexible metal conduit or LFMC is a special type of flexible metal conduit that has a plastic coating and is used with sealed fittings to make it watertight.

Peppers' unarmoured cable glands, also known as compression glands, are designed for use in fixed installations not exposed to the risk of mechanical damage. They provide a controlled pull resistant seal on the cable outer sheath (OD). This seal minimizes damage to cables that exhibit "cold flow" characteristics.

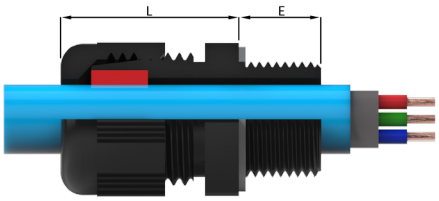
- A* Single/Double Compression Gland for Armoured/Unarmoured Cable/
- A*LDS/RCC Single/Double Compression Gland for Flexible & Rotating Conduit Connector

Peppers' unarmoured cable glands support unarmoured and armoured cables where sealing and retention is required only on the outer sheath. The glands also provide a male/female thread for a variety of conduit attachments:

PRODUCT TYPE PF

Single Compression Nylon Gland for Unarmoured Cable

Ex eb : Ex tb : IP68



PART NUMBERS:

PF * E

PRODUCT DESCRIPTION

"PF" type glands, certified Increased Safety Ex eb are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Group IIC. They are manufactured from polyamide and provide a controlled pull resistant displacement seal on the cable outer sheath providing both Ex eb & IP protection. The gland has been tested to IP66 & IP68 to 50 metres and is fully compliant with the Increased Safety 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 STANDARDS:

EN 60079-0, EN 60079-7, EN 60079-31
IEC 60079-0, IEC 60079-7, IEC 60079-31 & IEC 60529

IP RATING:	IP66 & IP68 (50 metres - 30 minutes)
OPERATING TEMP:	M16-M63 -35°C to +95°C
	M12 -20°C to +80°C
MATERIALS:	Polyamide
IMPACT RESISTANCE:	7Nm
OPTIONS:	Colour - Black / Blue
	Industrial Non-Ex version - Omit "E" from part number
ACCESSORIES:	Nylon Locknut / IP Washers

CERTIFICATION:

ATEX	II 2GD Ex e IIC / Ex tb IIIC
IECEx	Ex eb IIC / Ex tb IIIC
EAC	Ex e II
CEC - Canada	CAN/CSA C22.2
NEC - USA	ANSI/UL514B
VDE	DIN EN 50262 / VDE 0619
LLOYD'S	Enclosure Systems (Part 1B)
INMETRO	Ex e II

CERTIFICATION No:

ATEX	LCIE 07ATEX6082X/02
IECEx	LCI 10.0008X
EAC	RU C-FR.ГБ05.В.00955
CEC - Canada	E306665
NEC - USA	E306665
VDE	131210
LLOYD'S	LR2124442TA
INMETRO	BR230661-X

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size	Nominal Protrusion [L]	Cable Sealing Range		ISO Thread Length Standard [E]	Part Number Standard Thread		ISO Thread Length Standard [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

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

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	⅜" NPT	27.0	5.0	8.0	11	PF7440800E	PF8040800E	19.0	22.0	0.008
20	½" NPT	27.0	7.0	12.0	14	PF7441200E	PF8041200E	24.0	26.8	0.010
25	¾" 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

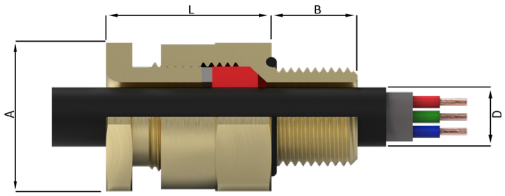
NOTES

- 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 threads.
- Industrial Non-Ex versions are not supplied with IP thread sealing washer.
- Industrial Non-Ex versions are available in Black or Grey.

PRODUCT TYPE A

Single Compression Gland for Armoured and Unarmoured Cable

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e : AEx ta



PART NUMBERS:

A	1	L	B	F
	2		S	
	3		A	
	4			

PRODUCT DESCRIPTION

"A" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Also certified for Zone and Division installations for use with Marine Shipboard and Tray Cables under the NEC and CEC. 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 50 metres. 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. The "A" version is designed to accommodate unarmoured and armoured cables where sealing and retention is required only on the outer sheath.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7, ISA 60079-31

EXAMPLE PART NUMBERING: A2LBF/NP/20/M20

	A	Type of gland featuring controlled displacement sealing
	2	Neoprene Seals (2) - Silicone (3) - Neoprene/Lead (1) - Silicone/Lead (4)
	L	Peppers Standard Designation
	B	Aluminium (A) / Brass (B) / Stainless Steel (S)
	F	Multiple Certification
OPTIONS	C	PVC Shroud (C) - PCP Shroud (P) - Silicone LSOH Shroud (3)
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	T	Including Earth Tag
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
OPTIONS	NP	Nickel Plated
	20	Gland shell size
	M20	M20 x 1.5mm Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / St Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / St Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (50 metres - 7 Days), Type 4X
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D
(except size 12)	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 Ex d IIC / Ex e II
NEC - USA	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1345X & CML 19ATEX4109X
IECEx	IECEx CML 19.0103X
CEC - Canada	CSA 1356011
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2012 X
CCC - China	2021312313000408
UKRAINE	СЦ 18.0325 X
CCoE - India	PESO P494321/6 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		ISO Thread Length [B]	Cable Acceptance Details Outer Sheath [D]		Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)			Shroud Size (Metric)
	Metric	NPT		Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)	
12*	M12 x 1.5	⅜"	16	0.9	6.0	33	19.0	21.0	0.038	L19
12*	M16 x 1.5	⅜" or ½"	16	0.9	6.0	33	25.4	28.0	0.068	L24
12*	M20 x 1.5	⅜" or ½"	16	0.9	6.0	33	25.4	28.0	0.082	L24
16	M16 x 1.5	⅜" or ½"	16	4.0	8.4	33	25.4	28.0	0.097	L24
16	M20 x 1.5	½" or ¾"	16	4.0	8.4	33	25.4	28.0	0.104	L24**
20S	M20 x 1.5	½" or ¾"	16	7.2	11.7	33	25.4	28.0	0.102	L24**
20	M20 x 1.5	½" or ¾"	16	9.4	14.0	33	30.0	33.0	0.127	L30
25	M25 x 1.5	¾" or 1"	16	13.5	20.0	33	37.6	41.4	0.166	L38
32	M32 x 1.5	1" or 1 ¼"	16	19.5	26.3	33	46.0	50.6	0.244	L46
40	M40 x 1.5	1 ¼" or 1 ½"	16	23.0	32.2	37	55.0	60.5	0.396	L55
50S	M50 x 1.5	1 ½" 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 ½"	19	39.2	50.1	37	80.0	88.0	0.832	L80
63	M63 x 1.5	2 ½"	19	46.7	56.0	37	80.0	88.0	0.664	L80
75S	M75 x 1.5	2 ½" 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 2.0	3" or 3 ½"	25	62.2	72.0	50	104.0	115.2	1.514	L104
85	M85 x 2.0	3" or 3 ½"	25	69.0	78.0	50	104.0	115.2	1.332	L104
90	M90 x 2.0	3 ½" or 4"	25	74.0	84.0	50	114.0	125.7	1.622	L114
100	M100 x 2.0	3 ½" or 4"	25	82.0	90.0	50	114.0	125.7	1.523	L114

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 canbe 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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length.

Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.

- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

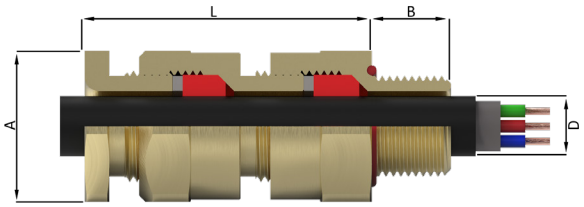
* Gland sizes 12 not available in aluminium.

** For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE A*LDS

Double Compression Gland for Unarmoured Cable

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e : AEx ta



PART NUMBERS:

A	1	L	DS	B	F
	2			S	
	3			A	
	4				

EXAMPLE PART NUMBERING: A2LDSBF/NP/20/M20

	A	Gland featuring controlled displacement sealing
	2	Neoprene Seals (2) - Silicone Seals (3) - Neoprene/Lead (1) - Silicone/Lead (4)
	L	Peppers Standard Designation
	DS	Double Sealing
	B	Aluminium (A) / Brass (B) / Stainless Steel (S)
	F	Multiple Certification
OPTIONS	**C**	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
OPTIONS	**K-V-H**	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	**T**	Including Earth Tag
OPTIONS	**S**	Including Serrated Washer
OPTIONS	**1**	Quantity per kit
OPTIONS	**NP**	Nickel Plated
	20	Gland shell size
	M20	M20 x 1.5mm Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / St Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / St Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone(ACSSIO)

IP RATING:	IP66 & IP68 (50 metres - 7 Days), Type 4X
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

PRODUCT DESCRIPTION

"A*LDS" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Also certified for Zone and Division installations for use with Marine Shipboard and Tray Cables under the NEC and CEC. 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 50 metres. 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 STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL514B, UL1203, UL2225, UL50E ANSI/UL 60079-0/7, ISA 60079-31

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D
(except size 12)	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 Ex d IIC / Ex e II
NEC - USA	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1345X & CML 19ATEX4109X
IECEx	IECEx CML 19.0103X
CEC - Canada	CSA 1356011
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2012 X
CCC - China	2021312313000408
UKRAINE	СЦ 18.0325 X
CCoE - India	PESO P494321/6 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details Outer Sheath [D]		Nominal Protrusion Length [L] Metric	Dimensions/Weight (Metric Versions)			Shroud Size (Metric)
	Metric	NPT		Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)	
12*	M12 x 1.5	⅜"	16	0.9	6.0	33	19.0	21.0	0.064	L19
12*	M16 x 1.5	⅜" or ½"	16	0.9	6.0	33	25.4	28.0	0.119	L24
16	M16 x 1.5	½" or ¾"	16	4.0	8.4	48	25.4	28.0	0.133	L24**
20S	M20 x 1.5	½" or ¾"	16	7.2	11.7	48	25.4	28.0	0.209	L24**
20	M20 x 1.5	½" or ¾"	16	9.4	14.0	62	30.0	33.0	0.275	L30
25	M25 x 1.5	¾" or 1"	16	13.5	20.0	62	37.6	41.4	0.408	L38
32	M32 x 1.5	1" or 1 ¼"	16	19.5	26.3	62	46.0	50.6	0.408	L46
40	M40 x 1.5	1 ¼" or 1 ½"	16	23.0	32.2	68	55.0	60.5	0.666	L55
50S	M50 x 1.5	1 ½" 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 ½"	19	39.2	50.1	74	80.0	88.0	1.330	L80
63	M63 x 1.5	2 ½"	19	46.7	56.0	74	80.0	88.0	1.114	L80
75S	M75 x 1.5	2 ½" 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 2.0	3" or 3 ½"	25	62.2	72.0	87	104.0	115.2	2.322	L104
85	M85 x 2.0	3" or 3 ½"	25	69.0	78.0	87	104.0	115.2	2.107	L104
90	M90 x 2.0	3 ½" or 4"	25	74.0	84.0	88	114.0	125.7	2.539	L114
100	M100 x 2.0	3 ½" or 4"	25	82.0	90.0	90	114.0	125.7	2.211	L114

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.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

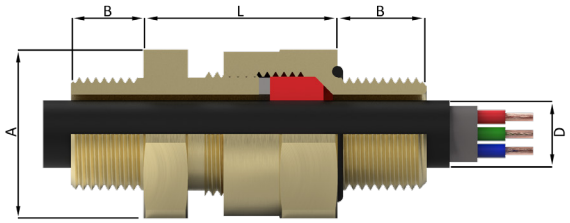
* Gland sizes 12 not available in aluminium.

** For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE A*LCM

Single Compression Gland for Unarmoured Cable featuring a Male Thread for Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e : AEx ta



PART NUMBERS:

A	1	L	CM	B	F
	2			S	
	3			A	
	4				

PRODUCT DESCRIPTION

"A*LCM" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Also certified for Zone and Division installations for use with Marine Shipboard and Tray Cables under the NEC and CEC. 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 50 metres. It is supplied with an IP O-ring seal as standard on metric entry threads. The gland features a male conduit connection thread as standard.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL514B, UL1203, UL2225, UL50E
ANSI/UL 60079-0/7, ISA 60079-31

EXAMPLE PART NUMBERING: A2LCMBF050NPT/NP/20/M20

	A	Gland featuring controlled displacement sealing
	2	Neoprene Seal (2) - Silicone Seal (3) - Neoprene/Lead (1) - Silicone/Lead (4)
	L	Peppers Standard Designation
	CM	Male Conduit Connection Thread
	B	Brass (B) / Stainless Steel (S) / Aluminium (A)
	F	Multiple Certification
OPTIONS	**K-V-H**	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
	050NPT	½"NPT Male Conduit Connection Thread
	NP	Nickel Plated
	20	Gland shell size
	M20	M20 x 1.5mm Male Entry Thread

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D
(except size 12)	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 Ex d IIC / Ex e II
NEC - USA	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1345X & CML 19ATEX4109X
IECEx	IECEx CML 19.0103X
CEC - Canada	CSA 1356011
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2012 X
CCC - China	2021312313000408
UKRAINE	СЦ 18.0325 X
CCoE - India	PESO P494321/6 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 Days), Type 4X
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Conduit Connection Thread		Cable Acceptance Outer Sheath [D]		Nominal Protrusion Length [L] (Metric)	Dimensions/Weight (Metric Versions)		
	Metric	NPT		Metric	NPT	Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)
12*	M12 x 1.5	⅜"	16	M12 x 1.5	⅜"	0.9	6.0	25	19.0	21.0	0.048
12*	M16 x 1.5	⅜" or ½"	16	M16 x 1.5	⅜" or ½"	0.9	6.0	26	25.4	28.0	0.117
16	M16 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	4.0	8.4	30	25.4	28.0	0.131
20S	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	7.2	11.7	35	25.4	28.0	0.134
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	9.4	14.0	35	30.0	33.0	0.150
25	M25 x 1.5	¾" or 1"	16	M25 x 1.5	¾" or 1"	13.5	20.0	35	37.6	41.4	0.215
32	M32 x 1.5	1" or 1 ¼"	16	M32 x 1.5	1" or 1 ¼"	19.5	26.3	35	46.0	50.6	0.293
40	M40 x 1.5	1 ¼" or 1 ½"	16	M40 x 1.5	1 ¼" or 1 ½"	23.0	32.2	38	55.0	60.5	0.472
50S	M50 x 1.5	1 ½" or 2"	16	M50 x 1.5	1 ½" or 2"	28.1	38.2	38	65.0	71.5	0.583
50	M50 x 1.5	2"	16	M50 x 1.5	2"	33.1	44.1	38	65.0	71.5	0.525
63S	M63 x 1.5	2" or 2 ½"	19	M63 x 1.5	2" or 2 ½"	39.2	50.1	38	80.0	88.0	0.899
63	M63 x 1.5	2 ½"	19	M63 x 1.5	2 ½"	46.7	56.0	38	80.0	88.0	0.803
75S	M75 x 1.5	2 ½" or 3"	19	M75 x 1.5	2 ½" or 3"	52.1	62.0	38	90.0	99.0	0.994
75	M75 x 1.5	3"	19	M75 x 1.5	3"	58.0	68.0	38	90.0	99.0	0.873
80	M80 x 2.0	3" or 3 ½"	25	M80 x 2.0	3" or 3 ½"	62.2	72.0	47	104.0	115.2	1.640
85	M85 x 2.0	3" or 3 ½"	25	M85 x 2.0	3" or 3 ½"	69.0	78.0	47	104.0	115.2	1.462
90	M90 x 2.0	3 ½" or 4"	25	M90 x 2.0	3 ½" or 4"	74.0	84.0	47	114.0	125.7	1.713
100	M100 x 2.0	3 ½" or 4"	25	M100 x 2.0	3 ½" or 4"	82.0	90.0	48	114.0	125.7	1.757

NOTES

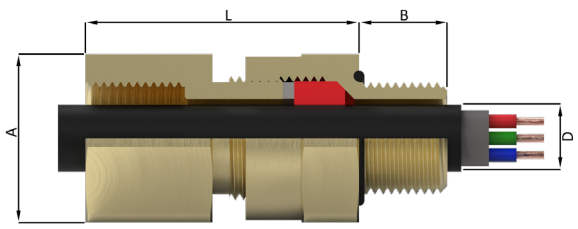
- Gland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* Gland sizes 12 not available in aluminium.

PRODUCT TYPE A*LCF

Single Compression Gland for Unarmoured Cable featuring a Female Thread for Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e : AEx ta



PART NUMBERS:

A	1	L	CF	B	F
	2			S	
	3			A	
	4				

PRODUCT DESCRIPTION

"A*LCF" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Also certified for Zone and Division installations for use with Marine Shipboard and Tray Cables under the NEC and CEC. 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 50 metres. 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.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL514B, UL1203, UL2225, UL50E
ANSI/UL 60079-0/7, ISA 60079-31

EXAMPLE PART NUMBERING: A2LCFBF050NPT/NP/20/M20

A		Gland featuring controlled displacement sealing
2		Neoprene Seal (2) - Silicone Seal (3) - Neoprene/Lead (1) - Silicone/Lead (4)
L		Peppers Standard Designation
CF		Female Conduit Connection Thread
B		Brass (B) / Stainless Steel (S) / Aluminium (A)
F		Multiple Certification
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
050NPT		½"NPT Female Conduit Connection Thread
NP		Nickel Plated
20		Gland shell size
M20		M20 x 1.5mm Male Entry Thread

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D
(except size 12)	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 Ex d IIC / Ex e II
NEC - USA	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1345X & CML 19ATEX4109X
IECEx	IECEx CML 19.0103X
CEC - Canada	CSA 1356011
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2012 X
CCC - China	2021312313000408
UKRAINE	СЦ 18.0325 X
CCoE - India	PESO P494321/6 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 Days), Type 4X
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Conduit Connection Thread		Cable Acceptance Outer Sheath [D]		Nominal Protrusion Length [L] (Metric)	Dimensions/Weight (Metric Versions)		
	Metric	NPT		Metric	NPT	Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)
12*	M12 x 1.5	⅜"	16	M12 x 1.5	⅜"	0.9	6.0	45	19.0	21.0	0.078
12*	M16 x 1.5	⅜" or ½"	16	M16 x 1.5	⅜" or ½"	0.9	6.0	44	25.4	28.0	0.130
16	M16 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	4.0	8.4	48	25.4	28.0	0.154
20S	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	7.2	11.7	53	25.4	28.0	0.150
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	9.4	14.0	53	30.0	33.0	0.206
25	M25 x 1.5	¾" or 1"	16	M25 x 1.5	¾" or 1"	13.5	20.0	53	37.6	41.4	0.310
32	M32 x 1.5	1" or 1 ¼"	16	M32 x 1.5	1" or 1 ¼"	19.5	26.3	53	46.0	50.6	0.442
40	M40 x 1.5	1 ¼" or 1 ½"	16	M40 x 1.5	1 ¼" or 1 ½"	23.0	32.2	56	55.0	60.5	0.625
50S	M50 x 1.5	1 ½" or 2"	16	M50 x 1.5	1 ½" or 2"	28.1	38.2	56	65.0	71.5	0.777
50	M50 x 1.5	2"	16	M50 x 1.5	2"	33.1	44.1	56	65.0	71.5	0.719
63S	M63 x 1.5	2" or 2 ½"	19	M63 x 1.5	2" or 2 ½"	39.2	50.1	59	80.0	88.0	1.238
63	M63 x 1.5	2 ½"	19	M63 x 1.5	2 ½"	46.7	56.0	59	80.0	88.0	1.142
75S	M75 x 1.5	2 ½" or 3"	19	M75 x 1.5	2 ½" or 3"	52.1	62.0	59	90.0	99.0	1.339
75	M75 x 1.5	3"	19	M75 x 1.5	3"	58.0	68.0	59	90.0	99.0	1.218
80	M80 x 2.0	3" or 3 ½"	25	M80 x 2.0	3" or 3 ½"	62.2	72.0	74	104.0	115.2	2.454
85	M85 x 2.0	3" or 3 ½"	25	M85 x 2.0	3" or 3 ½"	69.0	78.0	74	104.0	115.2	2.272
90	M90 x 2.0	3 ½" or 4"	25	M90 x 2.0	3 ½" or 4"	74.0	84.0	74	114.0	125.7	2.643
100	M100 x 2.0	3 ½" or 4"	25	M100 x 2.0	3 ½" or 4"	82.0	90.0	75	114.0	125.7	2.209

NOTES

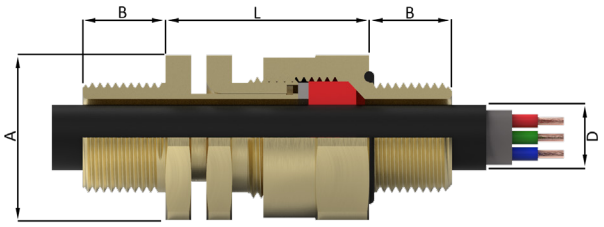
- Gland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* Gland sizes 12 not available in aluminium

PRODUCT TYPE A*RCM

Single Compression Gland for Unarmoured Cable featuring a Freely Rotating Male Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class II Div 1 : AEx e : AEx ta



PART NUMBERS:

A	1	R	CM	B	F
	2			S	
	3			A	
	4				

EXAMPLE PART NUMBERING: A2RCMBF050NPT/NP/20/M20

	A	Gland featuring controlled displacement seal
	2	Neoprene Seal (2) - Silicone Seal (3) - Neoprene/Lead (1) - Silicone/Lead (4)
	R	Rotating Conduit Design
	CM	Male Conduit Connection Thread
	B	Aluminium (A) / Brass (B) / Stainless Steel (S)
	F	Multiple Certification
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	T	Including Earth Tag
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
	050NPT	½"NPT Male Conduit Connection Thread
	NP	Nickel Plated
	20	Gland Shell Size
	M20	M20 x 1.5mm Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 Days), Type 4X
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Brass, Stainless Steel or Aluminium
PLATING:	Electroless Nickel

PRODUCT DESCRIPTION

"A*RCM" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. 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 50 metres and is supplied with an IP O-ring seal as standard on metric entry threads. The gland features a freely rotating male threaded conduit connection for ease of installation.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7, ISA 60079-31

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
NEC - USA	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1345X & CML 19ATEX4109X
IECEx	IECEx CML 19.0103X
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2012 X
CCC - China	2021312313000408
UKRAINE	СЦ 18.0325 X
CCoE - India	PESO P494321/6 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Conduit Connection Thread		Cable Acceptance Outer Sheath [D]		Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)		
	Metric	NPT		Metric	NPT	Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)
12*	M12 x 1.5	⅜"	16	M12 x 1.5	⅜"	0.9	6.0	34	19.0	21.0	0.061
12*	M16 x 1.5	⅜" or ½"	16	M16 x 1.5	⅜" or ½"	0.9	6.0	32	25.4	28.0	0.121
16	M16 x 1.5	½" or ¾"	16	M16 x 1.5	½" or ¾"	4.0	8.4	38	25.4	28.0	0.133
20S	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	7.2	11.7	43	25.4	28.0	0.149
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	9.4	14.0	43	30.0	33.0	0.174
25	M25 x 1.5	¾" or 1"	16	M25 x 1.5	¾" or 1"	13.5	20.0	43	37.6	41.4	0.243
32	M32 x 1.5	1" or 1 ¼"	16	M32 x 1.5	1" or 1 ¼"	19.5	26.3	43	46.0	50.6	0.344
40	M40 x 1.5	1 ¼" or 1 ½"	16	M40 x 1.5	1 ¼" or 1 ½"	23.0	32.2	46	55.0	60.5	0.510
50S	M50 x 1.5	1 ½" or 2"	16	M50 x 1.5	1 ½" or 2"	28.1	38.2	47	65.0	71.5	0.597
50	M50 x 1.5	2"	16	M50 x 1.5	2"	33.1	44.1	47	65.0	71.5	0.540
63S	M63 x 1.5	2" or 2 ½"	19	M63 x 1.5	2" or 2 ½"	39.2	50.1	47	80.0	88.0	0.921
63	M63 x 1.5	2 ½"	19	M63 x 1.5	2 ½"	46.7	56.0	47	80.0	88.0	0.825
75S	M75 x 1.5	2 ½" or 3"	19	M75 x 1.5	2 ½" or 3"	52.1	62.0	47	90.0	99.0	1.132
75	M75 x 1.5	3"	19	M75 x 1.5	3"	58.0	68.0	47	90.0	99.0	1.011
80	M80 x 2.0	3" or 3 ½"	25	M80 x 2.0	3" or 3 ½"	62.2	72.0	58	104.0	115.2	1.852
85	M85 x 2.0	3" or 3 ½"	25	M85 x 2.0	3" or 3 ½"	69.0	78.0	58	104.0	115.2	1.667
90	M90 x 2.0	3 ½" or 4"	25	M90 x 2.0	3 ½" or 4"	74.0	84.0	59	114.0	125.7	2.041
100	M100 x 2.0	3 ½" or 4"	25	M100 x 2.0	3 ½" or 4"	82.0	90.0	60	114.0	125.7	1.986

NOTES

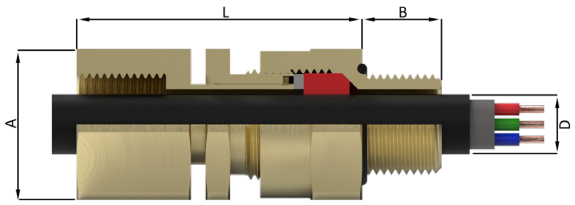
- Gland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* Gland sizes 12 not available in aluminium

PRODUCT TYPE A*RCF

Single Compression Gland for Unarmoured Cable featuring a Freely Rotating Female Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class II Div 1 : AEx e : AEx ta



PART NUMBERS:

A	1	R	CF	B	F
	2			S	
	3			A	
	4				

EXAMPLE PART NUMBERING: A2RCFBF050NPT/NP/20/M20

	A	Gland featuring controlled displacement sealing
	2	Neoprene Seal (2) - Silicone Seal (3) - Neoprene/Lead (1) - Silicone/Lead (4)
	R	Rotating Conduit Design
	CF	Female Conduit Connection Thread
	B	Aluminium (A) / Brass (B) / Stainless Steel (S)
	F	Multiple Certification
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	T	Including Earth Tag
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
	050NPT	½"NPT Female Conduit Connection Thread
	NP	Nickel Plated
	20	Gland Shell Size
	M20	M20 x 1.5mm Male Entry Thread

PRODUCT DESCRIPTION

"A*RCF" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. 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 50 metres and is supplied with an IP O-ring seal as standard on metric entry threads. The gland features a freely rotating female threaded conduit connection for ease of installation.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7, ISA 60079-31

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
NEC - USA	Class II Division 1, Groups E, F & G
	Class III, Type 4X
	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1345X & CML 19ATEX4109X
IECEx	IECEx CML 19.0103X
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2012 X
CCC - China	2021312313000408
UKRAINE	СЦ 18.0325 X
CCoE - India	PESO P494321/6 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 Days), Type 4X
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Brass, Stainless Steel or Aluminium
PLATING:	Electroless Nickel

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Conduit Connection Thread		Cable Acceptance Outer Sheath [D]		Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)		
	Metric	NPT		Metric	NPT	Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)
12*	M12 x 1.5	⅜"	16	M12 x 1.5	⅜"	0.9	6.0	52	19.0	21.0	0.085
12*	M16 x 1.5	⅜" or ½"	16	M16 x 1.5	⅜" or ½"	0.9	6.0	50	25.4	28.0	0.159
16	M16 x 1.5	½" or ¾"	16	M16 x 1.5	½" or ¾"	4.0	8.4	56	25.4	28.0	0.173
20S	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	7.2	11.7	61	25.4	28.0	0.165
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	9.4	14.0	61	30.0	33.0	0.229
25	M25 x 1.5	¾" or 1"	16	M25 x 1.5	¾" or 1"	13.5	20.0	61	37.6	41.4	0.340
32	M32 x 1.5	1" or 1 ¼"	16	M32 x 1.5	1" or 1 ¼"	19.5	26.3	61	46.0	50.6	0.471
40	M40 x 1.5	1 ¼" or 1 ½"	16	M40 x 1.5	1 ¼" or 1 ½"	23.0	32.2	64	55.0	60.5	0.676
50S	M50 x 1.5	1 ½" or 2"	16	M50 x 1.5	1 ½" or 2"	28.1	38.2	65	65.0	71.5	0.835
50	M50 x 1.5	2"	16	M50 x 1.5	2"	33.1	44.1	65	65.0	71.5	0.777
63S	M63 x 1.5	2" or 2 ½"	19	M63 x 1.5	2" or 2 ½"	39.2	50.1	68	80.0	88.0	1.307
63	M63 x 1.5	2 ½"	19	M63 x 1.5	2 ½"	46.7	56.0	68	80.0	88.0	1.211
75S	M75 x 1.5	2 ½" or 3"	19	M75 x 1.5	2 ½" or 3"	52.1	62.0	68	90.0	99.0	1.489
75	M75 x 1.5	3"	19	M75 x 1.5	3"	58.0	68.0	68	90.0	99.0	1.368
80	M80 x 2.0	3" or 3 ½"	25	M80 x 2.0	3" or 3 ½"	62.2	72.0	85	104.0	115.2	2.775
85	M85 x 2.0	3" or 3 ½"	25	M85 x 2.0	3" or 3 ½"	69.0	78.0	85	104.0	115.2	2.437
90	M90 x 2.0	3 ½" or 4"	25	M90 x 2.0	3 ½" or 4"	74.0	84.0	86	114.0	125.7	3.062
100	M100 x 2.0	3 ½" or 4"	25	M100 x 2.0	3 ½" or 4"	82.0	90.0	86	114.0	125.7	2.559

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.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length.

Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.

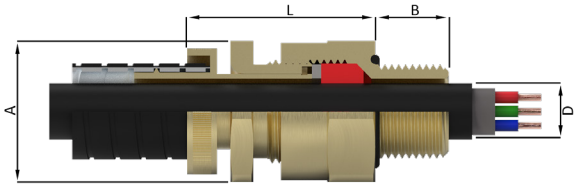
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* Gland sizes 12 not available in aluminium

PRODUCT TYPE A*RCC

Single Compression Gland for Unarmoured Cable featuring a Freely Rotating Flexible Metallic Conduit Connector

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68



PART NUMBERS:

A	1	R	CC	B	F
	2			S	
	3			A	
	4				

PRODUCT DESCRIPTION

"A*RCC" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. 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 50 metres. It is supplied with an IP O-ring seal as standard on metric entry threads. The gland features a freely rotating flexible conduit connection.

COMPLIANCE STANDARDS:

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

EXAMPLE PART NUMBERING: A2RCCBF/NP/20-1/M20

	A	Gland featuring controlled displacement sealing
	2	Neoprene Seal (2) - Silicone Seal (3) - Neoprene/Lead (1) - Silicone/Lead (4)
	R	Rotating Conduit Design
	CC	Metallic Flexible Conduit Connector
	B	Aluminium (A) / Brass (B) / Stainless Steel (S)
	F	Multiple Certification
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	T	Including Earth Tag
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
OPTIONS	NP	Nickel Plated
	20-1	Gland & Connector Size
	M20	M20 x 1.5mm Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 Days)
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1345X & CML 19ATEX4109X
IECEx	IECEx CML 19.0103X
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2012 X
CCC - China	2021312313000408
UKRAINE	СЦ 18.0325 X
CCoE - India	PESO P494321/6 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland & Connector Size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details Outer Sheath [D]		Typical Conduit Diameter		Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)		
	Metric	NPT		Min	Max	I/D	Max O/D		Across Flats [A]	Across Corners	Weight (Kgs)
12-1*	M12 x 1.5	¼"	16	0.9	5.4	6.8	10.3	35	19.0	20.9	0.051
12-2*	M12 x 1.5	¼"	16	0.9	6.0	10.2	14.1	35	19.0	20.9	0.054
12-3*	M12 x 1.5	¼"	16	0.9	6.0	9.1	14.3	35	19.0	20.9	0.057
12-4*	M12 x 1.5	¼"	16	0.9	6.0	10.9	15.8	35	19.0	20.9	0.062
12-5*	M12 x 1.5	¼"	16	0.9	6.0	7.7	13.0	35	19.0	20.9	0.056
16-1	M16 x 1.5	⅜"	16	4.0	8.4	10.2	14.1	39	25.4	28.0	0.108
16-2	M16 x 1.5	⅜"	16	4.0	8.4	10.9	15.8	39	25.4	28.0	0.115
16-3	M16 x 1.5	⅜"	16	4.0	8.4	13.0	17.1	39	25.4	28.0	0.120
20S-1	M20 x 1.5	½" or ¾"	16	7.2	11.0	13.0	17.1	45	25.4	28.0	0.122
20S-2	M20 x 1.5	½" or ¾"	16	7.2	11.7	13.9	19.3	45	25.4	28.0	0.132
20S-3	M20 x 1.5	½" or ¾"	16	7.2	11.7	14.6	20.7	45	25.4	28.0	0.124
20-1	M20 x 1.5	½" or ¾"	16	9.4	14.0	16.9	22.3	45	30.0	33.0	0.155
20-2	M20 x 1.5	½" or ¾"	16	9.4	14.0	16.9	23.8	45	30.0	33.0	0.164
20-3	M20 x 1.5	½" or ¾"	16	9.4	14.0	18.7	24.8	45	30.0	33.0	0.178
20-4	M20 x 1.5	½" or ¾"	16	9.4	14.0	20.7	28.3	45	30.0	33.0	0.197
20-5	M20 x 1.5	½" or ¾"	16	9.4	13.0	13.9	19.3	45	30.0	33.0	0.160
25-1	M25 x 1.5	¾" or 1"	16	13.5	20.0	23.7	31.3	46	37.6	41.4	0.250
25-2	M25 x 1.5	¾" or 1"	16	13.5	19.0	21.1	26.8	46	37.6	41.4	0.225
25-3	M25 x 1.5	¾" or 1"	16	13.5	19.0	25.0	31.3	46	37.6	41.4	0.260
25-4	M25 x 1.5	¾" or 1"	16	13.5	20.0	20.7	28.3	46	37.6	41.4	0.215
32-1	M32 x 1.5	1" or 1 ¼"	16	19.5	26.0	28.1	33.3	47	46.0	50.6	0.306
32-2	M32 x 1.5	1" or 1 ¼"	16	19.5	26.3	30.4	40.8	47	46.0	50.6	0.353
32-3	M32 x 1.5	1" or 1 ¼"	16	19.5	26.3	30.4	38.8	47	46.0	50.6	0.374
40-1	M40 x 1.5	1 ¼" or 1 ½"	16	23.0	32.2	36.4	46.8	50	55.0	60.5	0.529
40-2	M40 x 1.5	1 ¼" or 1 ½"	16	23.0	32.2	36.4	44.8	50	55.0	60.5	0.505
40-3	M40 x 1.5	1 ¼" or 1 ½"	16	23.0	32.2	37.6	45.3	50	55.0	60.5	0.491
50S-1	M50 x 1.5	1 ½" or 2"	16	28.1	38.2	48.4	55.8	50	65.0	71.5	0.613
50-1	M50 x 1.5	2"	16	33.1	44.1	48.4	55.8	50	65.0	71.5	0.600
63S-1	M63 x 1.5	2" or 2 ½"	19	39.2	50.1	57.5	64.8	50	80.0	88.0	0.933
63-1	M63 x 1.5	2 ½"	19	46.7	53.6	57.5	64.8	50	80.0	88.0	0.918

NOTES

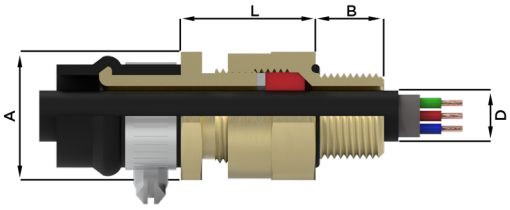
- Gland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- It is the installer's responsibility to ensure that the flexible conduit is secured correctly.
- If fit testing is required for specific conduit please contact Peppers.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* Gland sizes 12 not available in aluminium

PRODUCT TYPE A*LCH

Single Compression Gland for Unarmoured Cable featuring a Hose Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68



PART NUMBERS:

A	1	LCH	B	F
	2		S	
	3		A	
	4			

EXAMPLE PART NUMBERING: A2LCHBF/NP/20-1/M20

A		Gland featuring controlled displacement sealing
2		Neoprene Seals (2) - Silicone (3) - Neoprene/Lead (1) - Silicone/Lead (4)
LCH		Fixed Hose Connection
B		Aluminium (A) / Brass (B) / Stainless Steel (S)
F		Multiple Certification
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
20-1		Gland shell size
M20		M20 x 1.5mm Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 days)
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

PRODUCT DESCRIPTION

"A*LCH**" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. 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 50 metres. It is supplied with an IP O-ring seal as standard on metric entry threads. The gland features an extended tail for connection of suitable hose.

COMPLIANCE STANDARDS:

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

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da / Ex nR IIC Gc
CCC - China	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1345X & CML 19ATEX4109X
IECEx	IECEx CML 19.0103X
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2012 X
CCC - China	2021312313000408
UKRAINE	СЦ 18.0325 X
CCoE - India	PESO P494321/6 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland & Connector Size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details Outer Sheath [D]		Typical Hose Diameter	Nominal Protrusion Length [L]	Dimensions/Weight (Metric)		
	Metric	NPT		Min	Max	I/D		Across Flats [A]	Across Corners	Weight (Kgs)
12-1*	M12 x 1.5	⅜"	16	0.9	6.0	16.0	26	19.0	20.9	0.051
12-2*	M16 x 1.5	⅜" or ½"	16	0.9	6.0	16.0	25	25.4	28.0	0.092
16-1	M16 x 1.5	⅜" or ½"	16	4.0	8.4	16.0	30	25.4	28.0	0.118
20S-1	M20 x 1.5	½" or ¾"	16	7.2	11.7	16.0	35	25.4	28.0	0.122
20S-2	M20 x 1.5	½" or ¾"	16	7.2	11.7	19.2	35	25.4	28.0	0.142
20-1	M20 x 1.5	½" or ¾"	16	9.4	14.0	19.2	35	30.0	33.0	0.159
25-1	M25 x 1.5	¾" or 1"	16	13.5	20.0	25.5	35	37.6	41.4	0.247
25-2	M25 x 1.5	¾" or 1"	16	13.5	20.0	31.9	35	37.6	41.4	0.339
32-1	M32 x 1.5	1" or 1 ¼"	16	19.5	26.3	31.9	35	46.0	50.6	0.339
40-1	M40 x 1.5	1 ¼" or 1 ½"	16	23.0	32.2	38.2	38	55.0	60.5	0.537
50S-1	M50 x 1.5	1 ½" or 2"	16	28.1	38.2	50.9	38	65.0	71.5	0.768
50-1	M50 x 1.5	2"	16	33.1	44.1	50.9	38	65.0	71.5	0.710
63S-1	M63 x 1.5	2" or 2 ½"	19	39.2	50.1	63.6	38	80.0	88.0	1.218
63-1	M63 x 1.5	2 ½"	19	46.7	56.0	63.6	38	80.0	88.0	1.122
75S-1	M75 x 1.5	2 ½"	19	52.1	62.0	76.3	38	90.0	99.0	1.557
75-1	M75 x 1.5	3"	19	58.0	68.0	76.3	38	90.0	99.0	1.472
80-1	M80 x 2.0	3" or 3 ½"	25	62.2	72.0	76.3	50	104.0	115.2	1.920

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.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length.

Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.

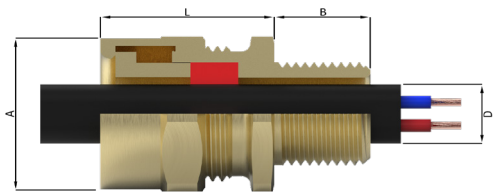
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- It is the installer's responsibility to ensure that the hose is secured correctly.
- If fit testing is required for specific hosing please contact Peppers.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* Gland sizes 12 not available in aluminium

PRODUCT TYPE A8

Single Compression Gland for Armoured and Unarmoured Flat Cable

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class II Div 1 : AEx e : AEx ta



PART NUMBERS:

A	8	B	F
		S	

PRODUCT DESCRIPTION

"A8" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The A8 version is designed to accommodate unarmoured and armoured cables where sealing and retention is required only on the outer sheath.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
UL514B, UL1203, ANSI/UL 60079-0/7, ISA 60079-31

EXAMPLE PART NUMBERING: A8BF/NP/20R/M20

A		Gland for Unarmoured Cables
8		Silicone Seal for flat cables
B		Brass (B) / Stainless Steel (S)
F		Multiple Certification
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
20R		Gland shell size
M20		M20 x 1.5mm Male Entry Thread

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
NEC - USA	Class II Division 1, Groups E, F & G
(except size 25)	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
	Class III, Type 4X
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO – Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC / Ex tb IIIC

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

CERTIFICATION No:

ATEX	CML 19ATEX1346X & CML 19ATEX4109X
IECEx	IECEx CML 19.0104X
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO – Brazil	NCC 13.2187 X
CCC – China	Certificate Pending
UKRAINE	СЦ 18.0321 X
CCoE - India	PESO P494321/7 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

IP RATING:	IP66 & IP68 (50 metres - 7 Days)
OPERATING TEMP:	Silicone Seals -60°C to +180°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Outer Sheath [D]				Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)		
				Width		Thickness					
	Metric	NPT		Min	Max	Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)
20S	M20 x 1.5 M25 x 1.5	¾" or ½"	16	6.3	11.7	4.0	7.0	33	30.0	33.0	0.104
20R	M20 x 1.5 M25 x 1.5	¾" or ½"	16	8.1	13.5	5.8	6.2	33	30.0	33.0	0.104
20	M20 x 1.5 M25 x 1.5	¾" or ½"	16	10.3	13.5	5.6	9.0	33	30.0	33.0	0.103
25*	M25 x 1.5	¾" or 1"	16	10.6	16.2	4.0	7.0	31	37.6	41.4	0.162

NOTES

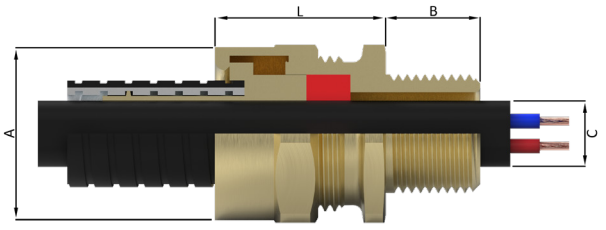
- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* Size 25 is not covered for NEC, CCoE and RS applications.

PRODUCT TYPE A8RC

Single Compression Gland for Armoured and Unarmoured Flat Cable, featuring a Rotating Flexible Metallic Conduit Connector

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68



PART NUMBERS:

A	8	RC	B	F
				S

PRODUCT DESCRIPTION

"A8RC" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The "A8RC" version is designed to accommodate unarmoured and armoured cables where sealing and retention is required only on the outer sheath. The gland features a rotating flexible metallic conduit connection.

COMPLIANCE STANDARDS:

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

EXAMPLE PART NUMBERING: A8RCBF/NP/20-1/M20

A		Gland designed for use with Unarmoured Cables
8		Silicone Seal for Flat Cable
RC		Rotating Metallic Flexible Conduit Connector
B		Brass (B) / Stainless Steel (S)
F		Multiple Certification
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
20-1		Gland shell size
M20		M20 x 1.5 Male Entry Thread

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rule
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 Days)
OPERATING TEMP:	Silicone Seals -60°C to +180°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel

CERTIFICATION No:

ATEX	CML 19ATEX1346X & CML 19ATEX4109X
IECEx	IECEx CML 19.0104X
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2187 X
CCC - China	Certificate Pending
UKRAINE	СЦ 18.0321 X
CCoE - India	PESO P494321/7 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		ISO Thread Length [B]	Cable Outer Sheath [D]				Typical Conduit Dia		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)		
				Width		Thickness							
	Metric	NPT		Min	Max	Min	Max	I/D	Max O/D		Across Flats [A]	Across Corners	Weight (Kgs)
20S-1	M20 x 1.5	½" or ¾"	16	6.3	11.2	4.0	7.0	13.0	17.1	31	30.0	33.0	0.117
20S-2	M20 x 1.5	½" or ¾"	16	6.3	11.7	4.0	7.0	15.0	19.3	31	30.0	33.0	0.125
20S-3	M20 x 1.5	½" or ¾"	16	6.3	11.7	4.0	7.0	16.9	21.5	31	30.0	33.0	0.117
20-1	M20 x 1.5	½" or ¾"	16	10.3	11.2	5.6	9.0	13.0	17.1	31	30.0	33.0	0.117
20-2	M20 x 1.5	½" or ¾"	16	10.3	13.5	5.6	9.0	15.0	19.3	31	30.0	33.0	0.125
20-3	M20 x 1.5	½" or ¾"	16	10.3	13.5	5.6	9.0	16.9	21.5	31	30.0	33.0	0.117
20R-1	M20 x 1.5	½" or ¾"	16	8.1	11.2	5.8	6.2	13.0	17.1	32	30.0	33.0	0.118
20R-2	M20 x 1.5	½" or ¾"	16	8.1	13.5	5.8	6.2	15.0	19.3	32	30.0	33.0	0.126
20R-3	M20 x 1.5	½" or ¾"	16	8.1	13.5	5.8	6.2	16.9	21.5	32	30.0	33.0	0.118
25-1*	M25 x 1.5	¾" or 1"	16	10.6	16.2	4.0	7.0	16.9	23.8	31	37.6	41.4	0.164
25-2*	M25 x 1.5	¾" or 1"	16	10.6	16.2	4.0	7.0	18.7	24.8	31	37.6	41.4	0.175
25-3*	M25 x 1.5	¾" or 1"	16	10.6	16.2	4.0	7.0	21.1	26.8	31	37.6	41.4	0.178
25-4*	M25 x 1.5	¾" or 1"	16	10.6	16.2	4.0	7.0	20.7	27.8	31	37.6	41.4	0.185

NOTES

** Size 25mm is only currently ATEX, IECEx, INMETRO, EAC and Ukraine certified.

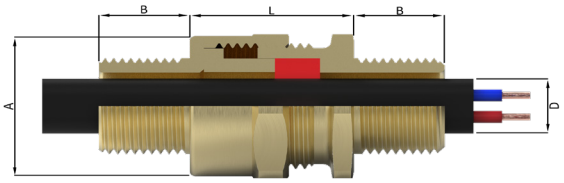
- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- It is the installer's responsibility to ensure that the conduit is secured correctly.
- If fit testing is required for specific conduit please contact Peppers.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* Size 25 is not covered for CCoE and RS applications.

PRODUCT TYPE A8CM

Single Compression Gland for Armoured and Unarmoured Flat Cable featuring a Male Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class II Div 1 : AEx e : AEx ta



PART NUMBERS:

A	8	CM	B	F
			S	

PRODUCT DESCRIPTION

"A8CM" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Developed for flat cables, they provide controlled Ex db, IP sealing and have been tested to IP66 and IP68 to 50 metres. The "A8CM" version is designed to accommodate unarmoured and armoured cables where sealing and retention is required only on the outer sheath and additionally provides a male thread for the connection of conduit.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7 & ISA 60079-31

EXAMPLE PART NUMBERING: A8CMBFM20/NP/20/M20

	A	Gland designed for use with Unarmoured Cables
	8	Silicone Seal for Flat Cables
	CM	Male Conduit Connection Thread
	B	Brass (B) / Stainless Steel (S)
	F	Multiple Certification
OPTIONS	**K-V-H**	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	**T**	Including Earth Tag
OPTIONS	**S**	Including Serrated Washer
OPTIONS	**1**	Quantity per kit
	M20	M20 x 1.5 Male Conduit Connection Thread
	NP	Nickel Plated
	20	Gland shell size
	M20	M20 x 1.5 Male Entry Thread

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
NEC - USA	Class II Division 1, Groups E, F & G
(except size 25)	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
	Class III, Type 4X
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
UKRAINE	II 2G Ex db IIC Gb / II 2 Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 Days), Type 4X
OPERATING TEMP:	Silicone Seals -60°C to +180°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel

CERTIFICATION No:

ATEX	CML 19ATEX1346X & CML 19ATEX4109X
IECEx	IECEx CML 19.0104X
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2187 X
CCC – China	Certificate Pending
UKRAINE	СЦ 18.0321 X
CCoE - India	PESO P494321/7 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Connection Thread Options		Cable Outer Sheath [D]				Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)		
						Width		Thickness					
	Metric	NPT		Metric	NPT	Min	Max	Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)
20S	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	6.3	11.7	4.0	7.0	31	30.0	33.0	0.132
20R	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	8.1	13.5	5.8	6.2	32	30.0	33.0	0.133
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	10.3	13.5	5.6	9.0	31	30.0	33.0	0.132
25*	M25 x 1.5	¾" or 1"	16	M25 x 1.5	¾" or 1"	10.6	16.2	4.0	7.0	31	37.6	41.4	0.280

NOTES

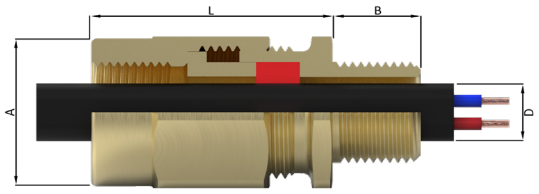
- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* Size 25 is not covered for NEC, CCoE and RS applications.

PRODUCT TYPE A8CF

Single Compression Gland for Armoured and Unarmoured Flat Cable and featuring a Female Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class II Div 1 : AEx e : AEx ta



PART NUMBERS:

A	8	CF	B	F
			S	

PRODUCT DESCRIPTION

"A8CF" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Developed for flat cables, they provide controlled Ex db, IP sealing and have been tested to IP66 and IP68 to 50 metres. The "A8CF" version is designed to accommodate unarmoured and armoured cables where sealing and retention is required only on the outer sheath and additionally provides a male thread for the connection of conduit.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-⁰⁄₇ & ISA 60079-31

EXAMPLE PART NUMBERING: A8CFBFM20/NP/20/M20

A		Gland designed for use with Unarmoured Cables
8		Silicone Seal for Flat Cables
CF		Female Conduit Connection Thread
B		Brass (B) / Stainless Steel (S)
F		Multiple Certification
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
M20		M20 x 1.5 Female Conduit Connection Thread
NP		Nickel Plated
20		Gland shell size
M20		M20 x 1.5 Male Entry Thread

CERTIFICATION:

ATEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
NEC - USA	Class II Division 1, Groups E, F & G
(except size 25)	Class I Zone 1 AEx e IIC Gb
	Class II Zone 20 AEx ta IIIC Da
	Class III, Type 4X
EAC	1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
UKRAINE	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (50 metres - 7 Days), Type 4X
OPERATING TEMP:	Silicone Seals -60°C to +180°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel

CERTIFICATION No:

ATEX	CML 19ATEX1346X & CML 19ATEX4109X
IECEx	IECEx CML 19.0104X
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2187 X
CCC - China	Certificate Pending
UKRAINE	СЦ 18.0321 X
CCoE - India	PESO P494321/7 & P494321/13
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Connection Thread Options		Cable Outer Sheath [D]				Nominal Protrusion Length [L] (Metric)	Dimensions/Weight (Metric Versions)		
						Width		Thickness					
	Metric	NPT		Metric	NPT	Min	Max	Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)
20S	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	6.3	11.7	4.0	7.0	45	30.0	33.0	0.174
20R	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	8.1	13.5	5.8	6.2	46	30.0	33.0	0.175
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	10.3	13.5	5.6	9.0	45	30.0	33.0	0.174
25*	M25 x 1.5	¾" or 1"	16	M25 x 1.5	¾" or 1"	10.6	16.2	4.0	7.0	48	37.6	41.4	0.194

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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, pleasebe aware of the accessories temperature range to ensure they are suitablefor the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required,this must be clearly requested at time of enquiry / order.

* Size 25 is not covered for NEC, CCoE and RS applications.

Peppers worldwide

UK OFFICE

Peppers Cable Glands Limited
Stanhope Road,
Camberley,
Surrey,
GU15 3BT
United Kingdom

Tel +44 1276 64232

US OFFICE

Peppers America
875 Via De La Paz – Suite D
Pacific Palisades
California 90272
USA

TEL +(310) 459 1605

ASIA OFFICE

Peppers Asia Pacific
6 Ubi Road #06-06
Wintech Centre
SINGAPORE

TEL +65 8511 1800

RUSSIAN OFFICE

Peppers OOO
Sabirovskaya Str 41
St Petersburg
RUSSIA

TEL +7 (812) 305-39-78

WORLDWIDE PEPPERS DISTRIBUTORS

Australia
Brunei
Bulgaria
China
Denmark
Egypt
Finland
France
Germany
Holland
Hong Kong
India
Indonesia
Italy
Japan
Kazakhstan
Korea
Kuwait
Malaysia
New Zealand
Norway
Oman
Pakistan
Philippines
Qatar
Romania
Russia
Singapore
Spain
Sweden
Taiwan
Thailand
Turkey
Ukraine
UAE
USA
Vietnam

eclipse™

BARRIER GLANDS

eclipse™

The Eclipse™ range of barrier gland products is engineered to be used with either Peppers New T2000 Compound or the existing T1000 Compound.

Available for both unarmoured and armoured cables with Peppers New multi-armour clamping system as well as cables housed within conduit. All metric threads are supplied with a built in interface seal.

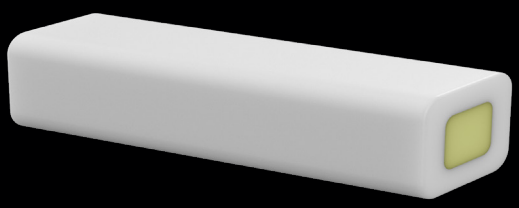
PEPPERS T2000

Peppers T-2000 Compound is supplied in a hand operated cartridge, incorporating a vortex mixing system which allows the installer to work confidently and effectively. No physical mixing is required to ensure error free installation and on-site time saving. The compound is certified for use within extreme conditions with an enhanced temperature range of -60°C to +120°C and can be removed after one hour for inspection.

- Hand Operated No Mix VMS Cartridge.
- Fast setting compound. Conductor termination can be effected from 60 minutes @ 23°C.
- Featuring Peppers unique "no ferrule" technology allowing it to be fully retractable and inspectable.
- Robust Compound for extreme conditions.
- Deluge proof without the requirements of additional seals or boots.
- Built in interface seal with metric threads.

PEPPERS T1000

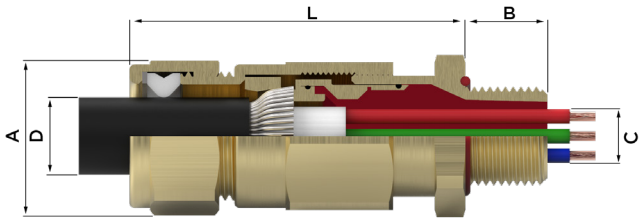
Peppers T-1000 Compound is a hand-mixable, UL-approved, sealing compound that mixes easily in minutes and can be removed for inspection in four hours. It provides water, dust and a vapour-tight seal for cable fittings and electrical connectors. This is supplied in a handy concentric putty stick form with the setting agent encapsulated in the contrasting colour base material. It's dough-like consistency eliminates drips and runs for a "no mess" application with no tools required for use.



PRODUCT TYPE EC*C

Double Compression Barrier Gland for Armoured Cable featuring Peppers MAC™ and Peppers T2000 or T1000 Compound

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : IP69



PART NUMBERS:

EC	1	C	B	*	*
	2		S	2	R

PRODUCT DESCRIPTION

"EC*-C" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dusts Groups IIIA, IIIB and IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex db & 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, Peppers multi-armour clamping system for wire, braid and tape armoured cables and Peppers T1000 or T2000 compound that enables a quick and easy installation. An innovative barrier chamber that allows for a full inspection of the compound fill. The gland maintains IP66, IP68 to 100 metres and IP 69. 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 cables.

COMPLIANCE STANDARDS:

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

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rule
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1113X & CML 19ATEX4114X
IECEx	IECEx CML 19.0035X
CCC - China	Certificate Pending
CCoE - India	PESO P494321/17 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

EXAMPLE PART NUMBERING: EC2-CB/NP/20/M20

	EC	Eclipse style barrier gland for use with Peppers T1000 or T2000 compound
	2	Peppers T1000 (1) - Peppers T2000 (2)
	C	Gland featuring Peppers multi-armour clamping system, Compound (Barrier) Inner Seal & Silicone Elastomeric Outer Seal
	2	For use with Lead Sheath Cables
	B	Brass (B) / Stainless Steel (S)
OPTIONS	**R**	Reduced Bore Seal
OPTIONS	**C**	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
OPTIONS	**K-V-H**	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	**S**	Including Serrated Washer
OPTIONS	**1**	Quantity per kit
OPTIONS	**NP**	Nickel Plated
	20	Gland shell size
	M20	M20 x 1.5 Male 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 WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO)

IP RATING:	IP66 & IP68 (100 metres - 7 days) & IP69
OPERATING TEMP:	T1000: -60°C to +135°C
	T2000: -60°C to +120°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Compound / Peppers T-2000 Compound
OUTERSEAL:	Silicone LSOH

Eclipse featuring the New T2000 Compound

- Hand operated No Mixing VMS Cartridge
- Fast setting compound. Conductor termination can be effected from 60 minutes @ 23°C
- Featuring Peppers unique "no ferrule" technology allowing it to be fully retractable and inspectable
- Robust Compound for extreme conditions
- Deluge proof without the requirements of additional seals or boots
- Built in interface seal with metric threads

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details										Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Shroud Size* (Metric)
				Internal Cable Details					Outer Sheath [D]		Reduced [D]									
	Metric	NPT		Max Number of Cores [C]		Max Ø Over Cores [C]	Min Inner Sheath [T2000]	Max Inner Sheath	Min	Max	Min	Max		Orientation 1	Orientation 2		Across Flats [A]	Across Corners	Weight (Kgs)	
				T1000	T2000															
16S	M16 x 1.5	⅜"	16	12	12	8.9	4.0	10.0	8.4	13.5	6.7	10.3		0.80-1.25	0.20-0.80	66	25.4	28.0	0.143	EL24
16	M20 x 1.5	½" or ¾"	16	15	15	10.4	4.0	11.7	8.4	13.5	6.7	10.3		0.80-1.25	0.20-0.80	66	25.4	28.0	0.147	EL24**
20S	M20 x 1.5	½" or ¾"	16	35	15	10.4	4.0	11.7	11.5	16.0	9.4	12.5		0.80-1.25	0.20-0.80	66	25.4	28.0	0.147	EL24**
20	M20 x 1.5	½" or ¾"	16	40	20	12.5	4.0	14.0	15.5	21.1	12.0	17.6		0.80-1.25	0.20-0.80	69	30.0	33.0	0.219	EL30
25	M25 x 1.5	¾" or 1"	16	60	30	16.5	8.0	18.5	20.3	27.4	16.8	23.9		1.25-1.60	0.20-0.80	74	37.6	41.4	0.322	EL38
32	M32 x 1.5	1" or 1 ¼"	16	80	50	23.5	14.0	26.3	26.7	34.0	23.2	30.5		1.60-2.00	0.30-1.20	87	46.0	50.6	0.578	EL46
40	M40 x 1.5	1 ¼" or 1 ½"	16	130	65	28.8	16.0	32.2	33.0	40.6	28.6	36.2		1.60-2.00	0.30-1.20	90	55.0	60.5	0.832	EL55
50S	M50 x 1.5	1 ½" or 2"	16	200	100	34.2	20.0	38.2	39.4	46.7	34.8	42.4		2.00-2.50	0.30-1.60	97	65.0	71.5	1.103	EL65
50	M50 x 1.5	2"	16	400	100	39.4	20.0	44.1	45.7	53.2	41.1	48.5		2.00-2.50	0.30-1.60	98	65.0	71.5	1.000	EL65
63S	M63 x 1.5	2" or 2 ½"	19	400	130	44.8	30.0	50.1	52.1	59.5	47.5	54.8		2.00-2.50	0.30-1.60	97	80.0	88.0	1.613	EL80
63	M63 x 1.5	2 ½"	19	425	130	50.0	30.0	56.0	58.4	65.8	53.8	61.2		2.00-2.50	0.30-1.60	97	80.0	88.0	1.475	EL80
75S*	M75 x 1.5	2 ½" or 3"	19	425	-	55.4	-	62.0	64.8	72.2	60.2	68.0		2.00-2.50	0.50-1.60	101	90.0	99.0	1.764	EL90
75*	M75 x 1.5	3"	19	425	-	60.8	-	68.0	71.1	78.0	66.5	73.4		2.00-2.50	0.50-1.60	101	90.0	99.0	1.682	EL90
80*	M80 x 2.0	3" or 3 ½"	25	425	-	64.4	-	72.0	77.0	84.0	71.9	79.4		3.15-4.00	0.50-1.60	127	104.7	115.2	3.452	EL104
85*	M85 x 2.0	3" or 3 ½"	25	425	-	69.8	-	78.0	79.6	90.0	75.0	85.4		3.15-4.00	0.50-1.60	127	104.7	115.2	2.936	EL104
90*	M90 x 2.0	3 ½" or 4"	25	425	-	75.1	-	84.0	88.0	96.0	82.0	91.4		3.15-4.00	0.50-1.60	126	114.3	125.7	3.722	EL114
100*	M100 x 2.0	3 ½" or 4"	25	425	-	80.5	-	90.0	92.0	102.0	87.4	97.4		3.15-4.00	0.50-1.60	128	114.3	125.7	3.097	EL114

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
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- 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. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of compound, gloves and instructions to allow one complete termination

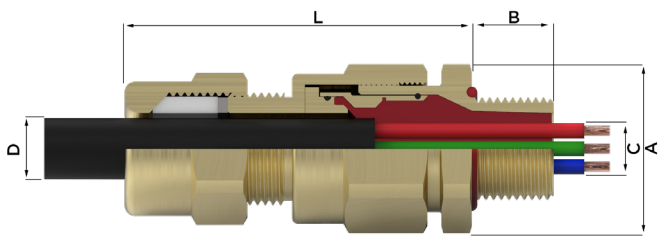
* Size 75S and above only available with T1000 Compound.

