

# PRODUCT TYPE A\*RDF

## Double Seal Gland for Unarmoured Cable featuring a Freely Rotating Female Conduit Connection

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



### PRODUCT DESCRIPTION

"A\*RDF" 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 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 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  
C22.2 (see certificate), CAN/CSA 60079-0/1/7/31  
UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7, ISA 60079-31

### CERTIFICATION:

<b>UKEX</b>	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da II 3G Ex nR IIC Gc
<b>ATEX</b>	II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da II 3G Ex nR IIC Gc
<b>IECEX</b>	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
<b>CEC - Canada</b>	Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da Class II Group E, F & G Class III Type 4X
<b>NEC - USA</b>	Class I Zone 1 AEx eb IIC Gb / Zone 20 AEx ta IIIC Da Class II Group E, F & G Class III Type 4X
<b>EAC</b>	1Ex db IIC Gb X / 1Ex eb IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIIC Da X
<b>INMETRO - Brazil</b>	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
<b>CCC - China</b>	Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20
<b>UKRAINE</b>	II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
<b>CCoE - India</b>	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
<b>ABS</b>	Specified ABS Rules
<b>LLOYD'S</b>	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
<b>DNV</b>	Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

### CERTIFICATION No:

<b>UKEX</b>	CML 21UKEX1032X & CML 21UKEX4043X
<b>ATEX</b>	CML 19ATEX1345X & CML 19ATEX4109X
<b>IECEX</b>	IECEX CML 19.0103X
<b>CEC - Canada</b>	CSA 1356011
<b>NEC - USA</b>	CSA 1356011
<b>EAC</b>	RU C-GB.AX58.B.051063/24
<b>INMETRO - Brazil</b>	NCC 13.2012 X
<b>CCC - China</b>	2021312313000408
<b>UKRAINE</b>	CLJ 18.0325 X
<b>CCoE - India</b>	PESO P494321/6 & P494321/3
<b>ABS</b>	20-LD1944057-PDA
<b>LLOYD'S</b>	LR2124442TA
<b>DNV</b>	TAE00004XK

### EXAMPLE PART NUMBERING: A2RDFB50NPT/MP/20/M20

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

### OPTIONAL ACCESSORIES:

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

<b>IP RATING:</b>	IP66 & IP68 (50 metres - 7 Days), Type 4X
<b>OPERATING TEMP:</b>	Neoprene Seals -35°C to +90°C Silicone Seals -60°C to +180°C
<b>MATERIALS:</b>	Brass, Stainless Steel or Aluminium
<b>PLATING:</b>	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	3/8"	16	M12 x 1.5	3/8"	0.9	6.0	74	19.0	21.0	0.112
12*	M16 x 1.5	3/8" or 1/2"	16	M16 x 1.5	3/8" or 1/2"	0.9	6.0	71	25.4	28.0	0.213
16	M16 x 1.5	1/2" or 3/4"	16	M16 x 1.5	1/2" or 3/4"	4.0	8.4	81	25.4	28.0	0.235
20S	M20 x 1.5	1/2" or 3/4"	16	M20 x 1.5	1/2" or 3/4"	7.2	11.7	92	25.4	28.0	0.231
20	M20 x 1.5	1/2" or 3/4"	16	M20 x 1.5	1/2" or 3/4"	9.4	14.0	92	30.0	33.0	0.320
25	M25 x 1.5	3/4" or 1"	16	M25 x 1.5	3/4" or 1"	13.5	20.0	91	37.6	41.4	0.465
32	M32 x 1.5	1" or 1 1/4"	16	M32 x 1.5	1" or 1 1/4"	19.5	26.3	91	46.0	50.6	0.652
40	M40 x 1.5	1 1/4" or 1 1/2"	16	M40 x 1.5	1 1/4" or 1 1/2"	23.0	32.2	97	55.0	60.5	0.973
50S	M50 x 1.5	1 1/2" or 2"	16	M50 x 1.5	1 1/2" or 2"	28.1	38.2	98	65.0	71.5	1.247
50	M50 x 1.5	2"	16	M50 x 1.5	2"	33.1	44.1	98	65.0	71.5	1.111
63S	M63 x 1.5	2" or 2 1/2"	19	M63 x 1.5	2" or 2 1/2"	39.2	50.1	101	80.0	88.0	1.897
63	M63 x 1.5	2 1/2"	19	M63 x 1.5	2 1/2"	46.7	56.0	101	80.0	88.0	1.720
75S	M75 x 1.5	2 1/2" or 3"	19	M75 x 1.5	2 1/2" or 3"	52.1	62.0	100	90.0	99.0	2.122
75	M75 x 1.5	3"	19	M75 x 1.5	3"	58.0	68.0	100	90.0	99.0	1.895
80	M80 x 2.0	3" or 3 1/2"	25	M80 x 2.0	3" or 3 1/2"	62.2	72.0	120	104.0	115.2	3.670
85	M85 x 2.0	3" or 3 1/2"	25	M85 x 2.0	3" or 3 1/2"	69.0	78.0	120	104.0	115.2	3.205
90	M90 x 2.0	3 1/2" or 4"	25	M90 x 2.0	3 1/2" or 4"	74.0	84.0	121	114.0	125.7	4.032
100	M100 x 2.0	3 1/2" or 4"	25	M100 x 2.0	3 1/2" or 4"	82.0	90.0	123	114.0	125.7	3.306

### 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