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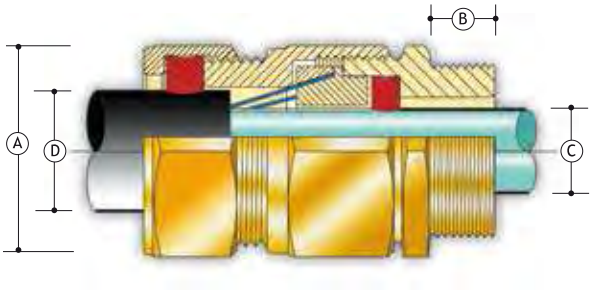
Cable Gland:- Type E1WF

Including type No's:

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

E1WF family of glands provide a seal on the inner sheath, a seal on the outer sheath and a specific armour clamp for steel wire, steel tape, screened or braided cable. The armour clamp provides an electrical bond between the cable armour and the gland. E2*F can be used to terminate lead sheathed cables. E1WF family of glands maintain Flameproof Exd and Increased Safety Exe methods of explosion protection, IP66, IP67 & IP68.

COMPLIANCE STANDARD	EN 60079-0, EN 60079-1, EN 60079-7, EN 61241-0, EN 61241-1, IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 61241-0 & IEC 61241-1
CERTIFICATION	ATEX II 2 GD, E Exd IIC / E Exe II GOST R-Exd IIC/Exe II CSA Exd IIC/Exe II 4X IECEx Ex d IIC / Ex e II NEPSI Exd IIC / Exe II
CERTIFICATE	SIRA 01ATEX1271X - Ex Notified Body No. 0518 POCC GB МЛ14.B00030 CSA 1356011 IECEx SIR 07.0097X NEPSI GYJ06187X
GLAND MARKING (EXAMPLE)	Exd IIC/Exe II/Ex tD A21 IP68 E1WF/20/M20 CA МЛ14 Peppers GU15 3BT UK IEC Ex SIR 07.0097X Sira 01ATEX1271X Ex II 2 GD EExd IIC/EExe II



APPLICATION

EExd Equipment
E1WF type glands will only maintain Flameproof Exd integrity when used with cable that is substantially round and compact with extruded bedding. The cable shall be deemed to be effectively filled. Ref: IEC60079-14:2002 Section 10.4.2

Gas Group	Internal Ignition Source	Enclosure Volume	Which Zone	Use E1WF Gland
IIC, IIB, IIA	NO	Any	Zone 1 or 2	YES
IIB, IIA	YES	Any	Zone 2	YES
IIB, IIA	YES	2 litres or less	Zone 1	YES

EExe Equipment
Gas Group II, Zones 1 and 2

Other Equipment
Ignitable Dust, Zones 21 and 22

INGRESS PROTECTION	IP66, IP67 & IP68
MATERIALS	Brass CZ121 (E1WF) 316 Stainless Steel (E1WSF) Inner & outer sheath seal material: Standard (E1) Neoprene, black. Option (E3) Silicone, white. Reduced bore outer sheath seal (R) Silicone, red. (E1WFR).
VARIATIONS	For lead sheath cables the gland is fitted with a metallic continuity washer: Brass (E2WF); 316 Stainless Steel (E2WSF). Integral Earth version for HV applications: Brass (E1WIEF); 316 Stainless Steel (E1WIESF) Omission of outer seal: Brass (D1WF); 316 Stainless Steel (D1WSF)
OPTIONS – THREADS	ISO Metric; NPT; NPS; ISO Pipe Thread (BSP Taper, BSP Parallel); PG
OPTIONS – SEALS	Extended operating temperature -60°C to +180°C, halogen free versions: Brass (E3WF); 316 Stainless Steel (E3WSF)
OPTIONS – CLAMPS	SWA steel wire armour (E1WF) SWB woven steel wire armour (E1XF) STA steel tape armour (E1ZF)
OPTIONS – PLATING	Zinc (ZP); Nickel (NP); Tin (TP); Electroless Nickel (EN)
OPERATING TEMPERATURES	Standard Seals -20°C to +85°C Silicone Seals -60°C to +180°C

ACCESSORIES	Locknut - Brass (ACBLN); 316 Stainless Steel (ACSLN) Earth Tag - Brass (ACBET), 316 Stainless Steel (ACSET) IP Washer - Nylon (ACNSW); Red Fibre (ACFSW) Serrated Lock Washer - 316 Stainless Steel (ACSSW), Galvanised Steel (ACGSW) Shroud - PVC (ACSPVC); PCP (ACSPCP); Low Smoke Zero Halogen (ACSSIO) Gland and accessory kits: CK1 - includes gland, locknut, earthtag, fibre IP washer and PVC shroud K1- includes gland, locknut, earthtag, nylon IP washer and PCP shroud E3WFK1 - includes brass gland, brass locknut, brass earthtag, IP washer and zero halogen shroud
EXAMPLE PART NUMBER	Sample: **E1WF R CK1/ZP/20S/M20** **E1WF:** E*WF - Gland type, armour type (SWA) and body material (Brass) *1** - Seal material (Neoprene) **R** - Reduced bore outer seal **CK1** - Supplied complete with accessories (PVC Shroud) **ZP** - Zinc plating **20s** - Gland size with regards to cable acceptance range **M20** - Entry thread