** For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required

PRODUCT TYPE EC*U

Double Compression Barrier Gland for Unarmoured cable featuring Peppers T2000 or T1000 Compound

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : IP69



PART NUMBERS:

EC	1	U	B
	2		S

PRODUCT DESCRIPTION

"EC*U" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dusts Groups IIIA, IIIB and IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex db & 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 T1000 or T2000 compound that enables a quick and easy installation. An innovative barrier chamber that allows for a full inspection of the compound fill. The gland maintains IP66, IP68 to 100 metres and IP 69. 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 STANDARDS:

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

EXAMPLE PART NUMBERING: EC2-UB/NP/20/M20

EC	Eclipse style barrier gland for use with Peppers T1000 or T2000 compound
2	Peppers T1000 (1) - Peppers T2000 (2)
U	Gland featuring double compression compound (Barrier) Inner Seal & Silicone Elastomeric Outer Seal for use with unamoured cable
B	Brass (B) / Stainless Steel (S)
C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
K - V - H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
20	Gland shell size
M20	M20 Entry Thread

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rule
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1113X & CML 19ATEX4114X
IECEx	IECEx CML 19.0035X
CCC - China	Certificate Pending
CCoE - India	PESO P494321/17 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (100 metres - 7 days) & IP69
OPERATING TEMP:	T1000: -60°C to +135°C
	T2000: -60°C to +120°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Compound / Peppers T-2000 Compound
OUTERSEAL:	Silicone LSOH

Eclipse featuring the New T2000 Compound

- Hand operated No Mixing VMS Cartridge
- Fast setting compound. Conductor termination can be effected from 60 minutes @ 23°C
- Featuring Peppers unique "no ferrule" technology allowing it to be fully retractable and inspectable
- Robust Compound for extreme conditions
- Deluge proof without the requirements of additional seals or boots
- Built in interface seal with metric threads

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Gland Sealing Range - Cable Sheath & Cores						Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Shroud Size* (Metric)
				Cable Inner Sheath [C]				Cable Outer Sheath [D]						
	Metric	NPT		Max Number of Cores [C] [T1000]	Max Number of Cores [C] [T2000]	Max Ø Over Cores [C]	Min Inner Sheath [T2000]	Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)	
16S	M16 x 1.5	⅜"	16	12	12	8.9	4.0	3.4	8.4	71	25.4	28.0	0.159	EL24
16	M20 x 1.5	½"	16	15	15	10.4	4.0	3.4	8.4	71	25.4	28.0	0.174	EL24**
20S	M20 x 1.5	½" or ¾"	16	35	15	10.4	4.0	4.8	11.7	72	25.4	28.0	0.175	EL24**
20	M20 x 1.5	½" or ¾"	16	40	20	12.5	4.0	9.5	14.0	71	30.0	33.0	0.223	EL30
25	M25 x 1.5	¾" or 1"	16	60	30	16.5	8.0	11.7	18.5	76	37.6	41.4	0.347	EL38
32	M32 x 1.5	1" or 1 ¼"	16	80	50	23.5	14.0	18.1	26.3	80	46.0	50.6	0.523	EL46
40	M40 x 1.5	1 ¼" or 1 ½"	16	130	65	28.8	16.0	22.6	32.2	80	55.0	60.5	0.725	EL55
50S	M50 x 1.5	1 ½" or 2"	16	200	100	34.2	20.0	28.2	38.2	93	65.0	71.5	1.108	EL65
50	M50 x 1.5	2"	16	400	100	39.4	20.0	33.1	44.1	91	65.0	71.5	1.046	EL65
63S	M63 x 1.5	2" or 2 ½"	19	400	130	44.8	30.0	39.3	50.1	92	80.0	88.0	1.467	EL80
63	M63 x 1.5	2 ½"	19	425	130	50.0	30.0	46.7	56.0	89	80.0	88.0	1.398	EL80
75S**	M75 x 1.5	2 ½" or 3"	19	425	-	55.4	-	52.3	62.0	95	90.0	99.0	1.783	EL90
75**	M75 x 1.5	3"	19	425	-	60.8	-	58.0	68.0	92	90.0	99.0	1.687	EL90
80**	M80 x 2.0	3" or 3 ½"	25	425	-	64.4	-	61.9	72.0	113	104.7	115.2	2.969	EL104
85**	M85 x 2.0	3" or 3 ½"	25	425	-	69.8	-	69.1	78.0	110	104.7	115.2	2.526	EL104
90**	M90 x 2.0	3 ½" or 4"	25	425	-	75.1	-	74.1	84.0	107	114.3	125.7	3.008	EL114
100**	M100 x 2.0	3 ½" or 4"	25	425	-	80.5	-	81.8	90.0	109	114.3	125.7	2.544	EL114

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
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- 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. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of compound, gloves and instructions to allow one complete termination.

* Size 75S and above only available with T1000 Compound.

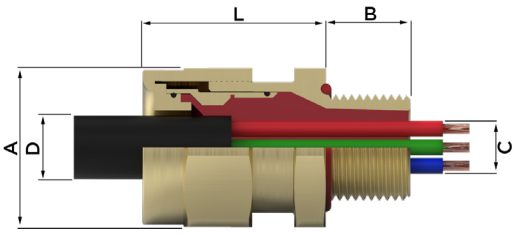
** For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

Peppers Cable Glands Ltd: www.peppers.co.uk | Email: sales@peppers.co.uk | Tel: +44 (0) 1276 64232

PRODUCT TYPE EC*X

Single Compression Barrier Gland for Unarmoured cable featuring Peppers T2000 or T1000 Compound

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : IP69



PART NUMBERS:

EC	1	X	B
	2		S

PRODUCT DESCRIPTION

"EC*-X" type glands, approved for use with any shape cable, are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dusts Groups IIIA, IIIB and IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex db & IP seal on the cable inner cores (or flying leads), eliminating damage to cables that exhibit "cold flow" characteristics. The unique features include, Peppers T1000 or T2000 compound that enables a quick and easy installation. An innovative barrier chamber that allows for a full inspection of the compound fill. The gland maintains IP66, IP68 to 100 metres and IP 69. 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 STANDARDS:

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

EXAMPLE PART NUMBERING: EC2-XB/NP/20/M20

EC	Eclipse style barrier gland for use with Peppers T1000 or T2000 compound
2	Peppers T1000 (1) - Peppers T2000 (2)
X	Gland featuring single compression compound (Barrier) Inner Seal for use with unamoured cable
B	Brass (B) / Stainless Steel (S)
C	PVC Shroud (C) - PCP Shroud (P) - LSOH Shroud (3)
K - V - H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
20	Gland shell size
M20	M20 Entry Thread

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rule
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1113X & CML 19ATEX4114X
IECEx	IECEx CML 19.0035X
CCC - China	Certificate Pending
CCoE - India	PESO P494321/17 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (100 metres - 7 days) & IP69
OPERATING TEMP:	T1000: -60°C to +135°C
	T2000: -60°C to +120°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Compound / Peppers T-2000 Compound

Eclipse featuring the New T2000 Compound

- Hand operated No Mixing VMS Cartridge
- Fast setting compound. Conductor termination can be effected from 60 minutes @ 23°C
- Featuring Peppers unique "no ferrule" technology allowing it to be fully retractable and inspectable
- Robust Compound for extreme conditions
- Deluge proof without the requirements of additional seals or boots
- Built in interface seal with metric threads

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Gland Sealing Range - Cable Sheath & Cores					Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Shroud Size* (Metric)
	Metric	NPT		Max Number of Cores [C] [T1000]	Max Number of Cores [C] [T2000]	Max Ø Over Cores [C]	Min Inner Sheath [T2000]	Max Outer Sheath [D]		Across Flats [A]	Across Corners	Weight (Kgs)	
16S	M16 x 1.5	⅜"	16	12	12	8.9	4.0	10.0	36	25.4	28.0	0.089	L24
20S	M20 x 1.5	½" or ¾"	16	35	15	10.4	4.0	11.7	36	25.4	28.0	0.104	L24**
20	M20 x 1.5	½" or ¾"	16	40	20	12.5	4.0	14.0	37	30.0	33.0	0.144	L30
25	M25 x 1.5	¾" or 1"	16	60	30	16.5	8.0	18.5	42	37.6	41.4	0.226	L38
32	M32 x 1.5	1" or 1 ¼"	16	80	50	23.5	14.0	26.3	45	46.0	50.6	0.358	L46
40	M40 x 1.5	1 ¼" or 1 ½"	16	130	65	28.8	16.0	32.2	45	55.0	60.5	0.515	L55
50S	-	1 ½"	16	200	100	34.2	20.0	38.2	54	65.0	71.5	0.675	L65
50	M50 x 1.5	2"	16	400	100	39.4	20.0	44.1	54	65.0	71.5	0.675	L65
63S	-	2"	19	400	130	44.8	30.0	50.1	53	80.0	88.0	0.993	L80
63	M63 x 1.5	2 ½"	19	425	130	50.0	30.0	56.0	53	80.0	88.0	0.993	L80
75S*	-	2 ½"	19	425	-	55.4	-	62.0	55	90.0	99.0	1.106	L90
75*	M75 x 1.5	3" or 3 ½"	19	425	-	60.8	-	68.0	55	90.0	99.0	1.106	L90
80*	M80 x 2.0	3" or 3 ½"	25	425	-	64.4	-	72.0	66	104.7	115.2	2.098	L104
85*	M85 x 2.0	3" or 3 ½"	25	425	-	69.8	-	78.0	66	104.7	115.2	1.770	L104
90*	M90 x 2.0	3 ½" or 4"	25	425	-	75.1	-	84.0	63	114.3	125.7	2.192	L114
100*	M100 x 2.0	3 ½" or 4"	25	425	-	80.5	-	90.0	65	114.3	125.7	1.847	L114

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
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- 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. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of compound, gloves and instructions to allow one complete termination.

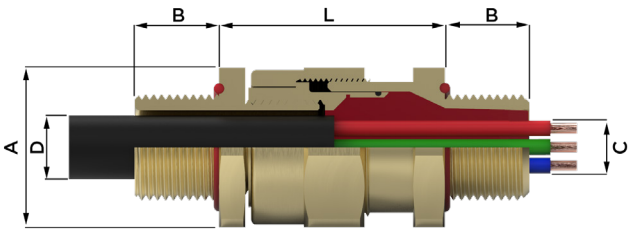
* Size 75S and above only available with T1000 Compound.

** For gland sizes 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE EC*S*M

Single Compression Barrier Gland featuring Peppers T2000 or T1000 Compound with Male Thread for Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : IP69



EC	1	S	B	M
	2		S	

PRODUCT DESCRIPTION

"EC*-S*M" type glands, used in any orientation, are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dusts Groups IIIA, IIIB and 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 db & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics. The unique features include, Peppers T1000 or T2000 compound that enables a quick and easy installation. An innovative barrier chamber that allows for a full inspection of the compound fill. The gland maintains IP66, IP68 to 100 metres and IP 69. 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 is supplied with a male conduit connection thread.

COMPLIANCE STANDARDS:

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

EXAMPLE PART NUMBERING: EC2-SBM20/NP/M20/050NPT

EC	Eclipse style barrier gland for use with Peppers T1000 & T2000 compound
2	Peppers T1000 (1) - Peppers T2000 (2)
S	Gland featuring single compression compound (Barrier) Inner Seal for use with conduit
B	Brass (B) / Stainless Steel (S)
M	Back End Configuration: Male (M)
20	Gland shell size
K - V - H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
M20	M20 x 1.5 Male Entry Thread
050NPT	½"NPT Male Connection Thread

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rule
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1113X & CML 19ATEX4114X
IECEx	IECEx CML 19.0035X
CCC - China	Certificate Pending
CCoE - India	PESO P494321/17 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (100 metres - 7 days) & IP69
OPERATING TEMP:	T1000: -60°C to +135°C
	T2000: -60°C to +120°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Compound / Peppers T-2000 Compound

Eclipse featuring the New T2000 Compound

- Hand operated No Mixing VMS Cartridge
- Fast setting compound. Conductor termination can be effected from 60 minutes @ 23°C
- Featuring Peppers unique "no ferrule" technology allowing it to be fully retractable and inspectable
- Robust Compound for extreme conditions
- Deluge proof without the requirements of additional seals or boots
- Built in interface seal with metric threads

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Female Entry Threads		Gland Sealing Range - Cable Sheath & Cores					Nominal Protrusion Length [L]	Dimensions/Weight (Metric)		
	Metric	NPT		Metric	NPT	Max Number of Cores [C] [T1000]	Max Number of Cores [C] [T2000]	Max Ø Over Cores [C]	Min Inner Sheath [T2000]	Max Outer Sheath [D]		Across Flats [A]	Across Corners	Weight (Kgs)
16S	M16 x 1.5	⅜"	16	M16	⅜"	12	12	8.9	4.0	10.0	56	25.4	28.0	0.139
20	M20 x 1.5	½" or ¾"	16	M20	½" or ¾"	40	20	12.5	4.0	14.0	58	30.0	33.0	0.192
25	M25 x 1.5	¾" or 1"	16	M25	¾" or 1"	60	30	16.5	8.0	18.5	63	37.6	41.4	0.291
32	M32 x 1.5	1" or 1 ¼"	16	M32	1" or 1 ¼"	80	50	23.5	14.0	26.3	64	46.0	50.6	0.449
40	M40 x 1.5	1 ¼" or 1 ½"	16	M40	1 ¼" or 1 ½"	130	65	28.8	16.0	32.2	60	55.0	60.5	0.603
50S	-	1 ½"	16	M50	1 ½" or 2"	200	100	34.2	20.0	38.2	66	65.0	71.5	0.678
50	M50 x 1.5	2"	16	M50	2"	400	100	39.4	20.0	44.1	66	65.0	71.5	0.678
63S	-	2"	19	M63	2" or 2 ½"	400	130	44.8	30.0	50.1	70	80.0	88.0	1.062
63	M63 x 1.5	2 ½"	19	M63	2 ½"	425	130	50.0	30.0	56.0	70	80.0	88.0	1.062
75S*	-	2 ½"	19	M75	2 ½" or 3"	425	-	55.4	-	62.0	70	90.0	99.0	1.165
75*	M75 x 1.5	3" or 3 ½"	19	M75	3"	425	-	60.8	-	68.0	70	90.0	99.0	1.165
80*	M80 x 2.0	3" or 3 ½"	25	M80	3" or 3 ½"	425	-	64.4	-	72.0	87	104.7	115.2	2.492
85*	M85 x 2.0	3" or 3 ½"	25	M85	3" or 3 ½"	425	-	69.8	-	78.0	85	104.7	115.2	2.051
90*	M90 x 2.0	3 ½" or 4"	25	M90	3 ½" or 4"	425	-	75.1	-	84.0	85	114.3	125.7	2.455
100*	M100 x 2.0	3 ½" or 4"	25	M100	3 ½" or 4"	425	-	80.5	-	90.0	85	114.3	125.7	2.223

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
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- 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. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length.

Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.

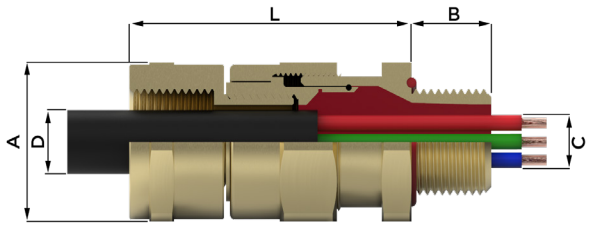
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of compound, gloves and instructions to allow one complete termination.

* Size 75S and above only available with T1000 Compound.

PRODUCT TYPE EC*S*F

Single Compression Barrier Gland featuring Peppers T2000 or T1000 Compound with Female Thread for Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : IP69



PART NUMBERS:

EC	1	S	B	F
	2		S	

PRODUCT DESCRIPTION

"EC*-S*F" type glands, used in any orientation, are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dusts Groups IIIA, IIIB and 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 db & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics. The unique features include, Peppers T1000 or T2000 compound that enables a quick and easy installation. An innovative barrier chamber that allows for a full inspection of the compound fill. The gland maintains IP66, IP68 to 100 metres and IP 69. 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 is supplied with a female conduit connection thread.

COMPLIANCE STANDARDS:

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

EXAMPLE PART NUMBERING: EC2-SBF20/NP/M20/050NPT

EC	Eclipse style barrier gland for use with Peppers T1000 & T2000 compound
2	Peppers T1000 (1) - Peppers T2000 (2)
S	Gland featuring single compression compound (Barrier) Inner Seal for use with conduit
B	Brass (B) / Stainless Steel (S)
F	Back End Configuration: Female (F)
20	Gland shell size
K - V - H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
M20	M20 x 1.5 Male Entry Thread
050NPT	½"NPT Internal Female Connection Thread

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rule
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1113X & CML 19ATEX4114X
IECEx	IECEx CML 19.0035X
CCC - China	Certificate Pending
CCoE - India	PESO P494321/17 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (100 metres - 7 days) & IP69
OPERATING TEMP:	T1000: -60°C to +135°C
	T2000: -60°C to +120°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Compound / Peppers T-2000 Compound

Eclipse featuring the New T2000 Compound

- Hand operated No Mixing VMS Cartridge
- Fast setting compound. Conductor termination can be effected from 60 minutes @ 23°C
- Featuring Peppers unique "no ferrule" technology allowing it to be fully retractable and inspectable
- Robust Compound for extreme conditions
- Deluge proof without the requirements of additional seals or boots
- Built in interface seal with metric threads

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Female Entry Threads		Gland Sealing Range - Cable Sheath & Cores					Nominal Protrusion Length [L]	Dimensions/Weight (Metric)		
	Metric	NPT		Metric	NPT	Max Number of Cores [C] [T1000]	Max Number of Cores [C] [T2000]	Max Ø Over Cores [C]	Min Inner Sheath [T2000]	Max Outer Sheath [D]		Across Flats [A]	Across Corners	Weight (Kgs)
16S	M16 x 1.5	⅜"	16	M16	⅜"	12	12	8.9	4.0	10.0	54	25.4	28.0	0.161
20	M20 x 1.5	½" or ¾"	16	M20	½" or ¾"	40	20	12.5	4.0	14.0	55	30.0	33.0	0.217
25	M25 x 1.5	¾" or 1"	16	M25	¾" or 1"	60	30	16.5	8.0	18.5	60	37.6	41.4	0.341
32	M32 x 1.5	1" or 1 ¼"	16	M32	1" or 1 ¼"	80	50	23.5	14.0	26.3	61	46.0	50.6	0.516
40	M40 x 1.5	1 ¼" or 1 ½"	16	M40	1 ¼" or 1 ½"	130	65	28.8	16.0	32.2	61	55.0	60.5	0.674
50S	-	1 ½"	16	M50	1 ½" or 2"	200	100	34.2	20.0	38.2	65	65.0	71.5	0.781
50	M50 x 1.5	2"	16	M50	2"	400	100	39.4	20.0	44.1	65	65.0	71.5	0.781
63S	-	2"	19	M63	2" or 2 ½"	400	130	44.8	30.0	50.1	74	80.0	88.0	1.247
63	M63 x 1.5	2 ½"	19	M63	2 ½"	425	130	50.0	30.0	56.0	74	80.0	88.0	1.247
75S*	-	2 ½"	19	M75	2 ½" or 3"	425	-	55.4	-	62.0	76	90.0	99.0	1.339
75*	M75 x 1.5	3" or 3 ½"	19	M75	3"	425	-	60.8	-	68.0	76	90.0	99.0	1.339
80*	M80 x 2.0	3" or 3 ½"	25	M80	3" or 3 ½"	425	-	64.4	-	72.0	92	104.7	115.2	3.061
85*	M85 x 2.0	3" or 3 ½"	25	M85	3" or 3 ½"	425	-	69.8	-	78.0	92	104.7	115.2	2.512
90*	M90 x 2.0	3 ½" or 4"	25	M90	3 ½" or 4"	425	-	75.1	-	84.0	89	114.3	125.7	3.143
100*	M100 x 2.0	3 ½" or 4"	25	M100	3 ½" or 4"	425	-	80.5	-	90.0	90	114.3	125.7	2.603

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
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supplies cable glands with parallel entry threads that conform to theflameproof threaded joint requirements of IEC/EN 60079-1 and other equivalentstandards. We usually incorporate a thread run out according to general machiningtechniques and parts will not have a full form thread for the entire length.

Peppers Cable Glands Limited will not be held responsible for clients' installationswhere this has not been taken into account.

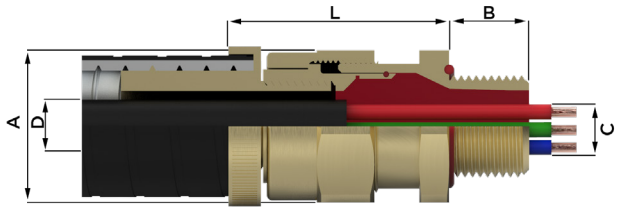
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of compound, gloves and instructions to allowone complete termination.

* Size 75S and above only available with T1000 Compound.

PRODUCT TYPE EC*S*C

Single Compression Barrier Gland featuring Peppers T2000 or T1000 Compound with Rotating Flexible Metallic Conduit Connector

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : IP69



PART NUMBERS:

EC	1	S	B	C
	2		S	

PRODUCT DESCRIPTION

"EC*-S*C" type glands, used in any orientation, are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dusts Groups IIIA, IIIB and 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 db & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics. The unique features include, Peppers T1000 or T2000 compound that enables a quick and easy installation. An innovative barrier chamber that allows for a full inspection of the compound fill. The gland maintains IP66, IP68 to 100 metres and IP 69. 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 is supplied with a rotating flexible conduit connection.

COMPLIANCE STANDARDS:

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

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Certificate Pending
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rule
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1113X & CML 19ATEX4114X
IECEx	IECEx CML 19.0035X
CCC - China	Certificate Pending
CCoE - India	PESO P494321/17 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

EXAMPLE PART NUMBERING: EC2-SBC/NP/20-1/M20

EC	Eclipse style barrier gland for use with Peppers T1000 or T2000 compound
2	Peppers T1000 (1) - Peppers T2000 (2)
S	Gland featuring single compression compound (Barrier) Inner Seal for use with conduit
B	Brass (B) / Stainless Steel (S)
C	Metallic Flexible Conduit connector
K - V - H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
20-1	Gland & Connector Size
M20	M20 x 1.5 Male 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 WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (100 metres - 7 days) & IP69
OPERATING TEMP:	T1000: -60°C to +135°C
	T2000: -60°C to +120°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Compound / Peppers T-2000 Compound

Eclipse featuring the New T2000 Compound

- Hand operated No Mixing VMS Cartridge
- Fast setting compound. Conductor termination can be effected from 60 minutes @ 23°C
- Featuring Peppers unique "no ferrule" technology allowing it to be fully retractable and inspectable
- Robust Compound for extreme conditions
- Deluge proof without the requirements of additional seals or boots
- Built in interface seal with metric threads

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland & Connector Size	Entry Thread Size		Metric Thread Length [B]	Cable Sheath & Cores					Typical Conduit Diameter		Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)		
	Metric	NPT		Number of Cores [C] [T1000]	Number of Cores [C] [T2000]	Max Ø Over Cores [C]	Min Inner Sheath [T2000]	Max Outer Sheath [D]	I/D	Max O/D		Across Flats [A]	Across Corners	Weight (Kgs)
16S-1	M16 x 1.5	⅜"	16	12	12	5.4	4.0	5.4	6.8	10.3	62	25.4	28.0	0.132
16S-2	M16 x 1.5	⅜"	16	12	12	6.0	4.0	6.0	7.7	13.0	62	25.4	28.0	0.130
16S-3	M16 x 1.5	⅜"	16	12	12	7.2	4.0	7.2	9.1	14.3	62	25.4	28.0	0.130
16S-4	M16 x 1.5	⅜"	16	12	12	8.4	4.0	8.4	10.2	14.1	62	25.4	28.0	0.128
16S-5	M16 x 1.5	⅜"	16	12	12	8.4	4.0	8.4	10.9	15.8	62	25.4	28.0	0.133
16S-6	M16 x 1.5	⅜"	16	12	12	8.4	4.0	8.4	13.0	17.1	62	25.4	28.0	0.135
16S-7	M16 x 1.5	⅜"	16	12	12	8.9	4.0	11.0	13.0	17.1	62	25.4	28.0	0.122
16S-8	M16 x 1.5	⅜"	16	12	12	8.9	4.0	11.7	13.9	19.3	62	25.4	28.0	0.118
16S-9	M16 x 1.5	⅜"	16	12	12	8.9	4.0	11.7	14.6	20.7	62	25.4	28.0	0.128
20-1	M20 x 1.5	½" or ¾"	16	40	20	12.5	4.0	13.0	13.9	19.3	65	30.0	33.0	0.176
20-2	M20 x 1.5	½" or ¾"	16	40	20	12.5	4.0	14.0	16.9	22.3	65	30.0	33.0	0.172
20-3	M20 x 1.5	½" or ¾"	16	40	20	12.5	4.0	14.0	16.9	23.8	65	30.0	33.0	0.181
20-4	M20 x 1.5	½" or ¾"	16	40	20	12.5	4.0	14.0	18.7	24.8	65	30.0	33.0	0.195
20-5	M20 x 1.5	½" or ¾"	16	40	20	12.5	4.0	14.0	20.7	28.3	65	30.0	33.0	0.214
25-1	M25 x 1.5	¾" or 1"	16	60	30	16.5	8.0	18.5	20.7	28.3	70	37.6	41.4	0.269
25-2	M25 x 1.5	¾" or 1"	16	60	30	16.5	8.0	18.5	21.1	26.8	64	37.6	41.4	0.261
25-3	M25 x 1.5	¾" or 1"	16	60	30	16.5	8.0	18.5	23.7	31.3	70	37.6	41.4	0.304
25-4	M25 x 1.5	¾" or 1"	16	60	30	16.5	8.0	18.5	25.0	31.3	70	37.6	41.4	0.297
32-1	M32 x 1.5	1" or 1 ¼"	16	80	50	23.5	14.0	26.3	28.1	33.3	79	46.0	50.6	0.409
32-2	M32 x 1.5	1" or 1 ¼"	16	80	50	23.5	14.0	26.3	30.4	40.8	79	46.0	50.6	0.458
32-3	M32 x 1.5	1" or 1 ¼"	16	80	50	23.5	14.0	26.3	30.4	38.8	79	46.0	50.6	0.478
40-1	M40 x 1.5	1 ¼" or 1 ½"	16	130	65	28.8	16.0	32.2	36.4	46.8	80	55.0	60.5	0.585
40-2	M40 x 1.5	1 ¼" or 1 ½"	16	130	65	28.8	16.0	32.2	36.4	44.8	80	55.0	60.5	0.553
40-3	M40 x 1.5	1 ¼" or 1 ½"	16	130	65	28.8	16.0	32.2	37.6	45.3	80	55.0	60.5	0.566
50	M50 x 1.5	2"	16	400	100	39.4	20.0	44.1	48.4	55.8	83	65.0	71.5	0.665
63	M63 x 1.5	2 ½"	19	425	130	50.0	30.0	56.0	57.5	64.8	84	80.0	88.0	1.030

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.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Sizes 16S-1 through 16S-6 max Ø over cores and max outer sheaths are determined by the connector component bore size.
- 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. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of compound, gloves and instructions to allow one complete termination.

peppers™

END—TO—END PERFORMANCE

BARRIER GLANDS

EXTREME APPLICATIONS

Group I Mining and US/Canadian Class 1 Division 1 & 2 are the most hazardous areas of classification for our industry and as such these environments should rightly command the highest level of safety to protect both workers and assets, in the most part they do.

