Double Seal Gland for Armoured and Unarmoured Cable

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

PRODUCT TYPE A*LDS

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 and is deluge proof. 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:

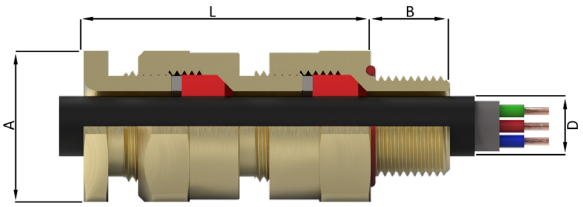
EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7/31
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7, ISA 60079-31

CERTIFICATION:

UKEX	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	II 3G Ex nR IIC Gc
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	Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
	Class II Group E, F & G
	Class III Type 4X
NEC - USA	Class I Zone 1 AEx eb IIC Gb / Zone 20 AEx ta IIIC Da
	Class II Group E, F & G
	Class III Type 4X
EAC	1Ex db IIC Gb X / 1Ex eb 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 db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
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
ECAS-Ex - U.A.E	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
DNV	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

CERTIFICATION No:

UKEX	CML 21UKEX1032X & CML 21UKEX4043X
ATEX	CML 19ATEX1345X & CML 19ATEX4109X
IECEx	IECEx CML 19.0103X
CEC - Canada	CSA 1356011
NEC - USA	CSA 1356011
EAC	RU C-GB.AЖ58.B.05106/24
INMETRO - Brazil	NCC 13.2012 X
CCC - China	2021312313000408
UKRAINE	СЦ 18.0325 X
CCoE - India	PESO P494321/6 & P494321/13
ECAS-Ex - U.A.E	25-06-153223/E25-06-159811/NB0007
ABS	25-0158110-PDA
LLOYD'S	LR25189453TA
DNV	TAE00004XK



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) - LS0H 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 (L)	Brass (ACBLN) / St Steel (ACSLN) / Aluminium (ACALN)
EARTH TAG (T)	Brass (ACBET) / St Steel (ACSET) / Aluminium (ACAET)
IP WASHERS	Nylon (N) / Fibre (J) / PTFE (Z)
SERRATED WASHERS	Stainless Steel (S)
SHROUDS	PVC (C) / LS0H Silicone(3)

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]	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	¼" or 3/8"	16	0.9	6.0	33	19.0	21.0	0.064	L19
12*	M16 x 1.5	3/8" or 1/2"	16	0.9	6.0	33	25.4	28.0	0.119	L24
12*	M20 x 1.5	3/8" or 1/2"	16	0.9	6.0	33	25.4	28.0	0.119	L24
16	M16 x 1.5	3/8" or 1/2"	16	4.0	8.4	48	25.4	28.0	0.133	L24
16	M20 x 1.5	1/2" or 3/4"	16	4.0	8.4	48	25.4	28.0	0.133	L24**
20S	M20 x 1.5	1/2" or 3/4"	16	7.2	11.7	48	25.4	28.0	0.209	L24**
20	M20 x 1.5	1/2" or 3/4"	16	9.4	14.0	62	30.0	33.0	0.275	L30
25	M25 x 1.5	3/4" or 1"	16	13.5	20.0	62	37.6	41.4	0.408	L38
32	M32 x 1.5	1" or 1 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 UKEX, 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.