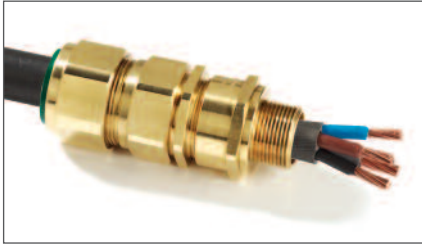


## E1FW CABLE GLAND

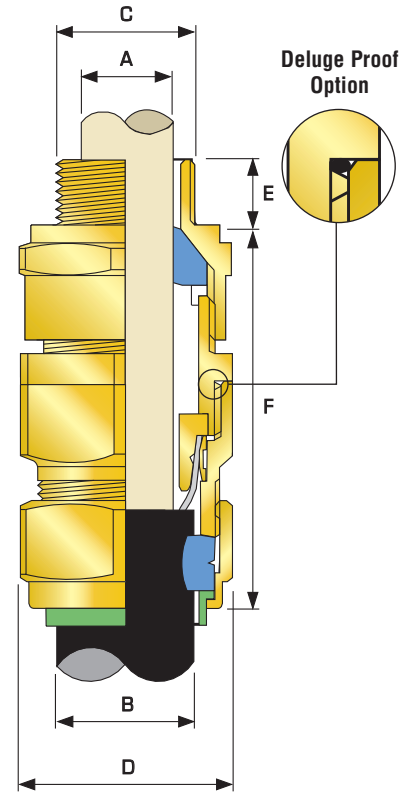


### E1FW Tri-Star Flameproof Ex d, Increased Safety Ex e and Restricted Breathing Ex nR Cable Gland

CMP Type E1FW Tri-Star Triple Certified Flameproof (Type 'd'), Increased Safety (Type 'e') and Restricted Breathing (Type 'nR') cable gland for use in Zone 1, Zone 2, Zone 21 and Zone 22 Hazardous Areas with Single Wire Armour (SWA) cable. This cable gland provides a Flameproof seal on the cable inner bedding and in addition the gas tight seal has been tested to prove compatibility with Restricted Breathing equipment. The cable gland allows mechanical cable retention and earth continuity via the cable armour termination. Separate tightening actions for the inner displacement seal and the armour termination afford maximum control over the pressure applied to the cable bedding, and also allows the effectiveness of the gas tight seal to be tested. A detachable armour cone and AnyWay clamping ring arrangement facilitates remote make off and enables the cable to be disconnected from the equipment. An environmental / load retention seal is provided on the cable outer sheath.

The CMP E1FW Tri-Star Cable Gland is suitable for use with all forms of equipment protection permitted in Zone 1, Zone 2, Zone 21 & Zone 22 provided always that the prevailing code of practice for selection and installation is observed, e.g. IEC 60079-14.

TECHNICAL DATA	
Type	E1FW Tri-Star
Design Specification	BS 6121: Part 1: 1989, EN 50262:1999
ATEX Certification	SIRA06ATEX1097X
Code of Protection Category	ATEX $\text{Ex}$ II 2GD / 3GD Ex d IIC, Ex e II, Ex nR II, Ex tD A21 IP66, - Equipment Zone 1, Zone 2, Zone 21, & Zone 22 - Gas Groups IIA, IIB, IIC, ATEX $\text{Ex}$ IM2 Exd I / Exe I
Compliance Standards	EN 60079-0:2004, EN 60079-1:2004, EN 60079-7: 2003, EN 60079-15:2003, EN 61241-0:2004, EN 61241-1:2004
IECEx Approval Number	IECEx SIR 06.0043X
Code of Protection Category	Ex d IIC, Ex e II, Ex nR II, Ex tD A21 IP66, Ex d I, Ex e I
Compliance Standards	IEC 60079-0:2004, IEC 60079-1:2003, IEC 60079-7:2001, IEC 60079-15:2005, IEC 61241-0:2004, IEC 61241-1:2004
GOST R Certificate Number	POCC GB.ГБ05.В01912
Code of Protection Category	Ex d IIC U / Ex e II U
GOST Compliance Standards	ГОСТ P 52350.0-2005, ГОСТ P 52350.1-2005, ГОСТ P 52350.7-2005
GGTN Permit Number	PPC 00-18262
GOST K Certificate Number	KZ7500052.05.01.00063
RoK Permit for Use Number	08-067693
INMETRO / UC Approval	MC, AEX-7618-X
Code of Protection Category	BR-Ex d IIC / BR-Ex e II / IP66W
Compliance Standards	IEC 60079-0/00, IEC 60079-1/01, IEC 60079-7/01, & NBR IEC 60529/05
Continuous Operating Temperature	-60°C to +130°C
Ingress Protection Rating	IP66 as standard, IP67 / IP68 available on request. Deluge Proof when fitted with optional CMP O-ring in the cable gland body joint
Cable Gland Material	Brass, Electroless Nickel Plated Brass, Stainless Steel, Aluminium
Seal Material	CMP SOLO LSF Thermoplastic Elastomer
Cable Type	Single Wire Armour (SWA)
Armour Clamping	Detachable Armour Cone & AnyWay Universal Clamping Ring
Sealing Technique	CMP Inner Displacement Seal & Unique CMP "LRS" <sup>™</sup> Outer Seal (Load Retention Seal)
Sealing Area(s)	Cable Inner Bedding & Cable Outer Sheath
Optional Accessories	Locknut, Shroud, Entry Thread Sealing Washer, Serrated Washer, Earth Tag, Adaptor/Reducer