Each standards authority have slightly different approaches as to what is required in the design and selection of an Ex db or Class I cable gland, but what determines its safety?

Let us look at the differences between the international authorities;

The Canadian Electrical Code allow cable glands that utilize an elastomeric seal to be used with a Class I application, providing the cable complies, i.e. the cable must have compact and extruded bedding.

The American National Electrical Code stipulates that for a Class I application the cable gland must be a barrier (potted) type.

Underwriters Laboratory (UL) state that a barrier gland must have the potting within a ferrule.

The International Electrical Commission 60079 part 14-2013 stipulates that an Ex db cable gland using an elastomeric seal may only be used if all of the following conditions apply;

The cable glands comply with IEC 60079-1 and certified as equipment,

Cables used comply IEC 60079-14 clause 9.3.2 (a) which states the following;

Cables used for fixed installations in hazardous areas shall be appropriate the ambient conditions in service. Cables shall be:

Sheathed with thermoplastic, thermosetting, or elastomeric material. They shall be circular and compact. Any bedding or sheath shall be extruded. Fillers, if any, shall be non-hygroscopic; or

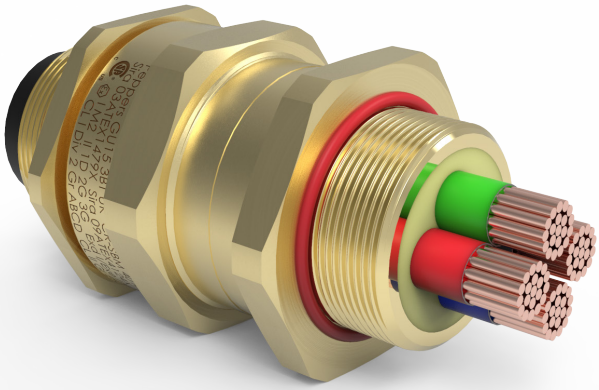
Mineral insulated metal sheathed; or

Special, e.g. flat cables with appropriate cable glands. They shall be compact and any bedding or sheath shall be extruded. Fillers, if any, shall be non-hygroscopic.

The connected cable is at least 3 metres in length.

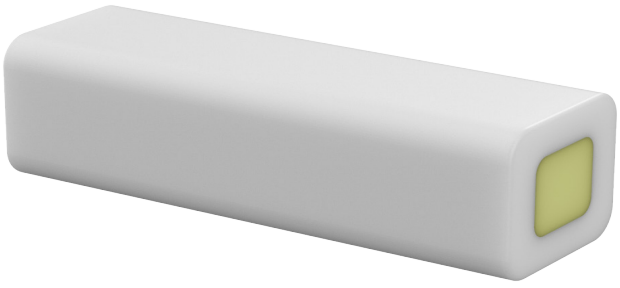
If all of the above do not apply then a barrier gland must be used.

*The above relating to IEC 60079-14 also applies to BS EN 60079-14 but this is currently being debated.



PEPPERS T1000

PEPPERS T-1000 COMPOUND complies with the Underwriters Laboratory requirements for sealing compounds, Class I, Groups A,

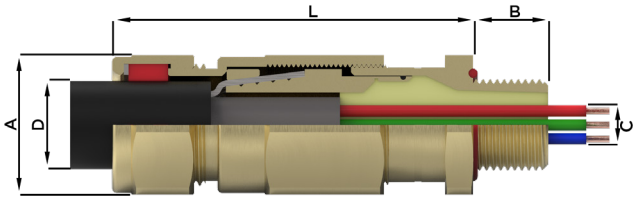


B, C and D; Class II, Groups E, F and G, in cable sealing fittings or lead seals for use in hazardous locations, UL File E334661. The product complies with Class I requirements following exposure to acetone, ammonium hydroxide, ethyl acetate, acetic acid, ASTM Reference Fuel C, benzene, hexane, furfural,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

PRODUCT TYPE CR-C

Double Compression Barrier Gland for Armoured Cable featuring "CROCLOCK®" and Peppers T-1000 Compound

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



PART NUMBERS:

C	R	C	*	B	*
			2	S	R

PRODUCT DESCRIPTION

"CR-C" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex db & 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, braid and tape 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 allows for a full inspection of the compound fill. 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 cables.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-%/7, UL514B, UL1203, UL2225, UL50E,
ANSI/UL 60079-%/7, ISA 60079-31

EXAMPLE PART NUMBERING: CR-CB/NP/20/M20

	CR-C	Gland featuring "CROCLOCK®", single orientation clamping, Peppers T-1000 Compound (Barrier) Inner Seal & Silicone LSOH Elastomeric Outer Seal
	2	For use with Lead Sheath Cables
	B	Brass (B) / Stainless Steel (S)
OPTIONS	**R**	Reduced Bore Outer Sheath Seal
OPTIONS	**C**	PVC Shroud (C) - PCP Shroud (P) - Silicone LSOH Shroud (3)
OPTIONS	**K-V-H**	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	**S**	Including Serrated Washer
OPTIONS	**1**	Quantity per kit
OPTIONS	**NP**	Nickel Plated
	20	Gland shell size
	M20	M20 x 1.5 Male 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 WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (100 metres - 7 Days), Type 4X & DTS01:1991
OPERATING TEMP:	-60°C to +135°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Sealing Compound
OUTERSEAL:	Silicone LSOH

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class I Zone 1 Ex d IIC / Ex e II Class III, Type 4X
NEC - USA	Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class I Zone 1 AEx d IIC Gb / AEx e IIC Gb Class II Zone 20 AEx ta IIIC Da Class III, Type 4X
EAC	PB Ex d I Mb / 1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / II 2G Ex db IIC Gb / II 2G Ex eb I Mb / II 2G Ex eb IIC Gb II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1344X & CML 19ATEX4114X
IECEx	IECEx CML 19.0046X
CEC - Canada	CSA 1356011
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2188 X
CCC - China	2021312313000407
UKRAINE	СЦ 18.0322 X
CCoE - India	PESO P494321/18 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CURING TIME:
@ 21°C Conductor termination can be effected after 1 hour. Compound chamber can be fully inspected after 4 hours and the equipment then energised.

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details							Armour Acceptance Range	Nominal Protrusion Length [L] Metric	Dimensions/Weight (Metric)			Shroud Size (Metric)
				Internal Cable Details			Cable Outer Sheath seal [D]									
							Standard		Reduced							
	Metric	NPT		Max Number of Cores	Max Ø Over Cores	Max Inner Sheath [C]	Min	Max	Min	Max			Across Flats [A]	Across Corners	Weight (Kgs)	
16	M20 x 1.5	½" or ¾"	16	15	10.4	11.7	8.4	13.5	6.7	10.3	0.15-1.25	79	25.4	28.0	0.177	EL24*
20S	M20 x 1.5	½" or ¾"	16	35	10.4	11.7	11.5	16.0	9.4	12.5	0.15-1.25	79	25.4	28.0	0.166	EL24*
20	M20 x 1.5	½" or ¾"	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	¾" 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 ¼"	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 ¼" or 1 ½"	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 ½" 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 ½"	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 ½"	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 ½" 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 2.0	3" or 3 ½"	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 2.0	3" or 3 ½"	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 2.0	3 ½" 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 2.0	3 ½" 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

NOTES

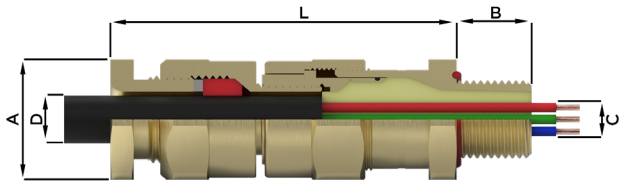
- Gland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full. Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* For gland sizes 16 and 20S when used with 3/4" NPT entry thread an EL30 shroud would be required.

PRODUCT TYPE CR-U

Double Compression Barrier Gland for Unarmoured Cable featuring Peppers T-1000 Compound

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



PART NUMBERS:

C	R	U	B
			S

PRODUCT DESCRIPTION

"CR-U" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex db & 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 allows for a full inspection of the compound fill. 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 STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL514B, UL1203, UL2225, UL50E
ANSI/UL 60079-0/1/7, ISA 60079-31

EXAMPLE PART NUMBERING: CR-UB/NP/20/M20

	CR-U	Gland with Peppers T-1000 Compound (Barrier) Inner Seal & Silicone LSOH Elastomeric Outer Seal
	B	Brass (B) / Stainless Steel (S)
OPTIONS	C	PVC Shroud (C) - PCP Shroud (P) - Silicone LSOH Shroud (3)
OPTIONS	K-V-H	Locknut, & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	T	Including Earth Tag
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
OPTIONS	NP	Nickel Plated
	20	Gland shell size
	M20	M20 x 1.5 Male 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 WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (100 metres - 7 Days), Type 4X & DTS01:1991
OPERATING TEMP:	-60°C to +135°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Sealing Compound
OUTER SEAL:	Silicone LSOH

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class I Zone 1 Ex d IIC / Ex e II Class III, Type 4X
NEC - USA	Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class I Zone 1 AEx d IIC Gb / AEx e IIC Gb Class II Zone 20 AEx ta IIIC Da Class III, Type 4X
EAC	PB Ex d I Mb / 1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / II 2G Ex db IIC Gb / II 2G Ex eb I Mb / II 2G Ex eb IIC Gb II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1344X & CML 19ATEX4114X
IECEx	IECEx CML 19.0046X
CEC - Canada	CSA 1356011
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2188 X
CCC - China	2021312313000407
UKRAINE	СЦ 18.0322 X
CCoE - India	PESO P494321/18 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CURING TIME:
@ 21°C Conductor termination can be effected after 1 hour. Compound chamber can be fully inspected after 4 hours and the equipment then energised.

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details				Nominal Protrusion Length [L] Metric	Dimensions/Weight (Metric)			Shroud Size (Metric)
				Internal Cable Details [C]		Cable Outer Sheath Seal [D]						
	Metric	NPT		Max Number of cores	Max Ø Over Cores	Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)	
16	M20 x 1.5	½" or ¾"	16	15	10.4	3.4	8.4	73	25.4	28.0	0.192	EL24*
20S	M20 x 1.5	½" or ¾"	16	35	10.4	4.8	11.7	73	25.4	28.0	0.192	EL24*
20	M20 x 1.5	½" or ¾"	16	40	12.5	9.5	14.0	73	30.0	33.0	0.258	EL30
25	M25 x 1.5	¾" 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 ¼"	16	80	23.5	18.1	26.3	80	46.0	50.6	0.578	EL46
40	M40 x 1.5	1 ¼" or 1 ½"	16	130	28.8	22.6	32.2	87	55.0	60.5	0.892	EL55
50S	M50 x 1.5	1 ½" 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 ½"	19	400	44.8	39.3	50.1	88	80.0	88.0	1.726	EL80
63	M63 x 1.5	2 ½"	19	425	50.0	46.7	56.0	88	80.0	88.0	1.558	EL80
75S	M75 x 1.5	2 ½" 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 2.0	3" or 3 ½"	25	425	64.4	61.9	72.0	123	104.0	115.2	3.826	EL104
85	M85 x 2.0	3" or 3 ½"	25	425	69.8	69.1	78.0	123	104.0	115.2	3.238	EL104
90	M90 x 2.0	3 ½" or 4"	25	425	75.1	74.1	84.0	123	114.0	125.7	4.063	EL114
100	M100 x 2.0	3 ½" or 4"	25	425	80.5	81.8	90.0	123	114.0	125.7	3.492	EL114

NOTES

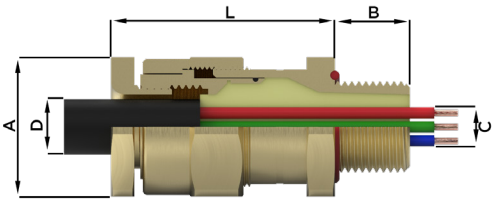
- Gland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* For gland sizes 16 and 20S when used with 3/4" NPT entry thread an EL30 should would be required.

PRODUCT TYPE CR-X

Single Compression Gland for Unarmoured Cable featuring Peppers T-1000 Compound

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



PART NUMBERS:

C	R	X	B
			S

PRODUCT DESCRIPTION

"CR-X" type glands, approved for use with any shape cable, are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex db & 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 allows for a full inspection of the compound fill. 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 STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL514B, UL1203, UL2225, UL50E
ANSI/UL 60079-0/1/7, ISA 60079-31

EXAMPLE PART NUMBERING: CR-XB/NP/20/M20

CR-X		Peppers T-1000 Compound (Barrier) Gland designed for use with unarmoured cable
B		Brass (B) / Stainless Steel (S)
OPTIONS	C	PVC Shroud (C) - PCP Shroud (P) - Silicone LSOH Shroud (3)
	K-V-H	Locknut, & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
20		Gland shell size
M20		M20 x 1.5 Male 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 WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (100 metres - 7 Days), Type 4X & DTS01:1991
OPERATING TEMP:	-60°C to +135°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Sealing Compound

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class I Zone 1 Ex d IIC / Ex e II Class III, Type 4X
NEC - USA	Class I Division 2, Groups A,B,C and D Class II Division 1, Groups E, F & G Class I Zone 1 AEx d IIC Gb / AEx e IIC Gb Class II Zone 20 AEx ta IIIC Da Class III, Type 4X
EAC	PB Ex d I Mb / 1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / II 2G Ex db IIC Gb / II 2G Ex eb I Mb / II 2G Ex eb IIC Gb II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1344X & CML 19ATEX4114X
IECEx	IECEx CML 19.0046X
CEC - Canada	CSA 1356011
NEC - USA	CSA 2627370
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2188 X
CCC - China	2021312313000407
UKRAINE	СЦ 18.0322 X
CCoE - India	PESO P494321/18 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CURING TIME:
@ 21°C Conductor termination can be effected after 1 hour. Compound chamber can be fully inspected after 4 hours and the equipment then energised.

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Gland Seal Range - Cable Sheath & Cores			Nominal Protrusion Length [L] Metric	Dimensions/Weight (Metric)			Shroud Size (Metric)
	Metric	NPT		Max Number of cores [C]	Max Ø Over Cores [C]	Max Outer Sheath [D]		Across Flats [A]	Across Corners	Weight (Kgs)	
20S	M20 x 1.5	½" or ¾"	16	35	10.4	11.7	42	25.4	28.0	0.126	L24*
20	M20 x 1.5	½" or ¾"	16	40	12.5	14.0	44	30.0	33.0	0.167	L30
25	M25 x 1.5	¾" or 1"	16	60	17.8	20.0	48	37.6	41.4	0.260	L38
32	M32 x 1.5	1" or 1 ¼"	16	80	23.5	26.3	53	46.0	50.6	0.396	L46
40	M40 x 1.5	1 ¼" or 1 ½"	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 ½"	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 2.0	3" or 3 ½"	25	425	64.4	72.0	80	104.0	115.2	2.734	L104
85	M85 x 2.0	3" or 3 ½"	25	425	69.8	78.0	80	104.0	115.2	2.282	L104
90	M90 x 2.0	3 ½" or 4"	25	425	75.1	84.0	85	114.0	125.7	2.854	L114
100	M100 x 2.0	3 ½" or 4"	25	425	80.5	90.0	85	114.0	125.7	2.453	L114

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.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length.

Peppers Cable Glands Limited will not be held responsible for clients' installationswhere this has not been taken into account.

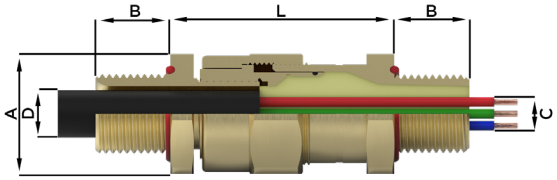
- When selecting IP Washer & Shroud material for use with glands, please be aware of theaccessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* For gland size 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE CR-S*M

Single Compression Barrier Gland featuring Peppers T-1000 Compound with Male Thread for Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2



PART NUMBERS:

C	R	S	B	M
			S	

PRODUCT DESCRIPTION

"CR-S*M" type glands, used in any orientation, are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and 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 db & 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 allows for a full inspection of the compound fill. 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. The gland is supplied with a male conduit connection thread.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31,
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL50

EXAMPLE PART NUMBERING: CR-SBM20/NP/M20/050NPT

CR-S		Gland with Compound (Barrier) Seal
B		Brass (B) / Stainless Steel (S)
M		Male Back End Configuration
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
20		Gland shell size
	NP	Nickel Plated
M20		M20 x 1.5 Male Entry Thread
050NPT		12"NPT Internal Female Connection 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 WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (100 metres - 7 Days), Type 4X & DTS01:1991
OPERATING TEMP:	-60°C to +135°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Sealing Compound

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc/ Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class I Zone 1 Ex d IIC / Ex e II Class III, Type 4X
EAC	PB Ex d I Mb / 1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / II 2G Ex db IIC Gb / II 2G Ex eb I Mb / II 2G Ex eb IIC Gb II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
KCS - Korea	Ex d IIC / Ex e IIC
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1344X & CML 19ATEX4114X
IECEx	IECEx CML 19.0046X
CEC - Canada	CSA 1356011
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2188 X
CCC - China	2021312313000422
UKRAINE	СЦ 18.0322 X
CCoE - India	PESO P494321/18 & P494321/20
KCS - Korea	15-GA4BO-0665X & 15-GA4BO-0666X
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CURING TIME:
@ 21°C Conductor termination can be effected after 1 hour. Compound chamber can be fully inspected after 4 hours and the equipment then energised.

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Male Entry Thread		Metric Entry Thread Length [B]	Male Conduit Entry Threads		Gland Seal Range - Cable Sheath & Cores			Nominal Protrusion Length [L]	Dimensions/Weight (Metric)		
	Metric	NPT		Metric	NPT	Number of Cores [C]	Max Ø Over Cores [C]	Max Outer Sheath [D]		Across Flats [A]	Across Corners	Weight (Kgs)
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	40	12.5	14.0	45	30.0	33.0	0.224
25	M25 x 1.5	¾" or 1"	16	M25 x 1.5	¾" or 1"	60	17.8	20.0	49	37.6	41.4	0.323
32	M32 x 1.5	1" or 1 ¼"	16	M32 x 1.5	1" or 1 ¼"	80	23.5	26.3	55	46.0	50.6	0.548
40	M40 x 1.5	1 ¼" or 1 ½"	16	M40 x 1.5	1 ¼" or 1 ½"	130	28.8	32.2	56	55.0	60.5	0.770
50S	-	1 ½"	16	M50 x 1.5	1 ½" or 2"	200	34.2	38.2	62	65.0	71.5	0.875
50	M50 x 1.5	2"	16	M50 x 1.5	2"	400	39.4	44.1	62	65.0	71.5	0.875
63S	-	2"	19	M63 x 1.5	2" or 2 ½"	400	44.8	50.1	63	80.00	88.0	1.281
63	M63 x 1.5	2 ½"	19	M63 x 1.5	2 ½"	425	50.0	56.0	63	80.0	88.0	1.281
75S	-	2 ½"	19	M75 x 1.5	2 ½" or 3"	425	55.4	62.0	63	90.0	99.0	1.406
75	M75 x 1.5	3" or 3 ½"	19	M75 x 1.5	3"	425	60.8	68.0	63	90.0	99.0	1.406
80	M80 x 2.0	3" or 3 ½"	25	M80 x 2.0	3" or 3 ½"	425	64.4	72.0	81	104.0	115.2	2.957
85	M85 x 2.0	3" or 3 ½"	25	M85 x 2.0	3" or 3 ½"	425	69.8	78.0	81	104.0	115.2	2.488
90	M90 x 2.0	3 ½" or 4"	25	M90 x 2.0	3 ½" or 4"	425	75.1	84.0	81	114.0	125.7	3.029
100	M100 x 2.0	3 ½" or 4"	25	M100 x 2.0	3 ½" or 4"	425	80.5	90.0	81	114.0	125.7	2.825

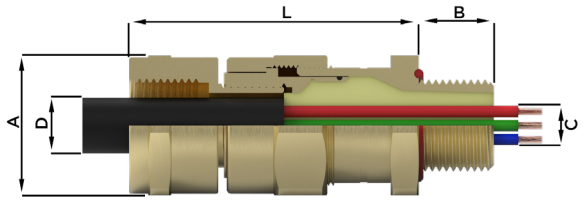
NOTES

- 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.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PRODUCT TYPE CR-S*F

Single Compression Barrier Gland featuring Peppers T-1000 Compound with Female Thread for Conduit Connection

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2



PART NUMBERS:

C	R	S	B	F
				S

PRODUCT DESCRIPTION

"CR-S*F" type glands, used in any orientation, are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and 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 db & 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 allows for a full inspection of the compound fill. 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. The gland is supplied with a female conduit connection thread.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31,
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL50

EXAMPLE PART NUMBERING: CR-SBF20/NP/M20/050NPT

CR-S		Gland with Compound (Barrier) Seal
B		Brass (B) / Stainless Steel (S)
F		Female Back End Configuration
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
20		Gland shell size
NP		Nickel Plated
M20		M20 x 1.5 Male Entry Thread
050NPT		12"NPT Internal Female Connection Thread

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc/ Ex ta IIIC Da
CEC - Canada	Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class I Zone 1 Ex d IIC / Ex e II Class III, Type 4X
EAC	PB Ex d I Mb / 1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc/ Ex tD A20
UKRAINE	I M2 Ex db I Mb / II 2G Ex db IIC Gb / II 2G Ex eb I Mb / II 2G Ex eb IIC Gb II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
KCS - Korea	Ex d IIC / Ex e IIC
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1344X & CML 19ATEX4114X
IECEx	IECEx CML 19.0046X
CEC - Canada	CSA 1356011
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2188 X
CCC - China	2021312313000422
UKRAINE	СЦ 18.0322 X
CCoE - India	PESO P494321/18 & P494321/20
KCS - Korea	15-GA4BO-0665X & 15-GA4BO-0666X
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / Stainless Steel (ACSLN)
EARTH TAG	Brass (ACBET) / Stainless Steel (ACSET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (100 metres - 7 Days), Type 4X & DTS01:1991
OPERATING TEMP:	-60°C to +135°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Sealing Compound

CURING TIME:
@ 21°C Conductor termination can be effected after 1 hour. Compound chamber can be fully inspected after 4 hours and the equipment then energised.

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Male Entry Thread		Metric Entry Thread Length [B]	Female Entry Threads		Gland Seal Range - Cable Sheath & Cores			Nominal Protrusion Length [L]	Dimensions/Weight (Metric)		
	Metric	NPT		Metric	NPT	Number of Cores [C]	Max Ø Over Cores [C]	Max Outer Sheath [D]		Across Flats [A]	Across Corners	Weight (Kgs)
20	M20 x 1.5	½" or ¾"	16	M20 x 1.5	½" or ¾"	40	12.5	14.0	57	30.0	33.0	0.324
25	M25 x 1.5	¾" or 1"	16	M25 x 1.5	¾" or 1"	60	17.8	20.0	63	37.6	41.4	0.513
32	M32 x 1.5	1" or 1 ¼"	16	M32 x 1.5	1" or 1 ¼"	80	23.5	26.3	67	46.0	50.6	0.726
40	M40 x 1.5	1 ¼" or 1 ½"	16	M40 x 1.5	1 ¼" or 1 ½"	130	28.8	32.2	68	55.0	60.5	1.088
50S	-	1 ½"	16	M50 x 1.5	1 ½" or 2"	200	34.2	38.2	68	65.0	71.5	1.328
50	M50 x 1.5	2"	16	M50 x 1.5	2"	400	39.4	44.1	68	65.0	71.5	1.328
63S	-	2"	19	M63 x 1.5	2" or 2 ½"	400	44.8	50.1	72	80.0	88.0	2.022
63	M63 x 1.5	2 ½"	19	M63 x 1.5	2 ½"	425	50.0	56.0	72	80.0	88.0	2.022
75S	-	2 ½"	19	M75 x 1.5	2 ½" or 3"	425	55.4	62.0	78	90.0	99.0	2.314
75	M75 x 1.5	3" or 3 ½"	19	M75 x 1.5	3"	425	60.8	68.0	78	90.0	99.0	2.314
80	M80 x 2.0	3" or 3 ½"	25	M80 x 2.0	3" or 3 ½"	425	64.4	72.0	103	104.0	115.2	4.262
85	M85 x 2.0	3" or 3 ½"	25	M85 x 2.0	3" or 3 ½"	425	69.8	78.0	103	104.0	115.2	3.748
90	M90 x 2.0	3 ½" or 4"	25	M90 x 2.0	3 ½" or 4"	425	75.1	84.0	104	114.0	125.7	4.791
100	M100 x 2.0	3 ½" or 4"	25	M100 x 2.0	3 ½" or 4"	425	80.5	90.0	104	114.0	125.7	4.103

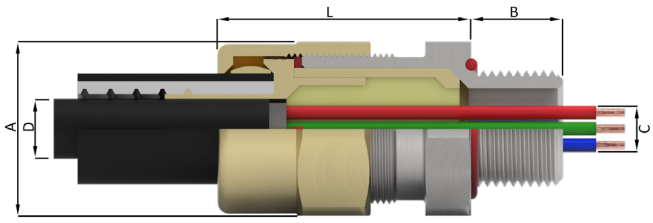
NOTES

- 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.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PRODUCT TYPE LT-C

Double Compression Barrier Gland featuring Peppers T-1000 Compound with Liquid Tight Connector for Flexible Metallic Conduit

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68



PART NUMBERS:

L	T	C	B
			S

PRODUCT DESCRIPTION

"LT-C" type glands are certified Flameproof Ex db, Increased Safety Ex eb and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex db & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics. The gland maintains IP66 & IP68 to 100 metres. The gland incorporates a connection for liquid tight flexible metallic conduit and features the Peppers T-1000 sealing compound that enables a quick and easy installation.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529

EXAMPLE PART NUMBERING: LT-CB/NP/20-1/M20

	LT-C	Gland featuring Peppers T-1000 Compound and connection for liquid tight flexible metallic conduit
	B	Brass (B) / Stainless Steel (S)
OPTIONS	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	T	Including Earth Tag
OPTIONS	S	Including Serrated Washer
OPTIONS	1	Quantity per kit
OPTIONS	NP	Nickel Plated
	20-1	Gland and Conduit Connection Size
	M20	M20 x 1.5 Male 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 WASHERS	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (100 metres - 7 Days) & DTS01:1991
OPERATING TEMP:	-60°C to +135°C
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless 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.

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
EAC	PB Ex d I Mb / 1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db I Mb / Ex eb I Mb / Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / II 2G Ex db IIC Gb / II 2G Ex eb I Mb / II 2G Ex eb IIC Gb
	II 1D Ex ta IIIC Da
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1171X & CML 19ATEX4114X
IECEx	IECEx CML 19.0049X
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 16.0275 X
CCC - China	2021312313000426
UKRAINE	СЦ 18.0324 X
CCoE - India	PESO P494321/16 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland & Connection Size	Standard Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details [C]			Conduit Data [D]		Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)		
	Metric	NPT		Max No .of Cores	Max Ø Over Cores [C]	Max Cable Inner Sheath Ø	Typical Conduit I/D	Max Conduit O/D		Across Flats [A]	Across Corners	Weight (Kgs)
20S-1	M20 x 1.5	½" or ¾"	16	9	5.0	5.0	6.2 - 7.1	11.4 - 12.9	45.0	25.4	28.0	0.180
20S-2	M20 x 1.5	½" or ¾"	16	20	7.8	7.8	9.8 - 10.3	14.2 - 15.6	44.0	25.4	28.0	0.177
20-1	M20 x 1.5	½" or ¾"	16	35	10.4	10.4	12.1 - 13.0	17.0 - 19.1	44.0	30.0	33.0	0.217
20-2	M20 x 1.5	½" or ¾"	16	40	12.5	13.3	15.8 - 16.3	20.8 - 22.3	42.0	30.0	33.0	0.218
25-1	M25 x 1.5	¾" or 1"	16	60	17.8	18.0	20.8 - 21.3	26.0 - 27.8	46.0	41.3	45.4	0.364
32-1	M32 x 1.5	1" or 1 ¼"	16	80	23.5	23.6	26.0 - 27.1	32.7 - 34.5	54.0	46.0	50.6	0.482
40-1	M40 x 1.5	1 ¼" or 1 ½"	16	130	28.8	31.8	34.8 - 35.8	41.1 - 43.3	57.0	55.0	60.5	0.706
50-1	M50 x1.5	2"	16	200	35.2	37.0	40.0 - 40.6	47.3 - 49.4	66.0	65.0	71.5	0.989
63-1	M63 x 1.5	2 ½"	19	300	48.0	48.0	50.5 - 51.9	59.4 - 61.4	67.0	80.0	88.0	1.410
75-1	M75 x 1.5	3"	19	325	59.3	59.3	62.9 - 63.9	72.1 - 74.1	67.0	98.8	108.7	1.945
75-2	M75 x 1.5	3"	19	425	60.8	68.0	77.9 - 78.7	87.8 - 90.0	67.0	104.7	115.2	2.338

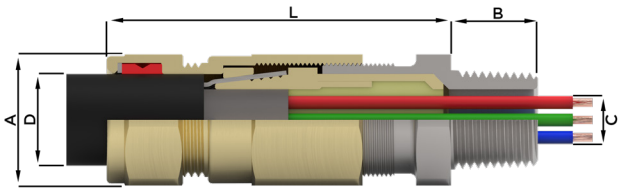
NOTES

- Gland size does not necessarily equate to the entry thread size.
- All brass entry threads are Nickel Plated as standard.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- It is the installer's responsibility to ensure that the conduit is secured correctly.
- If fit testing is required for specific conduit please contact Peppers.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PRODUCT TYPE UL-C

Double Seal Barrier Gland for Armoured Cable featuring "CROCLOCK®" and Peppers T-1000 Compound

Class I Div 1 : Class II Div 1 : Class III Type 4X : Ex db : Ex eb : Ex nR : Ex ta AEx d : AEx e : AEx ta : IP66 : IP68



PART NUMBERS:

UL	C	B	*
		S	R

PRODUCT DESCRIPTION

"UL-C" type glands, certified Explosion Proof Class I Div 1, Gas Groups ABCD, Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR & dust protected Ex ta are suitable for use in Zone 1, Zone 2, Zone 20, 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 db & 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 suitable for use with all certified Marine Shipboard Cable and Tray Cable whilst being UL listed for Marine Shipboard Armoured, Jacketed or Non Jacketed cable. The unique features include "CROCLOCK®", the non reversible multi-clamping system for wire, braid and tape armoured cables and Peppers T-1000, the sealing compound that enables a quick and easy installation. The gland is AEx d, AEx e, AEx ta approved and rated Type 4X, maintains IP66, IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot.

