



www.exproof.info

ATEX certified ex-proof fittings



- ◆ Ex-Proof Armored Cable Glands
- ◆ Ex-Proof Unarmored Cable Glands
- ◆ Ex-Proof Galvanized Conduit Unions
- ◆ Ex-Proof Flexible & Rigid Conduit Connectors

- ◆ Ex-Proof Blind Plugs
- ◆ Ex-Proof Sealing Fittings & J.Boxes
- ◆ Ex-Proof Nipples & Couplings
- ◆ Ex-Proof Adapters & Reductions

ATEX; The ATEX directives of the European Union Organizations have been applicable since July 1, 2003, were revised into Directive 2014/34/EU on April 20, 2016. ATEX is a combination of the first syllables of the French words "ATmosphères EXplosives" and means Explosive Atmospheres. The ATEX regulations effective in the European Union countries and recognized in many non-EU countries define the minimum safety requirements for explosive atmospheres, and covers the equipment mentioned here.

Exproof; It is the general name of Equipment and Protective Systems specially produced for use in potentially flammable and explosive areas.

Gas and vapour leaks occur during production, handling, transportation and storage of flammable chemicals and petroleum products (e.g. methane, alcohol, acetylene, natural gas ...) may inevitably react with the oxygen from the atmosphere to form an explosive concentration.

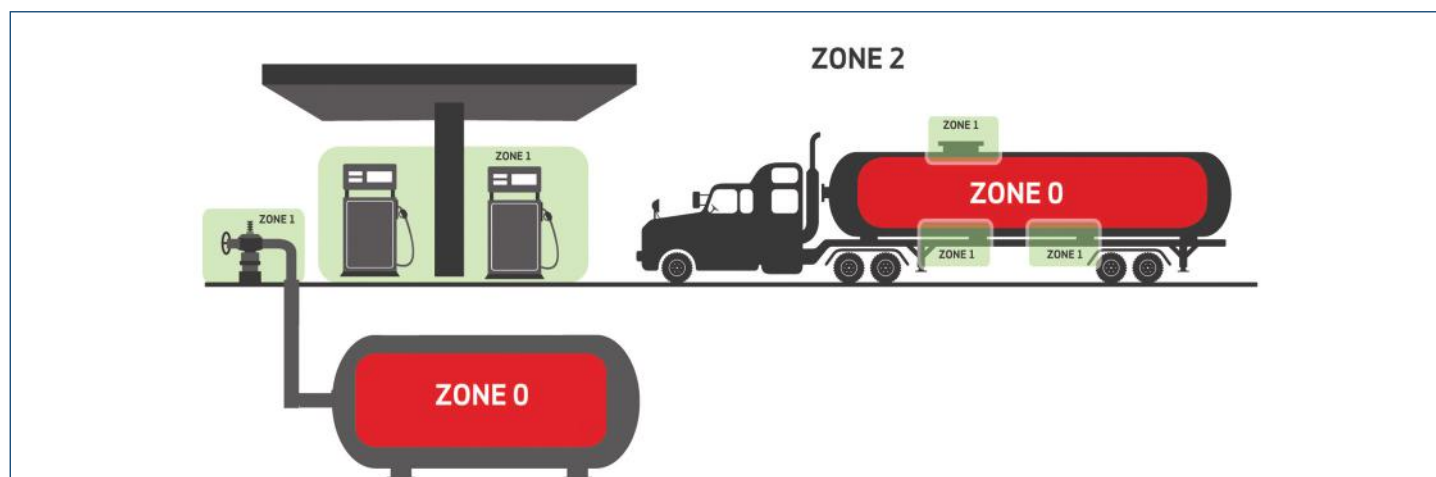
In such a situation, electrical arc, static electricity or excessive surface temperature may lead to an explosion that may endanger property and life safety. The structure and features of electrical equipment designed for use in such hazardous areas varies greatly from those used in normal areas. Such materials are named as Exproof (Flameproof) electrical materials by professionals who use them.

The equipment used in explosive, flammable and inflammable areas is labelled with specific codes. The aim is for the personnel working in hazardous areas to use the right equipment in the right area by paying attention to these codes. The same ex-proof equipment cannot be suitable for using everywhere. Explosions are mainly due to the wrong equipment picked for the area.

Tools from upper categories can be suitable for use in lower category. However, tools designed for lower categories can never be used in upper categories. The Category 1 tools can be comfortably used in **ZONE 0, ZONE 1, and ZONE 2**. However, the Category 2 tools can never be used in ZONE 0.

Hazardous Area Classification Comparison Table

European & IEC Classification	Definition of ZONE or DIVISION	North American Classification
Zone 0 (Gasses) Zone 20 (Dusts)	An area in which an explosive mixture is continuously present or frequently present	Class I Division 1 (Gasses) Class II Division 1 (Dusts)
Zone 1 (Gasses) Zone 21 (Dusts)	An area in which an explosive mixture is likely to occur but not regularly	Class I Division 1 (Gasses) Class II Division 1 (Dusts)
Zone 2 (Gasses) Zone 22 (Dusts)	An area in which an explosive mixture is not likely to occur and if it occurs it will exist only for a short time	Class I Division 2 (Gasses) Class II Division 2 (Dusts) Class III Division 1 (Fibers) Class III Division 2 (Fibers)



Gas Groups Comparison Table

Typical Gases	European & IEC Gas Groups	North American Gas Groups
Methane	I	-
Acetylene	IIC	A
Hydrogen	IIC	B
Ethylene	IIB	C
Propane	IIA	D
Metal Dust	-	E
Coal Dust	-	F
Grain Dust	-	G

Temperature Classification Comparison Table

Temperature Classification		Maximum Surface Temperature
European & IEC	North American	
T1	T1	450°C
T2	T2	300°C
	T2A	280°C
	T2B	260°C
	T2C	230°C
	T2D	215°C
T3	T3	200°C
	T3A	180°C
	T3B	165°C
	T3C	160°C
T4	T4	135°C
	T4A	120°C
T5	T5	100°C
T6	T6	85°C

Electrical equipment in hazardous areas

Electrical installations in dangerous areas (flammable-explosive environments) are detailed in the TSE EN 60079-14 standard. Products that have either ATEX or TSE certification are deemed suitable for use in ex-proof electrical installations in hazardous areas.

Choosing the right equipment is as important as calculating Temperature Classes and Gas Groups, and designing an electrical installation.

Cables connected to electrical equipment in hazardous areas feature cable glands or cable conduits that ensure environmental safety.

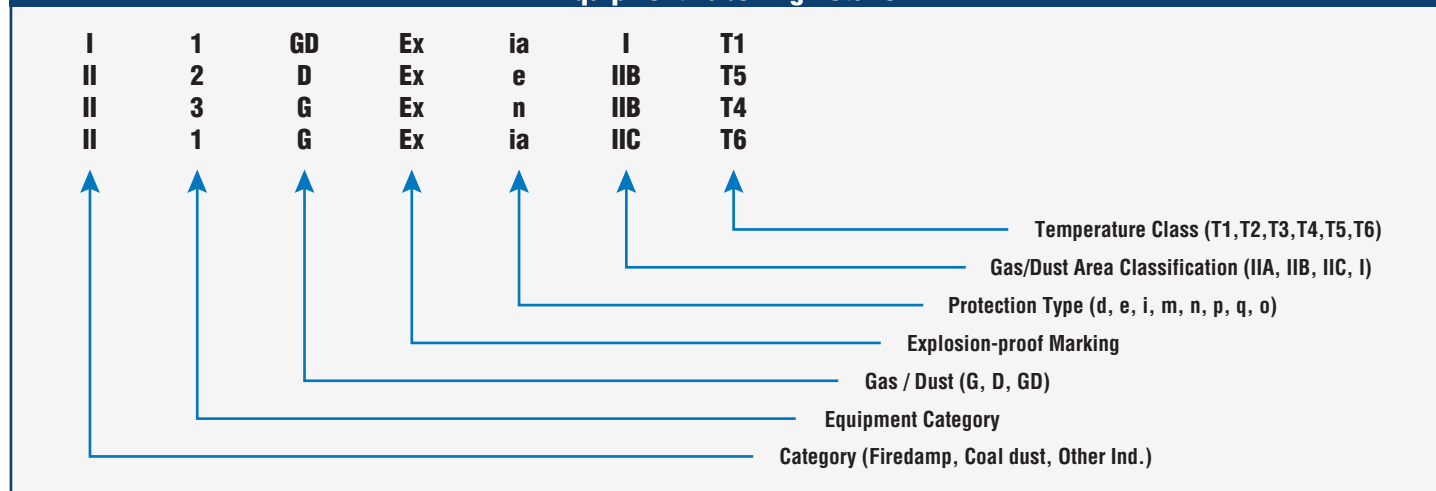
Selection of ex-proof cable gland (**M-VEN type ex-proof unarmoured or M-MER type ex-proof armoured cable glands**), and the type and the size of the cable and the junction box of the ex-proof equipment (**GWR-CJX-DMD type GRP terminal boxes, EJB cast distribution cabinets**) must comply with the relevant protection class.

Cables to be used in installation should be protected against mechanical damage, corrosion, chemicals, and heat. In cases where it cannot be protected, cables must be enclosed safely in industrial type **IMC or RSC threaded** conduits. IMC or RSC conduit provides great convenience, especially if more than one cable is connected to ex-proof equipment. In order to ensure environmental safety a proper installation must feature the special **MCK-1000** sealing resin with **EYS or EZS ex-proof stoppers, M-BMF, M-BMM, M-BFF ex-proof galvanized conduit unions, NP.. ex-proof nipple, BNG.. ex-proof stainless flexible conduits**.

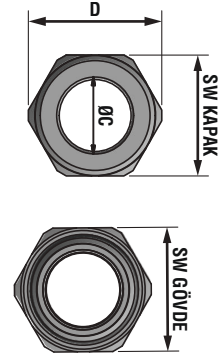
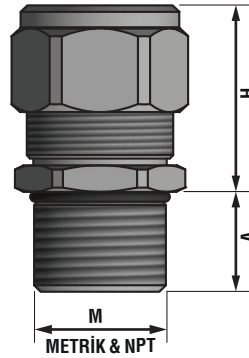
Note: According to ATEX, cables and rigid conduit are not considered a source of breakdown. **Therefore, there is no cable and conduit named as an ex-proof. Only BNG type spiral hoses can be used as Ex-Proof conduits.**

MSM Engineering Company, has ATEX certification, **EAC and IEP** (Energy Petroleum Institute) certificates, and therefore, complies with the **2014/34/EU** directive for the Ex-proof (explosion proof) cable glands, conduit unions and fittings such as reducers, adapters, etc. the company manufactures.

Equipment Labelling Details



M-VEN TYPE EX-PROOF UNARMoured CABLE GLANDS



Technical Details

Type	M-VEN type Unarmoured Cable Glands Metric & NPT Thread
Classification	Ex I M2 Ex db / eb I Mb / II 1D Ex tb IIIC Da / II 2G Ex db / eb IIC Gb
Certificate	IEP 19 ATEX 0708X / Directive 2014/34/EU
Material	MS 58 Brass, Nickel Plated Over Brass
Standards	EN 60079-0 / EN 60079-1 / EN 60079-7 / EN 60079-31
IP standard	EN 60529 IP66 & IP68
Sealing Material	Chloroprene Gasket -40°C to +100°C / Silicone Gasket -60°C to +180°C
Applications	Group II-III / Gas & Dust, Zone 1-2 & 21-22 Gas Group IIA, IIB, IIC / Dust Group IIIA, IIIB, IIIC
Optional Accessories	PVC Shroud, Lock Nut, Earth Tag, IP Washer Gasket

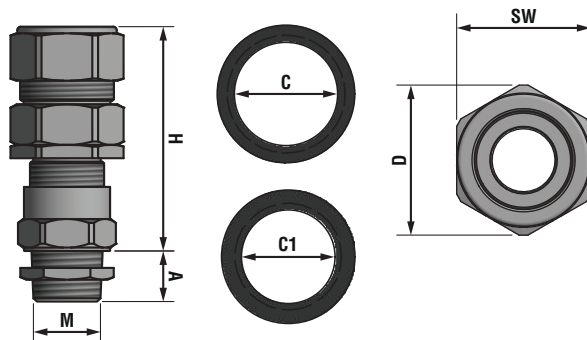


MSM Code	Metric Size	Clamping Range Ø min-max	Thread Length A (mm)	Thread Dia. M (mm)	Height H (mm)	Spanner Width		Outer Dia. D (mm)	Weight (kg)
						SW Cap (mm)	SW Body (mm)		
M-VEN1M	M12x1,5	4 ÷ 8	15,0	12,0	19,0	16,0	15,0	17,5	0,025
M-VEN2M	M16x1,5	5 ÷ 10	15,0	16,0	21,0	20,0	19,0	22,5	0,045
M-VEN3M	M20x1,5	10 ÷ 14	15,0	20,0	22,0	24,0	23,0	26,5	0,055
M-VEN4M	M25x1,5	13 ÷ 18	15,0	25,0	23,0	30,0	28,0	33,5	0,075
M-VEN5M	M32x1,5	18 ÷ 25	15,0	32,0	24,0	40,0	36,0	44,0	0,130
M-VEN6M	M40x1,5	22 ÷ 32	15,0	40,0	27,0	50,0	50,0	55,0	0,245
M-VEN7M	M50x1,5	30 ÷ 38	15,0	50,0	32,0	60,0	55,0	66,0	0,355
M-VEN8M	M63x1,5	34 ÷ 44	15,0	63,0	35,0	65,0	65,0	72,0	0,490
M-VEN9M	M75x1,5	48 ÷ 61	15,0	75,0	40,0	85,0	80,0	93,0	0,790

MSM Code	NPT Size	Clamping Range Ø min-max	Thread Length A (mm)	Thread Dia. M (mm)	Height H (mm)	Spanner Width		Outer Dia. D (mm)	Weight (kg)
						SW Cap (mm)	SW Body (mm)		
M-VEN1N	1/4"	4 ÷ 8	15,0	13,716	19,0	16,0	16,0	17,5	0,030
M-VEN2N	3/8"	5 ÷ 10	15,0	17,145	21,0	20,0	19,0	22,5	0,050
M-VEN3N	1/2"	10 ÷ 14	15,0	21,336	22,0	24,0	24,0	26,5	0,060
M-VEN4N	3/4"	13 ÷ 18	15,0	26,670	23,0	30,0	30,0	33,5	0,085
M-VEN5N	1"	18 ÷ 25	15,0	33,401	24,0	40,0	36,0	44,0	0,135
M-VEN6N	1 1/4"	22 ÷ 32	15,0	42,164	27,0	50,0	50,0	55,0	0,255
M-VEN7N	1 1/2"	30 ÷ 38	15,0	47,800	32,0	60,0	55,0	66,0	0,380
M-VEN8N	2"	34 ÷ 44	15,0	60,325	35,0	65,0	65,0	72,0	0,515
M-VEN9N	2 1/2"	48 ÷ 61	15,0	73,025	40,0	85,0	80,0	93,0	0,910

MSM Code	Size Code	Male Thread	Material	Sealing Gasket	Accessories				Code Example
	2 : M16x1,5 3 : M20x1,5	M: Metric N: NPT	B: Brass BN: Brass Nickel Plated	S: Silicone C: Chloroprene	PVC Shroud	Lock Nut	Earth Tag	IP Washer Gasket	
M-VEN	2	M	BN	C	S	L	E	W	M-VEN2MBNCL

M-MER TYPE EX-PROOF ARMoured CABLE GLANDS



Technical Details

Type	M-MER type Armoured Cable Glands Metric & NPT Thread
Classification	Ex I M2 Ex db/eb I Mb / II 2G Ex db/eb IIC Gb / II 1D Ex tb IIIC Da
Certificate	IEP 19 ATEX 0719X / Directive 2014/34/EU
Material	MS 58 Brass, Nickel Plated Over Brass
Standards	EN 60079-0 / EN 60079-1 / EN 60079-7 / EN 60079-31
IP standard	EN 60529 IP66 & IP68
Sealing Material	Chloroprene Gasket -40°C to +100°C / Silicone Gasket -60°C to +180°C
Applications	Group II-III / Gas & Dust, Zone 1-2 & 21-22 Gas Group IIA, IIB, IIC / Dust Group IIIA, IIIB, IIIC
Optional Accessories	PVC Shroud, Lock Nut, Earth Tag, IP Washer Gasket