Gland Size	Entry Threads		Entry Thread Length [B]	Max Across Corners [A]	Max Protrusion Length	Gland Seal Range						Armour Acceptance Range		Shroud Size
						Cable Inner Sheath [C]		Cable Outer Sheath [D]						
								Standard		Reduced (R)				
	Metric	NPT/BSP				Min	Max	Min	Max	Min	Max	W	XZ	
16	M20	½" or ¾"	16	26.5	58.0	4.0	8.4	8.4	13.5	4.9	10.0	0.90	0.15-0.35	L24
20s	M20	½" or ¾"	16	26.5	58.0	8.0	11.7	11.5	16.0	9.4	12.5	0.90-1.25	0.15-0.35	L24
20	M20	½" or ¾"	16	33.0	58.0	6.7	14.0	15.5	21.1	12.0	17.6	0.90-1.25	0.15-0.50	L30
25	M25	¾" or 1"	16	41.4	58.0	13.0	20.0	20.3	27.4	16.8	23.9	1.25-1.60	0.15-0.50	L38
32	M32	1" or 1¼"	16	50.6	65.0	19.0	26.3	26.7	34.0	23.2	30.5	1.60-2.00	0.15-0.55	L46
40	M40	11/4" or 1½"	16	60.5	72.0	25.0	32.2	33.0	40.6	28.6	36.2	1.60-2.00	0.20-0.60	L55
50s	M50	1½" or 2"	16	71.5	73.0	31.5	38.2	39.4	46.7	34.8	42.4	2.00-2.50	0.20-0.60	L65
50	M50	2"	16	71.5	73.0	36.5	44.1	45.7	53.2	41.1	48.5	2.00-2.50	0.30-0.80	L65
63s	M63	2" or 2½"	19	88.0	76.0	42.5	50.1	52.1	59.5	47.5	54.8	2.50	0.30-0.80	L80
63	M63	2½"	19	88.0	76.0	49.5	56.0	58.4	65.8	53.8	61.2	2.50	0.30-0.80	L80
75s	M75	2½" or 3"	19	99.0	82.0	54.5	62.0	64.8	72.2	60.2	68.0	2.50	0.30-1.00	L90
75	M75	3"	19	99.0	82.0	60.5	68.0	71.1	78.0	66.5	73.4	2.50	0.30-1.00	L90
80	M80 x 2	3" or 3½"	25	115.2	110.0	62.2	72.0	77.0	84.0	-	-	3.15	0.45-1.00	L104
80H	M80 x 2	3" or 3½"	25	115.2	110.0	62.2	72.0	79.6	90.0	-	-	3.15	0.45-1.00	L104
85	M85 x 2	3" or 3½"	25	115.2	110.0	69.0	78.0	79.6	90.0	75.0	85.4	3.15	0.45-1.00	L104
90	M90 x 2	3½" or 4"	25	125.7	110.0	74.0	84.0	88.0	96.0	-	-	3.15	0.45-1.00	L114
90H	M90 x 2	3½" or 4"	25	125.7	110.0	74.0	84.0	92.0	102.0	-	-	3.15	0.45-1.00	L114
100	M100 x 2	3½" or 4"	25	125.7	110.0	82.0	90.0	92.0	102.0	87.4	97.4	3.15	0.45-1.00	L114

All Dimensions are in Millimetres

NOTES:

- Gland Size does not necessarily equate to the entry thread size
- "W" refers to the wire diameter in a steel wire armoured cable
- "XZ" refers to the wire diameter in a woven steel wire armoured cable or the tape thickness in a steel tape armoured cable
- E3*F gland size 20, the silicone inner seal only seals to a minimum of 11.0mm and NOT 6.7mm
- Please note that dimensions (A) and (B) may differ for glands with non-Metric entry threads. Please refer to our thread data tables for specific dimensions
- Unless otherwise stated ISO Metric entry threads have a 1.5mm pitch
- For Flameproof Exd applications the female thread into which the gland is to be fitted must comply with clause 5.3 of EN 50018:2000 (clause 5.3 IEC 79-1) and an engagement of at least 5 full threads must be achieved for parallel threads and should be achieved for tapered threads
- Where E1WF type glands are fitted into non-metallic Increased Safety Exe enclosures they must be included within the earth circuit of the system
- The user should seek expert advice if intending to combine flammable gases and combustible dusts in one environment/installation
- Full assembly instructions are supplied with glands, the instructions must be read prior to installation and adhered to in full
- In order to maintain an IP rating greater than IP54, when used in a clearance hole, a suitable IP washer is required.
- Peppers supplies cable glands with parallel entry threads which conform to the flameproof threaded joint requirements of IEC 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques, and will not have a full-form thread for the entire length. Peppers will not be held responsible for clients' installations where this has not been taken into account