COMPLIANCE STANDARDS:

UL514B, UL14203, UL2225, UL50E, ANSI/UL 60079-1/1/7, ISA 60079-31
C22.2 No. 0/25/30/94.1/94.2/174 & CAN/CSA C22.2 60079-0/1/7/31
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

EXAMPLE PART NUMBERING: UL-CB/NP/20/075NPT

	UL-C	Gland featuring "CROCLOCK®", single orientation clamping, Compound (Barrier) Inner Seal & Silicone Elastomeric Outer Seal with Nickel Plated Entry Thread
	B	Brass (B) / Stainless Steel (S)
OPTIONS	**R**	Reduced Bore Seal Outer Sheath Seal
	C	PVC Shroud (C) - PCP Shroud (P) - Silicone LSOH Shroud (3)
	K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
	20	Gland shell size
	075NPT	¾"NPT Male 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 WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (100 metres - 7 Days)
	Type 4X, Oil Resistant II & DTS01:1991
OPERATING TEMP:	-60°C to +135°C (-25°C to +85°C for UL applications)
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Sealing Compound
ELASTOMERIC SEAL:	Silicone LSOH

CURING TIME:
@ 21°C Conductor termination can be effected after 1 hour.
The equipment can be energised after 4 hours.

CERTIFICATION:

UL	Class I Division 1 / Division 2, Gas Groups A, B, C & D, Type 4X
CEC - Canada	Class I Division 1, Groups A, B, C & D Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class I Zone 1 Ex d IIC Gb / Ex e IIC Gb / Ex ta IIIC Da Class II Zone 21 Ex ta IIIC Da Class III, Type 4X
NEC - USA	Class I Division 1, Groups A, B, C & D Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class I Zone 1 AEx d IIC Gb / AEx e IIC Gb Class II Zone 21 AEx ta IIIC Da Class III, Type 4X
ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
EAC	PB Ex d I Mb / 1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / II 2G Ex db IIC Gb / II 2G Ex eb I Mb / II 2G Ex eb IIC Gb II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION No:

UL	E248936
CEC - Canada	CSA 70004604
NEC - USA	CSA 70004604
ATEX	CML 19ATEX1349X & CML 19ATEX4114X
IECEx	IECEx CML 19.0107X
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.1957 X
CCC - China	2021312313000425
UKRAINE	СЦ 18.0324 X
CCoE - India	PESO P494321/9 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN inches)

Gland Size	Entry Thread Size		Metric Thread Length [B]	NPT Thread Length [B]	Cable Acceptance Details								Armour Acceptance Range	Nominal Protrusion Length [L]	Dimensions/Weight (NPT Entry Thread Versions)			Shroud Size (Metric)
					Internal Cable Details				Cable Outer Sheath Seal [D]									
									Standard		Reduced							
	Metric	NPT			Max No. of Cores IEC - NEC		Max Ø Over Cores	Max Inner Sheath [C]	Min	Max	Min	Max			Across Flats [A]	Across Corners	Weight (lbs)	
16	M20 x 1.5	½" or ¾"	0.630	0.783 or 0.795	15	1	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	½" or ¾"	0.630	0.783 or 0.795	35	4	0.409	0.461	0.453	0.630	0.370	0.492	0.006-0.049	3.228	1.000	1.102	0.606	EL24*
20	M20 x 1.5	½" or ¾"	0.630	0.783 or 0.795	40	8	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	¾" or 1"	0.630	0.795 or 0.985	60	16	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 ¼"	0.630	0.985 or 1.008	80	30	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 ¼" or 1 ½"	0.630	1.008 or 1.024	130	60	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	5	1.374	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	5	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 ½"	0.748	1.571	400	4	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 ½"	0.748	1.571	425	4	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	4	2.181	2.677	2.551	2.843	2.469	2.677	0.012-0.098	5.315	3.890	4.280	9.150	EL104
75	M75 x 1.5	3"	0.748	1.634	425	4	2.394	2.677	2.799	3.071	2.618	2.890	0.012-0.098	5.315	3.890	4.280	8.040	EL104

NOTES

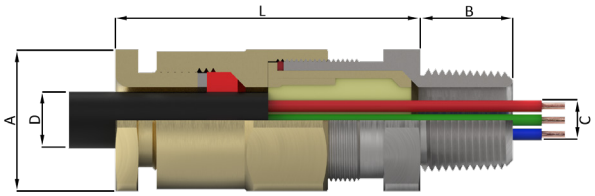
- Gland size does not necessarily equate to the entry thread size.
- UL approval/applications have a reduced core quantity. Consult product installation instructions for specific core data.
- Dimensions (A) & (B) may differ for glands with non metric entry threads.
- Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- Metric versions are supplied with an IP O-ring.
- All brass entry threads are Nickel Plated as standard.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* For glands size 16 and 20S when used with 3/4" NPT entry thread an EL30 shroud would be required.

PRODUCT TYPE UL-U

Double Seal Barrier Gland for Unarmoured Cable featuring Peppers T-1000 Compound

Class I Div 2 : Class II Div 1 : Class III Type 4 X : Ex db : Ex eb : Ex nR : Ex ta AEx d : AEx e : AEx ta : IP66 : IP68



PART NUMBERS:

UL	U	B
		S

PRODUCT DESCRIPTION

"UL-U" type glands, certified Explosion Proof Class I Div 2, Gas Groups ABCD, Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR & Dust Protected Ex ta. They are suitable for use in Zone 1, Zone 2, Zone 20, 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 db & 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 suitable for use with all certified Marine Shipboard Cable and Tray Cable whilst being UL listed for Marine Shipboard Unarmoured, Jacketed or Non Jacketed cable. A unique feature includes, Peppers T-1000, the sealing compound that enables a quick and easy installation. The gland is AEx d, AEx e, AEx ta approved and rated Type 4X, maintains IP66, IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot.

COMPLIANCE STANDARDS:

UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/1/7, ISA 60079-31
C22.2 No. 0/25/30/94.1/94.2/174 & CAN/CSA C22.2 60079-0/1/7/31
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

EXAMPLE PART NUMBERING: UL-UB/NP/20/075NPT

UL-U		Gland featuring a Compound (Barrier) Inner Seal with Nickel Entry Thread
B		Brass (B) / Stainless Steel (S)
	C	PVC Shroud (C) - PCP Shroud (P) - Silicone LSOH Shroud (3)
	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
OPTIONS	**T**	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
20		Gland shell size
075NPT		¾"NPT Male 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 WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (100 metres - 7 Days)
	Type 4X, Oil Resistant II & DTS01:1991
OPERATING TEMP:	-60°C to +135°C (-25°C to +85°C for UL applications)
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless 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.

CERTIFICATION:

UL	Class I Division 2, Gas Groups A, B, C & D, Type 4X
CEC - Canada	Class I Division 2, Groups A, B, C & D
	Class II Division 1, Groups E, F & G
	Class I Zone 1 Ex d IIC Gb / Ex e IIC Gb
	Class II Zone 21 Ex ta IIIC Da
	Class III, Type 4X
NEC - USA	Class I Division 2, Groups A, B, C & D
	Class II Division 1, Groups E, F & G
	Class I Zone 1 AEx d IIC Gb / AEx e IIC Gb
	Class II Zone 21 AEx ta IIIC Da
	Class III, Type 4X
ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
EAC	PB Ex d I Mb / 1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / II 2G Ex db IIC Gb / II 2G Ex eb I Mb / II 2G Ex eb IIC Gb
	II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION NO:

UL	E248936
CEC - Canada	CSA 70004604
NEC - USA	CSA 70004604
ATEX	CML 19ATEX1349X & CML 19ATEX4114X
IECEx	IECEx CML 19.0107X
EAC	RU C-GB.BH02.B.00693-18
INMETRO -Brazil	NCC 13.1957 X
CCC - China	2021312313000425
UKRAINE	CЦ 18.0324 X
CCoE - India	PESO P494321/9 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN inches)

Gland Size	Entry Thread Size		ISO Thread Length [B]	NPT Thread Length [B]	Cable Acceptance Details [C]					Nominal Protrusion Length [L]	Dimensions/Weight (NPT Entry Thread Versions)			Shroud Size (Metric)
					Cable Inner Sheath [C]			Cable Outer Sheath [D]						
	Metric	NPT			Number of Cores IEC - NEC		Max Ø Over Cores	Min	Max		Across Flats [A]	Across Corners	Weight (lbs)	
16	M20 x 1.5	½" or ¾"	0.630	0.783 - 0.795	15	1	0.409	0.134	0.331	2.717	1.000	1.102	0.602	EL24*
20S	M20 x 1.5	½" or ¾"	0.630	0.783 - 0.795	35	4	0.409	0.189	0.461	2.717	1.000	1.102	0.590	EL24*
20	M20 x 1.5	½" or ¾"	0.630	0.783 - 0.795	40	8	0.492	0.374	0.551	2.717	1.180	1.299	0.710	EL30
25	M25 x 1.5	¾" or 1"	0.630	0.795 - 0.985	60	16	0.701	0.461	0.787	2.953	1.480	1.630	1.120	EL38
32	M32 x 1.5	1" or 1 ¼"	0.630	0.985 - 1.008	80	30	0.925	0.713	1.035	3.425	1.810	1.992	1.797	EL46
40	M40 x 1.5	1 ¼" or 1 ½"	0.630	1.008 - 1.024	130	60	1.134	0.890	1.268	3.543	2.170	2.832	2.577	EL55
50S	M50 x 1.5	2"	0.630	1.059	200	5	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	5	1.551	1.303	1.736	3.937	2.560	2.815	3.263	EL65
63S	M63 x 1.5	2 ½"	0.748	1.571	400	4	1.764	1.547	1.972	3.937	3.150	3.465	6.190	EL80
63	M63 x 1.5	2 ½"	0.748	1.571	425	4	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	4	2.181	2.059	2.441	3.937	3.890	4.280	6.960	EL104
75	M75 x 1.5	3"	0.748	1.634	425	4	2.394	2.283	2.677	3.937	3.890	4.280	6.490	EL104

NOTES

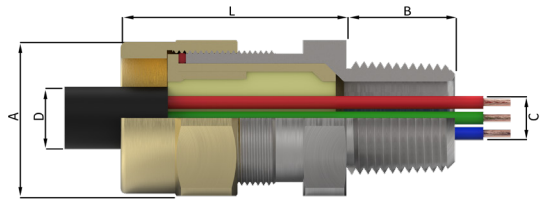
- Gland size does not necessarily equate to the entry thread size.
- UL approval/applications have a reduced core quantity. Consult product installation instructions for specific core data.
- Dimensions (A) & (B) may differ for glands with non metric entry threads.
- Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- Metric versions are supplied with an IP O-ring.
- All brass entry threads are Nickel Plated as standard.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* For glands size 16 and 20S when used with 3/4" NPT entry thread an EL30 shroud would be required.

PRODUCT TYPE UL-X

Single Seal Barrier Gland for Unarmoured Cable featuring Peppers T-1000 Compound

Class I Div 2 : Class II Div 1 : Class III Type 4 X : Ex db : Ex eb : Ex nR : Ex ta AEx d : AEx e : AEx ta : IP66 : IP68



PART NUMBERS:

UL	X	B
		S

EXAMPLE PART NUMBERING: UL-XB/NP/20/075NPT

	UL-X	Gland featuring a Compound (Barrier) Inner Seal with Nickel Plated Entry Thread
	B	Brass (B) / Stainless Steel (S)
OPTIONS	**C**	PVC Shroud (C) - PCP Shroud (P) - Silicone LSOH Shroud (3)
	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	T	Including Earth Tag
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
	20	Gland shell size
	075NPT	¾"NPT Male 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 WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (100 metres - 7 Days)
	Type 4X, Oil Resistant II & DTS01:1991
OPERATING TEMP:	-60°C to +135°C (-25°C to +85°C for UL applications)
MATERIALS:	Brass or Stainless Steel
PLATING:	Electroless Nickel
COMPOUND:	Peppers T-1000 Sealing Compound

PRODUCT DESCRIPTION

"UL-X" type glands, certified Explosion Proof Class I Div 2, Gas Groups ABCD, Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR & Dust Protected Ex ta. They are suitable for use in Zone 1, Zone 2, Zone 20, 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 db & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics. The gland is suitable for use with all certified Marine Shipboard Cable and Tray Cable whilst being UL listed for Marine Shipboard Unarmoured, Jacketed or Non Jacketed cable. A unique feature includes, Peppers T-1000, the sealing compound that enables a quick and easy installation. The gland is AEx d, AEx e, AEx ta approved and rated Type 4X, maintains IP66, IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot.

COMPLIANCE STANDARDS:

UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/1/7, ISA 60079-31
C22.2 No. 0/25/30/94.1/94.2/174 & CAN/CSA C22.2 60079-0/1/7/31
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 A, B, C & D, Type 4X
CEC - Canada	Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class I Zone 1 Ex d IIC Gb / Ex e IIC Gb Class II Zone 21 Ex ta IIIC Da Class III, Type 4X
NEC - USA	Class I Division 2, Groups A, B, C & D Class II Division 1, Groups E, F & G Class I Zone 1 AEx d IIC Gb / AEx e IIC Gb Class II Zone 21 AEx ta IIIC Da Class III, Type 4X
ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
EAC	PB Ex d I Mb / 1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / II 2G Ex db IIC Gb / II 2G Ex eb I Mb / II 2G Ex eb IIC Gb II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex ta IIIC

CERTIFICATION:

UL	E248936
CEC - Canada	CSA 70004604
NEC - USA	CSA 70004604
ATEX	CML 19ATEX1349X & CML 19ATEX4114X
IECEx	IECEx CML 19.0107X
EAC	RU C-GB.BH02.B.00693-18
INMETRO -Brazil	NCC 13.1957 X
CCC - China	2021312313000425
UKRAINE	CЦ 18.0324 X
CCoE - India	PESO P494321/9 & P494321/20
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CURING TIME:

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

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN inches)

Gland Size	Entry Thread Size		Metric Thread Length [B]	NPT Thread Length [B]	Cable Acceptance Details [C]				Nominal Protrusion Length [L]	Dimensions/Weight (NPT Entry Thread Versions)			Shroud Size (Metric)
	Metric	NPT			Max No. of Cores IEC - NEC		Max Ø Over Cores	Max Outer Sheath [D]		Across Flats [A]	Across Corners	Weight (lbs)	
20S	M20 x 1.5	½" or ¾"	0.630	0.783 or 0.795	35	4	0.409	0.461	41	1.000	1.102	0.138	L24*
20	M20 x 1.5	½" or ¾"	0.630	0.783 or 0.795	40	8	0.492	0.551	41	1.180	1.299	0.170	L30
25	M25 x 1.5	¾" or 1"	0.630	0.795 or 0.985	60	16	0.701	0.787	47	1.480	1.630	0.320	L38
32	M32 x 1.5	1" or 1 ¼"	0.630	0.985 or 1.008	80	30	0.925	1.035	58	1.810	1.992	0.612	L46
40	M40 x 1.5	1 ¼" or 1 ½"	0.630	1.008 or 1.024	130	60	1.134	1.268	58	2.170	2.382	0.790	L55
50	M50 x 1.5	2"	0.630	1.059	400	5	1.551	1.736	65	2.560	2.815	0.980	L65
63	M63 x 1.5	2 ½"	0.748	1.571	425	4	1.969	2.205	66	3.150	3.465	1.510	L80
75	M75 x 1.5	3"	0.748	1.634	425	4	2.394	2.677	66	3.890	4.280	1.732	L104

NOTES

- Gland size does not necessarily equate to the entry thread size.
- UL approval/applications have a reduced core quantity. Consult product installation instructions for specific core data.
- Dimensions (A) & (B) may differ for glands with non metric entry threads.
- Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- Metric versions are supplied with an IP O-ring.
- All brass entry threads are Nickel Plated as standard.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

* For glands size 16 and 20S when used with 3/4" NPT entry thread an EL30 shroud would be required.

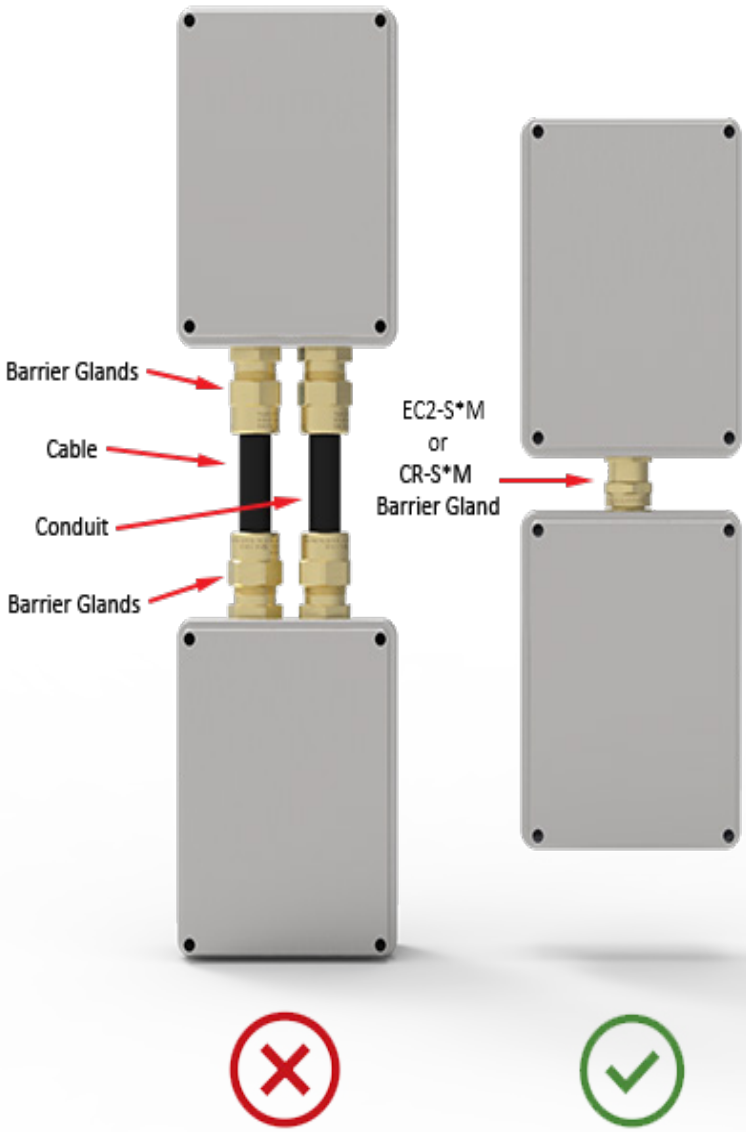
Most installations do not call for enclosures to be connected together but what do you do if you need to connect two (or more) Ex db enclosures within a Zone 1 hazardous area?

Traditional practice has been to use compound barrier glands 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 EC2-S*M or CR-S*M range of barrier glands can now be installed directly between two Ex db 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 the enclosure the EC2-S*M or CR-S*M gland will prevent any transmission to the second enclosure or the surrounding atmosphere.



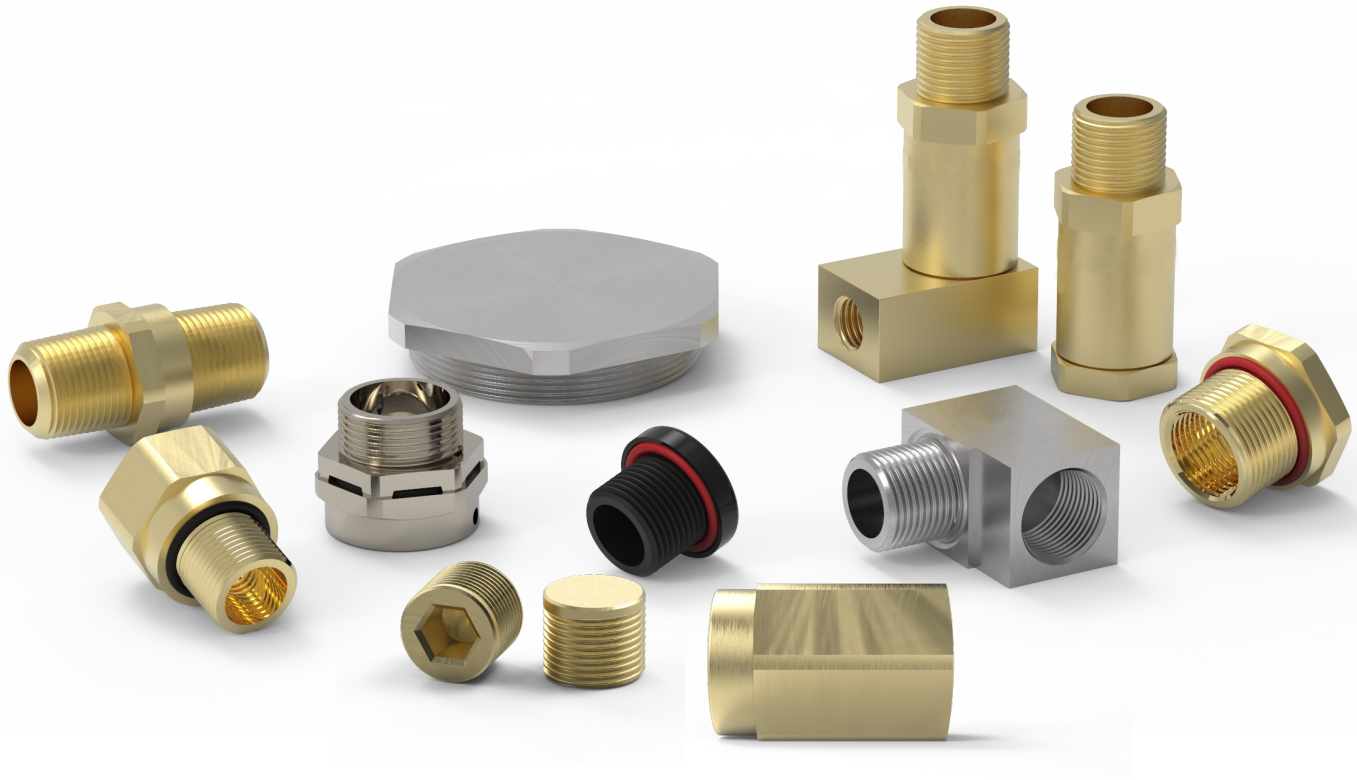
peppers™

END—TO—END PERFORMANCE

ENCLOSURE ACCESSORIES

Peppers offers a full suite of accessories designed to address the multitude of cabling and enclosure threading options and entry seals. Available in Stainless Steel, Nickel Plated Brass, Brass, Eco-Brass and Aluminum. Several thread options offered, including Metric, NPT & more.

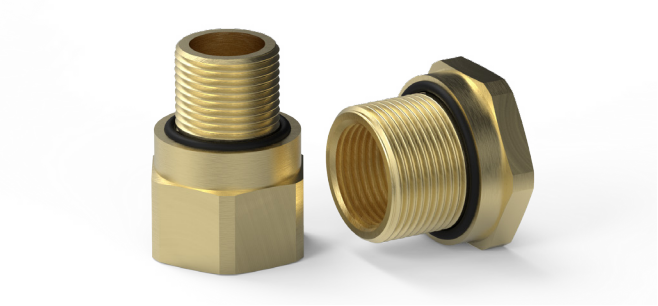
- AR Adaptors/Reducers
- ARMR & ARFR 90˚/Right Angle Adaptors
- RA**90˚ Rotating Right-Angle Adaptors/ Reducers
- RA Rotating Adaptors & Reducers/Unions
- ACDP Breather Drains
- SPMH & SPHH Dome/Hex Head Stopping Plugs
- SPA & SPB Stopping Plugs



PRODUCT TYPE AR

Metallic Adaptors and Reducers

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 Class I Div 1 : AEx db : AEx eb : AEx ta



PART NUMBERS:

A	R	1	B	F
		3	S	
			A	

EXAMPLE PART NUMBERING: ARIBF/NP/M20/M25

AR	Thread converting Adaptor/Reducer
1	No IP O-ring(0) - Nitrile (1) - Silicone (3)
B	Brass (B) - Stainless Steel (S) - Aluminium (A)
F	Multiple Certification
K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
M20	Male Entry Thread
M25	Female Entry Thread

OPTIONAL ACCESSORIES:

IP Washers	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
Earth Tag	Brass (ACBET) / St-Steel (ACSET) / Aluminium (ACAET)
Locknut	Brass (ACBLN) / St-Steel (ACSLN) / Aluminium (ACALN)
Serrated Washer	Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (100 metres for 7 days) & Type 4X/6P	
OPERATING TEMPERATURE:	O-ring - None	-100°C to +400°C
	O-ring - Nitrile	-30°C to +100°C
	O-ring - Silicone	-60°C to +200°C
MATERIALS:	Brass, Stainless Steel or Aluminium	
PLATING:	Electroless Nickel	

Male and Female Thread References and Size information can be found on page 77 of this product catalogue. Adaptor and Reducer size information is available on pages 78 + 79 of our product catalogue.

Male and female threads are manufactured in accordance with:-

- ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
- NPT and NPS threads are in accordance to ANSI B1.20.1
- PG threads to DIN40430
- ET threads to Imperial Conduit BS31
- ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
- ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

PRODUCT DESCRIPTION

"AR" Series Certified Adaptors & Reducers provide a method of matching electrical thread forms on Ex equipment whilst maintaining Ex db, Ex eb, Ex ta and Ex nR methods of explosion protection. Approved for use in mining (except Aluminium) and surface installations, they maintain IP66 & IP68 for IEC type applications and Class I Division 1 and Type 4X/6P for CEC / NEC type applications. All external metric threads are fitted with a nitrile O-ring as standard.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & 60529
C22.2 (see certificate), UL514B, UL1203, ANSI/UL 60079-0/1/7, ISA 60079-31, UL 50E

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	Class I Division 1, Groups A, B, C & D
	Class II Division 1, Groups E, F & G
	Class III, Type 4X/6P
NEC - USA	Class I Zone 1 AEx db IIC Gb / AEx eb IIC Gb / Class II Zone 20 AEx ta IIIC Da
	Class I Division 1, Groups A, B, C & D
	Class II Division 1, Groups E, F & G
	Class III, Enclosure Type 4X/6P
EAC	Ex d I Mb U / Ex d IIC Gb U / Ex e I Mb U / Ex e II Gb U / Ex nR II Gc U / Ex ta IIIC Da
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / Ex eb I Mb / II 2GD Ex db IIC Gb / Ex eb IIC Gb / Ex tb IIIC Db
	II 3G Ex nR IIC Gc
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex tb IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1090X & CML 19ATEX4092X
IECEx	IECEx CML19.0022X
CEC - Canada	CSA 2310046
NEC - USA	CSA 2310046
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2189 X
CCC - China	2021312313000373
UKRAINE	СЦ 18.0319 X
CCoE - India	PESO P494321/15 & P494321/19
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

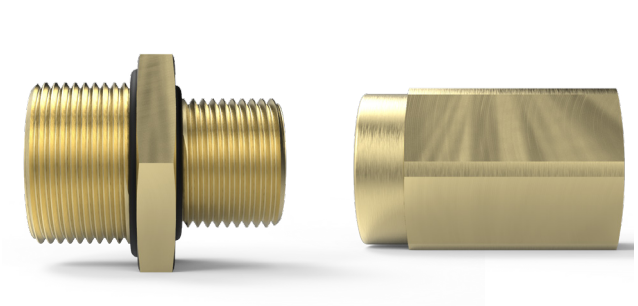
NOTES

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex d applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- ATEX / IECEx versions are supplied as standard.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to the general machining techniques and will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PRODUCT TYPE ARMM & ARFF

Metallic Adaptors

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 1 : AEx db : AEx eb : AEx ta



PART NUMBERS:

A	R	MM	0	B	F
		FF	1	S	
			3	A	

PRODUCT DESCRIPTION

"ARMM & ARFF" Series Certified Adaptors provide a method of matching electrical thread forms on Ex equipment whilst maintaining Ex db, Ex eb, Ex ta and Ex nR methods of explosion protection. Approved for use in mining (except Aluminium) and surface installations, they maintain IP66 & IP68 for IEC type applications and Class I Division 1 and Type 4X/6P for CEC type applications. All external metric threads are fitted with a nitrile O-ring as standard.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & 60529
C22.2 (see certificate), UL514B, UL1203, ANSI/UL 60079-0/1/7, ISA 60079-31, UL 50E

EXAMPLE PART NUMBERING: ARMM1BF/NP/M20/M25

ARMM or ARFF	ARMM = Male x Male - ARFF = Female x Female
1	No IP O-ring (0) - Nitrile (1) - Silicone (3)
B	Brass (B) - Stainless Steel (S) - Aluminium (A)
F	Multiple Certification
K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
M20	Male or Female Entry Thread
M25	Male or Female Entry Thread

ARFF part numbers will always contain the "0" as this product cannot be fitted with O-rings. For ARMM we always quote the smallest thread first so the product is an Adaptor not Reducer Accessories are available for ARMM series

IP RATING:	IP66 & IP68 (100 metres for 7 days) & Type 4X/6P	
OPERATING TEMPERATURE:	O-ring - None	-100°C to +400°C
	O-ring - Nitrile	-30°C to +100°C
	O-ring - Silicone	-60°C to +200°C
MATERIALS:	Brass, Stainless Steel or Aluminium	
PLATING:	Electroless Nickel	

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	Class I Division 1, Groups A, B, C & D
	Class II Division 1, Groups E, F & G
	Class III, Type 4X/6P
NEC - USA	Class I Zone 1 AEx db IIC Gb / AEx eb IIC Gb / Class II Zone 20 AEx ta IIIC Da
	Class I Division 1, Groups A, B, C & D
	Class II Division 1, Groups E, F & G
	Class III, Type 4X/6P
EAC	Ex d I Mb U / Ex d IIC Gb U / Ex e I Mb U / Ex e II Gb U / Ex nR II Gc U / Ex ta IIIC Da
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / Ex eb I Mb / II 2GD Ex db IIC Gb / Ex eb IIC Gb / Ex tb IIIC Db
	II 3G Ex nR IIC Gc
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex tb IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1090X & CML 19ATEX4092X
IECEx	IECEx CML19.0022X
CEC - Canada	CSA 2310046
NEC - USA	CSA 2310046
EAC	RU C-GB.BH02.B.00693/18
INMETRO - Brazil	NCC 13.2189 X
CCC - China	2021312313000373
UKRAINE	СЦ 18.0319 X
CCoE - India	PESO P494321/15 & P494321/19
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

Male and Female Thread References and Size information can be found on page 77 of this product catalogue. Adaptor and Reducer size information is available on pages 78 + 79 of our product catalogue.