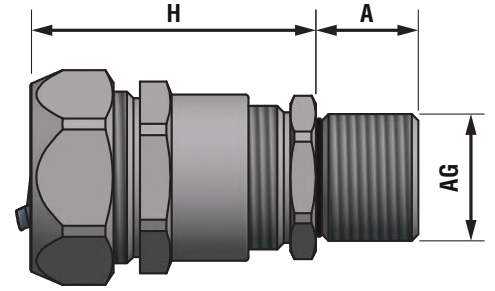
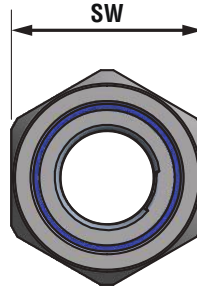


MSM Code	Metric Size	Male Thread Size M (mm)	Clamping Range (Ø min-max)		Thread Height A (mm)	Spanner Width (SW/D)		Height H (mm)	Weight (kg)
			C (mm)	C1 (mm)		SW (mm)	D (mm)		
M-MER1M	M12x1,5	12	3,0 ÷ 6,5	4,0 ÷ 9,0	15	18	20,00	62	0,080
M-MER2M	M16x1,5	16	11,0 ÷ 13,5	4,0 ÷ 9,0	15	22	24,50	67	0,120
M-MER3M	M20x1,5	20	15,0 ÷ 20,0	8,0 ÷ 13,0	15	30	33,50	68	0,192
M-MER4M	M25x1,5	25	20,0 ÷ 27,0	13,0 ÷ 19,0	15	36	40,50	71	0,256
M-MER5M	M32x1,5	32	26,0 ÷ 33,0	18,0 ÷ 26,0	15	45	51,50	79	0,409
M-MER6M	M40x1,5	40	33,0 ÷ 40,0	25,0 ÷ 32,0	15	55	61,50	88	0,692
M-MER7M	M50x1,5	50	43,0 ÷ 54,0	34,0 ÷ 44,0	15	70	77,50	97	1,083
M-MER8M	M63x1,5	63	58,0 ÷ 64,0	47,0 ÷ 54,0	15	80	88,50	126	1,418
M-MER9M	M75x1,5	75	65,0 ÷ 74,0	59,0 ÷ 65,0	15	90	100,00	126	1,800

MSM Code	NPT Size	Male Thread Size M (mm)	Clamping Range (Ø min-max)		Thread Height A (mm)	Spanner Width (SW/D)		Height H (mm)	Weight (kg)
			C (mm)	C1 (mm)		SW (mm)	D (mm)		
M-MER1N	1/4"	13,176	3,0 ÷ 6,5	4,0 ÷ 9,0	15	18	20,00	62	0,081
M-MER2N	3/8"	17,145	11,0 ÷ 13,5	4,0 ÷ 9,0	15	22	24,50	68	0,121
M-MER3N	1/2"	21,336	15,0 ÷ 20,0	8,0 ÷ 13,0	15	30	33,50	71	0,175
M-MER4N	3/4"	26,670	20,0 ÷ 27,0	13,0 ÷ 19,0	18	36	40,50	74	0,255
M-MER5N	1"	33,401	26,0 ÷ 33,0	18,0 ÷ 26,0	18	45	51,50	84	0,395
M-MER6N	1 1/4"	42,164	33,0 ÷ 40,0	25,0 ÷ 32,0	18	55	61,50	93	0,680
M-MER7N	1 1/2"	47,800	36,0 ÷ 45,0	30,0 ÷ 37,0	18	60	65,50	107	0,753
M-MER8N	2"	60,325	49,0 ÷ 59,0	40,0 ÷ 50,0	20	75	84,00	113	1,275
M-MER9N	2 1/2"	73,025	58,0 ÷ 64,0	47,0 ÷ 54,0	22	80	88,50	126	1,493

MSM Code	Size Code	Male Thread	Material	Sealing Gasket	Accessories				Code Example
	2 : M16x1,5 3 : M20x1,5	M: Metric N: NPT	B: Brass BN: Brass Nickel Plated	S: Silicone C: Chloroprene	PVC Shroud	Lock Nut	Earth Tag	IP Washer Gasket	
M-MER	2	M	BN	C	S	L	E	W	M-MER2MBNCL

M-SBR TYPE EX-PROOF FLEXIBLE CONDUIT CONNECTORS



Technical Details

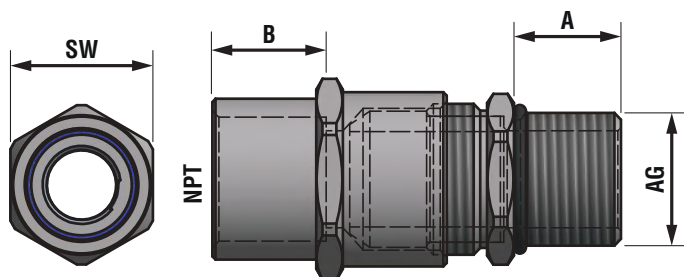
Type	M-SBR type Liquidtight Steel Flexible Conduit Connectors - Metric & NPT Thread
Classification	Ex I M2 Ex db/eb I Mb / II 2G Ex db/eb IIC Gb / II 1D Ex tb IIIC Da
Certificate	IEP 20 ATEX 0820X / Directive 2014/34/EU
Material	MS 58 Brass, Nickel Plated Over Brass
Standards	EN 60079-0 / EN 60079-1 / EN 60079-7 / EN 60079-31
IP standard	EN 60529 IP66 & IP68
Sealing Material	Chloroprene Gasket -40°C to +100°C / Silicone Gasket -60°C to +180°C
Applications	Group II-III / Gas & Dust, Zone 1-2 & 21-22 Gas Group IIA, IIB, IIC / Dust Group IIIA, IIIB, IIIC
Optional Accessories	Lock Nut, Earth Tag, IP Washer Gasket



MSM Code	Flexible Type Input Size	Metric Output Size	Cable Clamping Range (mm)	SW (mm)	A (mm)	AG (mm)	H (mm)	Weight (kg)
M-SBR1M	M...-10 - 1/4"	M12x1,5	4,0 ÷ 8,0	22	16	12	32,0	0,049
M-SBR2M	M...-13 - 3/8"	M16x1,5	5,0 ÷ 10,0	26	16	16	35,5	0,075
M-SBR3M	M...-16 - 1/2"	M20x1,5	6,0 ÷ 12,0	30	16	20	36,5	0,098
M-SBR4M	M...-21 - 3/4"	M25x1,5	13,0 ÷ 18,0	36	16	25	41,0	0,160
M-SBR5M	M...-26 - 1"	M32x1,5	18,0 ÷ 25,0	45	20	32	48,5	0,275
M-SBR6M	M...-35 - 1 1/4"	M40x1,5	22,0 ÷ 32,0	55	20	40	54,0	0,420
M-SBR7M	M...-40 - 1 1/2"	M50x1,5	30,0 ÷ 38,0	60	20	50	56,5	0,508
M-SBR8M	M...-52 - 2"	M63x1,5	34,0 ÷ 44,0	80	20	63	63,0	0,957

MSM Code	Flexible Type Input Size	NPT Output Size	Cable Clamping Range (mm)	SW (mm)	A (mm)	AG (mm)	H (mm)	Weight (kg)
M-SBR1N	M...-10 - 1/4"	1/4"	4,0 ÷ 8,0	22	16	13,176	32,0	0,052
M-SBR2N	M...-13 - 3/8"	3/8"	5,0 ÷ 10,0	26	16	17,145	35,5	0,077
M-SBR3N	M...-16 - 1/2"	1/2"	6,0 ÷ 12,0	30	16	21,336	36,5	0,102
M-SBR4N	M...-21 - 3/4"	3/4"	13,0 ÷ 18,0	36	16	26,670	41,0	0,164
M-SBR5N	M...-26 - 1"	1"	18,0 ÷ 25,0	45	20	33,401	48,5	0,290
M-SBR6N	M...-35 - 1 1/4"	1 1/4"	22,0 ÷ 32,0	55	20	42,164	54,0	0,440
M-SBR7N	M...-40 - 1 1/2"	1 1/2"	30,0 ÷ 38,0	60	20	47,800	56,5	0,516
M-SBR8N	M...-52 - 2"	2"	34,0 ÷ 44,0	80	20	60,325	63,0	0,970

MSM Code	Size Code	Male Thread	Material	Sealing Gasket	Accessories			Code Example
	2 : M16x1,5 3 : M20x1,5	M: Metric N: NPT	B: Brass BN: Brass Nickel Plated	S: Silicone C: Chloroprene	Lock Nut	Earth Tag	IP Washer Gasket	
M-SBR	2	M	BN	C	L	E	W	M-SBR2MBNCL

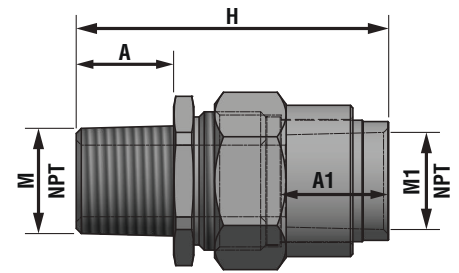
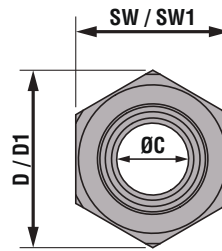


Opsiyonel Aksesuarlar	Lock Nut, Earth Tag, IP Washer Gasket
------------------------------	--



MSM Code	Size Code	Male Thread	Material	Sealing Gasket	Accessories			Code Example
	2 : M16x1,5 3 : M20x1,5	M: Metric N: NPT	B: Brass BN: Brass Nickel Plated	S: Silicone C: Chloroprene	Lock Nut	Earth Tag	IP Washer Gasket	
M-DBR	3	M	BN	C	L	E	W	M-DBR2MBNCL

M-BMF.. / M-BFF.. / M-BMM.. TYPE EX-PROOF CONDUIT UNIONS (THREE PIECES)



M-BFF.. (Female-Female) M-BMF.. (Male-Female) M-BMM.. (Male-Male)

Technical Details

Type	M-B.. type Conduit Unions (Three Pieces)
Classification	I M2 Ex db I Mb / I M2 Ex eb I Mb / II 1D Ex ta IIIC Da II 2G Ex db IIC Gb / II 2G Ex eb II Gb
Certificate	IEP 20 ATEX 0762U / Directive 2014/34/EU
Material	Galvanized Steel
Standards	EN 60079-0 / EN 60079-1 / EN 60079-7 / EN 60079-31
IP standard	EN 60529 IP66
Applications	Group II-III / Gas & Dust, Zone 1-2 & 21-22
	Gas Group IIA, IIB, IIC / Dust Group IIIA, IIIB, IIIC
Optional Accessories	Lock Nut, Earth Tag, IP Washer Gasket, Silicone Gasket

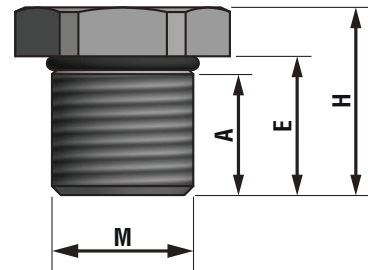
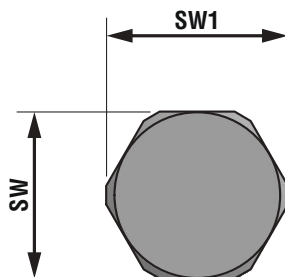


MSM Code	Product Size M (mm)		Product Size M1 (mm)		Cable Dia. Size C (mm)	Thread Length (mm)		Spanner Width SW/D (mm)				Height H (mm)	Weight (kg)
	NPT	Size	NPT	Size		A	A1	SW	D	SW1	D1		
M-BMF1N	1/2" NPT	21,336	1/2" NPT	20,1115	14,00	19,00	16,00	30,00	33,00	30,00	34,50	61,00	0,158
M-BMF2N	3/4" NPT	26,670	3/4" NPT	25,4435	19,00	20,00	20,00	36,00	40,00	36,00	41,50	60,00	0,212
M-BMF3N	1" NPT	33,401	1" NPT	31,9100	25,00	25,00	23,00	41,00	47,00	41,00	47,00	70,00	0,284
M-BMF4N	1 1/4" NPT	42,164	1 1/4" NPT	40,6730	32,00	28,00	25,00	50,00	56,00	55,00	63,00	81,00	0,549
M-BMF5N	1 1/2" NPT	47,800	1 1/2" NPT	46,3090	39,00	28,00	26,00	55,00	62,00	60,00	69,00	85,00	0,567
M-BMF6N	2" NPT	60,325	2" NPT	58,8340	50,00	30,00	29,00	70,00	79,00	75,00	85,00	91,00	0,982
M-BMF7N	2 1/2" NPT	73,025	2 1/2" NPT	70,8817	65,00	33,00	31,00	91,00	100,00	91,00	100,00	91,00	1,386

MSM Code	Product Size M (mm)		Product Size M1 (mm)		Cable Dia. Size C (mm)	Thread Length (mm)		Spanner Width SW/D (mm)				Height H (mm)	Weight (kg)
	NPT	Size	NPT	Size		A	A1	SW	D	SW1	D1		
M-BFF1N	1/2" NPT	20,1115	1/2" NPT	20,1115	14,00	19,00	16,00	30,00	33,00	30,00	34,50	42,00	0,122
M-BFF2N	3/4" NPT	25,4435	3/4" NPT	25,4435	19,00	20,00	20,00	36,00	40,00	36,00	41,50	46,00	0,177
M-BFF3N	1" NPT	31,9100	1" NPT	31,9100	25,00	25,00	23,00	41,00	47,00	41,00	47,00	56,00	0,248
M-BFF4N	1 1/4" NPT	40,6730	1 1/4" NPT	40,6730	32,00	28,00	25,00	50,00	56,00	55,00	63,00	65,00	0,460
M-BFF5N	1 1/2" NPT	46,3090	1 1/2" NPT	46,3090	39,00	28,00	26,00	55,00	62,00	60,00	69,00	68,00	0,475
M-BFF6N	2" NPT	58,8340	2" NPT	58,8340	50,00	30,00	29,00	70,00	79,00	75,00	85,00	74,50	0,889
M-BFF7N	2 1/2" NPT	70,8817	2 1/2" NPT	70,8817	65,00	33,00	31,00	91,00	100,00	91,00	100,00	76,00	1,254

MSM Code	Product Size M (mm)		Product Size M1 (mm)		Cable Dia. Size C (mm)	Thread Length (mm)		Spanner Width SW/D (mm)				Height H (mm)	Weight (kg)
	NPT	Size	NPT	Size		A	A1	SW	D	SW1	D1		
M-BMM1N	1/2" NPT	21,336	1/2" NPT	21,336	14,00	19,00	19,00	30,00	33,00	30,00	34,50	77,50	0,194
M-BMM2N	3/4" NPT	26,670	3/4" NPT	26,670	19,00	20,00	20,00	36,00	40,00	36,00	41,50	76,00	0,267
M-BMM3N	1" NPT	33,401	1" NPT	33,401	25,00	25,00	25,00	41,00	47,00	41,00	47,00	88,00	0,366
M-BMM4N	1 1/4" NPT	42,164	1 1/4" NPT	42,164	32,00	28,00	28,00	50,00	56,00	55,00	63,00	96,00	0,684
M-BMM5N	1 1/2" NPT	47,800	1 1/2" NPT	47,800	39,00	28,00	28,00	55,00	62,00	60,00	69,00	98,00	0,707
M-BMM6N	2" NPT	60,325	2" NPT	60,325	50,00	30,00	30,00	70,00	79,00	75,00	85,00	104,50	1,169
M-BMM7N	2 1/2" NPT	73,025	2 1/2" NPT	73,025	65,00	33,00	33,00	91,00	100,00	91,00	100,00	120,00	1,748

M-PLG TYPE EX-PROOF BLIND PLUGS



Technical Details

Type	M-PLG type Blind Plugs Metric & NPT Thread
Classification	Ex I M2 Ex db I Mb / I M2 Ex eb I Mb / II 1D Ex ta IIIC Da / II 2G Ex db IIC Gb / II 2G Ex eb II Gb
Certificate	IEP 19 ATEX 0694X / Directive 2014/34/EU
Material	MS 58 Brass, Nickel Plated Over Brass
Standards	EN 60079-0 / EN 60079-1 / EN 60079-7 / EN 60079-31
IP standard	EN 60529 IP66 & IP68
Sealing Material	Chloroprene Gasket -40°C to +100°C / Silicone Gasket -60°C to +180°C
Applications	Group II-III / Gas & Dust, Zone 1-2 & 21-22 Gas Group IIA, IIB, IIC / Dust Group IIIA, IIIB, IIIC
Optional Accessories	Lock Nut, Earth Tag, IP Washer Gasket