Note: Ingress Protection and Deluge Protection are essentially different and should not be confused with each other.

Note: Deluge Proof version available, ferrule colour coded "natural" for ease of identification

### Cable Gland Selection Table

Cable Gland Size	Available Entry Threads 'C'			Minimum Thread Length 'E'	Cable Bedding Diameter 'A'		Overall Cable Diameter 'B'		Armour Range †		Across Flats 'D'	Across Corners 'D'	Nominal Protusion Length 'F'	Ordering Reference (Brass Metric) #	PVC Shroud Reference*	Cable Gland Weight (Kgs)
	Standard		Option		Min	Max	Min	Max	Min	Max						
	Metric	NPT	NPT 2													
20S/16	M20	1/2"	3/4"	15.0	3.1	8.7	6.1	11.5	0.90	1.00	24.0	24.4	58.5	20S16E1FW1RA	PVC04	0.157
20S	M20	1/2"	3/4"	15.0	6.1	11.7	9.5	15.9	0.90	1.25	24.0	26.6	58.5	20SE1FW1RA	PVC04	0.157
20	M20	1/2"	3/4"	15.0	6.5	14.0	12.5	20.9	0.90	1.25	30.5	33.3	60.5	20E1FW1RA	PVC06	0.206
25S	M25	3/4"	1"	15.0	11.1	20.0	14.0	22.0	1.25	1.60	37.5	40.5	67.5	25SE1FW1RA	PVC09	0.325
25	M25	3/4"	1"	15.0	11.1	20.0	18.2	26.2	1.25	1.60	37.5	40.5	67.5	25E1FW1RA	PVC09	0.325
32	M32	1"	1-1/4"	15.0	17.0	26.3	23.7	33.9	1.60	2.00	46.0	51.0	69.5	32E1FW1RA	PVC11	0.452
40	M40	1-1/4"	1-1/2"	15.0	22.0	32.2	27.9	40.4	1.60	2.00	55.0	61.0	78.0	40E1FW1RA	PVC15	0.657
50S	M50	1-1/2"	2"	15.0	29.5	38.2	35.2	46.7	2.00	2.50	60.0	66.5	75.5	50SE1FW1RA	PVC18	0.734
50	M50	2"	2-1/2"	15.0	35.6	44.1	40.4	53.1	2.00	2.50	70.0	78.6	80.5	50E1FW1RA	PVC21	0.748
63S	M63	2"	2-1/2"	15.0	40.1	50.0	45.6	59.4	2.00	2.50	75.0	83.2	91.5	63SE1FW1RA	PVC23	1.337
63	M63	2-1/2"	3"	15.0	47.2	56.0	54.6	65.9	2.00	2.50	80.0	89.0	92.0	63E1FW1RA	PVC25	1.436
75S	M75	2-1/2"	3"	15.0	52.8	62.0	59.0	72.1	2.00	2.50	89.0	101.6	99.0	75SE1FW1RA	PVC28	2.073
75	M75	3"	3-1/2"	15.0	59.1	68.0	66.7	78.5	2.00	2.50	99.0	111.1	102.0	75E1FW1RA	PVC30	2.622
90	M90	3-1/2"	4"	15.0	66.6	80.0	76.2	90.4	3.15	3.15	114.0	128.6	120.0	90E1FW1RA	PVC32	4.174
100	M100	-	-	15.0	76.0	91.0	86.1	101.5	3.15	4.00	123.0	138.0	148.0	100E1FW1RA	150/50HST	4.523
115	M115	-	-	15.0	86.0	98.0	101.5	110.3	3.15	4.00	133.4	147.8	169.0	115E1FW1RA	180/60HST	6.860
130	M130	-	-	15.0	97.0	115.0	114.2	123.3	3.15	4.00	146.1	161.9	183.0	130E1FW1RA	180/60HST	8.121

All dimensions in millimetres

Note: \*LSF Shrouds also available on request. Alternative armour clamping range available for non-standard armour sizes. Marine approvals including L  
# Other thread forms are available.