Male and female threads are manufactured in accordance with:-

- ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
- NPT and NPS threads are in accordance to ANSI B1.20.1
- PG threads to DIN40430
- ET threads to Imperial Conduit BS31
- ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
- ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

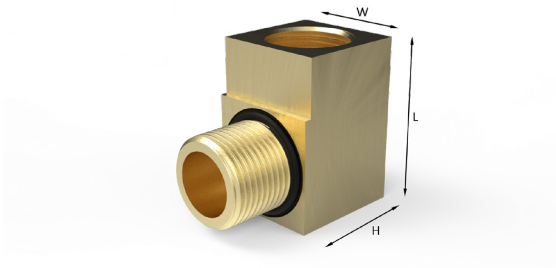
NOTES

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex d applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- ATEX / IECEx versions are supplied as standard.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to the general machining techniques and will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PRODUCT TYPE ARMR & ARFR

Metallic 90 Degree / Right Angle Adaptors

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 1 : AEx db : AEx eb : AEx ta



PART NUMBERS:

AR	MR	1	B	F
	FR	3	S	
			A	

PRODUCT DESCRIPTION

"ARMR" & "ARFR" Series Dual Certified Right Angled Adaptors are designed to protect cables when installed in confined spaces where the cable may otherwise be subject to excessive bending and / or stress. The series is available with Male/Female or Female/Female connection threads. They are approved for Ex db, Ex eb, Ex ta and Ex nR methods of explosion protection whilst maintaining IP66, IP68 for IEC type applications and Class I Division 1, and Type 4X/6P for NEC/CEC type applications. All external parallel threads are fitted with a nitrile O-ring as standard.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & 60529
C22.2 (see certificate), UL514B, UL1203, ANSI/UL 60079-0/1/7, ISA 60079-31, UL 50E

EXAMPLE PART NUMBERING: ARMR1BF/NP/M20/M20

ARMR	90 Degree Adaptor Male/Female (Right Angled)
OR	
ARFR	90 Degree Adaptor Female/Female (Right Angled)
1	No IP O-ring (0) - Nitrile (1) - Silicone (3) (Only available on ARMR)
B	Brass (B) - Stainless Steel (S) - Aluminium (A)
F	Multiple Certification
K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
M20	Male Entry Thread
M20	Female Entry Thread

IP RATING:	IP66 & IP68 (100 metres for 7 days) & Type 4X/6P	
OPERATING TEMPERATURE:	O-ring - None	-100°C to +400°C
	O-ring - Nitrile	-30°C to +100°C
	O-ring - Silicone	-60°C to +200°C
MATERIALS:	Brass, Stainless Steel or Aluminium	
PLATING:	Electroless Nickel	

ALSO AVAILABLE IN 30 DEGREE AND 45 DEGREE CONFIGURATIONS

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	Class I Division 1, Groups A, B, C & D
	Class II Division 1, Groups E, F & G
	Class III, Type 4X/6P
NEC - USA	Class I Zone 1 AEx db IIC Gb / AEx eb IIC Gb / Class II Zone 20 AEx ta IIIC Da
	Class I Division 1, Groups A, B, C & D
	Class II Division 1, Groups E, F & G
	Class III, Type 4X/6P
EAC	Ex d I Mb U / Ex d IIC Gb U / Ex e I Mb U / Ex e II Gb U / Ex nR II Gc U / Ex ta IIIC Da
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / Ex eb I Mb /II 2GD Ex db IIC Gb / Ex eb IIC Gb / Ex tb IIIC Db
	II 3G Ex nR IIC Gc
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex tb IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1091U & CML 19ATEX4093U
IECEx	IECEx CML 19.0023U
CEC - Canada	CSA 2310046
NEC - USA	CSA 2310046
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2190 U
CCC - China	2021312313000375
UKRAINE	СЦ 18.0319 X
CCoE - India	PESO P494321/3 & P494321/12
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Size	Bore	Height	Length	Width
M16 x M16	10.0	38.1	27.0	25.4
M20 x M20	14.0	38.1	27.0	25.4
M25 xM25	18.0	44.5	37.0	31.8
M32 x M32	24.0	50.8	45.0	38.1
M40 x M40	32.0	63.5	52.0	50.8
M50 x M50	41.0	72.0	67.0	60.0
M63 x M63	53.0	90.0	83.0	75.0
M75 x M75	64.0	102.0	94.0	88.0
M80 x M80	69.0	120.0	110.0	100.0
M85 x M85	73.0	125.0	115.0	110.0
M90 x M90	78.0	130.0	120.0	110.0
M100 x M100	88.0	140.0	125.0	130.0

NOTES

- Differing threads and thread forms are available upon request.
- Aluminium versions are not suitable for Group I Mining application.
- When used in an Ex nR application ARMR & ARFR adaptors must be fitted with an appropriate seal.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to the general machining techniques and will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.

PRODUCT TYPE RA

Metallic Rotating Adaptors and Reducers / Unions

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 Class I Zone 1 AEx db : AEx eb : AEx ta

PART NUMBERS:

RA	MF	0	B	F
	MM		S	
	FF			

PRODUCT DESCRIPTION

"RA" Series Certified Rotating Adaptors & Reducers provide a method of matching electrical thread forms on Ex equipment whilst maintaining Ex db, Ex eb, Ex ta and Ex nR methods of explosion protection. Approved for use in mining and surface applications, they maintain IP66 & IP68 for IEC type applications and Class 1 Zone 1 and Type 4X/6P for CEC / NEC type applications.

EXAMPLE PART NUMBERING: RAMF0BF/NP/M20/M25

RA	Rotating Thread converting Adaptor/Reducer
MF	Male / Female (MF) - Male / Male (MM) - Female/Female (FF)
0	No IP O-ring
B	Brass (B) - Stainless Steel (S)
F	Multiple Certification
K-V-H	Locknut & Nylon (K) - Fibre (V) - PTFE (H) IP Washer
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
M20	Male Entry Thread
M25	Female Entry Thread

OPTIONAL ACCESSORIES:

IP Washers	Nylon (ACNSW) - Fibre (ACFSW) - PTFE (ACPSW)
Earth Tag	Brass (ACBET) - St-Steel (ACSET)
Locknut	Brass (ACBLN) - St-Steel (ACSLN)
Serrated Washer	Stainless Steel (ACSSW)

IP RATING:	IP66, IP68 (2 metres for 24hrs) & Type 4X/6P	
OPERATING TEMPERATURE:	Washer - None	-60°C to +135°C
	Washer - Fibre	-40°C to +95°C
	Washer - Nylon	-40°C to +135°C
	Washer - PTFE	-60°C to +135°C
MATERIALS:	Brass or Stainless Steel	
PLATING:	Electroless Nickel	

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529
C22.2 (see certificate), ANSI/UL 514B, ANSI/UL 60079-0/1/7, ANSI/ISA 60079-31, UL50E

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	Type 4X / 6P
NEC - USA	Class I Zone 1 AEx db IIC Gb / Ex eb IIC Gb
	Zone 20 AEx ta IIIC Da
	Type 4X / 6P
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1330X & CML 19ATEX4331X
IECEx	IECEx CML 19.0101X
CEC - Canada	CSA 2310046
NEC - USA	CSA 2310046
CCC - China	2021312313000376
CCoE - India	PESO P494321/5 & P494321/14
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

Male and Female Thread References and Size information can be found on page 77 of our product catalogue. Adaptor and Reducer size information is available on request sales@peppers.co.uk.

Male and female threads are manufactured in accordance with:-

- ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
- NPT and NPS threads are in accordance to ANSI B1.20.1
- PG threads to DIN40430
- ET threads to Imperial Conduit BS31
- ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
- ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

NOTES

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex db applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- ATEX / IECEx / CSA versions are supplied as standard.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.

PRODUCT TYPE RA**90

Metallic 90 Degree Rotating Adaptors and Reducers

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 Class I Zone 1 AEx db : AEx eb : AEx ta

PART NUMBERS:

RA	MF90	0	B	F
	MM90		S	
	FF90			

PRODUCT DESCRIPTION

"RA**90" Series Dual Certified Right Angled Rotating Adaptors are designed to protect cables when installed in confined spaces where the cable may otherwise be subject to excessive bending and / or stress. The series is available with Male/Male, Male/Female or Female/Female connection threads. Approved for use in mining and surface applications, they maintain IP66 & IP68 for IEC type applications and Class 1 Zone 1 and Type 4X/6P for CEC / NEC type applications.

EXAMPLE PART NUMBERING: RAMF900BF/NP/M20/M20

RA	Rotating Thread converting Adaptor/Reducer
MF90	Male / Female (MF90) - Male / Male (MM90) - Female/Female (FF90)
0	No IP O-ring
B	Brass (B) - Stainless Steel (S)
F	Multiple Certification
K-V-H	Locknut & Nylon (K) - Fibre (V) - PTFE (H) IP Washer
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
M20	Male Entry Thread
M20	Female Entry Thread

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529
C22.2 (see certificate), ANSI/UL 514B, ANSI/UL 60079-0/1/7, ANSI/ISA 60079-31, UL50E

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	Type 4X / 6P
NEC - USA	Class I Zone 1 AEx db IIC Gb / Ex eb IIC Gb
	Zone 20 AEx ta IIIC Da
	Type 4X / 6P
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 19ATEX1330X & CML 19ATEX4331X
IECEx	IECEx CML 19.0101X
CEC - Canada	CSA 2310046
NEC - USA	CSA 2310046
CCC - China	2021312313000376
CCoE - India	PESO P494321/5 & P494321/14
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

OPTIONAL ACCESSORIES:

IP Washers	(N) Nylon (ACNSW) - (J) Fibre (ACFSW) - (Z) PTFE (ACPSW)
Earth Tag	(T) Brass (ACBET) - St-Steel (ACSET)
Locknut	(L) Brass (ACBLN) - St-Steel (ACSLN)
Serrated Washer	(S) Stainless Steel (ACSSW)

IP RATING:	IP66, IP68 (2 metres for 24hrs) & Type 4X/6P	
OPERATING TEMPERATURE:	Washer - None	-60°C to +135°C
	Washer - Fibre	-40°C to +95°C
	Washer - Nylon	-40°C to +135°C
	Washer - PTFE	-60°C to +135°C
MATERIALS:	Brass or Stainless Steel	
PLATING:	Electroless Nickel	

Male and Female Thread References and Size information can be found on page 77 of our product catalogue. Adaptor and Reducer size information is available on request sales@peppers.co.uk.

Male and female threads are manufactured in accordance with:-

- ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
- NPT and NPS threads are in accordance to ANSI B1.20.1
- PG threads to DIN40430
- ET threads to Imperial Conduit BS31
- ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
- ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

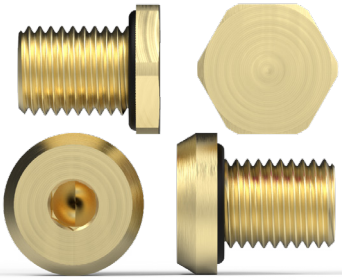
NOTES

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex db applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- ATEX / IECEx / CSA versions are supplied as standard.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.

PRODUCT TYPE SPMH & SPHH

Metallic Dome Head & Hex Head Stopping Plugs

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 1 : AEx db : AEx eb : AEx ta



PART NUMBERS:

SP	MH	0	B	F
	HH	1	S	
		3	A	

PRODUCT DESCRIPTION

"SPMH & SPHH" Series Certified Metallic Stopping (Blanking) Plugs provide a method of sealing unused entries in Ex equipment. They maintain Ex db, Ex eb, Ex ta and Ex nR methods of protection and IP66, IP68 for IEC type applications. They are Class I Division 1, Class II Division 1, Class II and Class 1 Zone 1 approved for NEC and CEC type applications whilst also maintain Type 4X/6P rating

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529
C22.2 (see certificate), UL514B, UL1203, ANSI/UL 60079-0/1/7, ISA 60079-31, UL 50E

EXAMPLE PART NUMBERING: SPMH1BF/NP/M20

SP	Stopping (Blanking) Plug
MH	Dome (Mushroom) Head (MH) / Hex Head (HH)
1	No IP O-ring(0) - Nitrile (1) - Silicone (3)
B	Brass (B) - Stainless Steel (S) - Aluminium (A)
F	Multiple Certification
K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
M20	Male Thread

OPTIONAL ACCESSORIES:

IP Washers	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
Earth Tag	Brass (ACBET) / St-Steel (ACSET) / Aluminium (ACAET)
Locknut	Brass (ACBLN) / St-Steel (ACSLN) / Aluminium (ACALN)
Serrated Washer	Stainless Steel (ACSSW)

IP RATING:	IP66, IP68 (100 metres for 7 days) & Type 4X/6P	
OPERATING TEMPERATURE:	O-ring - None	-100°C to +400°C
	O-ring - Nitrile	-30°C to +100°C
	O-ring - Silicone	-60°C to +200°C
MATERIALS:	Brass, Stainless Steel or Aluminium	
PLATING:	Electroless Nickel	

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da Class I Division 1, Groups A, B, C & D Class II Division 1, Groups E, F & G Class III, Type 4X/6P
NEC - USA	Class I Zone 1 AEx db IIC Gb / AEx eb IIC Gb / Class II Zone 20 AEx ta IIIC Da Class I Division 1, Groups A, B, C & D Class II Division 1, Groups E, F & G Class III, Type 4X/6P
EAC	PB Ex d I Mb X / 1Ex d IIC Gb X / PB Ex e I Mb X / 1Ex e IIC Gb X 2Ex nR IIC Gc X / Ex tb IIIC Db X
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
UKRAINE	I M2 Ex db I Mb / Ex eb I Mb / II 2GD Ex db IIC Gb / Ex eb IIC Gb / Ex tb IIIC Db II 3G Ex nR IIC Gc
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex tb IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1089X & CML 19ATEX4092X
IECEx	IECEx CML 19.0022X
CEC - Canada	CSA 2310046
NEC - USA	CSA 2310046
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2189 X
CCC - China	2021312313000377
UKRAINE	СЦ 18.0320 X
CCoE - India	PESO P494321/2 & P494321/19
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

Male threads are manufactured in accordance with:-

- ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
- NPT and NPS threads are in accordance to ANSI B1.20.1
- PG threads to DIN40430
- ET threads to Imperial Conduit BS31
- ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
- ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

SPHH INFORMATION TABLE (ALL DIMENSIONS IN mm)

ISO Metric Thread	A/F	Overall Length	Weight (Kgs)	NPT Thread	A/F	Overall Length	Weight (Kgs)
M12	19.0	20.5	0.024	1/4"	20.0	19.1	0.029
M16	23.4	20.5	0.032	3/8"	24.0	19.3	0.045
M20	27.0	21.0	0.049	1/2"	27.9	24.4	0.076
M25	31.8	21.0	0.078	3/4"	33.0	24.7	0.118
M32	37.6	21.0	0.134	1"	41.3	30.0	0.225
M40	47.2	21.5	0.218	1 ¼"	50.0	31.1	0.379
M50	57.2	21.5	0.333	1 ½"	57.2	31.5	0.499
M63	69.9	22.0	0.544	2"	70.0	32.9	0.814
M75	90.0	22.0	0.777	2 ½"	80.0	46.4	1.671
M80	90.0	28.0	1.050	3"	106.4	49.5	2.652
M85	106.4	28.0	1.225	3 ½"	114.3	50.8	3.566
M90	106.4	28.0	1.326	4"	127.0	52.0	4.602
M100	114.3	28.0	1.680				

SPMH INFORMATION TABLE (ALL DIMENSIONS IN mm)

ISO Metric Thread	Hex Socket A/F	Overall Length	Weight (Kgs)	NPT Thread	Hex Socket A/F	Overall Length	Weight (Kgs)
M12	6.0	21.5	0.020	1/4"	6.0	20.6	0.027
M16	8.0	21.5	0.032	3/8"	8.0	20.8	0.041
M20	10.0	21.5	0.049	1/2"	10.0	25.4	0.062
M25	12.0	21.5	0.078	3/4"	12.0	25.7	0.125
M32	12.0	21.5	0.134	1"	12.0	30.5	0.202
M40	14.0	21.5	0.218	1 ¼"	14.0	31.1	0.337
M50	17.0	21.5	0.333	1 ½"	17.0	31.5	0.451
M63	17.0	21.5	0.544	2"	17.0	32.4	0.743
M75	19.0	21.5	0.777	2 ½"	19.0	45.4	1.499
M80	22.0	25.5	1.050	3"	22.0	47.0	2.310
M85	22.0	25.5	1.255	3 ½"	22.0	48.3	3.133
M90	22.0	25.5	1.326	4"	22.0	49.5	4.086
M100	22.0	25.5	1.680				

Head Diameter = Minimum 5.5mm larger than the major thread diameter.

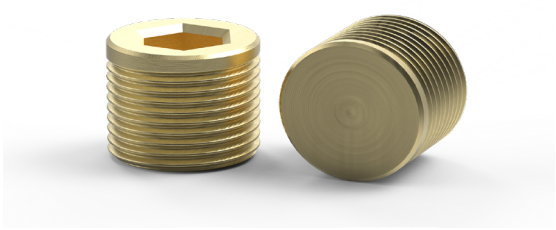
NOTES

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex db applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- ATEX / IECEx versions are supplied as standard.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.
- As per EN/IEC 60079-1 2014 Annex C SPMH / SPHH Stopping Plugs with tapered threads are not marked or intended for use in Ex db applications.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to the general machining techniques and will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PRODUCT TYPE SPA & SPB

Metallic Stopping Plugs

Ex db : Ex eb : Ex ta : IP66 : Class I Div 1 : AEx db : AEx eb : AEx ta



PART NUMBERS:

SP	A	0	B	D
	B		S	
			A	

PRODUCT DESCRIPTION

"SP" Series Certified Metallic Stopping (Blanking) Plugs provide a method of sealing unused entries in Ex equipment. They maintain Ex db, Ex eb and Ex ta methods of protection and IP66 for IEC type applications. They are Class I Division 1, Class II Division 1, Class II and Class 1 Zone 1 approved for NEC and CEC type applications whilst also maintain Type 4X rating.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & 60529
C22.2 (see certificate), UL514B, UL1203, ANSI/UL 60079-0/1/7, ISA 60079-31, UL 50E

EXAMPLE PART NUMBERING: SPA0BD/NP/M20

SP	Stopping (Blanking) Plug
A	Type A External Fixing (A) - Type B Internal Fixing (B)
0	No IP O-ring
B	Brass (B) - Stainless Steel (S) - Aluminium (A)
D	Ex d & Ex e certification including Marine Approvals
NP	Nickel Plated
M20	Male Thread

IP RATING:	IP66 & Type 4X
OPERATING TEMPERATURE:	O-ring - None -100°C to +400°C
MATERIALS:	Brass, Stainless Steel or Aluminium
PLATING:	Electroless Nickel

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
CEC - Canada	Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da Class I Division 1, Groups A, B, C & D Class II Division 1, Groups E, F & G Class III, Type 4X
NEC - USA	Class I Zone 1 AEx db IIC Gb / AEx eb IIC Gb / Class II Zone 20 AEx ta IIIC Da Class I Division 1, Groups A, B, C & D Class II Division 1, Groups E, F & G Class III, Type 4X
EAC	PB Ex d I Mb / 1Ex d IIC Gb X / РП Ex e I Mc / 1Ex e IIC Gb X / Ex tb IIIC Db X
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
CCC - China	Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex tD A20
UKRAINE	I M2 Ex db I Mb / Ex eb I Mb / II 2GD Ex db IIC Gb / Ex eb IIC Gb / Ex tb IIIC Db
CCoE - India	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex tb IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1089X
IECEx	IECEx CML 19.0022X
CEC - Canada	CSA 2310046
NEC - USA	CSA 2310046
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2189 X
CCC - China	2021312313000377
UKRAINE	СЦ 18.0320 X
CCoE - India	PESO P494321/2
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

Male threads are manufactured in accordance with:-

- ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
- NPT and NPS threads are in accordance to ANSI B1.20.1
- PG threads to DIN40430
- ET threads to Imperial Conduit BS31
- ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
- ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

STOPPING PLUG INFORMATION TABLE (ALL DIMENSIONS IN mm)

ISO Metric Thread	Hex Socket A/F	Overall Length	Weight (Kgs)	NPT Thread	Hex socket A/F	Overall Length	Weight (Kgs)
M12	6.0	17.0	0.011	¼"	6.0	11.2	0.009
M16	8.0	17.0	0.025	⅜"	8.0	11.3	0.030
M20	10.0	17.0	0.035	½"	10.0	14.5	0.030
M25	12.0	17.0	0.060	¾"	12.0	14.8	0.050
M32	12.0	17.0	0.105	1"	12.0	18.5	0.110
M40	14.0	17.0	0.170	1 ¼"	14.0	19.1	0.180
M50	17.0	17.0	0.265	1 ½"	17.0	19.5	0.250
M63	17.0	17.0	0.450	2"	17.0	20.5	0.430
M75	19.0	17.0	0.600	2 ½"	19.0	30.5	0.930
M80	22.0	22.0	0.750	3"	22.0	32.1	1.490
M85	22.0	22.0	0.880	3 ½"	22.0	33.4	2.060
M90	22.0	22.0	0.940	4"	22.0	34.7	2.760
M100	22.0	22.0	1.030				

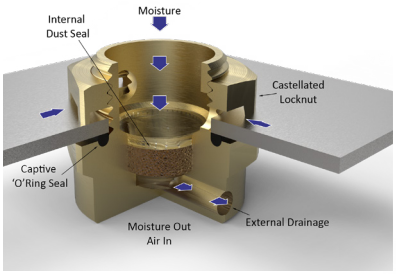
NOTES

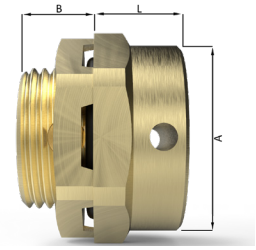
- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex d applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- ATEX / IECEx versions are supplied as standard.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to the general machining techniques and will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PRODUCT TYPE ACDP

Metallic Breather Drain

Ex eb : Ex ta IP66 : AEx eb : AEx ta





PART NUMBERS:

ACDP	0	B	E
	1	S	
	3	A	

PRODUCT DESCRIPTION

"ACDP" Series Breather Drains allow the inside of the equipment to breathe with the outside atmosphere and provide a method of effectively draining any moisture from within the equipment. ACDP series Breather Drains maintain Ex eb method of protection and IP66 for IEC type applications. A Castellated Locknut and O-ring is supplied with every Breather Drain.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-7, EN 60079-31
IEC 60079-0, IEC 60079-7, IEC 60079-31 & 60529
C22.2 (see certificate), UL514B, ANSI/UL 60079-0, ISA 60079-31, UL 50E

EXAMPLE PART NUMBERING:

ACDP1BE/NP/M20/10

ACDP	Breather Drain c/w Castellated Locknut
1	No IP O-ring (0) - Nitrile (1) - Silicone (3)
B	Brass (B) - Stainless Steel (S) - Aluminium (A)
E	Ex e certification including Marine Approvals
NP	Nickel Plated
M20	Male Entry Thread
10	Entry Thread Length 10mm or 15mm

IP RATING:	IP66 & NEMA 4X	
OPERATING TEMPERATURE:	O-ring - None	-100°C to +400°C
	O-ring - Nitrile	-30°C to +100°C
	O-ring - Silicone	-60°C to +200°C
MATERIALS:	Brass, Stainless Steel or Aluminium	
PLATING:	Electroless Nickel	
FLOW RATE:	0.25 Litres per Hour	

CERTIFICATION:

ATEX	I M2 II 2GD Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
IECEx	Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
UL	Class I Zone 1 AEx eb IIC Gb / Zone 20 AEx ta IIIC Da
CEC - Canada	Ex eb IIC Gb; Ex ta IIIC Da / Type 4
NEC - USA	Class I Zone 1 AEx eb IIC Gb / Class II Zone 20 AEx ta IIIC Da / Type 4
EAC	РП Ex e I Mc X / 1Ex e IIC Gb X / Ex ta IIIC Da X
INMETRO - Brazil	Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
SAC - China	Ex e IIC Gb
UKRAINE	I M2 Ex eb I Mb / II 2G Ex eb IIC Gb / II 1D Ex ta IIIC Da
CCoE - India	Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da
RS - Russia	Ex e IC / Ex e IIC / Ex tb IIIC

CERTIFICATION No:

ATEX	CML 19ATEX3347X
IECEx	IECEx CML 19.0105X
UL	E340660
CEC - Canada	CSA 2310046
NEC - USA	CSA 2310046
EAC	TC RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2191 X
SAC - China	NEPSI GYJ16.1407X
UKRAINE	СЦ 18.0319 X
CCoE - India	PESO P494321/11
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Thread Size	A/F	A/C [A]	Length [B]	Length [L]	Weight (Kgs)
M12 x 1.5	19.0	20.9	10 or 15	12.0	0.032
M16 x 1.5	24.0	26.4	10 or 15	12.0	0.052
M20 x1.5	27.0	29.7	10 or 15	12.0	0.065
M25 x 1.5	31.8	34.9	10 or 15	12.0	0.097
M32 x 1.5	37.6	41.3	10 or 15	12.0	0.107
½" NPT	28.6	31.4	15	12.0	0.075
¾" NPT	33.0	36.3	15	12.0	0.107

NOTES

- Assembly instructions must be read prior to installation and adhered to in full.
- All Breather Drains are supplied with Castellated locknut as standard.
- The standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining application.
- All Breather Drains are supplied with Castellated locknut as standard.
- The ACDP flow rate was obtained from testing in an empty enclosure filled with water. The enclosure had no heat or pressure producing equipment inside. Flow rates in the field may vary depending on operational parameters and surrounding environmental conditions.
- To maintain the specified IP rating, clearance holes must be in accordance with EN 62444 and the entry device should be suitably secured.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to the general machining techniques and will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PRODUCT TYPE SPMH*NE

Non-Metallic Dome Head Stopping Plug

Ex eb : Ex ta : IP66 : IP68

PART NUMBERS:

SP	MH	0	N	E
		1		
		3		

PRODUCT DESCRIPTION
"SPMH*N" Series Certified Non-Metallic Stopping (Blanking) Plugs provide a method of sealing unused entries in Ex equipment. They maintain Ex eb and Ex ta methods of protection and IP66, IP68 for IEC type applications.