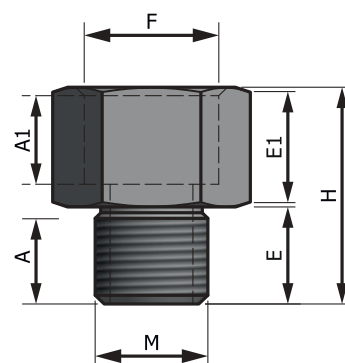
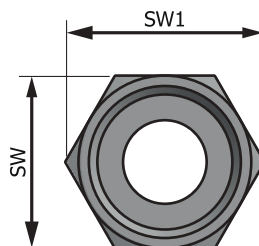


MSM Code	Metric Size	Thread Piece A	Thread Length E (mm)	Height H (mm)	Spanner Width SW (mm)	Outer Dia. SW1 (mm)	Lock Nut Code	Earth Tag Code	IP Washer Code	Weight (kg)
M-PLG1M	M12x1,5	8	15	22	17	19	LN-1M	ERT-1M	IPW-1M	0,028
M-PLG2M	M16x1,5	8	15	22	22	24	LN-2M	ERT-2M	IPW-2M	0,034
M-PLG3M	M20x1,5	8	15	22	24	26	LN-3M	ERT-3M	IPW-3M	0,047
M-PLG4M	M25x1,5	7	15	22	30	33	LN-4M	ERT-4M	IPW-4M	0,074
M-PLG5M	M32x1,5	7	15	22	36	40	LN-5M	ERT-5M	IPW-5M	0,110
M-PLG6M	M40x1,5	7	15	22	45	50	LN-6M	ERT-6M	IPW-6M	0,165
M-PLG7M	M50x1,5	7	15	22	55	61	LN-7M	ERT-7M	IPW-7M	0,230
M-PLG8M	M63x1,5	7	15	22	70	77	LN-8M	ERT-8M	IPW-8M	0,343

MSM Code	NPT Size	Thread Piece A	Thread Length E (mm)	Height H (mm)	Spanner Width SW (mm)	Outer Dia. SW1 (mm)	Lock Nut Code	Earth Tag Code	IP Washer Code	Weight (kg)
M-PLG1N	1/4"	8,0 / 18,0	15	22	16	18	LN-1N	ERT-1N	IPW-1N	0,028
M-PLG2N	3/8"	8,0 / 18,0	15	22	20	22	LN-2N	ERT-2N	IPW-2N	0,034
M-PLG3N	1/2"	7,0 / 18,0	15	22	24	26	LN-3N	ERT-3N	IPW-3N	0,047
M-PLG4N	3/4"	7,0 / 18,0	15	22	27	30	LN-4N	ERT-4N	IPW-4N	0,074
M-PLG5N	1"	6,0 / 18,0	15	22	35	38	LN-5N	ERT-5N	IPW-5N	0,110
M-PLG6N	1 1/4"	6,0 / 18,0	15	22	45	50	LN-6N	ERT-6N	IPW-6N	0,165
M-PLG7N	1 1/2"	6,0 / 18,0	15	22	50	55	LN-7N	ERT-7N	IPW-7N	0,230
M-PLG8N	2"	6,0 / 18,0	15	22	65	72	LN-8N	ERT-8N	IPW-8N	0,343

MSM Code	Size Code	Male Thread	Material	Sealing Gasket	Accessories			Code Example
	2 : M16x1,5 3 : M20x1,5	M: Metric N: NPT	B: Brass BN: Brass Nickel Plated	S: Silicone C: Chloroprene	Lock Nut	Earth Tag	IP Washer Gasket	
M-PLG	2	M	BN	C	L	E	W	M-PLG2MBNCL

M-REB TYPE EX-PROOF REDUCERS



Technical Details

Type	M-REB Type Reducers - Metric & NPT Thread
Classification	Ex I M2 Ex db/eb I Mb / II 2G Ex db/eb IIC Gb / II 1D Ex tb IIIC Da
Certificate	IEP 19 ATEX 0693X / Directive 2014/34/EU
Material	MS 58 Brass, Nickel Plated Over Brass
Standards	EN 60079-0 / EN 60079-1 / EN 60079-7 / EN 60079-31
IP standard	EN 60529 IP66 & IP68
Sealing Material	Chloroprene Gasket -40°C to +100°C / Silicone Gasket -60°C to +180°C
Applications	Group II-III / Gas & Dust, Zone 1-2 & 21-22 Gas Group IIA, IIB, IIC / Dust Group IIIA, IIIB, IIIC
Optional Accessories	Lock Nut, Earth Tag, IP Washer Gasket

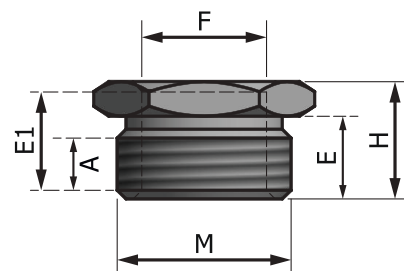
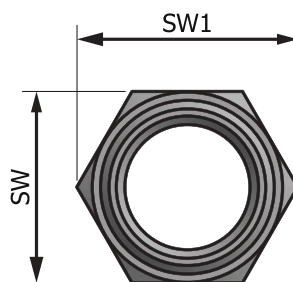


MSM Code	Male Metric Size (M)	Female Metric Size (F)	Thread Piece A	Thread Piece A1	Thread Length E (mm)	Thread Length E1 (mm)	Height H (mm)	Spanner Width SW (mm)	Outer Dia. SW1 (mm)	Weight (kg)
M-REB1M2M	M12x1,5	M16x1,5	8	8	15	15	34	22	24,0	0,00
M-REB2M3M	M16x1,5	M20x1,5	8	8	15	15	34	25	27,5	0,00
M-REB3M4M	M20x1,5	M25x1,5	8	8	15	15	34	30	33,0	0,00
M-REB4M5M	M25x1,5	M32x1,5	8	8	15	15	34	36	40,0	0,00
M-REB5M6M	M32x1,5	M40x1,5	8	10	15	18	37	45	50,0	0,00
M-REB6M7M	M40x1,5	M50x1,5	10	10	15	18	41	55	61,0	0,00
M-REB7M8M	M50x1,5	M63x1,5	10	10	18	18	41	70	77,0	0,00

MSM Code	Male NPT Size (M)	Female NPT Size (F)	Thread Piece A	Thread Piece A1	Thread Length E (mm)	Thread Length E1 (mm)	Height H (mm)	Spanner Width SW (mm)	Outer Dia. SW1 (mm)	Weight (kg)
M-REB1N2N	1/4" NPT	3/8" NPT	8 / 18	8 / 18	15	15	34	20	22,0	0,00
M-REB2N3N	3/8" NPT	1/2" NPT	8 / 18	8 / 18	15	15	34	25	27,5	0,00
M-REB3N4N	1/2" NPT	3/4" NPT	7 / 14	7 / 14	15	15	34	30	33,0	0,00
M-REB4N5N	3/4" NPT	1" NPT	6 / 14	6 / 14	15	15	34	36	40,0	0,00
M-REB5N6N	1" NPT	1 1/4" NPT	7 / 11,5	7 / 11,5	15	18	37	45	50,0	0,00
M-REB6N7N	1 1/4" NPT	1 1/2" NPT	7 / 11,5	7 / 11,5	18	18	41	55	61,0	0,00
M-REB7N8N	1 1/2" NPT	2" NPT	7 / 11,5	7 / 11,5	18	18	41	65	72,0	0,00

MSM Code	Male Size	Thread Type	Female Size	Thread Type	Material	Sealing Gasket	Code Example
	1: 1/4" 2: 3/8"	N: NPT M: Metric	2: 3/8" 3: 1/2"	N: NPT M: Metric	B: Brass BN: Brass Nickel Plated	S: Silicone C: Chloroprene	
M-REB	1	N	2	N	BN	S	M-REB1N2NBNS

M-RE TYPE EX-PROOF ADAPTER



Technical Details

Type	M-RE Tip Adapter - Metric & NPT Thread
Classification	Ex I M2 Ex db/eb I Mb / II 2G Ex db/eb IIC Gb / II 1D Ex tb IIIC Da
Certificate	IEP 20 ATEX 0693X / Directive 2014/34/EU
Material	MS 58 Brass, Nickel Plated Over Brass
Standards	EN 60079-0 / EN 60079-1 / EN 60079-7 / EN 60079-31
IP standard	EN 60529 IP66 & IP68
Sealing Material	Chloroprene Gasket -40°C to +100°C / Silicone Gasket -60°C to +180°C
Applications	Group II-III / Gas & Dust, Zone 1-2 & 21-22 Gas Group IIA, IIB, IIC / Dust Group IIIA, IIIB, IIIC
Optional Accessories	Lock Nut, Earth Tag, IP Washer Gasket



MSM Code	Male Metric Size (M)	Female Metric Size (F)	Thread Piece A	Thread Length E (mm)	Thread Length E1 (mm)	Height H (mm)	Spanner Width SW (mm)	Outer Dia. SW1 (mm)	Weight (kg)
M-RE2M1M	M16x1,5	M12x1,5	8	15	18	20	22	24	0,022
M-RE3M2M	M20x1,5	M16x1,5	8	15	18	20	25	27,5	0,025
M-RE4M3M	M25x1,5	M20x1,5	8	15	18	20	30	33	0,037
M-RE5M4M	M32x1,5	M25x1,5	8	15	18	20	36	40	0,060
M-RE6M5M	M40x1,5	M32x1,5	8	15	22	24	45	50	0,106
M-RE7M6M	M50x1,5	M40x1,5	9	15	22	24	55	61	0,164
M-RE8M7M	M63x1,5	M50x1,5	9	15	22	24	70	77	0,271

MSM Code	Male NPT Size (M)	Female NPT Size (F)	Thread Piece A	Thread Length E (mm)	Thread Length E1 (mm)	Height H (mm)	Spanner Width SW (mm)	Outer Dia. SW1 (mm)	Weight (kg)
M-RE2N1N	3/8"	1/4"	9 / 18	15	18	20	22	24	0,022
M-RE3N2N	1/2"	3/8"	7 / 14	15	18	20	25	27,5	0,028
M-RE4N3N	3/4"	1/2"	7 / 14	15	18	20	30	33	0,042
M-RE5N4N	1"	3/4"	6 / 11,5	15	18	20	36	40	0,064
M-RE6N5N	1 1/4"	1"	7 / 11,5	18	22	24	45	50	0,118
M-RE7N6N	1 1/2"	1 1/4"	7 / 11,5	18	22	24	55	61	0,129
M-RE8N7N	2"	1 1/2"	7 / 11,5	18	22	24	65	72	0,240

MSM Code	Male Size	Thread Type	Female Size	Thread Type	Material	Sealing Gasket	Code Example
	2: M16x1,5 3: M20x1,5	M: Metric N: NPT	1: M12x1,5 2: M16x1,5	M: Metric N: NPT	B: Brass BN: Brass Nickel Plated	S: Silicone C: Chloroprene	
M-RE	2	M	1	M	BN	S	M-RE2M1MBNS

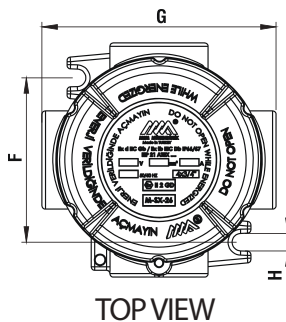
EX-PROOF JUNCTION BOXES / Ø 140 mm



Classification	Group II	Category 2G 2D	Directive:	2014/34/EU
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)	Certification:	IEP 23 ATEX 1324X
Marking:	II 2G Ex db IIC T3-T6 Gb	II 2D Ex tb IIIC T180°C-T85°C Db	Degree Of Protection:	IP66 & IP67
Standards:	IEC EN 60079-0:2018, EN 60079-1:2014, EN 60079-31:2014		Ambient Temperature:	-40°C ~ +80°C

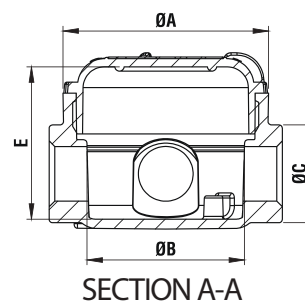
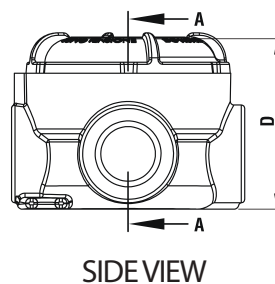
Mechanical Features

Body	Copper-Free Aluminum
Wall Thickness	5 mm
Screw	Stainless steel
Gasket	O-ring, Neoprene
Entry	NPT Thread ANSI B1.20.1
	GAS UNI ISO 228-1 (Optional)
	UNI ISO 7/1 (Optional)
	METRIC ISO 261/965 (Optional)



Electrical Features

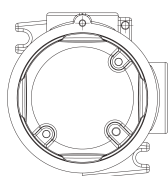
Voltage	750 V AC/DC max.
Frequency	50 / 60 Hz
Current	8 A - 175 A max.
Max. Current Density	2.5 - 6.6 (A/mm²)
Terminal Cross Section	1,5 mm² & 70 mm²



Technical Features

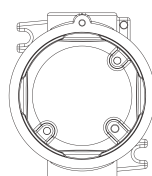
Type	ØA (mm)	ØB (mm)	ØC (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Weight (kg)
M-S.-36	140	104	70	111	100	118	170	10	2,00
M-S.-46	140	104	70	111	100	118	170	10	2,00
M-S.-56	140	104	70	111	100	118	170	10	2,00
M-S.-66	140	104	70	111	100	118	170	10	2,00

M-SL.. SERIES (2 WAY)



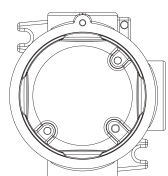
NPT Code	NPT Size	Metric Code	Metric Size
M-SL-36N	1"	M-SL-36M	M32x1,5
M-SL-46N	1 1/4"	M-SL-46M	M40x1,5
M-SL-56N	1 1/2"	M-SL-56M	M50x1,5
M-SL-66N	2"	M-SL-66M	M63x1,5

M-SC.. SERIES (2 WAY)



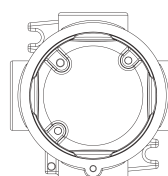
NPT Code	NPT Size	Metric Code	Metric Size
M-SC-36N	1"	M-SC-36M	M32x1,5
M-SC-46N	1 1/4"	M-SC-46M	M40x1,5
M-SC-56N	1 1/2"	M-SC-56M	M50x1,5
M-SC-66N	2"	M-SC-66M	M63x1,5

M-ST.. SERIES (3 WAY)



NPT Code	NPT Size	Metric Code	Metric Size
M-ST-36N	1"	M-ST-36M	M32x1,5
M-ST-46N	1 1/4"	M-ST-46M	M40x1,5
M-ST-56N	1 1/2"	M-ST-56M	M50x1,5
M-ST-66N	2"	M-ST-66M	M63x1,5

M-SX.. SERIES (4 WAY)



NPT Code	NPT Size	Metric Code	Metric Size
M-SX-36N	1"	M-SX-36M	M32x1,5
M-SX-46N	1 1/4"	M-SX-46M	M40x1,5
M-SX-56N	1 1/2"	M-SX-56M	M50x1,5
M-SX-66N	2"	M-SX-66M	M63x1,5

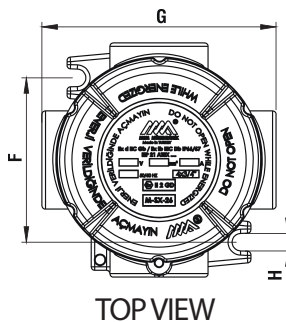
EX-PROOF JUNCTION BOXES / Ø 88 mm



Classification	Group II	Category 2G 2D	Directive:	2014/34/EU
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)	Certification:	IEP 21 ATEX 0909X
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T85°C Db	Degree Of Protection:	IP66 / IP67
Standards:	EN 60079-0; EN 60079-1; EN 60079-7; EN 60079-31		Ambient Temperature:	-60°C ~ +130°C

