

CABLE GLANDS & ACCESSORIES for GLOBAL HAZARDOUS APPLICATIONS

Electrical equipment in hazardous areas

In electrical engineering, a hazardous location is defined as a place where concentrations of flammable gases, vapors, or dusts occur. Electrical equipment that must be installed in such locations is especially designed and tested to ensure it does not initiate an explosion, due to arcing contacts or high surface temperature of equipment.

For example a household light switch may emit a small, harmless visible spark when switching; in an ordinary atmosphere this arc is of no concern, but if a flammable vapor is present, the arc might start an explosion. Electrical equipment intended for use in a chemical factory or refinery is designed either to contain any explosion within the device, or is designed not to produce sparks with sufficient energy to trigger an explosion.

Many strategies exist for safety in electrical installations. The simplest strategy is to minimize the amount of electrical equipment installed in a hazardous area, either by keeping the equipment out of the area altogether or by making the area less hazardous by process improvements or ventilation with clean air. Intrinsic safety, or non-incendive equipment and wiring methods, is a set of practices for apparatus designed with low power levels and low stored energy. Insufficient energy is available to produce an arc that can ignite the surrounding explosive mixture. Equipment enclosures can be pressurized with clean air or inert gas and designed with various controls to remove power or provide notification in case of supply or pressure loss of such gases. Arc-producing elements of the equipment can also be isolated from the surrounding atmosphere by encapsulation, immersion in oil, sand, etc. Heat producing elements such as motor winding, electrical heaters, including heat tracing and lighting fixtures are often designed to limit their maximum temperature below the autoignition temperature of the material involved. Both external and internal temperatures are taken into consideration.

As in most fields of electrical installation, different countries have approached the standardization and testing of equipment for hazardous areas in different ways. As world trade becomes more important in distribution of electrical products, international standards are slowly converging so that a wider range of acceptable techniques can be approved by national regulatory agencies.

Area classification is required by governmental bodies, for example by the U.S. Occupational Safety and Health Administration and compliance is enforced.

Documentation requirements are varied. Often an area classification plan-view is provided to identify equipment ratings and installation techniques to be used for each classified plant area. The plan may contain the list of chemicals with their group and temperature rating, and elevation details shaded to indicate Class, Division(Zone) and group combination. The area classification process would require the participation of operations, maintenance, safety, electrical and instrumentation professionals, the use of process diagrams and material flows, material safety data sheet and any pertinent documents, information and knowledge to determine the hazards and their extent and the countermeasures to be employed. Area classification documentations are reviewed and updated to reflect process changes.

History

Soon after the introduction of electric power into coal mines, it was discovered that lethal explosions could be initiated by electrical equipment such as lighting, signals, or motors. The hazard of fire damp or methane accumulation in mines was well known by the time electricity was introduced, along with the danger of suspended coal dust. At least two British mine explosions were attributed to an electric bell signal system. In this system, two bare wires were run along the length of a drift, and any miner desiring to signal the surface would momentarily touch the wires to each other or bridge the wires with a metal tool. The inductance of the signal bell coils, combined with breaking of contacts by exposed metal surfaces, resulted in sparks which could ignite methane, causing an explosion.

Gas divisions or zones

In an industrial plant such as a refinery or chemical process plant, handling of large quantities of flammable liquids and gases creates a risk of leaks. In some cases the gas, ignitable vapor or dust is present all the time or for long periods. Other areas would have a dangerous concentration of flammable substances only during process upsets, equipment deterioration between maintenance periods, or during an incident. Refineries and chemical plants are then divided into areas of risk of release of gas, vapor or dust known as divisions or zones. The process of determining the type and size of these hazardous areas is called area classification. Guidance on assessing the extent of the hazard is given in the NFPA 497 Standard, or API 500 and according to their adaptation by other areas gas zones is given in the current edition of IEC 60079.10. For hazardous dusts, the guiding standard is IEC 61421.10.

Typical gas hazards are from hydrocarbon compounds, but hydrogen and ammonia are common industrial gases that are flammable.

Non-Hazardous Area

An area such as a residence or office would be classed as Non Hazardous (safe area), where the only risk of a release of explosive or flammable gas would be such things as the propellant in an aerosol spray. The only explosive or flammable liquid would be paint and brush cleaner. These are classed as very low risk of causing an explosion and are more of a fire risk (although gas explosions in residential buildings do occur). Non hazardous areas on chemical and other plant are present where the hazardous gas is diluted to a concentration below 25% of its lower flammability limit (or lower explosive limit (LEL)).

Division 2 or Zone 2 area

This is a step up from the safe area. In this zone the gas, vapor or mist would only be present under abnormal conditions (most often leaks under abnormal conditions). As a general guide to Zone 2, unwanted substances should only be present under 10 hours/year or 0–0.1% of the time.

Division 1 or Zone 1 area

Gas, vapor or mist will be present or expected to be present for long periods of time under normal operating conditions. As a guide for Zone 1, this can be defined as 10–1000 hours/year or 0.1–10% of the time.

Zone 0 area

Gas or vapor is present all of the time. An example of this would be the vapor space above the liquid in the top of a tank or drum. The ANSI/NEC classification method consider this environment a Division 1 area. As a guide for Zone 0, this can be defined as over 1000 hours/year or >10% of the time.

Dust zones

Flammable dusts when suspended in air can explode. An old system of area classification to a British standard used a system of letters to designate the zones. This has been replaced by a European numerical system, as set out in directive 1999/92/EU implemented in the UK as the Dangerous Substances and Explosives Atmospheres Regulations 2002

The boundaries and extent of these three dimensional zones should be decided by a competent person. There must be a site plan drawn up of the factory with the zones marked on. The zone definitions are:

- Zone 20
A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is present continuously, or for long periods or frequently.
- Zone 21
A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is likely to occur, occasionally, in normal operation.
- Zone 22
A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

Gas groups

Explosive gases, vapors and dusts have different chemical properties that affect the likelihood and severity of an explosion. Such properties include flame temperature, minimum ignition energy, upper and lower explosive limits, and molecular weight. Empirical testing is done to determine parameters such as the maximum experimental safe gap, minimum ignition current, explosion pressure and time to peak pressure, spontaneous ignition temperature, and maximum rate of pressure rise. Every substance has a differing combination of properties but it is found that they can be ranked into similar ranges, simplifying the selection of equipment for hazardous areas.

Flammability of combustible liquids are defined by their flash-point. The flash-point is the temperature at which the material will generate sufficient quantity of vapor to form an ignitable mixture. The flash point determines if an area needs to be classified. A material may have a relatively low autoignition temperature yet if its flash-point is above the ambient temperature, then the area may not need to be classified. Conversely if the same material is heated and handled above its flash-point, the area must be classified.

Each chemical gas or vapour used in industry is classified into a gas group.

ABBREVIATIONS	
OFF-SHORE	Marine application Harsh Environment
SWA	Steel wire armored
AWA	Aluminium wire armored
SWB	Steel wire braid
PWA	Pliable wire armored
STA	Steel tape armored



PRODUCTS FOR MINING APPLICATIONS

Mining Applications

Metal Products

Cable Glands for Armoured Cables

- Orion for Mining Applications 132 - 135
- Corona for Mining Applications 136 - 139
- Centaurus-A Barrier for Mining Applications 140 - 141

Cable Glands for Non-armoured Cables

- Crater for Mining Applications 144 - 147
- Centaurus-N Barrier for Mining Applications 148 - 149

PRODUCTS FOR HAZARDOUS APPLICATIONS

Gas / Dust Applications

Metal Products

Cable Glands for Armoured Cables

- Orion Universal 152 - 155
- Orion Offshore 156 - 159
- Orion 160 - 163
- Orion Lead Sheathed 164 - 167
- Corona Universal 168 - 171
- Corona Offshore 172 - 175
- Corona 176 - 179
- Centaurus-A Barrier 180 - 181
- E-Vela 182 - 183

Cable Glands for Non-armoured Cables

- E-Octans 186 - 189
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- Crater 192 - 193
- Centaurus-N Barrier 194 - 195

Ventilation and Drain Products

- Hydra, Ventilation Plugs 198 - 199
- Virgo, Drain Plugs 200 - 201

Fittings for Rigid Conduits with Non-armoured Cables

- E-Carina, Straight Conduit Fittings 204 - 207
- E-Carina Flat, Straight Conduit Fittings 208 - 211
- E-Cygnus, Swivel Conduit Fittings 212 - 215
- Phoenix, Multihole Swivel Conduit Fittings 216 - 217

Fittings for Flexible Conduits with Non-armoured Cables

- E-Hydrus 220 - 221
- E-Scorpius 222 - 223
- E-Lupus 224 - 225
- E-Corvus 226 - 227

Adaptors & Plugs

- Apus, Enlargers 230 - 233
- Grus, Reducers 234 - 237
- Aries, Couplings 238 - 241
- Pavo, Nipples 242 - 245
- Aquila Hexagonal, Plugs 246 - 247
- Aquila Round, Plugs 248 - 249

Plastic Products

Cable Glands for Non-armoured Circular Cables

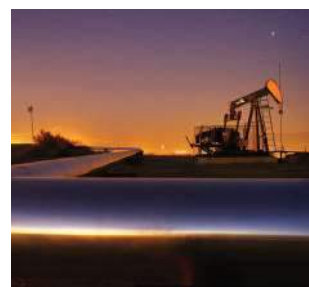
- Lyra 252 - 253
- Hi-Lyra 254 - 257
- Vega 258 - 261

Cable Glands for Non-armoured Non-circular Cables

- Gemini 262 - 263
- Hi-Gemini 264 - 265

Plugs

- Draco 268 - 269
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CABLE GLANDS for ARMoured CABLES for Mining Applications



Orion for Mining Applications

Corona for Mining Applications

Centaurus-A Barrier for Mining Applications

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Ex Glands / Group I / Mining



In mines where flammable minerals/materials are extracted, there can also be a risk of explosions because small particles of the extracted product can be blown into the air to form dust/air mixtures able to support rapid combustion.

Electrical equipment intended for mines where the atmosphere, in addition to firedamp, may contain significant proportions of other flammable gases (i.e. other than methane), shall be constructed and tested in accordance with the requirements relating to Group I and also to the subdivision of Group II corresponding to the other significant flammable gases.









Orion, Crater, Centaurus and Corona cable glands are tested according to IEC 60079 series and approved to be used in mining applications with M2, Mb protection level.

M 2 equipments may be used as it has a high level of protection and is suitable for the severe conditions in mining. In an explosive atmospheres, M 2 equipment needs to be capable of being disconnected or made safe.

Cable Glands for SWA and AWA Cables

ORION for Mining Application



Technical Details		
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L
	Seal	CR (Chloroprene) , Silicone
	O-ring	CR (Chloroprene) , Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene)	Silicone
	Standard Group	-40°C to +80°C
LT Group	-40°C to +80°C	-60°C to +80°C
Equipment For	Mining potentially explosive atmospheres.	
Suitable for use in	Group I	Mining Group IMb Group I
Equipment Marking	Group I Ex I M2 Ex db I Mb Ex eb I Mb	
Marking Example *	BMD KBA.. CE 0722  I M2 Ex db I Mb Ex eb I Mb IP66/68 Ta -40°C to +80°C CESI 13 ATEX 033X IECEx CES 13.0013X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	SWA - AWA	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 	
Remarks	<ul style="list-style-type: none"> • O-ring available in Metric outer threads. • Accessories must be ordered separately. 	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	20150612-E474828	UL 2225, CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA C22.2 No. 60079-7:12 CAN/CSA-C22.2 No. 60079-31:12
	20170315-E199260	UL 514B UL50E
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0053 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN60079-1, IEC/EN 62444
	MASC MS/18-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2014 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2014

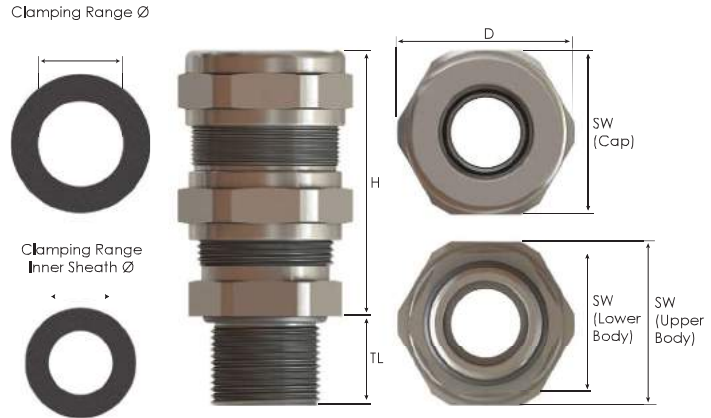
-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

Order Coding								
Part Number	Material	Seal	- Group	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Mandatory	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	C Chloroprene S Silicone	- M Group I (Mining)	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example								
KBA1N	BN	C	- M	-	WSR	L	S	-

ORION for Mining Application

Cable Glands for SWA and AWA Cables



Mining Application

Thread Type METRIC acc. to ISO 965-3

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm				Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
M20x1,5	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	16,0	26	26	24	29,0	50,0	KBA1SM
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	16,0	29	29	25	31,5	51,5	KBA1M
	8,5 - 14,5	12,0 - 20,0	0,90 - 1,30	16,0	32	30	28	35,0	54,0	KBA1LM
M25x1,5	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	18,0	26	26	29	31,5	50,0	KBA2XSM
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	18,0	29	29	29	31,5	52,5	KBA2SM
	8,5 - 16,0	12,0 - 21,0	0,70 - 1,20	18,0	34	34	32	37,0	56,5	KBA2M
M32x1,5	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	18,0	40	40	36	39,8	52,5	KBA3XSM
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	18,0	40	40	40	44,0	64,0	KBA3SM
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	18,0	52	52	48	57,0	81,0	KBA3M
M40x1,5	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	18,0	40	40	45	50,0	64,0	KBA4XSM
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	18,0	52	52	48	57,0	81,0	KBA4SM
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	18,0	60	60	55	66,0	92,0	KBA4M
M50x1,5	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	18,0	52	52	54	60,0	81,0	KBA5XSM
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	18,0	60	60	55	66,0	92,0	KBA5XMM
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	18,0	75	70	60	83,0	100,0	KBA5SM
M63x1,5	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	18,0	74	70	70	81,8	104,5	KBA5M
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	20,0	75	70	68	83,0	100,0	KBA6XSM
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	20,0	74	70	70	81,8	104,5	KBA6XMM
M75x1,5	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	20,0	80	80	75	89,5	109,5	KBA6SM
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	20,0	85	85	85	94,0	111,5	KBA6M
	45,0 - 56,0	54,0 - 70,0	1,30 - 2,50	20,0	100	95	90	110,5	128,5	KBA6LM
M90x1,5	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	20,0	80	80	85	94,0	109,5	KBA7XSM
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	20,0	85	85	85	94,0	111,5	KBA7SM
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	20,0	100	95	90	110,5	127,5	KBA7M
M110x2,0	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	20,0	85	85	100	110,5	111,5	KBA8XSM
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	20,0	100	95	95	110,5	127,5	KBA8SM
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	20,0	115	115	110	127,0	158,0	KBA8M

Thread Type METRIC acc. to ISO 965-3 (LT Type)

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm				Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
M90x2,0	70,0 - 82,0	78,0 - 90,0	1,5 - 4,4	20,0	120	120	115	134,0	159,5	KBA8MLT
M100x2,0	80,0 - 92,0	88,0 - 100,0	1,2 - 4,0	20,0	135	135	135	150,0	169,0	KBA9SMLT
M110x2,0	90,0 - 101,0	98,0 - 110,0	2,1 - 5,4	20,0	145	145	145	162,0	180,0	KBA10MLT
M130x2,0	100,0 - 115,0	109,0 - 123,0	2,0 - 5,4	24,0	160	160	160	176,0	202,0	KBA13MLT

Cable Glands for SWA and AWA Cables

ORION for Mining Applications



Technical Details		
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L
	Seal	CR (Chloroprene) , Silicone
	O-ring	CR (Chloroprene) , Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min	
	IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene)	Silicone
	Standard Group	-40°C to +80°C
LT Group	-40°C to +80°C	-60°C to +80°C
	Mining potentially explosive atmospheres.	
Equipment For	Group I Mining Group IMb Group I	
Equipment Marking	Group I Ex I M2 Ex db I Mb Ex eb I Mb	
Marking Example *	BMD KBA.. CE 0722 I M2 Ex db I Mb Ex eb I Mb IP66/68 Ta -40°C to +80°C CESI 13 ATEX 033X IECEx CES 13.0013X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	SWA - AWA	
Accessories	• Lock nuts	
	• Gaskets (Washers)	
	• Serrated Washers	
	• Shrouds	
	• Earth tags	
Remarks	• O-ring available in Metric outer threads.	
	• Accessories must be ordered separately.	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013
		EN 60079-1:2014
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6
		IEC 60079-1:2014 Edition:7
	20150612-E474828	IEC 60079-31:2013 Edition:2
		IEC 60079-7:2015
	20170315-E199260	EN 60079-31:2014
		UL 2225,
	№ TC RU C-TR.AA87.B.00941	CAN/CSA-C22.2 No. 60079-0:11
		CAN/CSA C22.2 No. 60079-7:12
	DNV 12.0053 X	CAN/CSA-C22.2 No. 60079-31:12
		UL 514B
	E-14044	UL50E
		ГОСТ 31610.0-2014
	MASC MS/18-0240X	ГОСТ IEC 60079-1:2013
		ГОСТ IEC 60079-31:2013
	MASC MS/18-0240X	ABNT NBR IEC 60079-0:2013,
		ABNT NBR IEC 60079-1:2009,
	MASC MS/18-0240X	ABNT NBR IEC 60079-7:2008,
		ABNT NBR IEC 60079-31:2011
	MASC MS/18-0240X	IEC/EN60079-0,
		IEC/EN60079-7,
	MASC MS/18-0240X	IEC/EN60079-31
		IEC/EN60079-1,
	MASC MS/18-0240X	IEC/EN 62444
		SANS (IEC) 60079-0 : 2011
	MASC MS/18-0240X	SANS (IEC) 60079-1 : 2014
		SANS (IEC) 60079-7 : 2007
	MASC MS/18-0240X	SANS (IEC) 60079-31 : 2014

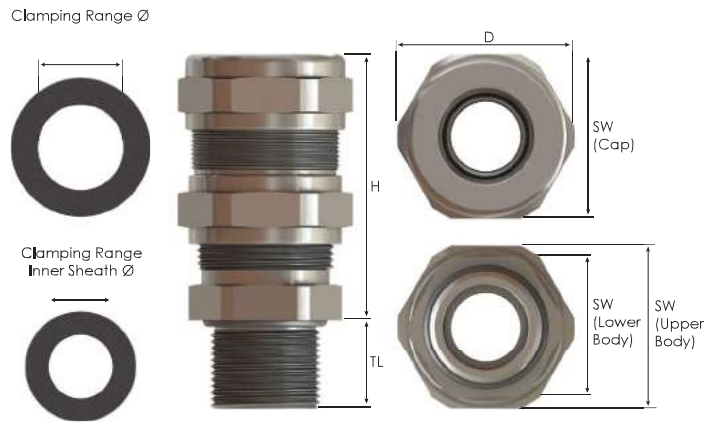


-For more information see our webpage.
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

Order Coding								
Part Number	Material	Seal	- Group	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Mandatory	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	C Chloroprene S Silicone	- M Group I (Mining)	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example								
KBA1N	BN	C	- M	-	WSR	L	S	-

ORION for Mining Applications

Cable Glands for SWA and AWA Cables



Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length mm	Spanner Width			Outer Ø mm	max. Height mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
NPT 1/2"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	21,0	26	26	24	29,0	49,5	KBA1SN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	21,0	29	29	25	31,5	51,0	KBA1N
	8,5 - 14,5	12,0 - 20,0	0,90 - 1,30	21,0	32	30	28	35,0	54,0	KBA1LN
NPT 3/4"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	21,0	26	26	29	31,5	50,0	KBA2XSN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	21,0	29	29	29	31,5	52,5	KBA2SN
	8,5 - 16,0	12,0 - 21,0	0,70 - 1,20	21,0	34	34	32	37,0	56,5	KBA2N
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	21,0	40	40	36	44,0	62,5	KBA2LN
NPT 1"	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	26,0	29	29	36	39,8	52,5	KBA3XSN
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	26,0	40	40	40	44,0	64,0	KBA3SN
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	26,0	52	52	48	57,0	80,5	KBA3N
NPT 1 1/4"	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	28,0	40	40	45	50,0	64,0	KBA4XSN
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	28,0	52	52	48	57,0	81,0	KBA4SN
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	28,0	60	60	55	66,0	92,0	KBA4N
NPT 1 1/2"	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	28,0	52	52	54	60,0	81,0	KBA5XSN
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	28,0	60	60	55	66,0	92,0	KBA5XMN
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	28,0	75	70	60	83,0	100,0	KBA5SN
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	28,0	74	70	70	81,8	104,5	KBA5N
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	28,0	75	70	68	83,0	100,0	KBA6XSN
NPT 2"	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	28,0	74	70	70	81,8	104,5	KBA6XMN
	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	28,0	80	80	75	89,5	109,5	KBA6SN
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	28,0	85	85	85	94,0	111,5	KBA6N
	45,0 - 52,0	54,0 - 70,0	1,30 - 2,50	28,0	100	95	90	110,5	128,5	KBA6LN
	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	41,0	80	80	80	89,5	109,0	KBA7XSN
NPT 2 1/2"	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	41,0	85	85	85	94,0	111,5	KBA7SN
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	41,0	100	95	90	110,5	127,5	KBA7N
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	43,0	85	85	95	105,0	111,5	KBA8XSN
NPT 3"	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	43,0	100	95	95	110,5	127,5	KBA8SN
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	43,0	115	115	110	127,0	158,0	KBA8N











Thread Type **NPT** acc. to ANSI ASME B1.20.1 (LT Type)

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm				Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
NPT 3 1/2"	70,0 - 82,0	78,0 - 90,0	1,5 - 4,4	45,0	120	120	115	134,0	159,5	KBA9MNLT
NPT 4"	80,0 - 92,0	88,0 - 100,0	1,2 - 4,0	46,0	135	135	135	150,0	169,0	KBA10SNLT
	90,0 - 101,0	98,0 - 110,0	2,1 - 5,4	46,0	145	145	145	162,0	180,0	KBA10NLT
NPT 5"	100,0 - 115,0	109,0 - 123,0	2,0 - 5,4	48,0	160	160	160	176,0	202,0	KBA11SNLT

Diaphragm Sealed Glands for SWA and AWA Cables

CORONA for Mining Applications



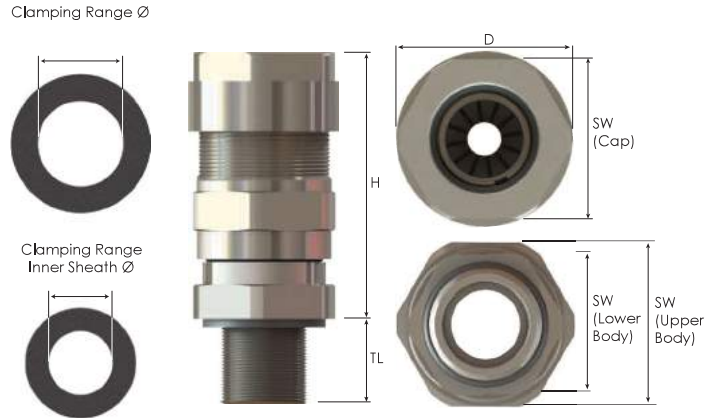
Technical Details											
Material	<table border="0"> <tr> <td>Body, Cap</td> <td>Brass, Brass Nickel Plated, Stainless Steel 316L</td> </tr> <tr> <td>Inner Part</td> <td>Brass, Brass Nickel Plated, Stainless Steel 316L</td> </tr> <tr> <td>Seal</td> <td>Silicone</td> </tr> <tr> <td>O-ring</td> <td>Silicone</td> </tr> <tr> <td>Lower Insert</td> <td>PA 6 (Polyamide 6)</td> </tr> </table>	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L	Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L	Seal	Silicone	O-ring	Silicone	Lower Insert	PA 6 (Polyamide 6)
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L										
Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L										
Seal	Silicone										
O-ring	Silicone										
Lower Insert	PA 6 (Polyamide 6)										
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66										
Operating Temperature	<table border="0"> <tr> <td>Seal Material</td> <td>Silicone</td> </tr> <tr> <td></td> <td>-40°C to +80°C</td> </tr> </table>	Seal Material	Silicone		-40°C to +80°C						
Seal Material	Silicone										
	-40°C to +80°C										
Equipment For	Mining potentially explosive atmospheres.										
Suitable for use in	Mining Group IMb										
Equipment Marking	Group I Ex I M2 Ex db I Mb Ex eb I Mb										
Marking Example *	BMD KBC... CE 0722  I M2 Ex db I Mb Ex eb I Mb IP66/68 Ta -40°C to +80°C <ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 										
Cable Type	SWA - AWA <ul style="list-style-type: none"> • Lock nuts • Gaskets • Serrated Washers • Shrouds • Earth tags 										
Accessories											
Remarks	<ul style="list-style-type: none"> • O-ring available in Metric and NPT outer threads. • Accessories must be ordered separately. 										
Approvals	<table border="0"> <thead> <tr> <th>Certificate Number</th> <th>Standards</th> </tr> </thead> <tbody> <tr> <td> CESI 13 ATEX 033X</td> <td>EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014</td> </tr> <tr> <td> IECEx CES 17.0042X</td> <td>IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5</td> </tr> <tr> <td> № TC RU C-TR.AA87.B.00941</td> <td>ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013</td> </tr> </tbody> </table>	Certificate Number	Standards	 CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014	 IECEx CES 17.0042X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5	 № TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013		
Certificate Number	Standards										
 CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014										
 IECEx CES 17.0042X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5										
 № TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013										
<p>-For more information see our webpage. * The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.</p>											



Order Coding								
Part Number	Material	Seal	- Group	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Mandatory	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless Steel 316L	S Silicone	- M Group I (Mining)	WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example								
KBAC4M	BN	S	- M	-	WSR	L	S	-

CORONA for Mining Applications

Diaphragm Sealed Glands for SWA and AWA Cables







Thread Type **METRIC** acc. to ISO 965 - 3

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Spanner Width			Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
M16x1,5	6,0 - 11,0	9,0 - 16,0	0,8 - 1,25	15,0	24	24	24	27,5	45,0	KBC01M
	6,0 - 11,0	9,0 - 16,0			24	24	24	27,5	45,0	KBC1SM
M20x1,5	8,5 - 14,5	12,0 - 20,0	0,8 - 1,25	15,0	30	30	29	33,0	48,0	KBC1M
	8,5 - 14,5	12,0 - 20,0			30	30	36	40,0	48,0	KBC2SM
M25x1,5	12,0 - 20,0	16,0 - 26,0	1,25 - 1,6	15,0	36	36	36	40,0	54,0	KBC2M
	12,0 - 20,0	16,0 - 26,0			36	36	44	52,5	54,0	KBC3SM
M32x1,5	17,0 - 26,0	20,0 - 33,0	1,6 - 2,0	15,0	46	46	44	52,5	64,5	KBC3M
	17,0 - 26,0	20,0 - 33,0			46	46	55	64,0	64,5	KBC4SM
M40x1,5	23,0 - 32,0	29,0 - 41,0	1,6 - 2,0	15,0	55	55	55	64,0	67,0	KBC4M
	23,0 - 32,0	29,0 - 41,0			55	55	65	74,0	67,0	KBC5SM
M50x1,5	29,0 - 41,0	36,0 - 52,0	1,8 - 2,5	15,0	65	65	65	74,0	77,7	KBC5M
	29,0 - 41,0	36,0 - 52,0			65	65	80	92,0	77,7	KBC6SM
M63x1,5	44,0 - 56,0	50,0 - 65,0	1,8 - 2,5	15,0	80	80	80	92,0	90,7	KBC6M
	44,0 - 56,0	50,0 - 65,0			80	80	95	107,5	90,7	KBC7SM
M75x1,5	54,5 - 68,0	61,0 - 78,0	1,8 - 2,5	15,0	95	95	95	107,5	103,7	KBC7M
	54,5 - 68,0	61,0 - 78,0			95	95	95	118,0	103,7	KBC80SM
M80x1,5	67,0 - 73,0	75,0 - 89,0	2,0 - 3,5	15,0	106	106	106	118,0	100,2	KBC80M
	67,0 - 73,0	75,0 - 89,0			106	106	115	133,0	100,2	KBC8M
M90x1,5	75,0 - 91,0	88,0 - 104,0	2,5 - 4,0	15,0	115	115	115	133,0	100,0	KBC8M
M100x1,5	88,0 - 104,0	104,0 - 120,0	2,5 - 4,0	15,0	127	127	127	145,0	114,0	KBC9M

Diaphragm Sealed Glands for SWA and AWA Cables

CORONA for Mining Applications



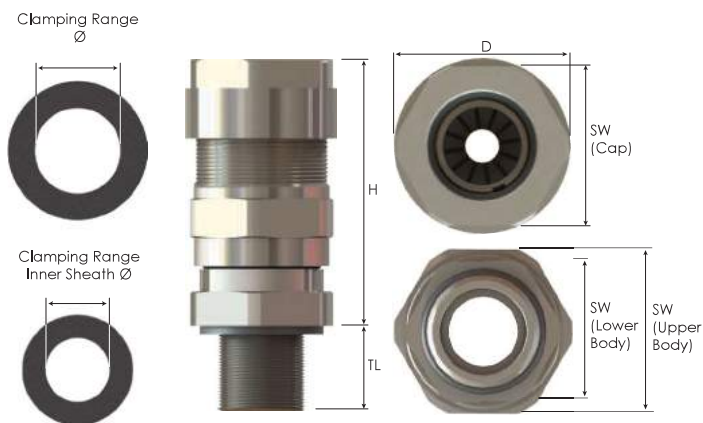
Technical Details		
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L	
Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L	
Material	Seal	Silicone
	O-ring	Silicone
	Lower Insert	PA 6 (Polyamide 6)
Ingress Protection Rating	IP 68 - 5 Bar, 30 min	
	IP 66	
Operating Temperature	Seal Material	
	Silicone -40°C to +80°C	
Equipment For	Mining potentially explosive atmospheres.	
Suitable for use in	Mining Group IMb	
Equipment Marking	Group I Ex I M2 Ex db I Mb Ex eb I Mb	
Marking Example *	BMD KBC... CE 0722  I M2 Ex db I Mb Ex eb I Mb IP66/68 Ta -40°C to +80°C	
Thread Type	• Metric (M) ISO Pitch 1,5	
	• NPT (N) ANSI ASME B1.20.1	
	• Other thread types also available upon request.	
Cable Type	SWA - AWA	
Accessories	• Lock nuts	
	• Gaskets	
	• Serrated Washers	
	• Shrouds	
	• Earth tags	
Remarks	• O-ring available in Metric and NPT outer threads.	
	• Accessories must be ordered separately.	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 17.0042X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
-For more information see our webpage.		
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.		



Order Coding								
Part Number	Material	Seal	- Group	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Mandatory	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless Steel 316L	S Silicone	- M Group I (Mining)	WS Silicone	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example								
KBAC4M	BN	S	- M	-	WSR	L	S	-

CORONA for Mining Applications

Diaphragm Sealed Glands for SWA and AWA Cables







Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Spanner Width			Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
NPT 3/8"	6,0 - 11,0	9,0 - 16,0	0,8 - 1,25	15,5	24	24	24	27,5	45,0	KBC01N
	6,0 - 11,0	9,0 - 16,0			24	24	24			
NPT 1/2"	8,5 - 14,5	12,0 - 20,0	0,8 - 1,25	20,1	30	30	29	33,0	48,0	KBC1N
	8,5 - 14,5	12,0 - 20,0			30	30	36			
NPT 3/4"	12,0 - 20,0	16,0 - 26,0	1,25 - 1,6	20,4	36	36	36	40,0	54,0	KBC2N
	12,0 - 20,0	16,0 - 26,0			36	36	44			
NPT 1"	17,0 - 26,0	20,0 - 33,0	1,6 - 2,0	25,5	44	46	44	52,5	64,5	KBC3N
	17,0 - 26,0	20,0 - 33,0			46	46	55			
NPT 1 1/4"	23,0 - 32,0	29,0 - 41,0	1,6 - 2,0	26,1	55	55	65	74,0	77,7	KBC5N
	23,0 - 32,0	29,0 - 41,0			55	55	65			
NPT 1 1/2"	29,0 - 41,0	36,0 - 52,0	1,8 - 2,5	27,4	65	65	80	92,0	90,7	KBC6N
	29,0 - 41,0	36,0 - 52,0			65	65	95			
NPT 2"	44,0 - 52,0	50,0 - 65,0	1,8 - 2,5	40,4	80	80	95	107,5	103,7	KBC7N
	44,0 - 52,0	50,0 - 65,0			80	80	95			
NPT 2 1/2"	54,5 - 63,0	61,0 - 78,0	1,8 - 2,5	40,4	95	95	95	118,0	103,7	KBC80SN
	54,5 - 63,0	61,0 - 78,0			95	95	106			
NPT 3"	67,0 - 73,0	75,0 - 89,0	2,0 - 3,5	41,9	106	106	106	118,0	100,2	KBC80N
	67,0 - 73,0	75,0 - 89,0			106	106	115			
NPT 3 1/2"	75,0 - 89,0	88,0 - 104,0	2,5 - 4,0	44,5	115	115	115	133,0	100,0	KBC8N
	75,0 - 89,0	88,0 - 104,0			115	115	127			
NPT 4"	75,0 - 91,0	88,0 - 104,0	2,5 - 4,0	44,5	127	127	127	145,0	114,0	KBC9N

Barrier Cable Glands for All Types of Armoured Cables

CENTAURUS-A BARRIER for Mining Applications



Technical Details		
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L
	Inner Parts	Brass, Brass Nickel Plated, Stainless Steel 316L
	Seal	Silicone
	O-Ring	Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	Silicone	-60°C to +60°C
Service Temperature	Seal Material	
	Silicone	-60°C to +100°C
Equipment For	Mining potentially explosive atmospheres	
Suitable for use in	Group I Mining Group IM	
Equipment Marking	Ex I M2 - Ex db IMb Ex eb IMb	
Marking Example*	BMD KBCTA.. CE 0722  I M2 Ex db I Mb Ex eb I Mb IP66/68 Ta -60°C to +60°C CESI 17 ATEX 007X IECEx CES 17.0029X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1.5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	SWA - SWB - STA - Shielded	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 	
Remarks	<ul style="list-style-type: none"> • O-ring available in Metric and NPT outer threads. • Accessories must be ordered separately. 	
Approvals	Certificate Number	Standards
	CESI 17 ATEX 0007X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 17.0029X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013

-For more information see our webpage.

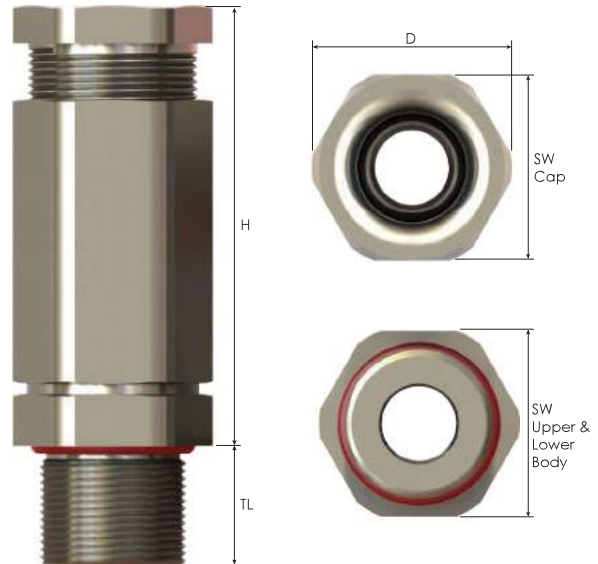
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding								
Part Number	Material	Seal	- Group	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Mandatory	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	S Silicone	- M Group I (Mining)	WS Silicone	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example								
KBCTA3N	BN	C	- M	-	WSR	L	S	-

CENTAURUS-A BARRIER for Mining Applications

Barrier Cable Glands for All Types of Armoured Cables



Mining Applications

Thread Type METRIC acc. to ISO 965-3

Outer Thread Size (Male)	Clamping Range Ø min-max mm	Over Conductors max Ø mm	Armour Wire max Ø mm	Outer Thread Length TL mm	Cap		Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Need Barrier Compound Material Per Pc. (g)
					SW Cap mm	SW Upper Body mm	SW Lower Body mm	SW Lower Body mm				
M20x1,5	6,0 - 13,0	9,5	1,3	16,0	25	25	25	25	27,0	63,5	KBCTA1SM	7
	8,0 - 15,0	9,5	1,3	16,0	25	25	25	25	27,0	63,5	KBCTA1M	7
	13,5 - 21,0	12,0	1,3	16,0	30	30	30	30	33,0	65,0	KBCTA1LM	6
M25x1,5	8,0 - 15,0	9,5	1,3	16,0	25	25	30	30	33,0	63,5	KBCTA2SM	7
	13,5 - 21,0	12,0	1,3	16,0	30	30	30	30	33,0	65,0	KBCTA2M	6
	18,0 - 27,0	15,0	1,6	16,0	40	40	40	40	44,5	72,5	KBCTA2LM	14
M32x1,5	18,0 - 27,0	15,0	1,6	16,0	40	40	40	40	44,5	72,5	KBCTA3M	14
	23,0 - 33,0	21,5	1,6	16,0	43	43	43	43	47,0	74,5	KBCTA3LM	26
M40x1,5	23,0 - 33,0	21,5	1,6	16,0	43	43	45	45	50,0	74,5	KBCTA4SM	26
	29,0 - 40,0	29,0	2,0	16,0	50	50	50	50	55,5	82,5	KBCTA4M	50
M50x1,5	29,0 - 40,0	29,0	2,0	16,0	50	50	55	55	61,0	82,5	KBCTA5SM	50
	35,0 - 48,0	37,0	2,5	16,0	58	58	58	58	64,0	90,5	KBCTA5M	82
M63x1,5	35,0 - 48,0	37,0	2,5	20,0	58	58	68	68	75,0	90,5	KBCTA6SM	82
	42,0 - 56,0	46,0	2,5	20,0	75	75	75	75	83,0	120,0	KBCTA6M	180
M75x1,5	42,0 - 56,0	46,0	2,5	20,0	75	75	80	80	89,0	120,0	KBCTA7SM	180
	54,0 - 70,0	58,0	3,2	20,0	100	100	100	100	110,5	126,0	KBCTA7M	290
M90x1,5	54,0 - 70,0	58,0	3,2	20,0	100	100	100	100	110,5	126,0	KBCTA8M	290

*Barrier compound is served as 50 g standard.

Thread Type NPT acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range Ø min-max mm	Over Conductors max Ø mm	Armour Wire max. Ø mm	Outer Thread Length TL mm	Cap		Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Barrier Compound Material Per Pc. (g)
					SW Cap mm	SW Upper Body mm	SW Lower Body mm	SW Lower Body mm				
NPT 1/2	6,0 - 13,0	9,5	1,3	21,0	25	25	25	25	27,0	63,5	KBCTA1SN	7
	8,0 - 15,0	9,5	1,3	21,0	25	25	25	25	27,0	63,5	KBCTA1N	7
	13,5 - 21,0	12,0	1,3	21,0	30	30	30	30	33,0	65,0	KBCTA1LN	6
NPT 3/4"	8,0 - 15,0	9,5	1,3	21,0	25	25	30	30	33,0	63,5	KBCTA2SN	7
	13,5 - 21,0	12,0	1,3	21,0	30	30	30	30	33,0	65,0	KBCTA2N	6
	18,0 - 27,0	15,0	1,6	21,0	40	40	40	40	44,5	72,5	KBCTA2LN	14
NPT 1"	18,0 - 27,0	15,0	1,6	26,0	40	40	40	40	44,5	72,5	KBCTA3N	14
	23,0 - 33,0	21,5	1,6	26,0	43	43	43	43	47,0	74,5	KBCTA3LN	26
NPT 1 1/4"	23,0 - 33,0	21,5	1,6	28,0	43	43	45	45	50,0	74,5	KBCTA4SN	26
	29,0 - 40,0	29,0	2,0	28,0	50	50	50	50	55,5	82,5	KBCTA4N	50
NPT 1 1/2"	29,0 - 40,0	29,0	2,0	28,0	50	50	55	55	61,0	82,5	KBCTA5N	50
NPT 2"	35,0 - 48,0	37,0	2,5	28,0	58	58	65	65	72,0	90,5	KBCTA6N	82
NPT 2 1/2"	42,0 - 56,0	46,0	2,5	41,0	75	75	80	80	89,0	120,0	KBCTA7N	180
NPT 3"	54,0 - 70,0	58,0	3,2	43,0	100	100	100	100	110,5	126,0	KBCTA8N	290

*Barrier compound is served as 50 g standard.

CABLE GLANDS for NON-ARMOURED CABLES for Mining Applications



Crater for Mining Applications
Centaurus-N Barrier for Mining Applications

144 - 147
148 - 149

Ex Glands / Group I / Mining



GROUP I (Mining)

In mines where flammable minerals/materials are extracted, there can also be a risk of explosions because small particles of the extracted product can be blown into the air to form dust/air mixtures able to support rapid combustion.

Electrical equipment intended for mines where the atmosphere, in addition to firedamp, may contain significant proportions of other flammable gases (i.e. other than methane), shall be constructed and tested in accordance with the requirements relating to Group I and also to the subdivision of Group II corresponding to the other significant flammable gases.








Orion, Crater, Centaurus and Corona cable glands are tested according to IEC 60079 series and approved to be used in mining applications with M2, Mb protection level.

M 2 equipments may be used as it has a high level of protection and is suitable for the severe conditions in mining. In an explosive atmospheres, M 2 equipment needs to be capable of being disconnected or made safe.

Cable Glands for Non-Armoured Cables

CRATER for Mining Applications



Technical Details		
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L
	Inner Parts	Brass, Brass Nickel Plated, Stainless Steel 316L
	Seal	CR (Chloroprene), Silicone
	O-ring	CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	Chloroprene	Silicone
Group I	-40°C to +80°C	-60°C to +100°C
Equipment For Suitable for use in	Mining potentially explosive atmospheres.	
Equipment Marking	Group I Ex I M2 Ex db I Mb Ex eb I Mb	
Marking Example*	BMD MKBU.. CE 0722  I M2 Ex db I Mb Ex eb I Mb IP66/68 Ta -40°C to +80°C CESI 13 ATEX 033X IECEx CES 13.0013X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1.5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	Non-armoured	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 	
Remarks	<ul style="list-style-type: none"> • O-ring available in Metric outer threads. • Accessories must be ordered separately. 	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0053 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN60079-1, IEC/EN 62444
	MASC MS/18-0240X	SANS (IEC) 60079-0 : 2014 SANS (IEC) 60079-1 : 2009 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2014

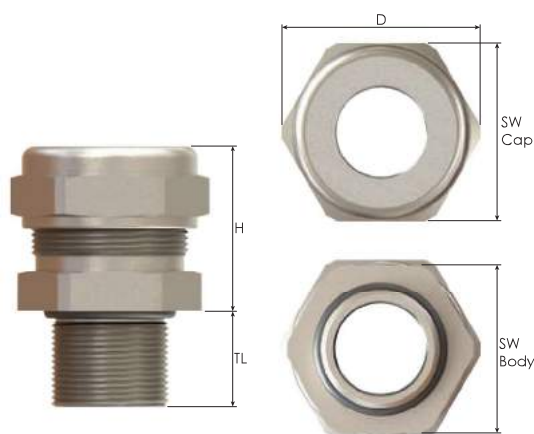
-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

Order Coding						
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut
Mandatory	Mandatory	Mandatory	-	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut
E	Earth tag					
Example						
MKBUSN1	BN	S	-	WC	WSR	L E

CRATER for Mining Applications

Cable Gland for Non-Armoured Cable










Thread Type METRIC acc. to ISO 965 - 3							
Outer Thread Size (Male)	Clamping Range	Outer Thread Length	Spanner Width		Outer Ø	max. Height	Part Number
			Cap	Body			
	Ø min - max mm	TL mm	SW Cap mm	SW Body mm	D mm	H mm	
M16x1,5	3,0 - 8,5	16,0	26	22	29,0	27,0	MKBU01M2
	6,0 - 9,0	16,0	29	27	31,5	31,5	MKBU01LM1
	9,0 - 12,0	16,0	29	27	31,5	31,5	MKBU01LM2
M20x1,5	6,0 - 9,0	16,0	29	27	31,5	31,5	MKBU1M1
	9,0 - 12,0	16,0	29	27	31,5	31,5	MKBU1M2
	8,5 - 11,5	16,0	30	28	33,5	34,0	MKBU1LM1
	11,5 - 14,5	16,0	30	28	33,5	34,0	MKBU1LM2
M25x1,5	6,0 - 9,0	18,0	29	29	31,5	31,0	MKBU2SM1
	9,0 - 12,0	18,0	29	29	31,5	31,0	MKBU2SM2
	8,5 - 12,5	18,0	34	32	37,0	35,5	MKBU2M1
	12,5 - 16,0	18,0	34	32	37,0	35,5	MKBU2M2
	12,0 - 16,0	18,0	40	36	44,5	35,5	MKBU2LM1
	16,0 - 20,0	18,0	40	36	44,5	35,5	MKBU2LM2
M32x1,5	12,0 - 16,0	18,0	40	40	44,5	36,5	MKBU3SM1
	16,0 - 20,0	18,0	40	40	44,5	36,5	MKBU3SM2
	15,0 - 20,0	18,0	52	48	57,0	43,0	MKBU3M1
	20,0 - 26,0	18,0	52	48	57,0	43,0	MKBU3M2
M40x1,5	15,0 - 20,0	18,0	52	48	57,0	43,0	MKBU4SM1
	20,0 - 26,0	18,0	52	48	57,0	43,0	MKBU4SM2
	20,0 - 26,0	18,0	60	55	66,0	52,0	MKBU4M1
	26,0 - 32,0	18,0	60	55	66,0	52,0	MKBU4M2
M50x1,5	22,0 - 28,0	18,0	70	60	77,0	52,0	MKBU5SM1
	28,0 - 35,0	18,0	70	60	77,0	52,0	MKBU5SM2
	27,0 - 34,0	18,0	70	70	77,0	56,0	MKBU5M1
	34,0 - 41,0	18,0	70	70	77,0	56,0	MKBU5M2
M63x1,5	35,0 - 40,0	20,0	80	75	89,5	63,5	MKBU6SM1
	40,0 - 45,0	20,0	80	75	89,5	63,5	MKBU6SM2
	40,0 - 46,0	20,0	85	85	94,0	64,0	MKBU6M1
	46,0 - 52,0	20,0	85	85	94,0	64,0	MKBU6M2
M75x1,5	40,0 - 46,0	20,0	85	85	94,0	64,0	MKBU7SM1
	46,0 - 52,0	20,0	85	85	94,0	64,0	MKBU7SM2
	45,0 - 52,0	20,0	95	90	105,0	79,0	MKBU7M1
	52,0 - 60,0	20,0	95	90	105,0	79,0	MKBU7M2
M90x1,5	45,0 - 52,0	20,0	95	95	105,0	79,0	MKBU8SM1
	52,0 - 60,0	20,0	95	95	105,0	79,0	MKBU8SM2
	60,0 - 66,0	20,0	115	110	127,0	86,0	MKBU8M1
	66,0 - 72,0	20,0	115	110	127,0	86,0	MKBU8M2

Cable Glands for Non-Armoured Cables

CRATER for Mining Applications



Technical Details		
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L
	Inner Parts	Brass, Brass Nickel Plated, Stainless Steel 316L
	Seal	CR (Chloroprene), Silicone
	O-ring	CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	Chloroprene	Silicone
Group I	-40°C to +80°C	-60°C to +100°C
Equipment For	Mining potentially explosive atmospheres.	
Suitable for use in	Group I Mining Group I Mb	
Equipment Marking	Group I Ex I M2 Ex db I Mb Ex eb I Mb	
Marking Example*	BMD MKBU.. CE 0722  I M2 Ex db I Mb Ex eb I Mb IP66/68 Ta -40°C to +80°C CESI 13 ATEX 033X IECEx CES 13.0013X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1.5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	Non-armoured	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 	
Remarks	<ul style="list-style-type: none"> • O-ring available in Metric outer threads. • Accessories must be ordered separately. 	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0053 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN60079-1, IEC/EN 62444
	MASC MS/18-0240X	SANS (IEC) 60079-0 : 2014 SANS (IEC) 60079-1 : 2009 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2014

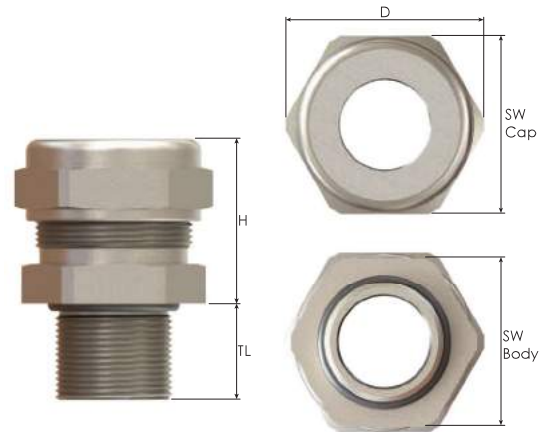
-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

Order Coding							
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut	Earth Tag
Mandatory	Mandatory	Mandatory	-	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	E Earth tag
Example							
MKBUSN1	BN	S	-	WC	WSR	L	E

CRATER for Mining Applications

Cable Gland for Non-Armoured Cable







Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range Ø min - max mm	Outer Thread Length TL mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
			Cap SW Cap mm	Body SW Body mm			
NPT 3/8"	3,0 - 8,5	16,0	26	22	29,0	27,0	MKBU01N2
	6,0 - 9,0	16,0	29	27	31,5	31,5	MKBU01LN1
	9,0 - 12,0	16,0	29	27	31,5	31,5	MKBU01LN2
NPT 1/2"	6,0 - 9,0	21,0	29	27	31,5	31,5	MKBU1N1
	9,0 - 12,0	21,0	29	27	31,5	31,5	MKBU1N2
	8,5 - 11,5	21,0	30	28	33,5	34,0	MKBU1LN1
	11,5 - 14,5	21,0	30	28	33,5	34,0	MKBU1LN2
NPT 3/4"	6,0 - 9,0	21,0	29	29	31,5	31,0	MKBU2SN1
	9,0 - 12,0	21,0	29	29	31,5	31,0	MKBU2SN2
	8,5 - 12,5	21,0	34	32	37,0	35,5	MKBU2N1
	12,5 - 16,0	21,0	34	32	37,0	35,5	MKBU2N2
	12,0 - 16,0	21,0	40	36	44,5	35,0	MKBU2LN1
	16,0 - 20,0	21,0	40	36	44,5	35,0	MKBU2LN2
NPT 1"	12,0 - 16,0	26,0	40	40	44,5	36,5	MKBU3SN1
	16,0 - 20,0	26,0	40	40	44,5	36,5	MKBU3SN2
	15,0 - 20,0	26,0	52	48	57,0	42,5	MKBU3N1
	20,0 - 26,0	26,0	52	48	57,0	42,5	MKBU3N2
NPT 1 1/4"	15,0 - 20,0	28,0	52	48	57,0	44,5	MKBU4SN1
	20,0 - 26,0	28,0	52	48	57,0	44,5	MKBU4SN2
	20,0 - 26,0	28,0	60	55	66,0	52,0	MKBU4N1
	26,0 - 32,0	28,0	60	55	66,0	52,0	MKBU4N2
NPT 1 1/2"	22,0 - 28,0	28,0	70	60	77,0	52,0	MKBU5SN1
	28,0 - 35,0	28,0	70	60	77,0	52,0	MKBU5SN2
	27,0 - 34,0	28,0	70	70	77,0	56,0	MKBU5N1
	34,0 - 41,0	28,0	70	70	77,0	56,0	MKBU5N2
NPT 2"	35,0 - 40,0	28,0	80	75	89,5	63,0	MKBU6SN1
	40,0 - 45,0	28,0	80	75	89,5	63,0	MKBU6SN2
	40,0 - 46,0	28,0	85	85	94,0	64,0	MKBU6N1
	46,0 - 52,0	28,0	85	85	94,0	64,0	MKBU6N2
NPT 2 1/2"	40,0 - 46,0	41,0	85	85	94,0	64,0	MKBU7SN1
	46,0 - 52,0	41,0	85	85	94,0	64,0	MKBU7SN2
	45,0 - 52,0	41,0	95	90	105,0	79,0	MKBU7N1
	52,0 - 60,0	41,0	95	90	105,0	79,0	MKBU7N2
NPT 3"	45,0 - 52,0	43,0	95	95	105,0	79,0	MKBU8SN1
	52,0 - 60,0	43,0	95	95	105,0	79,0	MKBU8SN2
	60,0 - 66,0	43,0	115	110	127,0	86,0	MKBU8N1
	66,0 - 72,0	43,0	115	110	127,0	86,0	MKBU8N2

Barrier Cable Glands for Non-armoured Cables

CENTAURUS-N BARRIER for Mining Applications

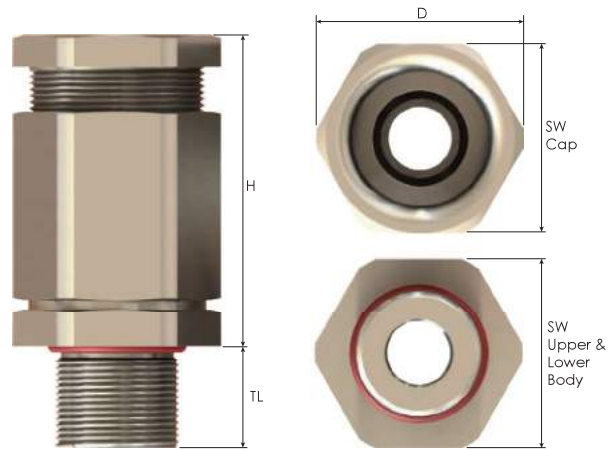
Technical Details		
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L
	Seal	Silicone
	O-ring	Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	Silicone
		-60°C to +60°C
Service Temperature	Seal Material	Silicone
		-60°C to +100°C
Equipment For	Mining potentially explosive atmospheres	
Suitable for use in	Group I Mining Group IM	
Equipment Marking	Ex I M - Ex db IMb Ex eb IMb	
Marking Example*	BMD KBCTN.. Ex CE 0722  I M2 Ex db I Mb Ex eb I Mb IP66/68 Ta -60°C to +60°C CESI 17 ATEX 007X IECEx CES 17.0029X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	Non Armoured	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 	
Remarks	<ul style="list-style-type: none"> • O-ring available in Metric and NPT outer threads. • Accessories must be ordered separately. 	
Approvals	Certificate Number	Standards
	CESI 17 ATEX 0007X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 17.0029X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
-For more information see our webpage.		
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.		



Order Coding								
Part Number	Material	Seal	- Group	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Mandatory	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	S Silicone	- M Group I (Mining)	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example								
KBCTN5N	BN	C	- M	-	WSR	L	S	-

CENTAURUS-N BARRIER for Mining Applications

Barrier Cable Glands for Non-Armoured Cables



Thread Type METRIC acc. to ISO 965-3

Outer Thread Size (Male)	Clamping Range Ø min-max mm	Over Conductors max Ø mm	Outer Thread Length TL mm	Spanner Width			Outer Ø D mm	max. Height		Part Number	Need Barrier Compound Material Per Pcs. (g)
				Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm		H mm			
M20x1,5	6,0 – 13,0	9,5	16,0	25	25	25	27,0	51,0	KBCTN1SM	7	
	8,0 – 15,0	9,5	16,0	25	25	25	27,0	51,0	KBCTN1M	7	
	13,5 – 21,0	12,0	16,0	30	30	30	33,0	52,5	KBCTN1LM	6	
M25x1,5	8,0 – 15,0	9,5	16,0	25	25	30	33,0	51,0	KBCTN2SM	7	
	13,5 – 21,0	12,0	16,0	30	30	30	33,0	52,5	KBCTN2M	6	
	18,0 – 27,0	15,0	16,0	40	40	40	44,5	60,0	KBCTN2LM	14	
M32x1,5	18,0 – 27,0	15,0	16,0	40	40	40	44,5	60,0	KBCTN3M	14	
	23,0 – 33,0	21,5	16,0	43	43	43	47,0	61,5	KBCTN3LM	26	
M40x1,5	23,0 – 33,0	21,5	16,0	43	43	45	50,0	61,5	KBCTN4SM	26	
	29,0 – 40,0	29,0	16,0	50	50	50	55,5	69,5	KBCTN4M	50	
M50x1,5	29,0 – 40,0	29,0	16,0	50	50	55	61,0	69,5	KBCTN5SM	50	
	35,0 – 48,0	37,0	16,0	58	58	58	64,0	75,0	KBCTN5M	82	
M63x1,5	35,0 – 48,0	37,0	20,0	58	58	68	75,0	75,0	KBCTN6SM	82	
	42,0 – 56,0	46,0	20,0	75	75	75	83,0	97,5	KBCTN6M	180	
M75x1,5	42,0 – 56,0	46,0	20,0	75	75	80	89,0	97,5	KBCTN7SM	180	
	54,0 – 70,0	58,0	20,0	100	100	100	110,5	106,5	KBCTN7M	290	
M90x1,5	54,0 – 70,0	58,0	20,0	100	100	100	110,5	106,5	KBCTN8M	290	

*Barrier compound is served as 50 g standard.

Thread Type NPT acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range Ø min-max mm	Over Conductors max Ø mm	Outer Thread Length TL mm	Spanner Width			Outer Ø D mm	max. Height		Part Number	Need Barrier Compound Material Per Pcs. (g)
				Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm		H mm			
NPT 1/2"	6,0 – 13,0	9,5	21,0	25	25	25	27,0	51,0	KBCTN1SN	7	
NPT 1/2"	8,0 – 15,0	9,5	21,0	25	25	25	27,0	51,0	KBCTN1N	7	
	13,5 – 21,0	12,0	21,0	30	30	30	33,0	52,5	KBCTN1LN	6	
NPT 3/4"	8,0 – 15,0	9,5	21,0	25	25	30	33,0	51,0	KBCTN2SN	7	
	13,5 – 21,0	12,0	21,0	30	30	30	33,0	52,5	KBCTN2N	6	
NPT 3/4"	18,0 – 27,0	15,0	21,0	40	40	40	44,5	60,0	KBCTN2LN	14	
	18,0 – 27,0	15,0	26,0	40	40	40	44,5	60,0	KBCTN3N	14	
NPT 1"	23,0 – 33,0	21,5	26,0	43	43	43	47,0	61,5	KBCTN3LN	26	
	23,0 – 33,0	21,5	28,0	43	43	45	50,0	61,5	KBCTN4SN	26	
NPT 1 1/4"	29,0 – 40,0	29,0	28,0	50	50	50	55,5	69,5	KBCTN4N	50	
	29,0 – 40,0	29,0	28,0	50	50	55	61,0	69,5	KBCTN5N	50	
NPT 2"	35,0 – 48,0	37,0	28,0	58	58	65	72,0	75,0	KBCTN6N	82	
NPT 2 1/2"	42,0 – 56,0	46,0	41,0	75	75	80	89,0	97,5	KBCTN7N	180	
NPT 3"	54,0 – 70,0	58,0	43,0	100	100	100	110,5	106,5	KBCTN8N	290	

*Barrier compound is served as 50 g standard.

CABLE GLANDS for ARMoured CABLES for Gas & Dust Applications



Orion Universal	152 - 155
Orion Offshore	156 - 159
Orion	160 - 163
Orion Lead Sheathed	164 - 167
Corona Universal	168 - 171
Corona Offshore	172 - 175
Corona	176 - 179
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Ex Glands / Group II-III / Gas & Dust



Explosive gases, vapors and dusts have different chemical properties that affect the likelihood and severity of an explosion. Such properties include flame temperature, minimum ignition energy, upper and lower explosive limits, and molecular weight. Empirical testing is done to determine parameters such as the maximum experimental safe gap, minimum ignition current, explosion pressure and time to peak pressure, spontaneous ignition temperature, and maximum rate of pressure rise. Every substance has a differing combination of properties but it is found that they can be ranked into similar ranges, simplifying the selection of equipment for hazardous areas.

Flammability of combustible liquids are defined by their flash-point. The flash-point is the temperature at which the material will generate sufficient quantity of vapor to form an ignitable mixture. The flash point determines if an area needs to be classified. A material may have a relatively low autoignition temperature yet if its flash-point is above the ambient temperature, then the area may not need to be classified. Conversely if the same material is heated and handled above its flash-point, the area must be classified.

Each chemical gas or vapour used in industry is classified into a gas group.

The boundaries and extent of these three dimensional zones should be decided by a competent person. There must be a site plan drawn up of the factory with the zones marked on.

Cable Glands for All Types of Armoured Cables

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Technical Details									
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium								
Material	<table border="0"> <tr> <td>Inner Part</td> <td>Brass, Brass Nickel Plated, Stainless Steel, Aluminium</td> </tr> <tr> <td>Seal</td> <td>CR (Chloroprene), Silicone</td> </tr> <tr> <td>O-ring</td> <td>CR (Chloroprene), Silicone</td> </tr> </table>	Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	Seal	CR (Chloroprene), Silicone	O-ring	CR (Chloroprene), Silicone		
Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Aluminium								
Seal	CR (Chloroprene), Silicone								
O-ring	CR (Chloroprene), Silicone								
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66								
Operating Temperature	<table border="0"> <tr> <th colspan="2">Seal Material</th> </tr> <tr> <td>CR (Chloroprene)</td> <td>Silicone</td> </tr> <tr> <td>Standard</td> <td>-40°C to +100°C -60°C to +130°C</td> </tr> <tr> <td>LT Type</td> <td>-40°C to +80°C -60°C to +80°C</td> </tr> </table>	Seal Material		CR (Chloroprene)	Silicone	Standard	-40°C to +100°C -60°C to +130°C	LT Type	-40°C to +80°C -60°C to +80°C
Seal Material									
CR (Chloroprene)	Silicone								
Standard	-40°C to +100°C -60°C to +130°C								
LT Type	-40°C to +80°C -60°C to +80°C								
Equipment For	Gas & Dust potentially explosive atmospheres								
Suitable for use in	<table border="0"> <tr> <td>Group II</td> <td>Gas Group IIC</td> <td>ZONE1/ZONE2</td> </tr> <tr> <td>Group III</td> <td>Dust Group IIIC</td> <td>ZONE21/ZONE 22</td> </tr> </table>	Group II	Gas Group IIC	ZONE1/ZONE2	Group III	Dust Group IIIC	ZONE21/ZONE 22		
Group II	Gas Group IIC	ZONE1/ZONE2							
Group III	Dust Group IIIC	ZONE21/ZONE 22							
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex fb IIIC Db								
Marking Example *	BMD KBAU.. CE 0722 II 2GD Ex db IIC Gb Ex eb IIC Gb Ex fb IIIC Db T _a -60°C +130°C IP66/68 CESI 13 ATEX 033X IECEx CES 13.0013X								
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 								
Cable Type	SWA - SWB - STA - PWA - AWA - Shielded								
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 								
Remarks	<ul style="list-style-type: none"> • O-ring available in Metric outer threads. • Accessories must be ordered separately. 								
Approvals	Certificate Number	Standards							
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014							
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5							
	20150612-E474828	UL 2225, CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA C22.2 No. 60079-7:12 CAN/CSA-C22.2 No. 60079-31:12							
	20170315-E199260	UL 514B UL 50E							
	N _o TC RU C-TR.AA87.B.00941	GOCT 31610.0-2014 GOCT IEC 60079-1:2013 GOCT IEC 60079-31:2013							
	DNV 12.0053 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011							
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN60079-1, IEC/EN 62444							
	MASC MS/18-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2014 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2014							

-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

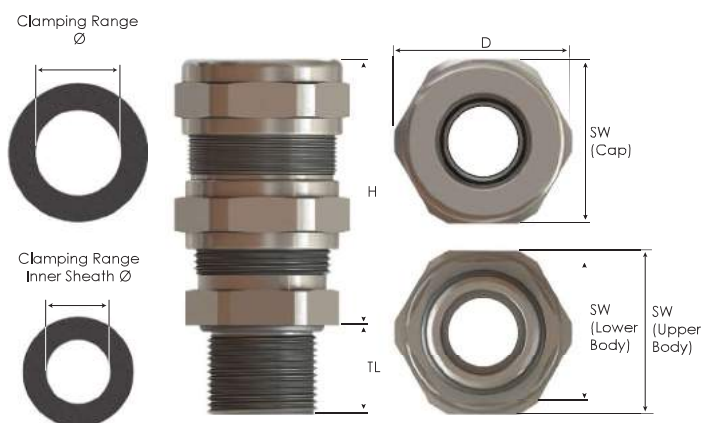


With armour reduction cone it can be used for shielded, SWB and STA cable. When armour reduction cone is taken out it can be used for armoured SWA and AWA cables.

Order Coding								
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	-	Option	Option	Option	Option	Option
See table	B Brass BN Brass nickel plated X Stainless steel 316L A Aluminium	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example KBAU4M	BN	S	-	WC	WSR	L	S	E

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Cable Glands for All Types of Armoured Cables



Thread Type **METRIC** acc. to ISO 965 - 3

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Shield Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm					Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
M12x1,5	3,0 - 7,5	6,0 - 12,0	0,70 - 1,20	0,2 - 0,5	15,0	26	26	22	29,0	50,5	KBAU0SLM
M16x1,5	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	0,2 - 0,5	16,0	26	26	22	29,0	49,5	KBAU01SM
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	0,2 - 0,5	16,0	29	29	25	31,5	52,0	KBAU01M
M20x1,5	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	0,2 - 0,5	16,0	26	26	24	29,0	50,0	KBAU1SM
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	0,2 - 0,5	16,0	29	29	25	31,5	51,5	KBAU1M
	8,5 - 14,5	12,0 - 20,0	0,90 - 1,30	0,2 - 0,5	16,0	32	30	28	35,0	54,0	KBAU1LM
M25x1,5	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	0,2 - 0,5	18,0	26	26	29	31,5	50,0	KBAU2XSM
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	0,2 - 0,5	18,0	29	29	29	31,5	52,5	KBAU2SM
	8,5 - 16,0	12,0 - 21,0	0,70 - 1,20	0,5 - 0,7	18,0	34	34	32	37,0	56,5	KBAU2M
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	0,2 - 0,5	18,0	40	40	36	44,0	63,0	KBAU2LM
M32x1,5	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	0,2 - 0,5	18,0	29	29	36	39,8	52,5	KBAU3XSM
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	0,2 - 0,5	18,0	40	40	40	44,0	64,0	KBAU3SM
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	0,2 - 0,8	18,0	52	52	48	57,0	81,0	KBAU3M
M40x1,5	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	0,2 - 0,5	18,0	40	40	45	50,0	64,0	KBAU4XSM
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	0,2 - 0,8	18,0	52	52	48	57,0	81,0	KBAU4SM
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	0,2 - 0,8	18,0	60	60	55	66,0	92,0	KBAU4M
M50x1,5	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	0,2 - 0,8	18,0	52	52	54	60,0	81,0	KBAU5XSM
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	0,2 - 0,8	18,0	60	60	55	66,0	92,0	KBAU5SM
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	0,2 - 1,0	18,0	75	70	60	83,0	100,0	KBAU5SM
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	0,3 - 1,4	18,0	74	70	70	81,8	104,5	KBAU5M
M63x1,5	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	0,2 - 1,0	20,0	75	70	68	83,0	100,0	KBAU6XSM
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	0,3 - 1,4	20,0	74	70	70	81,8	104,5	KBAU6XMM
	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	0,3 - 1,0	20,0	80	80	75	89,5	109,5	KBAU6SM
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	0,6 - 1,5	20,0	85	85	85	94,0	111,5	KBAU6M
M75x1,5	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	0,3 - 1,0	20,0	80	80	85	94,0	109,5	KBAU7XSM
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	0,6 - 1,5	20,0	85	85	85	94,0	111,5	KBAU7SM
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	0,2 - 1,2	20,0	100	95	90	110,5	127,5	KBAU7M
M90x1,5	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	0,6 - 1,5	20,0	85	85	100	110,5	111,5	KBAU8XSM
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	0,2 - 1,2	20,0	100	95	95	110,5	127,5	KBAU8SM
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	0,2 - 1,9	20,0	115	115	110	127,0	158,0	KBAU8M
M110x1,5	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	0,2 - 1,2	20,0	100	95	120	128,0	127,5	KBAU10SM
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	0,2 - 1,9	20,0	115	115	120	128,0	158,0	KBAU10M

Thread Type **METRIC** acc. to ISO 965 - 3 (LT Type)

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Shield Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm					Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
M90x2,0	70,0 - 82,0	78,0 - 90,0	1,5 - 4,4	0,2 - 2,4	20,0	120	120	120	134,0	159,5	KBAU8MLT
M100x2,0	80,0 - 92,0	88,0 - 100,0	1,2 - 4,0	0,2 - 2,2	20,0	135	135	135	150,0	169,0	KBAU9SMLT
M110x2,0	90,0 - 101,0	98,0 - 110,0	2,1 - 5,4	0,2 - 3,1	20,0	145	145	145	162,0	180,0	KBAU10MLT
M130x2,0	100,0 - 115,0	109,0 - 123,0	2,0 - 5,4	0,2 - 3,0	24,0	160	160	160	176,0	202,0	KBAU13MLT

Cable Glands for All Types of Armoured Cables

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Technical Details		
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
Material	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
Seal	CR (Chloroprene), Silicone	
O-ring	CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene) Silicone	
Standard	-40°C to +100°C -60°C to +130°C	
LT Type	-40°C to +80°C -60°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD KBAU.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta-60°C +130°C IP66/68 CESI 13 ATEX 033X IECEx CES 13.0013X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1.5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	SWA - SWB - STA - PWA - AWA - Shielded	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 	
Remarks	<ul style="list-style-type: none"> • O-ring available in Metric outer threads. • Accessories must be ordered separately. 	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	20150612-E474828 20170315-E199260	UL 2225, CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA C22.2 No. 60079-7:12 CAN/CSA-C22.2 No. 60079-31:12 UL 514B UL 50E
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0053 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN60079-1, IEC/EN 62444
	MASC MS/18-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2014 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2014

-For more information see our webpage.
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

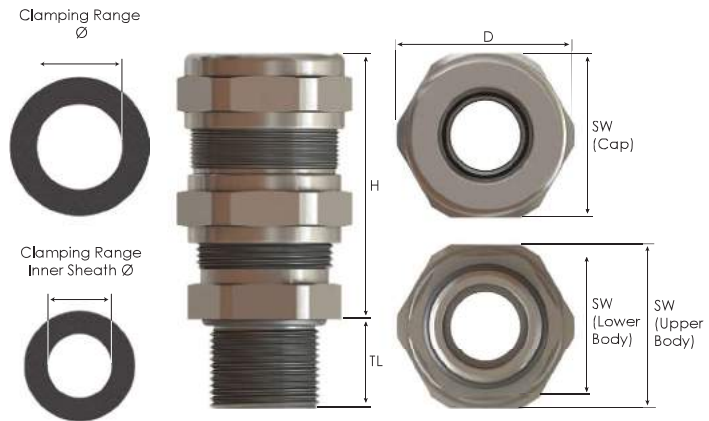


With armour reduction cone it can be used for shielded, SWB and STA cable. When armour reduction cone is taken out it can be used for armoured SWA and AWA cables.

Order Coding								
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	-	Option	Option	Option	Option	Option
See table	B Brass BN Brass nickel plated X Stainless steel 316L A Aluminium	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example	KBAU4M	BN	S	WC	WSR	L	S	E

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Cable Glands for All Type of Armoured Cables



Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min - max mm	Shield Wire Ø min - max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min - max mm	Ø min - max mm					Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
NPT 1/4"	3,0 - 8,0	6,0 - 12,0	0,70 - 1,20	0,2 - 0,5	15,0	26	26	22	29,0	50,0	KBAU0SLN
NPT 3/8"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	0,2 - 0,5	16,0	26	26	22	29,0	49,5	KBAU01SN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	0,2 - 0,5	16,0	29	29	25	31,5	52,0	KBAU01N
NPT 1/2"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	0,2 - 0,5	16,0	26	26	24	29,0	49,5	KBAU1SN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	0,2 - 0,5	16,0	29	29	25	31,5	51,0	KBAU1N
	8,5 - 14,5	12,0 - 20,0	0,90 - 1,30	0,2 - 0,5	16,0	32	30	28	35,0	54,0	KBAU1LN
NPT 3/4"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	0,2 - 0,5	16,0	26	26	29	31,5	50,0	KBAU2XSN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	0,2 - 0,5	18,0	29	29	29	31,5	52,5	KBAU2SN
	8,5 - 16,0	12,0 - 21,0	0,70 - 1,20	0,5 - 0,7	16,0	34	34	32	37,0	56,5	KBAU2N
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	0,2 - 0,5	16,0	40	40	36	44,0	62,5	KBAU2LN
NPT 1"	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	0,2 - 0,5	21,0	29	29	36	39,8	52,5	KBAU3XSN
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	0,2 - 0,5	21,0	40	40	40	44,0	64,0	KBAU3SN
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	0,2 - 0,8	21,0	52	52	48	57,0	80,5	KBAU3N
NPT 1 1/4"	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	0,2 - 0,5	21,0	40	40	45	50,0	64,0	KBAU4XSN
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	0,2 - 0,8	21,0	52	52	48	57,0	81,0	KBAU4SN
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	0,2 - 0,8	18,0	60	60	55	66,0	92,0	KBAU4N
NPT 1 1/2"	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	0,2 - 0,8	21,0	52	52	54	60,0	81,0	KBAU5XSN
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	0,2 - 0,8	21,0	60	60	55	66,0	92,0	KBAU5XMN
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	0,2 - 1,0	21,0	75	70	60	83,0	100,0	KBAU5SN
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	0,3 - 1,4	21,0	74	70	70	81,8	104,5	KBAU5N
NPT 2"	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	0,2 - 1,0	21,0	75	70	68	83,0	100,0	KBAU6XSN
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	0,3 - 1,4	21,0	74	70	70	81,8	104,5	KBAU6XMN
	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	0,3 - 1,0	20,0	80	80	75	89,5	109,5	KBAU6SN
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	0,6 - 1,5	21,0	85	85	85	94,0	111,5	KBAU6N
NPT 2 1/2"	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	0,3 - 1,0	21,0	80	80	80	89,5	109,0	KBAU7XSN
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	0,6 - 1,5	21,0	85	85	85	94,0	111,5	KBAU7SN
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	0,2 - 1,2	20,0	100	95	90	110,5	127,5	KBAU7N
NPT 3"	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	0,6 - 1,5	21,0	85	85	95	105,0	111,5	KBAU8XSN
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	0,2 - 1,2	21,0	100	95	95	110,5	127,5	KBAU8SN
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	0,2 - 1,9	21,0	115	115	110	127,0	158,0	KBAU8N
NPT 3 1/2"	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	0,2 - 1,2	21,0	100	95	110	123,0	127,5	KBAU9SN
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	0,2 - 1,9	21,0	115	115	110	127,0	158,0	KBAU9N

Thread Type **NPT** acc. to ANSI ASME B1.20.1 (LT Type)

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min - max mm	Shield Wire Ø min - max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min - max mm	Ø min - max mm					Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
NPT 3 1/2"	70,0 - 82,0	78,0 - 90,0	1,5 - 4,4	0,2 - 2,4	45,0	120	120	120	134,0	159,5	KBAU9MNL
NPT 4"	80,0 - 92,0	88,0 - 100,0	1,2 - 4,0	0,2 - 2,2	46,0	135	135	135	150,0	169,0	KBAU10SNLT
	90,0 - 101,0	98,0 - 110,0	2,1 - 5,4	0,2 - 3,1	46,0	145	145	145	162,0	180,0	KBAU10NLT
NPT 5"	100,0 - 115,0	109,0 - 123,0	2,0 - 5,4	0,2 - 3,0	48,0	160	160	160	176,0	202,0	KBAU11SNLT

Cable Glands for SWB, STA and Shielded Cables

ORION OFFSHORE



Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Seal	CR (Chloroprene), Silicone	
	O-ring	CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	CR (Chloroprene)	Silicone	
		-40°C to +100°C	
		-60°C to +130°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2	
	Group III	Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db		
Marking Example *	BMD KBAO.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta -40°C +100°C IP66/68 CESI 13 ATEX 033X IECEx CES 13.0013X		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	SWB - STA - Shielded		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 		
	<ul style="list-style-type: none"> • O-ring available in Metric outer threads. • Accessories must be ordered separately. 		
	Approvals	Certificate Number	Standards
		CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
		IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	20170315-E199260	UL 514B UL 50E	
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	
	DNV 12.0053 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011	
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN60079-1, IEC/EN 62444	
	MASC MS/18-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2014 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2014	



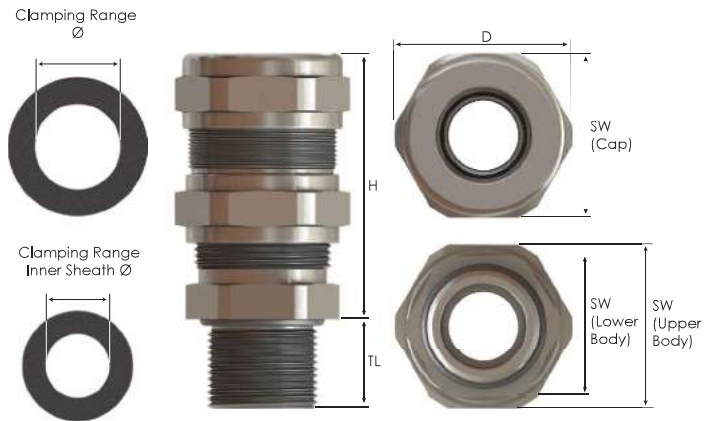
-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

Order Coding								
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	-	Option	Option	Option	Option	Option
See table	B Brass BN Brass nickel plated X Stainless steel 316L A Aluminium	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example	KBAO4M	BN	S	WC	WSR	L	S	E

ORION OFFSHORE

Cable Glands for SWB, STA and Shielded Cables



Thread Type **METRIC** acc. to ISO 965 - 3

Outer Thread Size (Male)	Clamping Range		Shield Wire Ø min-max mm	Outer Thread Length TL mm	Spanner Width			Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
M12x1,5	3,0 - 7,5	6,0 - 12,0	0,20 - 0,50	15	26	26	22	29,0	50,5	KBAO0SLM
	3,0 - 8,5	6,0 - 12,0	0,20 - 0,50	16	26	26	22	29,0	49,5	KBAO01SM
M16x1,5	6,0 - 12,0	8,5 - 16,0	0,20 - 0,50	16	29	29	25	31,5	52,0	KBAO01M
	3,0 - 8,5	6,0 - 12,0	0,20 - 0,50	16	26	26	24	29,0	50,0	KBAO1SM
M20x1,5	6,0 - 12,0	8,5 - 16,0	0,20 - 0,50	16	29	29	25	31,5	51,5	KBAO1M
	8,5 - 14,5	12,0 - 20,0	0,20 - 0,50	16	32	30	28	35,0	54,0	KBAO1LM
M25x1,5	3,0 - 8,5	6,0 - 12,0	0,20 - 0,50	18	26	26	29	31,5	50,0	KBAO2XSM
	6,0 - 12,0	8,5 - 16,0	0,20 - 0,50	18	29	29	29	31,5	52,5	KBAO2SM
	8,5 - 16,0	12,0 - 21,0	0,20 - 0,40	18	34	34	32	37,0	56,5	KBAO2M
M32x1,5	12,0 - 20,0	16,0 - 26,0	0,20 - 0,50	18	40	40	36	44,0	63,0	KBAO2LM
	6,0 - 12,0	8,5 - 16,0	0,20 - 0,50	18	29	29	36	39,8	52,5	KBAO3XSM
	12,0 - 20,0	16,0 - 26,0	0,20 - 0,50	18	40	40	40	44,0	64,0	KBAO3SM
M40x1,5	15,0 - 26,0	20,0 - 33,0	0,30 - 0,80	18	52	52	48	57,0	81,0	KBAO3M
	12,0 - 20,0	16,0 - 26,0	0,20 - 0,50	18	40	40	45	50,0	64,0	KBAO4XSM
	15,0 - 26,0	20,0 - 33,0	0,30 - 0,80	18	52	52	48	57,0	81,0	KBAO4SM
M50x1,5	20,0 - 32,0	29,0 - 41,0	0,15 - 0,75	18	60	60	55	66,0	92,0	KBAO4M
	15,0 - 26,0	20,0 - 33,0	0,30 - 0,80	18	52	52	54	60,0	81,0	KBAO5XSM
	20,0 - 32,0	29,0 - 41,0	0,15 - 0,75	18	60	60	55	66,0	92,0	KBAO5XMM
M63x1,5	22,0 - 35,0	33,0 - 48,0	0,25 - 0,90	18	75	70	60	83,0	100,0	KBAO5SM
	27,0 - 41,0	36,0 - 52,0	0,25 - 1,30	18	74	70	70	81,8	104,5	KBAO5M
	22,0 - 35,0	33,0 - 48,0	0,25 - 0,90	20	75	70	68	83,8	100,0	KBAO6XSM
M75x1,5	27,0 - 41,0	36,0 - 52,0	0,25 - 1,30	20	74	70	70	81,8	104,5	KBAO6XMM
	35,0 - 45,0	43,0 - 57,0	0,40 - 1,10	20	80	80	75	89,5	109,5	KBAO6SM
	40,0 - 52,0	47,0 - 60,0	0,30 - 1,30	20	85	85	85	94,0	111,5	KBAO6M
M90x1,5	35,0 - 45,0	43,0 - 57,0	0,40 - 1,10	20	80	80	85	94,0	109,5	KBAO7XSM
	40,0 - 52,0	47,0 - 60,0	0,30 - 1,30	20	85	85	85	94,0	111,5	KBAO7SM
	45,0 - 60,0	54,0 - 70,0	0,30 - 1,40	20	100	95	90	110,5	127,5	KBAO7M
M110x1,5	40,0 - 52,0	47,0 - 60,0	0,30 - 1,30	20	85	85	100	110,5	111,5	KBAO8XSM
	45,0 - 60,0	54,0 - 70,0	0,30 - 1,40	20	100	95	95	110,5	127,5	KBAO8SM
	60,0 - 72,0	63,0 - 80,0	0,30 - 3,30	20	115	115	110	127,0	158,0	KBAO8M
M110x1,5	45,0 - 60,0	54,0 - 70,0	0,30 - 1,40	20	100	95	120	128,0	127,5	KBAO10SM
	60,0 - 72,0	63,0 - 80,0	0,30 - 3,30	20	115	115	120	128,0	158,0	KBAO10M

Cable Glands for SWB, STA and Shielded Cables

ORION OFFSHORE



Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Seal	CR (Chloroprene), Silicone	
	O-ring	CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	CR (Chloroprene)	Silicone	
	-40°C to +100°C	-60°C to +130°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2	
	Group III	Dust Group III C ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db		
Marking Example *	BMD KBA0.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta -40°C +100°C IP66/68 CESI 13 ATEX 033X IECEx CES 13.0013X		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	SWB - STA - Shielded		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 		
	<ul style="list-style-type: none"> • O-ring available in Metric outer threads. • Accessories must be ordered separately. 		
	Approvals	Certificate Number	Standards
		CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
		IECEX CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	20170315-E199260	UL 514B UL 50E	
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	
	DNV 12.0053 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011	
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN60079-1, IEC/EN 62444	
	MASC MS/18-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2014 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2014	

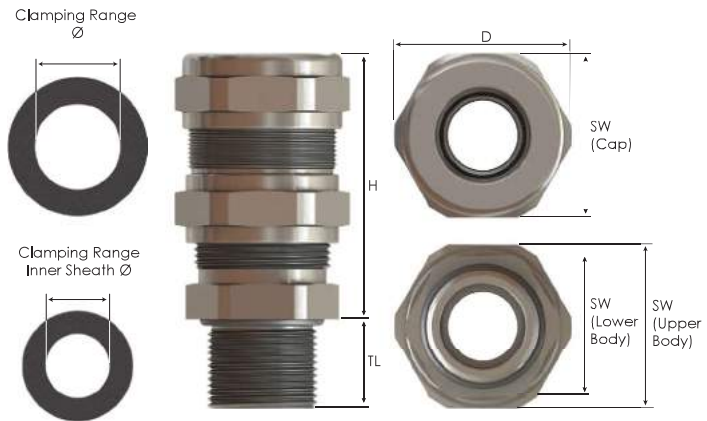
-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



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Cable Glands for SWB, STA and Shielded Cables











Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range		Shield Wire Ø min-max mm	Outer Thread Length TL mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			Cap SW Cap mm	Upper Body SW Upper Body mm			
NPT 1/4"	3,0 - 8,0	6,0 - 12,0	0,20 - 0,50	15,0	26	26	29,0	50,0	KBAO0SLN
	3,0 - 8,5	6,0 - 12,0	0,20 - 0,50	16,0	26	22	29,0	49,5	KBAO01SN
NPT 3/8"	6,0 - 12,0	8,5 - 16,0	0,20 - 0,50	16,0	29	29	31,5	52,0	KBAO01IN
	3,0 - 8,5	6,0 - 12,0	0,20 - 0,50	21,0	26	24	29,0	49,5	KBAO1SN
NPT 1/2"	6,0 - 12,0	8,5 - 16,0	0,20 - 0,50	21,0	29	25	31,5	51,0	KBAO1IN
	8,5 - 14,5	12,0 - 20,0	0,20 - 0,50	21,0	32	28	35,0	54,0	KBAO1LN
	3,0 - 8,5	6,0 - 12,0	0,20 - 0,50	21,0	26	29	31,5	50,0	KBAO2XSN
NPT 3/4"	6,0 - 12,0	8,5 - 16,0	0,20 - 0,50	21,0	29	29	31,5	52,5	KBAO2SN
	8,5 - 16,0	12,0 - 21,0	0,20 - 0,40	21,0	34	32	37,0	56,5	KBAO2N
	12,0 - 20,0	16,0 - 26,0	0,20 - 0,50	21,0	40	36	44,0	62,5	KBAO2LN
NPT 1"	6,0 - 12,0	8,5 - 16,0	0,20 - 0,50	26,0	29	36	39,8	52,5	KBAO3XSN
	12,0 - 20,0	16,0 - 26,0	0,20 - 0,50	26,0	40	40	44,0	64,0	KBAO3SN
	15,0 - 26,0	20,0 - 33,0	0,30 - 0,80	26,0	52	48	57,0	80,5	KBAO3N
NPT 1 1/4"	12,0 - 20,0	16,0 - 26,0	0,20 - 0,50	28,0	40	45	50,0	64,0	KBAO4XSN
	15,0 - 26,0	20,0 - 33,0	0,30 - 0,80	28,0	52	48	57,0	81,0	KBAO4SN
	20,0 - 32,0	29,0 - 41,0	0,15 - 0,75	28,0	60	55	66,0	92,0	KBAO4N
NPT 1 1/2"	15,0 - 26,0	20,0 - 33,0	0,30 - 0,80	28,0	52	54	60,0	81,0	KBAO5XSN
	20,0 - 32,0	29,0 - 41,0	0,15 - 0,75	28,0	60	55	66,0	92,0	KBAO5XMN
	22,0 - 35,0	33,0 - 48,0	0,25 - 0,90	28,0	75	60	83,0	100,0	KBAO5SN
	27,0 - 41,0	36,0 - 52,0	0,25 - 1,30	28,0	74	70	81,8	104,5	KBAO5N
NPT 2"	22,0 - 35,0	33,0 - 48,0	0,25 - 0,90	28,0	75	70	83,0	100,0	KBAO6XSN
	27,0 - 41,0	36,0 - 52,0	0,25 - 1,30	28,0	74	70	81,8	104,5	KBAO6XMN
	35,0 - 45,0	43,0 - 57,0	0,40 - 1,10	28,0	80	75	89,5	109,5	KBAO6SN
	40,0 - 52,0	47,0 - 60,0	0,30 - 1,30	28,0	85	85	94,0	111,5	KBAO6N
NPT 2 1/2"	35,0 - 45,0	43,0 - 57,0	0,40 - 1,10	41,0	80	80	89,5	109,0	KBAO7XSN
	40,0 - 52,0	47,0 - 60,0	0,30 - 1,30	41,0	85	85	94,0	111,5	KBAO7SN
	45,0 - 60,0	54,0 - 70,0	0,30 - 1,40	41,0	100	90	110,5	127,5	KBAO7N
NPT 3"	40,0 - 52,0	47,0 - 60,0	0,30 - 1,30	43,0	85	85	105,0	111,5	KBAO8XSN
	45,0 - 60,0	54,0 - 70,0	0,30 - 1,40	43,0	100	95	110,5	127,5	KBAO8SN
	60,0 - 72,0	63,0 - 80,0	0,30 - 3,30	43,0	115	110	127,0	158,0	KBAO8N
NPT 3 1/2"	45,0 - 60,0	54,0 - 70,0	0,30 - 1,40	45,0	100	95	123,0	127,5	KBAO9SN
	60,0 - 72,0	63,0 - 80,0	0,30 - 3,30	45,0	115	110	127,0	158,0	KBAO9N

Cable Glands for SWA and AWA Cables

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Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Seal	CR (Chloroprene) , Silicone	
	O-ring	CR (Chloroprene) , Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	CR (Chloroprene)	Silicone	
	Standard	LT Type	
	-40°C to +100°C	-60°C to +130°C	
	-40°C to +80°C	-60°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2	
	Group III	Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db		
Marking Example *	BMD KBA.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta -60°C to +130°C IP66/68 CESI 13 ATEX 033X IECEx CES 13.0013X		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	SWA - AWA		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 		
	<ul style="list-style-type: none"> • O-ring available in Metric outer threads. • Accessories must be ordered separately. 		
	Approvals	Certificate Number	Standards
		CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
		IECEX CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	20150612-E474828	UL 2225, CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA C22.2 No. 60079-7:12 CAN/CSA-C22.2 No. 60079-31:12	
	20170315-E199260	UL 514B UL50E	
	№ TC RU C-TR.AA87.B.00941	FOCT 31610.0-2014 FOCT IEC 60079-1:2013 FOCT IEC 60079-31:2013	
	DNV 12.0053 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011	
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN60079-1, IEC/EN 62444	
	MASC MS/18-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2014 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2014	

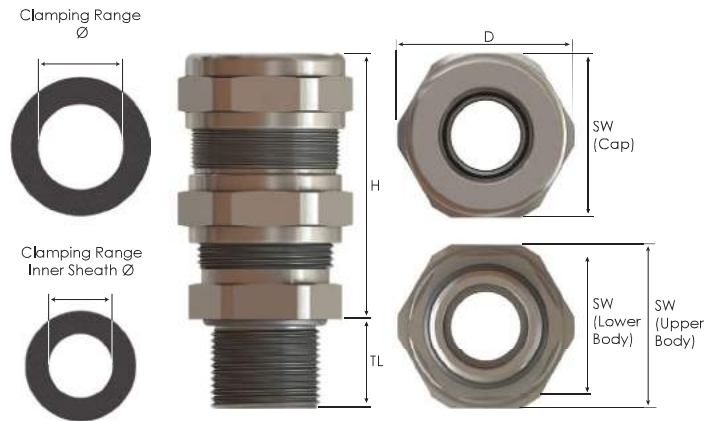
-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

Order Coding							
Part Number	Material	Seal	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel A Aluminium	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example							
KBA1N	BN	S	- WC	-	L	-	E

ORION

Cable Glands for SWA and AWA Cables



Thread Type **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Spanner Width Upper Body		Lower Body SW Lower Body mm	Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			SW Cap mm	SW Upper Body mm				
M12x1,5	2,0 - 4,0	3,0 - 5,5	0,10 - 0,40	15,0	17	17	17	18,9	62,5	KBA05M
	3,0 - 7,5	6,0 - 12,0	0,70 - 1,20	15,0	26	26	22	29,0	50,5	KBA05LM
M16x1,5	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	16,0	26	26	22	29,0	49,5	KBA015M
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	16,0	29	29	25	31,5	52,0	KBA01M
M20x1,5	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	16,0	26	26	24	29,0	50,0	KBA15M
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	16,0	29	29	25	31,5	51,5	KBA1M
	8,5 - 14,5	12,0 - 20,0	0,90 - 1,30	16,0	32	30	28	35,0	54,0	KBA1LM
M25x1,5	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	18,0	26	26	29	31,5	50,0	KBA2XSM
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	18,0	29	29	29	31,5	52,5	KBA25M
	8,5 - 16,0	12,0 - 21,0	0,70 - 1,20	18,0	34	34	32	37,0	56,5	KBA2M
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	18,0	40	40	36	44,0	63,0	KBA2LM
M32x1,5	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	18,0	29	29	36	39,8	52,5	KBA3XSM
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	18,0	40	40	40	44,0	64,0	KBA35M
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	18,0	52	52	48	57,0	81,0	KBA3M
M40x1,5	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	18,0	40	40	45	50,0	64,0	KBA4XSM
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	18,0	52	52	48	57,0	81,0	KBA45M
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	18,0	60	60	55	66,0	92,0	KBA4M
M50x1,5	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	18,0	52	52	54	60,0	81,0	KBA5XSM
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	18,0	60	60	55	66,0	92,0	KBA5XMM
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	18,0	75	70	60	83,0	100,0	KBA55M
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	18,0	74	70	70	81,8	104,5	KBA5M
M63x1,5	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	20,0	75	70	68	83,0	100,0	KBA6XSM
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	20,0	74	70	70	81,8	104,5	KBA6XMM
	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	20,0	80	80	75	89,5	109,5	KBA65M
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	20,0	85	85	85	94,0	111,5	KBA6M
	45,0 - 56,0	54,0 - 70,0	1,30 - 2,50	20,0	100	95	90	110,5	128,5	KBA6LM
M75x1,5	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	20,0	80	80	85	94,0	109,5	KBA7XSM
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	20,0	85	85	85	94,0	111,5	KBA75M
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	20,0	100	95	90	110,5	127,5	KBA7M
M90x1,5	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	20,0	85	85	100	110,5	111,5	KBA8XSM
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	20,0	100	95	95	110,5	127,5	KBA85M
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	20,0	115	115	110	127,0	158,0	KBA8M
M110x1,5	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	20,0	100	95	120	128,0	127,5	KBA10SM
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	20,0	115	115	120	128,0	158,0	KBA10M









Thread Type **METRIC** acc. to ISO 965-3 (LT Type)

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Spanner Width Upper Body		Lower Body SW Lower Body mm	Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			SW Cap mm	SW Upper Body mm				
M90x2,0	70,0 - 82,0	78,0 - 90,0	1,5 - 4,4	20,0	120	120	120	134,0	159,5	KBA8MLT
M100x2,0	80,0 - 92,0	88,0 - 100,0	1,2 - 4,0	20,0	135	135	135	150,0	169,0	KBA9SMLT
M110x2,0	90,0 - 101,0	98,0 - 110,0	2,1 - 5,4	20,0	145	145	145	162,0	180,0	KBA10MLT
M130x2,0	100,0 - 115,0	109,0 - 123,0	2,0 - 5,4	24,0	160	160	160	176,0	202,0	KBA13MLT

Cable Glands for Armoured Cables

ORION



Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Seal	CR (Chloroprene) , Silicone	
	O-ring	CR (Chloroprene) , Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	CR (Chloroprene)	Silicone	
	Standard	-40°C to +100°C	
LT Type	-40°C to +80°C	-60°C to +130°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2	
	Group III	Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db		
Marking Example *	BMD KBA.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta -60°C to +130°C IP66/68 CESI 13 ATEX 033X IECEx CES 13.0013X		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	SWA - AWA		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 		
	<ul style="list-style-type: none"> • O-ring available in Metric threads. • Accessories must be ordered separately. 		
	Remarks		
	Approvals	Certificate Number	Standards
		CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5	
	20150612-E474828	UL 2225, CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA C22.2 No. 60079-7:12 CAN/CSA-C22.2 No. 60079-31:12	
	20170315-E199260	UL 514B UL50E	
	No TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	
	DNV 12.0053 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011	
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN60079-1, IEC/EN 62444	
	MASC MS/18-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2014 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2014	

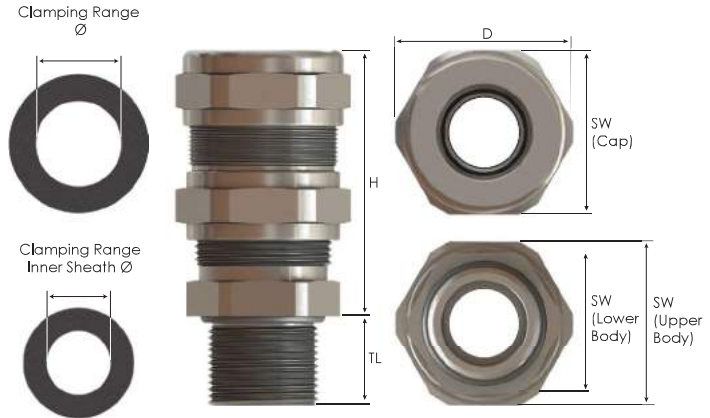
-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

Order Coding							
Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel A Aluminium	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example							
KBA1N	BN	S	- WC	-	L	-	E

ORION

Cable Glands for SWA and AWA Cables



Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width Upper Body		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm				SW Upper Body mm	Lower Body SW Lower Body mm			
NPT 1/4"	2,0 - 4,0	3,0 - 5,5	0,10 - 0,40	15,0	17	17	17	18,9	62,5	KBA0SN
	3,0 - 8,0	6,0 - 12,0	0,70 - 1,20	15,0	26	26	22	29,0	50,0	KBA0SLN
NPT 3/8"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	16,0	26	26	22	29,0	49,5	KBA01SN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	16,0	29	29	25	31,5	52,0	KBA01N
NPT 1/2"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	21,0	26	26	24	29,0	49,5	KBA1SN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	21,0	29	29	25	31,5	51,0	KBA1N
	8,5 - 14,5	12,0 - 20,0	0,90 - 1,30	21,0	32	30	28	35,0	54,0	KBA1LN
NPT 3/4"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	21,0	26	26	29	31,5	50,0	KBA2XSN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	21,0	29	29	29	31,5	52,5	KBA2SN
	8,5 - 16,0	12,0 - 21,0	0,70 - 1,20	21,0	34	34	32	37,0	56,5	KBA2N
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	21,0	40	40	36	44,0	62,5	KBA2LN
NPT 1"	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	26,0	29	29	36	39,8	52,5	KBA3XSN
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	26,0	40	40	40	44,0	64,0	KBA3SN
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	26,0	52	52	48	57,0	80,5	KBA3N
NPT 1 1/4"	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	28,0	40	40	45	50,0	64,0	KBA4XSN
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	28,0	52	52	48	57,0	81,0	KBA4SN
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	28,0	60	60	55	66,0	92,0	KBA4N
NPT 1 1/2"	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	28,0	52	52	54	60,0	81,0	KBA5XSN
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	28,0	60	60	55	66,0	92,0	KBA5XMN
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	28,0	75	70	60	83,0	100,0	KBA5SN
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	28,0	74	70	70	81,8	104,5	KBA5N
NPT 2"	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	28,0	75	70	68	83,0	100,0	KBA6XSN
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	28,0	74	70	70	81,8	104,5	KBA6XMN
	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	28,0	80	80	75	89,5	109,5	KBA6SN
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	28,0	85	85	85	94,0	111,5	KBA6N
	45,0 - 52,0	54,0 - 70,0	1,30 - 2,50	28,0	100	95	90	110,5	128,5	KBA6LN
NPT 2 1/2"	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	41,0	80	80	80	89,5	109,0	KBA7XSN
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	41,0	85	85	85	94,0	111,5	KBA7SN
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	41,0	100	95	90	110,5	127,5	KBA7N
NPT 3"	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	43,0	85	85	95	105,0	111,5	KBA8XSN
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	43,0	100	95	95	110,5	127,5	KBA8SN
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	43,0	115	115	110	127,0	158,0	KBA8N
NPT 3 1/2"	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	45,0	100	95	110	123,0	127,5	KBA9SN
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	45,0	115	115	110	127,0	158,0	KBA9N









Thread Type **NPT** acc. to ANSI ASME B1.20.1 (LT Type)

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width Upper Body		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm				SW Upper Body mm	Lower Body SW Lower Body mm			
NPT 3 1/2"	70,0 - 82,0	78,0 - 90,0	1,5 - 4,4	45,0	120	120	120	134,0	159,5	KBA9MNL
NPT 4"	80,0 - 92,0	88,0 - 100,0	1,2 - 4,0	46,0	135	135	135	150,0	169,0	KBA10SNLT
	90,0 - 101,0	98,0 - 110,0	2,1 - 5,4	46,0	145	145	145	162,0	180,0	KBA10NLT
NPT 5"	100,0 - 115,0	109,0 - 123,0	2,0 - 5,4	48,0	160	160	160	176,0	202,0	KBA11SNLT

Cable Glands for SWA and AWA Cables

ORION LEAD SHEATHED



Technical Details			
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium		
Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium		
Material	Seal	CR (Chloroprene) , Silicone	
	O-ring	CR (Chloroprene) , Silicone	
	Spring	Speacial Copper Alloy	
	Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material		
	CR (Chloroprene)	Silicone	
	Standard	-40°C to +100°C	-60°C to +130°C
LT Type	-40°C to +80°C	-60°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC	ZONE1/ZONE2
	Group III	Dust Group IIIC	ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex Ib IIC Db		
Marking Example *	BMD KBA.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex Ib IIC Db Ta -60°C to +130°C IP66/68 CESI 13 ATEX 033X IECEx CES 13.0013X		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	SWA - AWA		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 		
	<ul style="list-style-type: none"> • O-ring available in Metric outer threads. • Accessories must be ordered separately. 		
	Approvals	Certificate Number	Standards
		CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
		IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	20150612-E474828	UL 2225, CAN/CSA C-22.2 No. 60079-0:11 CAN/CSA C22.2 No. 60079-7:12 CAN/CSA-C22.2 No. 60079-31:12	
	20170315-E199260	UL 514B UL50E	
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	
	DNV 12.0053 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011	
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN60079-1, IEC/EN 62444	
	MASC MS/18-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2014 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2014	

*For more information see our webpage.

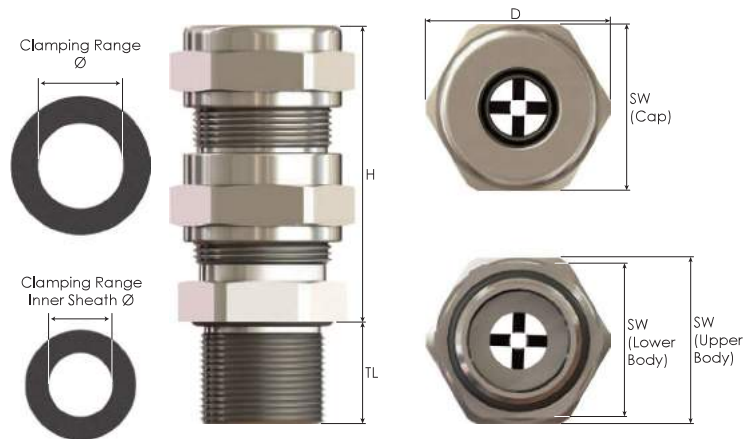
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding								
Part Number	Material	Seal	Lead Sheath	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Mandatory	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel A Aluminium	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example								
KBA1N	BN	S	-	LSK	WC	-	L	-

ORION LEAD SHEATHED

Cable Glands for SWA and AWA Cables



Thread Type METRIC acc. to ISO 965-3

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm				Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
M12x1,5	2,0 - 4,0	3,0 - 5,5	0,10 - 0,40	15,0	17	17	17	18,9	62,5	KBA0SM
	3,0 - 7,5	6,0 - 12,0	0,70 - 1,20	15,0	26	26	22	29,0	50,5	KBA0SLM
M16x1,5	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	16,0	26	26	22	29,0	49,5	KBA01SM
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	16,0	29	29	25	31,5	52,0	KBA01M
M20x1,5	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	16,0	26	26	24	29,0	50,0	KBA1SM
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	16,0	29	29	25	31,5	51,5	KBA1M
	8,5 - 14,5	12,0 - 20,0	0,90 - 1,30	16,0	32	30	28	35,0	54,0	KBA1LM
M25x1,5	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	18,0	26	26	29	31,5	50,0	KBA2XSM
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	18,0	29	29	29	31,5	52,5	KBA2SM
	8,5 - 16,0	12,0 - 21,0	0,70 - 1,20	18,0	34	34	32	37,0	56,5	KBA2M
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	18,0	40	40	36	44,0	63,0	KBA2LM
M32x1,5	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	18,0	29	29	36	39,8	52,5	KBA3XSM
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	18,0	40	40	40	44,0	64,0	KBA3SM
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	18,0	52	52	48	57,0	81,0	KBA3M
M40x1,5	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	18,0	40	40	45	50,0	64,0	KBA4XSM
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	18,0	52	52	48	57,0	81,0	KBA4SM
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	18,0	60	60	55	66,0	92,0	KBA4M
M50x1,5	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	18,0	52	52	54	60,0	81,0	KBA5XSM
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	18,0	60	60	55	66,0	92,0	KBA5XMM
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	18,0	75	70	60	83,0	100,0	KBA5SM
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	18,0	74	70	70	81,8	104,5	KBA5M
M63x1,5	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	20,0	75	70	68	83,0	100,0	KBA6XSM
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	20,0	74	70	70	81,8	104,5	KBA6XMM
	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	20,0	80	80	75	89,5	109,5	KBA6SM
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	20,0	85	85	85	94,0	111,5	KBA6M
	45,0 - 56,0	54,0 - 70,0	1,30 - 2,50	20,0	100	95	90	110,5	128,5	KBA6LM
M75x1,5	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	20,0	80	80	85	94,0	109,5	KBA7XSM
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	20,0	85	85	85	94,0	111,5	KBA7SM
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	20,0	100	95	90	110,5	127,5	KBA7M
M90x1,5	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	20,0	85	85	100	110,5	111,5	KBA8XSM
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	20,0	100	95	95	110,5	127,5	KBA8SM
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	20,0	115	115	110	127,0	158,0	KBA8M
M110x1,5	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	20,0	100	95	120	128,0	127,5	KBA10SM
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	20,0	115	115	120	128,0	158,0	KBA10M









Thread Type METRIC acc. to ISO 965-3 (LT Type)

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm				Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
M90x2,0	70,0 - 82,0	78,0 - 90,0	1,5 - 4,4	20,0	120	120	120	134,0	159,5	KBA8MLT
M100x2,0	80,0 - 92,0	88,0 - 100,0	1,2 - 4,0	20,0	135	135	135	150,0	169,0	KBA9SMLT
M110x2,0	90,0 - 101,0	98,0 - 110,0	2,1 - 5,4	20,0	145	145	145	162,0	180,0	KBA10MLT
M130x2,0	100,0 - 115,0	109,0 - 123,0	2,0 - 5,4	24,0	160	160	160	176,0	202,0	KBA13MLT

Cable Glands for SWA and AWA Cables

ORION LEAD SHEATHED



Technical Details		
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium
	Seal	CR (Chloroprene) , Silicone
	O-ring	CR (Chloroprene) , Silicone
Ingress Protection Rating	Spring	Special Copper Alloy
		IP 68 - 5 Bar, 30 min IP 66
Operating Temperature	Seal Material	
	CR (Chloroprene)	Silicone
	Standard	LT Type
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2
	Group III	Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIC Db	
Marking Example *	BMD KBA.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIC Db	
	Ta -60°C to +130°C IP66/68 CESI 13 ATEX 033X IECEx CES 13.0013X	
	• Metric (M) ISO Pitch 1,5	
	• NPT (N) ANSI ASME B1.20.1	
Thread Type	• Other thread types also available upon request.	
	Cable Type	
Accessories	SWA - AWA	
	• Lock nuts	
	• Gaskets (Washers)	
	• Serrated Washers	
	• Shrouds	
Remarks	• Earth tags	
	• O-ring available in Metric outer threads. • Accessories must be ordered separately.	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
		IECEx CES 13.0013X
		20150612-E474828
	20170315-E199260	UL 514B UL50E
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
		
	E-14044	
		

-For more information see our webpage.

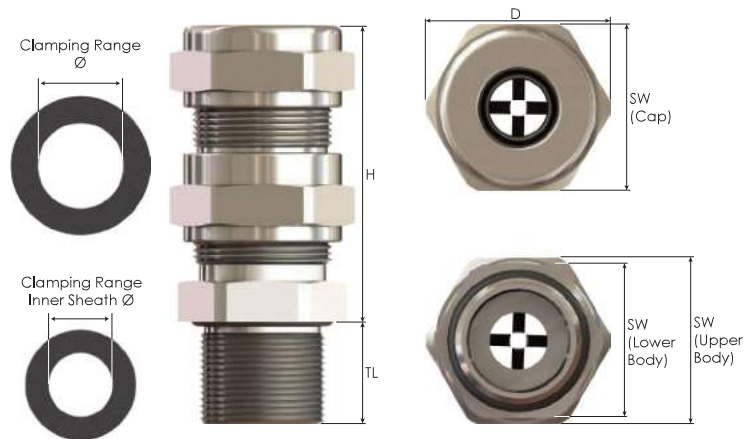
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding								
Part Number	Material	Seal	Lead Sheath	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Mandatory	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel A Aluminium	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example								
KBA1N	BN	S	- LSK	WC	-	L	-	E

ORION LEAD SHEATHED

Cable Glands for SWA and AWA Cables



Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Cap		Spanner Width		Outer Ø mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			SW Cap mm	SW Upper Body mm	Lower Body	SW Lower Body mm			
NPT 1/4"	2,0 - 4,0	3,0 - 5,5	0,10 - 0,40	15,0	17	17	17	17	18,9	62,5	KBA0SN
	3,0 - 8,0	6,0 - 12,0	0,70 - 1,20	15,0	26	26	22	22	29,0	50,0	KBA0SLN
NPT 3/8"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	16,0	26	26	22	22	29,0	49,5	KBA01SN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	16,0	29	29	25	25	31,5	52,0	KBA01N
NPT 1/2"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	21,0	26	26	24	24	29,0	49,5	KBA1SN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	21,0	29	29	25	25	31,5	51,0	KBA1N
	8,5 - 14,5	12,0 - 20,0	0,90 - 1,30	21,0	32	30	28	28	35,0	54,0	KBA1LN
NPT 3/4"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	21,0	26	26	29	29	31,5	50,0	KBA2XSN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	21,0	29	29	29	29	31,5	52,5	KBA2SN
	8,5 - 16,0	12,0 - 21,0	0,70 - 1,20	21,0	34	34	32	32	37,0	56,5	KBA2N
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	21,0	40	40	36	36	44,0	62,5	KBA2LN
NPT 1"	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	26,0	29	29	36	36	39,8	52,5	KBA3XSN
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	26,0	40	40	40	40	44,0	64,0	KBA3SN
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	26,0	52	52	48	48	57,0	80,5	KBA3N
NPT 1 1/4"	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	28,0	40	40	45	45	50,0	64,0	KBA4XSN
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	28,0	52	52	48	48	57,0	81,0	KBA4SN
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	28,0	60	60	55	55	66,0	92,0	KBA4N
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	28,0	52	52	54	54	60,0	81,0	KBA5XSN
NPT 1 1/2"	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	28,0	60	60	55	55	66,0	92,0	KBA5XMN
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	28,0	75	70	60	60	83,0	100,0	KBA5SN
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	28,0	74	70	70	70	81,8	104,5	KBA5N
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	28,0	75	70	68	68	83,0	100,0	KBA6XSN
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	28,0	74	70	70	70	81,8	104,5	KBA6XMN
NPT 2"	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	28,0	80	80	75	75	89,5	109,5	KBA6SN
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	28,0	85	85	85	85	94,0	111,5	KBA6N
	45,0 - 52,0	54,0 - 70,0	1,30 - 2,50	28,0	100	95	90	90	110,5	128,5	KBA6LN
	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	41,0	80	80	80	80	89,5	109,0	KBA7XSN
NPT 2 1/2"	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	41,0	85	85	85	85	94,0	111,5	KBA7SN
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	41,0	100	95	90	90	110,5	127,5	KBA7N
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	43,0	85	85	95	95	105,0	111,5	KBA8XSN
NPT 3"	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	43,0	100	95	95	95	110,5	127,5	KBA8SN
	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	43,0	115	115	110	110	127,0	158,0	KBA8N
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	45,0	100	95	110	110	123,0	127,5	KBA9SN
NPT 3 1/2"	60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	45,0	115	115	110	110	127,0	158,0	KBA9N

Thread Type **NPT** acc. to ANSI ASME B1.20.1 (LT Type)

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Cap		Spanner Width		Outer Ø mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			SW Cap mm	SW Upper Body mm	Lower Body	SW Lower Body mm			
NPT 3 1/2"	70,0 - 82,0	78,0 - 90,0	1,5 - 4,4	45,0	120	120	120	120	134,0	159,5	KBA9MNL
NPT 4"	80,0 - 92,0	88,0 - 100,0	1,2 - 4,0	46,0	135	135	135	135	150,0	169,0	KBA10SNLT
	90,0 - 101,0	98,0 - 110,0	2,1 - 5,4	46,0	145	145	145	145	162,0	180,0	KBA10NLT
NPT 5"	100,0 - 115,0	109,0 - 123,0	2,0 - 5,4	48,0	160	160	160	160	176,0	202,0	KBA11SNLT

Diaphragm Sealed Glands for All Types of Armoured Cables

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Technical Details			
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L		
Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L		
Material	Seal	Silicone	
	O-ring	Silicone	
	Lower Insert	PA 6 (Polyamide 6)	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material	Silicone	
		-40°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC	ZONE1/ZONE2
	Group III	Dust Group IIIC	ZONE21/ZONE 22
Equipment Marking	Group II/III Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIC Db		
Marking Example *	BMD KBCU.. CE 0722 II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIC Db IP66/68 Ta -40°C to +80°C		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	SWA - SWB - STA - PWA - AWA - Shielded		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 		
Remarks	<ul style="list-style-type: none"> • Gasket available in Metric threads. For NPT threads gasket must be ordered separately. • Accessories must be ordered separately. 		
Approvals	Certificate Number	Standards	
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014	
	IECEx CES 17.0042X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5	
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	
-For more information see our webpage.			
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.			

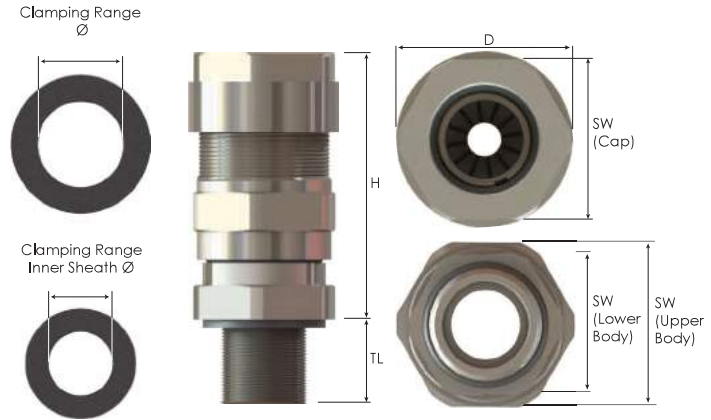


With armour reduction cone it can be used for shielded, SWB and STA cable. When armour reduction cone is taken out it can be used for armoured SWA and AWA cables.

Order Coding								
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	-	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	S Silicone	-	WS Silicone	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example								
KBCU4N	BN	S	-	WS	WSR	L	S	E

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Diaphragm Sealed Glands for All Types of Armoured Cables



Thread Type **METRIC** acc. to ISO 965 - 3

Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Shield Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width Upper Body SW Upper Body mm	Lower Body SW Lower Body mm	Outer Ø		Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm							D mm	H mm	
M16x1,5	6,0 - 11,0	9,0 - 16,0	0,8 - 1,25	0,2 - 0,8	15,0	24	24	24	27,5	45,0	KBCU01M
M20x1,5	6,0 - 11,0	9,0 - 16,0	0,8 - 1,25	0,2 - 0,8	15,0	24	24	24	27,5	45,0	KBCU1SM
	8,5 - 14,5	12,0 - 20,0	0,8 - 1,25	0,2 - 0,8	15,0	30	30	29	33,0	48,0	KBCU1M
M25x1,5	8,5 - 14,5	12,0 - 20,0	0,8 - 1,25	0,2 - 0,8	15,0	30	30	36	40,0	48,0	KBCU2SM
	12,0 - 20,0	16,0 - 26,0	1,25 - 1,6	0,2 - 0,7	15,0	36	36	36	40,0	54,0	KBCU2M
M32x1,5	12,0 - 20,0	16,0 - 26,0	1,25 - 1,6	0,2 - 0,7	15,0	36	36	44	52,5	54,0	KBCU3SM
	17,0 - 26,0	20,0 - 33,0	1,6 - 2,0	0,2 - 0,7	15,0	46	46	44	52,5	64,5	KBCU3M
M40x1,5	17,0 - 26,0	20,0 - 33,0	1,6 - 2,0	0,2 - 0,7	15,0	46	46	55	64,0	64,5	KBCU4SM
	23,0 - 32,0	29,0 - 41,0	1,6 - 2,0	0,2 - 0,7	15,0	55	55	55	64,0	67,0	KBCU4M
M50x1,5	23,0 - 32,0	29,0 - 41,0	1,6 - 2,0	0,2 - 0,7	15,0	55	55	65	74,0	67,0	KBCU5SM
	29,0 - 41,0	36,0 - 52,0	1,8 - 2,5	0,2 - 1,0	15,0	65	65	65	74,0	77,7	KBCU5M
M63x1,5	29,0 - 41,0	36,0 - 52,0	1,8 - 2,5	0,2 - 1,0	15,0	65	65	80	92,0	77,7	KBCU6SM
	44,0 - 56,0	50,0 - 65,0	1,8 - 2,5	0,2 - 1,0	15,0	80	80	80	92,0	90,7	KBCU6M
M75x1,5	44,0 - 56,0	50,0 - 65,0	1,8 - 2,5	0,2 - 1,0	15,0	80	80	95	107,5	90,7	KBCU7SM
	54,5 - 68,0	61,0 - 78,0	1,8 - 2,5	0,2 - 1,0	15,0	95	95	95	107,5	103,7	KBCU7M
M80x1,5	54,5 - 68,0	61,0 - 78,0	1,8 - 2,5	0,2 - 1,0	15,0	95	95	95	118,0	103,7	KBCU80SM
	67,0 - 73,0	75,0 - 89,0	2,0 - 3,5	0,2 - 1,0	15,0	106	106	106	118,0	100,2	KBCU80M
M90x1,5	67,0 - 77,0	75,0 - 89,0	2,0 - 3,5	0,2 - 1,0	15,0	115	115	115	133,0	100,0	KBCU8M
M100x1,5	75,0 - 91,0	88,0 - 104,0	2,5 - 4,0	0,2 - 1,0	15,0	127	127	127	145,0	114,0	KBCU9M

Diaphragm Sealed Glands for All Types of Armoured Cables

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Technical Details			
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L		
Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L		
Material	Seal	Silicone	
	O-ring	Silicone	
	Lower Insert	PA 6 (Polyamide 6)	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material	Silicone	
		-40°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC	ZONE1/ZONE2
	Group III	Dust Group IIIC	ZONE21/ZONE 22
Equipment Marking	Group II/III Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db		
Marking Example *	BMD KBCU.. CE 0722 II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db IP66/68 Ta -40°C to +80°C		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	SWA - SWB - STA - PWA - AWA - Shielded		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 		
Remarks	<ul style="list-style-type: none"> • Gasket available in Metric threads. For NPT threads gasket must be ordered separately. • Accessories must be ordered separately. 		
Approvals	Certificate Number	Standards	
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014	
	IECEx CES 17.0042X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5	
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	
-For more information see our webpage.			
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.			

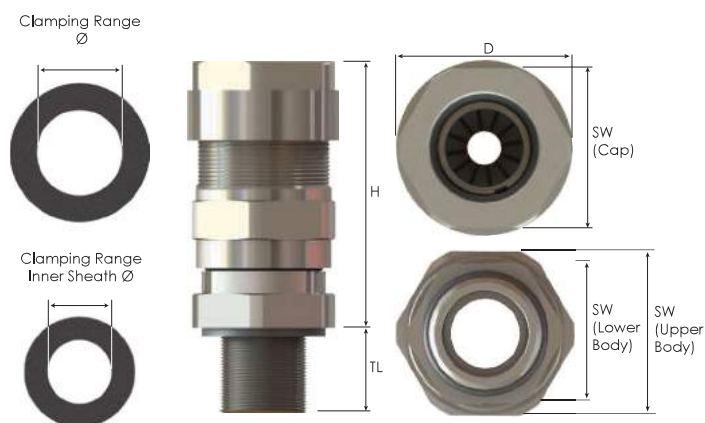


With armour reduction cone it can be used for shielded, SWB and STA cable. When armour reduction cone is taken out it can be used for armoured SWA and AWA cables.

Order Coding								
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	-	Option	Option	Option	Option	Option
See table	B Brass BN Brass, Nickel plated X Stainless steel 316L	S Silicone	-	WS Silicone	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example								
KBCU4N	BN	S	-	WS	WSR	L	S	E

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Diaphragm Sealed Glands for All Types of Armoured Cables



Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range		Armour Wire	Shield Wire	Outer Thread Length	Cap	Spanner Width	Lower Body	Outer Ø	max. Height	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm	Ø min-max mm	Ø min-max mm	TL mm	SW Cap mm	Upper Body SW Upper Body mm	SW Lower Body mm	D mm	H mm	
NPT 3/8"	6,0 - 11,0	9,0 - 16,0	0,8 - 1,25	0,2 - 0,8	15,5	24	24	24	27,5	45,0	KBCU01N
NPT 1/2"	6,0 - 11,0	9,0 - 16,0	0,8 - 1,25	0,2 - 0,8	20,1	24	24	24	27,5	45,0	KBCU1SN
	8,5 - 14,5	12,0 - 20,0	0,8 - 1,25	0,2 - 0,8	20,1	30	30	29	33,0	48,0	KBCU1N
NPT 3/4"	8,5 - 14,5	12,0 - 20,0	0,8 - 1,25	0,2 - 0,8	20,4	30	30	36	40,0	48,0	KBCU2SN
	12,0 - 20,0	16,0 - 26,0	1,25 - 1,6	0,2 - 0,7	20,4	36	36	36	40,0	54,0	KBCU2N
NPT 1"	12,0 - 20,0	16,0 - 26,0	1,25 - 1,6	0,2 - 0,7	25,5	36	36	44	52,5	54,0	KBCU3SN
	17,0 - 26,0	20,0 - 33,0	1,6 - 2,0	0,2 - 0,7	25,5	46	46	44	52,5	64,5	KBCU3N
NPT 1 1/4"	17,0 - 26,0	20,0 - 33,0	1,6 - 2,0	0,2 - 0,7	26,1	46	46	55	64,0	64,5	KBCU4SN
	23,0 - 32,0	29,0 - 41,0	1,6 - 2,0	0,2 - 0,7	26,1	55	55	55	64,0	67,0	KBCU4N
NPT 1 1/2"	23,0 - 32,0	29,0 - 41,0	1,6 - 2,0	0,2 - 0,7	26,5	55	55	65	74,0	67,0	KBCU5SN
	29,0 - 39,0	36,0 - 52,0	1,8 - 2,5	0,2 - 1,0	26,5	65	65	65	74,0	77,7	KBCU5N
NPT 2"	29,0 - 41,0	36,0 - 52,0	1,8 - 2,5	0,2 - 1,0	27,4	65	65	80	92,0	77,7	KBCU6SN
	44,0 - 52,0	50,0 - 65,0	1,8 - 2,5	0,2 - 1,0	27,4	80	80	80	92,0	90,7	KBCU6N
NPT 2 1/2"	44,0 - 56,0	50,0 - 65,0	1,8 - 2,5	0,2 - 1,0	40,4	80	80	95	107,5	90,7	KBCU7SN
	54,5 - 63,0	61,0 - 78,0	1,8 - 2,5	0,2 - 1,0	40,4	95	95	95	107,5	103,7	KBCU7N
NPT 3"	54,5 - 68,0	61,0 - 78,0	1,8 - 2,5	0,2 - 1,0	41,9	95	95	95	118,0	103,7	KBCU80SN
	67,0 - 73,0	75,0 - 89,0	2,0 - 3,5	0,2 - 1,0	41,9	106	106	106	118,0	100,2	KBCU80N
NPT 3 1/2"	67,0 - 77,0	75,0 - 89,0	2,0 - 3,5	0,2 - 1,0	43,2	115	115	115	133,0	100,0	KBCU8N
NPT 4"	75,0 - 91,0	88,0 - 104,0	2,5 - 4,0	0,2 - 1,0	44,5	127	127	127	145,0	114,0	KBCU9N

Diaphragm Sealed Glands for SWA, STA and Shielded Cables

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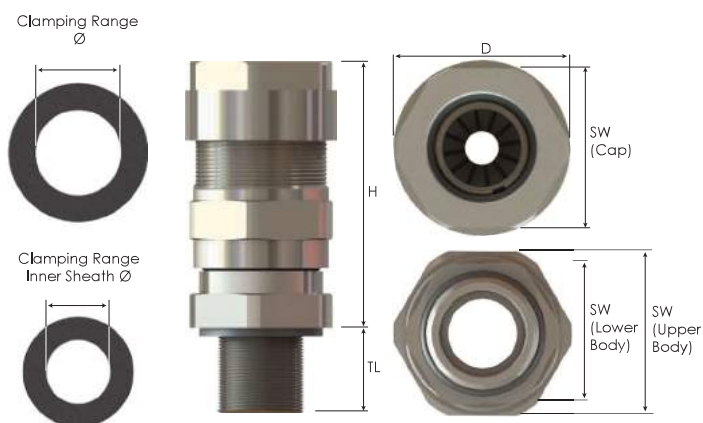
Technical Details			
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L		
Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L		
Material	Seal	Silicone	
	O-ring	Silicone	
	Lower Insert	PA 6 (Polyamide 6)	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material	Silicone	
		-40°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC	ZONE1/ZONE2
	Group III	Dust Group IIIC	ZONE21/ZONE 22
Equipment Marking	Group II/III Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db		
Marking Example *	BMD KBCO.. CE 0722 II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db IP66/68 Ta -40°C to +80°C		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	SWA - AWA		
Accessories	• Lock nuts		
	• Gaskets (Washers)		
	• Serrated Washers		
	• Shrouds		
	• Earth tags		
Remarks	<ul style="list-style-type: none"> • Gasket available in Metric threads. For NPT threads gasket must be ordered separately. • Accessories must be ordered separately. 		
Approvals	Certificate Number	Standards	
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014	
		IECEx CES 17.0042X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
		№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
-For more information see our webpage.			
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.			



Order Coding							
Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	S Silicone	- WS Silicone	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example							
KBCO4N	BN	S	- WS	WSR	L	S	E

CORONA OFFSHORE

Diaphragm Sealed Glands for SWA, STA and Shielded Cables







Thread Type **METRIC** acc. to ISO 965 - 3

Outer Thread Size (Male)	Clamping Range		Shield Wire Ø min-max mm	Outer Thread Length TL mm	Spanner Width			Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
M16x1,5	6,0 - 11,0	9,0 - 16,0	0,2 - 0,8	15,0	24	24	24	27,5	45,0	KBCO01M
M20x1,5	6,0 - 11,0	9,0 - 16,0	0,2 - 0,8	15,0	24	24	24	27,5	45,0	KBCO1SM
	8,5 - 14,5	12,0 - 20,0	0,2 - 0,8	15,0	30	30	29	33,0	48,0	KBCO1M
M25x1,5	8,5 - 14,5	12,0 - 20,0	0,2 - 0,8	15,0	30	30	36	40,0	48,0	KBCO2SM
	12,0 - 20,0	16,0 - 26,0	0,2 - 0,7	15,0	36	36	36	40,0	54,0	KBCO2M
M32x1,5	12,0 - 20,0	16,0 - 26,0	0,2 - 0,7	15,0	36	36	44	52,5	54,0	KBCO3SM
	17,0 - 26,0	20,0 - 33,0	0,2 - 0,7	15,0	46	46	44	52,5	64,5	KBCO3M
M40x1,5	17,0 - 26,0	20,0 - 33,0	0,2 - 0,7	15,0	46	46	55	64,0	64,5	KBCO4SM
	23,0 - 32,0	29,0 - 41,0	0,2 - 0,7	15,0	55	55	55	64,0	67,0	KBCO4M
M50x1,5	23,0 - 32,0	29,0 - 41,0	0,2 - 0,7	15,0	55	55	65	74,0	67,0	KBCO5SM
	29,0 - 41,0	36,0 - 52,0	0,2 - 1,0	15,0	65	65	65	74,0	77,7	KBCO5M
M63x1,5	29,0 - 41,0	36,0 - 52,0	0,2 - 1,0	15,0	65	65	80	92,0	77,7	KBCO6SM
	44,0 - 56,0	50,0 - 65,0	0,2 - 1,0	15,0	80	80	80	92,0	90,7	KBCO6M
M75x1,5	44,0 - 56,0	50,0 - 65,0	0,2 - 1,0	15,0	80	80	95	107,5	90,7	KBCO7SM
	54,5 - 68,0	61,0 - 78,0	0,2 - 1,0	15,0	95	95	95	107,5	103,7	KBCO7M
M80x1,5	54,5 - 68,0	61,0 - 78,0	0,2 - 1,0	15,0	95	95	95	118,0	103,7	KBCO80SM
	67,0 - 73,0	75,0 - 89,0	0,2 - 1,0	15,0	106	106	106	118,0	100,2	KBCO80M
M90x1,5	67,0 - 77,0	75,0 - 89,0	0,2 - 1,0	15,0	115	115	115	133,0	100,0	KBCO8M
M100x1,5	75,0 - 91,0	88,0 - 104,0	0,2 - 1,0	15,0	127	127	127	145,0	114,0	KBCO9M

Diaphragm Sealed Glands for SWA, STA and Shielded Cables

CORONA OFFSHORE



Technical Details			
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L		
Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L		
Material	Seal	Silicone	
	O-ring	Silicone	
	Lower Insert	PA 6 (Polyamide 6)	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material	Silicone	
		-40°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC	ZONE1/ZONE2
	Group III	Dust Group IIIC	ZONE21/ZONE 22
Equipment Marking	Group I/III Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db		
Marking Example *	BMD KBCO.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db IP66/68 Ta -40°C to +80°C		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	SWA - AWA		
Accessories	• Lock nuts		
	• Gaskets (Washers)		
	• Serrated Washers		
	• Shrouds		
	• Earth tags		
Remarks	• Gasket available in Metric threads. For NPT threads gasket must be ordered separately.		
	• Accessories must be ordered separately.		
Approvals	Certificate Number	Standards	
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014	
	IECEx CES 17.0042X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5	
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	

-For more information see our webpage.

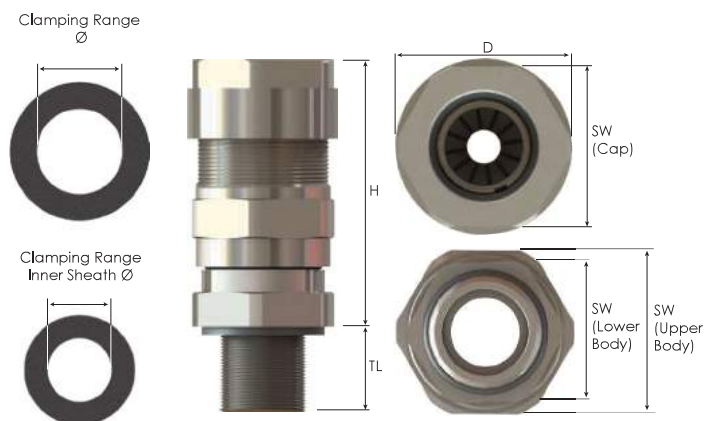
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding							
Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	S Silicone	- WS Silicone	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example							
KBCO4N	BN	S	- WS	WSR	L	S	E

CORONA OFFSHORE

Diaphragm Sealed Glands for SWA, STA and Shielded Cables







Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range		Shield Wire Ø min-max mm	Outer Thread Length TL mm	Spanner Width			Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
NPT 3/8"	6.0 - 11.0	9.0 - 16.0	0.2 - 0.8	15.5	24	24	24	27.5	45.0	KBCO01N
NPT 1/2"	6.0 - 11.0	9.0 - 16.0	0.2 - 0.8	20.1	24	24	24	27.5	45.0	KBCO1SN
	8.5 - 14.5	12.0 - 20.0	0.2 - 0.8	20.1	30	30	29	33.0	48.0	KBCO1N
NPT 3/4"	8.5 - 14.5	12.0 - 20.0	0.2 - 0.8	20.4	30	30	36	40.0	48.0	KBCO2SN
	12.0 - 20.0	16.0 - 26.0	0.2 - 0.7	20.4	36	36	36	40.0	54.0	KBCO2N
NPT 1"	12.0 - 20.0	16.0 - 26.0	0.2 - 0.7	25.5	36	36	44	52.5	54.0	KBCO3SN
	17.0 - 26.0	20.0 - 33.0	0.2 - 0.7	25.5	46	46	44	52.5	64.5	KBCO3N
NPT 1 1/4"	17.0 - 26.0	20.0 - 33.0	0.2 - 0.7	26.1	46	46	55	64.0	64.5	KBCO4SN
	23.0 - 32.0	29.0 - 41.0	0.2 - 0.7	26.1	55	55	55	64.0	67.0	KBCO4N
NPT 1 1/2"	23.0 - 32.0	29.0 - 41.0	0.2 - 0.7	26.5	55	55	65	74.0	67.0	KBCO5SN
	29.0 - 39.0	36.0 - 52.0	0.2 - 1.0	26.5	65	65	65	74.0	77.7	KBCO5N
NPT 2"	29.0 - 41.0	36.0 - 52.0	0.2 - 1.0	27.4	65	65	80	92.0	77.7	KBCO6SN
	44.0 - 52.0	50.0 - 65.0	0.2 - 1.0	27.4	80	80	80	92.0	90.7	KBCO6N
NPT 2 1/2"	44.0 - 56.0	50.0 - 65.0	0.2 - 1.0	40.4	80	80	95	107.5	90.7	KBCO7SN
	54.5 - 63.0	61.0 - 78.0	0.2 - 1.0	40.4	95	95	95	107.5	103.7	KBCO7N
NPT 3"	54.5 - 68.0	61.0 - 78.0	0.2 - 1.0	41.9	95	95	95	118.0	103.7	KBCO80SN
	67.0 - 73.0	75.0 - 89.0	0.2 - 1.0	41.9	106	106	106	118.0	100.2	KBCO80N
NPT 3 1/2"	67.0 - 77.0	75.0 - 89.0	0.2 - 1.0	43.2	115	115	115	133.0	100.0	KBCO8N
NPT 4"	75.0 - 91.0	88.0 - 104.0	0.2 - 1.0	44.5	127	127	127	145.0	114.0	KBCO9N

Diaphragm Sealed Glands for SWA and AWA Cables

CORONA



Technical Details		
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L	
Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L	
Material	Seal	Silicone
	O-ring	Silicone
	Lower Insert	PA 6 (Polyamide 6)
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material Silicone -40°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2	
	Group III Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Group II/III Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD KBC.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db IP66/68 Ta -40°C to +80°C	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	SWA - AWA	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 	
Remarks	<ul style="list-style-type: none"> • Gasket available in Metric threads. For NPT threads gasket must be ordered separately. • Accessories must be ordered separately. 	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 17.0042X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013

-For more information see our webpage.

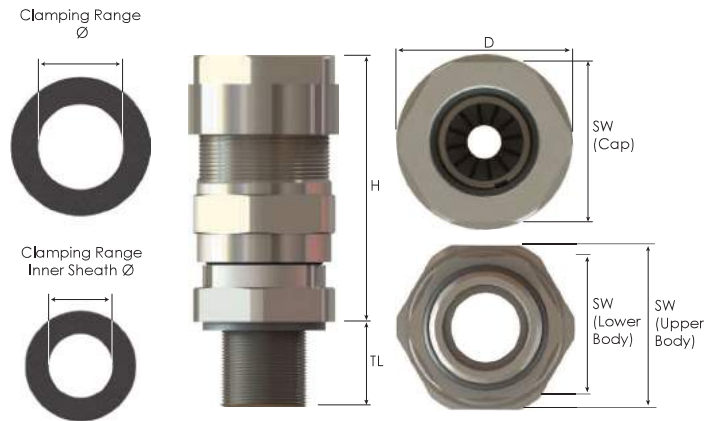
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding								
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	-	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	S Silicone	-	WS Silicone	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example								
KBC4N	BN	S	-	WS	WSR	L	S	E

CORONA

Diaphragm Sealed Glands for SWA and AWA Cables







Thread Type METRIC acc. to ISO 965 - 3										
Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm				Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
M16x1,5	6,0 - 11,0	9,0 - 16,0	0,8 - 1,25	15,0	24	24	24	27,5	45,0	KBC01M
M20x1,5	6,0 - 11,0	9,0 - 16,0	0,8 - 1,25	15,0	24	24	24	27,5	45,0	KBC1SM
	8,5 - 14,5	12,0 - 20,0	0,8 - 1,25	15,0	30	30	29	33,0	48,0	KBC1M
M25x1,5	8,5 - 14,5	12,0 - 20,0	0,8 - 1,25	15,0	30	30	36	40,0	48,0	KBC2SM
	12,0 - 20,0	16,0 - 26,0	1,25 - 1,6	15,0	36	36	36	40,0	54,0	KBC2M
M32x1,5	12,0 - 20,0	16,0 - 26,0	1,25 - 1,6	15,0	36	36	44	52,5	54,0	KBC3SM
	17,0 - 26,0	20,0 - 33,0	1,6 - 2,0	15,0	46	46	44	52,5	64,5	KBC3M
M40x1,5	17,0 - 26,0	20,0 - 33,0	1,6 - 2,0	15,0	46	46	55	64,0	64,5	KBC4SM
	23,0 - 32,0	29,0 - 41,0	1,6 - 2,0	15,0	55	55	55	64,0	67,0	KBC4M
M50x1,5	23,0 - 32,0	29,0 - 41,0	1,6 - 2,0	15,0	55	55	65	74,0	67,0	KBC5SM
	29,0 - 41,0	36,0 - 52,0	1,8 - 2,5	15,0	65	65	65	74,0	77,7	KBC5M
M63x1,5	29,0 - 41,0	36,0 - 52,0	1,8 - 2,5	15,0	65	65	80	92,0	77,7	KBC6SM
	44,0 - 56,0	50,0 - 65,0	1,8 - 2,5	15,0	80	80	80	92,0	90,7	KBC6M
M75x1,5	44,0 - 56,0	50,0 - 65,0	1,8 - 2,5	15,0	80	80	95	107,5	90,7	KBC7SM
	54,5 - 68,0	61,0 - 78,0	1,8 - 2,5	15,0	95	95	95	107,5	103,7	KBC7M
M80x1,5	54,5 - 68,0	61,0 - 78,0	1,8 - 2,5	15,0	95	95	95	118,0	103,7	KBC80SM
	67,0 - 73,0	75,0 - 89,0	2,0 - 3,5	15,0	106	106	106	118,0	100,2	KBC80M
M90x1,5	67,0 - 77,0	75,0 - 89,0	2,0 - 3,5	15,0	115	115	115	133,0	100,0	KBC8M
M100x1,5	75,0 - 91,0	88,0 - 104,0	2,5 - 4,0	15,0	127	127	127	145,0	114,0	KBC9M

Diaphragm Sealed Glands for SWA and AWA Cables

CORONA



Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L	
	Seal	Silicone	
	O-ring	Silicone	
	Lower Insert	PA 6 (Polyamide 6)	
Ingress Protection Rating		IP 68 - 5 Bar, 30 min	
		IP 66	
Operating Temperature	Seal Material		
	Silicone	-40°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC	ZONE1/ZONE2
	Group III	Dust Group IIIC	ZONE21/ZONE 22
Equipment Marking	Group II/III		
	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db		
Marking Example *	BMD KBC.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db IP66/68 Ta -40°C to +80°C		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	SWA - AWA		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 		
	Remarks		
	<ul style="list-style-type: none"> • Gasket available in Metric threads. For NPT threads gasket must be ordered separately. • Accessories must be ordered separately. 		
	Approvals	Certificate Number	Standards
		CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 17.0042X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5	
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	

-For more information see our webpage.

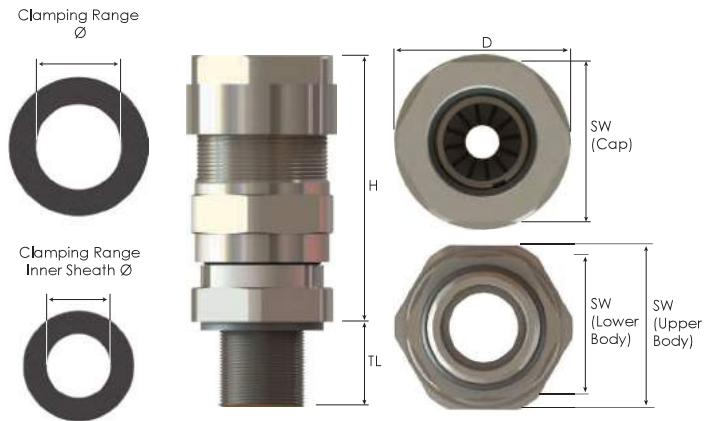
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding							
Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
See table	Mandatory B Brass BN Brass Nickel plated X Stainless steel 316L	Mandatory S Silicone	- Option WS Silicone WF Fiber	Option WSR Serrated washer	Option L Lock nut	Option S Shroud	Option E Earth tag
Example							
KBC4N	BN	S	- WS	WSR	L	S	E

CORONA

Diaphragm Sealed Glands for SWA and AWA Cables







Thread Type NPT acc. to ANSI ASME B1.20.1										
Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Cap SW Cap mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm				Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
NPT 3/8"	6,0 - 11,0	9,0 - 16,0	0,8 - 1,25	15,5	24	24	24	27,5	45,0	KBC01N
NPT 1/2"	6,0 - 11,0	9,0 - 16,0	0,8 - 1,25	20,1	24	24	24	27,5	45,0	KBC1SN
	8,5 - 14,5	12,0 - 20,0	0,8 - 1,25	20,1	30	30	29	33,0	48,0	KBC1N
NPT 3/4"	8,5 - 14,5	12,0 - 20,0	0,8 - 1,25	20,4	30	30	36	40,0	48,0	KBC2SN
	12,0 - 20,0	16,0 - 26,0	1,25 - 1,6	20,4	36	36	36	40,0	54,0	KBC2N
NPT 1"	12,0 - 20,0	16,0 - 26,0	1,25 - 1,6	25,5	36	36	44	52,5	54,0	KBC3SN
	17,0 - 26,0	20,0 - 33,0	1,6 - 2,0	25,5	46	46	44	52,5	64,5	KBC3N
NPT 1 1/4"	17,0 - 26,0	20,0 - 33,0	1,6 - 2,0	26,1	46	46	55	64,0	64,5	KBC4SN
	23,0 - 32,0	29,0 - 41,0	1,6 - 2,0	26,1	55	55	55	64,0	67,0	KBC4N
NPT 1 1/2"	23,0 - 32,0	29,0 - 41,0	1,6 - 2,0	26,5	55	55	65	74,0	67,0	KBC5SN
	29,0 - 39,0	36,0 - 52,0	1,8 - 2,5	26,5	65	65	65	74,0	77,7	KBC5N
NPT 2"	29,0 - 41,0	36,0 - 52,0	1,8 - 2,5	27,4	65	65	80	92,0	77,7	KBC6SN
	44,0 - 52,0	50,0 - 65,0	1,8 - 2,5	27,4	80	80	80	92,0	90,7	KBC6N
NPT 2 1/2"	44,0 - 56,0	50,0 - 65,0	1,8 - 2,5	40,4	80	80	95	107,5	90,7	KBC7SN
	54,5 - 63,0	61,0 - 78,0	1,8 - 2,5	40,4	95	95	95	107,5	103,7	KBC7N
NPT 3"	54,5 - 68,0	61,0 - 78,0	1,8 - 2,5	41,9	95	95	95	118,0	103,7	KBC80SN
	67,0 - 73,0	75,0 - 89,0	2,0 - 3,5	41,9	106	106	106	118,0	100,2	KBC80N
NPT 3 1/2"	67,0 - 77,0	75,0 - 89,0	2,0 - 3,5	43,2	115	115	115	133,0	100,0	KBC8N
NPT 4"	75,0 - 91,0	88,0 - 104,0	2,5 - 4,0	44,5	127	127	127	145,0	114,0	KBC9N

Barrier Cable Glands for All Types of Armoured Cables

CENTAURUS-A



Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L	
	Seal	Silicone	
	O-ring	Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	Silicone	-60°C to +60°C	
Service Temperature	Seal Material		
	Silicone	-60°C to +100°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC	ZONE1/ZONE2
	Group III	Dust Group IIIC	ZONE21/ZONE 22
	Equipment Marking		
Equipment Marking	Ex II 2GD - Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db		
Marking Example *	BMD KBCTA.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta -60°C to +60°C IP66/68 CESI 17 ATEX 007X IECEx CES 17.0029X		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	SWA - SWB - STA - Shielded		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 		
Remarks	<ul style="list-style-type: none"> • O-ring available in Metric outer threads. • Accessories must be ordered separately. 		
Approvals	Certificate Number	Standards	
	CESI 17 ATEX 0007X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014	
	IECEx CES 17.0029X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5	
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	

-For more information see our webpage.

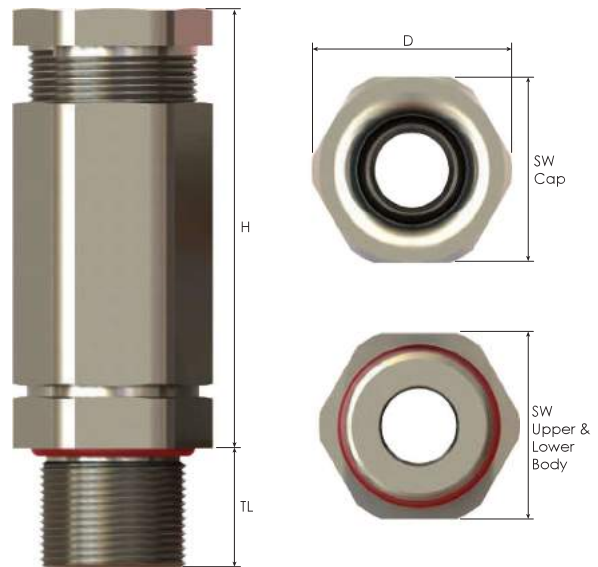
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding							
Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless Steel 316L	S Silicone	- WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example							
KBACTA3M	BN	S	- WS	WSR	L	S	E

CENTAURUS-A

Barrier Cable Glands for All Types of Armoured Cables



Thread Type **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Clamping Range Ø min-max mm	Over Conductors max Ø mm	Armour Wire max Ø mm	Outer Thread Length TL mm	Cap		Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Need Barrier Compound Material Per Pc. (g)
					SW Cap mm	SW Upper Body mm	Lower Body	SW Lower Body mm				
M20x1,5	6,0 - 13,0	9,5	1,3	16,0	25	25	25	25	27,0	63,5	KBCTA1SM	7
	8,0 - 15,0	9,5	1,3	16,0	25	25	25	25	27,0	63,5	KBCTA1M	7
	13,5 - 21,0	12,0	1,3	16,0	30	30	30	30	33,0	65,0	KBCTA1LM	6
M25x1,5	8,0 - 15,0	9,5	1,3	16,0	25	25	30	30	33,0	63,5	KBCTA2SM	7
	13,5 - 21,0	12,0	1,3	16,0	30	30	30	30	33,0	65,0	KBCTA2M	6
	18,0 - 27,0	15,0	1,6	16,0	40	40	40	40	44,5	72,5	KBCTA2LM	14
M32x1,5	18,0 - 27,0	15,0	1,6	16,0	40	40	40	40	44,5	72,5	KBCTA3M	14
	23,0 - 33,0	21,5	1,6	16,0	43	43	43	43	47,0	74,5	KBCTA3LM	26
M40x1,5	23,0 - 33,0	21,5	1,6	16,0	43	43	45	45	50,0	74,5	KBCTA4SM	26
	29,0 - 40,0	29,0	2,0	16,0	50	50	50	50	55,5	82,5	KBCTA4M	50
M50x1,5	29,0 - 40,0	29,0	2,0	16,0	50	50	55	55	61,0	82,5	KBCTA5SM	50
	35,0 - 48,0	37,0	2,5	16,0	58	58	58	58	64,0	90,5	KBCTA5M	82
M63x1,5	35,0 - 48,0	37,0	2,5	20,0	58	58	68	68	75,0	90,5	KBCTA6SM	82
	42,0 - 56,0	46,0	2,5	20,0	75	75	75	75	83,0	120,0	KBCTA6M	180
M75x1,5	42,0 - 56,0	46,0	2,5	20,0	75	75	80	80	89,0	120,0	KBCTA7SM	180
	54,0 - 70,0	58,0	3,2	20,0	100	100	100	100	110,5	126,0	KBCTA7M	290
M90x1,5	54,0 - 70,0	58,0	3,2	20,0	100	100	100	100	110,5	126,0	KBCTA8M	290

*Barrier compound is served as 50 g standard.








Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range Ø min-max mm	Over Conductors max Ø mm	Armour Wire max. Ø mm	Outer Thread Length TL mm	Cap		Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Barrier Compound Material Per Pc. (g)
					SW Cap mm	SW Upper Body mm	Lower Body	SW Lower Body mm				
NPT 1/2	6,0 - 13,0	9,5	1,3	21,0	25	25	25	25	27,0	63,5	KBCTA1SN	7
	8,0 - 15,0	9,5	1,3	21,0	25	25	25	25	27,0	63,5	KBCTA1N	7
	13,5 - 21,0	12,0	1,3	21,0	30	30	30	30	33,0	65,0	KBCTA1LN	6
NPT 3/4"	8,0 - 15,0	9,5	1,3	21,0	25	25	30	30	33,0	63,5	KBCTA2SN	7
	13,5 - 21,0	12,0	1,3	21,0	30	30	30	30	33,0	65,0	KBCTA2N	6
	18,0 - 27,0	15,0	1,6	21,0	40	40	40	40	44,5	72,5	KBCTA2LN	14
NPT 1"	18,0 - 27,0	15,0	1,6	26,0	40	40	40	40	44,5	72,5	KBCTA3N	14
	23,0 - 33,0	21,5	1,6	26,0	43	43	43	43	47,0	74,5	KBCTA3LN	26
NPT 1 1/4"	23,0 - 33,0	21,5	1,6	28,0	43	43	45	45	50,0	74,5	KBCTA4SN	26
	29,0 - 40,0	29,0	2,0	28,0	50	50	50	50	55,5	82,5	KBCTA4N	50
NPT 1 1/2"	29,0 - 40,0	29,0	2,0	28,0	50	50	55	55	61,0	82,5	KBCTA5N	50
NPT 2"	35,0 - 48,0	37,0	2,5	28,0	58	58	65	65	72,0	90,5	KBCTA6N	82
NPT 2 1/2"	42,0 - 56,0	46,0	2,5	41,0	75	75	80	80	89,0	120,0	KBCTA7N	180
NPT 3"	54,0 - 70,0	58,0	3,2	43,0	100	100	100	100	110,5	126,0	KBCTA8N	290

*Barrier compound is served as 50 g standard.

EMC Cable Glands for Shielded Cables

E-VELA

Technical Details			
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium		
Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium		
Material	Seal	CR (Chloroprene), Silicone	
	O-ring	CR (Chloroprene), Silicone	
	Spring	Special Copper Alloy	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	CR (Chloroprene)	Silicone	
	Ex d/tb	-40°C to +80°C	-60°C to +80°C
	Ex e/tb	-60°C to +80°C	-60°C to +140°C
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC	ZONE1/ZONE2
	Group III	Dust Group IIIC	ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db		
Marking Example *	BMD EBS.. CE 0722  2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Tα-40°C to +80°C IP66/68 CESI 13 ATEX 018X IECEx CES 13.0006X		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1.5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	Non Armoured, Shielded		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags • Dome plugs 		
	<ul style="list-style-type: none"> • Accessories must be ordered separately. • O-ring available in Metric outer threads. 		
Remarks			
Approvals	Certificate Number	Standards	
	IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014	
	IECEX IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7	
	20150501-E474828	UL 2225, CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA C22.2 No. 60079-7:12 CAN/CSA-C22.2 No. 60079-31:12	
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011	
	E-14044	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444	

-For more information see our webpage.

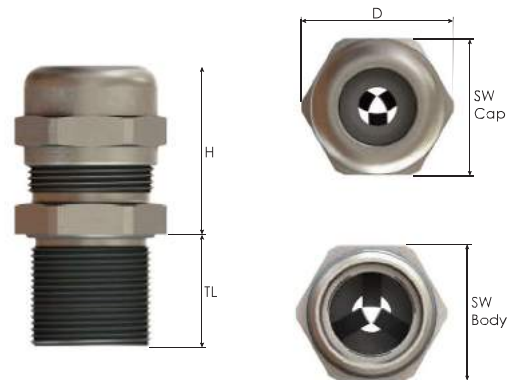
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding								
Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag	for Ex e
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless Steel 316L A Aluminium	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag	TL9
Example								
EBSIN	BN	S	- WC	WSR	L	S	E	TL9

E-VELA

EMC Cable Glands for Armoured Cables



Thread Type METRIC acc. to ISO 965 - 3

Outer Thread Size (Male)	Clamping Range		Shield Diameter Ø min - max mm	Outer Thread Length Ex-e min. Ex-d/e min.		Spanner Width Cap Body		Outer Ø D mm	max. Height H mm	Part Number
	Ø min - max mm	Seal Type		TL mm	TL mm	SW Cap mm	SW Body mm			
M8x1,25	2,0 - 4,0	Single	1,5 - 3,5	5,0	-	11	11	12,0	18,0	EBS01SM
M16x1,5	4,0 - 8,0	Double	2,5 - 5,0	9,0	16,0	22	22	24,5	30,5	EBS01M
M20x1,5	4,0 - 12,0	Triple	2,5 - 10,0	9,0	18,0	22	22	24,5	28,5	EBS1M
M25x1,5	10,0 - 18,0	Triple	8,0 - 14,0	9,0	16,0	28	28	31,0	32,0	EBS2M
M32x1,5	14,0 - 24,0	Triple	12,0 - 20,0	9,0	19,0	35	35	39,0	35,0	EBS3M
M40x1,5	22,0 - 32,0	Triple	18,0 - 28,0	9,0	20,0	45	45	49,5	42,5	EBS4M
M50x1,5	26,0 - 35,0	Triple	22,0 - 31,0	9,0	20,0	50	55	61,0	48,5	EBS5M
M63x1,5	35,0 - 45,0	Triple	31,0 - 41,0	9,0	20,0	64	68	75,0	45,0	EBS6M
M75x1,5	46,0 - 62,0	Triple	42,0 - 58,0	9,0	20,0	80	80	89,0	53,0	EBS7M
M90x1,5	60,0 - 75,0	Triple	56,0 - 71,0	9,0	20,0	95	95	105,0	57,0	EBS8M
M100x1,5	75,0 - 85,0	Triple	71,0 - 81,0	9,0	20,0	105	105	117,0	56,0	EBS10M
M110x1,5	85,0 - 95,0	Triple	81,0 - 91,0	9,0	20,0	115	115	128,0	58,0	EBS11M

Thread Type NPT acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range		Shield Diameter Ø min - max mm	Outer Thread Length TL mm	Spanner Width Cap Body		Outer Ø D mm	max. Height H mm	Part Number
	Ø min - max mm	Seal Type			SW Cap mm	SW Body mm			
NPT 3/8"	4,0 - 8,0	Double	2,5 - 5,0	16,0	20	20	22,0	30,5	EBS01SN
NPT 1/2"	4,0 - 8,0	Double	2,5 - 5,0	16,0	22	22	24,5	30,5	EBS01N
NPT 3/4"	4,0 - 12,0	Triple	2,5 - 10,0	18,0	22	22	24,5	28,5	EBS1N
NPT 1"	10,0 - 18,0	Triple	8,0 - 14,0	16,0	28	28	31,0	32,5	EBS2N
NPT 1 1/4"	14,0 - 24,0	Triple	12,0 - 20,0	20,0	35	35	39,0	35,0	EBS3N
NPT 1 1/2"	22,0 - 32,0	Triple	18,0 - 28,0	20,0	45	45	49,5	42,5	EBS4N
NPT 2"	26,0 - 35,0	Triple	22,0 - 31,0	20,0	50	55	61,0	45,0	EBS5N
NPT 2 1/2"	35,0 - 45,0	Triple	31,0 - 41,0	20,0	64	68	75,0	45,0	EBS6N
NPT 3"	46,0 - 62,0	Triple	42,0 - 58,0	21,0	80	80	89,0	56,5	EBS7N
NPT 3 1/2"	60,0 - 75,0	Triple	56,0 - 71,0	21,0	95	95	105,0	65,0	EBS8N
NPT 4"	75,0 - 85,0	Triple	71,0 - 81,0	21,0	105	115	128,0	56,5	EBS10N
NPT 4 1/2"	85,0 - 95,0	Triple	81,0 - 91,0	21,0	115	115	128,0	58,0	EBS11N

CABLE GLANDS for NON-ARMOURED CABLES for Gas & Dust Application



E-Octans
E-Octans Flat
Crater
Centaurus-N Barrier

186 - 189
190 - 191
192 - 193
194 - 195

Ex Glands / Group II - III / Gas & Dust Ex II 2GD / Ex d IIC Gb - Ex e IIC Gb - Ex tb IIIC Db



Explosive gases, vapors and dusts have different chemical properties that affect the likelihood and severity of an explosion. Such properties include flame temperature, minimum ignition energy, upper and lower explosive limits, and molecular weight. Empirical testing is done to determine parameters such as the maximum experimental safe gap, minimum ignition current, explosion pressure and time to peak pressure, spontaneous ignition temperature, and maximum rate of pressure rise. Every substance has a differing combination of properties but it is found that they can be ranked into similar ranges, simplifying the selection of equipment for hazardous areas.

Flammability of combustible liquids are defined by their flash-point. The flash-point is the temperature at which the material will generate sufficient quantity of vapor to form an ignitable mixture. The flash point determines if an area needs to be classified. A material may have a relatively low autoignition temperature yet if its flash-point is above the ambient temperature, then the area may not need to be classified. Conversely if the same material is heated and handled above its flash-point, the area must be classified.








Each chemical gas or vapour used in industry is classified into a gas group.

Flammable dusts when suspended in air can explode. An old system of area classification to a British standard used a system of letters to designate the zones. This has been replaced by a European numerical system, as set out in directive 1999/92/EU implemented in the UK as the Dangerous Substances and Explosives Atmospheres Regulations 2002

The boundaries and extent of these three dimensional zones should be decided by a competent person. There must be a site plan drawn up of the factory with the zones marked on.

Cable Glands for Non-armoured Cables

E-OCTANS

Technical Details	
Material	Body, Cap Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium Seal CR (Chloroprene), Silicone O-ring CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66
Operating Temperature	Seal Material CR (Chloroprene) -40°C to +80°C Silicone -60°C to +140°C
Equipment For	Gas & Dust potentially explosive atmospheres
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db
Marking Example *	BMD EBU.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta-40°C to +80°C IP66/68 IECEx CES 13.0006X CESI 13 ATEX 018X
Thread Type	• Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request.
Cable Type	Non Armoured
Accessories	• Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags • Dome plugs
Remarks	• Accessories must be ordered separately. • O-ring available in Metric outer threads.
Approvals	Certificate Number Standards
	IMQ 13 ATEX 018X EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014
	IECEx IMQ 13.0006X IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	20150501-E474828 UL 2225, CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA C22.2 No. 60079-7:12 CAN/CSA-C22.2 No. 60079-31:12
	№ TC RU C-TR.AA87.B.00941 GOCT 31610.0-2014 GOCT IEC 60079-1:2013 GOCT IEC 60079-31:2013
	DNV 12.0052 X ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14044 IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444

-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding									
Part Number	Material	Seal	Gasket (Washer)	Seal Plug	Serrated Washer	Lock Nut	Shroud	Earth Tag	for Ex e
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless Steel 316L A Aluminium	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber	P Dome Plug	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag	TL9
Example									
EBU1N (*BUE)	BN	S	-WC	P	WSR	L	S	E	TL9

* BUE: Part Number is valid for Customs Union certificate.

E-OCTANS

Cable Glands for Non-armoured Cables










Thread Type **METRIC** acc. to ISO 965 - 3

Outer Thread Size (Male)	Clamping Range		Outer Thread Length		Spanner Width		Outer Ø	max. Height		Part Number
	Ø min - max mm	Seal Type	Ex-e min.	Ex-d/e min.	Cap	Body		D mm	H mm	
			TL mm		SW Cap mm	SWBody mm				
M12x1,5	3,0 - 8,0	Double	9,0	16,0	20	20	22,0	29,0	EBU0M	
	4,0 - 8,0	Triple	9,0	16,0	22	22	24,5	33,0	EBU0SM	
M16x1,5	3,0 - 9,0	Double	9,0	16,0	20	20	22,0	29,0	EBU01SM	
	4,0 - 12,0	Triple	9,0	16,0	22	22	24,5	33,0	EBU01M	
M20x1,5	3,0 - 9,0	Double	9,0	16,0	20	22	24,5	29,0	EBU1SM	
	4,0 - 12,0	Triple	9,0	16,0	22	22	24,5	29,0	EBU1M	
	10,0 - 16,0	Triple	9,0	16,0	28	28	31,0	32,0	EBU12M	
M25x1,5	4,0 - 12,0	Triple	9,0	16,0	22	28	31,0	29,0	EBU2SM	
	10,0 - 18,0	Triple	9,0	16,0	28	28	31,0	32,5	EBU2M	
	14,0 - 20,0	Triple	9,0	16,0	35	35	39,0	36,0	EBU23M	
M32x1,5	10,0 - 18,0	Triple	9,0	16,0	28	35	39,0	32,5	EBU3SM	
	14,0 - 24,0	Triple	9,0	16,0	35	35	39,0	35,0	EBU3M	
	22,0 - 28,0	Triple	9,0	16,0	45	45	49,5	42,5	EBU34M	
M40x1,5	14,0 - 24,0	Triple	9,0	18,0	35	45	49,5	35,0	EBU4SM	
	22,0 - 32,0	Triple	9,0	18,0	45	45	49,5	42,5	EBU4M	
	26,0 - 34,0	Triple	9,0	18,0	50	50	56,0	45,5	EBU45M	
M50x1,5	22,0 - 32,0	Triple	9,0	18,0	45	55	61,0	42,5	EBU5SM	
	26,0 - 35,0	Triple	9,0	18,0	50	55	61,0	45,5	EBU5M	
	35,0 - 44,0	Triple	9,0	18,0	64	64	70,0	45,0	EBU56M	
M63x1,5	26,0 - 35,0	Triple	9,0	18,0	50	68	75,0	45,5	EBU6SM	
	35,0 - 45,0	Triple	9,0	18,0	64	68	75,0	45,0	EBU6M	
	46,0 - 56,0	Triple	9,0	18,0	80	75	89,0	54,0	EBU67M	
M75x1,5	35,0 - 45,0	Triple	9,0	20,0	64	80	89,0	45,0	EBU7SM	
	46,0 - 62,0	Triple	9,0	20,0	80	80	89,0	54,0	EBU7M	
	60,0 - 69,0	Triple	9,0	20,0	95	95	105,0	57,0	EBU78M	
M90x1,5	46,0 - 62,0	Triple	9,0	20,0	80	95	105,0	53,5	EBU8SM	
	60,0 - 75,0	Triple	9,0	20,0	95	95	105,0	57,0	EBU8M	
	75,0 - 82,0	Triple	9,0	20,0	105	105	117,0	56,5	EBU810M	
M100x1,5	60,0 - 75,0	Triple	9,0	20,0	95	105	117,0	57,0	EBU10SM	
	75,0 - 85,0	Triple	9,0	20,0	105	105	117,0	56,0	EBU10M	
M110x1,5	85,0 - 95,0	Triple	9,0	20,0	115	115	128,0	58,0	EBU11M	
M115x2,0	75,0 - 85,0	Triple	9,0	24,0	105	130	144,0	56,0	EBU115XSM	
	85,0 - 95,0	Triple	9,0	24,0	115	130	144,0	58,0	EBU115SM	
	95,0 - 105,0	Triple	9,0	24,0	130	130	144,0	64,0	EBU115M	
M130x2,0	105,0 - 115,0	Triple	9,0	24,0	140	140	154,0	67,5	EBU13M	

Cable Glands for Non-armoured Cables

E-OCTANS

Technical Details	
Material	Body, Cap Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium Seal CR (Chloroprene), Silicone O-ring CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66
Operating Temperature	Seal Material CR (Chloroprene) -40°C to +80°C Silicone -60°C to +140°C
Equipment For	Gas & Dust potentially explosive atmospheres
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db
Marking Example *	BMD EBU.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Tc-40°C to +80°C IP66/68 IECEx CES 13.0006X CESI 13 ATEX 018X
Thread Type	• Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request.
Cable Type	Non Armoured
Accessories	• Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags • Dome plugs
Remarks	• Accessories must be ordered separately. • O-ring available in Metric outer threads.
Approvals	Certificate Number Standards
	IMQ 13 ATEX 018X EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014
	IECEx IMQ 13.0006X IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	20150501-E474828 20161226-E199260 UL 2225, CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA C22.2 No. 60079-7:12 CAN/CSA-C22.2 No. 60079-31:12 UL 514B UL50E
	№ TC RU C-TR.AA87.B.00941 ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0052 X ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14044 IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444

-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding								
Part Number	Material	Seal	- Gasket (Washer)	Seal Plug	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless Steel 316L A Aluminium	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber	P Dome Plug	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example	EBU1N (*BUE)	BN	S	WC	P	WSR	L	S E

* BUE: Part Number is valid for Customs Union certificate.

E-OCTANS

Cable Glands for Non-armoured Cables



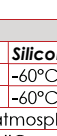
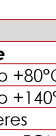




Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range		Outer Thread Length TL mm	Spanner Width		Outer Ø D mm	max. Height H mm		Part Number
	Ø min - max mm	Seal Type		SW Cap mm	SW Body mm				
NPT 1/4"	3,0 - 8,0	Double	16	20	20	22,0	29,0	EBU0N	
	4,0 - 8,0	Triple	16	22	22	24,5	33,0	EBU0SN	
NPT 3/8"	3,0 - 9,0	Double	16	20	20	22,0	29,0	EBU01SN	
	4,0 - 12,0	Triple	16	22	22	24,5	33,0	EBU01N	
NPT 1/2"	3,0 - 9,0	Double	16	20	22	24,5	29,0	EBU1SN	
	4,0 - 12,0	Triple	16	22	22	24,5	29,0	EBU1N	
	10,0 - 16,0	Triple	16	28	28	31,0	32,0	EBU12N	
NPT 3/4"	4,0 - 12,0	Triple	16	22	28	31,0	29,0	EBU2SN	
	10,0 - 18,0	Triple	16	28	28	31,0	32,0	EBU2N	
	14,0 - 20,0	Triple	16	35	35	39,0	35,0	EBU23N	
NPT 1"	10,0 - 18,0	Triple	20	28	35	39,0	32,5	EBU3SN	
	14,0 - 24,0	Triple	20	35	35	39,0	35,0	EBU3N	
	22,0 - 26,0	Triple	20	45	45	49,5	42,0	EBU34N	
NPT 1 1/4"	14,0 - 24,0	Triple	20	35	45	49,5	35,0	EBU4SN	
	22,0 - 32,0	Triple	20	45	45	49,5	42,5	EBU4N	
	26,0 - 34,0	Triple	20	50	50	55,5	45,5	EBU45N	
NPT 1 1/2"	22,0 - 32,0	Triple	20	45	55	61,0	42,5	EBU5SN	
	26,0 - 35,0	Triple	20	50	55	61,0	45,5	EBU5N	
	35,0 - 41,0	Triple	20	64	64	70,0	44,0	EBU56N	
NPT 2"	26,0 - 35,0	Triple	20	50	68	75,0	45,5	EBU6SN	
	35,0 - 45,0	Triple	20	64	68	75,0	45,0	EBU6N	
	46,0 - 52,0	Triple	20	80	75	89,0	54,0	EBU67N	
NPT 2 1/2"	35,0 - 45,0	Triple	21	64	80	89,0	45,0	EBU7SN	
	46,0 - 62,0	Triple	21	80	80	89,0	53,5	EBU7N	
	60,0 - 64,0	Triple	21	95	95	105,0	57,0	EBU78N	
NPT 3"	46,0 - 62,0	Triple	21	80	95	105,0	53,5	EBU8SN	
	60,0 - 75,0	Triple	21	95	95	105,0	57,0	EBU8N	
	75,0 - 79,5	Triple	21	105	105	117,0	56,0	EBU810N	
NPT 4"	60,0 - 75,0	Triple	21	95	115	128,0	57,0	EBU108N	
	75,0 - 85,0	Triple	21	105	115	128,0	56,0	EBU10N	
	85,0 - 95,0	Triple	21	115	115	128,0	58,0	EBU11N	
	95,0 - 101,0	Triple	21	130	130	144,0	64,5	EBU115N	
NPT 5"	95,0 - 105,0	Triple	27	130	145	162,0	64,5	EBU13N	
	105,0 - 115,0	Triple	27	140	145	162,0	67,5	EBU130N	

Cable Glands for Non-armoured Flat Cables

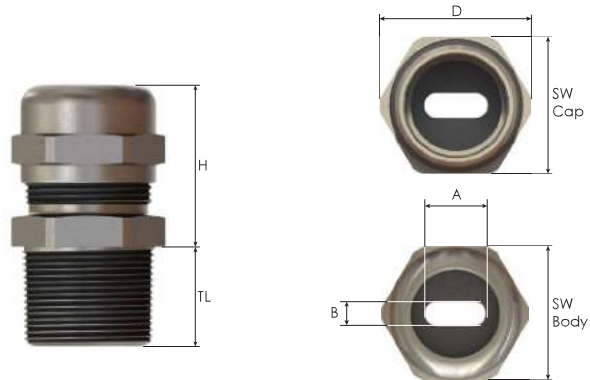
E-OCTANS FLAT

Technical Details		
Material	Body, Cap Brass, Brass Nickel Plated, Stainless Steel, Aluminium Seal CR (Chloroprene), Silicone O-ring CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material CR (Chloroprene) -40°C to +80°C Silicone -60°C to +80°C	
Ex d/tb	-40°C to +80°C	
Ex e/tb	-40°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD EBU.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta-40°C to +80°C IP66/68 IECEx CES 13.0006X CESI 13 ATEX 018X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	Flat form non armoured cable	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags • Dome plugs 	
Remarks	<ul style="list-style-type: none"> • Accessories must be ordered separately. • O-ring available in Metric outer threads. 	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444
-For more information see our webpage. * The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.		



Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag	For Ex e
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option	Option
See table	B Brass BN Brass, Nickel plated X Stainless Steel 316L A Aluminium	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag	TL 9
Example								
EBU1N(FxC1)	BN	S	- WC	-	L	-	E	TL 9

E-OCTANS FLAT Cable Glands for Non-armoured Cables



Thread Type **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Flat Hole		Outer Thread Length		Spanner Width		Outer Ø	max.Height	Part Number
	Height B mm	Width A mm	Ex-e min.	Ex-d/e min.	Cap	Body			
					TL mm	SW Cap mm	SW Body mm	D mm	
M20X1,5	5,0	12,2	9,0	16,0	22	22	24,5	29,0	EBU1M(FxA1)
	5,5	11,7	9,0	16,0	22	22	24,5	29,0	EBU1M(FxC1)
	6,0	8,5	9,0	16,0	22	22	24,5	29,0	EBU1M(FxB1)
	6,0	12,2	9,0	16,0	22	22	24,5	29,0	EBU1M(FxD1)
	6,3	10,8	9,0	16,0	22	22	24,5	29,0	EBU1M(FxE1)
	6,7	12,7	9,0	16,0	22	22	24,5	29,0	EBU1M(FxG1)
M25X1,5	5,0	12,8	9,0	16,0	28	28	31,0	32,5	EBU2M(FxA2)
	5,5	10,7	9,0	16,0	28	28	31,0	32,5	EBU2M(FxH2)
	5,5	11,7	9,0	16,0	28	28	31,0	32,5	EBU2M(FxC2)
	6,0	8,5	9,0	16,0	28	28	31,0	32,5	EBU2M(FxB2)
	6,0	14,0	9,0	16,0	28	28	31,0	32,5	EBU2M(FxD2)
	7,3	13,3	9,0	16,0	28	28	31,0	32,5	EBU2M(FxF2)
	6,8	15,3	9,0	16,0	28	28	31,0	32,5	EBU2M(FxG2)
	9,1	12,3	9,0	16,0	28	28	31,0	32,5	EBU2M(FxE2)

Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Flat Hole		Outer Thread Length	Spanner Width		Outer Ø	max.Height	Part Number
	Height B mm	Width A mm		Cap	Body			
			TL mm	SW Cap mm	SW Body mm	D mm	H mm	
NPT 1/2"	5,0	12,2	16,0	22	22	24,5	29,0	EBU1N(FxA1)
	5,5	11,7	16,0	22	22	24,5	29,0	EBU1N(FxC1)
	6,0	8,5	16,0	22	22	24,5	29,0	EBU1N(FxB1)
	6,0	12,2	16,0	22	22	24,5	29,0	EBU1N(FxD1)
	6,3	10,8	16,0	22	22	24,5	29,0	EBU1N(FxE1)
	6,7	12,7	16,0	22	22	24,5	29,0	EBU1N(FxG1)
NPT 3/4"	5,0	12,8	16,0	28	28	31,0	32,0	EBU2N(FxA2)
	5,5	10,7	16,0	28	28	31,0	32,0	EBU2N(FxH2)
	5,5	11,7	16,0	28	28	31,0	32,0	EBU2N(FxC2)
	6,0	8,5	16,0	28	28	31,0	32,0	EBU2N(FxB2)
	6,0	14,0	16,0	28	28	31,0	32,0	EBU2N(FxD2)
	6,8	15,3	16,0	28	28	31,0	32,0	EBU2N(FxG2)
	7,3	13,3	16,0	28	28	31,0	32,0	EBU2N(FxF2)
	9,1	12,3	16,0	28	28	31,0	32,0	EBU2N(FxE2)

Cable Glands for Non-armoured Cables

CRATER



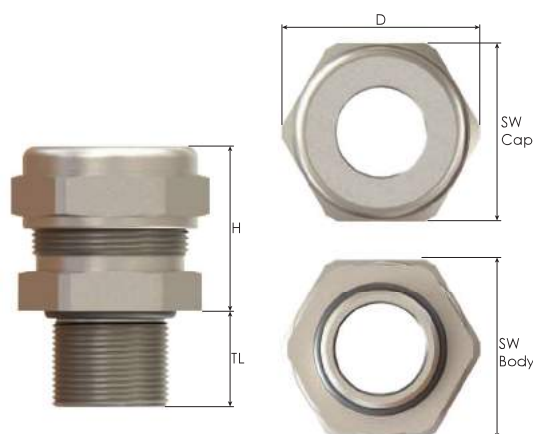
Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium	
	Seal	CR (Chloroprene), Silicone	
	O-ring	CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	CR (Chloroprene)	Silicone	
Ex d/e/tb	-40°C to +100°C -60°C to +130°C		
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2	
	Group III	Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex d IIC Gb Ex e IIC Gb Ex tb IIIC Db		
Marking Example *	BMD KBU.. CE 0722 IIGD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta -40°C to +80°C IP66/68 CESI 13 ATEX 033X IECEx CES 13.0013X		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	Non Armoured		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Earth tags 		
	<ul style="list-style-type: none"> • Accessories must be ordered separately. • O-ring available in Metric outer threads. 		
	Approvals	Certificate Number	Standards
		CESI 13 ATEX 033X	EN 60079-0:2012+A11:2013 EN 60079-1:2007 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6.0 IEC 60079-1:2007-04 Edition:6.0 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4	
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	
	DNV 12.0053 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011	
	E-14044	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444	
	MASC MS/18-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2014 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2014	
-For more information see our webpage.			
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.			



Order Coding						
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut
	Mandatory	Mandatory	-	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel A Aluminium	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut
Example			-			
KBU5N	BN	S	-	WC	WSR	L E

CRATER

Cable Glands for Non-armoured Cables



Thread Type METRIC acc. to ISO 965-3





Outer Thread Size (Male)	Clamping Range Ø min-max mm	Outer Thread Length TL mm	Spanner Width		Outer Ø D mm	max. Height		Part Number
			Cap SW Cap mm	Body SW Body mm		H mm		
M16x1,5	3,0 - 8,5	16,0	26	22	29,0	27,0	KBU01M	
	6,0 - 12,0	16,0	29	25	31,5	30,0	KBU01LM	
M20x1,5	6,0 - 12,0	16,0	29	25	31,5	29,5	KBU1M	
	12,0 - 14,5	16,0	30	28	33,5	30,0	KBU1LM	
M25x1,5	6,0 - 12,0	18,0	29	29	31,5	30,5	KBU2SM	
	12,0 - 16,0	18,0	34	32	37,0	30,5	KBU2M	
	12,0 - 20,0	18,0	40	36	44,5	34,5	KBU2LM	
M32x1,5	12,0 - 20,0	18,0	40	40	44,5	35,5	KBU3SM	
	15,0 - 26,0	18,0	52	48	57,0	42,5	KBU3M	
M40x1,5	15,0 - 26,0	18,0	52	48	57,0	42,5	KBU4SM	
	20,0 - 32,0	18,0	60	55	66,0	52,0	KBU4M	
M50x1,5	22,0 - 35,0	18,0	70	60	77,0	52,0	KBU5SM	
	27,0 - 41,0	18,0	70	70	77,0	55,5	KBU5M	
M63x1,5	35,0 - 45,0	20,0	80	75	89,5	63,5	KBU6SM	
	40,0 - 52,0	20,0	85	85	94,0	63,5	KBU6M	
M75x1,5	40,0 - 52,0	20,0	85	85	94,0	63,5	KBU7SM	
	45,0 - 60,0	20,0	95	90	105,0	73,5	KBU7M	
M90x1,5	45,0 - 60,0	20,0	95	95	105,0	73,5	KBU8SM	
	60,0 - 72,0	20,0	115	110	127,0	85,5	KBU8M	

Thread Type NPT acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range Ø min-max mm	Outer Thread Length TL mm	Spanner Width		Outer Ø D mm	max. Height		Part Number
			Cap SW Cap mm	Body SW Body mm		H mm		
NPT 3/8"	3,0 - 8,5	16,0	26	22	29,0	27,0	KBU01N	
	6,0 - 12,0	16,0	29	25	31,5	30,0	KBU01LN	
NPT 1/2"	6,0 - 12,0	21,0	29	25	31,5	29,0	KBU1N	
	12,0 - 14,5	21,0	30	28	33,5	30,0	KBU1LN	
NPT 3/4"	6,0 - 12,0	21,0	29	29	31,5	30,5	KBU2SN	
	12,0 - 16,0	21,0	34	32	37,0	30,5	KBU2N	
	12,0 - 20,0	21,0	40	36	44,5	34,0	KBU2LN	
NPT 1"	12,0 - 20,0	26,0	40	40	44,5	35,5	KBU3SN	
	15,0 - 26,0	26,0	52	48	57,0	42,0	KBU3N	
NPT 1 1/4"	15,0 - 26,0	28,0	52	48	57,0	44,0	KBU4SN	
	20,0 - 32,0	28,0	60	55	66,0	52,0	KBU4N	
NPT 1 1/2"	22,0 - 35,0	28,0	70	60	77,0	52,0	KBU5SN	
	27,0 - 41,0	28,0	70	70	77,0	55,5	KBU5N	
NPT 2"	35,0 - 45,0	28,0	80	75	89,5	63,0	KBU6SN	
	40,0 - 52,0	28,0	85	85	94,0	63,5	KBU6N	
NPT 2 1/2"	40,0 - 52,0	41,0	85	85	94,0	63,5	KBU7SN	
	45,0 - 60,0	41,0	95	90	105,0	73,5	KBU7N	
NPT 3"	45,0 - 60,0	43,0	95	95	105,0	73,5	KBU8SN	
	60,0 - 72,0	43,0	115	110	127,0	85,5	KBU8N	

Barrier Cable Glands for Non-armoured Cables

CENTAURUS-N

Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel 316L	
	Seal	Silicone	
Ingress Protection Rating		IP 68 - 5 Bar, 30 min	
		IP 66	
Operating Temperature	Seal Material	Silicone	
		-60°C to +60°C	
Service Temperature	Seal Material	Silicone	
		-60°C to +100°C	
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC	ZONE1/ZONE2
	Group III	Dust Group IIIC	ZONE21/ZONE 22
Equipment Marking	Ex II 2GD - Ex d IIC Gb Ex e IIC Gb Ex tb IIIC Db		
Marking Example *	BMD KBCTN.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta -60°C to +60°C IP66/68 CESI 17 ATEX 007X IECEx CES 17.0029X		
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 		
Cable Type	Non Armoured		
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Shrouds • Earth tags 		
	<ul style="list-style-type: none"> • O-ring available in Metric outer threads. • Accessories must be ordered separately. 		
Remarks			
Approvals	Certificate Number	Standards	
	CESI 17 ATEX 0007X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014	
		IECEx CES 17.0029X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015-08 Edition:5
		№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013

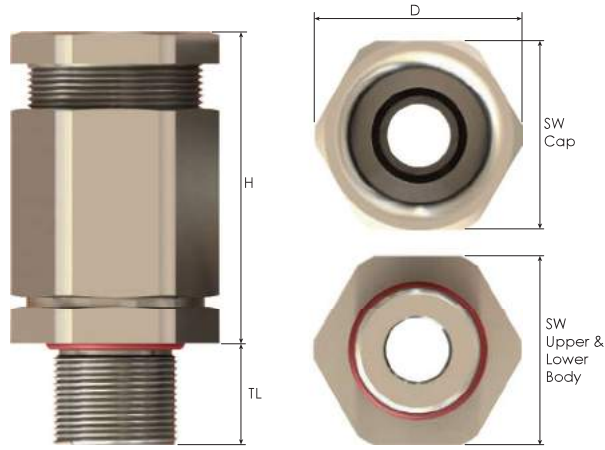
-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding							
Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Shroud	Earth Tag
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless Steel 316L	S Silicone	- WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	S Shroud	E Earth tag
Example							
KBACTN5N	BN	S	- Ws	-	L	-	E

CENTAURUS-N Barrier Cable Glands for Non-Armoured Cables



Thread Type **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Clamping Range Ø min-max mm	Over Conductors max Ø mm	Outer Thread Length TL mm	Spanner Width			Outer Ø D mm	max. Height H mm	Part Number	Need Barrier Compound Material Per Pcs. (g)
				Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm				
M20x1,5	6,0 – 13,0	9,5	16,0	25	25	25	27,0	51,0	KBCTN1SM	7
	8,0 – 15,0	9,5	16,0	25	25	25	27,0	51,0	KBCTN1M	7
	13,5 – 21,0	12,0	16,0	30	30	30	33,0	52,5	KBCTN1LM	6
M25x1,5	8,0 – 15,0	9,5	16,0	25	25	30	33,0	51,0	KBCTN2SM	7
	13,5 – 21,0	12,0	16,0	30	30	30	33,0	52,5	KBCTN2M	6
	18,0 – 27,0	15,0	16,0	40	40	40	44,5	60,0	KBCTN2LM	14
M32x1,5	18,0 – 27,0	15,0	16,0	40	40	40	44,5	60,0	KBCTN3M	14
	23,0 – 33,0	21,5	16,0	43	43	43	47,0	61,5	KBCTN3LM	26
M40x1,5	23,0 – 33,0	21,5	16,0	43	43	45	50,0	61,5	KBCTN4SM	26
	29,0 – 40,0	29,0	16,0	50	50	50	55,5	69,5	KBCTN4M	50
M50x1,5	29,0 – 40,0	29,0	16,0	50	50	55	61,0	69,5	KBCTN5SM	50
	35,0 – 48,0	37,0	16,0	58	58	58	64,0	75,0	KBCTN5M	82
M63x1,5	35,0 – 48,0	37,0	20,0	58	58	68	75,0	75,0	KBCTN6SM	82
	42,0 – 56,0	46,0	20,0	75	75	75	83,0	97,5	KBCTN6M	180
M75x1,5	42,0 – 56,0	46,0	20,0	75	75	80	89,0	97,5	KBCTN7SM	180
	54,0 – 70,0	58,0	20,0	100	100	100	110,5	106,5	KBCTN7M	290
M90x1,5	54,0 – 70,0	58,0	20,0	100	100	100	110,5	106,5	KBCTN8M	290

*Barrier compound is served as 50 g standard.

Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Clamping Range Ø min-max mm	Over Conductors max Ø mm	Outer Thread Length TL mm	Spanner Width			Outer Ø D mm	max. Height H mm	Part Number	Need Barrier Compound Material Per Pcs. (g)
				Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm				
NPT 1/2"	6,0 – 13,0	9,5	21,0	25	25	25	27,0	51,0	KBCTN1SN	7
	8,0 – 15,0	9,5	21,0	25	25	25	27,0	51,0	KBCTN1N	7
	13,5 – 21,0	12,0	21,0	30	30	30	33,0	52,5	KBCTN1LN	6
NPT 3/4"	8,0 – 15,0	9,5	21,0	25	25	30	33,0	51,0	KBCTN2SN	7
	13,5 – 21,0	12,0	21,0	30	30	30	33,0	52,5	KBCTN2N	6
	18,0 – 27,0	15,0	21,0	40	40	40	44,5	60,0	KBCTN2LN	14
NPT 1"	18,0 – 27,0	15,0	26,0	40	40	40	44,5	60,0	KBCTN3N	14
	23,0 – 33,0	21,5	26,0	43	43	43	47,0	61,5	KBCTN3LN	26
NPT 1 1/4"	23,0 – 33,0	21,5	28,0	43	43	45	50,0	61,5	KBCTN4SN	26
	29,0 – 40,0	29,0	28,0	50	50	50	55,5	69,5	KBCTN4N	50
NPT 1 1/2"	29,0 – 40,0	29,0	28,0	50	50	55	61,0	69,5	KBCTN5N	50
NPT 2"	35,0 – 48,0	37,0	28,0	58	58	65	72,0	75,0	KBCTN6N	82
NPT 2 1/2"	42,0 – 56,0	46,0	41,0	75	75	80	89,0	97,5	KBCTN7N	180
NPT 3"	54,0 – 70,0	58,0	43,0	100	100	100	110,5	106,5	KBCTN8N	290

*Barrier compound is served as 50 g standard.

VENTILATION AND DRAIN PRODUCTS for Gas & Dust Application



Hydra, Ventilation Plugs
Virgo, Drain Plugs

198 - 199
200 - 201



Ventilation and Drain Products / Group II-III / Gas & Dust



In order to choose the right ventilation plug unit (pressure balance elements) for a specific application, the working principles of the unit must be known first. Ventilation plugs are permeable to "gases and vapours, e.g. air" but impermeable to "liquids and dust, e.g. water". The permeability resistance to liquids depends on the pore size and structure of the membrane inside these devices.

If the working conditions of water (the most common liquid) are studied, it is possible to say that the water intrusion pressure goes down as air permeability increases. The relevant specifications are collected in tabulated data.

Of the relevant parameters, the "Pressure Balance" function depends on the differential pressure between the inner and the outer environments of the enclosure. As a reference pressure, 70 mBar (70mBar = 1 Psi) value is chosen to present data. Under normal conditions, air circulation exists for all differential pressure levels. But the volume flow rate is very low for smaller values and obviously increases with increasing pressure values. Of course the air flow rate also depends on the properties of the membrane (classified as standard, medium, high and ultra high permeability types).

If there is no water pressure danger (if the device is not immersed in the water), it is always better to choose highly permeable elements for good circulation even for low differential pressure levels.

In essence, there is air circulation in the enclosure from the inside to the outside when the device is heating up due to its operation. Similarly, a circulation in reverse direction occurs during the cooling period. It should also be noted that there is always a level of humidity in air, hence some water in the form of vapour is also circulated with air. However condensed water is blocked by the water repellent membrane unless the differential pressure exceeds the intrusion pressure threshold.

After this technical overview, the utility of the "Ventilation Plugs" can be listed as follows:

- Prevention of pressure increase inside the enclosure. The pressure sensitive elements are not threatened.
- Limiting of temperature increase by the air circulation. The temperature sensitive elements are not threatened.
- Added flexibility for maintenance. In traditional units, when the enclosures are heated, generally the dilated air goes out from the seals but can not return back when the device is colder. Because of the vacuum formed inside the enclosure, the gaskets are exposed to large pressure levels. In result, it is very difficult to open the covers for maintenance. Especially in "luminaires" it is obligatory to change the bulbs when the device is cold. The ventilation plugs in our system prevent these kind of limitations.
- Prevention of accidental water suction into the system. During the cooling period, we know that there is air circulation from the outside to the inside. Hence, if the enclosure is wet from rain or due to other reasons, some water may be sucked inside the enclosure if there is no ventilation plug.
- Prevention of exposure to hot, humid, compressed gases. There is always a level of humidity in the enclosure due to atmospheric conditions. Hence when the device is hot, all the components will be exposed to a hot, humid and compressed environment without the ventilation plug.

To conclude, the ventilation plug can reduce and even fully eliminate the adverse effects of humidity in the environment. Water drops on the bottom of the enclosure are normal, but the inherent damage becomes insignificant due to the existence of a ventilation plug.

Ventilation plugs for Ex e applications

Ventilation Plugs

- Balances pressure differences between inside and outside of enclosure.
- Prevents damages, such as condensation due to pressure differences.
- Membrane properties: hydrophobic, oleophobic.

Technical Details

Body ,Cap	Stainless Steel 316L		
Material	Vent. Membrane	Acrylic co-polymer on nylon-support	
	O-ring	CR (Chloroprene)	
Ingress Protection Rating	IP 66 (EN 60529)		
Operating Temperature	Seal Material		
	CR (Chloroprene)		
Ex e/tb	-40°C to +100°C		
Equipment For	• Gas & Dust potentially explosive atmospheres.		
Suitable for use in	Group II	Gas Group IIC	ZONE1 /ZONE2
	Group III	Dust Group IIIC	ZONE21 /ZONE 22
Equipment Marking	Ex II 2GD Ex e IIC Gb Ex † IIIC Db		
Marking Example *	RST DAE... 0637 Ex II 2G Ex e IIC Gb Ex II 2D Ex † IIIC Db IBExU 10 ATEX 1169 U		
Type Protection	Ex e ; Ex †		
Thread Type	• Metric (M) ISO Pitch 1,5		
Remarks	• O-ring available in Metric outer threads.		
Approvals	Certificate Number	Standards	



IBExU 10 ATEX 1169 U

EN 60079-0:2009
EN 60079-7:2007
EN 60079-31:2009



№ TC RU C-TR.AA87.B.00941

ГОСТ 31610.0-2014
ГОСТ IEC 60079-1:2013
ГОСТ IEC 60079-31:2013

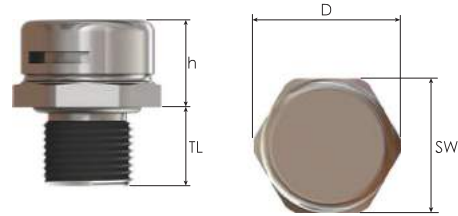
-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



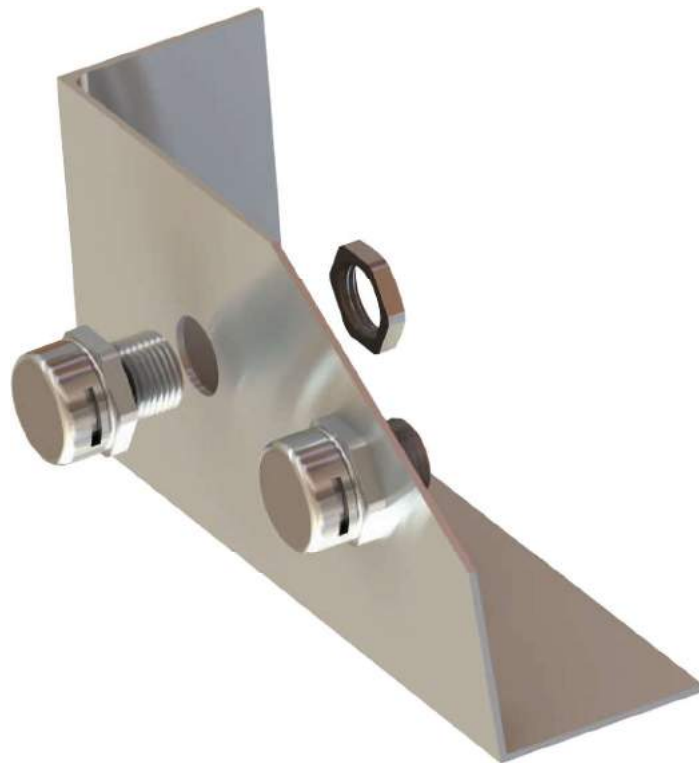
HYDRA

Ventilation Plugs for Ex e applications



Thread Type **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Average Air Flow $\Delta P=70$ mBar / 1 psi	Water Intrusion Pressure	Outer Thread Length	Spanner Width	Outer \varnothing	Height	Part Number
	l/h	bar	TL mm	SW mm	D mm	h mm	
M12x1.5	16	0,9	6,0	17	18,8	11,0	SBBVP-X01
	16	0,9	10,0	17	18,8	11,0	SBBVP-X01L
	25	0,5	6,0	17	18,8	11,0	MBBVP-X01
	25	0,5	10,0	17	18,8	11,0	MBBVP-X01L
	120	0,2	6,0	17	18,8	11,0	HBBVP-X01
	120	0,2	10,0	17	18,8	11,0	HBBVP-X01L
	300	0,1	6,0	17	18,8	11,0	UHHBVP-X01
	300	0,1	10,0	17	18,8	11,0	UHHBVP-X01L






Drain plugs for Ex e application

Drain Plug

- Effectively draining moisture out off an enclosure.
- Prevents damages, such as condensation water.
- Allows the air inside the enclosure to breathe with the surrounding atmosphere.

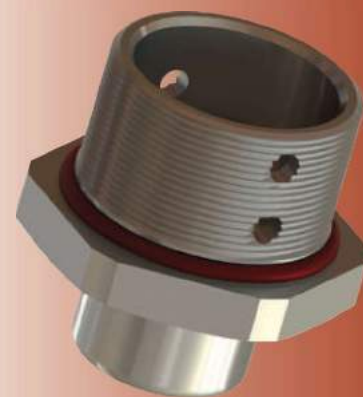
Technical Details

Material	Body ,Cap Membrane O-Ring	Brass, Brass Nickel Plated, Stainless Steel 316L Bronze Silicone
Ingress Protection Rating		IP 66
Operating Temperature	Seal Material	Silicone
Ex e/tb		-60°C to +85°C
Equipment For		• Gas & Dust potentially explosive atmospheres.
Suitable for use in		Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22
Equipment Marking		Ex II 2GD Ex eb IIC Gb Ex tb IIIC Db IP66
Marking Example *		BMD BDRV... CE 0722 Ex II 2GD Ex eb IIC Gb Ex tb IIIC Db Ta -60°C to +85°C IP66 IMQ 13 ATEX 030X IECEx IMQ 14.0003X
Type Protection		Ex eb ; Ex tb
Thread Type		• Metric (M) ISO Pitch 1,5 • Npt (N) ANSI ASME B1.20.1
Accessories		• Lock Nut
Remarks		• O-ring available in Metric outer threads. • Accessories must be ordered separately.

Approvals	Certificate Number	Standards
	IMQ 13 ATEX 030X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014
	IECEx IMQ 14.0003X	IEC 60079-0:2011 Edition:6 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015 Edition:5
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013

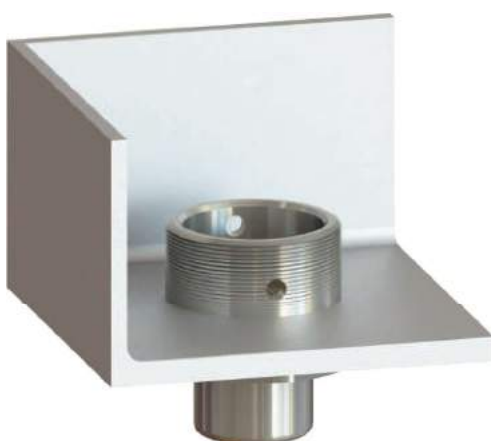
-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

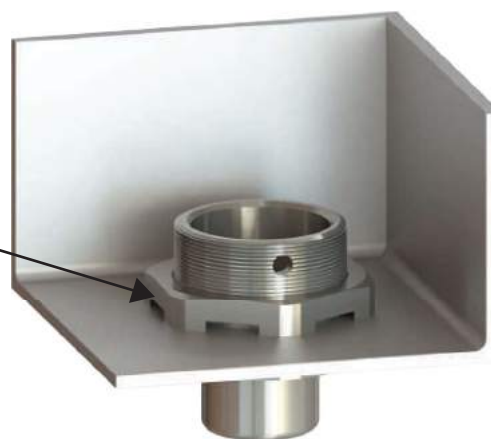


Threaded Hole

Non-Threaded Hole



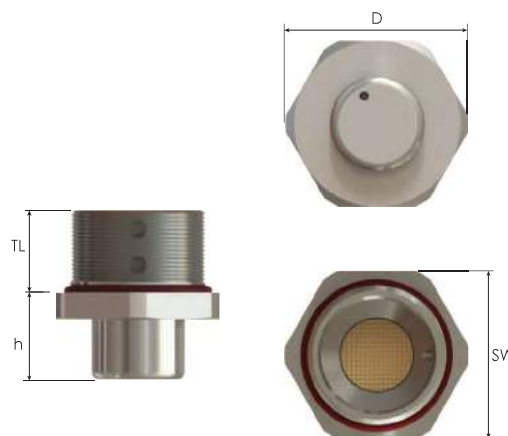
Special Lock Nut for Drain Plug



Order Coding				
Part Number	Material	Seal	-	Lock Nut
Mandatory	Mandatory	Mandatory	-	Option
See table	B Brass BN Brass Nickel Plated X Stainless steel 316L	S Silicone	-	L Lock Nut
Example				
BDRV-1M	BN		-	

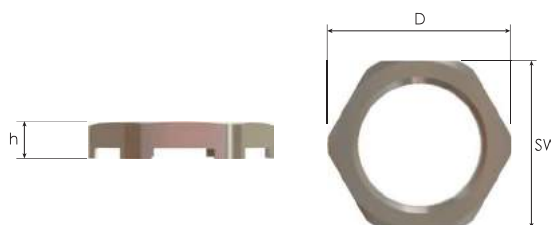
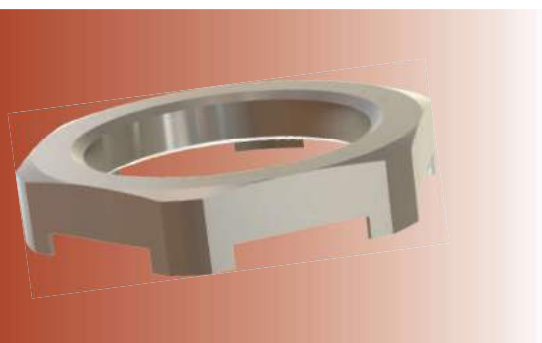
VIRGO

Drain Plugs Ex e applications



Thread Type METRIC acc. to ISO 965-3					
Outer Thread Size (Male)	Outer Thread Length	Spanner Width	Outer Ø	Height	Part Number
	TL mm	SW mm	D2 mm	h mm	
M20x1,5	15,0	25	27,5	16,0	BDRV-1M
M25x1,5	15,0	30	33,0	16,0	BDRV-2M

Thread Type NPT acc. to ANSI ASME B1.20.1					
Outer Thread Size (Male)	Outer Thread Length	Spanner Width	Outer Ø	Height	Part Number
	TL mm	SW mm	D2 mm	h mm	
NPT 1/2"	16,0	25	27,5	16,0	BDRV-1N
NPT 3/4"	16,0	30	33,0	16,0	BDRV-2N



Special Lock Nuts for Drain Plugs

Inner Thread Size (Female)	Spanner Width	Outer Ø	Height	Part Number
	SW mm	D2 mm	h mm	
M20x1,5	25	27,5	5,0	BDRL-03
M25x1,5	30	33,0	5,0	BDRL-04
NPSL 1/2"	25	27,5	5,0	BDRLN-03
NPSL 3/4"	30	33,0	5,0	BDRLN-04

bimed

FITTINGS FOR RIGID CONDUITS WITH NON-ARMOURED CABLES for Gas & Dust Application



E-Carina, Straight Conduit Fittings

E-Carina Flat, Straight Conduit Fittings

E-Cygnus, Swivel Conduit Fittings

Phoenix, Multihole Swivel Conduit Fittings

204 - 207

208 - 211

212 - 215

216 - 217

Ex Glands / Group II-III / Gas & Dust



Despite the similarity to pipes used in plumbing, purpose-designed electrical fittings are used to connect conduit. Box connectors join conduit to a junction box or other electrical box. A typical box connector is inserted into a knockout in a junction box, with the threaded end then being secured with a ring (called a lock nut) from within the box, as a bolt would be secured by a nut. The other end of the fitting usually has a screw or compression ring which is tightened down onto the inserted conduit.







Fittings for non-threaded conduits are either secured with set screws or with a compression nut that encircles the conduit. Fittings for general purpose use with metal conduits may be made of die-cast zinc, but where stronger fittings are needed, they are made of copper-free aluminum or cast iron.

Sometimes the fittings are considered sufficiently conductive to bond (electrically unite) the metal conduit to a metal junction box (thus sharing the box's ground connection); other times, grounding bushings are used which have bonding jumpers from the bushing to a grounding screw on the box. Unlike water piping, if it the conduit is to be watertight, the idea is to keep water out, not in. In this case, gaskets are used with special fittings, such as the weatherhead leading from the overhead electrical mains to the electric meter.

Rigid Conduit Fittings for Ex d/e applications

E-CARINA



Technical Details		
Material	Body	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium
	Seal	CR (Chloroprene), Silicone
	O-ring	CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene)	Silicone
Ex d/tb	-40°C to +80°C	-60°C to +80°C
Ex e/tb	-40°C to +80°C	-60°C to +140°C
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2
	Group III	Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD EBM.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Tg -40°C to +80°C IP66/68 IMQ 13 ATEX 018X IECEx IMQ 13.0006X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	Non Armoured	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Earth tags 	
Remarks	<ul style="list-style-type: none"> • Accessories must be ordered separately. • O-ring only available when male thread is Metric. 	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444

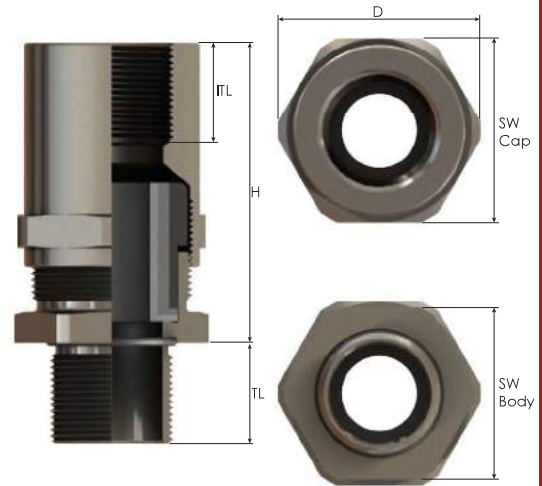
*For more information see our webpage.
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding								
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut	Earth Tag	for Ex e
Mandatory	Mandatory	Mandatory	-	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L A Aluminium	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	E Earth tag	TL9
Example								
EBMOSMOSN	BN	S	-	WC	WSR	L	E	TL9

E-CARINA

Rigid Conduit Fittings for Ex d/e applications



Thread Type **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Inner Thread Size (Female)	Clamping Range		Outer Thread Length		Inner Thread Length	Spanner Width		Outer Ø	max. Height	Part Number
		Ø min-max mm	Seal Type	Ex-e min.	Ex-d/e min.		Cap	Body			
				TL m	ITL mm	SW Cap mm	SW Body mm	D mm	H mm		
M12x1,5	NPT 1/4"	4,0 - 8,0	Triple	9,0	16,0	16,0	24	22	26,5	49,5	EBM0SM0SN*
	NPT 3/8"	4,0 - 8,0	Triple	9,0	16,0	16,0	24	22	26,5	49,5	EBM0SM01N*
M16x1,5	NPT 1/4"	4,0 - 8,0	Triple	9,0	16,0	16,0	24	22	26,5	49,5	EBM01M0SN
	NPT 3/8"	4,0 - 12,0	Triple	9,0	16,0	16,0	24	22	26,5	49,5	EBM01M01N
	NPT 1/2"	4,0 - 12,0	Triple	9,0	16,0	16,0	24	22	26,5	49,5	EBM01M12N
M20x1,5	NPT 3/8"	4,0 - 12,0	Triple	9,0	16,0	16,0	24	22	26,5	46,0	EBM12M01N
	NPT 1/2"	4,0 - 12,0	Triple	9,0	16,0	16,0	24	22	26,5	46,0	EBM1M1N
	NPT 1/2"	10,0 - 16,0	Triple	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M12N
	NPT 3/4"	10,0 - 16,0	Triple	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M23N
M25x1,5	NPT 1/2"	10,0 - 16,0	Triple	9,0	16,0	16,0	30	28	33,0	49,5	EBM23M12N
	NPT 3/4"	10,0 - 18,0	Triple	9,0	16,0	16,0	30	28	33,0	49,5	EBM2M2N
	NPT 3/4"	14,0 - 20,0	Triple	9,0	16,0	16,0	35	35	39,0	54,0	EBM23M23N
	NPT 1"	14,0 - 20,0	Triple	9,0	16,0	20,0	35	35	39,0	57,0	EBM23M34N
M32x1,5	NPT 3/4"	14,0 - 20,0	Triple	9,0	16,0	16,0	35	35	39,0	52,0	EBM34M23N
	NPT 1"	14,0 - 24,0	Triple	9,0	16,0	20,0	35	35	39,0	56,0	EBM3M3N
	NPT 1"	22,0 - 26,0	Triple	9,0	16,0	20,0	45	45	50,0	67,5	EBM34M34N
	NPT 1 1/4"	22,0 - 28,0	Triple	9,0	16,0	20,0	50	45	55,5	65,5	EBM34M45N
M40x1,5	NPT 1"	22,0 - 26,0	Triple	9,0	18,0	20,0	45	45	50,0	67,5	EBM45M34N
	NPT 1 1/4"	22,0 - 32,0	Triple	9,0	18,0	20,0	50	45	55,0	65,5	EBM4M4N
	NPT 1 1/4"	26,0 - 34,0	Triple	9,0	18,0	20,0	50	50	56,0	68,0	EBM45M45N
	NPT 1 1/2"	26,0 - 34,0	Triple	9,0	18,0	20,0	50	50	56,0	69,0	EBM45M56N
M50x1,5	NPT 1 1/4"	26,0 - 34,0	Triple	9,0	18,0	20,0	50	55	61,0	68,0	EBM5M45N
	NPT 1 1/2"	26,0 - 35,0	Triple	9,0	18,0	20,0	55	55	61,0	69,0	EBM5M5N
	NPT 1 1/2"	35,0 - 41,0	Triple	9,0	18,0	20,0	64	64	70,0	66,5	EBM56M56N
	NPT 2"	35,0 - 44,0	Triple	9,0	18,0	20,0	68	64	75,0	69,5	EBM56M67N
M63x1,5	NPT 1 1/2"	35,0 - 41,0	Triple	9,0	18,0	20,0	64	68	75,0	69,0	EBM67M56N
	NPT 2"	35,0 - 45,0	Triple	9,0	18,0	20,0	68	68	75,0	69,0	EBM6M6N
	NPT 2"	46,0 - 52,0	Triple	9,0	18,0	20,0	80	75	89,0	72,0	EBM67M67N
	NPT 2 1/2"	46,0 - 56,0	Triple	9,0	18,0	21,0	80	75	89,0	76,0	EBM67M78N
M75x1,5	NPT 2 1/2"	46,0 - 62,0	Triple	9,0	20,0	21,0	80	80	89,0	73,0	EBM7M7N
	NPT 2 1/2"	60,0 - 64,0	Triple	9,0	20,0	21,0	95	95	105,0	76,0	EBM78M78N
	NPT 3"	60,0 - 69,0	Triple	9,0	20,0	21,0	95	95	105,0	76,0	EBM78M810N
M90x1,5	NPT 2 1/2"	60,0 - 64,0	Triple	9,0	20,0	21,0	105	95	117,0	76,0	EBM810M78N
	NPT 3"	60,0 - 75,0	Triple	9,0	20,0	21,0	95	95	105,0	76,0	EBM8M8N
	NPT 3"	75,0 - 79,5	Triple	9,0	20,0	21,0	105	105	117,0	76,0	EBM810M810N
	NPT 4"	75,0 - 82,0	Triple	9,0	20,0	21,0	105	105	117,0	76,0	EBM810M10N
M100x1,5	NPT 3"	75,0 - 79,5	Triple	9,0	20,0	21,0	105	105	117,0	76,0	EBM10M810N
	NPT 4"	75,0 - 85,0	Triple	9,0	20,0	21,0	105	105	117,0	76,0	EBM10M10N
M110x1,5	NPT 4"	85,0 - 95,0	Triple	9,0	20,0	21,0	115	115	128,0	77,0	EBM11M11N

* Only Ex e/ Ex tb execution.

Rigid Conduit Fittings for Ex d/e applications

E-CARINA



Technical Details		
Material	Body	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium
	Seal	CR (Chloroprene), Silicone
	O-ring	CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene)	Silicone
	Ex d/tb	-40°C to +80°C
Ex e/tb	-40°C to +80°C	-60°C to +140°C
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2
	Group III	Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD EBM.. CE 0722 II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
	Ta -40°C to +80°C IP66/68 IMQ 13 ATEX 018X IECEx IMQ 13.0006X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	Non Armoured	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Earth tags 	
	Remarks	
	<ul style="list-style-type: none"> • Accessories must be ordered separately. • O-ring only available when male thread is Metric. 	
	Approvals	
	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444

-For more information see our webpage.

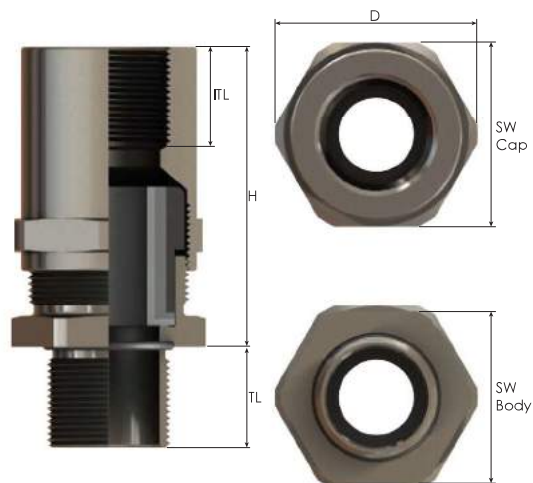
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding								
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut	Earth Tag	for Ex e
Mandatory	Mandatory	Mandatory	-	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L A Aluminium	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	E Earth tag	TL9
Example								
EBMOSMOSN	BN	S	-	WC	WSR	L	E	TL9

E-CARINA

Rigid Conduit Fittings for Ex d/e applications



Thread Type **NPT** acc. to ANSI ASME B1.20.1







Outer Thread Size (Male)	Inner Thread Size (Female)	Clamping Range		Outer Thread Length	Inner Thread Length	Spanner Width		Outer Ø	max. Height	Part Number
		Ø min-max mm	Seal Type			SW Cap mm	SW Body mm			
NPT 1/4"	NPT 1/4"	4,0 - 8,0	Triple	16,0	16,0	24	22	26,5	49,5	EBM0S0N0SN*
	NPT 3/8"	4,0 - 8,0	Triple	16,0	16,0	24	22	26,5	49,5	EBM0S0N01N*
NPT 3/8"	NPT 1/4"	4,0 - 8,0	Triple	16,0	16,0	24	22	26,5	49,5	EBM01N0SN
	NPT 3/8"	4,0 - 12,0	Triple	16,0	16,0	24	22	26,5	49,5	EBM01N01N
	NPT 1/2"	4,0 - 12,0	Triple	16,0	16,0	24	22	26,5	49,5	EBM01N12N
NPT 1/2"	NPT 3/8"	4,0 - 12,0	Triple	16,0	16,0	24	22	26,5	46,0	EBM12N01N
	NPT 1/2"K	4,0 - 12,0	Triple	16,0	16,0	24	22	26,5	46,0	EBM1N1N
	NPT 1/2"	10,0 - 16,0	Triple	16,0	16,0	30	28	33,0	49,0	EBM12N12N
	NPT 3/4"	10,0 - 16,0	Triple	16,0	16,0	30	28	33,0	49,0	EBM12N23N
NPT 3/4"	NPT 1/2"	10,0 - 16,0	Triple	16,0	16,0	30	28	33,0	49,0	EBM23N12N
	NPT 3/4"K	10,0 - 18,0	Triple	16,0	16,0	30	28	33,0	49,0	EBM2N2N
	NPT 3/4"	14,0 - 20,0	Triple	16,0	16,0	35	35	39,0	53,0	EBM23N23N
	NPT 1"	14,0 - 20,0	Triple	16,0	20,0	35	35	39,0	57,0	EBM23N34N
NPT 1"	NPT 3/4"	14,0 - 20,0	Triple	20,0	16,0	35	35	39,0	52,0	EBM34N23N
	NPT 1"K	14,0 - 24,0	Triple	20,0	20,0	35	35	39,0	56,0	EBM3N3N
	NPT 1"	22,0 - 26,0	Triple	20,0	20,0	45	45	50,0	67,0	EBM34N34N
	NPT 1 1/4"	22,0 - 26,0	Triple	20,0	20,0	50	45	55,5	65,5	EBM34N45N
NPT 1 1/4"	NPT 1"	22,0 - 26,0	Triple	20,0	20,0	45	45	50,0	67,5	EBM45N34N
	NPT 1 1/4"K	22,0 - 32,0	Triple	20,0	20,0	50	45	55,5	65,5	EBM4N4N
	NPT 1 1/4"	26,0 - 34,0	Triple	20,0	20,0	50	50	55,5	68,0	EBM45N45N
	NPT 1 1/2"	26,0 - 34,0	Triple	20,0	20,0	50	50	55,5	69,0	EBM45N56N
NPT 1 1/2"	NPT 1 1/4"	26,0 - 34,0	Triple	20,0	20,0	50	55	61,0	68,0	EBM5N45N
	NPT 1 1/2"K	26,0 - 35,0	Triple	20,0	20,0	55	55	61,0	69,0	EBM5N5N
	NPT 1 1/2"	35,0 - 41,0	Triple	20,0	20,0	64	64	70,0	66,0	EBM56N56N
	NPT 2"	35,0 - 41,0	Triple	20,0	20,0	68	64	75,0	69,5	EBM56N67N
NPT 2"	NPT 1 1/2"	35,0 - 41,0	Triple	20,0	20,0	64	68	75,0	69,5	EBM67N56N
	NPT 2"K	35,0 - 45,0	Triple	20,0	20,0	68	68	75,0	69,5	EBM6N6N
	NPT 2"	46,0 - 52,0	Triple	20,0	20,0	80	75	89,0	72,0	EBM67N67N
	NPT 2 1/2"	46,0 - 52,0	Triple	20,0	21,0	80	75	89,0	76,0	EBM67N78N
NPT 2 1/2"	NPT 2"	46,0 - 52,0	Triple	21,0	20,0	95	80	105,0	72,0	EBM78N67N
	NPT 2 1/2"K	46,0 - 62,0	Triple	21,0	21,0	80	80	89,0	73,0	EBM7N7N
	NPT 2 1/2"	60,0 - 64,0	Triple	21,0	21,0	95	95	105,0	76,0	EBM78N78N
	NPT 3"	60,0 - 64,0	Triple	21,0	21,0	95	95	105,0	76,0	EBM78N810N
NPT 3"	NPT 2 1/2"	60,0 - 64,0	Triple	21,0	21,0	105	95	117,0	76,0	EBM810N78N
	NPT 3"K	60,0 - 75,0	Triple	21,0	21,0	95	95	105,0	76,0	EBM8N8N
	NPT 3"	75,0 - 79,5	Triple	21,0	21,0	105	105	117,0	76,0	EBM810N810N
	NPT 4"K	75,0 - 79,5	Triple	21,0	21,0	105	105	117,0	76,0	EBM810N10N
NPT 4"	NPT 3"	75,0 - 79,5	Triple	21,0	21,0	115	115	128,0	76,0	EBM11N810N
	NPT 4"K	75,0 - 85,0	Triple	21,0	21,0	105	115	128,0	76,0	EBM10N10N
	NPT 4"	85,0 - 95,0	Triple	21,0	21,0	115	115	128,0	77,0	EBM11N11N

* Only Ex e/ Ex tb execution.

Rigid Conduit Fittings for Ex d/e Applications

E-CARINA FLAT



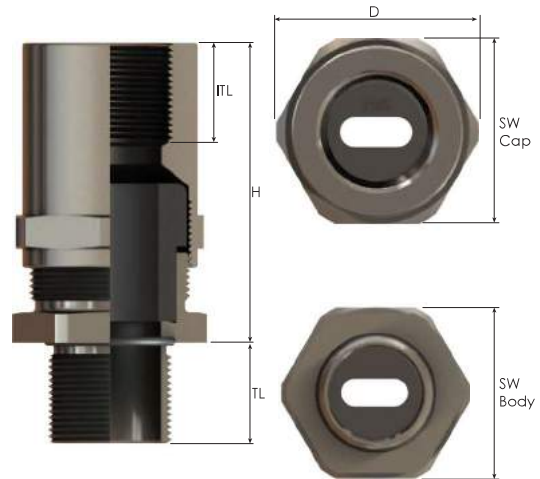
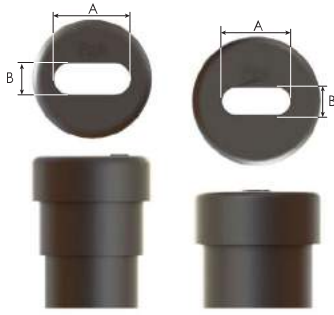
Technical Details		
Material	Body	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium
	Seal	CR (Chloroprene), Silicone
	O-ring	CR (Chloroprene), Silicone
Ingress Protection Rating		IP 68 - 5 Bar, 30 min IP 66
Operating Temperature	Seal Material	
	CR (Chloroprene)	Silicone
	Ex d/tb	-40°C to +80°C
Ex e/tb	-40°C to +80°C	
Equipment For		Gas & Dust potentially explosive atmospheres
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2
	Group III	Dust Group IIIC ZONE21/ZONE 22
Equipment Marking		Ex II 2GD Ex d IIC Gb Ex e IIC Gb Ex tb IIIC Db
Marking Example *		BMD EBM.. CE 0722  II 2GD Ex d IIC Gb Ex e IIC Gb Ex tb IIIC Db T _a -40°C to +80°C IP66/68 IMQ 13 ATEX 018X IECEx IMQ 13.0006X • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request.
Thread Type		• Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request.
Cable Type		Flat form non armoured cable
Accessories		• Lock nuts • Gaskets (Washers) • Serrated Washers • Earth tags • Flat cable Seals
Remarks		• Accessories must be ordered separately. • O-ring only available when male thread is Metric.
Approvals		Certificate Number Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	No TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444

-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



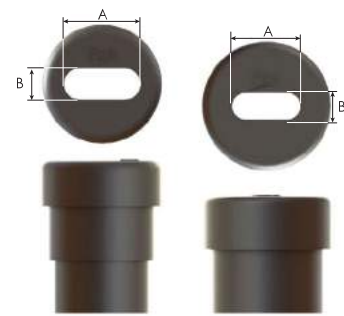
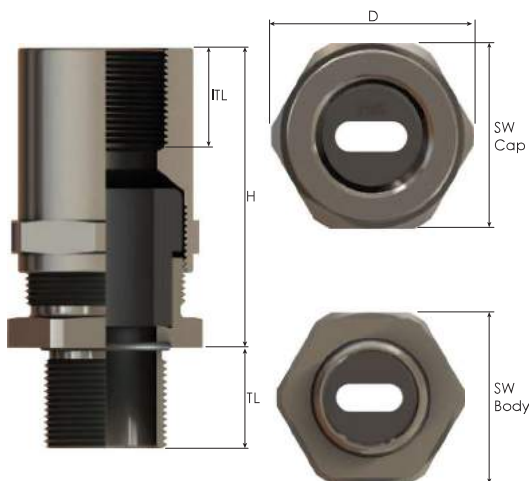
Order Coding								
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut	Earth Tag	for Ex e
Mandatory	Mandatory	Mandatory	-	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L A Aluminium	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	E Earth tag	TL9
Example								
EBM1M1M(FxA1)	BN	S	-	WC	WSR	L	E	TL9



E-CARINA FLAT

Rigid Conduit Fittings for Ex d/e Applications

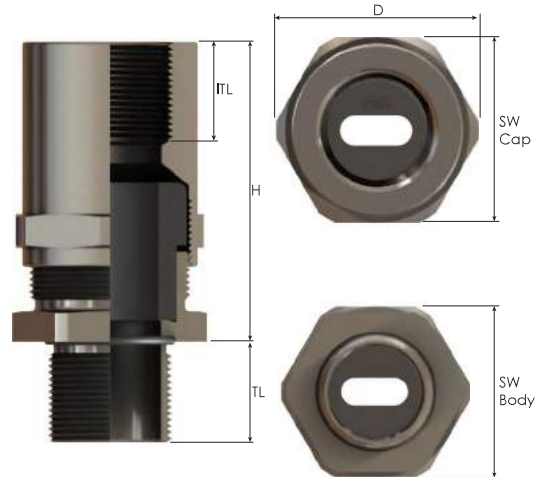
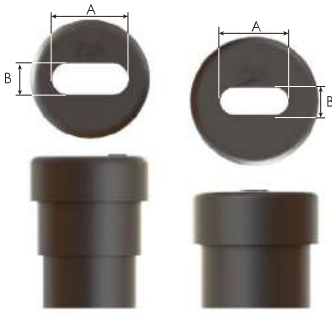
Thread Type METRIC acc. to ISO 965-3											
Outer Thread Size (Male)	Inner Thread Size (Female)	Flat Hole		Outer Thread Length		Inner Thread Length	Spanner Width		Outer Ø	max.Height	Part Number
		Height	Width	Ex-e min.	Ex-d/e min.		Cap	Body			
		B mm	A mm			ITL mm	SW Cap mm	SW Body mm	D mm	H mm	
M20x1,5	M20x1,5	5,0	12,2	9,0	16,0	16,0	24	22	26,5	47,0	EBM1M1M(FxA1)
		5,5	11,7	9,0	16,0	16,0	24	22	26,5	47,0	EBM1M1M(FxC1)
		6,0	8,5	9,0	16,0	16,0	24	22	26,5	47,0	EBM1M1M(FxB1)
		6,0	12,2	9,0	16,0	16,0	24	22	26,5	47,0	EBM1M1M(FxD1)
		6,3	10,8	9,0	16,0	16,0	24	22	26,5	47,0	EBM1M1M(FxE1)
		6,7	12,7	9,0	16,0	16,0	24	22	26,5	47,0	EBM1M1M(FxG1)
M20x1,5	M20x1,5	5,0	12,8	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M12M(FxA2)
		5,5	10,7	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M12M(FxH2)
		5,5	11,7	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M12M(FxC2)
		6,0	8,5	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M12M(FxB2)
		6,0	14,0	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M12M(FxD2)
		6,8	15,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M12M(FxG2)
		7,3	13,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M12M(FxF2)
		9,1	12,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M12M(FxE2)
M20x1,5	M25x1,5	5,0	12,8	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M23M(FxA2)
		5,5	10,7	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M23M(FxH2)
		5,5	11,7	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M23M(FxC2)
		6,0	8,5	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M23M(FxB2)
		6,0	14,0	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M23M(FxD2)
		6,8	15,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M23M(FxG2)
		7,3	13,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M23M(FxF2)
		9,1	12,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM12M23M(FxE2)
M25x1,5	M20x1,5	5,0	12,8	9,0	16,0	16,0	30	28	33,0	50,0	EBM23M12M(FxA2)
		5,5	10,7	9,0	16,0	16,0	30	28	33,0	50,0	EBM23M12M(FxH2)
		5,5	11,7	9,0	16,0	16,0	30	28	33,0	50,0	EBM23M12M(FxC2)
		6,0	8,5	9,0	16,0	16,0	30	28	33,0	50,0	EBM23M12M(FxB2)
		6,0	14,0	9,0	16,0	16,0	30	28	33,0	50,0	EBM23M12M(FxD2)
		6,8	15,3	9,0	16,0	16,0	30	28	33,0	50,0	EBM23M12M(FxG2)
		7,3	13,3	9,0	16,0	16,0	30	28	33,0	50,0	EBM23M12M(FxF2)
		9,1	12,3	9,0	16,0	16,0	30	28	33,0	50,0	EBM23M12M(FxE2)
M25x1,5	M25x1,5	5,0	12,8	9,0	16,0	16,0	30	28	33,0	50,0	EBM2M2M(FxA2)
		5,5	10,7	9,0	16,0	16,0	30	28	33,0	50,0	EBM2M2M(FxH2)
		5,5	11,7	9,0	16,0	16,0	30	28	33,0	50,0	EBM2M2M(FxC2)
		6,0	8,5	9,0	16,0	16,0	30	28	33,0	50,0	EBM2M2M(FxB2)
		6,0	14,0	9,0	16,0	16,0	30	28	33,0	50,0	EBM2M2M(FxD2)
		6,8	15,3	9,0	16,0	16,0	30	28	33,0	50,0	EBM2M2M(FxG2)
		7,3	13,3	9,0	16,0	16,0	30	28	33,0	50,0	EBM2M2M(FxF2)
		9,1	12,3	9,0	16,0	16,0	30	28	33,0	50,0	EBM2M2M(FxE2)



E-CARINA FLAT Rigid Conduit Fittings for Ex d/e Applications

Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Inner Thread Size (Female)	Flat Hole		Outer Thread Length	Inner Thread Length	Spanner Width		Outer Ø	max.Height	Part Number
		Height	Width			Cap	Body			
		B mm	A mm	TL mm	ITL mm	SW Cap mm	SW Body mm	D mm	H mm	
NPT 1/2"	NPT 1/2"	5,0	12,2	16,0	16,0	24	22	26,5	47,5	EBM1N1N(FxA1)
		5,5	11,7	16,0	16,0	24	22	26,5	47,5	EBM1N1N(FxC1)
		6,0	8,5	16,0	16,0	24	22	26,5	47,5	EBM1N1N(FxB1)
		6,0	12,2	16,0	16,0	24	22	26,5	47,5	EBM1N1N(FxD1)
		6,3	10,8	16,0	16,0	24	22	26,5	47,5	EBM1N1N(FxE1)
		6,7	12,7	16,0	16,0	24	22	26,5	47,5	EBM1N1N(FxG1)
		5,0	12,8	16,0	16,0	30	28	33,0	49,0	EBM12N12N(FxA2)
		5,5	10,7	16,0	16,0	30	28	33,0	49,0	EBM12N12N(FxH2)
		5,5	11,7	16,0	16,0	30	28	33,0	49,0	EBM12N12N(FxC2)
		6,0	8,5	16,0	16,0	30	28	33,0	49,0	EBM12N12N(FxB2)
	6,0	14,0	16,0	16,0	30	28	33,0	49,0	EBM12N12N(FxD2)	
	6,8	15,3	16,0	16,0	30	28	33,0	49,0	EBM12N12N(FxG2)	
	7,3	13,3	16,0	16,0	30	28	33,0	49,0	EBM12N12N(FxF2)	
	9,1	12,3	16,0	16,0	30	28	33,0	49,0	EBM12N12N(FxE2)	
NPT 1/2"	NPT 3/4"	5,0	12,8	16,0	16,0	30	28	33,0	49,0	EBM12N23N(FxA2)
		5,5	10,7	16,0	16,0	30	28	33,0	49,0	EBM12N23N(FxH2)
		5,5	11,7	16,0	16,0	30	28	33,0	49,0	EBM12N23N(FxC2)
		6,0	8,5	16,0	16,0	30	28	33,0	49,0	EBM12N23N(FxB2)
		6,0	14,0	16,0	16,0	30	28	33,0	49,0	EBM12N23N(FxD2)
		6,8	15,3	16,0	16,0	30	28	33,0	49,0	EBM12N23N(FxG2)
		7,3	13,3	16,0	16,0	30	28	33,0	49,0	EBM12N23N(FxF2)
		9,1	12,3	16,0	16,0	30	28	33,0	49,0	EBM12N23N(FxE2)
NPT 3/4"	NPT 1/2"	5,0	12,8	16,0	16,0	30	28	33,0	49,0	EBM23N12N(FxA2)
		5,5	10,7	16,0	16,0	30	28	33,0	49,0	EBM23N12N(FxH2)
		5,5	11,7	16,0	16,0	30	28	33,0	49,0	EBM23N12N(FxC2)
		6,0	8,5	16,0	16,0	30	28	33,0	49,0	EBM23N12N(FxB2)
		6,0	14,0	16,0	16,0	30	28	33,0	49,0	EBM23N12N(FxD2)
		6,8	15,3	16,0	16,0	30	28	33,0	49,0	EBM23N12N(FxG2)
		7,3	13,3	16,0	16,0	30	28	33,0	49,0	EBM23N12N(FxF2)
		9,1	12,3	16,0	16,0	30	28	33,0	49,0	EBM23N12N(FxE2)
NPT 3/4"	NPT 3/4"	5,0	12,8	16,0	16,0	30	28	33,0	49,0	EBM2N2N(FxA2)
		5,5	10,7	16,0	16,0	30	28	33,0	49,0	EBM2N2N(FxH2)
		5,5	11,7	16,0	16,0	30	28	33,0	49,0	EBM2N2N(FxC2)
		6,0	8,5	16,0	16,0	30	28	33,0	49,0	EBM2N2N(FxB2)
		6,0	14,0	16,0	16,0	30	28	33,0	49,0	EBM2N2N(FxD2)
		6,8	15,3	16,0	16,0	30	28	33,0	49,0	EBM2N2N(FxG2)
		7,3	13,3	16,0	16,0	30	28	33,0	49,0	EBM2N2N(FxF2)
		9,1	12,3	16,0	16,0	30	28	33,0	49,0	EBM2N2N(FxE2)



E-CARINA FLAT







Rigid Conduit Fittings for Ex d/e applications

Thread Type METRIC acc. to ISO 965-3 > NPT acc. to ANSI ASME B1.20.1											
Outer Thread Size (Male)	Inner Thread Size (Female)	Flat Hole		Outer Thread Length		Inner Thread Length	Spanner Width		Outer Ø	max.Height	Part Number
		Height	Width	Ex-e min.	Ex-d/e min.		Cap	Body			
		B mm	A mm	TL mm		ITL mm	SW Cap mm	SW Body mm	D mm	H mm	
M20X1,5	NPT 1/2"	5,0	12,2	9,0	16,0	16,0	24	22	26,5	46,5	EBM1M1N(FxA1)
		5,5	11,7	9,0	16,0	16,0	24	22	26,5	46,5	EBM1M1N(FxC1)
		6,0	8,5	9,0	16,0	16,0	24	22	26,5	46,5	EBM1M1N(FxB1)
		6,0	12,2	9,0	16,0	16,0	24	22	26,5	46,5	EBM1M1N(FxD1)
		6,3	10,8	9,0	16,0	16,0	24	22	26,5	46,5	EBM1M1N(FxE1)
		6,7	12,7	9,0	16,0	16,0	24	22	26,5	46,5	EBM1M1N(FxG1)
		5,0	12,8	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M12N(FxA2)
		5,5	10,7	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M12N(FxH2)
		5,5	11,7	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M12N(FxC2)
		6,0	8,5	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M12N(FxB2)
		6,0	14,0	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M12N(FxD2)
		6,8	15,3	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M12N(FxG2)
		7,3	13,3	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M12N(FxF2)
		9,1	12,3	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M12N(FxE2)
M20X1,5	NPT 3/4"	5,0	12,8	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M23N(FxA2)
		5,5	10,7	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M23N(FxH2)
		5,5	11,7	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M23N(FxC2)
		6,0	8,5	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M23N(FxB2)
		6,0	14,0	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M23N(FxD2)
		6,8	15,3	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M23N(FxG2)
		7,3	13,3	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M23N(FxF2)
		9,1	12,3	9,0	16,0	16,0	30	28	33,0	49,0	EBM12M23N(FxE2)
M25X1,5	NPT 1/2"	5,0	12,8	9,0	16,0	16,0	30	28	33,0	49,5	EBM23M12N(FxA2)
		5,5	10,7	9,0	16,0	16,0	30	28	33,0	49,5	EBM23M12N(FxH2)
		5,5	11,7	9,0	16,0	16,0	30	28	33,0	49,5	EBM23M12N(FxC2)
		6,0	8,5	9,0	16,0	16,0	30	28	33,0	49,5	EBM23M12N(FxB2)
		6,0	14,0	9,0	16,0	16,0	30	28	33,0	49,5	EBM23M12N(FxD2)
		6,8	15,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM23M12N(FxG2)
		7,3	13,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM23M12N(FxF2)
		9,1	12,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM23M12N(FxE2)
M25X1,5	NPT 3/4"	5,0	12,8	9,0	16,0	16,0	30	28	33,0	49,5	EBM2M2N(FxA2)
		5,5	10,7	9,0	16,0	16,0	30	28	33,0	49,5	EBM2M2N(FxH2)
		5,5	11,7	9,0	16,0	16,0	30	28	33,0	49,5	EBM2M2N(FxC2)
		6,0	8,5	9,0	16,0	16,0	30	28	33,0	49,5	EBM2M2N(FxB2)
		6,0	14,0	9,0	16,0	16,0	30	28	33,0	49,5	EBM2M2N(FxD2)
		6,8	15,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM2M2N(FxG2)
		7,3	13,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM2M2N(FxF2)
		9,1	12,3	9,0	16,0	16,0	30	28	33,0	49,5	EBM2M2N(FxE2)

Rigid Conduit Fittings for Ex d/e applications

E-CYGNUS



Technical Details		
Material	Body	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium
	Inner Parts	Stainless Steel 316L
	Seal	CR (Chloroprene), Silicone
	O-ring	CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene)	Silicone
	Ex d/tb	-40°C to +80°C
	Ex e/tb	-40°C to +80°C
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2
	Group III	Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD	
	Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD EBMS., CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
	Ta-40°C to +80°C IP66/68 IMQ 13 ATEX 018X IECEx IMQ 13.0006X	
Thread Type	• Metric (M) ISO Pitch 1.5	
	• NPT (N) ANSI ASME B1.20.1	
	• Other thread types also available upon request.	
	Non Armoured	
Accessories	• Lock nuts	
	• Gaskets (Washers)	
	• Serrated Washers	
	• Earth tags	
Remarks	• Accessories must be ordered separately.	
	• O-ring only available when male thread is Metric.	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	No TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444

-For more information see our webpage.

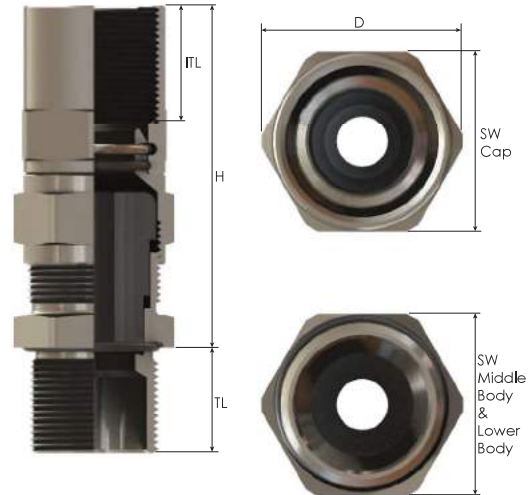
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding								
Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Earth Tag	for Ex e	
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option	
See table	B Brass BN Brass Nickel plated X Stainless steel 316L A Aluminium	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	E Earth tag	TL9	
Example								
EBMS23M12N	BN	S	- WC	WSR	L	E	TL9	

E-CYGNUS

Rigid Conduit Swivel Fittings for Ex d/e applications









Thread Type **METRIC** acc. to ISO 965-3 > **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Inner Thread Size (Female)	Clamping Range		Outer Thread Length		Inner Thread Length	Spanner Width			Outer Ø	max. Height	Part Number
				Ex-e min. Ex-d/e min.			Cap	Upper Body	Lower Body			
				TL	ITL							
Ø min-max mm	Seal Type	TL mm	ITL mm	SW Cap mm	SW Upper Body mm	SW Lower Body mm	D mm	H mm				
M16x1,5	NPT 3/8"	4,0 - 12,0	Triple	9,0	16,0	16,0	27	27	22	30,0	56,5	EBMS01M01N
	NPT 1/2"	4,0 - 12,0	Triple	9,0	16,0	16,0	27	27	22	30,0	56,0	EBMS01M12N
M20x1,5	NPT 3/8"	4,0 - 12,0	Triple	9,0	16,0	16,0	27	27	22	30,0	52,0	EBMS12M01N
	NPT 1/2"	4,0 - 12,0	Triple	9,0	16,0	16,0	27	27	22	30,0	52,0	EBMS1M1N
	NPT 1/2"	10,0 - 16,0	Triple	9,0	16,0	16,0	32	32	28	35,5	52,5	EBMS12M12N
	NPT 3/4"	10,0 - 16,0	Triple	9,0	16,0	16,0	32	32	28	35,5	56,5	EBMS12M23N
M25x1,5	NPT 1/2"	10,0 - 16,0	Triple	9,0	16,0	16,0	32	32	28	35,5	55,0	EBMS23M12N
	NPT 3/4"	10,0 - 18,0	Triple	9,0	16,0	16,0	32	32	28	35,5	57,0	EBMS2M2N
	NPT 3/4"	14,0 - 20,0	Triple	9,0	16,0	16,0	40	40	35	44,5	59,5	EBMS23M23N
	NPT 1"	14,0 - 20,0	Triple	9,0	16,0	20,0	40	40	35	44,5	65,0	EBMS23M34N
M32x1,5	NPT 3/4"	14,0 - 20,0	Triple	9,0	16,0	16,0	40	40	35	44,5	58,5	EBMS34M23N
	NPT 1"	14,0 - 24,0	Triple	9,0	16,0	20,0	40	40	35	44,5	64,0	EBMS3M3N
	NPT 1"	22,0 - 28,0	Triple	9,0	16,0	20,0	48	45	45	53,3	68,5	EBMS34M34N
	NPT 1 1/4"	22,0 - 28,0	Triple	9,0	16,0	20,0	48	45	45	53,3	68,5	EBMS34M45N
M40x1,5	NPT 1"	22,0 - 26,0	Triple	9,0	18,0	20,0	48	45	45	53,3	69,0	EBMS45M34N
	NPT 1 1/4"	22,0 - 32,0	Triple	9,0	18,0	20,0	48	45	45	53,3	69,0	EBMS4M4N
	NPT 1 1/4"	26,0 - 34,0	Triple	9,0	18,0	20,0	55	55	50	61,0	76,0	EBMS45M45N
	NPT 1 1/2"	26,0 - 34,0	Triple	9,0	18,0	20,0	55	55	50	61,0	76,0	EBMS45M56N
M50x1,5	NPT 1 1/4"	26,0 - 34,0	Triple	9,0	18,0	20,0	55	55	55	61,0	76,0	EBMS56M45N
	NPT 1 1/2"	26,0 - 35,0	Triple	9,0	18,0	20,0	55	55	55	61,0	76,0	EBMS5M5N
	NPT 1 1/2"	35,0 - 44,0	Triple	9,0	18,0	20,0	64	64	64	70,0	75,5	EBMS56M56N
	NPT 2"	35,0 - 44,0	Triple	9,0	18,0	20,0	80	80	64	89,0	85,5	EBMS56M67N
M63x1,5	NPT 1 1/2"	35,0 - 41,0	Triple	9,0	18,0	20,0	64	64	68	75,0	75,5	EBMS67M56N
	NPT 2"	35,0 - 45,0	Triple	9,0	18,0	20,0	64	64	68	75,0	77,0	EBMS6M6N
	NPT 2"	46,0 - 56,0	Triple	9,0	18,0	20,0	80	80	75	89,0	85,5	EBMS67M67N
	NPT 2 1/2"	46,0 - 56,0	Triple	9,0	18,0	21,0	95	95	75	105,0	90,0	EBMS67M78N
M75x1,5	NPT 2"	46,0 - 52,0	Triple	9,0	20,0	20,0	80	80	80	89,0	85,5	EBMS78M67N
	NPT 2 1/2"	46,0 - 62,0	Triple	9,0	20,0	21,0	80	80	80	89,0	86,5	EBMS7M7N
	NPT 2 1/2"	60,0 - 69,0	Triple	9,0	20,0	21,0	95	95	95	105,0	90,0	EBMS78M78N
	NPT 3"	60,0 - 69,0	Triple	9,0	20,0	21,0	105	105	95	117,0	90,0	EBMS78M810N
M90x1,5	NPT 2 1/2"	60,0 - 64,0	Triple	9,0	20,0	21,0	95	95	95	105,0	90,0	EBMS810M78N
	NPT 3"	60,0 - 75,0	Triple	9,0	20,0	21,0	95	95	95	105,0	90,0	EBMS8M8N
	NPT 3"	75,0 - 82,0	Triple	9,0	20,0	21,0	105	105	105	117,0	90,0	EBMS810M810N
	NPT 4"	75,0 - 82,0	Triple	9,0	20,0	21,0	115	115	105	128,0	90,0	EBMS810M10N
M100x1,5	NPT 3"	75,0 - 85,0	Triple	9,0	20,0	21,0	105	105	105	117,0	90,0	EBMS10M810N
	NPT 4"	75,0 - 85,0	Triple	9,0	20,0	21,0	115	115	105	128,0	90,0	EBMS10M10N
M110x1,5	NPT 4"	85,0 - 95,0	Triple	9,0	20,0	21,0	115	115	115	128,0	91,0	EBMS11M11N

Rigid Conduit Fittings for Ex d/e applications

E-CYGNUS



Technical Details		
Material	Body	Brass, Brass Nickel Plated, Stainless Steel 316L, Aluminium
	Inner Parts	Stainless Steel 316L
	Seal	CR (Chloroprene), Silicone
	O-ring	CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene)	Silicone
	Ex d/tb	-40°C to +80°C
Ex e/tb	-40°C to +80°C	-60°C to +140°C
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2
	Group III	Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD EBMS.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta-40°C to +80°C IP66/68 IMQ 13 ATEX 018X IECEx IMQ 13.0006X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	Non Armoured	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Earth tags 	
Remarks	<ul style="list-style-type: none"> • Accessories must be ordered separately. • O-ring only available when male thread is Metric. 	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	No TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
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-For more information see our webpage.

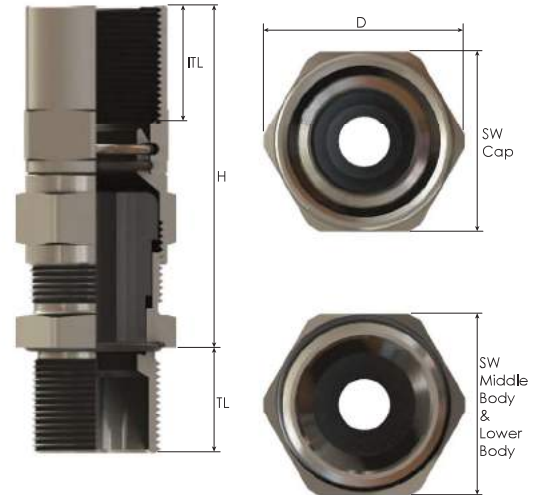
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding								
Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Earth Tag	for Ex e	
Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	Option	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L A Aluminium	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	E Earth tag	TL9	
Example	EBMS23M12N	BN	S	- WC	WSR	L	E	TL9

E-CYGNUS

Rigid Conduit Swivel Fittings for Ex d/e applications



Thread Type NPT acc. to ANSI ASME B1.20.1											
Outer Thread Size (Male)	Inner Thread Size (Female)	Clamping Range		Outer Thread Length	Inner Thread Length	Cap	Spanner Width		Outer Ø	max. Height	Part Number
		Ø min-max mm	Seal Type				TL mm	ITL mm			
NPT 3/8"	NPT 3/8"	4,0 - 12,0	Triple	16,0	16,0	27	27	22	30,0	56,5	EBMS01N01N
	NPT 1/2"	4,0 - 12,0	Triple	16,0	16,0	27	27	22	30,0	56,0	EBMS01N12N
NPT 1/2"	NPT 3/8"	4,0 - 12,0	Triple	16,0	16,0	27	27	22	30,0	52,0	EBMS12N01N
	NPT 1/2"K	4,0 - 12,0	Triple	16,0	16,0	27	27	22	30,0	52,0	EBMS1N1N
	NPT 1/2"	10,0 - 16,0	Triple	16,0	16,0	32	32	28	35,5	54,5	EBMS12N12N
	NPT 3/4"	10,0 - 16,0	Triple	16,0	16,0	32	32	28	35,5	56,5	EBMS12N23N
NPT 3/4"	NPT 1/2"	10,0 - 16,0	Triple	16,0	16,0	32	32	28	35,5	54,5	EBMS23N12N
	NPT 3/4"K	10,0 - 18,0	Triple	16,0	16,0	32	32	28	35,5	56,5	EBMS2N2N
	NPT 3/4"	14,0 - 20,0	Triple	16,0	16,0	40	40	35	44,5	58,5	EBMS23N23N
	NPT 1"	14,0 - 20,0	Triple	16,0	20,0	40	40	35	44,5	64,5	EBMS23N34N
NPT 1"	NPT 3/4"	14,0 - 20,0	Triple	20,0	16,0	40	40	35	44,5	58,5	EBMS34N23N
	NPT 1"	14,0 - 24,0	Triple	20,0	20,0	40	40	35	44,5	64,0	EBMS3N3N
	NPT 1"	22,0 - 26,0	Triple	20,0	20,0	48	45	45	53,3	68,0	EBMS34N34N
	NPT 1 1/4"	22,0 - 26,0	Triple	20,0	20,0	48	45	45	53,3	68,0	EBMS34N45N
NPT 1 1/4"	NPT 1"	22,0 - 26,0	Triple	20,0	20,0	48	45	45	53,3	69,0	EBMS45N34N
	NPT 1 1/4"K	22,0 - 32,0	Triple	20,0	20,0	48	45	45	53,3	69,0	EBMS4N4N
	NPT 1 1/4"	26,0 - 34,0	Triple	20,0	20,0	55	55	55	61,0	76,0	EBMS45N45N
	NPT 1 1/2"	26,0 - 34,0	Triple	20,0	20,0	55	55	55	61,0	76,0	EBMS45N56N
NPT 1 1/2"	NPT 1 1/4"	26,0 - 34,0	Triple	20,0	20,0	55	55	55	61,0	76,0	EBMS56N45N
	NPT 1 1/2"K	26,0 - 35,0	Triple	20,0	20,0	55	55	55	61,0	76,0	EBMS5N5N
	NPT 1 1/2"	35,0 - 41,0	Triple	20,0	20,0	64	64	64	70,0	75,5	EBMS56N56N
	NPT 2"	35,0 - 41,0	Triple	20,0	20,0	80	80	64	89,0	85,5	EBMS56N67N
NPT 2"	NPT 1 1/2"	35,0 - 41,0	Triple	20,0	20,0	64	64	68	75,0	75,5	EBMS67N56N
	NPT 2"K	35,0 - 45,0	Triple	20,0	20,0	64	64	68	75,0	77,0	EBMS6N6N
	NPT 2"	46,0 - 52,0	Triple	20,0	20,0	80	80	75	89,0	85,5	EBMS67N67N
	NPT 2 1/2"	46,0 - 52,0	Triple	20,0	21,0	95	95	75	105,0	90,0	EBMS67N78N
NPT 2 1/2"	NPT 2"	46,0 - 52,0	Triple	21,0	20,0	80	80	80	89,0	85,5	EBMS78N67N
	NPT 2 1/2"K	46,0 - 62,0	Triple	21,0	21,0	80	80	80	89,0	86,5	EBMS7N7N
	NPT 2 1/2"	60,0 - 64,0	Triple	21,0	21,0	95	95	95	105,0	90,0	EBMS78N78N
	NPT 3"	60,0 - 64,0	Triple	21,0	21,0	105	105	95	117,0	90,0	EBMS78N810N
NPT 3"	NPT 2 1/2"	60,0 - 64,0	Triple	21,0	21,0	95	95	95	105,0	90,0	EBMS810N78N
	NPT 3"K	60,0 - 75,0	Triple	21,0	21,0	95	95	95	105,0	90,0	EBMS8N8N
	NPT 3"	75,0 - 79,5	Triple	21,0	21,0	105	105	105	117,0	90,0	EBMS810N810N
	NPT 4"K	75,0 - 79,5	Triple	21,0	21,0	115	115	105	128,0	90,0	EBMS810N10N
NPT 4"	NPT 3"	75,0 - 79,5	Triple	21,0	21,0	105	105	115	128,0	90,0	EBMS11N810N
	NPT 4"K	75,0 - 85,0	Triple	21,0	21,0	115	115	115	128,0	90,0	EBMS10N10N
	NPT 4"	85,0 - 95,0	Triple	21,0	21,0	115	115	115	128,0	91,0	EBMS11N11N

Rigid Conduit Swivel Fittings with Multihole Seal for Ex d/e applications

PHOENIX



Technical Details		
Material	Body Brass, Brass Nickel Plated, Stainless Steel 316L Inner Parts Stainless Steel Seal Silicone O-ring Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material Silicone Ex e/tb -60°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD SV.. CE 0722 II 2GD Ex eb IIC Gb Ex tb IIIC Db Ta-60°C +80°C IP66/68 IECEx IMQ 14.0002X IMQ 13 ATEX 029X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • Npt (N) ANSI ASME B1.20.1 • Other thread types also available upon request. • Other combinations: Metric-Metric/Npt-Npt/Npt-Metric 	
Cable Type	Non Armour	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Earth tags 	
Remarks	<ul style="list-style-type: none"> • Accessories must be ordered separately. • O-ring only available when male thread is Metric. 	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 029X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014
	IECEx IMQ 14.0002X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2
	No TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31, IEC/EN60079-1, IEC/EN 62444

-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding									
Part Number #1	No. of Cores	Part Number #2	Material	Seal	Gasket (Washers)	Serrated Washer	Lock Nut	Earth Tag	
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	- Option	Option	Option	Option	
See table	See table	See table	B Brass BN Brass Nickel plated X Stainless steel 316L	S Silicone	- WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	E Earth tag	
Example									
SV	4	H301M1M	BN	S	- WC	WSR	L	E	



PHOENIX

Rigid Conduit Swivel Fittings with Multihole Seal for Ex d/e applications

Thread Type **METRIC** acc. to ISO 965-3 and NPT acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Inner Thread Size (Female)	max. Number of Cores n	Core Ø e mm	Outer Thread Length TL mm	Inner Thread Length ITL mm	Spanner Width			Outer Ø D mm	max. Height H mm	Part Number		
						Cap	Middle Body	Lower Body			#1	#2	
						SW Cap mm	SW Middle Body mm	SW Lower Body mm					
M20x1,5	M20x1,5	7	2,5	11,0	16,0	33	33	28	37,5	50,0	SV	H251M1M	
		4	3,0	11,0	16,0	33	33	28	37,5	50,0	SV	H301M1M	
	M25x1,5	7	2,5	11,0	16,0	33	33	28	37,5	50,0	SV	H251M2M	
		4	3,0	11,0	16,0	33	33	28	37,5	50,0	SV	H301M2M	
		NPT 3/4"	7	2,5	11,0	17,0	33	33	28	37,5	50,0	SV	H251M2N
4	3,0		11,0	17,0	33	33	28	37,5	50,0	SV	H301M2N		
M25x1,5	M20x1,5	7	2,5	11,0	16,0	33	33	28	37,5	48,0	SV	H252M1M	
		4	3,0	11,0	16,0	33	33	28	37,5	48,0	SV	H302M1M	
		3	3,6	11,0	16,0	33	33	28	37,5	48,0	SV	H362M1M	
		7	4,0	11,0	16,0	33	33	28	37,5	48,0	SV	H402M1M	
	M25x1,5	M25x1,5	7	2,5	11,0	16,0	33	33	28	37,5	48,0	SV	H252M2M
			4	3,0	11,0	16,0	33	33	28	37,5	48,0	SV	H302M2M
			3	3,6	11,0	16,0	33	33	28	37,5	48,0	SV	H362M2M
			7	4,0	11,0	16,0	33	33	28	37,5	48,0	SV	H402M2M
		NPT 3/4"	7	2,5	11,0	17,0	33	33	28	37,5	48,0	SV	H252M2N
			4	3,0	11,0	17,0	33	33	28	37,5	48,0	SV	H302M2N
			3	3,6	11,0	17,0	33	33	28	37,5	48,0	SV	H362M2N
NPT 3/4"	M20x1,5	7	2,5	16,0	16,0	33	33	28	37,5	48,0	SV	H252N1M	
		4	3,0	16,0	16,0	33	33	28	37,5	48,0	SV	H302N1M	
		3	3,6	16,0	16,0	33	33	28	37,5	48,0	SV	H362N1M	
		7	4,0	16,0	16,0	33	33	28	37,5	48,0	SV	H402N1M	
	M25x1,5	7	2,5	16,0	16,0	33	33	28	37,5	48,0	SV	H252N2M	
		4	3,0	16,0	16,0	33	33	28	37,5	48,0	SV	H302N2M	
		3	3,6	16,0	16,0	33	33	28	37,5	48,0	SV	H362N2M	
		7	4,0	16,0	16,0	33	33	28	37,5	48,0	SV	H402N2M	
		NPT 3/4"	7	2,5	16,0	17,0	33	33	28	37,5	48,0	SV	H252N2N
	4		3,0	16,0	17,0	33	33	28	37,5	48,0	SV	H302N2N	
	3		3,6	16,0	17,0	33	33	28	37,5	48,0	SV	H362N2N	
	7		4,0	16,0	17,0	33	33	28	37,5	48,0	SV	H402N2N	



bimed

Liquid Tight and Flexible Conduit Fittings for Gas & Dust Application



E-Hydrus	164 - 165
E-Scorpius	166 - 167
E-Lupus	168 - 169
E-Corvus	170 - 171



Ex Fittings / Group II-III / Gas & Dust Ex II 2GD / Ex d IIC Gb - Ex e IIC Gb - Ex tb IIIC Db



Typical applications for liquidtight conduit and liquidtight fittings include the wiring of machine tools, motors, transformers, food processing equipment, robotics, air conditioning units, illuminated store front signs and billboards, etc. The flexible metallic conduit and fittings protect conductors from mechanical damage due to vibration and movement, and seal out cutting oils, coolants, water, dust, etc. Applications such as these can be found in, but are not limited to, industries such as:

- Machine tool manufacturers
- Electric power generating plants
- Waste treatment facilities
- Paint manufacturing facilities
- Automobile manufacturing facilities
- Aerospace industries
- Breweries
- Food processing plants
- Dairies
- Pulp and paper mills
- Petroleum refineries
- Chemical and petrochemical plants

Fittings for Flexible Conduits for Non-armoured Cables

E-HYDRUS



Technical Details		
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L	
Seal	CR (Chloroprene), Silicone	
Material	Ferrule Steel Zinc Plated, Brass Nickel Plated	
	Plastic Ring Polyamide	
	O-ring CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene)	
Ex d/tb	-40°C to +80°C	Silicone
Ex e/tb	-40°C to +80°C	-60°C to +80°C
		-60°C to +140°C
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II Group III	Gas Group IIC Dust Group IIIC
		ZONE1/ZONE2 ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD EBL.. CE 0722 II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta-40°C +80°C IP66/68 CESI 13 ATEX 018X IECEx CES 13.0006X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	Non Armoured	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Earth tags 	
Remarks	<ul style="list-style-type: none"> • Accessories must be ordered separately. • O-ring available in Metric outer threads. 	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444

-For more information see our webpage.

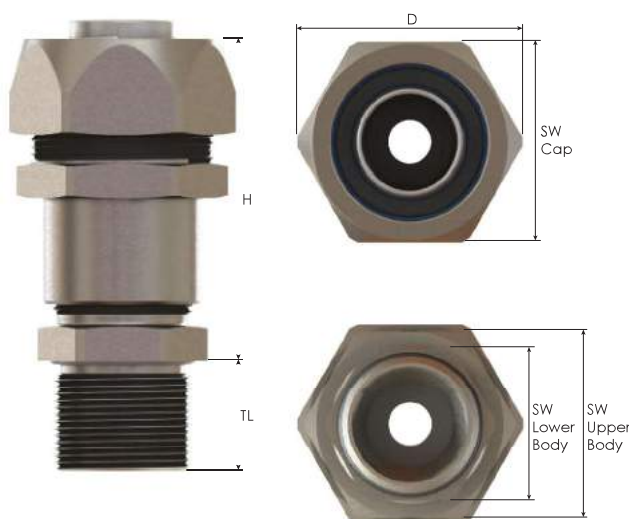
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding							
Part Number	Material	Seal	Gasket (Washer)	Serrated Washer	Lock Nut	Earth Tag	for Ex e
See table	Mandatory	Mandatory	- Option	Option	Option	Option	Option
	B Brass	C Chloroprene	- WC Chloroprene	WSR Serrated washer	L Lock nut	E Earth tag	TL9
	BN Brass Nickel plated	S Silicone	WS Silicone				
	X Stainless steel 316L		WF Fiber				
Example							
EBLS01M	BN	S	-WC	-	L	E	TL9

E-HYDRUS

Fittings for Flexible Conduits for Non-armoured Cables



Thread Type **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	For Seal/Title Nominal Size	Clamping Range		Outer Thread Length		Cap	Spanner Width		Outer Ø	max. Height	Part Number
		Ø min-max mm	Seal Type	Ex - e min.	Ex-d/e min.		Upper Body	Lower Body			
				TL mm		SW Cap mm	SW Upper Body mm	SW Lower Body mm	D mm	H mm	
M12x1,5	1/2 "	4,0 - 8,0	Triple	9,0	16,0	29	27	22	32,7	57,0	*EBLS02M
M16x1,5	1/2 "	4,0 - 12,0	Triple	9,0	16,0	29	27	22	32,7	57,0	EBLS01M
M20x1,5	3/8 "	4,0 - 10,0	Triple	9,0	16,0	26	24	22	29,0	50,5	EBLS1SM
	1/2 "	4,0 - 12,0	Triple	9,0	16,0	29	27	22	32,7	53,0	EBLS1M
M25x1,5	3/4 "	10,0 - 18,0	Triple	9,0	16,0	35	33	28	39,0	56,0	EBLS2M
M32x1,5	1 "	14,0 - 24,0	Triple	9,0	16,0	45	43	35	50,0	64,0	EBLS3M
M40x1,5	1 1/4 "	22,0 - 32,0	Triple	9,0	18,0	54	52	45	60,0	75,0	EBLS4M
M50x1,5	1 1/2 "	26,0 - 35,0	Triple	9,0	18,0	63	60	55	69,3	81,5	EBLS5M







Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	For Seal/Title Nominal Size	Clamping Range		Outer Thread Length		Cap	Spanner Width		Outer Ø	max. Height	Part Number
		Ø min-max mm	Seal Type	TL mm			Upper Body	Lower Body			
				TL mm		SW Cap mm	SW Upper Body mm	SW Lower Body mm	D mm	H mm	
NPT 1/4"	1/2 "	4,0 - 8,0	Triple	16,0		29	27	22	32,7	57,0	*EBLS02N
NPT 3/8"	1/2 "	4,0 - 12,0	Triple	16,0		29	27	22	32,7	57,0	EBLS01N
NPT 1/2"	3/8 "	4,0 - 10,0	Triple	16,0		26	24	22	29,0	50,5	EBLS1SN
	1/2 "	4,0 - 12,0	Triple	16,0		29	27	22	32,7	53,0	EBLS1N
NPT 3/4"	3/4 "	10,0 - 18,0	Triple	16,0		35	33	28	39,0	55,5	EBLS2N
NPT 1"	1 "	14,0 - 24,0	Triple	20,0		45	43	35	50,0	64,0	EBLS3N
NPT 1 1/4"	1 1/4 "	22,0 - 32,0	Triple	20,0		54	52	45	60,0	75,0	EBLS4N
NPT 1 1/2"	1 1/2 "	26,0 - 35,0	Triple	20,0		63	60	55	69,3	81,5	EBLS5N

45° Fittings for Flexible Conduits for Non-armoured Cables

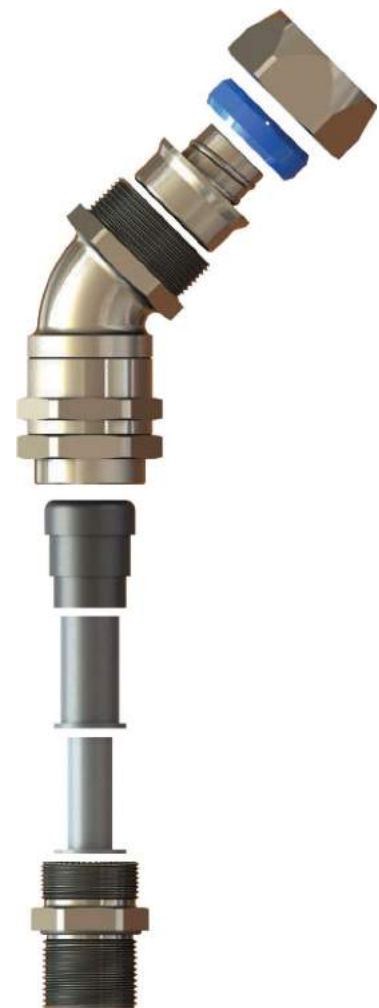
E-SCORPIUS



Technical Details		
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L	
Seal	CR (Chloroprene), Silicone	
Material	Ferrule Steel Zinc Plated, Brass Nickel Plated	
	Plastic Ring Polyamide	
	O-ring CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene) -40°C to +80°C	
	Silicone -60°C to +80°C	
Ex d/tb	-40°C to +80°C	
Ex e/tb	-40°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD EBLQ.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Ta-40°C +80°C IP66/68 CESI 13 ATEX 018X IECEx CES 13.0006X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1.5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	Non Armoured	
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Earth tags 	
Remarks	<ul style="list-style-type: none"> • Accessories must be ordered separately. • O-ring available in Metric outer threads. 	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444

-For more information see our webpage.

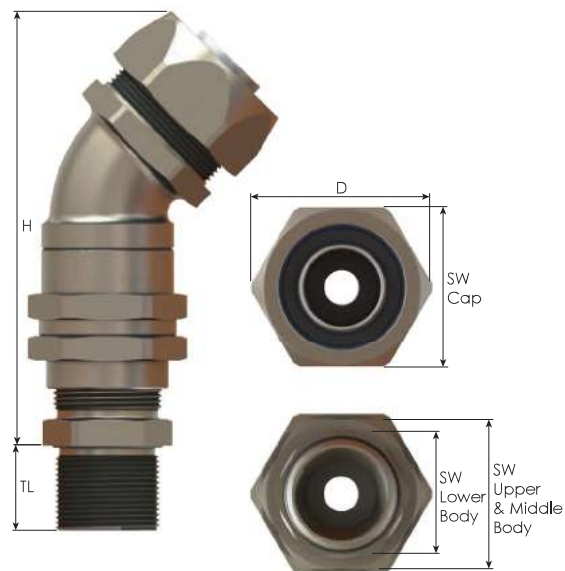
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding							
Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Earth Tag	for Ex e
See table	Mandatory	Mandatory	- Option	Option	Option	Option	Option
	B Brass BN Brass Nickel plated X Stainless steel 316L	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	E Earth tag	TL9
Example							
EBLQ01M	BN	S	- WC	WSR	L	E	TL9

E-SCORPIUS

45° Fittings for Flexible Conduits for Non-armoured Cables



Thread Type **METRIC** acc. to ISO 965-3

















Outer Thread Size (Male)	For Sealtite Nominal Size	Clamping Range		Outer Thread Length		Spanner Width				Outer Ø	max. Height	Part Number
		Ø min-max mm	Seal Type	Ex - e min.	Ex - d/e min.	Cap	Upper Body	Middle Body	Lower Body			
						TL mm	SW Cap mm	SW Upper Body mm	SW Middle Body mm			
M12x1,5	1/2 "	4,0 - 8,0	Triple	9,0	16,0	29	27	27	22	32,7	89,0	*EBLQ02M
M16x1,5	1/2 "	4,0 - 12,0	Triple	9,0	16,0	29	27	27	22	32,7	89,0	EBLQ01M
M20x1,5	3/8 "	4,0 - 10,0	Triple	9,0	16,0	26	22	27	22	29,0	83,0	EBLQ15M
	1/2 "	4,0 - 12,0	Triple	9,0	16,0	29	27	27	22	32,7	85,0	EBLQ11M
M25x1,5	3/4 "	10,0 - 18,0	Triple	9,0	16,0	35	33	33	28	39,0	96,5	EBLQ2M
M32x1,5	1 "	14,0 - 24,0	Triple	9,0	16,0	45	42	42	35	50,0	113,5	EBLQ3M
M40x1,5	1 1/4 "	22,0 - 32,0	Triple	9,0	18,0	54	51	51	45	60,0	135,0	EBLQ4M
M50x1,5	1 1/2 "	26,0 - 35,0	Triple	9,0	18,0	63	60	60	55	69,3	147,5	EBLQ5M

Thread Type **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	For Sealtite Nominal Size	Clamping Range		Outer Thread Length		Spanner Width				Outer Ø	max. Height	Part Number
		Ø min-max mm	Seal Type	TL mm	SW Cap mm	Upper Body	Middle Body	Lower Body				
						SW Upper Body mm	SW Middle Body mm	SW Lower Body mm	D mm			
NPT 1/4"	1/2 "	4,0 - 8,0	Triple	16,0	29	27	27	22	32,7	89,0	*EBLQ02N	
NPT 3/8"	1/2 "	4,0 - 12,0	Triple	16,0	29	27	27	22	32,7	89,0	EBLQ01N	
NPT 1/2"	3/8 "	4,0 - 10,0	Triple	16,0	26	22	27	22	29,0	83,0	EBLQ15N	
	1/2 "	4,0 - 12,0	Triple	16,0	29	27	27	22	32,7	85,0	EBLQ11N	
NPT 3/4"	3/4 "	10,0 - 18,0	Triple	16,0	35	33	33	28	39,0	96,0	EBLQ2N	
NPT 1"	1 "	14,0 - 24,0	Triple	20,0	45	42	42	35	50,0	113,5	EBLQ3N	
NPT 1 1/4"	1 1/4 "	22,0 - 32,0	Triple	20,0	54	51	51	45	60,0	135,0	EBLQ4N	
NPT 1 1/2"	1 1/2 "	26,0 - 35,0	Triple	20,0	63	60	60	55	69,3	147,5	EBLQ5N	

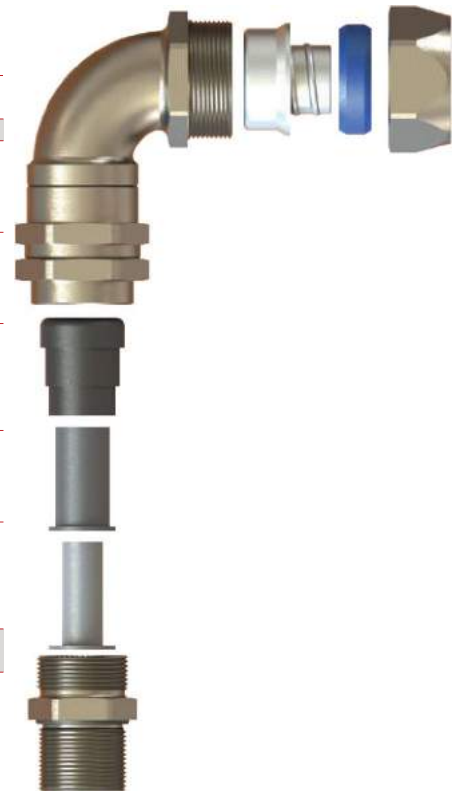
90° Fittings for Flexible Conduits for Non-Armoured Cables

E-LUPUS

Technical Details													
Material	<table border="0"> <tr> <td>Body, Cap</td> <td>Brass, Brass Nickel Plated, Stainless Steel 316L</td> </tr> <tr> <td>Seal</td> <td>CR (Chloroprene), Silicone</td> </tr> <tr> <td>Ferrule</td> <td>Steel Zinc Plated, Brass Nickel Plated</td> </tr> <tr> <td>Plastic Ring</td> <td>Polyamide</td> </tr> <tr> <td>O-ring</td> <td>CR (Chloroprene), Silicone</td> </tr> </table>	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L	Seal	CR (Chloroprene), Silicone	Ferrule	Steel Zinc Plated, Brass Nickel Plated	Plastic Ring	Polyamide	O-ring	CR (Chloroprene), Silicone		
Body, Cap	Brass, Brass Nickel Plated, Stainless Steel 316L												
Seal	CR (Chloroprene), Silicone												
Ferrule	Steel Zinc Plated, Brass Nickel Plated												
Plastic Ring	Polyamide												
O-ring	CR (Chloroprene), Silicone												
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66												
Operating Temperature	<table border="0"> <tr> <td>Seal Material</td> <td>CR (Chloroprene)</td> <td>Silicone</td> </tr> <tr> <td>Ex d/tb</td> <td>-40°C to +80°C</td> <td>-60°C to +80°C</td> </tr> <tr> <td>Ex e/tb</td> <td>-40°C to +80°C</td> <td>-60°C to +140°C</td> </tr> </table>	Seal Material	CR (Chloroprene)	Silicone	Ex d/tb	-40°C to +80°C	-60°C to +80°C	Ex e/tb	-40°C to +80°C	-60°C to +140°C			
Seal Material	CR (Chloroprene)	Silicone											
Ex d/tb	-40°C to +80°C	-60°C to +80°C											
Ex e/tb	-40°C to +80°C	-60°C to +140°C											
Equipment For	Gas & Dust potentially explosive atmospheres												
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22												
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db												
Marking Example *	BMD EBLN.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Tα-40°C +80°C IP66/68 CESI 13 ATEX 018X IECEx CES 13.0006X												
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 												
Cable Type	Non Armoured												
Accessories	<ul style="list-style-type: none"> • Lock nuts • Gaskets (Washers) • Serrated Washers • Earth tags 												
Remarks	<ul style="list-style-type: none"> • Accessories must be ordered separately. • O-ring available in Metric outer threads. 												
Approvals	<table border="0"> <tr> <th>Certificate Number</th> <th>Standards</th> </tr> <tr> <td> IMQ 13 ATEX 018X</td> <td>EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014</td> </tr> <tr> <td> IECEx IMQ 13.0006X</td> <td>IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7</td> </tr> <tr> <td> № TC RU C-TR.AA87.B.00941</td> <td>ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013</td> </tr> <tr> <td> DNV 12.0052 X</td> <td>ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011</td> </tr> <tr> <td> E-14044</td> <td>IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444</td> </tr> </table>	Certificate Number	Standards	 IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014	 IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7	 № TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013	 DNV 12.0052 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011	 E-14044	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444
Certificate Number	Standards												
 IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014												
 IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2015 Edition:5 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7												
 № TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013												
 DNV 12.0052 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-1:2009 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011												
 E-14044	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN60079-1 IEC/EN 62444												

-For more information see our webpage.

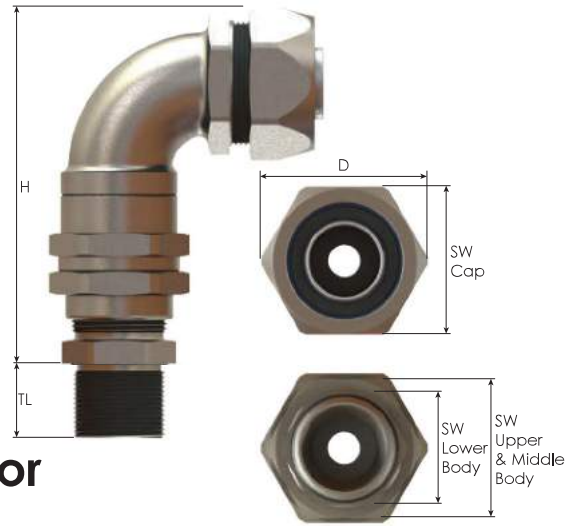
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding								
Part Number	Material	Seal	-	Gasket (Washer)	Serrated Washer	Lock Nut	Earth Tag	for Ex e
See table	Mandatory	Mandatory	-	Option	Option	Option	Option	Option
	B Brass BN Brass Nickel plated X Stainless steel 316L	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber	WSR Serrated washer	L Lock nut	E Earth tag	TL9
Example								
EBLN3M	BN	S	-	WC	WSR	L	E	TL9

E-LUPUS

90° Fittings for Flexible Conduits for Non-Armoured Cables



Thread Type METRIC acc. to ISO 965-3

Outer Thread Size (Male)	For Sealtitle Nominal Size	Clamping Range		Outer Thread Length		Cap	Spanner Width			Outer Ø	max. Height	Part Number
		Ø min-max mm	Seal Type	Ex-e min.	Ex-d/e min.		Upper Body	Middle Body	Lower Body			
				TL mm		SW Cap mm	SW Upper Body mm	SW Middle Body mm	SW Lower Body mm	D mm	H mm	
M12x1,5	1/2 "	4,0 - 8,0	Triple	9,0	16,0	29	27	27	22	32,7	83,5	*EBLN02M
M16x1,5	1/2 "	4,0 - 12,0	Triple	9,0	16,0	29	27	27	22	32,7	83,5	EBLN01M
M20x1,5	3/8 "	4,0 - 10,0	Triple	9,0	16,0	26	22	27	22	29,0	75,0	EBLN1SM
	1/2 "	4,0 - 12,0	Triple	9,0	16,0	29	27	27	22	32,7	80,0	EBLN1M
M25x1,5	3/4 "	10,0 - 18,0	Triple	9,0	16,0	35	33	33	28	39,0	90,0	EBLN2M
M32x1,5	1 "	14,0 - 24,0	Triple	9,0	16,0	45	42	42	35	50,0	104,0	EBLN3M
M40x1,5	1 1/4 "	22,0 - 32,0	Triple	9,0	18,0	54	51	51	45	60,0	122,0	EBLN4M
M50x1,5	1 1/2 "	26,0 - 35,0	Triple	9,0	18,0	63	60	60	55	69,3	137,0	EBLN5M

Thread Type NPT acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	For Sealtitle Nominal Size	Clamping Range		Outer Thread Length		Cap	Spanner Width			Outer Ø	max. Height	Part Number
		Ø min-max mm	Seal Type	TL mm			Upper Body	Middle Body	Lower Body			
				TL mm		SW Cap mm	SW Upper Body mm	SW Middle Body mm	SW Lower Body mm	D mm	H mm	
NPT 1/4"	1/2 "	4,0 - 8,0	Triple	16,0		29	27	27	22	32,7	83,5	*EBLN02N
NPT 3/8"	1/2 "	4,0 - 12,0	Triple	16,0		29	27	27	22	32,7	83,5	EBLN01N
NPT 1/2"	3/8 "	4,0 - 10,0	Triple	16,0		26	22	27	22	29,0	75,0	EBLN1SN
	1/2 "	4,0 - 12,0	Triple	16,0		29	27	27	22	32,7	79,5	EBLN1N
NPT 3/4"	3/4 "	10,0 - 18,0	Triple	16,0		35	33	33	28	39,0	89,5	EBLN2N
NPT 1"	1 "	14,0 - 24,0	Triple	20,0		45	42	42	35	50,0	104,0	EBLN3N
NPT 1 1/4"	1 1/4 "	22,0 - 32,0	Triple	20,0		54	51	51	45	60,0	122,0	EBLN4N
NPT 1 1/2"	1 1/2 "	26,0 - 35,0	Triple	20,0		63	60	60	55	69,3	137,0	EBLN5N

1 Function Ex d/e Flexible Conduit Straight Fittings

E-CORVUS



Technical Details		
Material	Body, Cap Brass, Brass Nickel Plated, Stainless Steel 316L	
	Seal CR (Chloroprene), Silicone	
	O-ring CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene) -40°C to +80°C	
	Silicone -60°C to +80°C	
Ex d/tb	-40°C to +80°C	
Ex e/tb	-40°C to +80°C	
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2	
	Group III Dust Group IIIC ZONE21/ZONE 22	
	Ex II 2GD	
Equipment Marking	Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD EBMCM.. CE 0722 II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
	Ta-40°C to +80°C IP66/68 CESI 13 ATEX 018X IECEx CES 13.0006X	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request. 	
Cable Type	Non Armoured	
Accessories	• Lock nuts	
	• Gaskets (Washers)	
	• Serrated Washers	
	• Earth tags	
Remarks	<ul style="list-style-type: none"> • Accessories must be ordered separately. • O-ring available in Metric outer threads. 	
Approvals	Certificate Number Standards	
	IMQ 13 ATEX 018X	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014 EN 60079-1:2014
		IECEX IMQ 13.0006X
		№ TC RU C-TR.AA87.B.00941
		DNV 12.0052 X
		E-14044

-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

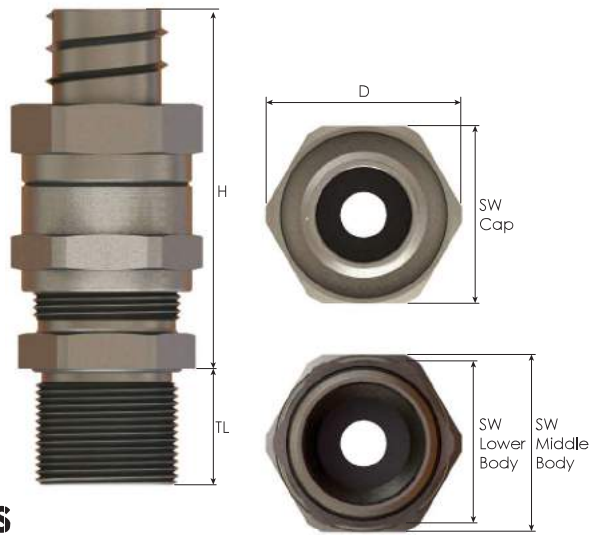


Order Coding							
Part Number	Material	Seal	- Gasket (Washer)	Serrated Washer	Lock Nut	Earth Tag	for Ex e
See table	Mandatory	Mandatory	- Option	Option	Option	Option	Option
	B Brass	C Chloroprene	- WC Chloroprene	WSR Serrated washer	L Lock nut	E Earth tag	TL9
	BN Brass Nickel plated	S Silicone	WS Silicone				
	X Stainless steel 316L		WF Fiber				
Example							
EBMCTM	BN	S	- WF	WSR	L	E	TL9

E-CORVUS

1 Function Ex d/e

Flexible Conduit Straight Fittings



Thread Type METRIC acc. to ISO 965-3

Outer Thread Size (Male)	For Seal/Title Nominal Size	Clamping Range		Outer Thread Length		Cap	Spanner Width		Outer Ø	max. Height	Part Number
		Ø min-max mm	Seal Type	Ex-e min.	Ex-d/e min.		Middle Body	Lower Body			
				TL mm		SW Cap mm	SW Middle Body mm	SW Lower Body mm	D mm	H mm	
M12x1,5	1/2"	4,0 - 8,0	Triple	9,0	16,0	24	24	22	26,5	43,0	*EBMC0SM
M16x1,5	3/8"	3,0 - 9,0	Double	9,0	16,0	20	20	20	22,0	39,0	EBMC01SM
	1/2"	4,0 - 12,0	Triple	9,0	16,0	24	24	22	26,5	43,0	EBMC01M
M20x1,5	3/8"	3,0 - 9,0	Double	9,0	16,0	20	20	22	24,5	39,0	EBMC1SM
	1/2"	4,0 - 12,0	Triple	9,0	16,0	24	24	22	26,5	39,0	EBMC1M
	3/4"	10,0 - 16,0	Triple	9,0	16,0	29	29	28	31,5	41,5	EBMC12M
M25x1,5	3/4"	10,0 - 18,0	Triple	9,0	16,0	29	29	28	31,5	42,0	EBMC2M
	1"	14,0 - 20,0	Triple	9,0	16,0	36	36	35	39,8	47,0	EBMC23M
M32x1,5	1"	14,0 - 24,0	Triple	9,0	16,0	36	36	35	39,8	46,0	EBMC3M
	1 1/4"	22,0 - 28,0	Triple	9,0	16,0	45	45	45	50,0	54,0	EBMC34M
M40x1,5	1 1/4"	22,0 - 32,0	Triple	9,0	18,0	45	45	45	50,0	54,0	EBMC4M
	1 1/2"	26,0 - 34,0	Triple	9,0	18,0	52	52	50	59,0	59,5	EBMC45M
M50x1,5	1 1/2"	26,0 - 35,0	Triple	9,0	18,0	52	52	55	61,0	59,5	EBMC5M
	2"	35,0 - 44,0	Triple	9,0	18,0	65	65	64	72,0	58,5	EBMC56M
M63x1,5	2"	35,0 - 45,0	Triple	9,0	18,0	65	65	68	75,0	58,5	EBMC6M
M75x1,5	2 1/2"	46,0 - 59,0	Triple	9,0	20,0	80	80	80	89,0	69,0	EBMC7M

Thread Type NPT acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	For Seal/Title Nominal Size	Clamping Range		Outer Thread Length	Cap	Spanner Width		Outer Ø	max. Height	Part Number
		Ø min-max mm	Seal Type			Middle Body	Lower Body			
				TL mm	SW Cap mm	SW Middle Body mm	SW Lower Body mm	D mm	H mm	
NPT 1/4"	1/2"	4,0 - 8,0	Triple	16,0	24	24	22	26,5	43,0	*EBMC0SN
NPT 3/8"	3/8"	3,0 - 9,0	Double	16,0	20	20	20	22,0	39,0	EBMC01SN
	1/2"	4,0 - 12,0	Triple	16,0	24	24	22	26,5	43,0	EBMC01N
NPT 1/2"	3/8"	3,0 - 9,0	Double	16,0	20	20	22	24,5	39,0	EBMC1SN
	1/2"	4,0 - 12,0	Triple	16,0	24	24	22	26,5	39,0	EBMC1N
	3/4"	10,0 - 16,0	Triple	16,0	29	29	28	31,5	41,5	EBMC12N
NPT 3/4"	3/4"	10,0 - 18,0	Triple	16,0	29	29	28	31,5	41,5	EBMC2N
	1"	14,0 - 20,0	Triple	16,0	36	36	35	39,8	46,0	EBMC23N
NPT 1"	1"	14,0 - 24,0	Triple	20,0	36	36	35	39,8	46,0	EBMC3N
	1 1/4"	22,0 - 26,0	Triple	20,0	45	45	45	50,0	53,5	EBMC34N
NPT 1 1/4"	1 1/4"	22,0 - 32,0	Triple	20,0	45	45	45	50,0	54,0	EBMC4N
	1 1/2"	26,0 - 34,0	Triple	20,0	52	52	50	59,0	59,5	EBMC45N
	1 1/2"	26,0 - 35,0	Triple	20,0	52	52	55	61,0	59,5	EBMC5N
NPT 1 1/2"	2"	35,0 - 41,0	Triple	20,0	65	65	64	72,0	56,5	EBMC56N
NPT 2"	2"	35,0 - 45,0	Triple	20,0	65	65	68	75,0	58,5	EBMC6N
NPT 2 1/2"	2 1/2"	46,0 - 59,0	Triple	21,0	80	80	80	89,0	69,0	EBMC7N

ADAPTORS and PLUGS for Gas & Dust Applications



Apus, Enlargers

Grus, Reducers

Aries, Couplings

Pavo, Nipples

Aquila Hexagonal, Plugs

Aquila Round, Plugs

230 - 233

234 - 237

238 - 241

242 - 245

246 - 247

248 - 249

Ex Glands / Group II-III / Gas & Dust



Adaptors are used where the thread size of the cable gland or connection device is larger than, or of an equivalent size, to the entry thread of the enclosure. Reducers are used where the thread size of the cable gland or entry device is smaller than the entry thread of the enclosure. A coupling is a very short length of pipe or tube, with a socket at one or both ends that allows two pipes or tubes to be joined. Alternatively it is a short length of pipe with two female National pipe threads (NPT) (in North American terms, a coupler is a double female while a nipple is double male) or two male or female British standard pipe threads. When the two ends use the same connection method but are of a different size, the terms reducing coupling or reducer are used.

Enlargers for Ex d/e Applications

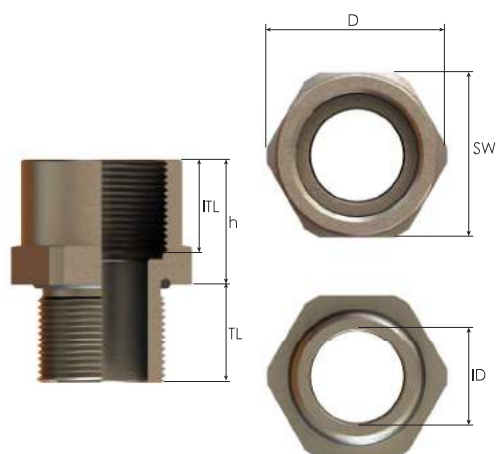
Technical Details		
Material	Body Brass, Brass Nickel Plated, Stainless Steel 316L O-ring CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	O-ring Material CR (Chloroprene) -40°C to +100°C Silicone -60°C to +130°C	
Equipment For	• Gas & Dust potentially explosive atmospheres.	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD B-RB.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Tc-40°C to +100°C IP66/68 CESI 13 ATEX 066X IECEx CES 13.0022X	
Thread Type	• Metric (M) ISO Pitch 1,5 • Npt (N) ANSI ASME B1.20.1 • PG (P) DIN 40430 • (G) GAS UNI ISO 228/1	
Accessories	• Gaskets (Washers)	
Remarks	• Accessories must be ordered separately. • O-ring only available when male thread is Metric.	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 066X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 13.0022X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015 Edition:5
	№ TC RU C-TR.AA87.B.00941	FOCT 31610.0-2014 FOCT IEC 60079-1:2013 FOCT IEC 60079-31:2013
	DNV 12.0150 X	ABNT NBR IEC 60079-0:2008, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31, IEC/EN60079-1 & IEC/EN 62444

- Other sizes available upon request. For more information see our webpage.
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



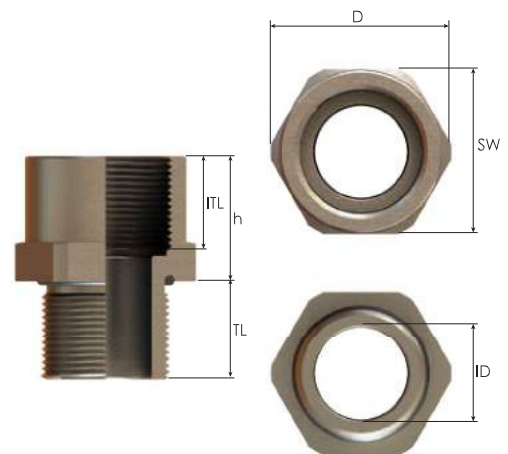
Order Coding			
Part Number	Material	Seal	- Gasket (Washer)
Mandatory	Mandatory	Mandatory	- Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber
Example			
B-RB01M01M	BN	C	- WC

APUS Enlargers for Ex d/e Applications



Thread Type METRIC > METRIC acc. to ISO 965-3								
Outer Thread Size (Male)	Inner Thread Size (Female)	Outer Thread Length	Inner Thread Length	Spanner Width	Outer Ø	Inner Ø	Height	Part Number
		TL mm	ITL mm	SW mm	D mm	ID mm	h mm	
M16x1,5	M20x1,5	15,0	15,0	25	27,5	10,0	19,0	B-RB1M01M
	M25x1,5	15,0	15,0	30	33,0	10,0	19,0	B-RB2M01M
	M32x1,5	15,0	15,0	36	39,5	10,0	19,0	B-RB3M01M
M20x1,5	M25x1,5	15,0	15,0	30	33,0	14,0	19,0	B-RB2M1M
	M32x1,5	15,0	15,0	36	39,5	14,0	19,0	B-RB3M1M
	M40x1,5	15,0	18,0	45	50,0	14,0	22,0	B-RB4M1M
M25x1,5	M32x1,5	15,0	15,0	36	39,5	19,0	19,0	B-RB3M2M
	M40x1,5	15,0	18,0	45	50,0	19,0	22,0	B-RB4M2M
	M50x1,5	15,0	18,0	55	61,0	19,0	22,0	B-RB5M2M
M32x1,5	M40x1,5	15,0	18,0	45	50,0	26,0	22,0	B-RB4M3M
	M50x1,5	15,0	18,0	55	61,0	26,0	22,0	B-RB5M3M
	M60x1,5	18,0	18,0	68	75,0	26,0	22,5	B-RB6M3M
M40x1,5	M50x1,5	18,0	18,0	55	61,0	34,0	22,0	B-RB5M4M
	M60x1,5	18,0	18,0	68	75,0	34,0	22,5	B-RB6M4M
	M63x1,5	18,0	18,0	68	75,0	34,0	22,5	B-RB6M4M
	M70x1,5	18,0	18,0	80	88,5	34,0	22,5	B-RB7M4M
	M75x1,5	18,0	18,0	80	88,5	34,0	22,5	B-RB7M4M
M50x1,5	M60x1,5	18,0	18,0	68	75,0	44,0	22,5	B-RB6M5M
	M63x1,5	18,0	18,0	68	75,0	44,0	22,5	B-RB6M5M
	M70x1,5	18,0	18,0	80	88,5	44,0	22,5	B-RB7M5M
	M75x1,5	18,0	18,0	80	88,5	44,0	22,5	B-RB7M5M
	M80x1,5	18,0	18,0	90	100,0	44,0	22,5	B-RB8M5M
M60x1,5	M63x1,5	18,0	18,0	68	75,0	54,0	22,5	B-RB6M6M
	M70x1,5	18,0	18,0	80	88,5	54,0	22,5	B-RB7M6M
	M75x1,5	18,0	18,0	80	88,5	54,0	22,5	B-RB7M6M
	M80x1,5	18,0	18,0	90	100,0	54,0	22,5	B-RB8M6M
	M85x1,5	18,0	18,0	95	105,0	54,0	22,5	B-RB8M6M
	M90x1,5	18,0	21,0	95	105,0	54,0	25,5	B-RB8M6M
M63x1,5	M70x1,5	18,0	18,0	80	88,5	57,0	22,5	B-RB7M6M
	M75x1,5	18,0	18,0	80	88,5	57,0	22,5	B-RB7M6M
	M80x1,5	18,0	18,0	90	100,0	57,0	22,5	B-RB8M6M
	M85x1,5	18,0	18,0	95	105,0	57,0	22,5	B-RB8M6M
	M90x1,5	18,0	21,0	95	105,0	57,0	25,5	B-RB8M6M
M70x1,5	M75x1,5	18,0	18,0	80	88,5	64,0	22,5	B-RB7M7M
	M80x1,5	18,0	18,0	90	100,0	64,0	22,5	B-RB8M7M
	M85x1,5	18,0	18,0	95	105,0	64,0	22,5	B-RB8M7M
	M90x1,5	18,0	21,0	95	105,0	64,0	25,5	B-RB8M7M
M75x1,5	M80x1,5	18,0	18,0	90	100,0	69,0	22,5	B-RB8M7M
	M85x1,5	18,0	18,0	95	105,0	69,0	22,5	B-RB8M7M
	M90x1,5	18,0	21,0	95	105,0	69,0	25,5	B-RB8M7M
	M100x1,5	18,0	21,0	110	123,0	69,0	25,5	B-RB9M7M
M80x1,5	M85x1,5	18,0	18,0	95	105,0	72,0	22,5	B-RB8M8M
	M90x1,5	18,0	21,0	95	105,0	72,0	25,5	B-RB8M8M
	M100x1,5	18,0	21,0	110	123,0	72,0	25,5	B-RB9M8M
	M110x1,5	18,0	21,0	120	134,0	72,0	26,0	B-RB10M8M
M85x1,5	M90x1,5	18,0	21,0	95	105,0	77,0	25,5	B-RB8M8M
	M100x1,5	18,0	21,0	110	123,0	77,0	25,5	B-RB9M8M
	M110x1,5	18,0	21,0	120	134,0	77,0	26,0	B-RB10M8M
M90x1,5	M100x1,5	21,0	21,0	110	123,0	84,0	26,0	B-RB9M8M
	M110x1,5	21,0	21,0	120	134,0	84,0	26,0	B-RB10M8M
M100x1,5	M110x1,5	21,0	21,0	120	134,0	94,0	26,0	B-RB10M9M

APUS Enlargers for Ex d/e Applications



Thread Type NPT acc. to ANSI ASME B1.20.1 > METRIC acc. to ISO 965-3								
Outer Thread Size (Male)	Inner Thread Size (Female)	Outer Thread Length		Inner Thread Length		Spanner Width		Part Number
		TL mm	ITL mm	SW mm	D mm	ID mm	h mm	
NPT 3/8"	M16x1,5	15,0	15,0	22	24,0	12,0	18,5	B-RB01M01N
	M20x1,5	15,0	15,0	25	27,5	14,5	19,0	B-RB1M01N
	M25x1,5	15,0	15,0	30	33,0	14,5	19,0	B-RB2M01N
	M32x1,5	15,0	15,0	36	39,5	12,0	19,0	B-RB3M01N
NPT 1/2"	M20x1,5	15,0	15,0	25	27,5	14,5	19,0	B-RB1M1N
	M25x1,5	15,0	15,0	30	33,0	14,5	19,0	B-RB2M1N
	M32x1,5	15,0	15,0	36	39,5	14,5	19,0	B-RB3M1N
	M40x1,5	15,0	18,0	45	50,0	14,5	22,0	B-RB4M1N
NPT 3/4"	M20x1,5	15,0	15,0	30	33,0	14,5	19,0	B-RB1M2N
	M32x1,5	15,0	15,0	36	39,5	19,0	19,0	B-RB3M2N
	M40x1,5	15,0	18,0	45	50,0	19,0	22,0	B-RB4M2N
	M50x1,5	18,0	18,0	55	61,0	19,0	22,0	B-RB5M2N
NPT 1"	M32x1,5	15,0	15,0	36,0	39,5	26,0	19,0	B-RB3M3N
	M40x1,5	15,0	18,0	45,0	50,0	26,0	22,0	B-RB4M3N
	M50x1,5	18,0	18,0	55,0	61,0	26,0	22,0	B-RB5M3N
	M60x1,5	18,0	18,0	68,0	75,0	26,0	22,5	B-RB6M3N
NPT 1 1/4"	M63x1,5	18,0	18,0	68,0	75,0	26,0	22,5	B-RB6M3N
	M40x1,5	18,0	18,0	45,0	50,0	35,0	22,0	B-RB4M4N
	M50x1,5	18,0	18,0	55,0	61,0	35,0	22,0	B-RB5M4N
	M60x1,5	18,0	18,0	68,0	75,0	35,0	22,5	B-RB6M4N
	M63x1,5	18,0	18,0	68,0	75,0	35,0	22,5	B-RB6M4N
NPT 1 1/2"	M70x1,5	18,0	18,0	80,0	88,5	35,0	22,5	B-RB7M4N
	M75x1,5	18,0	18,0	80,0	88,5	35,0	22,5	B-RB7M4N
	M50x1,5	18,0	18,0	55,0	61,0	40,0	22,0	B-RB5M5N
	M60x1,5	18,0	18,0	68,0	75,0	40,0	22,5	B-RB6M5N
	M63x1,5	18,0	18,0	68,0	75,0	40,0	22,5	B-RB6M5N
NPT 2"	M70x1,5	18,0	18,0	80,0	88,5	40,0	22,5	B-RB7M5N
	M75x1,5	18,0	18,0	80,0	88,5	40,0	22,5	B-RB7M5N
	M80x1,5	18,0	18,0	90,0	100,0	51,0	23,0	B-RB8M6N
	M85x1,5	18,0	18,0	95,0	105,0	51,0	23,0	B-RB8M6N
	M90x1,5	28,0	21,0	95,0	105,0	51,0	26,0	B-RB8M6N
NPT 2 1/2"	M75x1,5	28,0	18,0	80,0	88,5	62,0	22,5	B-RB7M7N
	M80x1,5	28,0	18,0	90,0	100,0	62,0	23,0	B-RB8M7N
	M85x1,5	28,0	18,0	95,0	105,0	62,0	23,0	B-RB8M7N
	M90x1,5	28,0	21,0	95,0	105,0	62,0	26,0	B-RB8M7N
NPT 3"	M85x1,5	28,0	18,0	95,0	105,0	75,0	23,0	B-RB8M8N
	M90x1,5	28,0	21,0	95,0	105,0	75,0	26,0	B-RB8M8N
	M100x1,5	28,0	21,0	110,0	123,0	75,0	26,0	B-RB9M8N
	M110x1,5	28,0	21,0	120,0	134,0	75,0	26,0	B-RB10M8N
NPT 3 1/2"	M100x1,5	28,0	21,0	110,0	123,0	87,0	26,0	B-RB9M9N
	M110x1,5	28,0	21,0	120,0	134,0	87,0	26,0	B-RB10M9N
NPT 4"	M110x1,5	28,0	21,0	120,0	134,0	100,0	26,0	B-RB10M10N

APUS Enlargers for Ex d/e Applications







Thread Type **NPT > NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Inner Thread Size (Female)	Outer Thread Length	Inner Thread Length	Spanner Width	Outer Ø	Inner Ø	Height	Part Number
		TL mm	ITL mm	SW mm	D mm	ID mm	h mm	
NPT 3/8"	NPT 1/2"	15,0	15,0	25	27,5	13,0	19,0	B-RB1N01N
	NPT 3/4"	15,0	15,0	30	33,0	12,0	19,0	B-RB2N01N
	NPT 1"	15,0	15,0	30	39,5	12,0	19,0	B-RB3N01N
NPT 1/2"	NPT 3/4"	15,0	15,0	30	33,0	14,5	19,0	B-RB2N1N
	NPT 1"	15,0	15,0	36	39,5	14,5	19,0	B-RB3N1N
	NPT 1 1/4"	15,0	18,0	45	50,0	14,5	22,0	B-RB4N1N
NPT 3/4"	NPT 1"	15,0	15,0	36	39,5	20,0	19,0	B-RB3N2N
	NPT 1 1/4"	15,0	18,0	45	50,0	20,0	22,0	B-RB4N2N
	NPT 1 1/2"	15,0	18,0	55	61,0	20,0	22,5	B-RB5N2N
NPT 1"	NPT 1 1/4"	15,0	18,0	45	50,0	27,0	22,0	B-RB4N3N
	NPT 1 1/2"	15,0	18,0	55	61,0	25,0	22,5	B-RB5N3N
	NPT 2"	18,0	18,0	65	72,0	25,0	22,5	B-RB6N3N
NPT 1 1/4"	NPT 1 1/2"	18,0	18,0	55	61,0	40,5	22,5	B-RB5N4N
	NPT 2"	18,0	18,0	65	72,0	40,5	22,5	B-RB6N4N
	NPT 2 1/2"	18,0	28,0	80	88,5	35,0	32,5	B-RB7N4N
NPT 1 1/2"	NPT 2"	18,0	18,0	65	72,0	41,0	22,5	B-RB6N5N
	NPT 2 1/2"	18,0	28,0	80	88,5	41,0	32,5	B-RB7N5N
	NPT 3"	28,0	28,0	95	105,0	41,0	32,5	B-RB8N5N
NPT 2"	NPT 2 1/2"	18,0	28,0	80	88,5	53,0	32,5	B-RB7N6N
	NPT 3"	28,0	28,0	95	105,0	53,0	32,5	B-RB8N6N
	NPT 3 1/2"	28,0	28,0	110	123,0	53,0	33,0	B-RB9N6N
NPT 2 1/2"	NPT 3"	28,0	28,0	95	105,0	62,0	32,5	B-RB8N7N
	NPT 3 1/2"	28,0	28,0	110	123,0	62,0	33,0	B-RB9N7N
	NPT 4"	28,0	28,0	120	134,0	62,0	33,0	B-RB10N7N
NPT 3"	NPT 3 1/2"	28,0	28,0	110	123,0	75,0	33,0	B-RB9N8N
	NPT 4"	28,0	28,0	120	134,0	75,0	33,0	B-RB10N8N
	NPT 4"	28,0	28,0	120	134,0	87,5	33,0	B-RB10N9N

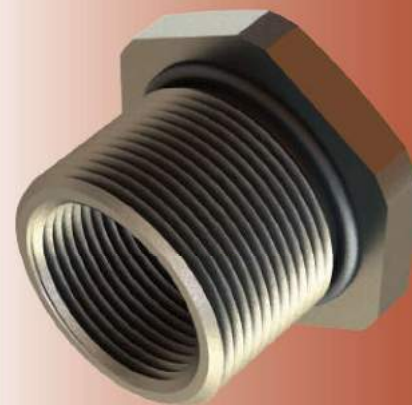
Thread Type **METRIC** acc. to ISO 965-3 > **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Inner Thread Size (Female)	Outer Thread Length	Inner Thread Length	Spanner Width	Outer Ø	Inner Ø	Height	Part Number
		TL mm	ITL mm	SW mm	D mm	ID mm	h mm	
M16x1,5	NPT 3/8"	15,0	15,0	20	22,0	10,0	18,5	B-RB01N01M
	NPT 1/2"	15,0	15,0	25	27,5	10,0	19,0	B-RB1N01M
	NPT 3/4"	15,0	15,0	30	33,0	10,0	19,0	B-RB2N01M
M20x1,5	NPT 3/4"	15,0	15,0	30	33,0	14,0	19,0	B-RB2N1M
	NPT 1"	15,0	15,0	36	39,5	14,0	19,0	B-RB3N1M
	NPT 1 1/4"	15,0	18,0	45	50,0	14,0	22,0	B-RB4N1M
M25x1,5	NPT 3/4"	15,0	15,0	30	33,0	19,0	19,0	B-RB2N2M
	NPT 1"	15,0	15,0	36	39,5	19,0	19,0	B-RB3N2M
	NPT 1 1/4"	15,0	18,0	45	50,0	19,0	22,0	B-RB4N2M
M32x1,5	NPT 1"	15,0	15,0	36	39,5	26,0	19,0	B-RB3N3M
	NPT 1 1/4"	15,0	18,0	45	50,0	26,0	22,0	B-RB4N3M
	NPT 1 1/2"	18,0	18,0	55	61,0	26,0	22,0	B-RB5N3M
M40x1,5	NPT 1 1/4"	18,0	18,0	45	50,0	34,0	22,0	B-RB4N4M
	NPT 1 1/2"	18,0	18,0	55	61,0	34,0	22,0	B-RB5N4M
	NPT 2"	18,0	18,0	65	72,0	34,0	22,5	B-RB6N4M
M50x1,5	NPT 1 1/2"	18,0	18,0	55	61,0	40,0	22,0	B-RB5N5M
	NPT 2"	18,0	18,0	65	72,0	44,0	22,5	B-RB6N5M
	NPT 2 1/2"	18,0	28,0	80	88,5	44,0	32,5	B-RB7N5M
M60x1,5	NPT 2"	18,0	18,0	68	75,0	48,0	22,5	B-RB6N6M
	NPT 2 1/2"	18,0	28,0	80	88,5	54,0	32,5	B-RB7N6M
	NPT 3"	18,0	28,0	95	105,0	54,0	32,5	B-RB8N6M
M63x1,5	NPT 2"	18,0	18,0	68	75,0	51,0	22,5	B-RB6N6M
	NPT 2 1/2"	18,0	28,0	80	88,5	57,0	32,5	B-RB7N6M
	NPT 3"	18,0	28,0	95	105,0	51,0	32,5	B-RB8N6M
M70x1,5	NPT 2 1/2"	18,0	28,0	80	88,5	64,0	32,5	B-RB7N7M
	NPT 3"	18,0	28,0	95	105,0	64,0	32,5	B-RB8N7M
	NPT 3 1/2"	18,0	28,0	110	123,0	64,0	33,0	B-RB9N7M
M75x1,5	NPT 2 1/2"	18,0	28,0	80	88,5	69,0	32,5	B-RB7N7M
	NPT 3"	18,0	28,0	95	105,0	69,0	32,5	B-RB8N7M
	NPT 3 1/2"	18,0	28,0	110	123,0	69,0	33,0	B-RB9N7M
M80x1,5	NPT 3"	18,0	28,0	95	105,0	72,0	32,5	B-RB8N8M
	NPT 3 1/2"	18,0	28,0	110	123,0	72,0	33,0	B-RB9N8M
	NPT 4"	18,0	28,0	120	134,0	72,0	33,0	B-RB10N8M
M85x1,5	NPT 3"	18,0	28,0	95	105,0	77,0	32,5	B-RB8N8M
	NPT 3 1/2"	18,0	28,0	110	123,0	77,0	33,0	B-RB9N8M
	NPT 4"	18,0	28,0	120	134,0	77,0	33,0	B-RB10N8M
M90x1,5	NPT 3"	21,0	28,0	95	105,0	78,0	33,0	B-RB8N8M
	NPT 3 1/2"	21,0	28,0	110	123,0	78,0	33,0	B-RB9N8M
	NPT 4"	21,0	28,0	120	134,0	78,0	33,0	B-RB10N8M
M100x1,5	NPT 3 1/2"	21,0	28,0	110	123,0	94,0	33,0	B-RB9N9M
	NPT 4"	21,0	28,0	120	134,0	94,0	33,0	B-RB10N9M
	NPT 4"	21,0	28,0	120	134,0	103,0	33,0	B-RB10N10M

Reducers for Ex d/e Applications

Technical Details					
Material	Body	Brass, Brass Nickel Plated, Stainless Steel 316L			
	O-Ring	CR (Chloroprene), Silicone			
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66				
Operating Temperature	O-ring Material				
	Ex d/e/tb	<table border="0"> <tr> <td>CR (Chloroprene)</td> <td>Silicone</td> </tr> <tr> <td>-40°C to +100°C</td> <td>-60°C to +130°C</td> </tr> </table>	CR (Chloroprene)	Silicone	-40°C to +100°C
CR (Chloroprene)	Silicone				
-40°C to +100°C	-60°C to +130°C				
Equipment For	• Gas & Dust potentially explosive atmospheres.				
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2			
	Group III	Dust Group IIIC ZONE21/ZONE 22			
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db				
Marking Example *	BMD B-RA.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Tc-40°C to +100°C IP66/68 CESI 13 ATEX 066X IECEx CES 13.0022X				
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO Pitch 1,5 • Npt (N) ANSI ASME B1.20.1 • PG (P) DIN 40430 • (G) GAS UNI ISO 228/1 				
Accessories	• Gaskets (Washers)				
Remarks	• Accessories must be ordered separately. • O-ring available in Metric.				
Approvals	Certificate Number	Standards			
	CESI 13 ATEX 066X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014			
	IECEx CES 13.0022X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015 Edition:5			
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013			
	DNV 12.0150 X	ABNT NBR IEC 60079-0:2008, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011			
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31, IEC/EN60079-1 & IEC/EN 62444			

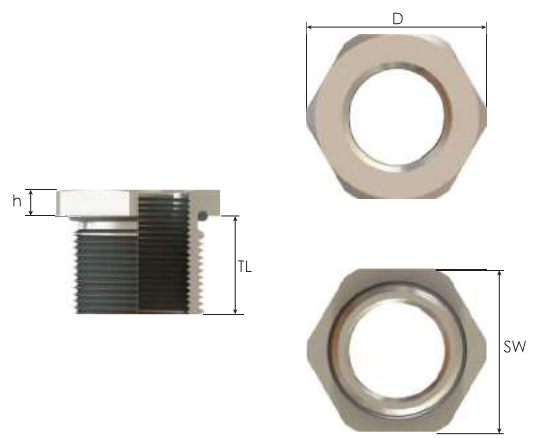
- Other sizes available upon request. For more information see our webpage.
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding				
Part Number	Material	Seal	Gasket (Washer)	
	Mandatory	Mandatory	-	Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone WF Fiber
Example				
B-RA2M01M	BN	C	-	WS

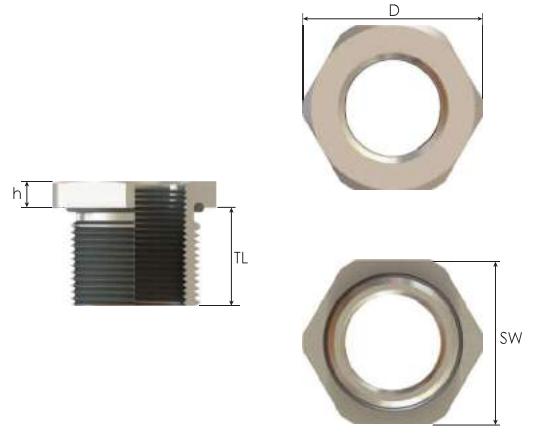
GRUS

Reducers for Ex d/e Applications



Thread Type METRIC > METRIC acc. to ISO965-3						
Outer Thread Size (Male)	Inner Thread Size (Female)	Outer Thread Length	Spanner Width	Outer Ø	Height	Part Number
		TL mm	SW mm	D mm	h mm	
M20x1,5	M16x1,5	15,0	25	27,5	4,0	B-RA1M01M
M25x1,5	M16x1,5	15,0	30	33,0	4,0	B-RA2M01M
	M20x1,5	15,0	30	33,0	4,0	B-RA2M1M
M32x1,5	M16x1,5	15,0	36	39,5	4,0	B-RA3M01M
	M20x1,5	15,0	36	39,5	4,0	B-RA3M1M
	M25x1,5	15,0	36	39,5	4,0	B-RA3M2M
M40x1,5	M16x1,5	18,0	45	50,0	4,0	B-RA4M01M
	M20x1,5	18,0	45	50,0	4,0	B-RA4M1M
	M25x1,5	18,0	45	50,0	4,0	B-RA4M2M
	M32x1,5	18,0	45	50,0	4,0	B-RA4M3M
M50x1,5	M16x1,5	18,0	55	61,0	5,0	B-RA5M01M
	M20x1,5	18,0	55	61,0	5,0	B-RA5M1M
	M25x1,5	18,0	55	61,0	5,0	B-RA5M2M
	M32x1,5	18,0	55	61,0	5,0	B-RA5M3M
	M40x1,5	18,0	55	61,0	5,0	B-RA5M4M
M60x1,5	M20x1,5	18,0	70	77,0	5,0	B-RA6M1M
	M25x1,5	18,0	70	77,0	5,0	B-RA6M2M
	M32x1,5	18,0	70	77,0	5,0	B-RA6M3M
	M40x1,5	18,0	70	77,0	5,0	B-RA6M4M
	M50x1,5	18,0	70	77,0	5,0	B-RA6M5M
M63x1,5	M20x1,5	18,0	70	77,0	5,0	B-RA6M1M
	M25x1,5	18,0	70	77,0	5,0	B-RA6M2M
	M32x1,5	18,0	70	77,0	5,0	B-RA6M3M
	M40x1,5	18,0	70	77,0	5,0	B-RA6M4M
	M50x1,5	18,0	70	77,0	5,0	B-RA6M5M
M70x1,5	M25x1,5	18,0	80	89,0	6,0	B-RA7M2M
	M32x1,5	18,0	80	89,0	6,0	B-RA7M3M
	M40x1,5	18,0	80	89,0	6,0	B-RA7M4M
	M50x1,5	18,0	80	89,0	6,0	B-RA7M5M
	M60x1,5	18,0	80	89,0	6,0	B-RA7M60M
M75x1,5	M32x1,5	18,0	85	94,0	6,0	B-RA7M3M
	M40x1,5	18,0	85	94,0	6,0	B-RA7M4M
	M50x1,5	18,0	85	94,0	6,0	B-RA7M5M
	M60x1,5	18,0	85	94,0	6,0	B-RA7M60M
	M63x1,5	18,0	85	94,0	6,0	B-RA7M6M
M80x1,5	M40x1,5	18,0	90	100,0	6,0	B-RA8M4M
	M50x1,5	18,0	90	100,0	6,0	B-RA8M5M
	M60x1,5	18,0	90	100,0	6,0	B-RA8M60M
	M63x1,5	18,0	90	100,0	6,0	B-RA8M6M
	M70x1,5	18,0	90	100,0	6,0	B-RA8M70M
M85x1,5	M50x1,5	21,0	95	105,0	8,0	B-RA8M5M
	M60x1,5	21,0	95	105,0	8,0	B-RA8M60M
	M63x1,5	21,0	95	105,0	8,0	B-RA8M6M
	M70x1,5	21,0	95	105,0	8,0	B-RA8M70M
	M75x1,5	21,0	95	105,0	8,0	B-RA8M7M
M90x1,5	M63x1,5	21,0	100	111,0	8,0	B-RA8M6M
	M70x1,5	21,0	100	111,0	8,0	B-RA8M70M
	M75x1,5	21,0	100	111,0	8,0	B-RA8M7M
	M80x1,5	21,0	100	111,0	8,0	B-RA8M80M
M100x1,5	M80x1,5	21,0	110	123,0	10,0	B-RA9M80M
	M85x1,5	21,0	110	123,0	10,0	B-RA9M85M
	M90x1,5	21,0	110	123,0	10,0	B-RA9M8M
M110x1,5	M90x1,5	21,0	120	133,5	10,0	B-RA10M8M
	M100x1,5	21,0	120	133,5	10,0	B-RA10M9M

GRUS Reducers for Ex d/e Applications



Thread Type **METRIC** acc. to ISO 965-3 > **NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Inner Thread Size (Female)	Outer Thread Length	Spanner Width	Outer Ø	Height	Part Number
		TL mm	SW mm	D mm	h mm	
M20x1,5	NPT 3/8"	15,0	25	27,5	4,0	B-RA1M01N
	NPT 3/8"	15,0	30	33,0	4,0	B-RA2M01N
M25x1,5	NPT 1/2"	15,0	30	33,0	4,0	B-RA2M1N
	NPT 3/8"	15,0	36	39,5	4,0	B-RA3M01N
M32x1,5	NPT 1/2"	15,0	36	39,5	4,0	B-RA3M1N
	NPT 3/4"	15,0	36	39,5	4,0	B-RA3M2N
	NPT 3/8"	18,0	45	50,0	4,0	B-RA4M01N
M40x1,5	NPT 1/2"	18,0	45	50,0	4,0	B-RA4M1N
	NPT 3/4"	18,0	45	50,0	4,0	B-RA4M2N
	NPT 3/8"	18,0	55	61,0	5,0	B-RA5M01N
M50x1,5	NPT 1/2"	18,0	55	61,0	5,0	B-RA5M1N
	NPT 3/4"	18,0	55	61,0	5,0	B-RA5M2N
	NPT 3/8"	18,0	70	77,0	5,0	B-RA6M0M01N
M60x1,5	NPT 1/2"	18,0	70	77,0	5,0	B-RA6M0M1N
	NPT 3/4"	18,0	70	77,0	5,0	B-RA6M0M2N
	NPT 1"	18,0	70	77,0	5,0	B-RA6M0M3N
	NPT 3/8"	18,0	70	77,0	5,0	B-RA6M01N
M63x1,5	NPT 1/2"	18,0	70	77,0	5,0	B-RA6M1N
	NPT 3/4"	18,0	70	77,0	5,0	B-RA6M2N
	NPT 1"	18,0	70	77,0	5,0	B-RA6M3N
	NPT 3/8"	18,0	80	89,0	6,0	B-RA70M01N
M70x1,5	NPT 1/2"	18,0	80	89,0	6,0	B-RA70M1N
	NPT 3/4"	18,0	80	89,0	6,0	B-RA70M2N
	NPT 1"	18,0	80	89,0	6,0	B-RA70M3N
	NPT 1 1/4"	18,0	80	89,0	6,0	B-RA70M4N
	NPT 1/2"	18,0	80	89,0	6,0	B-RA7M1N
M75x1,5	NPT 3/4"	18,0	85	94,0	6,0	B-RA7M2N
	NPT 1"	18,0	85	94,0	6,0	B-RA7M3N
	NPT 1 1/4"	18,0	85	94,0	6,0	B-RA7M4N
	NPT 1 1/2"	18,0	85	94,0	6,0	B-RA7M5N
	NPT 3/4"	18,0	90	100,0	6,0	B-RA80M2N
M80x1,5	NPT 1"	18,0	90	100,0	6,0	B-RA80M3N
	NPT 1 1/4"	18,0	90	100,0	6,0	B-RA80M4N
	NPT 1 1/2"	18,0	90	100,0	6,0	B-RA80M5N
	NPT 2"	18,0	90	100,0	6,0	B-RA80M6N
	NPT 1"	21,0	95	105,0	8,0	B-RA85M3N
M85x1,5	NPT 1 1/4"	21,0	95	105,0	8,0	B-RA85M4N
	NPT 1 1/2"	21,0	95	105,0	8,0	B-RA85M5N
	NPT 2"	21,0	95	105,0	8,0	B-RA85M6N
	NPT 2 1/2"	21,0	95	105,0	8,0	B-RA85M7N
	NPT 1 1/4"	21,0	100	111,0	8,0	B-RA8M4N
M90x1,5	NPT 1 1/2"	21,0	100	111,0	8,0	B-RA8M5N
	NPT 2"	21,0	100	111,0	8,0	B-RA8M6N
	NPT 2 1/2"	21,0	100	111,0	8,0	B-RA8M7N
	NPT 1 1/2"	21,0	110	123,0	10,0	B-RA9M5N
M100x1,5	NPT 2"	21,0	110	123,0	10,0	B-RA9M6N
	NPT 2 1/2"	21,0	110	123,0	10,0	B-RA9M7N
	NPT 3"	21,0	110	123,0	10,0	B-RA9M8N
M110x1,5	NPT 2"	21,0	120	133,5	10,0	B-RA10M6N
	NPT 2 1/2"	21,0	120	133,5	10,0	B-RA10M7N

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Reducers for Ex d/e Applications






Thread Type **NPT > NPT** acc. to ANSI ASME B1.20.1

Outer Thread Size (Male)	Inner Thread Size (Female)	Outer Thread Length	Spanner Width	Outer Ø	Height	Part Number
		TL mm	SW mm	D mm	h mm	
NPT 1/2"	NPT 3/8"	15,0	25	27,5	4,0	B-RA1N01N
NPT 3/4"	NPT 3/8"	15,0	30	33	4,0	B-RA2N01N
	NPT 1/2"	15,0	30	33	4,0	B-RA2N1N
NPT 1"	NPT 3/8"	15,0	36	39,5	4,0	B-RA3N01N
	NPT 1/2"	15,0	36	39,5	4,0	B-RA3N1N
	NPT 3/4"	15,0	36	39,5	4,0	B-RA3N2N
NPT 1 1/4"	NPT 1/2"	18,0	45	50	4,0	B-RA4N1N
	NPT 3/4"	18,0	45	50	4,0	B-RA4N2N
	NPT 1"	18,0	45	50	4,0	B-RA4N3N
	NPT 3/4"	18,0	55	61	5,0	B-RA5N2N
NPT 1 1/2"	NPT 1"	18,0	55	61	5,0	B-RA5N3N
	NPT 1 1/4"	18,0	55	61	5,0	B-RA5N4N
	NPT 3/4"	18,0	65	72	5,0	B-RA6N2N
NPT 2"	NPT 1"	18,0	65	72	5,0	B-RA6N3N
	NPT 1 1/4"	18,0	65	72	5,0	B-RA6N4N
	NPT 1 1/2"	18,0	65	72	5,0	B-RA6N5N
	NPT 3/4"	28,0	75	83	6,0	B-RA7N2N
NPT 2 1/2"	NPT 1"	28,0	75	83	6,0	B-RA7N3N
	NPT 1 1/4"	28,0	75	83	6,0	B-RA7N4N
	NPT 1 1/2"	28,0	75	83	6,0	B-RA7N5N
	NPT 2"	28,0	75	83	6,0	B-RA7N6N
	NPT 1"	28,0	95	105	8,0	B-RA8N3N
NPT 3"	NPT 1 1/4"	28,0	95	105	8,0	B-RA8N4N
	NPT 1 1/2"	28,0	95	105	8,0	B-RA8N5N
	NPT 2"	28,0	95	105	8,0	B-RA8N6N
	NPT 2 1/2"	28,0	95	105	8,0	B-RA8N7N
	NPT 1 1/4"	28,0	110	123	10,0	B-RA9N4N
NPT 3 1/2"	NPT 1 1/2"	28,0	110	123	10,0	B-RA9N5N
	NPT 2"	28,0	110	123	10,0	B-RA9N6N
	NPT 2 1/2"	28,0	110	123	10,0	B-RA9N7N
	NPT 3"	28,0	110	123	10,0	B-RA9N8N
	NPT 1 1/2"	28,0	120	133,5	10,0	B-RA10N5N
NPT 4"	NPT 2"	28,0	120	133,5	10,0	B-RA10N6N
	NPT 2 1/2"	28,0	120	133,5	10,0	B-RA10N7N
	NPT 3"	28,0	120	133,5	10,0	B-RA10N8N

Thread Type **NPT** acc. to ANSI ASME B1.20.1 > **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Inner Thread Size (Female)	Outer Thread Length	Spanner Width	Outer Ø	Height	Part Number
		TL mm	SW mm	D mm	h mm	
NPT 1/2"	M16x1,5	15,0	25	27,5	4,0	B-RA1N01M
NPT 3/4"	M16x1,5	15,0	30	33	4,0	B-RA2N01M
	M20x1,5	15,0	30	33	4,0	B-RA2N1M
NPT 1"	M16x1,5	15,0	36	39,5	4,0	B-RA3N01M
	M20x1,5	15,0	36	39,5	4,0	B-RA3N1M
	M25x1,5	15,0	36	39,5	4,0	B-RA3N2M
NPT 1 1/4"	M16x1,5	18,0	45	50	4,0	B-RA4N01M
	M20x1,5	18,0	45	50	4,0	B-RA4N1M
	M25x1,5	18,0	45	50	4,0	B-RA4N2M
	M32x1,5	18,0	45	50	4,0	B-RA4N3M
NPT 1 1/2"	M20x1,5	18,0	55	61	5,0	B-RA5N1M
	M25x1,5	18,0	55	61	5,0	B-RA5N2M
	M32x1,5	18,0	55	61	5,0	B-RA5N3M
	M40x1,5	18,0	55	61	5,0	B-RA5N4M
NPT 2"	M25x1,5	18,0	65	72	5,0	B-RA6N2M
	M32x1,5	18,0	65	72	5,0	B-RA6N3M
	M40x1,5	18,0	65	72	5,0	B-RA6N4M
	M50x1,5	18,0	65	72	5,0	B-RA6N5M
NPT 2 1/2"	M50x1,5	28,0	75	83	6,0	B-RA7N5M
	M60x1,5	28,0	75	83	6,0	B-RA7N60M
	M63x1,5	28,0	75	83	6,0	B-RA7N6M
NPT 3"	M63x1,5	28,0	95	105	8,0	B-RA8N6M
	M70x1,5	28,0	95	105	8,0	B-RA8N70M
	M75x1,5	28,0	95	105	8,0	B-RA8N7M
NPT 3 1/2"	M80x1,5	28,0	110	123	10,0	B-RA9N80M
	M85x1,5	28,0	110	123	10,0	B-RA9N85M
	M90x1,5	28,0	110	123	10,0	B-RA9N8M
NPT 4"	M80x1,5	28,0	120	133,5	10,0	B-RA10N80M
	M85x1,5	28,0	120	133,5	10,0	B-RA10N85M
	M90x1,5	28,0	120	133,5	10,0	B-RA10N8M
	M100x1,5	28,0	120	133,5	10,0	B-RA10N9M

Couplers for Ex d/e Applications

Technical Details		
Material Body	Brass, Brass Bickel Plated, Stainless Steel 316L	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene) Silicone	
Ex d/e/tb	-40°C to +100°C -60°C to +130°C	
Equipment For	• Gas & Dust potentially explosive atmospheres.	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2	
	Group III Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db	
Marking Example	BMD B-RM.. CE 0722  II 2GD Ex e IIC Gb Ex tb IIIC Db Ta-40°C +100°C IP66/68 CESI 13 ATEX 066X IECEx CES 13.0022X	
Type Protection	Ex db ; Ex eb ; Ex tb	
Thread Type	<ul style="list-style-type: none"> • Metric (M) ISO 965-3 • Npt (N) ANSI ASME B1.20.1 • PG (P) DIN 40430 • (G) GAS UNI ISO 228/1 	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 066X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 13.0022X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015 Edition:5
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0150 X	ABNT NBR IEC 60079-0:2008, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31, IEC/EN60079-1 & IEC/EN 62444

* For more information see our webpage.

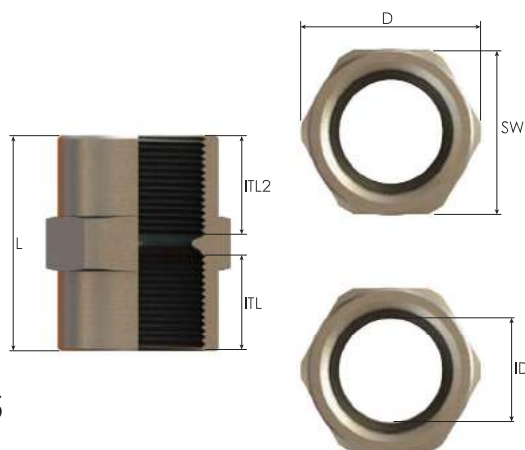
** The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding	Material
Part Number	Mandatory
See table	B Brass BN Brass Nickel plated X Stainless steel 316L
Example	
B-RM5M4M	BN

ARIES

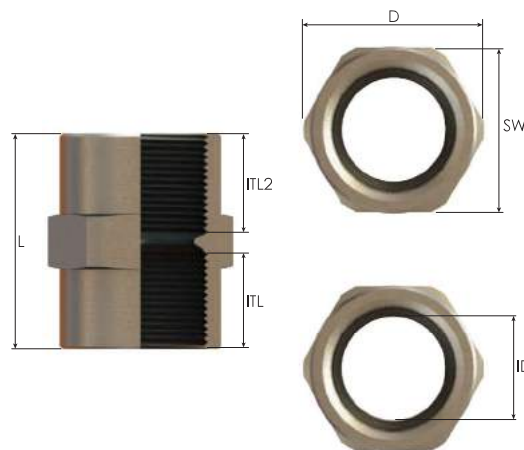
Couplers for Ex d/e Applications



Thread Type **METRIC > METRIC** acc. to ISO 965-3

Inner Thread Size (Female)	Inner Thread Size 2 (Female)	Inner Thread Length	Inner Thread Length 2	Spanner Width	Outer Ø	Inner Ø	Total Height	Part Number
		ITL mm	ITL2 mm					
M16x1,5	M16x1,5	15,0	15,0	20	22,0	13,5	33,0	B-RM01M01M
M20x1,5	M16x1,5	15,0	15,0	25	27,5	13,5	32,0	B-RM1M01M
	M20x1,5	15,0	15,0	25	27,5	17,0	32,0	B-RM1M1M
M25x1,5	M16x1,5	15,0	15,0	32	35,0	13,5	35,0	B-RM2M01M
	M20x1,5	15,0	15,0	32	35,0	17,0	33,0	B-RM2M1M
	M25x1,5	15,0	15,0	32	35,0	22,0	33,0	B-RM2M2M
M32x1,5	M20x1,5	15,0	15,0	36	39,5	17,0	36,0	B-RM3M1M
	M25x1,5	15,0	15,0	36	39,5	22,0	34,0	B-RM3M2M
	M32x1,5	15,0	15,0	36	39,5	29,0	32,0	B-RM3M3M
M40x1,5	M25x1,5	18,0	15,0	45	50,0	22,0	40,0	B-RM4M2M
	M32x1,5	18,0	15,0	45	50,0	29,0	37,0	B-RM4M3M
	M40x1,5	18,0	18,0	45	50,0	37,0	38,0	B-RM4M4M
M50x1,5	M32x1,5	18,0	15,0	55	61,0	29,0	41,0	B-RM5M3M
	M40x1,5	18,0	18,0	55	61,0	37,0	40,0	B-RM5M4M
	M50x1,5	18,0	18,0	55	61,0	47,0	38,0	B-RM5M5M
M60x1,5	M40x1,5	18,0	18,0	68	75,0	36,0	45,0	B-RM6M4M
	M50x1,5	18,0	18,0	68	75,0	47,0	41,0	B-RM6M5M
	M60x1,5	18,0	18,0	68	75,0	55,0	40,0	B-RM6M6M
M63x1,5	M50x1,5	18,0	18,0	68	75,0	47,0	41,0	B-RM6M5M
	M60x1,5	18,0	18,0	68	75,0	55,0	40,0	B-RM6M6M
	M63x1,5	18,0	18,0	68	75,0	60,0	38,0	B-RM6M6M
M75x1,5	M63x1,5	18,0	18,0	80	88,5	60,0	41,0	B-RM7M6M
	M70x1,5	18,0	18,0	80	88,5	65,0	41,0	B-RM7M7M
	M75x1,5	18,0	18,0	80	88,5	72,0	38,0	B-RM7M7M
M80x1,5	M70x1,5	18,0	18,0	90	100,0	65,0	43,0	B-RM8M7M
	M75x1,5	18,0	18,0	90	100,0	72,0	40,0	B-RM8M7M
	M80x1,5	18,0	18,0	90	100,0	75,0	40,0	B-RM8M8M
M85x1,5	M75x1,5	18,0	18,0	95	105,0	72,0	41,0	B-RM8M7M
	M80x1,5	18,0	18,0	95	105,0	75,0	41,0	B-RM8M8M
	M85x1,5	18,0	18,0	95	105,0	80,0	40,0	B-RM8M8M
M90x1,5	M80x1,5	21,0	18,0	95	105,0	75,0	46,0	B-RM8M8M
	M85x1,5	21,0	18,0	95	105,0	80,0	44,0	B-RM8M8M
	M90x1,5	21,0	21,0	95	105,0	87,0	44,0	B-RM8M8M
M100x1,5	M85x1,5	21,0	18,0	110	123,0	80,0	48,0	B-RM9M8M
	M90x1,5	21,0	21,0	110	123,0	87,0	48,0	B-RM9M8M
	M100x1,5	21,0	21,0	110	123,0	95,0	46,0	B-RM9M9M
M110x1,5	M90x1,5	21,0	21,0	120	133,5	87,0	51,0	B-RM10M8M
	M100x1,5	21,0	21,0	120	133,5	95,0	50,0	B-RM10M9M
	M110x1,5	21,0	21,0	120	133,5	107,0	44,0	B-RM10M10M

ARIES Couplers for Ex d/e Applications

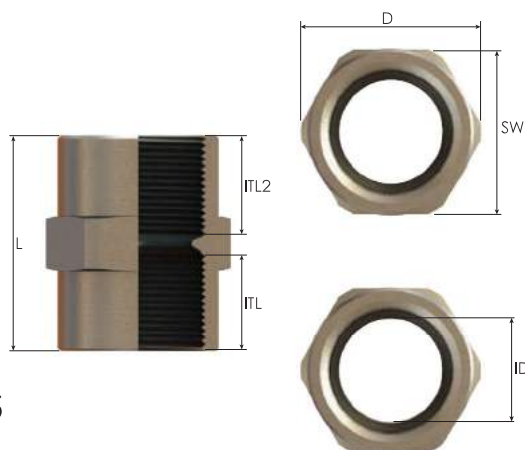


Thread Type **NPT > NPT** acc. to ANSI ASME B1.20.1

Inner Thread Size (Female)	Inner Thread Size 2 (Female)	Inner Thread Length		Spanner Width	Outer Ø		Total Height	Part Number
		ITL mm	ITL2 mm		D mm	Inner Ø mm		
NPT 3/8"	NPT 3/8"	15,0	15,0	20	22,0	12,5	32,0	B-RM01N01N
NPT 1/2"	NPT 3/8"	15,0	15,0	25	27,5	12,5	33,0	B-RM1N01N
	NPT 1/2"	15,0	15,0	25	27,5	16,0	32,0	B-RM1N11N
NPT 3/4"	NPT 3/8"	15,0	15,0	32	35,0	12,5	35,0	B-RM2N01N
	NPT 1/2"	15,0	15,0	32	35,0	16,0	33,0	B-RM2N11N
	NPT 3/4"	15,0	15,0	32	35,0	21,0	32,0	B-RM2N21N
NPT 1"	NPT 1/2"	15,0	15,0	36	39,5	16,0	36,0	B-RM3N11N
	NPT 3/4"	15,0	15,0	36	39,5	21,0	34,0	B-RM3N21N
	NPT 1"	15,0	15,0	36	39,5	27,0	32,0	B-RM3N31N
NPT 1 1/4"	NPT 3/4"	18,0	15,0	45	50,0	21,0	40,0	B-RM4N21N
	NPT 1"	18,0	15,0	45	50,0	27,0	38,0	B-RM4N31N
	NPT 1 1/4"	18,0	18,0	45	50,0	35,0	39,0	B-RM4N41N
NPT 1 1/2"	NPT 1"	18,0	15,0	55	61,0	27,0	40,0	B-RM5N31N
	NPT 1 1/4"	18,0	18,0	55	61,0	35,0	41,0	B-RM5N41N
	NPT 1 1/2"	18,0	18,0	55	61,0	41,5	39,0	B-RM5N51N
NPT 2"	NPT 1 1/4"	18,0	18,0	65	72,0	35,0	45,0	B-RM6N41N
	NPT 1 1/2"	18,0	18,0	65	72,0	41,5	43,0	B-RM6N51N
	NPT 2"	18,0	18,0	65	72,0	53,5	39,0	B-RM6N61N
NPT 2 1/2"	NPT 1 1/2"	28,0	18,0	80	88,5	41,5	56,0	B-RM7N51N
	NPT 2"	28,0	18,0	80	88,5	53,5	53,0	B-RM7N61N
	NPT 2 1/2"	28,0	28,0	80	88,5	64,0	60,0	B-RM7N71N
NPT 3"	NPT 2"	28,0	18,0	95	105,0	53,5	58,0	B-RM8N61N
	NPT 2 1/2"	28,0	28,0	95	105,0	64,0	64,0	B-RM8N71N
	NPT 3"	28,0	28,0	95	105,0	80,0	59,0	B-RM8N81N
NPT 3 1/2"	NPT 2 1/2"	28,0	28,0	110	123,0	64,0	69,0	B-RM9N71N
	NPT 3"	28,0	28,0	110	123,0	80,0	64,0	B-RM9N81N
	NPT 3 1/2"	28,0	28,0	110	123,0	90,0	62,0	B-RM9N91N
NPT 4"	NPT 3"	28,0	28,0	120	133,5	80,0	62,0	B-RM10N81N
	NPT 3 1/2"	28,0	28,0	120	133,5	90,0	65,0	B-RM10N91N
	NPT 4"	28,0	28,0	120	133,5	105,0	59,0	B-RM10N10N

ARIES







Couplers for Ex d/e Applications



Thread Type **NPT** acc. to ANSI ASME B1.20.1 > **METRIC** acc. to ISO 965-3

Inner Thread Size (Female)	Inner Thread Size 2 (Female)	Inner Thread Length	Inner Thread Length 2	Spanner Width	Outer Ø	Inner Ø	Total Height	Part Number
		ITL mm	ITL2 mm		SW mm	D mm	ID mm	
NPT 3/8"	M16x1,5	15,0	15,0	20	22,0	12,5	32,0	B-RM01N01M
NPT 1/2"	M16x1,5	15,0	15,0	25	27,5	14,0	33,0	B-RM1N01M
	M20x1,5	15,0	15,0	25	27,5	16,0	32,0	B-RM1N1M
NPT 3/4"	M16x1,5	15,0	15,0	32	35,0	12,5	35,0	B-RM2N01M
	M20x1,5	15,0	15,0	32	35,0	16,0	34,0	B-RM2N1M
	M25x1,5	15,0	15,0	32	35,0	21,0	33,0	B-RM2N2M
NPT 1"	M20x1,5	15,0	15,0	36	39,5	16,0	36,0	B-RM3N1M
	M25x1,5	15,0	15,0	36	39,5	21,0	34,0	B-RM3N2M
	M32x1,5	15,0	15,0	36	39,5	27,0	33,0	B-RM3N3M
NPT 1 1/4"	M25x1,5	18,0	15,0	45	50,0	21,0	40,0	B-RM4N2M
	M32x1,5	18,0	15,0	45	50,0	27,0	38,0	B-RM4N3M
	M40x1,5	18,0	18,0	45	50,0	36,0	39,0	B-RM4N4M
NPT 1 1/2"	M32x1,5	18,0	15,0	55	61,0	27,0	41,0	B-RM5N3M
	M40x1,5	18,0	18,0	55	61,0	36,0	41,0	B-RM5N4M
	M50x1,5	18,0	18,0	55	61,0	41,5	40,0	B-RM5N5M
NPT 2"	M50x1,5	18,0	18,0	65	72,0	47,0	41,0	B-RM6N5M
	M60x1,5	18,0	18,0	65	72,0	53,5	41,0	B-RM6N60M
	M63x1,5	18,0	18,0	20	72,0	53,5	41,0	B-RM6N6M
NPT 2 1/2"	M63x1,5	28,0	18,0	80	88,5	58,0	51,0	B-RM7N6M
	M70x1,5	28,0	18,0	80	88,5	63,0	52,0	B-RM7N70M
	M75x1,5	28,0	18,0	80	88,5	63,0	52,0	B-RM7N7M
NPT 3"	M80x1,5	28,0	18,0	95	105,0	75,0	51,0	B-RM8N80M
	M85x1,5	28,0	18,0	95	105,0	78,0	51,0	B-RM8N85M
	M90x1,5	28,0	21,0	95	105,0	79,0	55,0	B-RM8N8M
NPT 3 1/2"	M85x1,5	28,0	18,0	110	123,0	80,0	55,0	B-RM9N85M
	M90x1,5	28,0	21,0	110	123,0	84,0	56,0	B-RM9N8M
	M100x1,5	28,0	21,0	110	123,0	90,0	56,0	B-RM9N9M
NPT 4"	M90x1,5	28,0	21,0	120	133,5	85,0	60,0	B-RM10N8M
	M100x1,5	28,0	21,0	120	133,5	95,0	57,0	B-RM10N9M
	M110x1,5	28,0	21,0	120	133,5	103,0	55,0	B-RM10N10M

Nipples for Ex d/e Applications

Technical Details	
Material	Body Brass, Brass Nickel Plated, Stainless Steel 316L O-ring CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66
Operating Temperature	O-ring Material CR (Chloroprene) -40°C to +100°C Silicone -60°C to +130°C
Equipment For	• Gas & Dust potentially explosive atmospheres.
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db
Marking Example *	BMD B-RN.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db Tα-40°C to +100°C IP66/68 CESI 13 ATEX 066X IECEx CES 13.0022X • Metric (M) ISO Pitch 1,5 • Npt (N) ANSI ASME B1.20.1 • PG (P) DIN 40430 • (G) GAS UNI ISO 228/1
Thread Type	• Metric (M) ISO Pitch 1,5 • Npt (N) ANSI ASME B1.20.1 • PG (P) DIN 40430 • (G) GAS UNI ISO 228/1
Accessories	• Gaskets (Washers)
Remarks	• Accessories must be ordered separately. • O-ring only available when male thread is Metric.
Approvals	Certificate Number Standards
	CESI 13 ATEX 066X EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 13.0022X IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015 Edition:5
	№ TC RU C-TR.AA87.B.00941 ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0150 X ABNT NBR IEC 60079-0:2008, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011
	E-14044 IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31, IEC/EN60079-1 & IEC/EN 62444

-For more information see our webpage.

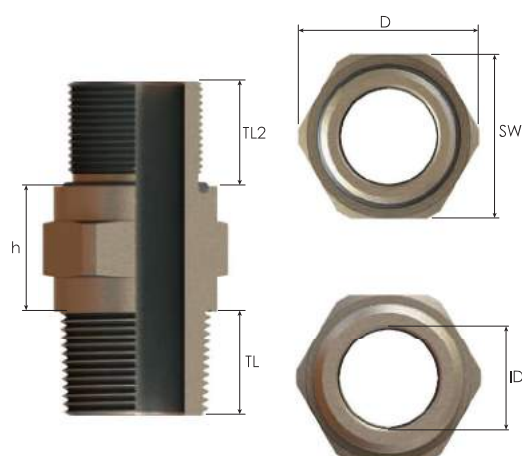
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding			
Part Number	Material	Seal	Gasket
Mandatory	Mandatory	Mandatory	- Option
See table	B Brass BN Brass Nickel plated X Stainless Steel 316L	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber
Example			
B-RN8M8M	A	C	- WS

PAVO

Nipples for Ex d/e Applications

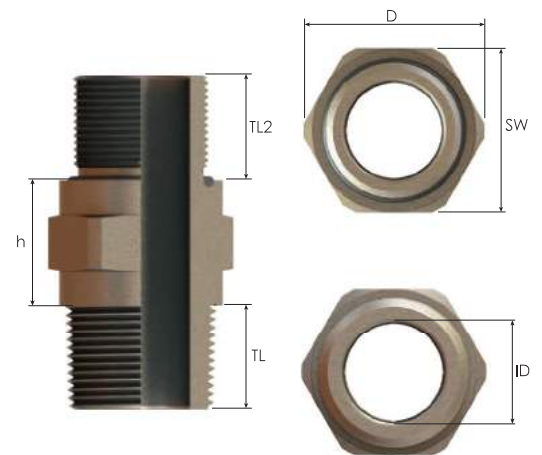


Thread Type **METRIC** > **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Outer Thread Size 2 (Male)	Outer Thread Length	Outer Thread Length 2	Spanner Width	Outer Ø	Inner Ø	Height	Part Number
		TL mm	TL2 mm	SW mm	D mm	ID mm	h mm	
M16x1,5	M16x1,5	15,0	15,0	20	22,0	10,0	18,0	B-RN01M01M
M20x1,5	M16x1,5	15,0	15,0	24	26,5	10,0	18,0	B-RN1M01M
	M20x1,5	15,0	15,0	24	26,5	14,0	18,0	B-RN1M1M
M25x1,5	M16x1,5	15,0	15,0	32	35,0	10,0	20,0	B-RN2M01M
	M20x1,5	15,0	15,0	32	35,0	14,0	20,0	B-RN2M1M
	M25x1,5	15,0	15,0	32	35,0	19,0	20,0	B-RN2M2M
M32x1,5	M20x1,5	15,0	15,0	36	39,5	14,0	20,0	B-RN3M1M
	M25x1,5	15,0	15,0	36	39,5	19,0	20,0	B-RN3M2M
	M32x1,5	15,0	15,0	36	39,5	26,0	20,0	B-RN3M3M
M40x1,5	M25x1,5	15,0	18,0	45	50,0	19,0	20,0	B-RN4M2M
	M32x1,5	15,0	18,0	45	50,0	26,0	20,0	B-RN4M3M
	M40x1,5	18,0	18,0	45	50,0	34,0	20,0	B-RN4M4M
M50x1,5	M32x1,5	15,0	18,0	55	61,0	26,0	22,0	B-RN5M3M
	M40x1,5	18,0	18,0	55	61,0	34,0	22,0	B-RN5M4M
	M50x1,5	18,0	18,0	55	61,0	44,0	22,0	B-RN5M5M
M60x1,5	M40x1,5	18,0	18,0	70	77,0	34,0	22,0	B-RN6M4M
	M50x1,5	18,0	18,0	70	77,0	44,0	22,0	B-RN6M5M
	M60x1,5	18,0	18,0	70	77,0	54,0	22,0	B-RN6M6M
M63x1,5	M50x1,5	18,0	18,0	70	77,0	44,0	22,0	B-RN6M5M
	M60x1,5	18,0	18,0	70	77,0	54,0	22,0	B-RN6M6M
	M63x1,5	18,0	18,0	70	77,0	57,0	22,0	B-RN6M6M
M70x1,5	M60x1,5	18,0	18,0	80	88,5	54,0	26,0	B-RN7M6M
	M63x1,5	18,0	18,0	80	88,5	57,0	26,0	B-RN7M6M
	M70x1,5	18,0	18,0	80	88,5	64,0	26,0	B-RN7M7M
M75x1,5	M63x1,5	18,0	18,0	85	94,0	57,0	26,0	B-RN7M6M
	M70x1,5	18,0	18,0	85	94,0	64,0	26,0	B-RN7M7M
	M75x1,5	18,0	18,0	85	94,0	69,0	26,0	B-RN7M7M
M80x1,5	M70x1,5	18,0	18,0	90	100,0	64,0	26,0	B-RN8M7M
	M75x1,5	18,0	18,0	90	100,0	69,0	26,0	B-RN8M7M
	M80x1,5	18,0	18,0	90	100,0	74,0	26,0	B-RN8M8M
M85x1,5	M75x1,5	18,0	18,0	95	105,0	69,0	26,0	B-RN8M7M
	M80x1,5	18,0	18,0	95	105,0	74,0	26,0	B-RN8M8M
	M85x1,5	18,0	18,0	95	105,0	79,0	26,0	B-RN8M8M
M90x1,5	M80x1,5	18,0	21,0	100	111,0	74,0	26,0	B-RN8M8M
	M85x1,5	18,0	21,0	100	111,0	79,0	26,0	B-RN8M8M
	M90x1,5	21,0	21,0	100	111,0	84,0	26,0	B-RN8M8M
M100x1,5	M85x1,5	18,0	21,0	110	123,0	79,0	27,0	B-RN9M8M
	M90x1,5	21,0	21,0	110	123,0	84,0	27,0	B-RN9M8M
	M100x1,5	21,0	21,0	110	123,0	93,0	27,0	B-RN9M9M
M110x1,5	M90x1,5	21,0	21,0	120	133,5	84,0	27,0	B-RN10M8M
	M100x1,5	21,0	21,0	120	133,5	93,0	27,0	B-RN10M9M
	M110x1,5	21,0	21,0	120	133,5	100,0	27,0	B-RN10M10M

PAVO

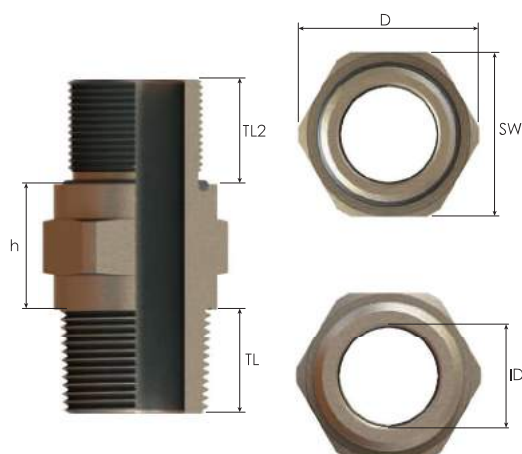
Nipples for Ex d/e Applications



Thread Type NPT > NPT acc. to ANSI ASME B1.20.1								
Outer Thread Size (Male)	Outer Thread Size 2 (Male)	Outer Thread Length	Outer Thread Length 2	Spanner Width	Outer Ø	Inner Ø	Height	Part Number
		TL mm	TL2 mm	SW mm	D mm	ID mm	h mm	
NPT 3/8"	NPT 3/8"	15,0	15,0	20	22,0	12,0	18,0	B-RN01N01N
NPT 1/2"	NPT 3/8"	15,0	15,0	24	26,5	12,0	18,0	B-RN1N01N
	NPT 1/2"	15,0	15,0	24	26,5	15,5	18,0	B-RN1N1N
NPT 3/4"	NPT 3/8"	15,0	15,0	32	35,0	12,0	20,0	B-RN2N01N
	NPT 1/2"	15,0	15,0	32	35,0	15,5	20,0	B-RN2N1N
	NPT 3/4"	15,0	15,0	32	35,0	19,0	20,0	B-RN2N2N
NPT 1"	NPT 1/2"	15,0	15,0	36	39,5	15,5	20,0	B-RN3N1N
	NPT 3/4"	15,0	15,0	36	39,5	19,0	20,0	B-RN3N2N
	NPT 1"	15,0	15,0	36	39,5	25,0	20,0	B-RN3N3N
NPT 1 1/4"	NPT 3/4"	15,0	18,0	45	50,0	19,0	23,0	B-RN4N2N
	NPT 1"	15,0	18,0	45	50,0	25,0	23,0	B-RN4N3N
	NPT 1 1/4"	18,0	18,0	45	50,0	33,0	20,0	B-RN4N4N
NPT 1 1/2"	NPT 1"	15,0	18,0	55	61,0	25,0	25,0	B-RN5N3N
	NPT 1 1/4"	18,0	18,0	55	61,0	33,0	22,0	B-RN5N4N
	NPT 1 1/2"	18,0	18,0	55	61,0	40,0	22,0	B-RN5N5N
NPT 2"	NPT 1 1/4"	18,0	18,0	65	72,0	33,0	22,0	B-RN6N4N
	NPT 1 1/2"	18,0	18,0	65	72,0	40,0	22,0	B-RN6N5N
	NPT 2"	18,0	18,0	65	72,0	52,0	22,0	B-RN6N6N
NPT 2 1/2"	NPT 1 1/2"	18,0	28,0	80	88,5	40,0	36,0	B-RN7N5N
	NPT 2"	18,0	28,0	80	88,5	52,0	36,0	B-RN7N6N
	NPT 2 1/2"	28,0	28,0	80	88,5	62,0	26,0	B-RN7N7N
NPT 3"	NPT 2"	18,0	28,0	95	105,0	52,0	36,0	B-RN8N6N
	NPT 2 1/2"	28,0	28,0	95	105,0	62,0	26,0	B-RN8N7N
	NPT 3"	28,0	28,0	95	105,0	75,0	26,0	B-RN8N8N
NPT 3 1/2"	NPT 2 1/2"	28,0	28,0	110	123,0	62,0	27,0	B-RN9N7N
	NPT 3"	28,0	28,0	110	123,0	75,0	27,0	B-RN9N8N
	NPT 3 1/2"	28,0	28,0	110	123,0	87,5	27,0	B-RN9N9N
NPT 4"	NPT 3"	28,0	28,0	120	133,5	75,0	27,0	B-RN10N8N
	NPT 3 1/2"	28,0	28,0	120	133,5	87,5	27,0	B-RN10N9N
	NPT 4"	28,0	28,0	120	133,5	100,0	27,0	B-RN10N10N

PAVO

Nipples for Ex d/e Applications






Thread Type **NPT** acc. to ANSI ASME B1.20.1 > **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Inner Thread Size 2 (Male)	Outer Thread Length	Outer Thread Length 2	Spanner Width	Outer Ø	Inner Ø	Height	Part Number
		TL mm	TL 2 mm	SW mm	D mm	ID mm	h mm	
NPT 3/8"	M16x1,5	15,0	15,0	20	22,0	10,0	18,0	B-RN01N01M
NPT 1/2"	M16x1,5	15,0	15,0	24	26,5	10,0	18,0	B-RN1N01M
	M20x1,5	15,0	15,0	24	26,5	14,0	18,0	B-RN1N1M
NPT 3/4"	M16x1,5	15,0	15,0	32	35,0	10,0	20,0	B-RN2N01M
	M20x1,5	15,0	15,0	32	35,0	14,0	20,0	B-RN2N1M
	M25x1,5	15,0	15,0	32	35,0	19,0	20,0	B-RN2N2M
NPT 1"	M20x1,5	15,0	15,0	36	39,5	14,0	20,0	B-RN3N1M
	M25x1,5	15,0	15,0	36	39,5	19,0	20,0	B-RN3N2M
	M32x1,5	15,0	15,0	36	39,5	26,0	20,0	B-RN3N3M
NPT 1 1/4"	M25x1,5	15,0	18,0	45	50,0	19,0	20,0	B-RN4N2M
	M32x1,5	15,0	18,0	45	50,0	26,0	20,0	B-RN4N3M
	M40x1,5	18,0	18,0	45	50,0	33,0	20,0	B-RN4N4M
NPT 1 1/2"	M32x1,5	15,0	18,0	55	61,0	26,0	22,0	B-RN5N3M
	M40x1,5	18,0	18,0	55	61,0	33,0	22,0	B-RN5N4M
	M50x1,5	18,0	18,0	55	61,0	40,0	22,0	B-RN5N5M
NPT 2"	M50x1,5	18,0	18,0	65	72,0	40,0	22,0	B-RN6N5M
	M60x1,5	18,0	18,0	65	72,0	50,0	22,0	B-RN6N6M
	M63x1,5	18,0	18,0	70	77,0	52,0	22,0	B-RN6N6M
NPT 2 1/2"	M63x1,5	18,0	28,0	80	88,5	52,0	26,0	B-RN7N6M
	M70x1,5	18,0	28,0	80	88,5	57,0	26,0	B-RN7N7M
	M75x1,5	18,0	28,0	85	94,0	62,0	26,0	B-RN7N7M
NPT 3"	M80x1,5	18,0	28,0	95	105,0	67,0	26,0	B-RN8N8M
	M85x1,5	18,0	28,0	95	105,0	72,0	26,0	B-RN8N85M
	M90x1,5	21,0	28,0	95	111,0	75,0	26,0	B-RN8N8M
NPT 3 1/2"	M85x1,5	18,0	28,0	110	123,0	72,0	27,0	B-RN9N85M
	M90x1,5	21,0	28,0	110	123,0	75,0	27,0	B-RN9N8M
	M100x1,5	21,0	28,0	110	123,0	87,5	27,0	B-RN9N9M
NPT 4"	M90x1,5	21,0	28,0	120	133,5	75,0	27,0	B-RN10N8M
	M100x1,5	21,0	28,0	120	133,5	87,5	27,0	B-RN10N9M
	M110x1,5	21,0	28,0	120	133,5	100,0	27,0	B-RN10N10M

Hexagonal Plugs for Ex d/e Applications

AQUILA HEXAGONAL



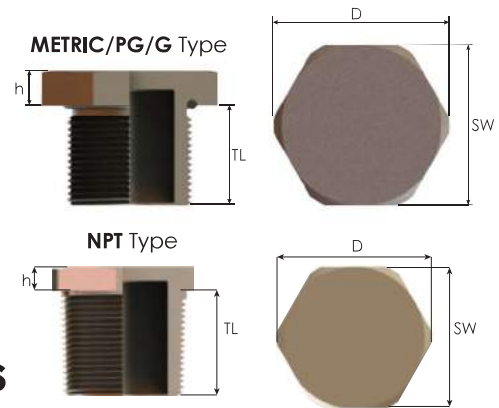
Technical Details		
Material	Body Brass, Brass Nickel Plated, Stainless Steel 316L O-ring CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	O-ring Material CR (Chloroprene) -40°C to +100°C Silicone 60°C to +130°C	
Equipment For	• Gas & Dust potentially explosive atmospheres.	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22	
Marking Example *	BMD MB-TS.. CE 0722  II 2GD Ex db IIC Gb Ex eb IIC Gb Ta-40°C to +100°C IP66/68 CESI 13 ATEX 066X IECEx CES 13.0022X	
Type Protection	Ex d ; Ex e ; Ex tb *For NB-TS type only Ex e ; Ex tb.	
Thread Type	• Metric (M) ISO Pitch 1,5 • Npt (N) ANSI ASME B1.20.1	
Accessories	• Gaskets (Washers) • Lock nuts	
Remarks	• O-ring available in Metric, PG and G threads. • Accessories must be ordered separately.	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 066X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 13.0022X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015 Edition:5
	E493186	UL 60079-0, UL 60079-1, UL 60079-7 UL 60079-31 CAN/CSA-C22.2 No. 60079-0:15, CAN/CSA-C22.2 No. 60079-1:16 CAN/CSA C22.2 No. 60079-7:12, CAN/CSA-C22.2 No. 60079-31:15,
	E467237	UL 508A C22.2 No. 14-13
	No TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0150 X	ABNT NBR IEC 60079-0:2008, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31, IEC/EN60079-1 & IEC/EN 62444

*For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

Order Coding			
Part Number	Material	Seal	- Gasket (Washer)
Mandatory	Mandatory	Mandatory	- Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber
Example			
B-TS3M	B	C	- WC

AQUILA HEXAGONAL Round Plugs for Ex d/e Applications



Thread Type METRIC acc. to ISO 965-3					
Outer Thread Size (Male)	Outer Thread Length		Spanner Width		Part Number
	TL mm	SW mm	Outer Ø mm	Height h mm	
M16x1,5	15,5	22	24,0	5,5	B-TS01M
M20x1,5	15,5	25	27,5	5,5	B-TS1M
M25x1,5	15,5	30	33,0	5,5	B-TS2M
M32x1,5	15,5	37	41,0	5,5	B-TS3M
M40x1,5	17,5	45	50,0	5,5	B-TS4M
M50x1,5	17,5	55	61,0	5,5	B-TS5M
M60x1,5	17,5	70	77,0	5,5	B-TS60M
M63x1,5	17,5	70	77,0	5,5	B-TS6M
M70x1,5	18,0	80	89,0	7,0	B-TS70M
M75x1,5	20,0	85	94,0	5,0	B-TS7M
M80x1,5	20,0	90	100,0	5,0	B-TS80M
M85x1,5	20,0	95	105,0	5,0	B-TS85M
M90x1,5	20,0	100	111,0	5,0	B-TS8M
M100x1,5	20,0	110	123,0	5,0	B-TS9M
M110x1,5	20,0	120	133,5	5,0	B-TS10M

Thread Type PG acc. to DIN 40430					
Outer Thread Size (Male)	Outer Thread Length		Spanner Width		Part Number
	TL mm	SW mm	Outer Ø mm	Height h mm	
PG 9	16,5	20	22,0	5,5	B-TS2P
PG 11	16,5	25	27,5	5,5	B-TS3P
PG 13,5	16,5	25	27,5	5,5	B-TS4P
PG 16	16,5	27	30,0	5,5	B-TS5P
PG 21	17,0	35	38,5	5,0	B-TS6P
PG 29	17,0	42	46,5	5,0	B-TS7P
PG 36	17,0	55	61,0	5,0	B-TS8P
PG 42	17,0	60	66,5	5,0	B-TS9P
PG 48	17,0	65	72,0	5,0	B-TS10P

Thread Type G acc. to GAS UNI ISO 228/1					
Outer Thread Size (Male)	Outer Thread Length		Spanner Width		Part Number
	TL mm	SW mm	Outer Ø mm	Height h mm	
G 3/8"	17,5	22	24,0	5,5	B-TS01C
G 1/2"	18,0	25	27,5	5,0	B-TS1C
G 3/4"	18,0	32	35,5	5,0	B-TS2C
G 1"	22,0	37	41,0	5,0	B-TS3C
G 1 1/4"	22,0	45	50,0	5,0	B-TS4C
G 1 1/2"	22,0	55	61,0	5,0	B-TS5C
G 2"	22,0	65	72,0	5,0	B-TS6C
G 2 1/2"	22,0	85	94,0	8,0	B-TS7C
G 3"	22,0	95	105,0	8,0	B-TS8C
G 3 1/2"	22,0	110	123,0	8,0	B-TS9C
G 4"	22,0	120	133,5	8,0	B-TS10C

Thread Type NPT acc. to ANSI ASME B1.20.1					
Outer Thread Size (Male)	Outer Thread Length		Spanner Width		Part Number
	TL mm	SW mm	Outer Ø mm	Height h mm	
NPT 3/8"	16,0	20	22,0	4,0	NB-TS01N
NPT 1/2"	18,0	24	26,5	4,0	NB-TS1N
NPT 3/4"	18,0	28	31,0	4,0	NB-TS2N
NPT 1"	21,0	35	38,5	4,0	NB-TS3N
NPT 1 1/4"	21,0	45	50,0	4,0	NB-TS4N
NPT 1 1/2"	21,0	50	55,5	5,0	NB-TS5N
NPT 2"	21,0	65	72,0	5,0	NB-TS6N
NPT 2 1/2"	28,0	75	83,0	5,0	NB-TS7N
NPT 3"	28,0	95	105,0	5,0	NB-TS8N
NPT 3 1/2"	28,0	100	123,0	5,0	NB-TS9N
NPT 4"	28,0	120	134,0	5,0	NB-TS10N

*NPT type is only Ex e.

Round Plugs for Ex d/e Applications

AQUILA ROUND

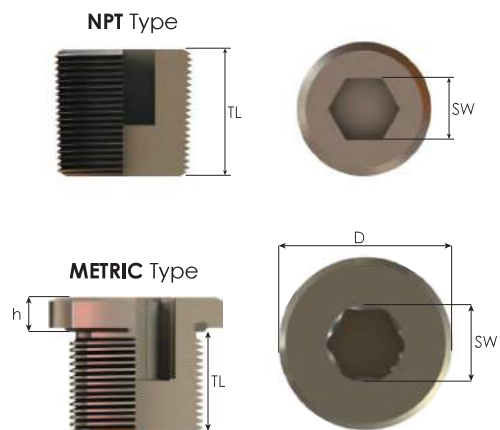


Technical Details		
Material	Body Brass, Brass Nickel Plated, Stainless Steel 316L O-ring CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	O-ring Material CR (Chloroprene) -40°C to +100°C Silicone 60°C to +130°C	
Equipment For	• Gas & Dust potentially explosive atmospheres.	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22	
Marking Example *	BMD B-TS.. CE 0722 II 2GD Ex db IIC Gb Ex eb IIC Gb Ta-40°C to +100°C IP66/68 CESI 13 ATEX 066X IECEx CES 13.0022X	
Type Protection	Ex d ; Ex e ; Ex tb	
Thread Type	• Metric (M) ISO Pitch 1,5 • Npt (N) ANSI ASME B1.20.1 • PG (P) DIN 40430 • (G)GAS UNI ISO 228/1	
Accessories	• Gaskets (Washers) • Lock nuts	
Remarks	• The Aquila NPT type plugs can be only used on threaded enclosure. • Lock nuts and gaskets can not be used with NPT type Round Aquila. • O-ring only available in Metric threads. • Accessories must be ordered separately.	
Approvals	Certificate Number	Standards
	CESI 13 ATEX 066X	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014
	IECEx CES 13.0022X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2013 Edition:2 IEC 60079-7:2015 Edition:5
	E493186	UL 60079-0, UL 60079-1, UL 60079-7 UL 60079-31 CAN/CSA-C22.2 No. 60079-0:15, CAN/CSA-C22.2 No. 60079-1:16 CAN/CSA C22.2 No. 60079-7:12, CAN/CSA-C22.2 No. 60079-31:15.
	E467237	UL 508A C22.2 No. 14-13
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0150 X	ABNT NBR IEC 60079-0:2008, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008, ABNT NBR IEC 60079-31:2011
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31, IEC/EN60079-1 & IEC/EN 62444

-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

Order Coding			
Part Number	Material	Seal	Gasket (Washer)
Mandatory	Mandatory	Mandatory	- Option
See table	B Brass BN Brass Nickel plated X Stainless steel 316L	C Chloroprene S Silicone	- WC Chloroprene WS Silicone WF Fiber
Example			
NB -TS3N	B	C	- WC



AQUILA ROUND Round Plugs for Ex d/e Applications

Thread Type METRIC acc. to ISO 965-3					
Outer Thread Size (Male)	Outer Thread Length	Allen Screw Spanner Width	Outer Ø	Height	Part Number
	TL mm	SW mm	D mm	h mm	
M16x1,5	15,5	10	22,0	3,5	MB-TS01M
M20x1,5	15,5	10	26,0	4,5	MB-TS1M
M25x1,5	15,5	10	30,0	4,5	MB-TS2M
M32x1,5	15,5	14	37,0	4,5	MB-TS3M
M40x1,5	17,5	14	46,0	4,5	MB-TS4M
M50x1,5	17,5	14	56,0	4,5	MB-TS5M
M60x1,5	17,5	14	68,0	4,5	MB-TS60M
M63x1,5	17,5	14	70,0	4,5	MB-TS6M
M70x1,5	20,0	14	78,0	4,5	MB-TS70M
M75x1,5	20,0	14	83,0	4,5	MB-TS7M
M80x1,5	20,0	14	88,0	5,0	MB-TS80M
M85x1,5	20,0	14	94,0	5,0	MB-TS85M
M90x1,5	20,0	16	98,0	5,0	MB-TS8M
M100x1,5	20,0	16	108,0	5,0	MB-TS9M
M110x1,5	20,0	16	118,0	5,0	MB-TS10M

Thread Type NPT acc. to ANSI ASME B1.20.1					
Outer Thread Size (Male)	Outer Thread Length	Allen Screw Spanner Width	Outer Ø	Height	Part Number
	TL mm	SW mm	D mm	h mm	
NPT 3/8"	15,0	6	-	-	B-TS01N
NPT 1/2"	20,0	10	-	-	B-TS1N
NPT 3/4"	20,0	10	-	-	B-TS2N
NPT 1"	25,0	14	-	-	B-TS3N
NPT 1 1/4"	25,0	14	-	-	B-TS4N
NPT 1 1/2"	25,0	14	-	-	B-TS5N
NPT 2"	25,0	14	-	-	B-TS6N
NPT 2 1/2"	32,0	14	-	-	B-TS7N
NPT 3"	32,0	16	-	-	B-TS8N
NPT 3 1/2"	32,0	16	-	-	B-TS9N
NPT 4"	33,0	16	-	-	B-TS10N

bimed

CABLE GLANDS for NON-ARMOURED CIRCULAR CABLES for Gas & Dust Application



Lyra
Hi-Lyra
Vega

252 - 253
254 - 257
258 - 261

Ex Glands / Group II-III / Gas & Dust



A cable gland is a fitting that connects a cable to an electrical source, and also is able to secure the cable so it will not escape. Cable gland units are placed into different categories, depending on whether the gland is used for general industrial work or needs hazard protection against high temperatures or explosions. The cables that fit into the glands are either armored or unarmored and a different type of gland will be required for each variety. The gland itself can be made of metals, such as brass or aluminum, or plastic; each material is useful in a different environment.

There are two major categories for cable glands: industrial and hazardous. An industrial cable gland is a general-use gland that meets general hazard requirements, so it is useful in environments without high temperatures or the risk of explosions. If the environment is hazardous, a hazardous gland is used, because these glands meet the necessary extra requirements. They are extra fortified, so they are resistant to temperatures and outside forces that general glands cannot withstand.

Polyamide Glands for Ex e Applications

4 joule

LYRA



Technical Details		
Material	Body, Cap	PA 6 (Polyamide 6)
	Seal	CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material	
	CR (Chloroprene)	Silicone
Ex e/tb / Ex tb	-40°C to +80°C	-60°C to +80°C
Ex-i	-40°C to +70°C	-60°C to +70°C
Equipment For	<ul style="list-style-type: none"> Gas & Dust potentially explosive atmospheres. Cable glands should be also used for intrinsically safe circuits Ex-i. These cable glands shall have a light blue colored cap. The symbol "I" will be added beside of the "BM" for order processing. 	
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2
	Group III	Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD BM-X... CE 0722 @ 2GD Ex eb IIC Gb Ex tb IIIC Db IP66/68 T _a -40°C +80°C IMQ 13 ATEX 010X IECEx IMQ 13.0003X	
Impact Test Result	4J	
Thread Type	<ul style="list-style-type: none"> Metric (M) ISO Pitch 1,5 Npt (N) ANSI ASME B1.20.1 PG (P) DIN 40430 Other thread types also available upon request. 	
Cable Type	Non Armoured	
Accessories	<ul style="list-style-type: none"> Lock nuts Gaskets (Washers) Dome Plugs Dust Plugs Double Seals 	
Remarks	<ul style="list-style-type: none"> We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes. Accessories must be ordered separately. 	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 010X	EN 60079-0:2012 + A11:2013 EN 60079-7:2015 EN 60079-31:2014
	IECEx IMQ 13.0003X	IEC 60079-0:2011 Edition:6.0 IEC 60079-31:2013 Edition:2.0 IEC 60079-7:2016 Edition: 6.0
		ISO 4892-2
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0051 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14045	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN 62444

-For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding						
Part Number	Seal	-	Gasket (Washer)	Seal Type	Lock Nut	Sealing Plug
See table	Mandatory	-	Option	Option	Option	Option
	C Chloropren	-	WC Chloroprene WF Fiber WS Silicone	Double Seal	L Lock nut	P Dome Plug
*Part number for blue cap is BMI-..						
Example						
BM-X3	C	-	WC	DS	L	P
*BMI-X3						

LYRA

Polyamide Glands for Ex e Applications



Thread Type METRIC acc. to ISO 965 - 3

Outer Thread Size (Male)	Clamping Range Ø min - max mm	Outer Thread Length TL mm	Spanner Width		Outer Ø D mm	max. Height		Part Number
			SW Cap mm	SW Body mm		H mm		
M20x1,5	5,0 - 10,0	10,0	22	24	27,0	32,2	BM-SX2	
	6,0 - 12,0	10,0	24	24	27,0	32,4	BM-X2	
	6,0 - 12,0	15,0	24	24	27,0	32,4	BM-X2L	
	10,0 - 14,0	10,0	27	27	30,9	31,9	BM-X3	
	10,0 - 14,0	15,0	27	27	30,9	31,9	BM-X4	
M25x1,5	10,0 - 14,0	10,0	27	27	30,9	31,9	BM-SX5	
	10,0 - 14,0	15,0	27	27	30,9	31,9	BM-SX6	
	11,0 - 17,0	10,0	29	29	32,5	37,7	BM-XEU25	
	13,0 - 18,0	15,0	33	33	37,2	38,4	BM-X6	
	13,0 - 18,0	10,0	33	33	37,2	38,4	BM-X5	
M32x1,5	13,0 - 18,0	10,0	33	36	41,0	38,4	BM-SX7	
	15,0 - 21,0	10,0	36	36	41,0	42,3	BM-XEU32	
	18,0 - 25,0	15,0	42	42	47,1	43,3	BM-X7	
M40x1,5	19,0 - 28,0	10,0	46	46	52,4	47,4	BM-XEU40	
	19,0 - 28,0	15,0	46	46	52,4	47,4	BM-XEU40L	
	22,0 - 32,0	18,0	53	53	59,6	52,4	BM-X8	
M50x1,5	30,0 - 38,0	18,0	60	60	67,8	54,8	BM-X9	
M63x1,5	34,0 - 44,0	18,0	65	65	72,4	54,9	BM-X10	

Thread Type NPT acc. to ANSI B1.20.1

Outer Thread Size (Male)	Clamping Range Ø min-max mm	Outer Thread Length TL mm	Spanner Width		Outer Ø D mm	max. Height		Part Number
			SW Cap mm	SW Body mm		H mm		
NPT 1/2"	5,0 - 10,0	15	22	24	27,0	32,2	BN-SX2	
	6,0 - 12,0	15	24	24	27,0	32,4	BN-X2	
	10,0 - 14,0	15	27	27	30,9	31,9	BN-LX2	
NPT 3/4"	13,0 - 18,0	15	33	33	37,2	38,4	BN-X3	
NPT 1"	18,0 - 25,0	18	42	42	47,1	43,3	BN-X4	

High Impact Polyamide Glands for Ex e Applications

7 joule

HI-LYRA



Technical Details	
Material	Body, Cap: PA 6 (Polyamide 6) Seal: CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66
Operating Temperature	Seal Material CR (Chloroprene) : -40°C to +70°C Silicone : -60°C to +70°C
Equipment For	<ul style="list-style-type: none"> Gas & Dust potentially explosive atmospheres. Cable glands should be also used for intrinsically safe circuits Ex-i. These cable glands shall have a light blue coloured cap. The symbol "I" will be added beside of the "HIBM" for order processing.
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex eb IIC Gb Ex tb IIIC Db
Marking Example *	BMD HIBM-X... CE 0722 II 2GD Ex eb IIC Gb Ex tb IIIC Db IP66/68 Ta-60°C to +70°C IMQ 13 ATEX 010X IECEx IMQ 13.0003X
Impact Test Result	7J
Thread Type	<ul style="list-style-type: none"> Metric (M) ISO Pitch 1,5 Npt (N) ANSI ASME B1.20.1 PG (P) DIN 40430 Other thread types also available upon request.
Cable Type	Non Armoured
Accessories	<ul style="list-style-type: none"> Lock nuts Gaskets (Washers) Dome Plugs Dust Plugs Double Seals
Remarks	<ul style="list-style-type: none"> We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes. Accessories must be ordered separately.

Approvals	Certificate Number	Standards
	IMQ 13 ATEX 010X	EN 60079-0:2012 + A11:2013 EN 60079-7:2015 EN 60079-31:2014
	IECEx IMQ 13.0003X	IEC 60079-0:2011 Edition:6.0 IEC 60079-31:2013 Edition:2.0 IEC 60079-7:2016 Edition: 6.0
		ISO 4892-2
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0051 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14045	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN 62444

-For more information see our webpage.
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Ex-e Gland Ex-i Gland with Lock Nut



with Dust Plug & Gasket with Dome Plug & Washer



Order Coding						
Part Number	Seal	-	Gasket (Washer)	Seal Type	Lock Nut	Sealing Plug
See table	Mandatory C Chloroprene S Silicone	-	Option WC Chloroprene WS Silicone WF Fiber	Option DS Double Seal	Option L Lock nut	Option P Dome Plug
*Part number for blue cap is HIBM-..						
Example						
HIBM-X2 *HIBM-X2	S	-	WC	DS	L	P

HI-LYRA

High Impact Polyamide Glands for Ex e Applications



Thread Type **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Clamping Range		Outer Thread Length TL mm	Spanner Width		Outer Ø D mm	max. Height		Part Number
	Ø min-max mm	Seal Type		Cap	Body		H mm		
M12x1,5	4,0 - 6,5	Single	10,0	15	15	17,0	25,3	HIBM-0XS	
	4,0 - 6,5	Single	15,0	15	15	17,0	25,3	HIBM-XS	
M16x1,5	5,0 - 8,0	Single	10,0	19	19	21,7	27,4	HIBM-SX1	
	5,0 - 8,0	Single	15,0	19	19	21,7	27,4	HIBM-SX1L	
	6,0 - 10,0	Single	10,0	22	22	25,0	32,2	HIBM-X1	
	6,0 - 10,0	Single	15,0	22	22	25,0	32,2	HIBM-X1L	
M20x1,5	6,0 - 10,0	Single	10,0	22	24	27,0	32,2	HIBM-SX2	
	7,0 - 12,0	Single	10,0	24	24	27,0	32,4	HIBM-X2	
	7,0 - 12,0	Single	15,0	24	24	27,0	32,4	HIBM-X2L	
	7,0 - 13,0	Single	10,0	25	25	27,5	34,0	HIBM-MX2	
	11,0 - 14,0	Single	10,0	27	27	30,9	31,9	HIBM-X3	
	11,0 - 14,0	Single	15,0	27	27	30,9	31,9	HIBM-X4	
M25x1,5	11,0 - 14,0	Single	10,0	27	27	30,9	31,9	HIBM-SX5	
	11,0 - 14,0	Single	15,0	27	27	30,9	31,9	HIBM-SX6	
	14,0 - 18,0	Single	10,0	33	33	37,2	38,4	HIBM-X5	
	14,0 - 18,0	Single	15,0	33	33	37,2	38,4	HIBM-X6	
	12,0 - 17,0	Single	10,0	29	29	32,5	37,7	HIBM-XEU25	
	12,0 - 17,0	Single	15,0	29	29	32,5	37,7	HIBM-XEU25L	
M32x1,5	16,0 - 21,0	Single	10,0	36	36	41,0	42,3	HIBM-XEU32	
	16,0 - 21,0	Single	15,0	36	36	41,0	42,3	HIBM-XEU32L	
	14,0 - 18,0	Single	10,0	33	36	41,0	38,4	HIBM-SX7	
	19,0 - 25,0	Single	15,0	42	42	47,1	43,3	HIBM-X7	
M40x1,5	20,0 - 28,0	Single	10,0	46	46	52,4	47,4	HIBM-XEU40	
	20,0 - 28,0	Single	15,0	46	46	52,4	47,4	HIBM-XEU40L	
	23,0 - 32,0	Single	18,0	53	53	59,6	52,4	HIBM-X8	
M50x1,5	31,0 - 38,0	Single	18,0	60	60	67,8	54,8	HIBM-X9	
M63x1,5	35,0 - 44,0	Single	18,0	65	65	72,4	54,9	HIBM-X10	


Thread Type **NPT** acc. to ANSI B1.20.1

Outer Thread Size (Male)	Clamping Range		Outer Thread Length TL mm	Spanner Width		Outer Ø D mm	max. Height		Part Number
	Ø min-max mm	Seal Type		Cap	Body		H mm		
NPT 3/8"	6,0 - 10,0	Single	15,0	22	22	25,0	32,2	HIBM-X1	
NPT 1/2"	6,0 - 10,0	Single	15,0	22	24	27,0	32,2	HIBM-SX2	
	7,0 - 12,0	Single	15,0	24	24	27,0	32,4	HIBM-X2	
	11,0 - 14,0	Single	15,0	27	27	30,9	31,9	HIBM-LX2	
NPT 3/4"	14,0 - 18,0	Single	15,0	33	33	37,2	38,4	HIBM-X3	
NPT 1"	19,0 - 25,0	Single	18,0	42	42	47,1	43,3	HIBM-X4	







High Impact Polyamide Glands for Ex e Applications

7 joule

VEGA High Impact

Technical Details	
Material	Body, Cap Seal PA 6 (Polyamide 6) CR (Chloroprene), Silicone
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66
Operating Temperature	Seal Material
Ex e/tb / Ex tb / Ex-i	CR (Chloroprene) -40°C to +70°C Silicone -60°C to +70°C
Equipment For	<ul style="list-style-type: none"> Gas & Dust potentially explosive atmospheres. Cable glands should be also used for intrinsically safe circuits Ex-i. These cable glands shall have a light blue colored cap. The symbol "I" will be added beside of the "EHIBM" for order processing.
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex eb IIC Gb Ex tb IIIC Db
Marking Example *	BMD EHIBM-X.. CE 0722  2GD Ex eb IIC Gb Ex tb IIIC Db Ta=-40°C to +70°C IP66/68 IECEx IMQ 13.0003X IMQ 13 ATEX 010
Impact Test Result	7J
Thread Type	<ul style="list-style-type: none"> Metric (M) ISO Pitch 1,5 Other thread types also available upon request.
Cable Type	Non Armoured
Accessories	<ul style="list-style-type: none"> Lock nuts Gaskets (Washers) Dome Plugs Double Seals Dust Plug
Remarks	<ul style="list-style-type: none"> We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes. Accessories must be ordered separately.



Approvals	Certificate Number	Standards
	IMQ 13 ATEX 010X	EN 60079-0:2012 + A11:2013 EN 60079-7:2015 EN 60079-31:2014
	IECEx IMQ 13.0003X	IEC 60079-0:2011 Edition:6.0 IEC 60079-31:2013 Edition:2.0 IEC 60079-7:2016 Edition: 6.0
		ISO 4892-2
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0051 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14045	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN 62444

-For more information see our webpage.
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

Order Coding				
Part Number	Seal	- Gasket (Washer)	Lock Nut	Sealing Plug
See table	Mandatory C Chloroprene S Silicone	- Option - WC Chloroprene - WF Fiber - WS Silicone	Option L Lock nut	Option P Dome Plug
*Part number for blue cap is EHBMI-..				
Example				
EHIBM-X2L	C	- WC	L	P
*EHIBM-X2L				



VEGA

High Impact Polyamide Glands for Ex e Applications








Tread Type **METRIC** acc. to ISO 965 - 3

Outer Thread Size (Male)	Clamping Range		Outer Thread Length TL mm	Spanner Width Cap Body		Outer Ø D mm	max. Height H mm		Part Number
	Ø min - max mm	Seal Type		SW Cap mm	SW Body mm		H mm	H mm	
M12x1,5	3,0 - 6,5	Double	10,0	15	15	17,0	30,3	EHIBM-OXS(DS)	
	3,0 - 6,5	Double	15,0	15	15	17,0	30,3	EHIBM-XS(DS)	
	4,0 - 6,5	Single	10,0	15	15	17,0	30,3	EHIBM-OXS	
	4,0 - 6,5	Single	15,0	15	15	17,0	30,3	EHIBM-XS	
M16x1,5	4,0 - 8,0	Double	10,0	19	19	21,3	33,6	EHIBM-SX1(DS)	
	4,0 - 8,0	Double	15,0	19	19	21,3	33,6	EHIBM-SX1L(DS)	
	4,0 - 10,0	Double	10,0	22	22	25,0	37,2	EHIBM-X1(DS)	
	4,0 - 10,0	Double	15,0	22	22	25,0	37,2	EHIBM-X1L(DS)	
	5,0 - 8,0	Single	10,0	19	19	21,3	33,6	EHIBM-SX1	
	5,0 - 8,0	Single	15,0	19	19	21,3	33,6	EHIBM-SX1L	
	6,0 - 10,0	Single	10,0	22	22	25,0	37,2	EHIBM-X1	
	6,0 - 10,0	Single	15,0	22	22	25,0	37,2	EHIBM-X1L	
M20x1,5	4,0 - 10,0	Double	10,0	22	24	27,5	37,2	EHIBM-SX2(DS)	
	4,0 - 13,0	Double	10,0	25	25	27,5	38,4	EHIBM-MX2(DS)	
	6,0 - 10,0	Single	10,0	22	24	27,5	37,2	EHIBM-SX2	
	6,0 - 12,0	Double	10,0	24	24	27,5	37,8	EHIBM-X2(DS)	
	6,0 - 12,0	Double	15,0	24	24	27,5	37,8	EHIBM-X2L(DS)	
	7,0 - 12,0	Single	10,0	24	24	27,5	37,8	EHIBM-X2	
	7,0 - 12,0	Single	15,0	24	24	27,5	37,8	EHIBM-X2L	
	7,0 - 13,0	Single	10,0	25	25	27,5	38,4	EHIBM-MX2	
	8,0 - 14,0	Double	10,0	27	27	31,0	37,0	EHIBM-X3(DS)	
	8,0 - 14,0	Double	15,0	27	27	31,0	37,0	EHIBM-X4(DS)	
	11,0 - 14,0	Single	10,0	27	27	31,0	37,0	EHIBM-X3	
	11,0 - 14,0	Single	15,0	27	27	31,0	37,0	EHIBM-X4	
M25x1,5	8,0 - 14,0	Double	10,0	27	27	31,0	37,8	EHIBM-SX5(DS)	
	8,0 - 14,0	Double	15,0	27	27	31,0	37,8	EHIBM-SX6(DS)	
	9,0 - 17,0	Double	10,0	29	29	32,5	42,2	EHIBM-XEU25(DS)	
	9,0 - 17,0	Double	15,0	29	29	32,5	42,2	EHIBM-XEU25L(DS)	
	10,0 - 18,0	Double	10,0	33	33	37,0	43,6	EHIBM-X5(DS)	
	10,0 - 18,0	Double	15,0	33	33	37,0	43,6	EHIBM-X6(DS)	
	11,0 - 14,0	Single	10,0	27	27	31,0	37,8	EHIBM-SX5	
	11,0 - 14,0	Single	15,0	27	27	31,0	37,8	EHIBM-SX6	
	12,0 - 17,0	Single	10,0	29	29	32,5	42,2	EHIBM-XEU25	
	12,0 - 17,0	Single	15,0	29	29	32,5	42,2	EHIBM-XEU25L	
	14,0 - 18,0	Single	10,0	33	33	37,0	43,6	EHIBM-X5	
	14,0 - 18,0	Single	15,0	33	33	37,0	43,6	EHIBM-X6	
	M32x1,5	10,0 - 18,0	Double	10,0	33	36	41,0	43,6	EHIBM-SX7(DS)
		12,0 - 21,0	Double	10,0	36	36	41,0	47,3	EHIBM-XEU32(DS)
12,0 - 21,0		Double	15,0	36	36	41,0	47,3	EHIBM-XEU32L(DS)	
14,0 - 18,0		Single	10,0	33	36	41,0	43,6	EHIBM-SX7	
14,0 - 25,0		Double	15,0	42	42	47,5	48,7	EHIBM-X7(DS)	
16,0 - 21,0		Single	10,0	36	36	41,0	47,3	EHIBM-XEU32	
16,0 - 21,0		Single	15,0	36	36	41,0	47,3	EHIBM-XEU32L	
19,0 - 25,0		Single	15,0	42	42	47,5	48,7	EHIBM-X7	
M40x1,5	17,0 - 28,0	Double	10,0	46	46	52,0	52,4	EHIBM-XEU40(DS)	
	17,0 - 28,0	Double	15,0	46	46	52,0	52,4	EHIBM-XEU40L(DS)	
	20,0 - 28,0	Single	10,0	46	46	52,0	52,4	EHIBM-XEU40	
	20,0 - 28,0	Single	15,0	46	46	52,0	52,4	EHIBM-XEU40L	
	21,0 - 32,0	Double	18,0	53	53	60,0	57,9	EHIBM-X8(DS)	
	23,0 - 32,0	Single	18,0	53	53	60,0	57,9	EHIBM-X8	
M50x1,5	22,0 - 38,0	Double	18,0	60	60	67,5	60,1	EHIBM-X9(DS)	
	31,0 - 38,0	Single	18,0	60	60	67,5	60,1	EHIBM-X9	
M63x1,5	28,0 - 44,0	Double	18,0	65	65	72,0	60,4	EHIBM-X10(DS)	
	35,0 - 44,0	Single	18,0	65	65	72,0	60,4	EHIBM-X10	

High Impact Polyamide Glands for Ex e Applications

7 joule

VEGA High Impact

Technical Details		
Material	Body, Cap Seal PA 6 (Polyamide 6) CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material CR (Chloroprene) -40°C to +70°C Silicone -60°C to +70°C	
Equipment For	<ul style="list-style-type: none"> Gas & Dust potentially explosive atmospheres. Cable glands should be also used for intrinsically safe circuits Ex-i. These cable glands shall have a light blue colored cap. The symbol "I" will be added beside of the "EHIBM" for order processing. 	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD EHIBM-X.. CE 0722  2GD Ex eb IIC Gb Ex tb IIIC Db Tq-40°C to +70°C IP66/68 IECEx IMQ 13.0003X IMQ 13 ATEX 010	
Impact Test Result	7J	
Thread Type	<ul style="list-style-type: none"> Metric (M) ISO Pitch 1,5 Other thread types also available upon request. 	
Cable Type	Non Armoured	
Accessories	<ul style="list-style-type: none"> Lock nuts Gaskets (Washers) Dome Plugs Double Seals Dust Plug 	
Remarks	<ul style="list-style-type: none"> We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes. Accessories must be ordered separately. 	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 010X	EN 60079-0:2012 + A11:2013 EN 60079-7:2015 EN 60079-31:2014
	IECEx IMQ 13.0003X	IEC 60079-0:2011 Edition:6.0 IEC 60079-31:2013 Edition:2.0 IEC 60079-7:2016 Edition: 6.0
		ISO 4892-2
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0051 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14045	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN 62444

-For more information see our webpage.
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding				
Part Number	Seal	Gasket (Washer)	Lock Nut	Sealing Plug
See table	Mandatory C Chloroprene S Silicone	- Option WC Chloroprene WF Fiber WS Silicone	Option L Lock nut	Option P Dome Plug
*Part number for blue cap is EHBMI-..				
Example				
EHIBM-X2L	C	- WC	L	P
*EHIBM-X2L	C	- WC	L	P



VEGA

High Impact Polyamide Glands for Ex e Applications

Thread Type **NPT** acc. to ANSI B1.20.1

Outer Thread Size (Male)	Clamping Range		Outer Thread Length TL mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number
	Ø min-max mm	Seal Type		SW Cap mm	SW Body mm			
NPT 3/8"	4,0 - 10,0	Double	15,0	22	22	25,0	37,2	EHIBN-X1(DS)
	6,0 - 10,0	Single	15,0	22	22	25,0	37,2	EHIBN-X1
NPT 1/2"	4,0 - 10,0	Double	15,0	22	24	27,5	37,2	EHIBN-SX2(DS)
	4,0 - 10,0	Single	15,0	22	24	27,5	37,2	EHIBN-SX2
	6,0 - 12,0	Double	15,0	24	24	27,5	37,8	EHIBN-X2(DS)
	7,0 - 12,0	Single	15,0	24	24	27,5	37,8	EHIBN-X2
	8,0 - 14,0	Double	15,0	27	27	31,0	37,0	EHIBN-LX2(DS)
11,0 - 14,0	Single	15,0	27	27	31,0	37,0	EHIBN-LX2	
NPT 3/4"	10,0 - 18,0	Double	15,0	33	33	37,0	43,6	EHIBN-X3(DS)
	14,0 - 18,0	Single	15,0	33	33	37,0	43,6	EHIBN-X3
NPT 1"	14,0 - 25,0	Double	18,0	42	42	47,5	48,7	EHIBN-X4(DS)
	19,0 - 25,0	Single	18,0	42	42	47,5	48,7	EHIBN-X4

bimed

CABLE GLANDS for NON-ARMOURED NON-CIRCULAR CABLES for Gas & Dust Application



Gemini
Hi-Gemini

262 - 263
264 - 265

Ex Glands / Group II-III / Gas & Dust










A cable gland is a fitting that connects a cable to an electrical source, and also is able to secure the cable so it will not escape. Cable gland units are placed into different categories, depending on whether the gland is used for general industrial work or needs hazard protection against high temperatures or explosions. The cables that fit into the glands are either armored or unarmored and a different type of gland will be required for each variety. The gland itself can be made of metals, such as brass or aluminum, or plastic; each material is useful in a different environment.

There are two major categories for cable glands: industrial and hazardous. An industrial cable gland is a general-use gland that meets general hazard requirements, so it is useful in environments without high temperatures or the risk of explosions. If the environment is hazardous, a hazardous gland is used, because these glands meet the necessary extra requirements. They are extra fortified, so they are resistant to temperatures and outside forces that general glands cannot withstand.

Polyamide Cable Glands for Ex e Applications and Heat Trace Cables

4joule

GEMINI

Technical Details		
Material	Body, Cap	PA 6 (Polyamide 6)
	Seal	CR (Chloroprene), Silicone
Ingress Protection Rating		IP 68 - 5 Bar, 30 min
		IP 66
Operating Temperature	Seal Material	
		CR (Chloroprene)
		Silicone
Ex e/tb / Ex tb		-40°C to +80°C
	Ex-i	-40°C to +70°C
Equipment For		• Gas & Dust potentially explosive atmospheres.
		• Cable glands should be also used for intrinsically safe circuits Ex-i. These cable glands shall have a light blue colored cap. The symbol "I" will be added beside of the "BM" for order processing.
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2
	Group III	Dust Group IIIC ZONE21/ZONE 22
Equipment Marking		Ex II 2GD
		Ex eb IIC Gb Ex tb IIIC Db
Marking Example *	BMD BM-X2L.. CE 0722  II 2GD Ex eb IIC Gb Ex tb IIIC Db IP66/68 Ta-40°C to +80°C IMQ 13 ATEX 011X IECEx IMQ 13.0004X	
Impact Test Result	4J	
Thread Type	• Metric (M) ISO Pitch 1,5 • Other thread types also available upon request.	
Cable Type	Non Armoured, Non Circular, Heat Trace	
Accessories	• Lock nuts	
	• Gaskets (Washers)	
	• Dust plugs	
Remarks	• We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes.	
	• Accessories must be ordered separately.	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 011X	EN 60079-0:2009 EN 60079-7:2007 EN 60079-31:2009
	IECEx IMQ 13.0004X	IEC 60079-0:2007 Edition:5 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006 Edition: 4
		ISO 4892-2
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0051 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14045	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN 62444
-For more information see our webpage.		
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.		



Order Coding			
Part Number	Seal	Gasket (Washer)	Lock Nut
Mandatory	Mandatory	- Option	Option
See table	C Chloroprene S Silicone	- WC Chloroprene WF Fiber WS Silicone	L Lock nut
*Part number for blue cap is BMI-..			
Example			
BM-X2L (10,8x6,0)	C	- WC	L
* BMI-X2L (10,8x6,0)			



GEMINI

Polyamide Cable Glands for Ex e Applications and Heat Trace Cables








Tread Type **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Flat Hole		Outer Thread Length	Spanner Width		Outer Ø	max. Height	Part Number	
	Height	Width		Cap	Body				
	B	A	TL	SW Cap	SW Body	D	H		
	mm	mm	mm	mm	mm	mm	mm		
M20x1,5	4,0	10,0	10,0	24	24	27,0	32,4	BM-X2 (10,0x4,0)	
	4,0	10,0	15,0	24	24	27,0	32,4	BM-X2L (10,0x4,0)	
	5,0	12,8	10,0	27	27	30,9	31,9	BM-X3 (12,8x5,0)	
	5,0	12,8	15,0	27	27	30,9	31,9	BM-X4 (12,8x5,0)	
	6,0	10,8	10,0	24	24	27,0	32,4	BM-X2 (10,8x6,0)	
	6,0	10,8	10,0	27	27	30,9	31,9	BM-X3 (10,8x6,0)	
	6,0	10,8	15,0	24	24	27,0	32,4	BM-X2L (10,8x6,0)	
	6,0	10,8	15,0	27	27	30,9	31,9	BM-X4 (10,8x6,0)	
	6,5	11,0	15,0	24	24	27,0	32,4	BM-X2L (11,0x6,5)	
	6,5	11,0	10,0	24	24	27,0	32,4	BM-X2 (11,0x6,5)	
	6,5	12,4	10,0	27	27	30,9	31,9	BM-X3 (12,4x6,5)	
	6,5	12,4	15,0	27	27	30,9	31,9	BM-X4 (12,4x6,5)	
M25x1,5	4,0	10,0	10,0	24	27	30,9	32,4	BM-XSX5 (10,0x4,0)	
	4,0	10,0	15,0	24	27	30,9	32,4	BM-XSX6 (10,0x4,0)	
	5,0	12,8	10,0	27	27	30,9	31,9	BM-SX5 (12,8x5,0)	
	5,0	12,8	15,0	27	27	30,9	31,9	BM-SX6 (12,8x5,0)	
	5,0	15,0	10,0	33	33	37,2	38,4	BM-X5 (15,0x5,0)	
	5,0	15,0	15,0	33	33	37,2	38,4	BM-X6 (15,0x5,0)	
	6,0	10,8	10,0	24	27	30,9	32,4	BM-XSX5 (10,8x6,0)	
	6,0	10,8	10,0	27	27	30,9	31,9	BM-SX5 (10,8x6,0)	
	6,0	10,8	15,0	24	27	30,9	32,4	BM-XSX6 (10,8x6,0)	
	6,0	10,8	15,0	27	27	30,9	31,9	BM-SX6 (10,8x6,0)	
	6,0	12,0	15,0	33	33	37,2	38,4	BM-X6 (12,0x6,0)	
	6,0	12,0	10,0	33	33	37,2	38,4	BM-X5 (12,0x6,0)	
	6,5	11,0	10,0	24	27	30,9	32,4	BM-XSX5 (11,0x6,5)	
	6,5	11,0	15,0	24	27	30,9	32,4	BM-XSX6 (11,0x6,5)	
	6,5	12,4	10,0	27	27	30,9	31,9	BM-SX5 (12,4x6,5)	
	6,5	12,4	15,0	27	27	30,9	31,9	BM-SX6 (12,4x6,5)	
	M32x1,5	5,0	15,0	10,0	33	36	41,0	38,4	BM-SX7 (15,0x5,0)
		6,0	12,0	10,0	33	36	41,0	38,4	BM-SX7 (12,0x6,0)

High Impact Polyamide Cable Glands for Ex e Applications and Heat Trace Cables

7 joule

HI-GEMINI

Technical Details	
Material	Body, Cap PA 6 (Polyamide 6) Seal CR (Chloroprene)
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66
Operating Temperature	Seal Material CR (Chloroprene) -40°C to +70°C Silicone -60°C to +70°C
Equipment For	<ul style="list-style-type: none"> Gas & Dust potentially explosive atmospheres. Cable glands should be also used for intrinsically safe circuits Ex-i. These cable glands shall have a light blue colored cap. The symbol "I" will be added beside of the "HIBM" for order processing.
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex eb IIC Gb Ex tb IIIC Db
Marking Example *	BMD HIBM-X2.. CE 0722  II 2GD Ex eb IIC Gb Ex tb IIIC Db IP66/68 Ta-40°C to +80°C IECEx IMQ 13.0003X IMQ 13 ATEX 010
Impact Test Result	7J
Thread Type	<ul style="list-style-type: none"> Metric (M) ISO Pitch 1,5 Other thread types also available upon request.
Cable Type	Non armoured non circular heat trace
Accessories	<ul style="list-style-type: none"> Lock nuts Gaskets (Washers) Dust plugs
Remarks	<ul style="list-style-type: none"> We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes. Accessories must be ordered separately.
Approvals	Certificate Number Standards
	IMQ 13 ATEX 010X EN 60079-0:2012 + A11:2013 EN 60079-7:2015 EN 60079-31:2014
	IECEx IMQ 13.0003X IEC 60079-0:2011 Edition:6.0 IEC 60079-31:2013 Edition:2.0 IEC 60079-7:2016 Edition: 6.0
	ISO 4892-2
	№ TC RU C-TR.AA87.B.00941 GOCT 31610.0-2014 GOCT IEC 60079-1:2013 GOCT IEC 60079-31:2013
	DNV 12.0051 X ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14045 IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN 62444

*For more information see our webpage.

* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding				
Part Number	Seal	-	Gasket (Washer)	Lock Nut
Mandatory	Mandatory	-	Option	Option
See table	C Chloroprene S Silicone	-	WC Chloroprene WS Silicone	L Lock nut
*Part number for blue cap is HIBMI-...				
Example				
HIBM-X5 (10,8x6,0)	C	-	WC	L
* HIBM-X5 (10,8x6,0)				



High Impact Polyamide Cable Glands for Ex e Applications and Heat Trace Cables

Thread Type **METRIC** acc. to ISO 965-3

Outer Thread Size (Male)	Flat Hole		Outer Thread Length	Spanner Width		Outer Ø	max. Height	Part Number
	Height	Width		Cap	Body			
	B mm	A mm	TL mm	SW Cap mm	SW Body mm	D mm	H mm	
M25x1,5	5,0	12,8	10,0	27	27	30,9	31,9	HIBM-SX5 (12,8x5,0)
	5,0	12,8	10,0	29	29	32,5	37,7	HIBM-XEU25 (12,8x5,0)
	5,0	12,8	10,0	33	33	37,2	38,4	HIBM-X5 (12,8x5,0)
	5,0	12,8	15,0	27	27	30,9	31,9	HIBM-SX6 (12,8x5,0)
	5,0	12,8	15,0	29	29	32,5	37,7	HIBM-XEU25L (12,8x5,0)
	5,0	12,8	15,0	33	33	37,2	38,4	HIBM-X6 (12,8x5,0)
	5,0	15,0	10,0	29	29	32,5	37,7	HIBM-XEU25 (15,0x5,0)
	5,0	15,0	10,0	33	33	37,2	38,4	HIBM-X5 (15,0x5,0)
	5,0	15,0	15,0	29	29	32,5	37,7	HIBM-XEU25L (15,0x5,0)
	5,0	15,0	15,0	33	33	37,2	38,4	HIBM-X6 (15,0x5,0)
	6,0	10,8	10,0	27	27	30,9	31,9	HIBM-SX5 (10,8x6,0)
	6,0	10,8	10,0	29	29	32,5	37,7	HIBM-XEU25 (10,8x6,0)
	6,0	10,8	10,0	33	33	37,2	38,4	HIBM-X5 (10,8x6,0)
	6,0	10,8	15,0	27	27	30,9	31,9	HIBM-SX6 (10,8x6,0)
	6,0	10,8	15,0	29	29	32,5	37,7	HIBM-XEU25L (10,8x6,0)
	6,0	10,8	15,0	33	33	37,2	38,4	HIBM-X6 (10,8x6,0)

bimed

PLUGS for Gas & Dust Applications



Draco
Hi-Draco

268 - 269
270 - 271

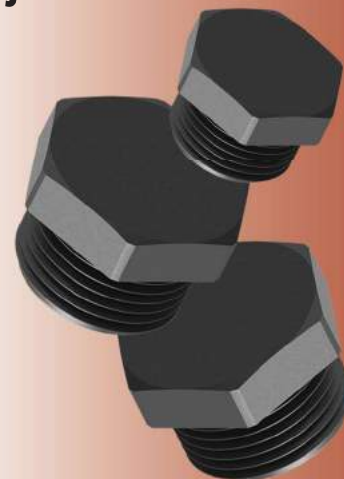
Ex Glands / Group II-III / Gas & Dust



Polyamide Hexagonal Plugs for Ex e Applications

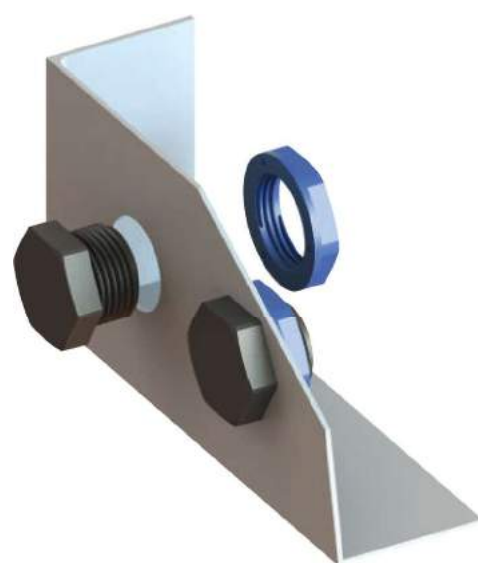
4 joule

DRACO

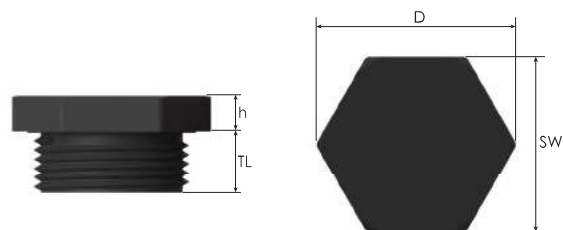


Technical Details		
Material	Body: PA 6 (Polyamide 6) O-ring: CR (Chloroprene), Silicone	
Ingress Protection Rating	IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	O-ring Material CR (Chloroprene) Silicone	
Ex eb/tb / Ex tb	-40°C to +80°C -60°C to +80°C	
Ex i	-40°C to +70°C -60°C to +70°C	
Equipment For	<ul style="list-style-type: none"> Gas & Dust potentially explosive atmospheres. Cable glands should be also used for intrinsically safe circuits Ex-i. These cable glands shall have a light blue colored lock nut. The symbol "I" will be added beside of the "TP" for order processing. 	
Suitable for use in	Group II Gas Group IIC ZONE1/ZONE2 Group III Dust Group IIIC ZONE21/ZONE 22	
Equipment Marking	Ex II 2GD Ex eb IIC Gb / Ex tb IIIC Db	
Marking Example *	BMD TP-X... CE 0722 II 2GD Ex e IIC Gb Ex tb IIIC Db IP66/68 Ta -40°C to +80°C IMQ 13 ATEX 010X IECEx IMQ 13.0003X	
Impact Test Result	4J	
Thread Type	<ul style="list-style-type: none"> Metric (M) ISO Pitch 1.5 Npt (N) ANSI ASME B1.20.1 	
Accessories	<ul style="list-style-type: none"> Lock nuts Gaskets (Washers) 	
Remarks	<ul style="list-style-type: none"> We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes. Accessories must be ordered separately. 	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 010X	EN 60079-0:2012 + A11:2013 EN 60079-7:2015 EN 60079-31:2014
	IECEx IMQ 13.0003X	IEC 60079-0:2011 Edition:6 IEC 60079-31:2013 Edition:2 IEC 60079-7:2006 Edition: 4
		ISO 4892-2
	№ TC RU C-TR.AA87.B.00941	ГОСТ 31610.0-2014 ГОСТ IEC 60079-1:2013 ГОСТ IEC 60079-31:2013
	DNV 12.0051 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14045	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN 62444

-For more information see our webpage.
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding		
Part Number	-	Gasket (Washer) Lock Nut
Mandatory	-	Option
See table	-	WC Chloroprene L Lock nut WF Fiber WS Silicone
*Part number for blue cap is TPI..		
Example		
TP-X02	-	WC
*TPI-X02	-	L



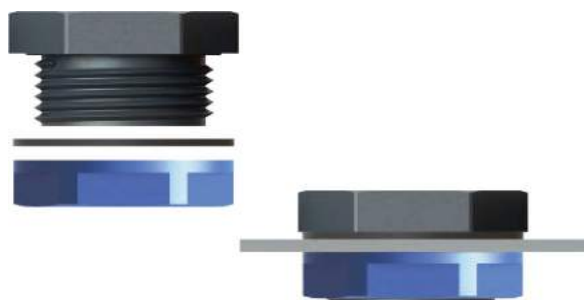
DRACO

Polyamide Hexagonal Plugs for Ex e Applications

Thread Type METRIC acc. to ISO 965-3					
Outer Thread Size (Male)	Outer Thread Length	Spanner Width	Outer Ø	Height	Part Number
	TL mm	SW mm	D mm	h mm	
M12x1,5	10,0	15	17,0	5,0	TP-X02
M16x1,5	11,0	19	22,0	4,3	TP-X01
M20x1,5	11,0	23	26,0	6,0	TP-X1
M25x1,5	10,0	28	32,0	5,8	TP-X2
M32x1,5	15,0	36	41,5	7,8	TP-X3
M40x1,5	18,0	46	53,0	8,5	TP-X4
M50x1,5	18,0	55	63,5	9,5	TP-X5
M63x1,5	18,0	69	79,5	9,5	TP-X6

See Example "A" for IP protection degree and clamping note:

The plugs Ex e II can be used with circuits Ex I. These cable glands should have a lock nut painted **light blue**. The plugs must be supplied with the flat washer for IP protection degree.

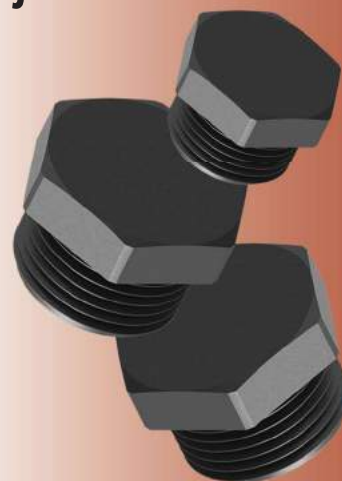


High Impact Hexagonal Plugs for Ex e Applications

7 joule

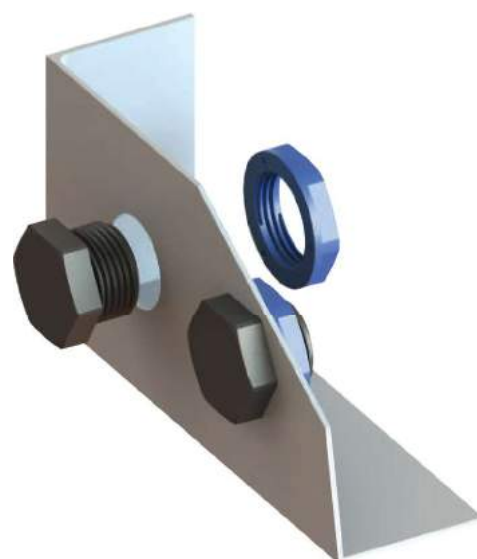
HI-DRACO

High Impact

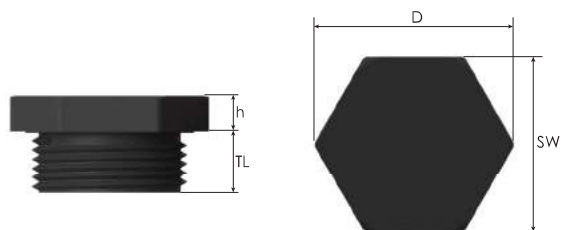


Technical Details		
Material	Body	PA 6 (Polyamide 6)
	O-ring	CR (Chloroprene), Silicone
Ingress Protection Rating		IP 68 - 5 Bar, 30 min IP 66
Operating Temperature	O-ring Material	
	CR (Chloroprene)	Silicone
Ex eb/tb / Ex tb / Ex-i		-40°C to +70°C -60°C to +70°C
Equipment For		<ul style="list-style-type: none"> Gas & Dust potentially explosive atmospheres. Cable glands should be also used for intrinsically safe circuits Ex-i. These cable glands shall have a light blue colored lock nut. The symbol "I" will be added beside of the "HITP" for order processing.
Suitable for use in	Group II	Gas Group IIC ZONE1/ZONE2
	Group III	Dust Group IIIC ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex eb IIC Gb Ex tb IIIC Db	
Marking Example *	BMD HITP-X... CE 0722 II 2GD Ex eb IIC Gb Ex tb IIIC Db IP66/68 Ta -40°C to +70°C IMQ 13 ATEX 010X IECEx IMQ 13.0003X	
Impact Test Result	7J	
Thread Type	<ul style="list-style-type: none"> Metric (M) ISO Pitch 1,5 NPT (N) ANSI ASME B1.20.1 	
Accessories	<ul style="list-style-type: none"> Lock nuts Gaskets (Washers) 	
Remarks	<ul style="list-style-type: none"> We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes. Accessories must be ordered separately. 	
Approvals	Certificate Number	Standards
	IMQ 13 ATEX 010X	EN 60079-0:2012 + A11:2013 EN 60079-7:2015 EN 60079-31:2014
	IECEx IMQ 13.0003X	IEC 60079-0:2011 Edition:6 IEC 60079-31:2013 Edition:2 IEC 60079-7:2006 Edition: 4
		ISO 4892-2
	№ TC RU C-TR.AA87.B.00941	FOCT 31610.0-2014 FOCT IEC 60079-1:2013 FOCT IEC 60079-31:2013
	DNV 12.0051 X	ABNT NBR IEC 60079-0:2013 ABNT NBR IEC 60079-7:2008 ABNT NBR IEC 60079-31:2011
	E-14045	IEC/EN60079-0 IEC/EN60079-7 IEC/EN60079-31 IEC/EN 62444

-For more information see our webpage.
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.



Order Coding		
Part Number	-	Gasket (Washer)
Mandatory	-	Option
See table	-	WC Chloroprene WF Fiber WS Silicone
		L Lock nut
*Part number for blue cap is HITPL-..		
Example		
HITP-X02	-	WC
*HITPL-X02		L



HI-DRACO

Polyamide High Impact Hexagonal Plugs for Ex e Applications

Thread Type METRIC acc. to ISO 965-3					
Outer Thread Size (Male)	Outer Thread Length	Spanner Width	Outer Ø	Height	Part Number
	TL mm				
M12x1,5	10,0	15	17,0	5,0	HITP-X02
M16x1,5	11,0	19	22,0	4,3	HITP-X01
	15,0	19	22,0	4,3	HITP-X01HL
M20x1,5	11,0	23	26,0	6,0	HITP-X1
	15,0	23	26,0	6,0	HITP-X1HL
M25x1,5	10,0	28	32,0	5,8	HITP-X2
	15,0	28	32,0	5,8	HITP-X2HL
M32x1,5	15,0	36	41,5	7,8	HITP-X3
M40x1,5	18,0	46	53,0	8,5	HITP-X4
M50x1,5	18,0	55	63,5	9,5	HITP-X5
M63x1,5	18,0	69	79,5	9,5	HITP-X6

Thread Type NPT acc. to ANSI ASME B1.20.1					
Outer Thread Size (Male)	Outer Thread Length	Spanner Width	Outer Ø	Height	Part Number
	TL mm				
NPT 1/2"	15,0	23	26,0	6,0	HITN-X1HL
NPT 3/4"	15,0	28	32,0	5,8	HITN-X2HL
NPT 1"	15,0	36	41,0	7,8	HITN-X3

See Example "A" for IP protection degree and clamping note:

The plugs Ex e II can be used with circuits Ex i. These cable glands should have a lock nut painted [light blue](#). The plugs must be supplied with the flat washer for IP protection degree.