COMPLIANCE STANDARDS:
EN 60079-0, EN 60079-7, EN 60079-31
IEC 60079-0, IEC 60079-7, IEC 60079-31 & IEC 60529

NEW PRODUCT

EXAMPLE PART NUMBERING: SPMHINE/M20

SP	Stopping (Blanking) Plug
MH	Dome (Mushroom) Head
1	No IP O-ring(0) - Nitrile (1) - Silicone (3)
N	Nylon
E	Ex eb and Ex ta certifcation
M20	Male Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Nylon (ACNLN) / Brass (ACBLN) / Stainless Steel (ACSLN)
IP WASHERS	Nylon [N] (ACNSW) / Fibre [J] (ACFSW)

IP RATING:	IP66 & IP68 (100 metres for 7 days)
OPERATING TEMPERATURE:	O-ring - None -25°C to +130°C
	O-ring - Nitrile -25°C to +100°C
	O-ring - Silicone -25°C to +130°C
MATERIALS:	Nylon
IMPACT RESISTANCE:	7J*

CERTIFICATION:

ATEX	II 2G Ex eb IIC Gb / II 1D Ex ta IIIC Da
IECEx	Ex eb IIC Gb / Ex ta IIIC Da
EAC	1Ex e IIC Gb X / Ex ta IIIC Da X
UKRAINE	II 2G Ex eb IIC Gb / II 1D Ex ta IIIC Da
CCC - China	Ex e IIC Gb / Ex tD A20
CCoE - India	Ex eb IIC Gb / Ex ta IIIC Da
ABS	Specified ABS Rules
LLOYD'S	Ex eb IIC Gb / Ex ta IIIC Da

CERTIFICATION No:

ATEX	CML 17ATEX3256X
IECEx	IECEx CML 17.0145X
EAC	TC RU C-GB.BH02.B.00693-18
UKRAINE	СЦ 18.0320 X
CCC - China	2021312313000374
CCoE - India	PESO P494321/1
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA

STOPPING PLUG INFORMATION TABLE (ALL DIMENSIONS IN mm)

ISO Metric Thread	Hex Socket A/F	Thread Length	Overall Length	Weight (Kgs)	NPT Thread	Hex socket A/F	Thread Length	Overall Length	Weight (Kgs)
M16*	8.0	15.0	21.0	0.005	½"	10.0	15.0	21.0	0.010
M20	10.0	15.0	21.0	0.007	¾"	12.0	15.0	21.0	0.015
M25	12.0	15.0	21.0	0.011	1"	14.0	15.0	21.0	0.022
M32	12.0	15.0	21.0	0.019	1 ¼"	19.0	15.0	21.0	0.032
M40	14.0	15.0	21.0	0.028	1 ½"	19.0	15.0	21.0	0.036
M50	19.0	15.0	21.0	0.265	2"	19.0	15.0	21.0	0.052
M63	19.0	15.0	21.0	0.058					
M75	19.0	15.0	21.0	0.071					

Head Diameter = Minimum 5.5mm larger than the major thread diameter.

NOTES

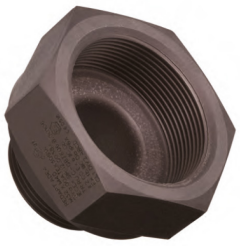
- Assembly instructions must be read prior to installation and adhered to in full.
- The standard O-ring material is nitrile. Other options are available upon request.
- When selecting IP Washer material for use with plugs, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX and IECEx is required, this must be clearly requested at time of enquiry / order.

* Size M16 Stopping Plugs are only suitable for use in areas of low risk of mechanical impact

PRODUCT TYPE ARN

Non-Metallic Adaptors and Reducers

Ex e : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e



PART NUMBERS:

A	R	N

PRODUCT DESCRIPTION

"ARN" Series Certified Adaptors & Reducers provide a method of matching electrical thread forms on Ex equipment whilst maintaining Ex e and Ex ta methods of explosion protection. They maintain IP66 & IP68 for IEC type applications and Class I Division 2 and Type 4X/6P for CEC / NEC type applications.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-7, EN 61241-0, EN 61241-1
IEC 60079-0, IEC 60079-31, IEC 60079-7
C22.2 (see certificate), CAN/CSA 60079-0-11, CAN/CSA 60079-7-12, CAN/CSA 60079-31:12

EXAMPLE PART NUMBERING: ARN/M20/M25

AR	Thread converting Adaptor/Reducer
N	Nylon (N)
M20	Male Entry Thread
M25	Female Entry Thread

OPTIONAL ACCESSORIES:

Locknut	Nylon (ACNLN)

IP RATING:	IP66, IP68 (2m for 60 minutes) & Type 4X/6P	
OPERATING TEMPERATURE:	O-ring - None	-20°C to +40°C
	O-ring - Nitrile	-25°C to +40°C
MATERIALS:	Glass filled nylon	

CERTIFICATION:

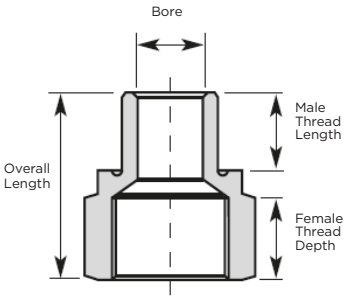
ATEX	II 2 GD Ex e IIC Mb Gb / Ex tb IIIC Db
IECEx	Ex e IIC Gb / Ex tb IIIC Db
CEC - Canada	Ex e IIC
	Class I Division 1, Groups A, B, C & D
	Class II Groups E, F & G
	Class III, Type 4X/6P
NEC - USA	Class I Zone 1 AEx e IIC
	Class I Division 2, Groups A, B, C & D
	Class II Groups E, F & G
	Class III, Type 4X/6P
EAC	Ex e IIC

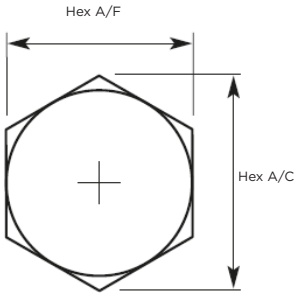
CERTIFICATION No:

ATEX	Sira 00ATEX3091X
IECEx	IECEx SIR 12.0038X
CEC - Canada	1248014 (LR 106084)
NEC - USA	1248014 (LR 106084)
EAC	RU C-GB.GB06.B.00106

SELECTION TABLE (ALL DIMENSIONS IN mm)

Mertic	Bore	NPT	Bore	ISO Pipe	Bore	ET	Bore	PG	Bore
M16	9.00	-		3⁄8"	9.30	5⁄8"	9.30	PG9	9.00
M20	11.00	1⁄2"	12.00	1⁄2"	12.00	3⁄4"	11.00	PG11	10.00
M25	16.00	3⁄4"	13.00	3⁄4"	13.00	1"	16.00	PG13.5	11.50
M32	21.00	1"	18.00	1"	18.00	1 1⁄4"	21.00	PG16	13.50
M40	31.00	1 1⁄4"	33.00	1 1⁄4"	33.00	1 1⁄2"	31.00	PG21	19.00
M50	41.00	1 1⁄2"	38.00	1 1⁄2"	38.00	2"	40.00	PG29	28.00
-	-	-	-	-	-	-	-	PG36	37.0
-	-	-	-	-	-	-	-	PG42	44.00





NOTES

- Assembly instructions must be read prior to installation and adhered to in full.
- Unless otherwise stated ISO Metric entry threads have a 1.5mm pitch.

peppers™

END—TO—END PERFORMANCE

INDUSTRIAL GLANDS

The World Is Changing

Climate change and global warming concerns, coupled with the continuing fall in the costs of some renewable energy equipment, such as wind turbines and solar panels, are driving increased use of renewables.

These areas in most cases are Non-Hazardous Area. An area in which an explosive atmosphere is not expected to be present in quantities such as to require special precautions for the construction, installation and use of equipment.

Peppers offers industrial cable glands for armoured and unarmoured cable.

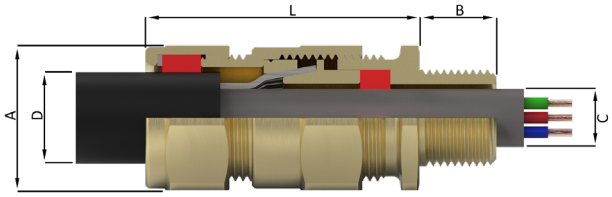
- A* Single Seal Gland for Unarmoured Cable
- C* Single Compression Gland for Armoured Cable
- E* Double Compression Gland for Armoured Cable
- PF* Single Compression Nylon Gland

Peppers Industrial Glands maintain IP66 & IP68 protection up to 50 meters with operating temperatures ranging from -60˚C to +180˚C.

PRODUCT TYPE E*U

Double Compression Gland for Armoured Cable featuring Peppers MAC™

IEC 62444 : EN 62444 : BS 6121 : IP66 : IP68



PART NUMBERS:

E	1	U	B	*	*
	2		S	IE	R
	3				
	4				

PRODUCT DESCRIPTION

"E*U" type double compression glands provide a controlled IP seal on the cable inner sheath, an environmental seal on the outer sheath and Peppers multi-armour clamping system for wire, braid and tape armoured cables. The gland has been tested to IP66 and IP68 to 50 metres. The Integral Earth, "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 STANDARDS:

IEC 62444
EN 62444
BS 6121

CERTIFICATION:

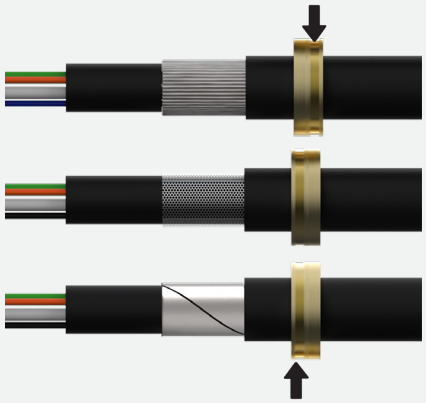
ABS Specified ABS Rules

CERTIFICATE NO.

20-LD1944057-PDA

EXAMPLE PART NUMBERING: E1UBF/NP/20/050NPT

	E	Gland featuring Peppers Multi-armour clamping system
	1	Neoprene Seal (1) - Silicone Seal (3) - Neoprene/Lead (2) - Silicone/Lead (4)
	U	SWA / SWB or STA
	B	Brass (B) / Stainless Steel (S)
	IE	Integral Earth (see page 43)
	R	Reduced Bore Seal
	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
OPTIONS	**K-V-H**	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
	20	Gland shell size
	050NPT	½"NPT Male 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 WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO)

IP RATING:	IP66 & IP68 (50 metres - 7 days)
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Shroud Size* (Metric)
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]					Across Flats [A]	Across Corners	Weight Kgs	
	Metric	NPT		Min	Max	Min	Max	Min	Max	Orientation 1	Orientation 2					
16	M16 x 1.5	⅜" or ½"	16	3.5	8.4	8.4	13.5	4.9	10.0	0.80-1.25	0.20-0.80	58	24.0	26.5	0.143	L24
16	M20 x 1.5	½" or ¾"	16	3.5	8.4	8.4	13.5	4.9	10.0	0.80-1.25	0.20-0.80	58	24.0	26.5	0.154	L24**
20S	M20 x 1.5	½" or ¾"	16	8.0	11.7	11.5	16.0	9.4	12.5	0.80-1.25	0.20-0.80	58	24.0	26.5	0.125	L24**
20	M20 x 1.5	½" or ¾"	16	6.7*	14.0	15.5	21.1	12.0	17.6	0.80-1.25	0.20-0.80	58	30.0	33.0	0.180	L30
25	M25 x 1.5	¾" or 1"	16	13.0	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.20-0.80	58	37.6	41.4	0.256	L38
32	M32 x 1.5	1" or 1 ¼"	16	19.0	26.3	26.7	34.0	23.2	30.5	1.60-2.00	0.30-1.20	65	46.0	50.6	0.400	L46
40	M40 x 1.5	1 ¼" or 1 ½"	16	25.0	32.2	33.0	40.6	28.6	36.2	1.60-2.00	0.30-1.20	72	55.0	60.5	0.649	L55
50S	M50 x 1.5	1 ½" or 2"	16	31.5	38.2	39.4	46.7	34.8	42.4	2.00-2.50	0.30-1.60	73	65.0	71.5	0.940	L65
50H	M50 x 1.5	1½" or 2"	16	31.5	38.2	45.7	53.2	41.1	48.5	2.00-2.50	0.30-1.60	73	65.0	71.5	0.849	L65
50	M50 x 1.5	2"	16	36.5	44.1	45.7	53.2	41.1	48.5	2.00-2.50	0.30-1.60	73	65.0	71.5	0.707	L65
63S	M63 x 1.5	2" or 2 ½"	19	42.5	50.1	52.1	59.5	47.5	54.8	2.00-2.50	0.30-1.60	76	80.0	88.0	1.369	L80
63H	M63 x 1.5	2" or 2 ½"	19	42.5	50.1	58.4	65.8	53.8	61.2	2.00-2.50	0.30-1.60	76	80.0	88.0	1.306	L80
63	M63 x 1.5	2 ½"	19	49.5	56.0	58.4	65.8	53.8	61.2	2.00-2.50	0.30-1.60	76	80.0	88.0	1.123	L80
75S	M75 x 1.5	2 ½" or 3"	19	54.5	62.0	64.8	72.2	60.2	68.0	2.00-2.50	0.50-1.60	82	90.0	99.0	1.661	L90
75H	M75 x 1.5	2 ½" or 3"	19	54.5	62.0	71.1	78.0	66.5	73.4	2.00-2.50	0.50-1.60	82	90.0	99.0	1.553	L90
75	M75 x 1.5	3"	19	60.5	68.0	71.1	78.0	66.5	73.4	2.00-2.50	0.50-1.60	82	90.0	99.0	1.310	L90
80	M80 x 2.0	3" or 3 ½"	25	62.2	72.0	77.0	84.0	71.9	79.4	3.15-4.00	0.50-1.60	110	104.0	115.2	2.718	L104
80H	M80 x 2.0	3" or 3 ½"	25	62.2	72.0	79.6	90.0	75.0	85.4	3.15-4.00	0.50-1.60	110	104.0	115.2	2.489	L104
85	M85 x 2.0	3" or 3 ½"	25	69.0	78.0	79.6	90.0	75.0	85.4	3.15-4.00	0.50-1.60	110	104.0	115.2	2.326	L104
90	M90 x 2.0	3 ½" or 4"	25	74.0	84.0	88.0	96.0	82.0	91.4	3.15-4.00	0.50-1.60	110	114.0	125.7	2.852	L114
90H	M90 x 2.0	3 ½" or 4"	25	74.0	84.0	92.0	102.0	87.4	97.4	3.15-4.00	0.50-1.60	110	114.0	125.7	2.629	L114
100	M100 x 2.0	3 ½" or 4"	25	82.0	90.0	92.0	102.0	87.4	97.4	3.15-4.00	0.50-1.60	110	114.0	125.7	2.496	L114

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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.

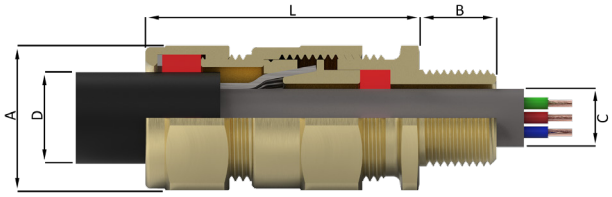
* For gland size 20 the silicone inner seal has a minimum diameter of 9.3mm NOT 6.7mm.

** For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE E

Double Compression Gland for Armoured Cable featuring Dedicated Armour Clamping

IEC 62444 : EN 62444 : BS 6121 : IP66 : IP68



PART NUMBERS:

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

PRODUCT DESCRIPTION

"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/tape (X) armoured cables. The gland has been tested to IP66 and IP68 to 50 metres. The Integral Earth, "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 STANDARDS:

IEC 62444
EN 62444
BS 6121

CERTIFICATION:

ABS Specified ABS Rules

CERTIFICATE NO.

20-LD1944057-PDA

EXAMPLE PART NUMBERING: EIWB/NP/20/050NPT

E	Gland featuring armour specific clamping
1	Neoprene Seals (1) - Silicone Seals (3) - Neoprene/Lead (2) - Silicone/Lead (4)
W	SWA (W) / SWB or STA (X)
B	Aluminium (A) / Brass (B) / Stainless Steel (S)
OPTIONS	
IE	Integral Earth (see page TR-2)
R	Reduced Bore Seal
C	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
20	Gland shell size
050NPT	½"NPT Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / St Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / St Steel (ACSET) / Aluminium (ACALN)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (50 metres - 7 Days)
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Shroud Size (Metric)
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]					Across Flats [A]	Across Corners	Weight (Kgs)	
	Metric	NPT		Min	Max	Min	Max	Min	Max	W	X					
16	M16 x 1.5	½" or ¾"	16	3.5	8.4	8.4	13.5	4.9	10.3	0.90	0.15-0.35	58	24.0	26.5	0.143	L24**
16	M20 x 1.5	½" or ¾"	16	3.5	8.4	8.4	13.5	4.9	10.3	0.90	0.15-0.35	58	24.0	26.5	0.154	L24**
20S	M20 x 1.5	½" or ¾"	16	8.0	11.7	11.5	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	½" or ¾"	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	¾" or 1"	16	13.0	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.15-0.55	58	37.6	41.4	0.256	L38
32	M32 x 1.5	1" or 1 ¼"	16	19.0	26.3	26.7	34.0	23.2	30.5	1.60-2.00	0.20-0.60	65	46.0	50.6	0.400	L46
40	M40 x 1.5	1 ¼" or 1 ½"	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 ½" or 2"	16	31.5	38.2	39.4	46.7	34.8	42.4	2.00-2.50	0.30-0.80	73	65.0	71.5	0.940	L65
50H	M50 x 1.5	1 ½" or 2"	16	31.5	38.2	45.7	53.2	41.1	48.5	2.00-2.50	0.30-0.80	73	65.0	71.5	0.849	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 ½"	19	42.5	50.1	52.1	59.5	47.5	54.8	2.50	0.30-0.80	76	80.0	88.0	1.369	L80
63H	M63 x 1.5	2" or 2 ½"	19	42.5	50.1	58.4	65.8	53.8	61.2	2.50	0.30-0.80	76	80.0	88.0	1.306	L80
63	M63 x 1.5	2 ½"	19	49.5	56.0	58.4	65.8	53.8	61.2	2.50	0.30-1.00	76	80.0	88.0	1.123	L80
75S	M75 x 1.5	2 ½" or 3"	19	54.5	62.0	64.8	72.2	60.2	68.0	2.50	0.30-1.00	82	90.0	99.0	1.661	L90
75H	M75 x 1.5	2 ½" or 3"	19	54.5	62.0	71.1	78.0	66.5	73.4	2.50	0.30-1.00	82	90.0	99.0	1.553	L90
75	M75 x 1.5	3"	19	60.5	68.0	71.1	78.0	66.5	73.4	2.50	0.30-1.00	82	90.0	99.0	1.310	L90
80	M80 x 2.0	3" or 3 ½"	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 2.0	3" or 3 ½"	25	62.2	72.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.489	L104
85	M85 x 2.0	3" or 3 ½"	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 2.0	3 ½" 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 2.0	3 ½" 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	2.629	L114
100	M100 x 2.0	3 ½" 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
110	M110 x 2.0	-	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 2.0	-	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 2.0	-	25	107.0	122.0	120.0	137.0	-	-	3.15	0.45-1.00	185	155.0	170.0	6.900	N/A

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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to theflameproof threaded joint requirements of IEC/EN 60079-1 and other equivalentstandards. We usually incorporate a thread run out according to general machiningtechniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, pleasebe aware of the accessories temperature range to ensure they are suitable for the intended installation.

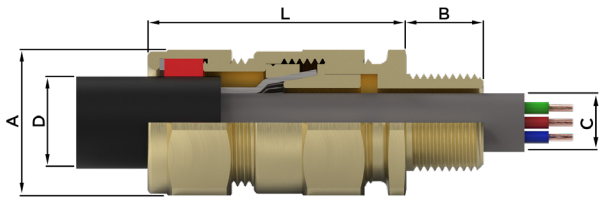
* For gland size 20 the silicone inner seal has a minimum diameter of 9.3 mm and NOT 6.7mm

** For gland sizes 16 and 20S when used with a 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE C

Single Compression Gland for Armoured Cable featuring Dedicated Armour Clamping

IEC 62444 : EN 62444 : BS 6121 : IP66



PART NUMBERS:

C	1	W	B	*
	3	X	S	R
			A	

PRODUCT DESCRIPTION

"C" type single compression glands provide a controlled IP and environmental seal on the outer sheath and a detachable armour specific clamping system for wire (W), braid/tape (X) armoured cables. The gland has been tested to IP66 and options are available for use with LSOH cables and extreme temperature applications.

COMPLIANCE STANDARDS:

IEC 62444
EN 62444
BS 6121

CERTIFICATION:

ABS Specified ABS Rules

CERTIFICATE NO.

20-LD1944057-PDA

EXAMPLE PART NUMBERING: C1WB/NP/20/050NPT

	C	Gland featuring armour specific clamping
	1	Neoprene Seals (1) - Silicone Seals (3)
	W	SWA (W) / SWB or STA (X)
	B	Aluminium (A) / Brass (B) / Stainless Steel (S)
OPTIONS	R	Reduced Bore Seal
	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
	K-V-H	Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
	20	Gland shell size
	050NPT	½"NPT Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / St Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG	Brass (ACBET) / St Steel (ACSET) / Aluminium (ACALN)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO)

IP RATING:	IP66
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)			Shroud Size (Metric)
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]								
	Metric	NPT		Min	Max	Min	Max	Min	Max	W	X		Across Flats [A]	Across Corners	Weight (Kgs)	
16	M16 x 1.5	½" or ¾"	16	N/A	8.4	8.4	13.5	4.9	10.3	0.90	0.15-0.35	58	24.0	26.5	0.143	L24*
16	M20 x 1.5	½" or ¾"	16	N/A	8.4	8.4	13.5	4.9	10.3	0.90	0.15-0.35	58	24.0	26.5	0.154	L24*
20S	M20 x 1.5	½" or ¾"	16	N/A	11.7	11.5	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	½" or ¾"	16	N/A	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	¾" or 1"	16	N/A	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.15-0.50	58	37.6	41.4	0.256	L38
32	M32 x 1.5	1" or 1 ¼"	16	N/A	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 ¼" or 1 ½"	16	N/A	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 ½" or 2"	16	N/A	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
50H	M50 x 1.5	1 ½" or 2"	16	N/A	38.2	45.7	53.2	41.1	48.5	2.00-2.50	0.30-0.80	73	65.0	71.5	0.849	L65
50	M50 x 1.5	2"	16	N/A	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 ½"	19	N/A	50.1	52.1	59.5	47.5	54.8	2.50	0.30-0.80	76	80.0	88.0	1.369	L80
63H	M63 x 1.5	2" or 2 ½"	19	N/A	50.1	58.4	68.5	53.8	61.2	2.50	0.30-0.80	76	80.0	88.0	1.306	L80
63	M63 x 1.5	2 ½"	19	N/A	56.0	58.4	68.5	53.8	61.2	2.50	0.30-0.80	76	80.0	88.0	1.123	L80
75S	M75 x 1.5	2 ½" or 3"	19	N/A	62.0	64.8	72.2	60.2	68.0	2.50	0.30-1.00	82	90.0	99.0	1.661	L90
75H	M75 x 1.5	2 ½" or 3"	19	N/A	62.0	71.1	78.0	66.5	73.4	2.50	0.30-1.00	82	90.0	99.0	1.553	L90
75	M75 x 1.5	3"	19	N/A	68.0	71.1	78.0	66.5	73.4	2.50	0.30-1.00	82	90.0	99.0	1.310	L90
80	M80 x 2.0	3" or 3 ½"	25	N/A	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 2.0	3" or 3 ½"	25	N/A	72.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	110	104.0	115.2	2.489	L104
85	M85 x 2.0	3" or 3 ½"	25	N/A	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 2.0	3 ½" or 4"	25	N/A	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 2.0	3 ½" or 4"	25	N/A	84.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	2.629	L114
100	M100 x 2.0	3 ½" or 4"	25	N/A	90.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	110	114.0	125.7	2.496	L114
110	M110 x 2.0	-	25	N/A	102.0	110.0	117.0	N/A	N/A	3.15	0.45-1.00	170	135.0	148.0	4.190	N/A
120	M120 x 2.0	-	25	N/A	112.0	120.0	127.0	N/A	N/A	3.15	0.45-1.00	170	145.0	149.0	5.750	N/A
130	M130 x 2.0	-	25	N/A	122.0	130.0	137.0	N/A	N/A	3.15	0.45-1.00	170	155.0	170.0	6.900	N/A

NOTES

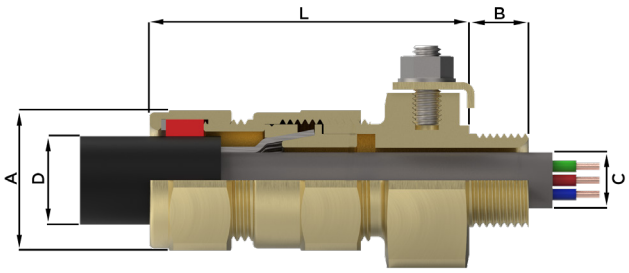
- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads.
- Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.

* For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE C*IE

Single Compression Gland for Armoured Cable featuring Dedicated Armour Clamping and an Integral Earth Connection for HV Cables

IEC 62444 : EN 62444 : BS 6121 : IP66



PART NUMBERS:

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

PRODUCT DESCRIPTION

"C" type single compression glands provide a controlled IP and environmental seal on the outer sheath and a detachable armour specific clamping system for wire (W), braid/tape (X) armoured cables. The gland has been tested to IP66 and options are available for use with LSOH cables and extreme temperature applications.

COMPLIANCE STANDARDS:

IEC 62444
EN 62444
BS 6121

CERTIFICATION:

ABS Specified ABS Rules

CERTIFICATE NO.

20-LD1944057-PDA

EXAMPLE PART NUMBERING: C1WBIE/NP/20/050NPT

C		Gland featuring armour specific clamping
1		Neoprene Seals (1) - Silicone Seals (3)
W		SWA (W) / SWB or STA (X)
B		Aluminium (A) / Brass (B) / Stainless Steel (S)
IE		Integral Earth
OPTIONS	R	Reduced Bore Seal
	C	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
	K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
	S	Including Serrated Washer
	1	Quantity per kit
	NP	Nickel Plated
20		Gland shell size
050NPT		½"NPT Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / St Steel (ACSLN) / Aluminium (ACALN)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO)

IP RATING:	IP66
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass or Stainless Steel
PLATING:	Electroless Nickel

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details						Armour Acceptance Range		Nominal Protrusion Length [L]	Dimensions/Weight (Metric)		
				Inner Sheath [C]		Outer Sheath [D]		Reduced [D]							
	Metric	NPT		Min	Max	Min	Max	Min	Max	W	X		Across Flats [A]	Across Corners	Weight (Kgs)
16	M16 x 1.5	½" or ¾"	16	N/A	8.4	8.4	13.5	4.9	10.3	0.90	0.15-0.35	72	24.0	26.5	0.237
16	M20 x 1.5	½" or ¾"	16	N/A	8.4	8.4	13.5	4.9	10.3	0.90	0.15-0.35	72	24.0	26.5	0.248
20S	M20 x 1.5	½" or ¾"	16	N/A	11.7	11.5	16.0	9.4	12.5	0.90-1.25	0.15-0.35	72	24.0	26.5	0.213
20	M20 x 1.5	½" or ¾"	16	N/A	14.0	15.5	21.1	12.0	17.6	0.90-1.25	0.15-0.50	72	30.0	33.0	0.323
25	M25 x 1.5	¾" or 1"	16	N/A	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.15-0.55	72	36.7	41.4	0.385
32	M32 x 1.5	1" or 1 ¼"	16	N/A	26.3	26.7	34.0	23.2	30.5	1.60-2.00	0.20-0.60	81	46.0	50.6	0.636
40	M40 x 1.5	1 ¼" or 1 ½"	16	N/A	32.2	33.0	40.6	28.6	36.2	1.60-2.00	0.20-0.60	94	55.0	60.5	0.967
50S	M50 x 1.5	1 ½" or 2"	16	N/A	38.2	39.4	46.7	34.8	42.4	2.00-2.50	0.30-0.80	95	65.0	71.5	1.383
50H	M50 x 1.5	1 ½" or 2"	16	N/A	38.2	45.7	53.2	41.1	48.5	2.00-2.50	0.30-0.80	95	65.0	71.5	1.292
50	M50 x 1.5	2"	16	N/A	44.1	45.7	53.2	41.1	48.5	2.00-2.50	0.30-0.80	95	65.0	71.5	1.088
63S	M63 x 1.5	2" or 2 ½"	19	N/A	50.1	52.1	59.5	47.5	54.8	2.50	0.30-0.80	101	80.0	88.0	2.091
63H	M63 x 1.5	2" or 2 ½"	19	N/A	50.1	58.4	68.5	53.8	61.2	2.50	0.30-0.80	101	80.0	88.0	2.132
63	M63 x 1.5	2 ½"	19	N/A	56.0	58.4	68.5	53.8	61.2	2.50	0.30-1.00	101	80.0	88.0	1.748
75S	M75 x 1.5	2 ½" or 3"	19	N/A	62.0	64.8	72.2	60.2	68.0	2.50	0.30-1.00	107	90.0	99.0	2.463
75H	M75 x 1.5	2 ½" or 3"	19	N/A	62.0	71.1	78.0	66.5	73.4	2.50	0.30-1.00	107	90.0	99.0	2.355
75	M75 x 1.5	3"	19	N/A	68.0	71.1	78.0	66.5	73.4	2.50	0.30-1.00	107	90.0	99.0	2.007
80	M80 x 2.0	3" or 3 ½"	25	N/A	72.0	77.0	84.0	71.9	79.4	3.15	0.45-1.00	132	104.0	115.2	3.692
80H	M80 x 2.0	3" or 3 ½"	25	N/A	72.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	132	104.0	115.2	3.463
85	M85 x 2.0	3" or 3 ½"	25	N/A	78.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	132	104.0	115.2	3.197
90	M90 x 2.0	3 ½" or 4"	25	N/A	84.0	88.0	96.0	82.0	91.4	3.15	0.45-1.00	132	114.0	125.7	3.900
90H	M90 x 2.0	3 ½" or 4"	25	N/A	84.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	132	114.0	125.7	3.677
100	M100 x 2.0	3 ½" or 4"	25	N/A	90.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	132	114.0	125.7	3.404

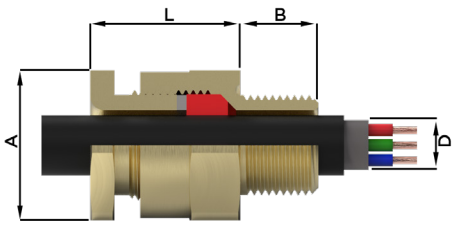
NOTES

- 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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machiningtechniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.