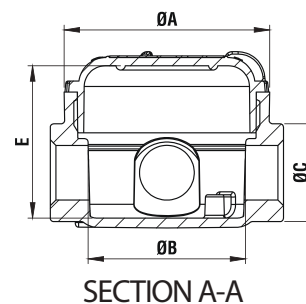
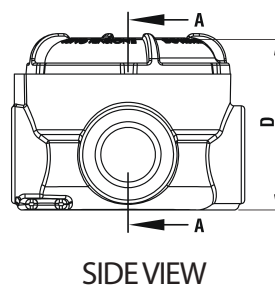
Mechanical Features

Body	Copper-Free Aluminum
Wall Thickness	3,5 mm
Screw	Stainless steel
Gasket	O-ring, Neoprene
Entry	NPT Thread ANSI B1.20.1
	GAS UNI ISO 228-1 (Optional)
	UNI ISO 7/1 (Optional)
	METRIC ISO 261/965 (Optional)



Electrical Features

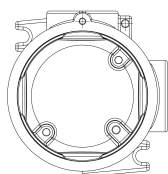
Voltage	750 V AC/DC max.
Frequency	50 / 60 Hz
Current	8 - 175 (A)
Max. Current Density	2.5 - 6.6 (A/mm²)
Terminal Cross Section	1.5; 2.5; 4; 6; 10; 16; 25; 35; 70 (mm²)



Technical Features

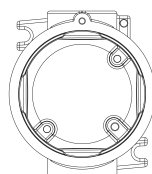
Type	ØA (mm)	ØB (mm)	ØC (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Weight (kg)
M-S.-16	88	73	42	75	65	70	100	7	0,60
M-S.-26	88	73	42	75	65	70	100	7	0,60

M-SL.. SERIES (2 WAY)



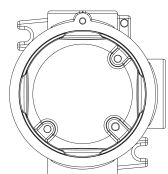
NPT Code	NPT Size	Metric Code	Metric Size
M-SL-16N	1/2"	M-SL-16M	M16x1,5
M-SL-26N	3/4"	M-SL-26M	M20x1,5

M-SC.. SERIES (2 WAY)



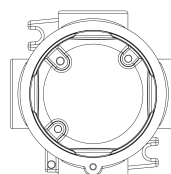
NPT Code	NPT Size	Metric Code	Metric Size
M-SC-16N	1/2"	M-SC-16M	M16x1,5
M-SC-26N	3/4"	M-SC-26M	M20x1,5

M-ST.. SERIES (3 WAY)



NPT Code	NPT Size	Metric Code	Metric Size
M-ST-16N	1/2"	M-ST-16M	M16x1,5
M-ST-26N	3/4"	M-ST-26M	M20x1,5

M-SX.. SERIES (4 WAY)



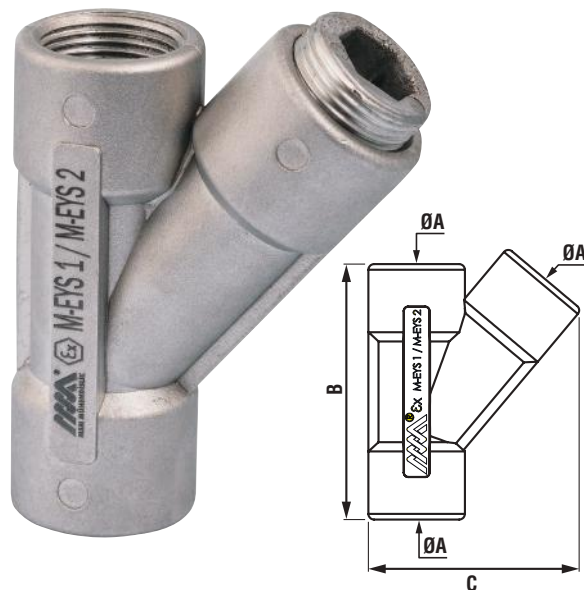
NPT Code	NPT Size	Metric Code	Metric Size
M-SX-16N	1/2"	M-SX-16M	M16x1,5
M-SX-26N	3/4"	M-SX-26M	M20x1,5

M-EYS SERIES EX-PROOF SEALING FITTINGS - VERTICAL

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC 80°C Db
Standards:	IEP 21 ATEX 0910U	IP66

General Features

Body	Copper-Free Aluminum
Entry	NPT Thread ANSI B1.20.1
	GAS UNI ISO 228-1 (Optional)
	UNI ISO 7/1 (Optional)
	METRIC ISO 261/965 (Optional)



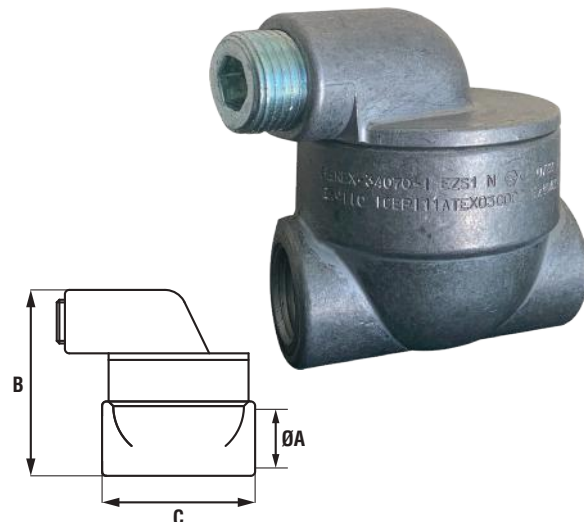
MSM Code NPT	NPT Size ØA	MSM Code Metric	Metric Size ØA	B (mm)	C (mm)	Sealing Compound (gr)	Weight (kg)
M-EYS1N	1/2" NPT	M-EYS1M	M20x1,5	90	74	50	0,150
M-EYS2N	3/4" NPT	M-EYS2M	M25x1,5	90	74	50	0,200

M-EZS SERIES EX-PROOF SEALING FITTINGS - HORIZONTAL

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC 80°C Db
Standards:	-	IP66

General Features

Body	Copper-Free Aluminum
Entry	NPT Thread ANSI B1.20.1
	GAS UNI ISO 228-1 (Optional)
	UNI ISO 7/1 (Optional)
	METRIC ISO 261/965 (Optional)



MSM Code NPT	NPT Size ØA	MSM Code Metric	Metric Size ØA	B (mm)	C (mm)	Sealing Compound (gr)	Weight (kg)
M-EZS1N	1/2" NPT	M-EZS1M	M20x1,5	83	72	150	0,26
M-EZS2N	3/4" NPT	M-EZS2M	M25x1,5	83	72	140	0,25
M-EZS3N	1" NPT	M-EZS3M	M32x1,5	92	74	140	0,27
M-EZS4N	1 1/4" NPT	M-EZS4M	M40x1,5	110	98	390	0,52
M-EZS5N	1 1/2" NPT	M-EZS5M	M50x1,5	110	98	390	0,48
M-EZS6N	2" NPT	M-EZS6M	M63x1,5	120	130	570	0,70

Note: For detailed information and ATEX documents of all our Exproof products visit our website "www.exproof.info"

MCK 1000 + MX COMPOUND - CATALYST

Compound	Weight (gr)
MCK 1000+MX	1000



Figure 1: Open the blind plug of the stopper and fill it tightly with fiber rope so that there are no gaps in it.

Figure 2: Mix the resin in the jar, pour catalyst B into jar A and stir for 2 minutes.

Figure 2a: For small applications, mix the required dose of resin A and catalyst B (100 A / 20 B) in a certain proportion.

Figure 2b: In small applications, choose to mix in a small box.

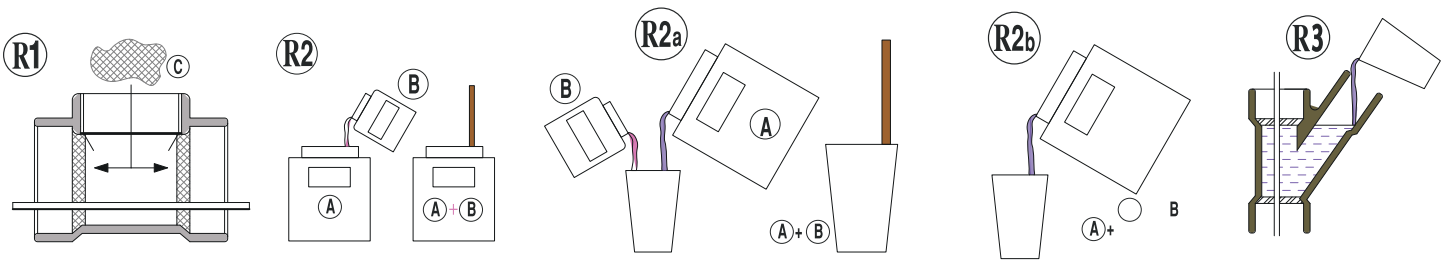
Figure 3: Fill the mixture to the level indicated in the figure and close the blind plug firmly after the process is finished.

The storage time of the prepared mixture is 15 min. The approximate freezing time in the stopper of the mixture is 36 hr.

Note: The recommended mixing temperature of the medium is +10°C +20°C.

Areas of use: Cable pulling is a compound liquid prepared by mixing after testing and checks are completed.

PREPARATION OF THE COMPOUND



Compound material: 800g resin, 160g Catalyst and 40g Fiber rope consists of three parts.

CRV420 / 1000 COMPOUND - CATALYST

Compound	Type	Weight (gr)
CRV420/1000	Liquid Freezer	1000
MR RESIN	Powder Freezer	1000
FV-10	Fiber Rope	1000

CRV420 series freezers are certified with EYS and EZS type stoppers, therefore they should be sold and used together. It is manufactured to prevent the passage of flammable explosive gases, vapors or flames through pipe systems. The mixture should be prepared as prescribed and filled to the capacity of the stopper to be used.

It is manufactured in two types as powder and liquid. Before pouring into the stopper, an appropriate amount of fiber rope squeezer should be filled and then the prepared mixture should be added.

CRV420/1000
Liquid Freezer



CATALYST



MR RESIN
Powder Freezer



FV10
Fiber Rope



PRO 1000 HARDENING RESIN

Compound	Weight (gr)
PRO 500	500
PRO 1000	1000

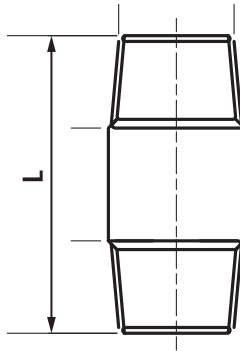


Protoline is a two-component substance.

A hardener component is added to the resin and mixed with a mixer to make it ready for use. It is a rigid (non-flexible) material.

It can be used in AG and OG cable joints, heads, Exproof M-EYS and M-EZS type stoppers for sealing purposes and similar places.

M-NP TYPE EX NIPPLES

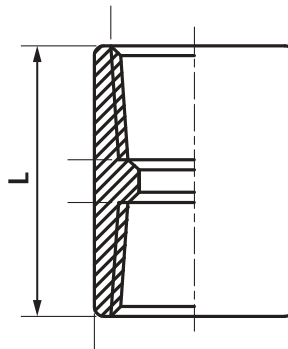


Technical Features

Type	M-NP Type Nipples NPT Thread
Classification	Ex I M2 Ex db I Mb / I M2 Ex eb I Mb / II 1D Ex ta IIIC Da II 2G Ex db IIC Gb / II 2G Ex eb II Gb
Certificate	IEP 21 ATEXX / Directive 2014/34/EU
Material	Galvanized Steel
Thread Type	NPT Thread ANSI B1.20.1
Standards	EN 60079-0 / EN 60079-1 / EN 60079-7 / EN 60079-31
IP standard	EN 60529 IP66
Applications Area	Group II-III / Gas & Dust, Zone 1-2 & 21-22 Gas Group IIA, IIB, IIC / Dust Group IIIA, IIIB, IIIC

MSM Code	NPT Size	Length L (mm)	Weight Kg
M-NP1N	1/2"	48	0,05
M-NP2N	3/4"	48	0,06
M-NP3N	1"	60	0,10
M-NP4N	1 1/4"	55	0,14
M-NP5N	1 1/2"	55	0,15
M-NP6N	2"	55	0,20
M-NP7N	2 1/2"	68	0,45
M-NP8N	3"	68	0,70
M-NP10N	4"	68	1,00

M-EM TYPE EX COUPLING



Technical Features

Type	M-EM Type Coupling NPT Thread
Classification	Ex I M2 Ex db I Mb / I M2 Ex eb I Mb / II 1D Ex ta IIIC Da II 2G Ex db IIC Gb / II 2G Ex eb II Gb
Certificate	IEP 21 ATEXX / Directive 2014/34/EU
Material	Galvanized Steel
Thread Type	NPT Thread ANSI B1.20.1
Standards	EN 60079-0 / EN 60079-1 / EN 60079-7 / EN 60079-31
IP standard	EN 60529 IP66
Applications Area	Group II-III / Gas & Dust, Zone 1-2 & 21-22 Gas Group IIA, IIB, IIC / Dust Group IIIA, IIIB, IIIC

MSM Code	NPT Size	Length L (mm)	Weight Kg
M-EM1N	1/2"	39	0,09
M-EM2N	3/4"	39	0,08
M-EM3N	1"	51	0,15
M-EM4N	1 1/4"	51	0,27
M-EM5N	1 1/2"	51	0,27
M-EM6N	2"	51	0,45
M-EM7N	2 1/2"	65	0,65
M-EM8N	3"	65	0,80
M-EM10N	4"	65	1,00



www.exproof.info

ATEX certified ex-proof electric materials



EAC

CE

- ◆ Ex-Proof Linear Fixtures
- ◆ Ex-Proof Glob Fixtures
- ◆ Ex-Proof Led Floodlights
- ◆ Ex-Proof Emergency Fixtures

- ◆ Ex-Proof Enclosures Boxes & J.Boxes
- ◆ Ex-Proof Switches
- ◆ Ex-Proof Plugs & Sockets
- ◆ Ex-Proof Warning Systems

BYS SERIES EX-PROOF FLUORESCENT FIXTURES - WITHOUT BALLAST (POLYESTER BODY)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 24 ATEX-B US81	IP66

General Features

Body	Impact resistant fiberglass reinforced polyester
Diffuser	Polycarbonate, anti-glare
Gasket	Silicone rubber
Bolts and Screws	Stainless steel
Entry	2 x M25x1.5 cable gland (Cable tightening range: Ø10-14mm)
Mounting Method	Pendant, Ceiling, Chain, Wall, Pole



- **Special Locking Mechanism:** Sliding system operated with a hexagon head key. Safe micro switch that cuts off energy when the cover is opened.

MSM Code	Power T8	Power LED	Dimensions (mm)			Input Voltage	Input Frequency
			L	W	H		
BYS-600	2x18 W	2x8 W	798	208	120	50 - 60 Hz	50 - 60 Hz
BYS-1200	2x36 W	2x16 W	1380	208	120	50 - 60 Hz	50 - 60 Hz
BYS-1200-EM	2x36W (180 dk)	2x18W (180 dk)	1380	208	120	50 - 60 Hz	50 - 60 Hz

BYS-LED SERIES EXPROOF LED FLUORESCENT FIXTURES (POLYESTER BODY)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 24 ATEX-B US81	IP66

General Features

Body	Impact resistant fiberglass reinforced polyester
Diffuser	Polycarbonate, anti-glare
Gasket	Silicone rubber
Bolts and Screws	Stainless steel
Entry	4 x M25x1.5 cable gland (Cable tightening range: Ø10-14mm)
Mounting Method	Pendant, Ceiling, Chain, Wall, Pole



- **Special Locking Mechanism:** Sliding system operated with a hexagon head key. Safe micro switch that cuts off energy when the cover is opened.

MSM Code	Power LED	Power Lümen	Dimensions (mm)			Input Voltage	Input Frequency
			L	W	H		
BYS-600-LED	25 W - 50 W	3.000 lm - 6.000 lm	798	208	120	AC100~277 V	50 - 60 Hz
BYS-1200-LED	50 W - 100 W	6.000 lm - 12.000 lm	1380	208	120	AC100~277 V	50 - 60 Hz

BPY SERIES EX-PROOF FLUORESCENT FIXTURES - WITHOUT BALLAST (ALUMINUM BODY)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 24 ATEX-B US81	IP66

General Features

Body	Low copper aluminum alloy
Diffuser	Impact and high temperature resistant borosilicate glass
Gasket	Silicone rubber
Bolts and Screws	Stainless steel
Entry	1 x 1/2" NPT
Mounting Method	Pendant, Ceiling, Chain, Wall, Pole



MSM Code	Power T8	Power LED	Dimensions (mm)			Input Voltage	Input Frequency
			L	W	H		
BPS-600-Double	2x18-20 W	2x8 W	710	635	145/210	220V AC	50 - 60 Hz
BPY-900-Double	2x30 W	2x12 W	1050	940	145/210	220V AC	50 - 60 Hz
BPY-1200-Double	2x36-40 W	2x16 W	1320	1235	145/210	220V AC	50 - 60 Hz

GYD 930 LED LINEAR SERIES EX-PROOF FIXTURES (ALUMINUM BODY)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 24 ATEX-B US81	IP66

General Features

Body	Low copper aluminum alloy
Glass	Impact and high temperature resistant borosilicate glass
Gasket	Silicone rubber
Bolts and Screws	Stainless steel
Entry	M20x1.5
Mounting Method	Ceiling; Chain; Wall.



MSM Code	Power LED	Power Lumen	Color Temperature (Kelvin - K)	Dimensions (mm)			Input Voltage	Input Frequency
				L	W	H		
GYD930-1	50 W	6.250 lm	5500 - 6000	400	143	75	100-240V AC, 24 VDC	50 - 60 Hz
GYD930-2	80 W	10.000 lm	5500 - 6000	600	143	75	100-240V AC, 24 VDC	50 - 60 Hz
GYD930-3	100 W	12.500 lm	5500 - 6000	900	143	75	100-240V AC, 24 VDC	50 - 60 Hz

GYD680 SERIES EX-PROOF LED FLOODLIGHT (ALUMINUM BODY)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust) / IP66
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 24 ATEX-B US81	IECEx CNEX 23.0009X

General Features

Body	Low copper aluminum alloy
Glass	Impact and high temperature resistant borosilicate glass
Gasket	Silicone rubber
Bolts and Screws	Stainless steel
Entry	1 x 3/4" NPT
Mounting Method	Ceiling, Wall, Pole



MSM Code	Power LED	Power Lumen	Color Temperature (Kelvin - K)	Dimensions (mm)			Input Voltage	Input Frequency
				L	W	H		
GYD680-1	50 W	6.500 lm	5500 - 6000	Ø260	Ø260	250	100 - 240V AC	50 - 60 Hz
GYD680-2	100 W	13.000 lm	5500 - 6000	Ø260	Ø260	250	100 - 240V AC	50 - 60 Hz
GYD680-3	150 W	19.500 lm	5500 - 6000	Ø300	Ø300	250	100 - 240V AC	50 - 60 Hz

GYD620 SERIES EX-PROOF LED FLOODLIGHT (ALUMINUM BODY)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 24 ATEX-B US81	IP66

General Features

Body	Low copper aluminum alloy
Glass	Impact and high temperature resistant borosilicate glass
Gasket	Silicone rubber
Bolts and Screws	Stainless steel
Entry	1 x 3/4" NPT
Mounting Method	Ceiling, Wall, Pole



MSM Code	Power LED	Power Lumen	Color Temperature (Kelvin - K)	Dimensions (mm)			Input Voltage	Input Frequency
				L	W	H		
GYD620-0	50 W	6.250 lm	5500 - 6000	Ø270	Ø270	170	100 - 240V AC	50 - 60 Hz
GYD620-1	100 W	12.500 lm	5500 - 6000	Ø320	Ø320	170	100 - 240V AC	50 - 60 Hz
GYD620-2	150 W	18.750 lm	5500 - 6000	Ø360	Ø360	170	100 - 240V AC	50 - 60 Hz
GYD620-3	200 W	25.000 lm	5500 - 6000	Ø360	Ø360	170	100 - 240V AC	50 - 60 Hz
GYD620-4	240 W	30.000 lm	5500 - 6000	Ø400	Ø400	175	100 - 240V AC	50 - 60 Hz

GYD780L SERIES EX-PROOF STREET LIGHTINGS (ALUMINUM BODY)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 24 ATEX-B US81	IP66

General Features

Body	Low copper aluminum alloy
Glass	Impact and high temperature resistant borosilicate glass
Gasket	Silicone rubber
Bolts and Screws	Stainless steel
Entry	1 x Ø60 mm
Mounting Method	Pole



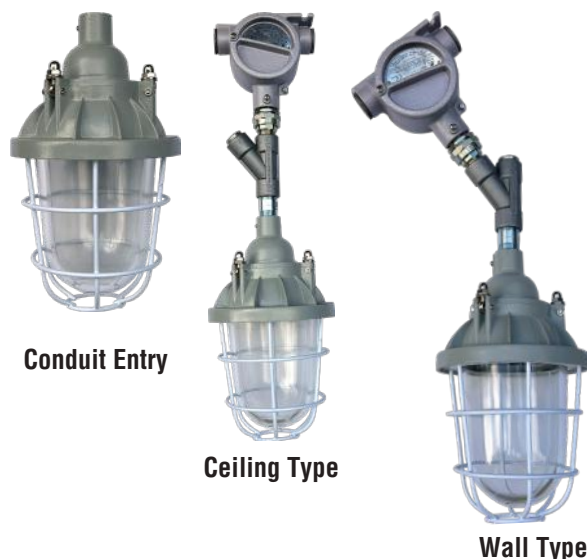
MSM Code	Power LED	Power Lumen	Color Temperature (Kelvin - K)	Dimensions (mm)			Input Voltage	Input Frequency
				L	W	H		
GYD7801L	50 W	6.000 lm	5500-6000	Ø350	Ø250	181	100 - 240V AC	50 - 60 Hz
GYD7802L	100 W	12.000 lm	5500-6000	Ø350	Ø250	185	100 - 240V AC	50 - 60 Hz
GYD7803L	150 W	18.000 lm	5500-6000	Ø430	Ø290	190	100 - 240V AC	50 - 60 Hz

BCD SERIES EX-PROOF GLOB LIGHTINGS (ALUMINUM BODY)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 24 ATEX-B US81	IP66

General Features

Body	Low copper aluminum alloy
Glass	Impact and high temperature resistant borosilicate glass
Gasket	Silicone rubber
Bolts and Screws	Stainless steel
Entry	1 x 3/4" NPT
Mounting Method	Ceiling, Wall, Conduit Entry



MSM Code	LED Bulb	Energy Saving Bulb	Metal Halide Bulb	Sodium Vapor Bulb	Input Voltage	Input Frequency	Weight (Kg)
BCD-100	E27-8 W	E27-15 W	—	—	220V AC	50 - 60 Hz	1.40
BCD-200	E27-15 W	E27-36 W	E27 (70/100/150 W)	E27 (70/100/150 W)	220V AC	50 - 60 Hz	2.00
BCD-200B	E27-15 W	E27-36 W	E27 (100/150/175 W)	E27 (100/150/175 W)	220V AC	50 - 60 Hz	2.87
BCD-250	E40-36 W	E40-105 W	E40 (250 W)	E40 (250 W)	220V AC	50 - 60 Hz	3.78
BCD-400	—	E40-150 W	E40 (400 W)	E40 (400 W)	220V AC	50 - 60 Hz	6.31

BCJ SERIES EX-PROOF EMERGENCY LIGHTING FIXTURES

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 24 ATEX-B US81	IP66

General Features

Body	Low copper aluminum alloy
Glass	Impact and high temperature resistant borosilicate glass
Gasket	Silicone rubber
Bolts and Screws	Stainless steel
Entry	1 x 3/4" NPT
Mounting Method	Pendant, Ceiling, Wall



MSM Code	Power LED	Dimensions (mm)			Input Voltage	Input Frequency	Battery Time	Weight (Kg)
		L	W	H				
BCJ	2x3 W	243	570	55	220V AC	50-60 Hz	120 min.	2,60

NOTE: • Internal maintenance-free battery pack, the battery is automatically charged when power is applied.

Emergency light turns on when power is cut.

- Equipped with Ex buzzer with 65dB-85dB sound. When the product is in fault condition, it will work for 1-3 seconds every minute.
- Lamp head can be rotated 270° from top to bottom and has a wide lighting range. Easy to install.
- Main power, charging, fault LED indicator allows you to easily know the status of the light.

BYY SERIES EX-PROOF EXIT

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 24 ATEX-B US81	IP66

General Features

Body	Low copper aluminum alloy
Glass	Impact and high temperature resistant borosilicate glass
Gasket	Silicone rubber
Bolts and Screws	Stainless steel
Entry	1 x 3/4" NPT
Mounting Method	Pendant, Ceiling, Wall



TYPE-C



TYPE-B

MSM Code	Power LED	Dimensions (mm)			Input Voltage	Input Frequency	Battery Time	Weight (Kg)
		L	W	H				
BYY	3 W	374	165	65	220V AC	50-60 Hz	120 min.	3,25
BYY-B	3 W	374	165	65	220V AC	50-60 Hz	120 min.	3,25
BYY-C	3 W	374	165	65	220V AC	50-60 Hz	120 min.	3,25

NOTE: • Internal maintenance-free battery pack, the battery automatically charges when power is applied.

Emergency light turns on when power is cut.

- Main, charge, fault LED indicator allows you to easily know the status of the light.

GYJ SERIES EX-PROOF SIREN (90 dB / 120 dB / 180 dB)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 24 ATEX-B US81	IP66

General Features

Body	Special aluminum alloy, anti-corrosion electrostatic Dust paint.
Glass	Impact and high temperature resistant borosilicate glass, transparent cover.
Gasket	Silicone rubber.
Bolts and Screws	Stainless steel.
Entry	1 x 3/4" NPT.
Mounting Method	Ceiling; Wall mounted.



GYJ-I Series (90 dB)



GYJ-II Series (120 dB)



GYJ-III Series (180 dB)

	24V				220V			
GYJ-I Series 90 dB	GYJ-I-24R 24V	GYJ-I-24G 24V	GYJ-I-24Y 24V	GYJ-I-24B 24V	GYJ-I-220R 220V	GYJ-I-220G 220V	GYJ-I-220Y 220V	GYJ-I-220B 220V
Color	Red	Green	Yellow	Blue	Red	Green	Yellow	Blue
Power	5-10 W	5-10 W	5-10 W	5-10 W	5-10 W	5-10 W	5-10 W	5-10 W
Noise Level	90 dB	90 dB	90 dB	90 dB	90 dB	90 dB	90 dB	90 dB
Weight	1,80 kg	1,80 kg	1,80 kg	1,80 kg	1,80 kg	1,80 kg	1,80 kg	1,80 kg

GYJ-II Series 120 dB	GYJ-II-24R 24V	GYJ-II-24G 24V	GYJ-II-24Y 24V	GYJ-II-24B 24V	GYJ-II-220R 220V	GYJ-II-220G 220V	GYJ-II-220Y 220V	GYJ-II-220B 220V
Color	Red	Green	Yellow	Blue	Red	Green	Yellow	Blue
Power	5 W	5 W	5 W	5 W	5 W	5 W	5 W	5 W
Noise Level	120 dB	120 dB	120 dB	120 dB	120 dB	120 dB	120 dB	120 dB
Weight	2,70 kg	2,70 kg	2,70 kg	2,70 kg	2,70 kg	2,70 kg	2,70 kg	2,70 kg

GYJ-III Series 180 dB	GYJ-III-24R 24V	GYJ-III-24G 24V	GYJ-III-24Y 24V	GYJ-III-24B 24V	GYJ-III-220R 220V	GYJ-III-220G 220V	GYJ-III-220Y 220V	GYJ-III-220B 220V
Color	Red	Green	Yellow	Blue	Red	Green	Yellow	Blue
Power	40 W	40 W	40 W	40 W	40 W	40 W	40 W	40 W
Noise Level	180 dB	180 dB	180 dB	180 dB	180 dB	180 dB	180 dB	180 dB
Weight	3,70 kg	3,70 kg	3,70 kg	3,70 kg	3,70 kg	3,70 kg	3,70 kg	3,70 kg

AC SERIES EX-PROOF PLUGS – SOCKETS (ALUMINUM BODY)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	0H230103.CEL0021	IP66

General Features

Body	Low copper aluminum alloy.
Gasket	Silicone rubber.
Bolts and Screws	Stainless steel.

NOTE:

- Plug and socket set is sold.
- Due to its special locking mechanism, it cannot be coupled with different brand products.



MSM Code	Current	Poles	Entry	Cable Gland Tightening Range	Input Voltage	Input Frequency
AC-16	16 A	2P+PE	1x3/4"	Ø9 - Ø14 mm	220V AC	50 - 60 Hz
AC-32	32 A	3P+N+PE	1x1 1/4"	Ø14 - Ø25 mm	380V AC	50 - 60 Hz

AC8060 SERIES EX-PROOF PLUGS – SOCKETS (POLYESTER BODY)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	0H230103.CEL0021	IP66

General Features

Body	Black, impact resistant fiberglass reinforced polyester.
Gasket	Silicone rubber.
Bolts and Screws	Stainless steel.
Mounting Method	Wall mounted

NOTE:

- Plug and socket set is sold.
- Due to its special locking mechanism, it cannot be coupled with different brand products.



MSM Code	Current	Poles	Entry	Cable Gland Tightening Range	Input Voltage	Input Frequency
AC8060-16	16 A	2P+PE	1x3/4"	Ø3 - Ø14 mm	220V AC	50 - 60 Hz
AC8060-16	16 A	3P+N+PE	1x3/4"	Ø3 - Ø14 mm	220V AC	50 - 60 Hz
AC8060-32	32 A	3P+N+PE	1x1"	Ø11 - Ø18 mm	380V AC	50 - 60 Hz
AC8060-63	63 A	3P+N+PE	1x1 1/2"	Ø17 - Ø28 mm	380V AC	50 - 60 Hz

ZXF8030 SERIES EX-PROOF CONTROL BOXES

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	0H230103.CEL0021	IP65

General Features

Body	Black, impact resistant fiberglass reinforced polyester.
Gasket	Silicone rubber.
Bolts and Screws	Stainless steel. 1x3/4" Cable gland included.
Mounting Method	Wall mounted.



MSM Code	Description	Entry	Input Voltage	Weight (kg)
ZXF8030-1	Ex Switch 0-1 Control Box	1x3/4"	10A - Max 415V AC	0,65
ZXF8030-2	Ex Emergency Stop Control Box	1x3/4"	10A - Max 415V AC	0,65
ZXF8030-3	Ex Start-Stop Control Box	1x3/4"	10A - Max 415V AC	0,85
ZXF8030-4	Ex Start- Stop-Emergency Stop Control Box	1x3/4"	10A - Max 415V AC	1,10
ZXF8030-5	Ex Start-Stop-Signal Control Box	1x3/4"	10A - Max 415V AC	1,10
ZXF8030-6	Ex Start-Stop-Signal-0/1 Switch Control Box	1x3/4"	10A - Max 415V AC	1,40

CJX SERIES EX-PROOF TERMINAL BOXES

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db eb IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	ECM 22 ATEX-B 0032	IP66

General Features

Body	Black, impact resistant fiberglass reinforced polyester.
Gasket	Silicone rubber.
Bolts and Screws	Stainless steel.
Mounting Method	Wall mounted.



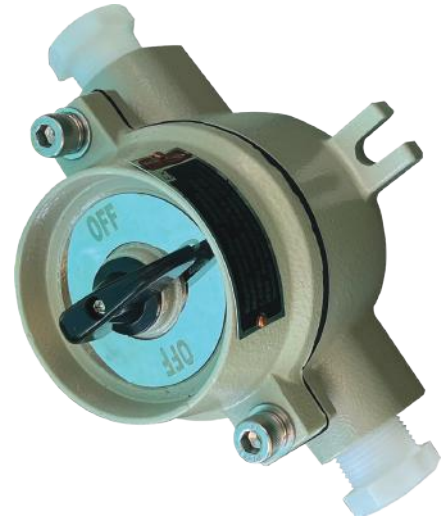
MSM Code	Dimensions (mm)	Weight (kg)	MSM Code	Dimensions (mm)	Weight (kg)
CJX-1	105x85x85	1,00	CJX-5	360x360x130	5,20
CJX-2	210x85x85	1,20	CJX-6	420x300x190	6,50
CJX-3	210x130x110	1,50	CJX-7	460x320x170	6,50
CJX-4	330x225x120	3,10	CJX-8	720x360x240	15,00

SW-10 SERIES EX-PROOF SWITCHES (ALUMINUM BODY)

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	0H230103.CEL0021	IP65

General Features

Body	Low copper aluminum alloy.
Gasket	Silicone rubber.
Bolts and Screws	Stainless steel.



MSM Code	Current	Poles	Entry	Cable Gland Tightening Range	Input Voltage	Input Frequency
SW-10	16 A	0-1	2x3/4"	Ø9 - Ø14 mm	220V AC	50 - 60 Hz

BNG SERIES EX-PROOF STAINLESS STEEL FLEXIBLE CONDUITS

Classification	Group II	Category 2G 2D
Installation:	Zone 1 / 2 (Gas)	Zone 21 / 22 (Dust)
Marking:	II 2G Ex db IIC T6 Gb	II 2D Ex tb IIIC T80°C Db
Standards:	0H230103.CEL0021	IP65

General Features

- BNG type spiral hoses are manufactured from 304 quality stainless material.
- Both ends of spiral hoses have 304 stainless fittings.
- The fittings are movable and Male-Male, and can be used as Male-Female or Female-Female by removing the nipples at the end.
- It can be manufactured with Gas thread and different lengths upon request.



MSM Code	Thread Size	Length (cm)	Min. Bending Diameter (mm)	MSM Code	Thread Size	Length (cm)	Min. Bending Diameter (mm)
BNG-1-50	1/2" NPT	50	80	BNG-1-100	1/2" NPT	100	80
BNG-2-50	3/4" NPT	50	110	BNG-2-100	3/4" NPT	100	110
BNG-3-50	1" NPT	50	145	BNG-3-100	1" NPT	100	145
BNG-4-50	1 1/4" NPT	50	180	BNG-4-100	1 1/4" NPT	100	180
BNG-5-50	1 1/2" NPT	50	210	BNG-5-100	1 1/2" NPT	100	210
BNG-6-50	2" NPT	50	250	BNG-6-100	2" NPT	100	250
BNG-8-50	3" NPT	50	400	BNG-8-100	3" NPT	100	400
BNG-9-50	4" NPT	50	500	BNG-9-100	4" NPT	100	500



www.exproof.info

ATEX certified ex-proof electric materials



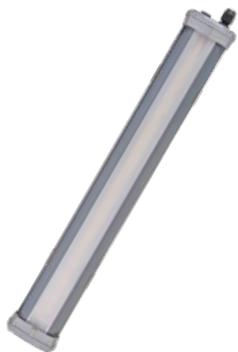
EAC

CE

- ◆ Ex-Proof Linear Fixtures
- ◆ Ex-Proof Glob Fixtures
- ◆ Ex-Proof Led Floodlights
- ◆ Ex-Proof Portable Fixtures
- ◆ Ex-Proof Zone 2 Fixtures
- ◆ Ex-Proof Emergency Fixtures

- ◆ Ex-Proof Conduit Fittings
- ◆ Ex-Proof Enclosures Boxes & J.Boxes
- ◆ Ex-Proof Switches
- ◆ Ex-Proof Plugs & Sockets
- ◆ Ex-Proof Warning Systems
- ◆ Ex-Proof Other Products

LifEx-PE SERIES EX LED LINEAR LIGHTING FIXTURES



GAS: II2G Ex db eb mb IIC T.. Gb
Dust: II2D Ex tb IIIC T..°C Db IP66
 Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CML 21 ATEX 31405X

IECEx: IECEx CML 21.0168X

- UV resistant, IK09 impact resistant, RAL 7015 and **7045 GRP Grey body.**
- Transparent polycarbonate UV and impact resistant IK09 glass.
- 2 x M20x1.5 entry.
- Including 1 Cable Gland and 1 Blind Plug.

Code No	Watt	Lumen (lm)	Weight (kg)	Input Voltage
LifEx-PE-0315	15 W	1586	2,2	220-240V AC
LifEx-PE-0330	30 W	2957	2,2	220-240V AC
LifEx-PE-0615	15 W	1637	2,5	220-240V AC
LifEx-PE-0630	30 W	3220	2,8	110-277V AC
LifEx-PE-0645	45 W	5037	2,8	110-277V AC
LifEx-PE-0660	60 W	6548	2,8	110-277V AC
LifEx-PE-1230	30 W	3091	4,3	110-277V AC
LifEx-PE-1260	60 W	6390	4,3	110-277V AC
LifEx-PE-1290	90 W	9503	4,3	120-277V AC
LifEx-PE-12120	120 W	12449	4,3	220-277V AC

LifEx-ME SERIES EX LED LINEAR LIGHTING FIXTURES



GAS: II2G Ex db eb mb IIC T.. Gb

Dust: II2D Ex tb IIIC T..°C Db IP66

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CML 20 ATEX 3018X

IECEx: CML 20.0008X

- Corrosion resistant **Aluminum alloy outer body.**
- Impact, impact and UV resistant glass.
- 2 x M20x1.5 entry.
- Including 1 Cable Gland and 1 Blind Plug.

Code No	Watt	Lumen (lm)	Weight (kg)	Input Voltage
LifEx-ME-0315	15 W	1865	1,5	220-240V AC
LifEx-ME-0615	15 W	2008	2,5	220-240V AC
LifEx-ME-0630	30 W	3677	2,5	110-277V AC
LifEx-ME-0645	45 W	6200	2,5	110-277V AC
LifEx-ME-0660	60 W	8011	2,5	110-277V AC
LifEx-ME-1230	30 W	4112	3,5	110-277V AC
LifEx-ME-1260	60 W	8316	3,5	110-277V AC
LifEx-ME-1290	90 W	12228	3,5	220-240V AC
LifEx-ME-12120	120 W	16029	3,4	220-240V AC
LifEx-ME-1590	90 W	11926	4,0	220-240V AC

RB LED SERIES EX LED FLUORESCENT FIXTURES



GAS: II2G Ex e d mb IIC T4 Gb

Dust: II2D Ex tb IIIC T135°C Db IP66

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: ExVeritas 17 ATEX 0288 X

- Corrosion resistant **GRP Grey body.**
- Transparent polycarbonate and impact resistant glass.
- 4 x M20x1.5 entry.

Code No	A (mm)	B (mm)	C (mm)	Lamp Power
RB 250 LED	1310	145	210	2x50 W - 11200 lm
RB 150 LED	1310	145	210	1x50 W - 5600 lm
RB 230 LED	1310	145	210	2x30 W - 7000 lm

1-RB...LED MS : Cover Micro Switch

2-RB...LED EM2H: Emergency Kit 2 Hours

3-RB...LED EM3H: Emergency Kit 3 Hours

FLF...L SERIES EX LED FLUORESCENT FIXTURES



GAS: II2G Ex db op is IIC T6 Gb

Dust: II2D Ex tb op is IIIC T..°C Db IP66

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CESI 09 ATEX 008

IECEx: CES 11.0021

- Corrosion resistant **aluminum alloy outer body.**
- Impact and high temperature resistant borosilicate glass.
- 2 x 3/4" entry.

Code No	Watt	Lumen (lm)	Weight (kg)	Input Voltage
FLF-111L	11 W	925	4,5	220-240V AC
FLF-211L	11 W	1850	4,5	220-240V AC
FLF-122L	22 W	2150	7,3	220-240V AC
FLF-222L	22 W	4300	7,3	220-240V AC
FLF-131L	31 W	2700	9,0	220-240V AC
FLF-231L	31 W	5400	9,0	220-240V AC

NOTE: For detailed information and ATEX documents of all our Exproof products, please visit our website www.exproof.info.

SLED SERIES EX LED FLOODLIGHT



GAS: II2G Ex de IIB+H 2 T5/T6 Gb
Dust: II2D Ex tb IIIC T..°C Db IP66
 Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CEC 15 ATEX 178

IECEx: IECEx CML 17.0004

- Corrosion resistant aluminum alloy outer body.
- Impact and temperature resistant tempered glass.
- 2 x M20x1.5 entry.

Code No	Watt	Lumen (lm)	Weight (kg)	Input Voltage
SLED-250	122 W	12387	13,5	100-277V AC
SLED-400	194 W	20744	20,3	120-277V AC
SLED-600	290 W	30799	32,4	120-277V AC

EVL SERIES EX LED FLOODLIGHT



GAS: II2G Ex de IIC T.. Gb

Dust: II2D Ex tb IIIC T..°C Db IP66
 Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: ITS 14 ATEX 1814

IECEx: IECEx ITS 14.0061

- Corrosion resistant aluminum alloy outer body.
- Impact and temperature resistant tempered glass.
- 2 x M20x1.5 entry.

Code No	Watt	Lumen (lm)	Weight (kg)	Input Voltage
EVL-60	27 W	3140	3,5	120-277V AC
EVL-70	53 W	6564	5,2	120-277V AC
EVL-80	86 W	9732	7,2	220-240V AC
EVL-100	154 W	19125	11,2	100-277V AC

FLOWEX SERIES EX LED FLOODLIGHT



GAS: II2G Ex db eb mb IIC T.. Gb
Dust: II2D Ex tb IIIC T..°C Db - IP66
 Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CML 21 ATEX 3606X

IECEx: IECEx CML 21.0070X

- Corrosion resistant aluminum alloy outer body.
- Impact and temperature resistant tempered glass.
- 1 x M20x1.5 entry.

Code No	Watt	Lumen (lm)	Weight (kg)	Input Voltage
FLOWEX-ME-060030	30 W	4785	3,2	100-277V AC
FLOWEX-ME-060040	40 W	5531	3,2	100-277V AC
FLOWEX-ME-060050	50 W	6389	3,2	100-277V AC
FLOWEX-ME-060060	60 W	7285	3,2	100-277V AC
FLOWEX-ME-080070	70 W	9547	4,2	100-277V AC
FLOWEX-ME-080080	80 W	10646	4,2	100-277V AC
FLOWEX-ME-080090	90 W	11641	4,2	100-277V AC
FLOWEX-ME-080100	100 W	12708	4,2	100-277V AC
FLOWEX-ME-100120	120 W	17687	7,8	100-277V AC
FLOWEX-ME-100140	140 W	20154	7,8	100-277V AC
FLOWEX-ME-100160	160 W	22422	7,8	100-277V AC
FLOWEX-ME-100180	180 W	24218	7,8	100-277V AC
FLOWEX-ME-100200	200 W	25709	7,8	100-277V AC
FLOWEX-ME-100220	220 W	27961	7,8	100-277V AC

LFED SERIES EX LED FLOODLIGHT



GAS: II2G Ex db op is IIB+H2 T6 Gb

Dust: II2D Ex tb op is IIIC T..°C Db IP66
 Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: EPT 18 ATEX 2969 X

IECEx: IECEx SEV 18.0018X

- Corrosion resistant aluminum alloy outer body.
- Impact and temperature resistant tempered glass.
- 2 x M20x1.5 entry.

Code No	Watt	Version	Input Voltage
LFED-112	12 W	Normal	110-240V AC
LFED-112E	12 W	Emergency	110-240V AC
LFED-112N	12 W	Normal+Emergency	110-240V AC

empty	=	EXIT	=	EXIT
/S	=	←	=	EXIT FROM THE LEFT
/D	=	→	=	EXIT FROM THE RIGHT
/G	=	↓	=	GO STRAIGHT AHEAD
/T	=		=	TRANSPARENT

NOTE: For detailed information and ATEX documents of all our Exproof products, please visit our website www.exproof.info.

BJD 81 SERIES EX-PROOF CAUTION LIGHT



- GAS:** II2G Ex d IIC T6 Gb
Dust: II2D Ex tb IIIC T180°C Db
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: LCIE 11 ATEX 3109X
IECEX: IECEX CQM 12.0038X
- Corrosion resistant aluminum alloy outer body.
 - Impact resistant toughened glass.
 - 150/min flash flash,
 - 220V AC and 24V DC options, 4x3/4" entry.

24V Code No	Color	Lamp Power	Dimensions (mm)	Weight (kg)
BJD81-R-24V	Kırmızı	3W LED	Ø146x230	2,50
BJD81-Y-24V	Sarı	3W LED	Ø146x230	2,50
BJD81-G-24V	Yeşil	3W LED	Ø146x230	2,50
BJD81-B-24V	Mavi	3W LED	Ø146x230	2,50
220V Code No	Color	Lamp Power	Dimensions (mm)	Weight (kg)
BJD81-R-220V	Kırmızı	3W LED	Ø146x230	2,50
BJD81-Y-220V	Sarı	3W LED	Ø146x230	2,50
BJD81-G-220V	Yeşil	3W LED	Ø146x230	2,50
BJD81-B-220V	Mavi	3W LED	Ø146x230	2,50

BDD81 SERIES LIGHTING FIXTURES



- GAS:** II2G Ex d IIC T4 Gb
Dust: II2D Ex t IIIC T130°C Db IP66
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: LCIE 11 ATEX 3110X
IECEX: —
- Corrosion resistant aluminum alloy outer body.
 - Impact resistant toughened glass.
 - 220-240V AC, 50/60 Hz.
 - Ceiling type mounting.
 - 4x3/4" entry.

Code No	E27 Bulb	LED Bulb	Dimensions (mm)	Weight (kg)
BDD81-LED	25 W	3 W	Ø146x250	2,50
CEILING TYPE	40 W	5 W	Ø146x250	2,50
	60 W	8 W	Ø146x250	2,50
	100W	—	Ø146x250	2,50
BDD81-H	Hooked	Portable	Ø146x330	2,70
BDD81-G	J.Box	Pendant Type	Ø146x715	4,50

BBJ81 SERIES EX-PROOF CAUTION LIGHT WITH SIREN



- GAS:** II2G Ex d ib IIC T6 Gb
Dust: II2D Ex t IIIC T80 Db IP66
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: LCIE 11 ATEX 3111X
IECEX: IECEX CQM 12.0035X
- Corrosion resistant aluminum alloy outer body.
 - Impact resistant toughened glass.
 - 150/min flash, 100~120 dB (R=1m)
 - 220V AC and 24V DC options, 3x3/4" entry.

24V Code No	Color	Lamp Power	Dimensions (mm)	Weight (kg)
BBJ81-R-24V	Kırmızı	5W LED	Ø146x230	2,60
BBJ81-Y-24V	Sarı	5W LED	Ø146x230	2,60
BBJ81-G-24V	Yeşil	5W LED	Ø146x230	2,60
BBJ81-B-24V	Mavi	5W LED	Ø146x230	2,60
220V Code No	Color	Lamp Power	Dimensions (mm)	Weight (kg)
BBJ81-R-220V	Kırmızı	5W LED	Ø146x230	2,60
BBJ81-Y-220V	Sarı	5W LED	Ø146x230	2,60
BBJ81-G-220V	Yeşil	5W LED	Ø146x230	2,60
BBJ81-B-220V	Mavi	5W LED	Ø146x230	2,60

EV.. SERIES LIGHTING FIXTURES



- GAS:** II 2G Ex d IIC T.. Gb
Dust: II 2D Ex tb IIIC T.. °C Db
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: CESI 12 ATEX 006
IECEX: IECEX CES 07.0004
- Corrosion resistant aluminum alloy outer body.
 - RAL 7035 (Light gray) painted.
 - Impact and high temperature resistant borosilicate glass.
 - 3/4" NPT entry.

Code No	Mounting Type	Dimensions (mm)	Lamp Holder	Weight (kg)
EVA-5050	Conduit Entry	Ø150x261	E27	2,00
EVA-5060	Conduit Entry	Ø170x323	E27	2,70
EVX-5050	Ceiling Type	Ø150x260	E27	2,40
EVX-5060	Ceiling Type	Ø170x322	E27	3,20
EVGC-5050	Hanger Hook	Ø150x296	E27	2,10
EVGC-5060	Hanger Hook	Ø170x358	E27	2,80
EVIX-5050	Wall Type	Ø150x285	E27	2,90
EVIX-5060	Wall Type	Ø170x339	E27	3,70

NOTE: For detailed information and ATEX documents of all our Exproof products, please visit our website www.exproof.info.

SPH SERIES EX-PROOF FLEXIBLE CONDUITS



GAS: II2G Ex db IIB Gb Ex tb IIIC Db
Dust: II2D Ex db IIC Gb Ex tb IIIC Db
 Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CESI 00 ATEX 048U

IECEx: IECEx CES 14.0011U

- Spiral conduits are manufactured from 304 quality stainless material.
- Both ends of spiral conduits have self-fixing male-male galvanized fittings.

50 cm Code No	100 cm Code No	Thread Size	Ø min. Inner Diameter	Bending Diameter (mm)
SPH15G	SPH110G	1/2"	12,0	40
SPH25G	SPH210G	3/4"	16,0	60
SPH35G	SPH310G	1"	25,1	75
SPH45G	SPH410G	1 1/4"	32,2	90
SPH55G	SPH510G	1 1/2"	38,2	110
SPH65G	SPH610G	2"	50,1	150
SPH75G	SPH710G	2 1/2"	63,1	200
SPH85G	SPH810G	3"	73,1	225
SPH105G	SPH1010G	4"	100,1	280

EYS / EZS SERIES EX-PROOF SEALING FITTINGS



GAS: II2G Ex d IIC Gb

Dust: II2D Ex td IIIC Db IP66

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CESI 03 ATEX 085

IECEx: CESI 03 ATEX 085

- Corrosion resistant aluminum alloy outer body.
- Standard ISO 7/1 thread.
- NPT thread can be produced upon request.

Vertical Code No	Sealing Compound (gr)	Horizontal Code No	Sealing Compound (gr)	Thread Size
EYS1	35	EZS1	150	1/2"
EYS2	50	EZS2	140	3/4"
EYS3	100	EZS3	140	1"
EYS4	240	EZS4	390	1 1/4"
EYS5	240	EZS5	390	1 1/2"
EYS6	380	EZS6	570	2"
EYS7	1250	EZS7	1000	2 1/2"
EYS8	1250	EZS8	1000	3"
EYS10	1500	EZS10	1250	4"

ELF SERIES EX-PROOF ELBOW



GAS: II2G Ex db IIC Gb

Dust: II2D Ex tb IIIC Db IP66/67

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CESI 01 ATEX 104U

IECEx: IECEx CES 15.0005U

- Corrosion resistant aluminum alloy outer body.
- Standard ISO 7/1 thread.
- NPT thread can be produced upon request.

Code No	Thread Size	A (mm)	H (mm)	R (mm)
ELF1	1/2"	60	45	30
ELF2	3/4"	75	55	30
ELF3	1"	85	65	35
ELF4	1 1/4"	100	75	50
ELF5	1 1/2"	110	87	50
ELF6	2"	135	98	60
ELF7	2 1/2"	175	135	65
ELF8	3"	210	160	85
ELF10	4"	270	200	150

LBH SERIES EX-PROOF CABLE PULLING BOXES



GAS: II2G Ex d IIB

Dust: —

Zone 1 - Zone 2

ATEX: II 2 G Ex d IIB

IECEx: —

- Corrosion resistant aluminum alloy outer body.
- Standard ISO 7/1 thread.
- NPT thread can be produced upon request.

Code No	Thread Size	A (mm)	H (mm)	R (mm)
LBH1	1/2"	70	165	21
LBH2	3/4"	70	165	21
LBH3	1"	70	168	30
LBH4	1 1/4"	100	230	50
LBH5	1 1/2"	110	265	70
LBH6	2"	110	265	70
LBH7	2 1/2"	136	363	96
LBH8	3"	136	363	96
LBH10	4"	181	720	125

NOTE: For detailed information and ATEX documents of all our Exproof products, please visit our website www.exproof.info.

SAG SERIES EX PLUG-SOCKET COMBINATION BOXES



GAS: II2G Ex eb IIC T6/T5/T4 Gb
: II2D Ex tb IIIC T..°C Db IP66
Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CECI 03 ATEX 333

IECEx: IECEx CES 13.0001

- Corrosion resistant aluminum alloy outer body.
- Sockets, wall type mounting ears.
- Special locking mechanism.

Code No	Panel External Dimensions	Plug-socket Scope
SAG-302318	305x230x180 mm	1 MONO PHASE-1 THREE PHASE
SAG-473018	475x305x195 mm	2 MONO PHASE-1 THREE PHASE
SAG-473018	475x305x195 mm	1 MONO PHASE-2 THREE PHASE
SAG-623018	625x305x195 mm	2 MONO PHASE-2 THREE PHASE

EJB SERIES EX PLUG-SOCKET COMBINATION BOXES



GAS: II2G Ex db IIB+H2 Gb

Dust: II2D Ex tb IIIC Db - IP66/67

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CECI 00 ATEX 036U

IECEx: IECEx CES 14.0017U

- Corrosion resistant aluminum alloy outer body.
- Stainless steel hinged panel.
- Sockets, wall type mounting ears.
- Special locking mechanism.

Code No	Panel External Dimensions	Plug-socket Scope
EJB31A	415x315x259 mm	1 MONO PHASE-1 THREE PHASE
EJB51A	566x366x269 mm	2 MONO PHASE-1 THREE PHASE
EJB51A	566x366x269 mm	1 MONO PHASE-2 THREE PHASE
EJB61A	670x470x245 mm	2 MONO PHASE-2 THREE PHASE

DMTB SERIES EX ELECTRONIC GROUNDING SYSTEM



GAS: II2G Ex d IIB / Ex d IIB+H2 T6

Dust: II2D Ex tD A21 T80°C IP65/IP66

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CEC -10ATEX 036

IECEx: —

- Corrosion resistant aluminum alloy outer body.
- RAL7035 Light Gray painted.
- 305x206x157 mm Ex box with Start, Red - Green signal and 1 Piece 0-1 Position key included.

Code No	Input Voltage	Input Frequency	Entry Size	Weight (kg)
DMTB 20R	230 V	50-60 Hz	3x3/4"	14
DMT 20/3	GROUNDING CLIPS			
DMT 20/4	GROUNDING CABLE (2x2,5mm ²)			

GRD-4200 SERIES EX ELECTRONIC GROUNDING SYSTEM



GAS: II2G Ex d [ia Ga] ia IIB+H2 T6 Gb

Dust: II2D Ex tb [ia Da] ia IIIC T85°C Db

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CECI 04 ATEX 129

IECEx: IECEx CES 14.0035X

- Corrosion resistant aluminum alloy outer body.
- RAL7035 Light Gray painted.
- PZCC-4209 Earthing Clamp.
- 8 mt Yellow fireproof cable.

Code No	Input Voltage	Input Frequency	Entry Size	Weight (kg)
GRD-4200	230 V	50-60 Hz	2x3/4"	20
GRD-4200/110	110 V	50-60 Hz	2x3/4"	20
GRD-4200/24	24 V	0 / 50-60 Hz	2x3/4"	20

ETH 20MD SERIES EX ELECTRONIC SIREN



GAS: II2G Ex d IIB / Ex d IIB+H2 T6

Dust: II2D Ex tD A21 T80°C IP65/IP66

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CEC -10ATEX 036

Code No	Input Voltage	Input Frequency	Power	Sound Level
ETH 20MD	230 V / 24 V	440-550 Hz	4 W	101 ÷ 104 dB

ETH20MDLOUD/TR SERIES EX SPEAKER



GAS: II2G Ex d [ia Ga] ia IIB+H2 T6 Gb

Dust: II2D Ex tb [ia Da] ia IIIC T85°C Db

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CECI 04 ATEX 129

Code No	Input Voltage	Input Frequency	Power	Sound Level
ETH20MDLOUD/TR	100 V	650-10000 Hz	6-25 W	100 - 112 dB

NOTE: For detailed information and ATEX documents of all our Exproof products, please visit our website www.exproof.info.

S.. SERIES EX JUNCTION BOXES



GAS: II2G Ex d IIC T... Gb
Dust: II2D Ex tb IIIC T... Db - IP66/67
 Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CESI 02 ATEX 091

IECEx: IECEx CES 14.0018X

- Corrosion resistant aluminum alloy outer body.
- Standard ISO 7/1 thread.
- NPT thread can be produced upon request.

SL.. Code No	SC.. Code No	ST.. Code No	SX.. Code No	Thread Size ISO 7/1
SL-16.1	SC-16.1	ST-16.1	SX-16.1	1/2"
SL-26.1	SC-26.1	ST-26.1	SX-26.1	3/4"
SL-36.1	SC-36.1	ST-36.1	SX-36.1	1"
SL-59.1	SC-59.1	ST-59.1	SX-59.1	1 1/2"
SL-69.1	SC-69.1	ST-69.1	SX-69.1	2"

CCA-...E EX JUNCTION BOXES



GAS: II2G Ex db IIC Gb

Dust: II2D Ex tb IIIC Db - IP66

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CESI 03 ATEX 174X

IECEx: IECEx CES 16.0015X

- Corrosion resistant aluminum alloy outer body.
- Cover with safety fixing screw.
- Heat resistant cover gasket.
- Painted in RAL 7035 Light Grey.

Code No	A (mm)	B (mm)	C (mm)	Mounting Plate Dimen. (mm)
CCA-0E	128	128	133	111x138
CCA-01E	145	145	135	128x150
CCA-02E	195	195	159	175x175
CCA-03E	240	240	228	213x213
CCA-04E	385	385	294	339x339

SA-SAG SERIES EX TERMINAL BOXES



GAS: II2G Ex eb IIC T6/T5/T4 Gb

Dust: II2D Ex tb IIIC T...°C Db IP66

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CESI 03 ATEX 333

IECEx: IECEx CES 13.0001

- Corrosion resistant aluminum alloy outer body.
- Heat resistant lid gasket.
- Painted in RAL 7035 Light Grey.
- **SA.. series, light series, thin walled.**
- **SAG.. series, heavy series, thick**

Code No	A (mm)	B (mm)	C (mm)	Mounting Plate Dimen. (mm)
SA141410	147	147	100	131x131
SAG141410	147	147	100	131x131
SA202012	200	200	120	180x180
SA301410	305	147	110	285x127
SAG301410	305	147	96	285x127
SA302310	305	230	110	285x210
SAG302310	305	230	100	285x210
SA302318	305	230	190	285x210
SAG302318	305	230	180	285x210
SA473018	475	305	195	450x285
SAG473018	475	305	195	450x285
SAG623018	625	305	195	605x285

EJB SERIES EX ENCLOSURES BOXES



GAS: II2G Ex db IIB+H2 Gb

Dust: II2D Ex tb IIIC Db - IP66/67

Zone 1 - Zone 21 - Zone 2 - Zone 22

ATEX: CESI 00 ATEX 036U

IECEx: IECEx CES 14.0017U

- Corrosion resistant aluminum alloy outer body.
- Stainless steel hinges.
- Heat resistant lid seal.
- RAL 7035 Light Grey painted.

Code No	A (mm)	B (mm)	C (mm)	Mounting Plate Dimen. (mm)
EJB-1A	304	204	218	230x130
EJB-2A	424	224	218	350x150
EJB-3A	364	284	278	290x210
EJB-3BA	364	284	218	290x210
EJB-4	432	332	299	350x250
EJB-4B	432	332	229	350x250
EJB-45	567	387	298	360x236
EJB-45B	567	387	248	360x236
EJB-5	632	432	341	350x550
EJB-5B	632	432	271	350x550
EJB-55	710	510	356	600x400
EJB-6	870	650	480	680x460

NOTE: For detailed information and ATEX documents of all our Exproof products, please visit our website www.exproof.info.

BZC 8050 SERIES ALUMINUM CONTROL BOXES



- GAS:** II2G Ex de IIC T6
Dust: II2D Ex td A21 T80 IP65
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: LCIE 09 ATEX 3099
IECEx: IECEx CQM 11. 0029
- Corrosion resistant aluminum alloy outer body.
 - RAL7040 Gray painted.
 - 10A, Max. 415V AC.

Code No	Description
BZC 8050-A1 (40092B)	Start Control Box
BZC 8050-A1 (40092A)	Stop Control Box
BZC 8050-A1 (40096)	Emergency Stop Control Box
BZC 8050-A2 (40092BA)	Start-Stop Control Box
BZC 8050-A1D1 A	Start-Emergency Stop Control Box
BZC 8050-A2D1-220V	Start-Stop-Red Signal (220V) Control Box
BZC 8050-A2D1-24V	Start-Stop-Red Signal (24V) Control Box
BZC 8050-A3(92B-92A-92C)	Start-Stop-Start Control Box
BZC 8050-A3(92B-92A-96)	Start-Stop-Emergency Stop Control Box

BZA 8050 SERIES POLYESTER CONTROL BOXES



- GAS:** II2G Ex de IIC T6 Gb
Dust: II2D Ex tb IIIC T80°C Db IP65
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: LCIE 09 ATEX 3097
IECEx: IECEx CQM 11.0018
- Corrosion resistant GRP Black body.
 - 10A, Max. 415V AC.
 - 1 x M25x1.5 Input.
 - 1 pc. Cable Gland included.

Code No	Description
BZA 8050-A1 (40063A)	Stop Control Box
BZA 8050-A1 (40063B)	Start Control Box
BZA 8050-A1 (40064)	Emergency Stop Control Box
BZA 8050-A1 (40065B)	Switch 0-1 Control Box
BZA 8050-A2 (40066)	Start-Stop Control Box
BZA 8050-A2D1 220V	Start- Stop-Red Signal (220V) Control Box
BZA 8050-A2D1 24V	Start- Stop-Red Signal (24V) Control Box
BZA 8050-A3 (40071)	Start-Stop-Emergency Stop Control Box
BZA 8050-A3 (40072)	Start- Stop-Switch 0-1 Control Box

EFDC SERIES SWITCHES



- GAS:** II2G Ex d IIC T4 ÷ T5
Dust: II2D Ex tb IIIC T95°C ÷ T130°C
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: CEC 14 ATEX 015
IECEx: —
- Corrosion resistant aluminum alloy outer body.
 - RAL7040 Gray painted.
 - 10A, Max. 415V AC.

Code No	Number of Poles	Current	Contact Type	Entry Size
FSPC-210	2	16A	0-1	2x3/4"
FSPC-410	4	16A	0-1	2x3/4"
FSPC-325	3	32A	0-1	2x3/4"
FSPC-425	4	32A	0-1	2x3/4"
EFD 7-	2	16A	0-1-2	2x3/4"
EFD 502	2	16A	1-0-2	2x3/4"
EFD 503	3	32A	1-0-2	2x3/4"
EFD 52	2	16A	1-2	2x3/4"
EFD 53	3	32A	1-2	2x3/4"

FCC SERIES LIMIT SWITCHES (FOOT PEDAL & FLOAT)

FCC 72G
Float

- GAS:** II2G Ex d IIC T6
Dust: II2D Ex td A21 T85°C
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: CEC 10 ATEX 141
IECEx: —
- Corrosion resistant aluminum alloy outer body.
 - 1/2" Entry, Z11 Contact (1NO+1NC).
 - RAL7040 Gray painted.
 - 10A, Max. 690V AC.

Code No		FCC 10P Foot Pedal
FCC 11		
FCC 12		
FCC 13		
FCC 32		
FCC 42		
FCC 52		
FCC 93		
FCC 72G		
FCC 10P		

NOTE: For detailed information and ATEX documents of all our Exproof products, please visit our website www.exproof.info.

BCZ 85 SERIES PLUG AND SOCKETS



- GAS:** II2G Ex d IIC T6 Gb
Dust: II2D Ex t IIIC T80°C Db IP66
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: NEMKO 12 ATEX 1044
IECEx: IECEx CQM 12.0015
- Corrosion resistant aluminum alloy outer body.
 - Wall type mounting ears.
 - Colored and safety chain cover (Blue Single Phase, Red Three Phase).
 - Special locking mechanism.

Plug and Socket Code	Input Voltage	Current	Entry Size
BCZ85-16 / 250 / 3P	200/250 V	16 A	2x3/4" + 1x3/4"
BCZ85-32 / 415 / 5P	380/415 V	32 A	2x3/4" + 1x3/4"
BCZ85-63 / 415 / 5P	380/415 V	63 A	2x1 1/2" + 1x1"
BCZ85-125 / 415 / 5P	380/415 V	125 A	2x2" + 1x1 1/2"

FSQ-BP SERIES PLUG AND SOCKETS



- GAS:** II2G Ex d IIC T6 Gb
Dust: II2D Ex tb IIIC T180°C Db IP66
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: CESI 01 ATEX 37
IECEx: —
- Corrosion resistant aluminum alloy outer body.
 - Wall type mounting ears.
 - Cover with safety chain.
 - Special locking mechanism.

Socket Code	Plug Code	Input Voltage	Current	Entry Size
FSQ 215A	BP 215A	200/250 V	25 A	2x1" + 1x3/4"
FSQ 325A	BP 325A	380/415 V	32 A	2x1" + 1x3/4"
FSQ 425A	BP 425A	380/415 V	32 A	2x1" + 1x3/4"
FSQ 360A	BP 360A	380/415 V	63 A	2x1 1/2" + 1x1"
FSQ 460A	BP 460A	380/415 V	63 A	2x1 1/2" + 1x1"

BSX-60 SERIES EX PORTABLE LAMP



- GAS:** II2G Ex de IIC T4
Dust: —
 Zone 1 - Zone 2
ATEX: LCIE 07 ATEX 6028
- With control knob, Black plastic handle.

Code No	Input Voltage	Lamp Holder	Lamp Power	Entry Size
BSX-60	230V / 24V	E27	25W-40W-60W	1xM25

PYN-SPYN SERIES PLUG AND SOCKETS



- GAS:** II2G Ex db eb IIC T... Gb
Dust: II2D Ex tb IIIC T...°C Db IP66
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: IMQ 20 ATEX 049X
IECEx: IECEx IMQ 21.0003X
- Corrosion resistant aluminum alloy outer body.
 - Wall type mounting ears.
 - Colored and safety chain cover (Blue Single Phase, Red Three Phase).
 - Special locking mechanism.

Socket Code	Plug Code	Input Voltage	Current	Entry Size
PYN..16..	SPYN..16..	200/250 V	16 A	2x3/4"
PYN..32..	SPYN..32..	380/415 V	32 A	2x1"
PYN..63..	SPYN..63..	380/415 V	32 A	3x1 1/2"
PYN..125..	SPYN..125..	380/415 V	32 A	3x1 1/2"

BCZ 8060 SERIES GRP PLUG AND SOCKETS



- GAS:** II2G Ex de IIC T6
Dust: II2D Ex tb IIIC T80°C Db IP65
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: EUT 14 ATEX 1153
IECEx: IECEx CQM 13.0043X
- Corrosion resistant GRP Black body.
 - Wall type mounting ears.
 - Special locking mechanism.

Plug and Socket Code	Input Voltage	Current	Entry Size
BCZ8060-16 / 250 / 3P	200/250 V	16 A	1xM25 / 1xM25
BCZ8060-16 / 415 / 5P	380/415 V	16 A	1xM25 / 1xM25
BCZ8060-32 / 415 / 5P	380/415 V	32 A	1xM40 / 1xM40
BCZ8060-63 / 415 / 5P	380/415 V	63 A	1xM50 / 1xM50
BCZ8060-125 / 415 / 5P	380/415 V	125 A	1xM63 / 1xM63

EVP 50 SERIES EX PORTABLE LAMP



- GAS:** II 2G Ex d IIC T3 ÷ T5 Gb
Dust: II 2D Ex tb IIIC T95°C ÷ T295°C Db
 Zone 1 - Zone 21 - Zone 2 - Zone 22
ATEX: CEC 10 ATEX 035
- Aluminum body, Metal handle.

Code No	Input Voltage	Lamp Holder	Lamp Power	Entry Size
EVP 50	230V	E27	25W-40W-60W	1x1/2"

NOTE: For detailed information and ATEX documents of all our Exproof products, please visit our website www.exproof.info.

(BELONGS TO MSM BRANDED PRODUCTS)

IEP ENERGY PETROLEUM INSTITUTE **IEP ATEX**

(1) **EU-Type Examination Certificate**

(2) **Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres**
Directive 2014/34/EU

(3) EU - Type Examination Certificate Number: **IEP 19 ATEX 0708X**

(4) Product: **M-VEN-M and M-VEN-N Series Unarmoured Cable Glands**

(5) Firm Name **MSM Mühendislik Elektromekanik San. Tic. Ltd. Şti.**

(6) Firm Address: **Barbaros Mah. Evren Cad. No : 38 Ataşehir / İSTANBUL**

(7) This product any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyonu Tic. Ltd. Şti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in confidential Report Nr : IEP.Rp.Ex.10-1492 date 24.06.2019.

(9) Compliance with Essential Health and safety requirements has been assured by compliance with;

EN 60079-0:2013, EN 60079-1:2014, EN 60079-7:2015, EN 60079-31:2014

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the directive 2014/34/EU. Further requirements of the directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:

**Ex I M2 Ex db/eb I Mb
II 2G Ex db/eb IIC Gb
II 1D Ex tb IIC Da**

Responsible Person :
Nurettin Terzioğlu
Head of Certification Body

Date of Issue : **25.06.2019**

IEP Uluslararası Enerji Petrol Göz., Sertifikasyon ve Teknik Hiz. Org. Tic. Ltd. Şti.
5746/1 Sok. No:9 K:2Büyükdere - İZMİR / TÜRKİYE
Tel: +90 232 431 17 45 - 46Fax: +90 232 431 17 30 E-mail: iep@iep.com.tr Fr:45
This certificate is granted subject to the general conditions of the IEP Energy Petroleum Institute. This certificate may only be reproduced in its entirety and without any change, schedule included. You can check accuracy of this document by www.iep.com.tr.
Page | 1 / 3

IEP ENERGY PETROLEUM INSTITUTE **IEP ATEX**

(1) **EU-Type Examination Certificate**

(2) **Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres**
Directive 2014/34/EU

(3) EU - Type Examination Certificate Number: **IEP 19 ATEX 0719X**

(4) Product: **M-MERXM and M-MERXN Series Armoured Cable Glands**

(5) Firm Name **MSM Mühendislik Elektromekanik San. Tic. Ltd. Şti.**

(6) Firm Address: **Barbaros Mah. Evren Cad. No : 38 Ataşehir / İSTANBUL**

(7) This product any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyonu Tic. Ltd. Şti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in confidential Report Nr : IEP.Rp.Ex.10-1515 date 16.08.2019.

(9) Compliance with Essential Health and safety requirements has been assured by compliance with;

EN 60079-0:2013, EN 60079-1:2014, EN 60079-7:2015, EN 60079-31:2014

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the directive 2014/34/EU. Further requirements of the directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:

**Ex I M2 Ex db/eb I Mb
II 2G Ex db/eb IIC Gb
II 1D Ex tb IIC Da**

Responsible Person :
Nurettin Terzioğlu
Head of Certification Body

Date of Issue : **19.08.2019**

IEP Uluslararası Enerji Petrol Göz., Sertifikasyon ve Teknik Hiz. Org. Tic. Ltd. Şti.
5746/1 Sok. No:9 K:2Büyükdere - İZMİR / TÜRKİYE
Tel: +90 232 431 17 45 - 46Fax: +90 232 431 17 30 E-mail: iep@iep.com.tr Fr:45
This certificate is granted subject to the general conditions of the IEP Energy Petroleum Institute. This certificate may only be reproduced in its entirety and without any change, schedule included. You can check accuracy of this document by www.iep.com.tr.
Page | 1 / 3

IEP ENERGY PETROLEUM INSTITUTE **IEP ATEX**

(1) **EU-Type Examination Certificate**

(2) **Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres**
Directive 2014/34/EU

(3) EU - Type Examination Certificate Number: **IEP 20 ATEX 0762U**

(4) Product: **M-BMFXX, M-BFEXX and M-BMMXX Series Three-pieces Connection Fittings**

(5) Firm Name: **MSM Mühendislik Elektromekanik San. Tic. Ltd. Şti.**

(6) Firm Address: **Barbaros Mah. Evren Cad. No : 38 Ataşehir / İSTANBUL**

(7) This product any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyonu Tic. Ltd. Şti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in confidential Report Nr : IEP.Rp.Ex.10-1605 date 05.02.2020.

(9) Compliance with Essential Health and safety requirements has been assured by compliance with;

EN 60079-0:2013, EN 60079-1:2014, EN 60079-31:2014

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the directive 2014/34/EU. Further requirements of the directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:

**Ex II 2G Ex db IIC Gb
II 2D Ex tb IIC Db
I M2 Ex db I Mb, IP 66/67**

Responsible Person :
Nurettin Terzioğlu
Head of Certification Body

Date of Issue : **06.02.2020**

IEP Uluslararası Enerji Petrol Göz., Sertifikasyon ve Teknik Hiz. Org. Tic. Ltd. Şti.
5746/1 Sok. No:9 K:2Büyükdere - İZMİR / TÜRKİYE
Tel: +90 232 431 17 45 - 46Fax: +90 232 431 17 30 E-mail: iep@iep.com.tr Fr:45
This certificate is granted subject to the general conditions of the IEP Energy Petroleum Institute. This certificate may only be reproduced in its entirety and without any change, schedule included. You can check accuracy of this document by www.iep.com.tr.
Page | 1 / 4

IEP ENERGY PETROLEUM INSTITUTE **IEP ATEX**

(1) **EU-Type Examination Certificate**

(2) **Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres**
Directive 2014/34/EU

(3) EU - Type Examination Certificate Number: **IEP 20 ATEX 0820X**

(4) Product: **M-SBRXM, M-SBRXN and M-DBRXX, M-DBRXN Series Glands**

(5) Firm Name **MSM Mühendislik Elektromekanik San. Tic. Ltd. Şti.**

(6) Firm Address: **Barbaros Mah. Evren Cad. No : 38 Ataşehir / İSTANBUL**

(7) This product any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyonu Tic. Ltd. Şti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in confidential Report Nr : IEP.Rp.Ex.10-1707 date 27.05.2020.

(9) Compliance with Essential Health and safety requirements has been assured by compliance with;

EN 60079-0:2013, EN 60079-1:2014, EN 60079-7:2015, EN 60079-31:2014

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the directive 2014/34/EU. Further requirements of the directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:

**Ex I M2 Ex db/eb I Mb
II 2G Ex db/eb IIC Gb
II 1D Ex tb IIC Da**

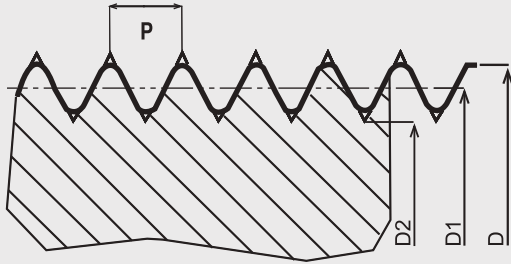
Responsible Person :
Nurettin Terzioğlu
Head of Certification Body

Date of Issue : **28.05.2020**

IEP Uluslararası Enerji Petrol Göz., Sertifikasyon ve Teknik Hiz. Org. Tic. Ltd. Şti.
5746/1 Sok. No:9 K:2Büyükdere - İZMİR / TÜRKİYE
Tel: +90 232 431 17 45 - 46Fax: +90 232 431 17 30 E-mail: iep@iep.com.tr Fr:45
This certificate is granted subject to the general conditions of the IEP Energy Petroleum Institute. This certificate may only be reproduced in its entirety and without any change, schedule included. You can check accuracy of this document by www.iep.com.tr.
Page | 1 / 3

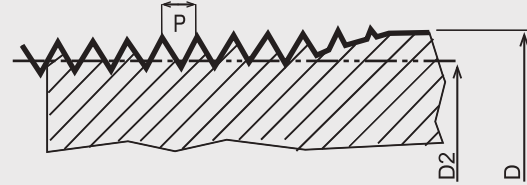
THREAD TYPE FEATURES

GAS THREAD
(UNI ISO 228)



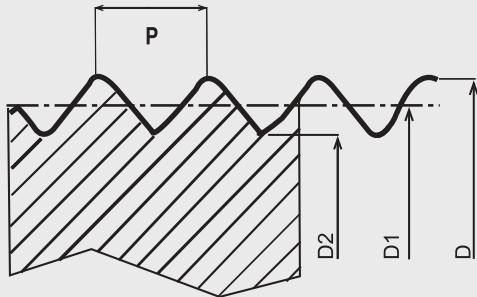
Thread Type	Thread Diameter D	Size D1	Size D2	Size P	Thread Piece Z
G 1/4"	13,157	12,301	11,445	1,337	19
G 3/8"	16,662	15,806	14,950	1,337	19
G 1/2"	20,955	19,793	18,631	1,814	14
G 3/4"	26,441	25,279	24,117	1,814	14
G 1"	33,249	31,770	30,291	2,309	11
G 1 1/4"	41,910	40,431	38,952	2,309	11
G 1 1/2"	47,803	46,324	44,845	2,309	11
G 2"	59,614	58,135	56,656	2,309	11
G 2 1/2"	75,184	73,705	72,226	2,309	11
G 3"	87,884	86,405	84,926	2,309	11
G 4"	113,030	111,551	110,072	2,309	11

NPT THREAD
(ANSI B1.20.1)



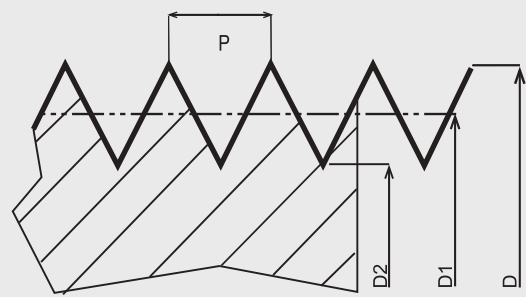
Thread Type	Thread Diameter D	Size D2	Size P	Thread Piece Z
NPT 1/4"	13,716	12,7635	1,411	18
NPT 3/8"	17,145	16,1925	1,411	18
NPT 1/2"	21,336	20,1115	1,814	14
NPT 3/4"	26,670	25,4455	1,814	14
NPT 1"	33,401	31,9100	2,208	11,5
NPT 1 1/4"	42,164	40,6730	2,208	11,5
NPT 1 1/2"	47,800	—	2,208	11,5
NPT 2"	60,325	58,8340	2,208	11,5
NPT 2 1/2"	73,025	70,8817	3,175	8
NPT 3"	88,900	86,7567	3,175	8
NPT 4"	114,300	112,1567	3,175	8

PG THREAD
(DIN 40430)



Thread Type	Thread Diameter D	Size D1	Size D2	Size P	Thread Piece Z
Pg 7	12,50	11,89	11,28	1,27	20
Pg 9	15,20	14,53	13,36	1,41	18
Pg 11	18,60	17,93	17,26	1,41	18
Pg 13,5	20,40	19,73	19,06	1,41	18
Pg 16	22,50	21,83	21,16	1,41	18
Pg 21	28,30	27,54	26,78	1,588	16
Pg 29	37,00	36,24	35,48	1,588	16
Pg 36	47,00	46,24	45,48	1,588	16
Pg 42	54,00	53,24	52,48	1,588	16
Pg 48	59,30	58,54	57,78	1,588	16

METRIC THREAD
(EN 60423)



Thread Type	Thread Diameter D	Size D1	Size D2	Size P
M12	12	11,026	10,376	1,5
M16	16	15,026	14,376	1,5
M20	20	19,026	18,376	1,5
M25	25	24,026	23,376	1,5
M32	32	31,026	30,376	1,5
M40	40	39,026	38,376	1,5
M50	50	49,026	48,376	1,5
M63	63	62,026	61,376	1,5

Note: Dimensions are given in "mm". Technical pictures are scale-free.
The specified dimensions cover the teeth of the panel (male) type.

CYCLE TABLES

WEIGHT

1 ons (oz)	= 437,5 grains	= 28,350 g
1 pound (lb)	= 16 oz	= 0,4536 kg
1 stone	= 14 lb	= 6,35 kg
1 ton	= 2.240 lb	= 0,0161 t
1 gram (g)	= 1,000 mg	= 0,0353 oz
1 kilogram (kg)	= 1.000 g	= 2,2046 lb
1 ton	= 1.000 kg	= 0,9842 ton

VOLUME

1 cubic yard	= 27 cu ft	= 0,77 m3
1 pint (pt)	= 4 gills	= 0,57 L
1 gallon (gal)	= 8 pt	= 4,55 L
1 cubic decimeter (dm3)	= 1,000 cm3	= 0,04 cu ft
1 cubic meter (m3)	= 1,000 dm3	= 1,31 cu yd
1 liter (L)	= 1 dm3	= 0,22 gal

LENGTH

1 inch	= 0,027 yard	= 2.54 cm
1 ft	= 12 inch	= 0.31 m
1 yard	= 3 ft	= 0.91 m
1 mil	= 5.280 ft	= 1.60 km
1 cm	= 0,032 ft	= 0.39 inch
1 m	= 36 inch	= 1.09 yard
1 km	= 1.760 yard	= 0.62 mil

HEAD OFFICE - WAREHOUSE:

Barbaros Mah. Millet Cad. No:38

Ataşehir-İSTANBUL

Tel: (+90 216) 472 87 55 (Pbx) Fax: (+90 216) 315 35 85

www.msmmuhendislik.com

msm@msmmuhendislik.com

www.exproof.info



**cable carrying, protection, ending
and ex-proof mounting systems**



ATEX

EN



EAC



BS

CE