PRODUCT TYPE A

Single Seal Gland Designed for use with Unarmoured Cable

IEC 62444 : EN 62444 : BS 6121 : IP66 : IP68



PART NUMBERS:

A	1	L	B
	2		S
	3		A
	4		

PRODUCT DESCRIPTION

"A" type glands are 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 50 metres. Options are available for use with LSOH cables and extreme temperature applications.

COMPLIANCE STANDARDS:

IEC 62444
EN 62444
BS 6121

CERTIFICATION:

ABS Specified ABS Rules

CERTIFICATE NO.

20-LD1944057-PDA

EXAMPLE PART NUMBERING: A2LB/NP/20/M20

A	Gland featuring controlled displacement sealing
2	Neoprene Seal (2) - Silicone Seal (3) - Neoprene/Lead (1) - Silicone/ Lead (4)
L	Peppers Standard Designation
B	Aluminium (A) / Brass (B) / Stainless Steel (S)
OPTIONS	
C	PVC Shroud (C) - PCP Shroud (P) - Silicone LSOH Shroud (3)
K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
20	Gland shell size
M20	M20 x 1.5mm Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / St Steel (ACSLN) / Aluminium (ALALN)
EARTH TAG	Brass (ACBET) / St Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (50 metres - 7 Days)
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass, Stainless Steel
PLATING:	Electroless Nickel

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details Outer Sheath [D]		Nominal Protrusion Length [L]	Dimensions/Weight (Metric Versions)			Shroud Size (Metric)
	Metric	NPT		Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)	
12*	M12 x 1.5	⅜"	16	0.9	6.0	33	19.0	21.0	0.038	L19
12*	M16 x 1.5	⅜" or ½"	16	0.9	6.0	33	25.4	28.0	0.068	L24
12*	M20 x 1.5	⅜" or ½"	16	0.9	6.0	33	25.4	28.0	0.082	L24
16	M16 x 1.5	⅜" or ½"	16	4.0	8.4	33	25.4	28.0	0.097	L24
16	M20 x 1.5	½" or ¾"	16	4.0	8.4	33	25.4	28.0	0.104	L24**
20S	M20 x 1.5	½" or ¾"	16	7.2	11.7	33	25.4	28.0	0.102	L24**
20	M20 x 1.5	½" or ¾"	16	9.4	14.0	33	30.0	33.0	0.127	L30
25	M25 x 1.5	¾" or 1"	16	13.5	20.0	33	37.6	41.4	0.166	L38
32	M32 x 1.5	1" or 1 ¼"	16	19.5	26.3	33	46.0	50.6	0.244	L46
40	M40 x 1.5	1 ¼" or 1 ½"	16	23.0	32.2	37	55.0	60.5	0.396	L55
50S	M50 x 1.5	1 ½" 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 ½"	19	39.2	50.1	37	80.0	88.0	0.832	L80
63	M63 x 1.5	2 ½"	19	46.7	56.0	37	80.0	88.0	0.664	L80
75S	M75 x 1.5	2 ½" 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 2.0	3" or 3 ½"	25	62.2	72.0	50	104.0	115.2	1.514	L104
85	M85 x 2.0	3" or 3 ½"	25	69.0	78.0	50	104.0	115.2	1.332	L104
90	M90 x 2.0	3 ½" or 4"	25	74.0	84.0	50	114.0	125.7	1.622	L114
100	M100 x 2.0	3 ½" or 4"	25	82.0	90.0	50	114.0	125.7	1.523	L114
110	M110 x 2.0	-	25	87.0	102.0	88	135.0	148.0	2.550	N/A
120	M120 x 2.0	-	25	97.0	112.0	88	145.0	159.0	3.200	N/A
130	M130 x 2.0	-	25	107.0	122.0	88	155.0	170.0	4.750	N/A

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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.

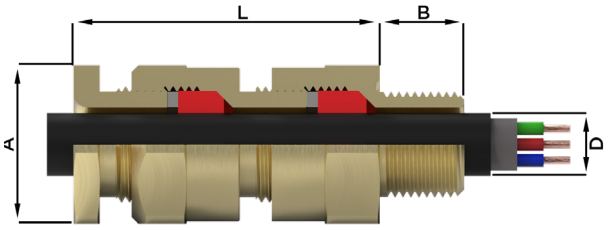
* Gland sizes 12 not available in aluminium.

** For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

PRODUCT TYPE A*LDS

Double Compression Gland Designed for use with Unarmoured Cable

IEC 62444 : EN 62444 : BS 6121 : IP66 : IP68



PART NUMBERS:

A	1	L	DS	B
	2			S
	3			A
	4			

PRODUCT DESCRIPTION

"A*LDS" type glands are 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 50 metres.. Options are available for use with LSOH cables and extreme temperature applications.

COMPLIANCE STANDARDS:

IEC 62444
EN 62444
BS 6121

CERTIFICATION:

ABS Specified ABS Rules

CERTIFICATE NO.

20-LD1944057-PDA

EXAMPLE PART NUMBERING: A2LDSB/NP/20/M20

A	Gland featuring controlled displacement sealing
2	Neoprene Seals (2) - Silicone Seals (3) - Neoprene/Lead (1) - Silicone/Lead (4)
L	Peppers Standard Designation
DS	Double Sealing
B	Aluminium (A) / Brass (B) / Stainless Steel (S)
OPTIONS	
C	PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3)
K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
20	Gland shell size
M20	M20 x 1.5mm Male Entry Thread

OPTIONAL ACCESSORIES:

LOCKNUT	Brass (ACBLN) / St Steel (ACSLN) / Aluminium (ALALN)
EARTH TAG	Brass (ACBET) / St Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
SERRATED WASHERS	Stainless Steel (ACSSW)
SHROUDS	PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)

IP RATING:	IP66 & IP68 (50 metres - 7 Days)
OPERATING TEMP:	Neoprene Seals -35°C to +90°C
	Silicone Seals -60°C to +180°C
MATERIALS:	Aluminium, Brass, Stainless Steel
PLATING:	Electroless Nickel

CABLE GLAND SELECTION TABLE (ALL DIMENSIONS IN mm)

Gland Size	Entry Thread Size		Metric Thread Length [B]	Cable Acceptance Details Outer Sheath [D]		Nominal Protrusion Length [L] Metric	Dimensions/Weight (Metric Versions)			Shroud Size (Metric)
	Metric	NPT		Min	Max		Across Flats [A]	Across Corners	Weight (Kgs)	
12*	M12 x 1.5	⅜"	16	0.9	6.0	33	19.0	21.0	0.064	L19
12*	M16 x 1.5	⅜" or ½"	16	0.9	6.0	33	25.4	28.0	0.119	L24
16	M16 x 1.5	½" or ¾"	16	4.0	8.4	48	25.4	28.0	0.133	L24**
20S	M20 x 1.5	½" or ¾"	16	7.2	11.7	48	25.4	28.0	0.209	L24**
20	M20 x 1.5	½" or ¾"	16	9.4	14.0	62	30.0	33.0	0.275	L30
25	M25 x 1.5	¾" or 1"	16	13.5	20.0	62	37.6	41.4	0.408	L38
32	M32 x 1.5	1" or 1 ¼"	16	19.5	26.3	62	46.0	50.6	0.408	L46
40	M40 x 1.5	1 ¼" or 1 ½"	16	23.0	32.2	68	55.0	60.5	0.666	L55
50S	M50 x 1.5	1 ½" 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 ½"	19	39.2	50.1	74	80.0	88.0	1.330	L80
63	M63 x 1.5	2 ½"	19	46.7	56.0	74	80.0	88.0	1.114	L80
75S	M75 x 1.5	2 ½" 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 2.0	3" or 3 ½"	25	62.2	72.0	87	104.0	115.2	2.322	L104
85	M85 x 2.0	3" or 3 ½"	25	69.0	78.0	87	104.0	115.2	2.107	L104
90	M90 x 2.0	3 ½" or 4"	25	74.0	84.0	88	114.0	125.7	2.539	L114
100	M100 x 2.0	3 ½" or 4"	25	82.0	90.0	90	114.0	125.7	2.211	L114

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.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.

* Gland sizes 12 not available in aluminium.

** For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required.

peppers™

END—TO—END PERFORMANCE

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 and are subject to change without notice.

ISO Thread Dia	Nominal Thickness	Nominal A/F	Nominal A/C	Weight (Kgs/100)	NPT Thread Dia	Nominal Thickness	Nominal A/F	Nominal A/C
M12 x 1.5	2.5	17.0	18.7	0.30	1/2"	3.2	27.0	29.7
M16 x 1.5	4.0	22.0	24.2	0.772	3/4"	4.0	30.5	33.5
M20 x 1.5	4.0	24.0	26.4	0.683	1"	6.4	36.0	39.5
M25 x 1.5	4.0	30.0	33.0	1.027	1 ¼"	6.4	46.0	50.5
M32 x 1.5	4.0	40.0	44.0	2.020	1 ½"	6.4	55.0	60.6
M40 x 1.5	4.8	46.0	50.5	2.200	2"	6.4	65.0	70.8
M50 x 1.5	5.0	65.0	71.5	6.997	2 ½"	9.0	90.0	99.0
M63 x 1.5	6.4	80.0	88.0	12.40	3"	9.0	104.8	115.3
M75 x 1.5	7.0	90.0	99.0	14.871	3 ½"	10.0	114.3	125.7
M80 x 2	9.0	90.0	99.0	15.140	4"	10.0	140.0	152.0
M85 x 2	9.0	104.8	115.3	27.518				
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				

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, nickel 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

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

ISO Thread Dia	Nominal Thickness	Nominal Centres	Bolt Hole Dia	Weight (Kgs/100)	NPT Thread Dia	Nominal Thickness	Nominal Centres	Bolt Hole Dia
M12	1.5	31.8	6.9	0.836	1/2"	1.5	33.0	6.9
M16	1.5	31.8	6.9	0.746	3/4"	1.5	36.5	6.9
M20	1.5	33.0	6.9	0.672	1"	1.5	42.5	11.8
M25	1.5	36.5	6.9	0.797	1 ¼"	1.5	45.4	13.5
M32	1.5	42.5	11.8	1.476	1 ½"	1.5	58.1	13.5
M40	1.5	45.4	13.5	2.089	2"	1.5	66.8	13.5
M50	1.5	58.1	13.5	3.729	2 ½"	1.5	73.0	13.5
M63	1.5	66.8	13.5	4.898	3"	1.5	90.0	13.5
M75	1.5	73.0	13.5	5.220	3 ½"	1.5	112.0	13.5
M80	1.5	73.0	13.5	4.647	4"	1.5	120.0	13.5
M85	2.0	90.0	13.5	7.600				
M90	2.0	90.0	13.5	8.800	Sizes M110 to M130, PG7 to PG48 and BSPP/ BSPT are available upon request			
M100	2.0	112.0	13.5	13.800				

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
M12	2.00	1.50	24.0	0.079	1/2"	2.0	1.50	30.0
M16	2.00	1.50	25.0	0.116	3/4"	2.0	1.50	38.0
M20	2.00	1.50	29.4	0.164	1"	2.0	1.50	46.3
M25	2.00	1.50	38.1	0.257	1 ¼"	2.0	1.50	55.5
M32	2.00	1.50	42.5	0.341	1 ½"	2.0	1.50	60.0
M40	2.00	1.50	52.0	0.386	2"	2.0	1.50	79.4
M50	2.00	1.50	65.0	0.594	2 ½"	2.0	1.50	90.5
M63	2.00	1.50	79.4	0.794	3"	2.0	1.50	114.3
M75	2.00	1.50	90.5	0.868	3 ½"	2.0	1.50	114.3
M80	2.00	1.50	104.8	0.839	4"	2.0	1.50	146.0
M85	2.00	1.50	104.8	0.698				
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				

SERRATED WASHERS

Serrated or "shake proof" washers act as an anti-vibration device 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

All dimensions in mm - Weights are based on metric versions

ISO Thread Dia	Nominal Thickness	Outside Diameter	Weight (Kgs/100)	NPT Thread Dia	Nominal Thickness	Nominal O/D
M12	1.0	20.25	0.137	1/2"	1.5	35.5
M16	1.2	25.5	0.262	3/4"	1.5	43.5
M20	1.4	32.5	0.560	1"	1.5	52.0
M25	1.5	37.5	0.675	1 ¼"	1.5	59.5
M32	1.5	48.0	1.042	1 ½"	1.5	71.0
M40	1.5	60.0	1.730	2"	1.5	87.0
M50	1.5	71.0	2.154	2 ½"	1.5	102.0
M63	1.5	87.0	3.259	3"	1.5	125.0
M75	1.5	102.0	4.189	3 ½"	1.5	140.0
M80	1.5	120.0	6.880	4"	1.5	155.0
M85	1.5	120.0	6.550			
M90	1.5	125.0	6.233	Sizes M110 to M130 are available upon request		
M100	1.5	140.0	7.985			

O-RINGS

Please note: IP flat washers and o-rings cannot be used in conjunction with one another. O-rings fitted on glands as standard can be removed and replaced by a flat washer if required. O-rings procured from other sources and fitted to Peppers glands will invalidate the IP certification.

Peppers Item Reference	Seal Material	Code	Temperature
ORN	Nitrile	1	-30°C to + 100 °C
ORS	Silicone	3	-60°C to + 200 °C

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. Please note where glands have a larger than standard entry thread the standard shroud will not fit over the gland hexagon body section.

	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

THREAD REFERENCE TABLES

Thread Type	Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Max Clearance Hole Dia
ISO Metric IEC 60423	M16	M16	1.50	16.93	15.97	16.0	16.7
	M20	M20	1.50	16.93	19.97	16.0	20.7
	M25	M25	1.50	16.93	24.97	16.0	25.7
	M32	M32	1.50	16.93	31.97	16.0	32.7
	M40	M40	1.50	16.93	39.97	16.0	40.7
	M50	M50	1.50	16.93	49.97	16.0	50.7
	M63	M63	1.50	16.93	62.97	19.0	63.7
	M75	M75	1.50	16.93	74.97	19.0	75.7
	M80	M80	2.00	12.70	79.97	25.0	80.7
	M85	M85	2.00	12.70	84.97	25.0	85.7
	M90	M90	2.00	12.70	89.97	25.0	90.7
	M100	M100	2.00	12.70	99.97	25.0	100.7

Thread Type	Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Max Clearance Hole Dia
NPT ANSI B1.20.1	1/2"	050NPT	1.81	14.0	21.34	19.9	22.04
	3/4"	075NPT	1.81	14.0	26.67	20.1	27.37
	1"	100NPT	2.20	11.5	33.40	25.0	34.10
	1 ¼"	125NPT	2.20	11.5	42.16	25.6	42.86
	1 ½"	150NPT	2.20	11.5	48.26	26.0	48.96
	2"	200NPT	2.20	11.5	60.33	26.9	61.03
	2 ½"	250NPT	3.18	8.0	73.03	39.9	73.73
	3"	300NPT	3.18	8.0	88.90	41.5	89.60
	3 ½"	350NPT	3.18	8.0	101.60	42.8	102.30
	4"	400NPT	3.18	8.0	114.30	44.0	115.0

Thread Type	Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Max Clearance Hole Dia
NPS ANSI B1.20.1	1/2"	050NPS	1.81	14.0	20.90	19.9	21.60
	3/4"	075NPS	1.81	14.0	26.26	20.2	26.96
	1"	100NPS	2.20	11.5	32.84	25.0	33.54
	1 ¼"	125NPS	2.20	11.5	41.61	25.6	42.31
	1 ½"	150NPS	2.20	11.5	47.68	26.0	48.87
	2"	200NPS	2.20	11.5	59.72	26.9	60.42
	2 ½"	250NPS	3.18	8.0	72.16	39.9	72.86
	3"	300NPS	3.18	8.0	88.06	41.5	88.76
	3 ½"	350NPS	3.18	8.0	100.78	42.8	101.48
	4"	400NPS	3.18	8.0	113.43	44.0	114.13

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

Thread Type	Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Max Clearance Hole Dia
ISO PIPE PARALLEL ISO R/7 BS2779 (BSPPP,G, R&PF)	1/2"	050BSP	1.81	14.0	20.96	19.9	21.66
	3/4"	075BSP	1.81	14.0	26.44	20.2	27.14
	1"	100BSP	2.31	11.0	33.25	25.0	33.95
	1 ¼"	125BSP	2.31	11.0	41.91	25.6	42.61
	1 ½"	150BSP	2.31	11.0	47.80	26.0	48.50
	2"	200BSP	2.31	11.0	59.61	26.9	60.31
	2 ½"	250BSP	2.31	11.0	75.18	39.9	75.88
	3"	300BSP	2.31	11.0	87.88	41.5	88.58
	3 ½"	350BSP	2.31	11.0	100.33	42.8	101.03
	4"	400BSP	2.31	11.0	113.03	44.0	113.73

Thread Type	Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Max Clearance Hole Dia
ISO PIPE TAPER ISO R/7 BS21 (BSPT & GK)	1/2"	050BST	1.81	14.0	20.96	19.9	21.66
	3/4"	075BST	1.81	14.0	26.44	20.2	27.14
	1"	100BST	2.31	11.0	33.25	15.0	33.95
	1 ¼"	125BST	2.31	11.0	41.91	25.6	42.61
	1 ½"	150BST	2.31	11.0	47.80	26.0	48.50
	2"	200BST	2.31	11.0	59.61	26.9	60.31
	2 ½"	250BST	2.31	11.0	75.18	39.9	75.88
	3"	300BST	2.31	11.0	87.88	41.5	88.58
	3 ½"	350BST	2.31	11.0	100.33	42.8	101.03
	4"	400BST	2.31	11.0	113.03	44.0	113.73

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

AR SERIES METALLIC ADAPTORS & REDUCERS - SIZE REFERENCE

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										
3/4"	R03*	R03*	A03*	A05	A06									
1"	R06*	R06*	R06*	A05*	A06	A08								
1 ¼"	R08*	R08*	R08*	R08*	A06*	A08	A11							
1 ½"	R10*	R10*	R10*	R10*	R10*	A08*	A11	A12						
2"	R13	R13	R13	R13	R13	R13	A11	A12	A13	A14				
2 ½"	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*	A17*	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										
1/2"	3/4"	1"	1 ¼"	1 ½"	2"	2 ½"	3"	3 ½"	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				

ADAPTOR | REDUCER

Adaptors and reducers with NPT male threads are designed to be used in threaded entries. If required with a sealing washer for use in clearance holes with a locknut these items can be manufactured from a larger hexagon size to provide a suitable sealing face.

MALE SIZE	PG FEMALE SIZES									
METRIC	PG7	PG9	PG11	PG13.5	PG16	PG21	PG29	PG36	PG42	PG48
M16	R01	A01	A01	A01						
M20	R02	R02	A02	A02	A02	A04				
M25	R05	R05	R05	R05	A04	A04	A06			
M32	R07	R07	R07	R07	R07	A05	A06	A08		
M40	R09	R09	R09	R09	R09	R09	A07	A08	A10	
M50	R12	R12	R12	R12	R12	R12	R12	A09	A10	A11
M63	R14	R14	R14	R14	R14	R14	R14	R14	R14	A11
M75	R16	R16	R16	R16	R16	R16	R16	R16	R16	R16
M80	R16	R16	R16	R16	R16	R16	R16	R16	R16	R16
M85	R17	R17	R17	R17	R17	R17	R17	R17	R17	R17
M90	R17	R17	R17	R17	R17	R17	R17	R17	R17	R17
M100	R18	R18	R18	R18	R18	R18	R18	R18	R18	R18
M110	R19	R19	R19	R19	R19	R19	R19	R19	R19	R19
M120	R20	R20	R20	R20	R20	R20	R20	R20	R20	R20
NPT										
½"	R01*	R01*	A01*	A01*	A02	A04				
3/4"	R03*	R03*	R03*	R03*	A03*	A04	A06			
1"	R06*	R06*	R06*	R06*	R06*	A05*	A06	A08		
1 ¼"	R08*	R08*	R08*	R08*	R08*	R08*	A06*	A08	A10	
1 ½"	R10*	R10*	R10*	R10*	R10*	R10*	R10*	A08*	A10	A11
2"	R13	R13	R13	R13	R13	R13	R13	R13	R13	A11
2 ½"	R15	R15	R15	R15	R15	R15	R15	R15	R15	R15
3"	R16*	R16*	R16*	R16*	R16*	R16*	R16*	R16*	R16*	R16*
3 ½"	R17*	R17*	R17*	R17*	R17*	R17*	R17*	R17*	R17*	R17*
4"	R19*	R19*	R19*	R19*	R19*	R19*	R19*	R19*	R19*	R19*
5"	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*	R21*
PG										
PG9	A01	A01	A01	A01						
PG11	A01	A01	A01	A01	A02	A04				
PG13.5	R02	R02	A02	A02	A02	A04				
PG16	R04	R04	R04	A03	A03	A04				
PG21	R07	R07	R07	R07	R07	A05	A06			
PG29	R08	R08	R08	R08	R08	R08	A07	A08		
PG36	R11	R11	R11	R11	R11	R11	R11	A08	A10	A11
PG42	R13	R13	R13	R13	R13	R13	R13	R13	A10	A11
PG48	R14	R14	R14	R14	R14	R14	R14	R14	R14	A11

ADAPTORS

Metric x Metric / Metric x PG / PG x Metric / PG x PG

AR Adaptor Details	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17
A/F Dim (Min)	23.4	27.0	30.0	31.8	37.6	44.5	47.2	55.9	57.2	61.2	69.9	90.2	104.8	104.8	114.3	120.7	140.0
A/C Dim (Min)	25.7	29.7	33.0	35.0	41.4	48.9	51.9	61.5	62.9	67.3	76.8	99.2	99.2	115.3	125.7	132.8	154.0
Nominal Protrusion Length**	22.5	22.5	22.5	22.5	22.5	22.5	22.5	23.5	23.5	23.5	23.5	23.5	29.0	29.0	29.0	29.0	29.0

Metric x NPT / NPT x NPT / PG x NPT

AR Adaptor Details	A18	A19	A20	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33
A/F Dim (Min)	23.4	27.0	30.0	31.8	37.6	47.2		57.2	69.9	80.0	90.2	104.8	114.3	127.0	133.0	160.0
A/C Dim (Min)	25.7	29.7	33.0	35.0	41.4	51.9	61.5	62.9	76.9	88.0	99.2	115.3	125.7	139.7	146.3	176.0
Nominal Protrusion Length**	26.0	26.0	26.0	26.0	31.0	31.0	32.0	32.0	32.0	44.4	44.4	46.0	47.3	48.5	48.5	53.7

REDUCERS

Metric / NPT / PG

AR Adaptor Details	R01	R02	R03	R04	R05	R06	R07	R08	R09	R10	R11	R12	R13	R14	R15	R16	R17	R18	R19	R20	R21
A/F Dim (Min)	23.4	27.0	27.9	30.0	31.8	34.9	37.6	44.5	47.2	52.1	55.9	57.2	61.2	69.9	80.0	90.2	104.8	114.3	120.7	133.4	146.0
A/C Dim (Min)	25.7	29.7	30.7	33.0	35.0	38.4	41.4	48.9	51.9	57.3	61.5	62.9	67.3	76.8	88.0	99.2	115.3	125.7	132.8	146.7	160.7
Nominal Protrusion Length**	12.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	12.0	12.0

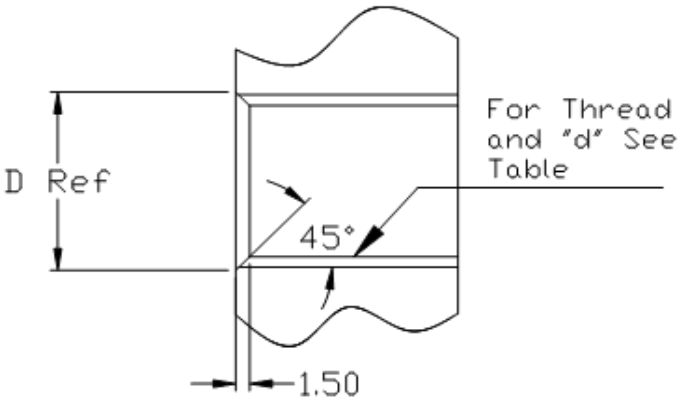
* Stated nominal protrusion lengths do not take into account if any form of IP seal (o-ring / washer) is used in conjunction with the entry thread.

** Due to the nature of tapered threads the nominal protrusion length may be further away from the enclosure wall than the stated figure.

Here at Peppers we take pride in having over 70 years experience providing threaded products. To maintain the ingress protection rating of the product, the entry hole must be perpendicular to the surface of the enclosure. The surface should be sufficiently flat and rigid to make the IP joint. The surface must be clean and dry. It is the users/installers responsibility to ensure that the interface between the enclosure and the product is suitably sealed for the required application. We supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to the available machining techniques and parts will not have a full form thread for the entire length.

The table below outlines our recommended chamfers for internal threads. Following these recommendations will ensure that a suitable ingress protection seal will be maintained.

Size	Minor Dia (d)	Chamfer Depth	Ref Dia (D)
M12 x 1.5	10.4	1.5	13.4
M16 x 1.5	14.4	1.5	17.4
M20 x 1.5	18.4	1.5	21.4
M25 x 1.5	23.4	1.5	26.4
M32 x 1.5	30.4	1.5	33.4
M40 x 1.5	38.4	1.5	41.4
M50 x 1.5	48.4	1.5	51.4
M65 x 1.5	61.4	1.5	64.4
M75 x 1.5	73.4	1.5	76.4
M80 x 2.0	77.8	2.0	81.8
M85 x 2.0	82.8	2.0	86.8
M90 x 2.0	87.8	2.0	91.8
M100 x 2.0	97.8	2.0	101.8
M110 x 2.0	107.8	2.0	111.8
M120 x 2.0	117.8	2.0	121.8
All Sizes are in millimeters			



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. The pressure applied during the IPX8 testing is a static pressure.

Please note that any gland without an integral O-ring must have a suitable IP washer fitted in order to maintain greater than an IP54 rating. If in doubt about the installation please contact Peppers for installation guidance.

IP66	• Dust tight. No ingress of dust possible • Water projected in powerful jets (12.5mm nozzle) from any direction shall have no harmful effects
IP67	• Dust tight. No ingress of dust possible • Protected against harmful ingress of water when immersed between a depth of 150mm to 1m
IP68	• Dust tight. No ingress of dust possible • Protected against submersion. Suitable for continuous immersion in water at stated depth
IP69	• Dust tight. No ingress of dust possible • Protection against close-range high pressure, high temperature spray downs
DTS 01	• This test was originally constructed by Shell and Esso in the UK to simulate the routine deluging of electrical equipment on offshore installations

The minimum requirements for Hazardous Location products is:

IP54	• Dust protected. Prevents ingress of dust sufficient to cause harm. • Protected from splashing water from any direction shall have no harmful effects

As a general guide to selecting the sealing method that is most likely to maintain the required IP rating for different entry types, we recommend:

- Clearance Holes - Integral 'O' ring seal or nylon IP washer
- Parallel Threaded Entries - Integral 'O' ring seal, nylon IP washer or non-hardening thread sealant
- Taper Threaded Entries - Non-hardening thread sealant

Clearance holes and a lead-in chamfer should be machined in accordance with our recommendations.

- Clearance holes we recommend 0.5mm over the nominal diameter ±0.2
- Lead-in chamfer please refer to our Thread run-out chamfer guide pg80

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.

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 62444:2013 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.

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.

THREAD STANDARD/GAUGING

- ISO M BS ISO 965-1:2013, 6g fit - M16 to M75 1.5mm pitch, M80 to M130 2.0mm pitch
- NPT ANSI/ASME B1.20.1, 2013
- NPSM ANSI/ASME B1.20.1, 2013
- BSPT BS EN 10226-2:2005 (ISO 7/1), Standard Threads Only (Clause 5.4)
- BSPP BS EN ISO 228-1:2003, Class A Full Form External Threads
- PG DIN 40430:1971-02

MATERIAL SPECIFICATION

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

- Brass to EN12164, EN12165 & EN12168 Grade CW614N
- Stainless Steel to EN 10088-3, ASTM/SAE 316L
- Aluminium to BS EN 573-3 Grade AW6082 T6.
- Electroless Nickel Plating in accordance with BS EN ISO 4527

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 6121-5:2005.

Ex Standards do not cover the requirements of cable glands for HV cable. BS6121-5 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.

BI-METALLIC CORROSION

Bi-metallic Corrosion (or Galvanic Corrosion) is the process by which metals, when in contact with each other, oxidise 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:-

- There must be two electrochemically dissimilar metals present but not necessarily in direct contact with each other.
- There must be an electrically conductive path between the two metals.
- 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.

HEALTH & SAFETY

When used and installed as recommended within the assembly instructions provided, Peppers Cable Glands Ltd 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 Ltd 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 Ltd 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 servicing 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 62444:2013 classification with regard to mechanical and electrical properties of cable glands is available upon request.

ROHS / WEEE DIRECTIVES

Peppers Cable Glands Ltd 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.

peppers™

END—TO—END PERFORMANCE

PEPPERS CABLE GLANDS LIMITED
Stanhope Road
Camberley
Surrey
GU15 3BT
United Kingdom

Tel: +44 (0) 1276 64232
Email: sales@peppers.co.uk
Website: www.peppers.co.uk

Your local agent or distributor: