

CABLE GLANDS & ACCESSORIES

for Industrial and Hazardous Applications



INDUSTRIAL
PRODUCTS



EX-PROOF
PRODUCTS



VENTILATION
SYSTEMS



HYGIENIC
PRODUCTS





Bimed begun in 1978 as a manufacturer of medical and mechanical components. Today Bimed is a family owned organization with more than 300 people and a 20,000 square meter facility. The Istanbul, Turkey-based company has offices in North America, Germany and Egypt. In many other countries Bimed is represented through local distribution partners.

Our product range consists of the following groups:

- Cable glands and conduit fittings
- Pressure balance elements
- Connectors for the appliance and automotive industries
- Gas springs for the automotive and furniture industries
- Disposable medical products

Cable glands and conduit fittings are designed for applications in a wide range of industries. Pressure balance elements improve quality and reliability of our customers' products. Connectors for appliances and for the automotive industry are used all over the world. Custom designed gas springs reduce total cost of ownership of our customers. Medical products are manufactured in a clean room environment and are sold as OEM products globally. All our products conform to the relevant national and international standards and our activities are based on EN ISO 9001:2008 standard.

As a result, Bimed gained an international reputation for high quality production. Due to our state-of-the-art certified laboratory and our 30 years of experience in the cable gland and electrical industry we also received ATEX 100 and IEC Ex factory approval.

Bimed is constantly working to achieve customer satisfaction, by meeting requested requirements with its standard and customized products. Most often, our research and development department produces completely new items in accordance with client demands. These activities help us gain the praise and high appreciation of our customers.

Because of High standards need for Hazardus Area Bimed start to invest for own Laboratory which has been certified by IMQ according to EN60079-0/2009.

With a worldwide market base, the Bimed distribution network has been established to ensure that the needs of this global market are well understood and fully satisfied. Our products have been expanded to and distributed in more than 30 countries. Bimed has a merit-based leadership in the cable gland and connector sector established on its reputation for quality and innovation. This philosophy has been instrumental in the development of a product line that is constantly growing to reflect the changing industry needs and advancements in technology.

With the above resume about Bimed we intend to emphasize the Bimed production philosophy and let it serve as certification for the large product line manufactured by all our divisions.



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Polyamide CABLE GLANDS for Industrial Application



Glands

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Polyamide ACCESSORIES for Industrial Application

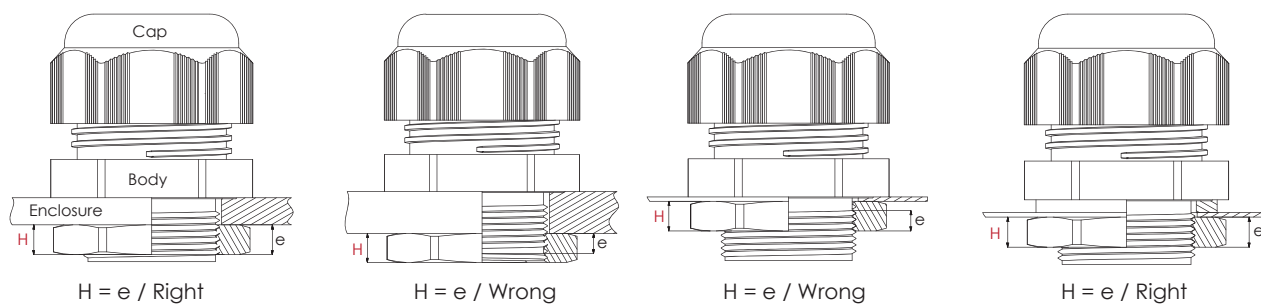


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Cable Gland Assembling Instruction

Assembling with lock nut on **non threaded** enclosure

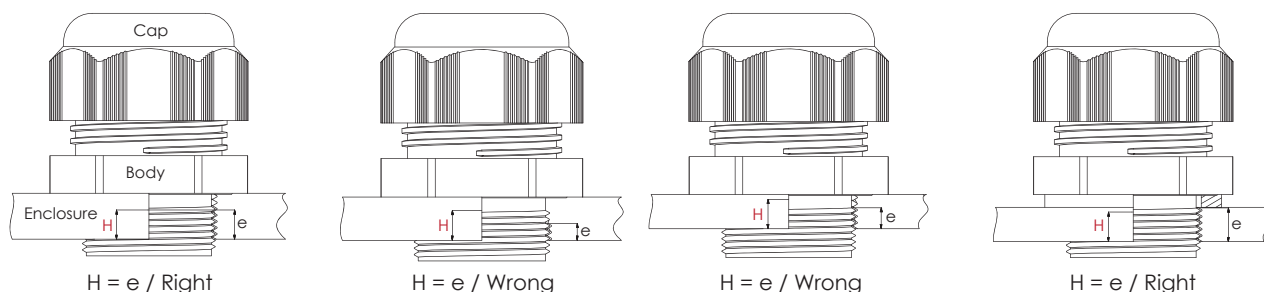


Relevant Lock Nut Thickness

Size	H (±0,5 mm)
M12 to M16 Pg 7 to Pg 11	5,0
M20 to M25 Pg 13,5 to Pg 16	6,0
M32 to M40 Pg 21 to Pg 29	7,0
M50 to M63 Pg 36 to Pg 42	8,0



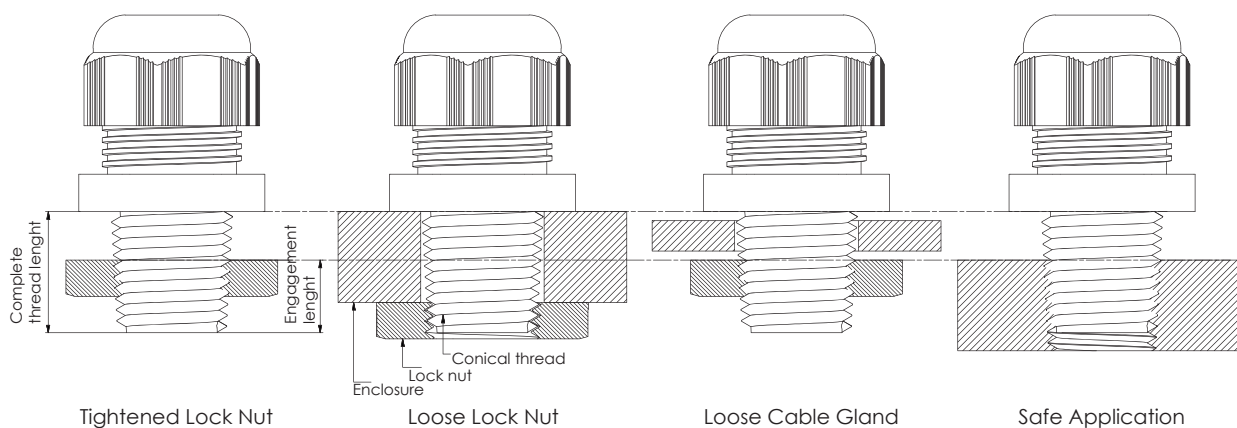
Assembling with lock nut on **threaded** enclosure



Complementary Instruction

- The engaged thread length "e" must be equal or longer than relevant lock nut thickness "H"
- The thread dimensions and tolerances on threaded enclosures must be convenient with the relevant thread standard.
- Firstly, the gland body must be mounted to the enclosure.
- The body or the lock nut must be tightened according to torque indicated on the instruction chart.
- As much as possible double wrench have to be used for non threaded enclosures.
- For cable assembling the cap must be tightened according to torque indicated on the instruction chart.
- During the cable assembling or disassembling gland body must be keep fixed. Double wrench have to be used for this purpose.

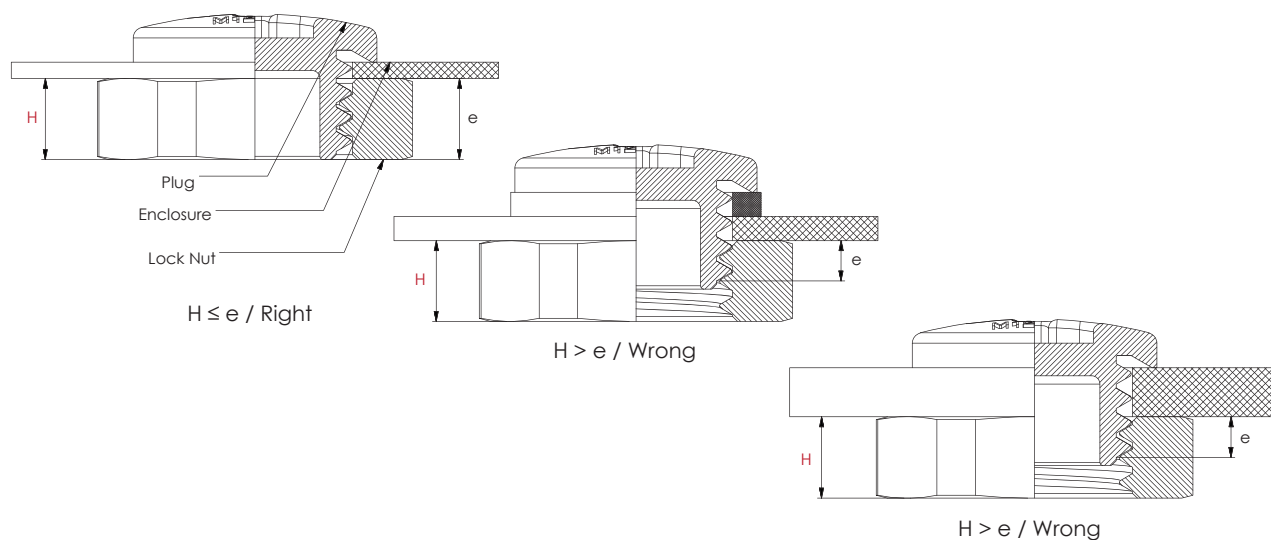
Npt threads application



Thread standard	ANSI B1.20.1
Thread name	National Pipe Threads
Thread definition	NPT is an US Standard for "Tapered Threads" used in threaded pipes and fittings. The thread can provide an effective seal for liquids, gases, hydraulic, fluids and steam. They are used generally for steel, brass, cast-iron, PTFE, PVC, PA materials.
Other Appellations	MPT : Male Pipe Threads FPT : Female Pipe Threads
Applications	The NPT threads are always used for male and female pipe / fitting joints. Regarding the conicity of the thread they are not suitable for lock-nut applications.
"Cable Glands" and "Electrical Fitting" applications	The NPT threaded cable glands or male threaded electrical fittings as reducers, blind stops etc must used a NPT female threaded enclosures or cabinets. The usage of lock nuts for NPT threads is not a recommended application. According the relevant standard, the male and female threads have a defined engagement length. When we use a lock nut (even if is NPT threaded), we know that this one will be blocked, after the defined length portion of the male thread. In result we can not be sure that this blocking distance will be suitable for the wall thickness of the enclosure or cabinet. If we are using an equivalent parallel thread lock nut the result will be worst because the male and female thread, will not be in complete contact.

Plug Assembling Instruction

Assembling with lock nut on **non threaded** enclosure



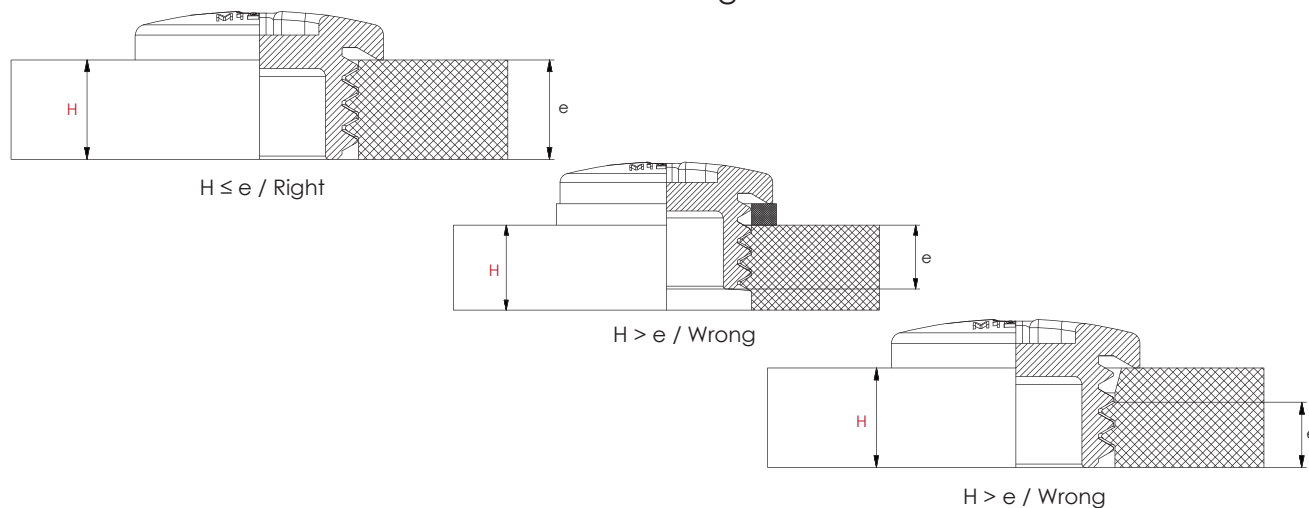
Industrial Application

Relevant Lock Nut Thickness

	Size	H ($\pm 0,5$ mm)
M12 to M16	Pg 7 to Pg 11	5,0
M20 to M25	Pg 13,5 to Pg 16	6,0
M32 to M40	Pg 21 to Pg 29	7,0
M50 to M63	Pg 36 to Pg 42	8,0



Assembling with lock nut on **threaded** enclosure



Complementary Instructions:

- The engaged thread length "e" must be equal or longer than relevant lock nut thickness "H"
- The thread dimensions and tolerances on threaded enclosures must be convenient with the relevant thread standard.
- Firstly, the blind stop must be mounted to the enclosure.
- The blind stop or the lock nut must be tightened according to torque indicated on the instruction chart.
- As much as possible double tool have to be used for non threaded enclosures.(Screw driver+wrench)

Standard Glands with Thread, Polyamide

Polyamide cable glands with lamellar clamping

- For standard industrial applications.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

Technical Details

Material	Body	PA 6 (Polyamide 6)	
	Cap	PA 6 (Polyamide 6)	
	Seal	CR (Chloroprene Rubber)	
Protection Class	IP 68 - 5 Bar, 30 min IP 66		
Flammability	V2 according to UL94		
Operating Temperature	Permanent		Intermittent
	-20 °C to +100 °C		-30 °C to +150 °C
Thread Type	• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1 • Gas ISO 228 • Other thread types also available upon request.		
Cable Type	Non armoured		
Accessories	• Lock nuts • Dome plugs • Reducing seals • Flat cable seals • Multihole seals • Gaskets		
Remarks	• Different sealing types available. • Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet. Other colours on request: • RAL 5015 (blue) • RAL 9003 (white) • RAL 3020 (red)		

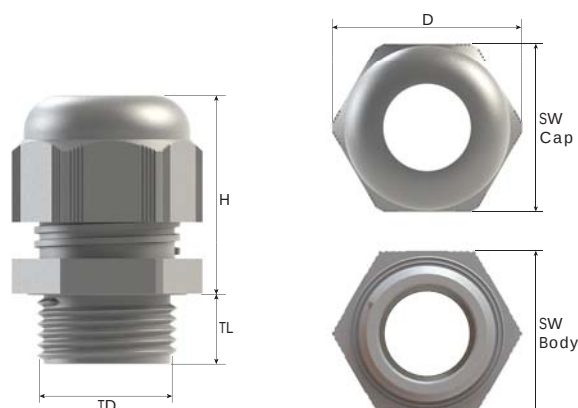
Approvals

	Certificate Number	Standards
	134171	acc. to DIN EN 62444
	115116_0_000	acc. to CSA C22.2
	E199260	acc. to UL514
	SERCOVAM RES 107572	acc. to UL514B §8.26.7

Some approvals do not cover all sizes or colours. For more approvals: see our webpage.



Standard Glands with Thread, Polyamide



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit					
M12x1,5	2,0 - 5,0	8	12	15	15	16,9	22,5	BI-1S	BI-0S	BI-2S	100					
		10						BM-EN-1SMR	BM-EN-0SMR	BM-EN-2SMR						
		15						BM-EN-1SRL	BM-EN-0SRL	BM-EN-2SRL						
	3,0 - 6,5	8						BM-1S	BM-0S	BM-2S						
		10						BM-EN-1SM	BM-EN-0SM	BM-EN-2SM						
		15						BM-EN-1SL	BM-EN-0SL	BM-EN-2SL						
M16x1,5	2,0 - 6,0	8	16	19	19	21,9	26,5	BM-EN-11R	BM-EN-01R	BM-EN-21R	50					
		10						BM-EN-11MR	BM-EN-01MR	BM-EN-21MR						
		15						BM-EN-11LR	BM-EN-01LR	BM-EN-21LR						
	3,0 - 7,0	10		22	22	25,0	30,0	BI-11	BI-01	BI-21						
		15						BI-11L	BI-01L	BI-21L						
		8						BM-EN-11	BM-EN-01	BM-EN-21						
	4,0 - 8,0	10		19	19	21,9	26,5	BM-EN-11M	BM-EN-01M	BM-EN-21M						
		15						BM-EN-11L	BM-EN-01L	BM-EN-21L						
		10						22	22	25,0		30,0	BM-11	BM-01	BM-21	
	15	BM-11L		BM-01L	BM-21L											
	M20x1,5	5,0 - 9,0		10	20	24	24						27,0	29,5	BI-12	BI-02
				15				BI-12L	BI-02L	BI-22L						
6,0 - 12,0		10	27	27		31,0	31,0	BM-12	BM-02	BM-22						
		15						BM-12L	BM-02L	BM-22L						
7,0 - 12,0		10	25	25		27,5	29,5	BI-13	BI-03	BI-23						
		15						BI-14	BI-04	BI-24						
7,0 - 13,0		10	27	27		31,0	31,0	BM-EN-12S	BM-EN-02S	BM-EN-22S						
		15						BM-13	BM-03	BM-23						
M25x1,5		9,0 - 13,0	8	25		29	29	32,5	35,0	BM-14	BM-04	BM-24	50			
			15							BM-EN-13R	BM-EN-03R	BM-EN-23R				
	9,0 - 16,0	10	33		33	38,0	37,0	BM-EN-13RL	BM-EN-03RL	BM-EN-23RL	25					
		15						BI-15	BI-05	BI-25						
	11,0 - 17,0	8	29		29	32,5	35,0	BI-16	BI-06	BI-26	50					
		15						BM-EN-13	BM-EN-03	BM-EN-23						
M32x1,5	13,0 - 18,0	10	32	33	33	38,0	37,0	BM-EN-13L	BM-EN-03L	BM-EN-23L	25					
		15						BM-15	BM-05	BM-25						
	11,0 - 15,0	10		36	36	41,0	42,0	BM-16	BM-06	BM-26	20					
		15						BM-EN-14R	BM-EN-04R	BM-EN-24R						
	12,0 - 20,0	10		42	42	47,3	41,0	BM-EN-14RL	BM-EN-04RL	BM-EN-24RL						
		15						BI-17	BI-07	BI-27						
	15,0 - 21,0	10		36	36	41,0	42,0	BM-EN-14	BM-EN-04	BM-EN-24						
		15						BM-EN-14L	BM-EN-04L	BM-EN-24L						
18,0 - 25,0	10	42	42	47,3	41,0	BM-17	BM-07	BM-27								
	15					BM-17	BM-07	BM-27								
M40x1,5	16,0 - 23,0	10	40	46	46	52,4	47,0	BM-EN-15R	BM-EN-05R	BM-EN-25R	20					
		15						BM-EN-15MR	BM-EN-05MR	BM-EN-25MR						
		18						BM-EN-15RL	BM-EN-05RL	BM-EN-25RL						
	19,0 - 28,0	10						53	53	60,0		51,5	BM-EN-15	BM-EN-05	BM-EN-25	
		15											BM-EN-15M	BM-EN-05M	BM-EN-25M	
		18											BM-EN-15L	BM-EN-05L	BM-EN-25L	
	20,0 - 26,0	10						53	53	60,0		51,5	BI-18	BI-08	BI-28	10
		15											BI-18	BI-08	BI-28	
22,0 - 32,0	10	50	60	60	67,8	53,0	BM-18	BM-08	BM-28	10						
	15						BI-19	BI-09	BI-29							
M50x1,5	30,0 - 38,0	18	63	65	65	72,9	53,0	BM-19	BM-09	BM-29	10					
	29,0 - 35,0	18						BI-20	BI-10	BI-30						
M63x1,5	34,0 - 44,0	18	75,0	75	80	89,0	55,0	BM-20	BM-10	BM-30	10					
	48,0 - 55,0	25						BM-B12	BM-B02	BM-B22		5				

Standard Glands with Thread, Polyamide

Polyamide cable glands with lamellar clamping

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- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

Technical Details

Material	Body	PA 6 (Polyamide 6)	
	Cap	PA 6 (Polyamide 6)	
	Seal	CR (Chloroprene Rubber)	
Protection Class	IP 68 - 5 Bar, 30 min IP 66		
Flammability	V2 according to UL94		
Operating Temperature	Permanent		Intermittent
	-20 °C to +100 °C		-30 °C to +150 °C
Thread Type	• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1 • Gas ISO 228 • Other thread types also available upon request.		
Cable Type	Non armoured		
Accessories	• Lock nuts • Dome plugs • Reducing seals • Flat cable seals • Multihole seals • Gaskets		
Remarks	• Different sealing types available. • Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet. Other colours on request: • RAL 5015 (blue) • RAL 9003 (white) • RAL 3020 (red)		

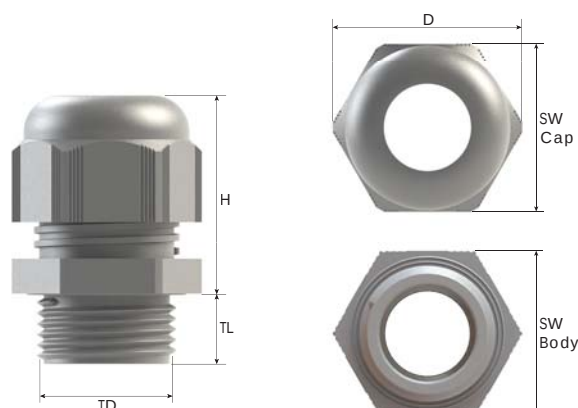
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Some approvals do not cover all sizes or colours. For more approvals: see our webpage.



Standard Glands with Thread, Polyamide



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

Size	Clamping Range Ø min-max		Thread Length TL		Thread Ø TD		Spanner Width				Outer Ø D		max. Height H		Part Number			Packing Unit
	mm	Inch	mm	Inch	mm	Inch	SW Cap	Inch	SW Body	Inch	mm	Inch	mm	Inch	RAL 7035 light grey	RAL 7001 grey	RAL 9005 black	
NPT 3/8"	3,0 - 7,0	0.118 - 0.276	15	0.591	17,14	0.675	22	0.866	22	0.866	25,0	0.984	29,0	1,141	BSPA-11R	BSPA-01R	BSPA-21R	50
	5,0 - 10,0	0.197 - 0.394													BSPA-11	BSPA-01	BSPA-21	
NPT 1/2"	5,0 - 9,0	0.197 - 0.354	15	0.591	21,34	0.840	24	0.945	24	0.945	27,0	1.063	29,0	1,141	BSPB-12R	BSPB-02R	BSPB-22R	50
	6,0 - 12,0	0.236 - 0.472													BSPB-12	BSPB-02	BSPB-22	
	7,0 - 12,0	0.276 - 0.472	11	0.433			27	1.063	27	1.063	30,9	1.217	31,0	1,220	BSPC-12R	BSPC-02R	BSPC-22R	
	10,0 - 14,0	0.394 - 0.551													BSPC-12	BSPC-02	BSPC-22	
NPT 3/4"	9,0 - 16,0	0.354 - 0.630	15	0.591	26,67	1.050	33	1.299	33	1.299	38,0	1.496	37,0	1,456	BSPD-13R	BSPD-03R	BSPD-23R	25
	13,0 - 18,0	0.512 - 0.709													BSPD-13	BSPD-03	BSPD-23	
NPT 1"	12,0 - 20,0	0.472 - 0.787	18	0.709	33,40	1.315	42	1.654	42	1.654	47,3	1.862	41,0	1,614	BSP-14R	BSP-04R	BSP-24R	20
	18,0 - 25,0	0.709 - 0.984													BSP-14	BSP-04	BSP-24	

Thread Type **PG** acc. to DIN 40430

Size	Clamping Range Ø min-max		Thread Length TL		Thread Ø TD		Spanner Width SW Cap		Spanner Width SW Body		Outer Ø D		max. Height H		RAL 7035 light grey	Part Number		Packing Unit
	mm		mm		mm		mm		mm		mm		mm			RAL 7001 grey	RAL 9005 black	
PG 7	2,0 - 5,0		8		12,5		15		15		16,9		22,0		BSR-11	BSR-01	BSR-21	100
	3,0 - 6,5														BS-11	BS-01	BS-21	
PG 9	2,0 - 6,0		8		15,2		19		19		21,9		26,5		BSR-12	BSR-02	BSR-22	50
	4,0 - 8,0														BS-12	BS-02	BS-22	
PG 11	3,0 - 7,0		8		18,6		22		22		25,0		29,0		BSR-13	BSR-03	BSR-23	50
	5,0 - 10,0														BS-13	BS-03	BS-23	
PG 13,5	5,0 - 9,0		10		20,4		24		24		27,0		29,0		BSR-14	BSR-04	BSR-24	50
	6,0 - 12,0														BS-14	BS-04	BS-24	
PG 16	7,0 - 12,0		10		22,5		27		27		30,9		31,0		BSR-15	BSR-05	BSR-25	50
	10,0 - 14,0														BS-15	BS-05	BS-25	
PG 21	9,0 - 16,0		11		28,3		33		33		38,0		37,0		BSR-16	BSR-06	BSR-26	25
	13,0 - 18,0														BS-16	BS-06	BS-26	
PG 29	12,0 - 20,0		11		37,0		42		42		47,3		41,0		BSR-17	BSR-07	BSR-27	20
	18,0 - 25,0														BS-17	BS-07	BS-27	
PG 36	20,0 - 26,0		13		47,0		53		53		60,0		51,5		BSR-18	BSR-08	BSR-28	10
	22,0 - 32,0														BS-18	BS-08	BS-28	
PG 42	25,0 - 31,0		13		54,0		60		60		67,8		53,5		BSR-19	BSR-09	BSR-29	10
	30,0 - 38,0														BS-19	BS-09	BS-29	
PG 48	29,0 - 35,0		14		59,3		65		65		72,9		53,5		BSR-20	BSR-10	BSR-30	10
	34,0 - 44,0														BS-20	BS-10	BS-30	

Thread Type **G** acc. to DIN ISO 228

Size	Clamping Range Ø min-max		Thread Length TL		Thread Ø TD		Spanner Width SW Cap		Spanner Width SW Body		Outer Ø D		max. Height H		RAL 7035 light grey	Part Number		Packing Unit
	mm		mm		mm		mm		mm		mm		mm			RAL 7001 grey	RAL 9005 black	
G 1/4"	2,0 - 5,0		10		13,160		15		15		16,9		23,0		BPFR-1S	BPFR-0S	BPFR-2S	100
	3,0 - 6,5														BPF-1S	BPF-0S	BPF-2S	
G 3/8"	3,0 - 7,0		11		16,662		22		22		25,0		29,0		BPFR-11	BPFR-01	BPFR-21	50
	5,0 - 10,0														BPF-11	BPF-01	BPF-21	
G 1/2"	5,0 - 9,0		10		20,955		24		24		27,0		29,0		BPFR-12	BPFR-02	BPFR-22	50
	6,0 - 12,0														BPF-12	BPF-02	BPF-22	
	7,0 - 12,0		11		20,955		27		27		30,9		31,0		BPFR-13	BPFR-03	BPFR-23	
G 3/4"	10,0 - 14,0														BPF-13	BPF-03	BPF-23	25
	9,0 - 16,0		12		26,441		33		33		38,0		37,5		BPFR-14	BPFR-04	BPFR-24	
G 1"	13,0 - 18,0														BPF-14	BPF-04	BPF-24	20
	12,0 - 20,0		13		33,249		42		42		47,3		41,5		BPFR-15	BPFR-05	BPFR-25	
	18,0 - 25,0														BPF-15	BPF-05	BPF-25	

Snap-In Glands without thread, Polyamide

Polyamide cable glands, front-side assembly, without thread

- Specially designed cable glands - easy to assemble to housings without threaded holes.
- Easy assembly: push cable gland and turn body clockwise - insert cable - tighten cap.
- Perfectly fit to wall thickness 0,5 mm to 4,0 mm.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Easy disassembly (with separate tool).

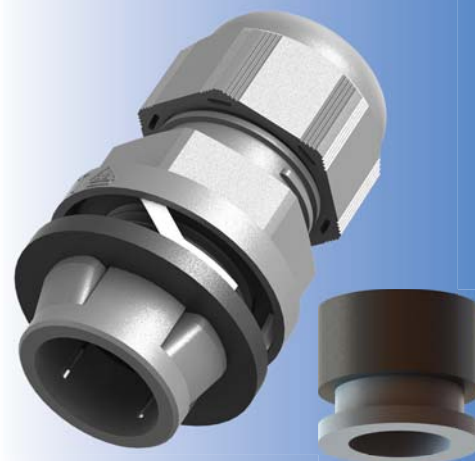
Technical Details

Material	Body	PA 6 (Polyamide 6)	
	Lower Body	PA 6 (Polyamide 6)	
	Cap	PA 6 (Polyamide 6)	
	Seal	CR (Chloroprene Rubber)	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-30 °C to +150 °C
Thread Type		• Metric EN 60423 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Dome plugs • Reducing seals • Flat cable seals • Multihole seals • Disassembly tools (one piece included per packing unit)	
Remarks		• Different sealing types available. • Manufactured according to DIN EN 62444/50262. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet. Other colours on request: • RAL 5015 (blue) • RAL 9003 (white) • RAL 3020 (red)	

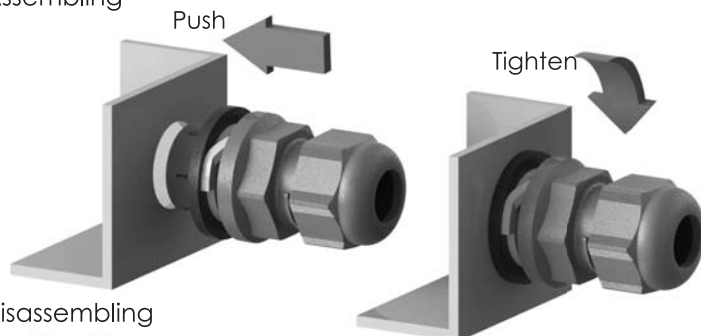
Approvals

	Certificate Number	Standards
	134171	acc. to DIN EN 62444
	E199260	acc. to UL 514B
	SERCOVAM RES 107572	acc. to UL514B §8.26.7

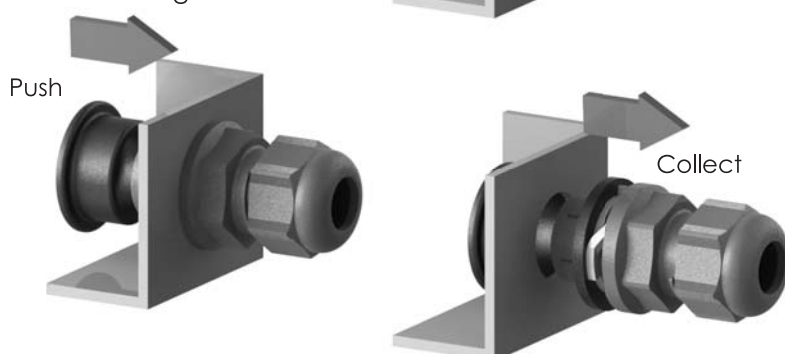
Some approvals do not cover all sizes or colours. For more approvals: see our webpage.



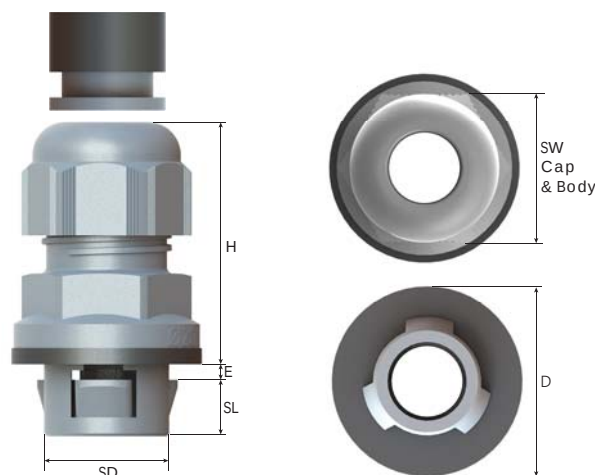
Assembling



Disassembling

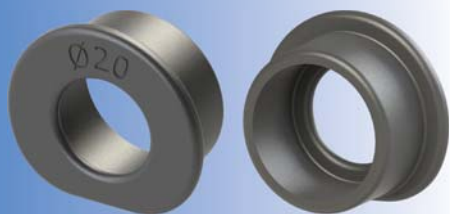


Snap-In Glands without thread, Polyamide



wall thickness (E) : 0,5 - 4,0 mm

Size	Outer Seal Ø min-max mm	Double Seal Ø min-max mm	Snap Length SL mm	Snap Ø SD mm	Hole Ø HD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit
16	5,0 - 10,0	-	9,0	15,9	16,2 - 16,4	22	22	26,5	42,5	BMOS-11	BMOS-01	BMOS-21	100
		3,0 - 7,0								BMOS-DS-11	BMOS-DS-01	BMOS-DS-21	
20	6,0 - 12,0	-	9,0	19,9	20,2 - 20,4	24	24	30,3	41,5	BMOS-12	BMOS-02	BMOS-22	50
		5,0 - 9,0								BMOS-DS-12	BMOS-DS-02	BMOS-DS-22	
	7,0 - 13,0	-				25	25	30,3	41,5	BMOS-EU-12	BMOS-EU-02	BMOS-EU-22	
		3,0 - 7,0								BMOS-EU-DS-12	BMOS-EU-DS-02	BMOS-EU-DS-22	
25	11,0 - 17,0	-	9,0	24,9	25,2 - 25,4	29	29	36,3	43,5	BMOS-EU-13	BMOS-EU-03	BMOS-EU-23	25
		8,0 - 13,0								BMOS-EU-DS-13	BMOS-EU-DS-03	BMOS-EU-DS-23	
32	15,0 - 21,0	-	9,0	31,9	32,2 - 32,4	36	36	43,2	49,5	BMOS-EU-14	BMOS-EU-04	BMOS-EU-24	25
		11,0 - 16,0								BMOS-EU-DS-14	BMOS-EU-DS-04	BMOS-EU-DS-24	
40	19,0 - 28,0	-	11,5	39,9	40,2 - 40,4	46	46	55,2	56,0	BMOS-EU-15	BMOS-EU-05	BMOS-EU-25	20
		16,0 - 21,0								BMOS-EU-DS-15	BMOS-EU-DS-05	BMOS-EU-DS-25	



Snap-In Gland Disassembling Tool

Tool to disassemble Snap-In Glands

Technical Details

Material Plastic

Size	ID mm	H mm	Part Number	Packing Unit
16	16,0	13,0	BEX-16	10
20	20,0	13,0	BEX-20	10
25	25,0	13,0	BEX-25	10
32	32,0	13,0	BEX-32	10
40	40,0	15,5	BEX-40	10

Cable Protection Glands Polyamide

Cable protection glands with lamellar clamping

- For cable bending protection.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

Technical Details

Material	Body	PA 6 (Polyamide 6)	
	Cap	PA 6 (Polyamide 6)	
	Seal	CR (Chloroprene Rubber)	
Protection Class	IP 68 - 5 Bar, 30 min IP 66		
Flammability	V2 according to UL94		
Operating Temperature	Permanent	Intermittent	
	-20 °C to +100 °C	-30 °C to +150 °C	
Thread Type	• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1 • Gas ISO 228 • Other thread types also available upon request.		
Cable Type	Non armoured		
Accessories	• Lock nuts • Dome plugs • Reducing seals • Flat cable seals • Multihole seals • Gaskets		
Remarks	• Different sealing types available. • Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all colours or sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet. Other colours on request: • RAL 5015 (blue) • RAL 9003 (white) • RAL 3020 (red)		

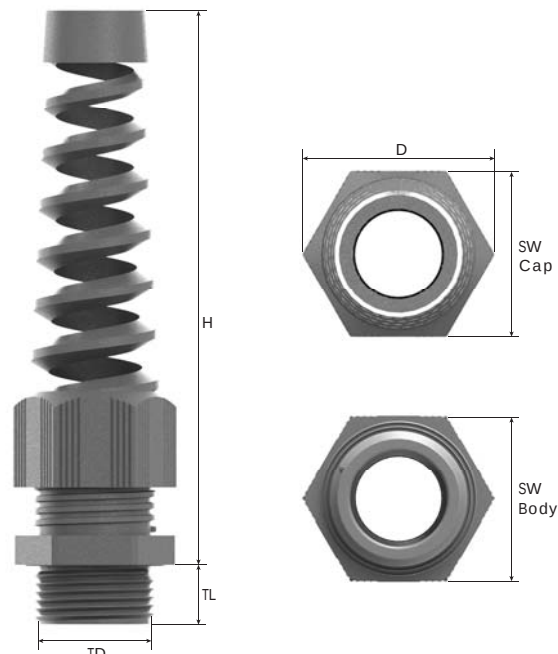
Approvals

	Certificate Number	Standards
	134171	acc. to DIN EN 62444
	115116_0_000	acc. to CSA C22.2
	E199260	acc. to UL514
	SERCOVAM RES 107572	acc. to UL514B §8.26.7

Some approvals do not cover all sizes or colours. For more approvals: see our webpage.



Cable Protection Glands Polyamide



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	RAL 7035 light grey	Part Number		Packing Unit
				SW Cap mm	SW Body mm				RAL 7001 grey	RAL 9005 black	
M12x1,5	2,0 - 5,0	8	12,0	15	15	17,1	57,0	BISP-1S	BISP-0S	BISP-2S	100
		10						BISP-1SM	BISP-0SM	BISP-2SM	
		15						BISP-1SL	BISP-0SL	BISP-2SL	
	3,0 - 6,5	8						BMSBP-1S	BMSBP-0S	BMSBP-2S	
		10						BMSBP-1SM	BMSBP-0SM	BMSBP-2SM	
		15						BMSBP-1SL	BMSBP-0SL	BMSBP-2SL	
M16x1,5	3,0 - 7,0	10	16,0	22	22	25,2	81,5	BISP-11	BISP-01	BISP-21	50
		15						BISP-11L	BISP-01L	BISP-21L	
		10						BMSBP-11	BMSBP-01	BMSBP-21	
	5,0 - 10,0	15						BMSBP-11L	BMSBP-01L	BMSBP-21L	
		10						BISP-12	BISP-02	BISP-22	
		15						BISP-12L	BISP-02L	BISP-22L	
M20x1,5	5,0 - 9,0	10	20,0	24	24	26,7	93,0	BMSBP-12	BMSBP-02	BMSBP-22	50
		15						BMSBP-12L	BMSBP-02L	BMSBP-22L	
	6,0 - 12,0	10						BISP-13	BISP-03	BISP-23	
		15						BISP-13L	BISP-03L	BISP-23L	
	7,0 - 12,0	10		27	27	31,0	106,0	BMSBP-13	BMSBP-03	BMSBP-23	
		15						BMSBP-13L	BMSBP-03L	BMSBP-23L	
	10,0 - 14,0	10						BISP-14	BISP-04	BISP-24	
		15						BISP-14L	BISP-04L	BISP-24L	
M25x1,5	9,0 - 16,0	10	25,0	33	33	38,0	117,5	BISP-15	BISP-05	BISP-25	25
		15						BISP-15L	BISP-05L	BISP-25L	
	13,0 - 18,0	10						BMSBP-15	BMSBP-05	BMSBP-25	
		15						BMSBP-15L	BMSBP-05L	BMSBP-25L	

Cable Protection Glands Polyamide

Cable protection glands with lamellar clamping

- For cable bending protection.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

Technical Details

Technical Details			
Material	Body	PA 6 (Polyamide 6)	
	Cap	PA 6 (Polyamide 6)	
	Seal	CR (Chloroprene Rubber)	
Protection Class	IP 68 - 5 Bar, 30 min IP 66		
Flammability	V2 according to UL94		
Operating Temperature	Permanent	Intermittent	
	-20 °C to +100 °C	-30 °C to +150 °C	
Thread Type	• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1 • Gas ISO 228 • Other thread types also available upon request.		
Cable Type	Non armoured		
Accessories	• Lock nuts • Dome plugs • Reducing seals • Flat cable seals • Multihole seals • Gaskets		
Remarks	• Different sealing types available. • Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all colours or sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet. Other colours on request: • RAL 5015 (blue) • RAL 9003 (white) • RAL 3020 (red)		

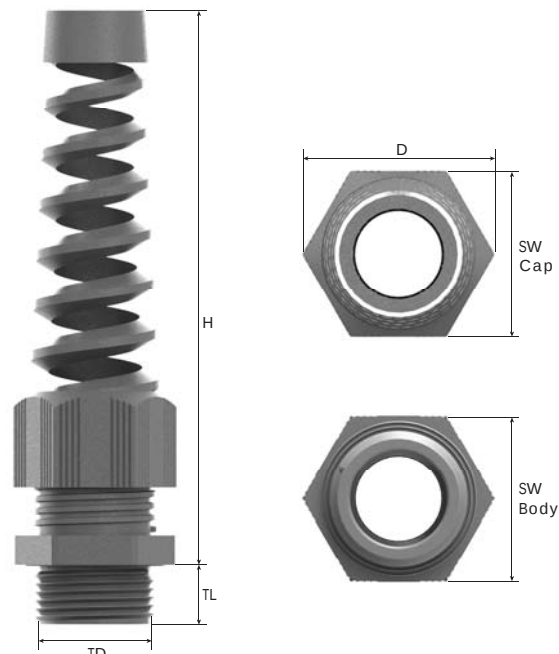
Approvals

	Certificate Number	Standards
	134171	acc. to DIN EN 62444
	115116_0_000	acc. to CSA C22.2
	E199260	acc. to UL514
	SERCOVAM RES 107572	acc. to UL514B §8.26.7

Some approvals do not cover all sizes or colours. For more approvals: see our webpage.



Cable Protection Glands Polyamide



Thread Type NPT acc. to ANSI B1.20.1

Size	Clamping Range Ø min-max		Thread Length TL		Thread Ø TD		Spanner Width				Outer Ø D		max. Height H		RAL 7035 light grey	Part Number		Packing Unit
	mm	inch	mm	inch	mm	inch	SW Cap mm	inch	SW Body mm	inch	mm	inch	mm	inch		RAL 7001 grey	RAL 9005 black	
NPT 3/8"	3,0 - 7,0	0.118 - 0.276	15,0	0.591	17,14	0.673	22	0.866	22	0.866	25,3	0.996	81,5	3.169	BNSPA-11R	BNSPA-01R	BNSPA-21R	50
	5,0 - 10,0	0.197 - 0.394													BNSPA-11	BNSPA-01	BNSPA-21	
NPT 1/2"	5,0 - 9,0	0.197 - 0.354	15,0	0.591	21,34	0.839	24	0.945	24	0.945	27,6	1.087	93,3	3.720	BNSPB-12R	BNSPB-02R	BNSPB-22R	50
	6,0 - 12,0	0.236 - 0.472													BNSPB-12	BNSPB-02	BNSPB-22	
	7,0 - 12,0	0.276 - 0.472					27	1.063	27	1.063	31,0	1.220	106,0	4.173	BNSPC-12R	BNSPC-02R	BNSPC-22R	
	10,0 - 14,0	0.394 - 0.551													BNSPC-12	BNSPC-02	BNSPC-22	
NPT 3/4"	9,0 - 16,0	0.354 - 0.630	15,0	0.591	26,67	1.051	33	1.299	33	1.299	38,0	1.496	117,9	4.606	BNSPD-13R	BNSPD-03R	BNSPD-23R	25
	13,0 - 18,0	0.512 - 0.709													BNSPD-13	BNSPD-03	BNSPD-23	

Thread Type PG acc. to DIN 40430

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	RAL 7035 light grey	Part Number			Packing Unit
				SW Cap mm	SW Body mm				RAL 7001 grey	RAL 9005 black		
PG 7	2,0 - 5,0	8,0	12,5	15	15	17,2	57,5	BSRP-11	BSRP-01	BSRP-21	100	
	3,0 - 6,5							BSSP-11	BSSP-01	BSSP-21		
PG 9	2,0 - 6,0	8,0	15,2	19	19	21,8	69,4	BSRP-12	BSRP-02	BSRP-22	50	
	4,0 - 8,0							BSSP-12	BSSP-02	BSSP-22		
PG 11	3,0 - 7,0	8,0	18,6	22	22	25,3	81,6	BSRP-13	BSRP-03	BSRP-23	50	
	5,0 - 10,0							BSSP-13	BSSP-03	BSSP-23		
PG 13,5	5,0 - 9,0	10,0	20,4	24	24	27,6	93,5	BSRP-14	BSRP-04	BSRP-24	50	
	6,0 - 12,0							BSSP-14	BSSP-04	BSSP-24		
PG 16	7,0 - 12,0	10,0	22,5	27	27	31,1	106,0	BSRP-15	BSRP-05	BSRP-25	50	
	10,0 - 14,0							BSSP-15	BSSP-05	BSSP-25		
PG 21	9,0 - 16,0	11,0	28,3	33	33	38,0	117,9	BSRP-16	BSRP-06	BSRP-26	25	
	13,0 - 18,0							BSSP-16	BSSP-06	BSSP-26		

Thread Type G acc. to DIN ISO 228

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number			Packing Unit
				SW Cap mm	SW Body mm			RAL 7035 light grey	RAL 7001 grey	RAL 9005 black	
G 3/8"	3,0 - 7,0	11	16,662	22	22	25,3	80,0	BFSR-11	BFSR-01	BFSR-21	50
	5,0 - 10,0							BFSP-11	BFSP-01	BFSP-21	
G 1/2"	5,0 - 9,0	10	20,955	24	24	27,6	94,0	BFSR-12	BFSR-02	BFSR-22	50
	6,0 - 12,0							BFSP-12	BFSP-02	BFSP-22	
	7,0 - 12,0	11		27	27	31,0	105,6	BFSR-13	BFSR-03	BFSR-23	
	10,0 - 14,0							BFSP-13	BFSP-03	BFSP-23	
G 3/4"	9,0 - 16,0	12	26,441	33	33	38,0	117,5	BFSR-14	BFSR-04	BFSR-24	25
	13,0 - 18,0							BFSP-14	BFSP-04	BFSP-24	

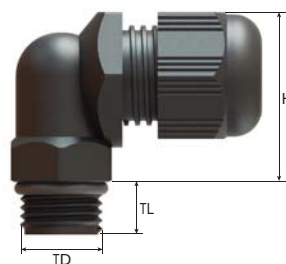
Elbow Glands Polyamide

Elbow glands with lamellar clamping

- For cables guided along housing side.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications..

Technical Details

Material	Body	PA 6 (Polyamide 6)	
	Cap	PA 6 (Polyamide 6)	
	Seal	CR (Chloroprene Rubber)	
	O-Ring	NBR	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-30 °C to +150 °C
Thread Type		• PG DIN 40430 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Lock nuts • Dome plugs • Reducing seals • Flat cable seals • Multihole seals • Gaskets	
		• Different sealing types available. • Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	
Remarks			



Thread Type **PG** acc. to DIN 40430

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		max. Height H mm	Part Number			Packing Unit
				SW Cap mm	SW Body mm		RAL 7035 light grey	RAL 7001 grey	RAL 9005 black	
PG 7	3,0 - 6,0	8,0	12,5	19	19	26,5	EGR-11	EGR-01	EGR-21	100
	4,0 - 8,0						EG-11	EG-01	EG-21	
PG 9	3,0 - 6,0	7,0	15,2	19	19	28,7	EGR-12	EGR-02	EGR-22	100
	4,0 - 8,0						EG-12	EG-02	EG-22	



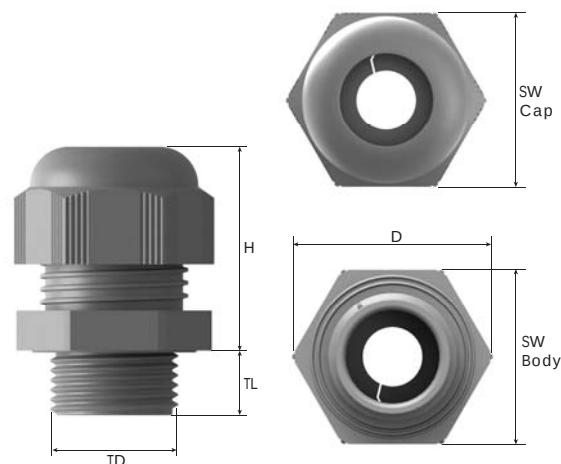
RJ 45 Glands Polyamide

Cable glands for RJ 45 cables

- For standard industrial applications using data cables with pre-assembled RJ 45 connectors.
- Easy assembly: feed connector through cable gland - assemble splitted seal around cable - insert seal into gland body - install cable gland - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	PA 6 (Polyamide 6)	
	Cap	PA 6 (Polyamide 6)	
	Seal	CR (Chloroprene Rubber)	
Protection Class	IP 68 - 5 Bar, 30 min		
Flammability	V2 according to UL94		
Operating Temperature	Permanent	-20 °C to +80 °C	
	Intermittent	-30 °C to +150 °C	
Thread Type	• Metric EN 60423 • PG DIN 40430 • Other thread types also available upon request.		
Cable Type	Non armoured		
Accessories	• Lock nuts • Dome plugs • Gaskets		
Remarks	• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.		



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Diameter D mm	max. Height H mm	Part Number			Packing Unit
				SW Cap mm	SW Body mm			RAL 7035 light grey	RAL 7001 grey	RAL 9005 black	
M20x1,5	6,0	10	20,0	27	24	27,0	29,7	BMRJ-13	BMRJ-03	BMRJ-23	50
		15		27	27	31	31,5	BMRJ-15	BMRJ-05	BMRJ-25	
M25x1,5	6,0	8	25,0	29	29	32,5	30,5	BMRJ-EN-13	BMRJ-EN-03	BMRJ-EN-23	25
		15						BMRJ-EN-13L	BMRJ-EN-03L	BMRJ-EN-23L	
		10						BM-15RJ	BM-05RJ	BM-25RJ	
		15		33	33	38,0	38,0	BM-16RJ	BM-06RJ	BM-26RJ	

Thread Type **PG** acc. to DIN 40430

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Diameter D mm	max. Height H mm	Part Number			Packing Unit
				SW Cap mm	SW Body mm			RAL 7035 light grey	RAL 7001 grey	RAL 9005 black	
PG 16	6	10	22,5	27	27	31,0	31,0	BSRJ-15	BSRJ-05	BSRJ-25	50
PG 21	6	11	28,3	33	33	33,0	35,0	BSRJ-16	BSRJ-06	BSRJ-26	25.

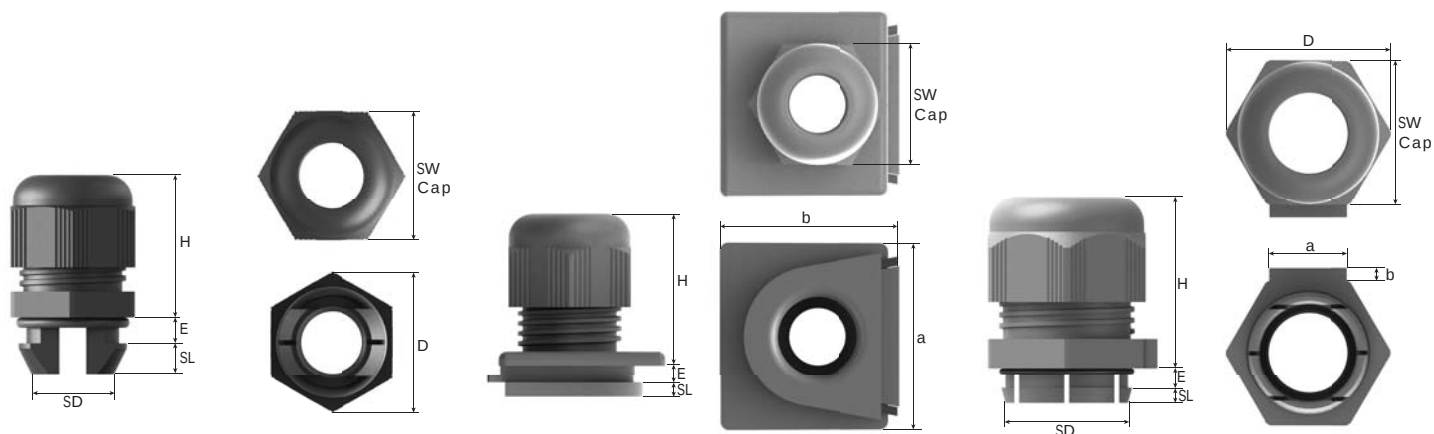
Quick Fitting Glands Polyamide

Cable glands without thread, special designs

- Specially designed cable glands.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	PA 6 (Polyamide 6)	
	Cap	PA 6 (Polyamide 6)	
	Seal	CR (Chloroprene Rubber)	
	O-Ring	NBR	
Protection Class		IP 68	
Flammability		V2 according to UL94	
Operating Temperature	Permanent	-20 °C to +100 °C	Intermittent
			-30 °C to +150 °C
Cable Type		Non armoured	
Accessories		• Dome plugs	
		• Reducing seals	
		• Flat cable seals	
		• Multihole seals	
Remarks	• Using O-rings, the available wall thickness is reduced (design type A and C)		
	• Design type B: ask for special cut-out data.		



A

B

C

w/o thread

Size	Clamping Range Ø min-max mm	Snap Length SL mm	Wall Thickness E mm	Snap Diameter SD mm	Spanner Width		Outer Diameter D mm	max. Height H mm	Body Length		Design Type	Part Number			Packing Unit
					SW Cap mm	SW Body mm			a mm	b mm		RAL 7035 light grey	RAL 7001 grey	RAL 9005 black	
9	2,0 - 6,0	8,0	3,7	12,25	19	19	21,7	25,0	-	-	A	QFR-12	QFR-02	QFR-22	100
	4,0 - 8,0											QF-12	QF-02	QF-22	
16	7,0 - 12,0	5,7	3,2	-	27	-	30,9	30,1	28,2	30,4	B	QFVR-15	QFVR-05	QFVR-25	50
	10,0 - 14,0											QFV-15	QFV-05	QFV-25	
21	9,0 - 16,0	7,5	4,3	26	33	33	37,2	38,0	18,0	2,8	C	QFR-16	QFR-06	QFR-26	25
	13,0 - 18,0											QF-16	QF-06	QF-26	

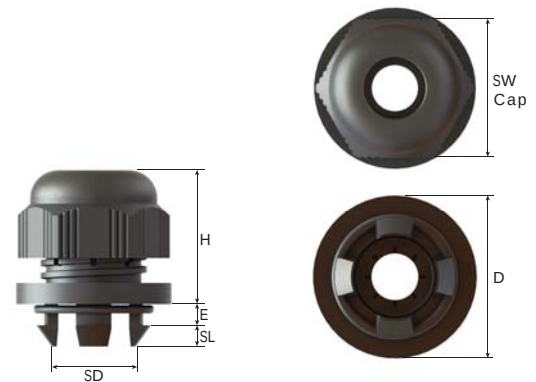


Polyamide cable glands for limited space applications

- For standard industrial applications.
- Plastic cable glands for limited space applications.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	PA 6 (Polyamide 6)	
	Cap	PA 6 (Polyamide 6)	
	Seal	CR (Chloroprene Rubber)	
	O-Ring	NBR	
Protection Class		IP 55	
Flammability		V2 according to UL94	
Operating Temperature	Permanent	-20 °C to +100 °C	Intermittent
			-30 °C to +150 °C
Cable Type		Non armoured	
Accessories		• Dome plugs • Gaskets	



wall thickness (E) : 2,35 mm

Size	Clamping Range	Snap Length SL mm	Wall Thickness E mm	Snap Diameter SD mm	Spanner Width		Outer Diameter D mm	max. Height H mm	Part Number	Packing Unit
	Ø min-max mm				SW Cap mm	SW Body mm				
9	4,0 - 8,0	8,0	2,35	11,2	19	-	22,0	29,7	BSND-22(QF)	100
11	5,0 - 10,0	8,0	2,35	18,6	22	-	25,0	22,0	BSND-23(QF)	50

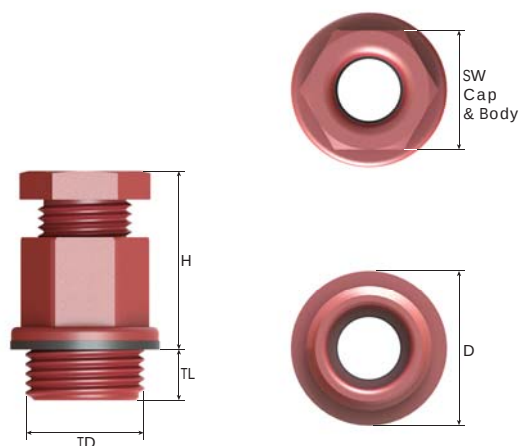
Conus Glands Metric Version, Polyamide

Polyamide cable glands, DIN-type

- For standard industrial applications.
- "DIN"-type design and clamping.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	PA 6 (Polyamide 6)	
	Cap	PA 6 (Polyamide 6)	
	Seal	CR (Chloroprene Rubber)	
	Gasket	PA 6 (Polyamide 6)	
Protection Class		IP 68	
Flammability		V2 according to UL94	
Operating Temperature	Permanent	-20 °C to +100 °C	Intermittent
			-30 °C to +150 °C
Thread Type		• Metric EN 60423	
Cable Type		Non armoured	
Accessories		• Lock nuts • Gaskets	
Remarks		• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Diameter D mm	max. Height H mm	Part Number			Packing Unit
				SW Cap mm	SW Body mm			RAL 9005 black	RAL 9003 white	RAL 3020 red	
M20x1,5	7,0 - 10,0	10,0	20,0	19	19	24,7	27,0	BDM-22	BDM-42	BDM-52	100
	10,0 - 13,0			23	23	27,1	30,0	BDM-23	BDM-43	BDM-53	

Conus Glands PG Version, Polyamide

Industrial Application

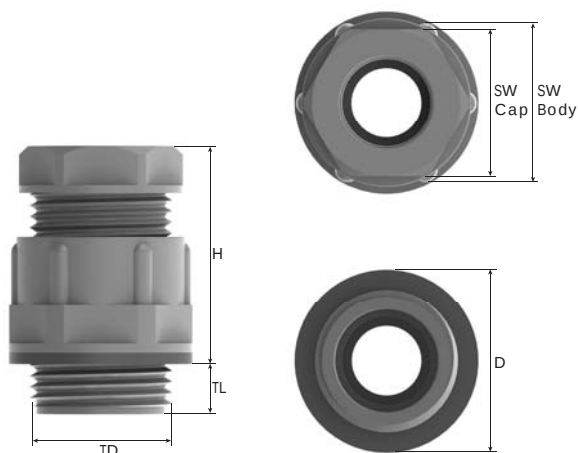


Polyamide cable glands, DIN-type

- For standard industrial applications.
- "DIN"-type design and clamping.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	PA 6 (Polyamide 6)
	Cap	PA 6 (Polyamide 6)
	Seal	TPE
	Gasket	PP
Protection Class		IP 54
Flammability		V2 according to UL94
Operating Temperature		Permanent
		-20 °C to +80 °C
Thread Type		• PG DIN 40430
Cable Type		Non armoured
Accessories		• Lock nuts
		• Gaskets
Remarks		• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.



Thread Type **PG** acc. to DIN 40430

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Diameter D mm	max. Height H mm	Part Number	Packing Unit
				SW Cap mm	SW Body mm			RAL 7035 light grey	
PG 7	3,0 - 6,0	8,0	12,5	13	15	16,1	22,0	BD-11	100
PG 9	4,5 - 7,0	8,0	15,2	16	19	20,5	23,0	BD-12	100
PG 11	6,0 - 9,0	8,0	18,6	19	22	24,0	25,0	BD-13	100
PG 13,5	9,0 - 12,0	9,0	20,4	21	24	26,2	26,0	BD-14	100
PG 16	11,0 - 14,0	10,0	22,5	23	27	29,4	28,0	BD-15	100
PG 21	14,0 - 18,0	11,0	28,3	30	33	36,3	32,0	BD-16	50
PG 29	18,0 - 25,0	11,0	37,0	40	42	45,5	36,0	BD-17	25
PG 36	25,0 - 32,0	13,0	47,0	49	53	57,8	47,0	BD-18	10

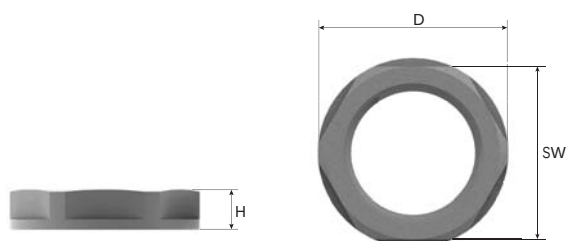
Lock Nuts, Flanged Polyamide

Lock nuts, flanged

- For standard industrial applications.
- Safe fastening of cable glands.
- Flanged design offers safe sealing.

Technical Details

Material	PA 6 GF 30 (Polyamide 6, 30% Glass Fiber Reinforced)	
Flammability	HB according to UL94	
Operating Temperature	Permanent	Intermittent
	-20 °C to +100 °C	-30 °C to +150 °C
Thread Type	• Metric EN 60423	
	• NPT ANSI B1.20.1	
	• PG DIN 40430	
	• Gas ISO 228	



Thread Type **METRIC** acc. to EN 60423

Size	Spanner Width SW mm		Outer Diameter D mm		max. Height H mm		RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit
M12x1,5	18		19,5		5,0		BML-1S	BML-0S	BML-2S	100
M16x1,5	22		24,2		5,0		BML-11	BML-01	BML-21	50
M20x1,5	26		28,6		6,0		BML-12	BML-02	BML-22	50
M25x1,5	32		35,0		6,0		BML-13	BML-03	BML-23	50
M32x1,5	41		46,1		7,0		BML-14	BML-04	BML-24	25
M40x1,5	50		55,3		7,0		BML-15	BML-05	BML-25	10
M50x1,5	60		66,1		8,0		BML-16	BML-06	BML-26	10
M63x1,5	75		82,5		8,0		BML-17	BML-07	BML-27	10
M75x2,0	85		94,0		15,0		BML-18	BML-08	BML-28	5

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

Size	Spanner Width SW		Outer Diameter D		max. Height H		RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit
	mm	inch	mm	inch	mm	inch				
NPT 3/8"	22	0.866	25,0	0.984	7,0	0.276	BPL-11	BPL-01	BPL-21	50
NPT 1/2"	27	1.063	30,5	1.201	7,0	0.276	BPL-12	BPL-02	BPL-22	50
NPT 3/4"	33	1.299	37,5	1.476	7,0	0.276	BPL-13	BPL-03	BPL-23	25
NPT 1"	41	1.614	46,5	1.831	7,0	0.276	BPL-14	BPL-04	BPL-24	20

Thread Type **PG** acc. to DIN 40430

Size	Spanner Width SW mm		Outer Diameter D mm		max. Height H mm		RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit
PG 7	19		21,0		5,0		BL-11	BL-01	BL-21	50
PG 9	22		24,0		5,0		BL-12	BL-02	BL-22	50
PG 11	24		26,0		5,0		BL-13	BL-03	BL-23	50
PG 13,5	27		29,0		6,0		BL-14	BL-04	BL-24	50
PG 16	30		33,0		6,0		BL-15	BL-05	BL-25	50
PG 21	36		39,0		7,0		BL-16	BL-06	BL-26	25
PG 29	46		50,0		7,0		BL-17	BL-07	BL-27	20
PG 36	60		66,0		8,0		BL-18	BL-08	BL-28	10
PG 42	65		73,0		8,0		BL-19	BL-09	BL-29	10
PG 48	70		78,0		8,0		BL-20	BL-10	BL-30	10

Thread Type **G** acc. to DIN ISO 228

Size	Spanner Width SW mm		Outer Diameter D mm		max. Height H mm		RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit
G 3/8"	22		25,0		5,0		BFL-11	BFL-01	BFL-21	50
G 1/2"	27		30,5		5,0		BFL-12	BFL-02	BFL-22	50
G 3/4"	33		37,5		5,0		BFL-13	BFL-03	BFL-23	25
G 1"	42		47,5		6,0		BFL-14	BFL-04	BFL-24	20

Lock Nuts, without Flange Polyamide

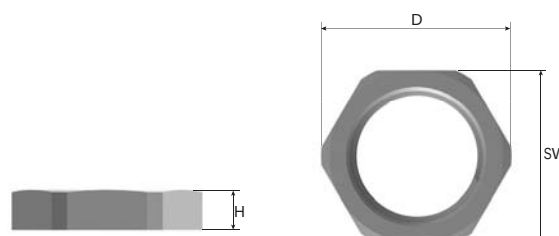


Lock nuts, without flange

- For standard industrial applications.
- Safe fastening of cable glands.

Technical Details

Material	PA 6 GF 30 (Polyamide 6, 30% Glass Fiber Reinforced)	
Flammability	HB according to UL94	
Operating Temperature	Permanent	Intermittent
	-20 °C to +100 °C	-30 °C to +150 °C
Thread Type	• Metric EN 60423 • PG DIN 40430	



Thread Type **METRIC** acc. to EN 60423

Size	Spanner Width SW mm	Outer Diameter D mm	max. Height H mm	RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit
M12x1,5	18	19,5	5,0	BLMN-1S	BLMN-0S	BLMN-2S	100
M16x1,5	22	24,2	5,0	BLMN-11	BLMN-01	BLMN-21	50
M20x1,5	26	28,6	6,0	BLMN-12	BLMN-02	BLMN-22	50
M25x1,5	32	35,0	6,0	BLMN-13	BLMN-03	BLMN-23	50
M32x1,5	41	46,1	7,0	BLMN-14	BLMN-04	BLMN-24	25
M40x1,5	50	55,3	7,0	BLMN-15	BLMN-05	BLMN-25	10
M50x1,5	60	66,1	8,0	BLMN-16	BLMN-06	BLMN-26	10
M63x1,5	75	82,5	8,0	BLMN-17	BLMN-07	BLMN-27	10

Thread Type **PG** acc. to DIN 40430

Size	Spanner Width SW mm	Outer Diameter D mm	max. Height H mm	RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit
PG 7	19	21,0	5,0	BLN-11	BLN-01	BLN-21	100
PG 9	22	24,0	5,0	BLN-12	BLN-02	BLN-22	100
PG 11	24	26,0	5,0	BLN-13	BLN-03	BLN-23	50
PG 13,5	27	29,0	6,0	BLN-14	BLN-04	BLN-24	50
PG 16	30	33,0	6,0	BLN-15	BLN-05	BLN-25	50
PG 21	36	39,0	7,0	BLN-16	BLN-06	BLN-26	25
PG 29	46	50,0	7,0	BLN-17	BLN-07	BLN-27	25
PG 36	60	66,0	8,0	BLN-18	BLN-08	BLN-28	25
PG 42	65	72,0	8,0	BLN-19	BLN-09	BLN-29	10
PG 48	70	78,0	8,0	BLN-20	BLN-10	BLN-30	10

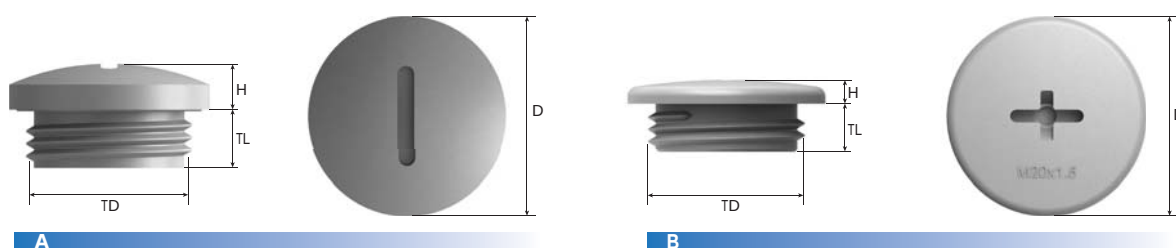
Plugs, Round Polyamide

Plugs, round

- For standard industrial applications.
- Sealing of housing hole when no cable gland is used.
- Slotted version to fasten with screw driver.
- Crossed version for Phillips screw driver.

Technical Details

Technical Details		
Material	Body	PA 6 (Polyamide 6)
	O-ring	CR (Chloroprene Rubber)
	Gasket	CR (Chloroprene Rubber)
Flammability	V2 according to UL94	
Operating Temperature	Permanent	Intermittent
	-20 °C to +100 °C	-30 °C to +150 °C
Thread Type	• Metric EN 60423 • PG DIN 40430	
Accessories	• Lock nuts	
Remarks	• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	



Thread Type METRIC acc. to EN 60423

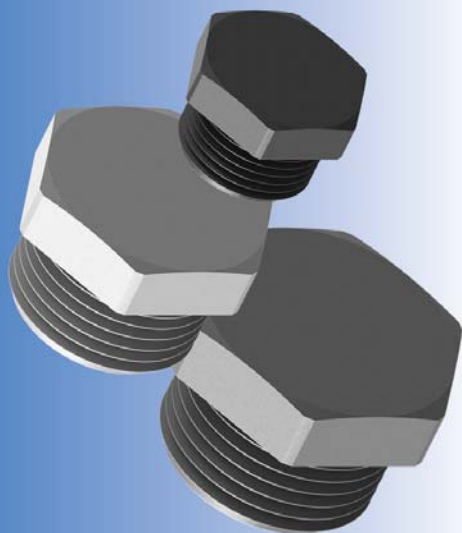
Size	Thread Length TL mm	Thread Ø TD mm	Outer Ø D mm	max. Height H mm	RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Plug Type	Sealing Type	Packing Unit
M12x1,5	6,0	12,0	15,0	3,0	BMBS-1S(Y+)	BMBS-0S(Y+)	BMBS-2S(Y+)	B	O-ring	100
				4,5	BMBS-1S(Y)	BMBS-0S(Y)	BMBS-2S(Y)	A	O-ring	
M16x1,5	6,0	16,0	19,5	3,0	BMBS-11(Y+)	BMBS-01(Y+)	BMBS-21(Y+)	B	O-ring	50
	7,0			4,5	BMBS-11(Y)	BMBS-01(Y)	BMBS-21(Y)	A	O-ring	
	10,0			3,0	BMBS-11(Y+)+TL10	BMBS-01(Y+)+TL10	BMBS-21(Y+)+TL10	B	O-ring	
M20x1,5	6,0	20,0	25,0	3,0	BMBS-12(Y+)	BMBS-02(Y+)	BMBS-22(Y+)	B	O-ring	50
	7,0			5,5	BMBS-12(Y)	BMBS-02(Y)	BMBS-22(Y)	A	O-ring	
	10,0			3,0	BMBS-12(Y+)+TL10	BMBS-02(Y+)+TL10	BMBS-22(Y+)+TL10	B	O-ring	
M25x1,5	6,0	25,0	30,0	4,0	BMBS-13(Y+)	BMBS-03(Y+)	BMBS-23(Y+)	B	O-ring	50
	10,0			5,0	BMBS-13(Y)	BMBS-03(Y)	BMBS-23(Y)	A	O-ring	
M32x1,5	8,0	32,0	37,0	4,0	BMBS-14(Y+)	BMBS-04(Y+)	BMBS-24(Y+)	B	O-ring	25
				6,0	BMBS-14(Y)	BMBS-04(Y)	BMBS-24(Y)	A	O-ring	
M40x1,5	6,0	40,0	46,5	6,5	BMBS-15(Y)	BMBS-05(Y)	BMBS-25(Y)	A	O-ring	10
	8,0			4,3	BMBS-15(Y+)	BMBS-05(Y+)	BMBS-25(Y+)	B	Gasket	
M50x1,5	10,0	50,0	56,0	4,0	BMBS-16(Y)	BMBS-06(Y)	BMBS-26(Y)	A	O-ring	10
					BMBS-16(Y+)	BMBS-06(Y+)	BMBS-26(Y+)	B	Gasket	

Thread Type PG acc. to DIN 40430

Size	Thread Length TL mm	Thread Ø TD mm	Outer Ø D mm	max. Height H mm	RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Plug Type	Sealing Type	Packing Unit
PG 7	6,0	12,5	15,0	2,0	BBS-11(Y)	BBS-01(Y)	BBS-21(Y)	A	O-ring	100
				3,0	BBS-11(Y+)	BBS-01(Y+)	BBS-21(Y+)	B	O-ring	
PG 9	6,0	15,2	19,0	2,5	BBS-12(Y)	BBS-02(Y)	BBS-22(Y)	A	O-ring	100
				3,0	BBS-12(Y+)	BBS-02(Y+)	BBS-22(Y+)	B	O-ring	
PG 11	6,0	18,6	22,0	2,5	BBS-13(Y)	BBS-03(Y)	BBS-23(Y)	A	O-ring	50
				3,0	BBS-13(Y+)	BBS-03(Y+)	BBS-23(Y+)	B	O-ring	
PG 13,5	6,0	20,4	25,0	2,5	BBS-14(Y)	BBS-04(Y)	BBS-24(Y)	A	O-ring	50
				3,0	BBS-14(Y+)	BBS-04(Y+)	BBS-24(Y+)	B	O-ring	
PG 16	6,0	22,5	27,0	3,0	BBS-15(Y)	BBS-05(Y)	BBS-25(Y)	A	O-ring	50
				3,7	BBS-15(Y+)	BBS-05(Y+)	BBS-25(Y+)	B	O-ring	
PG 21	8,0	28,3	33,0	4,0	BBS-16(Y)	BBS-06(Y)	BBS-26(Y)	A	O-ring	25
				3,7	BBS-16(Y+)	BBS-06(Y+)	BBS-26(Y+)	B	O-ring	
PG 29	8,0	37,0	44,0	3,5	BBS-17(Y)	BBS-07(Y)	BBS-27(Y)	A	O-ring	25
				5,0	BBS-17(Y+)	BBS-07(Y+)	BBS-27(Y+)	B	Gasket	
PG 36	10,0	47,0	55,0	4,0	BBS-18(Y)	BBS-08(Y)	BBS-28(Y)	A	O-ring	25
				5,0	BBS-18(Y+)	BBS-08(Y+)	BBS-28(Y+)	B	Gasket	

Plugs, Hexagonal Polyamide

Industrial Application

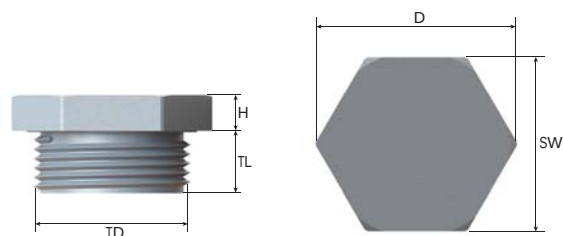


Plugs, hexagonal

- For standard industrial applications.
- Sealing of housing hole when no cable gland is used.
- Hexagonal version to fasten with spanner.

Technical Details

Material	PA 6 (Polyamide 6)	
Flammability	V2 according to UL94	
Operating Temperature	Permanent	Intermittent
	-20 °C to +100 °C	-30 °C to +150 °C
Thread Type	• Metric EN 60423	
Accessories	• Lock nuts • Gaskets	
Remarks	• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	



Thread Type **METRIC** acc. to EN 60423

Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer Ø D mm	max. Height H mm	RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit
M12x1,5	10	12,0	15	17,0	5,0	BMBS-1S(A)	BMBS-0S(A)	BMBS-2S(A)	100
M16x1,5	12	16,0	19	22,0	4,3	BMBS-11(A)TL12	BMBS-01(A)TL12	BMBS-21(A)TL12	50
	15					BMBS-11(A)TL15	BMBS-01(A)TL15	BMBS-21(A)TL15	
M20x1,5	11	20,0	23	26,0	6,0	BMBS-12(A)TL11	BMBS-02(A)TL11	BMBS-22(A)TL11	50
	15					BMBS-12(A)TL15	BMBS-02(A)TL15	BMBS-22(A)TL15	
M25x1,5	10	25,0	28	32,0	5,8	BMBS-13(A)TL10	BMBS-03(A)TL10	BMBS-23(A)TL10	25
	15					BMBS-13(A)TL15	BMBS-03(A)TL15	BMBS-23(A)TL15	
M32x1,5	15	32,0	36	41,5	7,8	BMBS-14(A)	BMBS-04(A)	BMBS-24(A)	25
M40x1,5	18	40,0	46	53,0	8,5	BMBS-15(A)	BMBS-05(A)	BMBS-25(A)	10
M50x1,5	18	50,0	55	63,5	9,5	BMBS-16(A)	BMBS-06(A)	BMBS-26(A)	10
M63x1,5	18	63,0	69	80,0	9,5	BMBS-17(A)	BMBS-07(A)	BMBS-27(A)	10

Modular Plugs Polyamide

Polyamide plugs, front-side assembly, without thread

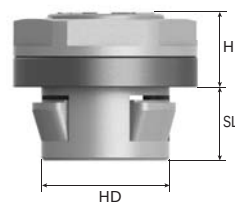
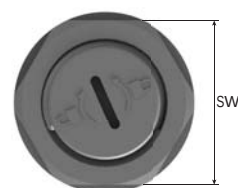
- For standard industrial applications.
- Snap-in assembly for non-threaded holes.
- Lock nuts have threads acc. to EN 60423 (metric) and acc. to DIN 40430 (PG).
- Replacing the modular plug: lock nut can be used for fixing the cable gland.

Technical Details

Technical Details		
Material	Body	PA 6 (Polyamide 6)
	Gasket	CR (Chloroprene Rubber)
	Lock Nut	PA 6 GF 30 (Polyamide 6, 30% Glass Fiber Reinforced)
Flammability	V2 according to UL94	
Protection Class	IP 68 - 5 Bar, 30 min	
Operating Temperature	Permanent	Intermittent
	-20 °C to +100 °C	-30 °C to +150 °C
Remarks	Other colours on request: • RAL 5015 (blue) • RAL 9003 (white) • RAL 3020 (red)	

Approvals

	Certificate Number	Standards
	SERCOVAM RES 107572	acc. to UL514B §8.26.7



without thread - wall thickness : 0,5 - 2,0 mm

Size	Snap Length SL mm	Snap Ø SD mm	Hole Ø HD mm	Spanner Width SW mm	Outer Ø D mm	max. Height H mm	Part Number			Packing Unit
							RAL 7035 light grey	RAL 7001 grey	RAL 9005 black	
M12	9,0	12,6	12,2 - 12,4	18	19,7	10,5	BMPL-1S	BMPL-0S	BMPL-2S	50
M20	9,0	20,6	20,2 - 20,4	26	28,8	12,0	BMPL-12	BMPL-02	BMPL-22	30
M32	9,0	32,6	32,2 - 32,4	41	46,3	14,0	BMPL-14	BMPL-04	BMPL-24	20
PG 16	9,0	22,8	22,7 - 22,9	30	33,2	12,0	BSPL-15	BSPL-05	BSPL-25	30

Dome Plugs Polyamide

Industrial Application

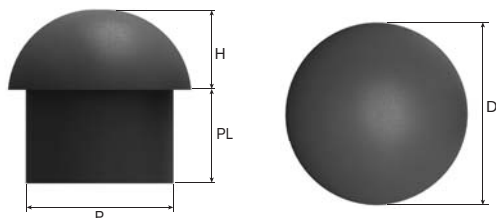


Plugs for sealing cable insert

- For standard industrial applications.
- Sealing of cable glands when no cable is used.

Technical Details

Material	PA 6 (Polyamide 6)	
Flammability	V2 acc. to UL94	
Operating Temperature	Permanent	Intermittend
	-20 °C to +100 °C	-30 °C to +150 °C



Dome plugs

Size	Plug Ø P mm	Dome Ø D mm	Plug Length PL mm	max. Height H mm	Dome Plug fits into Clamping Range Ø min-max				RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit				
					Standard Seal mm	Reducing Seal mm	Double Seal mm	Outer Seal mm								
9	4,0	9,2	12,0	4,0	3,0 - 6,5	2,0 - 5,0	2,0 - 4,0	3,0 - 6,5	BDP-09-11	BDP-09-01	BDP-09-21	100				
	6,4								BDP-09-12	BDP-09-02	BDP-09-22					
11	5,0	10,5	14,0	5,0	4,0 - 8,0	2,0 - 6,0	3,0 - 5,0	4,0 - 8,0	BDP-11-11	BDP-11-01	BDP-11-21	50				
	8,0		13,7	4,7					BDP-11-12	BDP-11-02	BDP-11-22					
13	7,0	13,3	15,0	5,7	5,0 - 10,0	3,0 - 7,0	3,0 - 7,0	5,0 - 10,0	BDP-13-11	BDP-13-01	BDP-13-21	50				
	9,7		9,0	5,3					BDP-13-12	BDP-13-02	BDP-13-22					
			15,0	5,7					BDP-13-12S	BDP-13-02S	BDP-13-22S					
16	7,0	15,8	14,0	7,5	6,0 - 12,0 7,0 - 13,0	5,0 - 9,0	4,0 - 7,0 5,0 - 8,5	6,0 - 12,0 7,0 - 13,0	BDP-16-10	BDP-16-00	BDP-16-20	50				
	8,5		13,0	7,7					BDP-16-11	BDP-16-01	BDP-16-21					
	12,0								BDP-16-12	BDP-16-02	BDP-16-22					
18	13,0	18,0	14,0	7,5	10,0 - 14,0	7,0 - 12,0	7,0 - 11,0	10,0 - 14,0	BDP-16-13	BDP-16-03	BDP-16-23	50				
	11,0		13,5	8,5					BDP-18-11	BDP-18-01	BDP-18-21					
	13,6								BDP-18-12	BDP-18-02	BDP-18-22					
20	13,0	20,0	14,5	7,0	11,0 - 17,0	9,0 - 13,0	8,0 - 13,0	11,0 - 17,0	BDP-20-11	BDP-20-01	BDP-20-21	50				
	16,4								BDP-20-12	BDP-20-02	BDP-20-22					
22	14,0	22,0	14,0	9,5	13,0 - 18,0	11,0 - 15,0	9,0 - 14,0	13,0 - 18,0	BDP-22-11	BDP-22-01	BDP-22-21	25				
	17,8								BDP-22-12	BDP-22-02	BDP-22-22					
24	16,1	24,0	15,5	9,0	15,0 - 21,0	9,0 - 16,0	11,0 - 16,0	15,0 - 21,0	BDP-24-11	BDP-24-01	BDP-24-21	25				
	20,4								BDP-24-12	BDP-24-02	BDP-24-22					
29	20,3	28,5	15,0	9,7	18,0 - 25,0	12,0 - 20,0	13,0 - 20,0	18,0 - 25,0	BDP-29-11	BDP-29-01	BDP-29-21	25				
	25,0								BDP-29-12	BDP-29-02	BDP-29-22					
32	21,1	31,5	15,8	9,2	19,0 - 28,0	16,0 - 23,0	16,0 - 21,0	19,0 - 28,0	BDP-32-11	BDP-32-01	BDP-32-21	10				
	27,5								BDP-32-12	BDP-32-02	BDP-32-22					
37	26,3	36,8	17,0	10,7	22,0 - 32,0	20,0 - 26,0	20,0 - 26,0	22,0 - 32,0	BDP-37-11	BDP-37-01	BDP-37-21	10				
	31,8								BDP-37-12	BDP-37-02	BDP-37-22					
45	31,2	43,3	20,2	11,9	30,0 - 38,0	25,0 - 31,0	21,0 - 31,0	30,0 - 38,0	BDP-45-11	BDP-45-01	BDP-45-21	10				
	38,0								BDP-45-12	BDP-45-02	BDP-45-22					
52	35,2	51,0	22,5	16,0	34,0 - 44,0	29,0 - 35,0	27,0 - 35,0	34,0 - 44,0	BDP-52-11	BDP-52-01	BDP-52-21	10				
	44,2								BDP-52-12	BDP-52-02	BDP-52-22					

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Gaskets



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Junction Boxes



Compressor



Voltage Cabinet



Pipe Lamp



Data Transmission



Plastic and Metal Enclosures



Electro Powered Cranes



Inverters



Plug Connectors



Spring Operated Brakes



Transducers



Machine Tools



Metal CABLE GLAND for Industrial Application



Glands

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Metal ACCESSORIES for Industrial Application



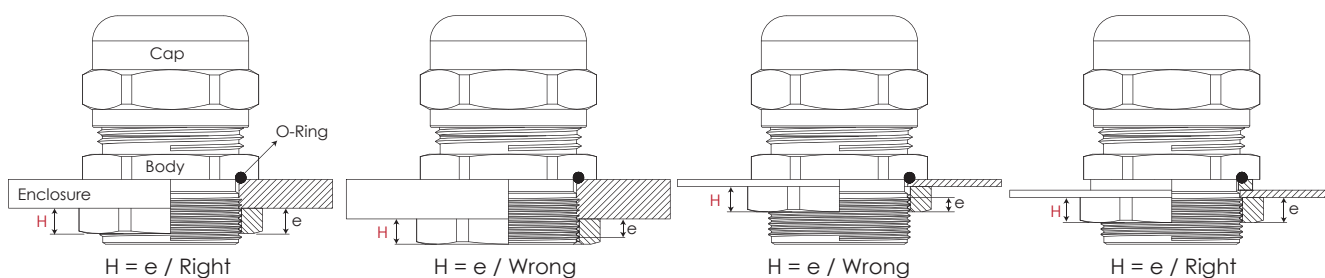
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Cable Gland Assembling Instruction

Assembling with lock nut on **non threaded** enclosure

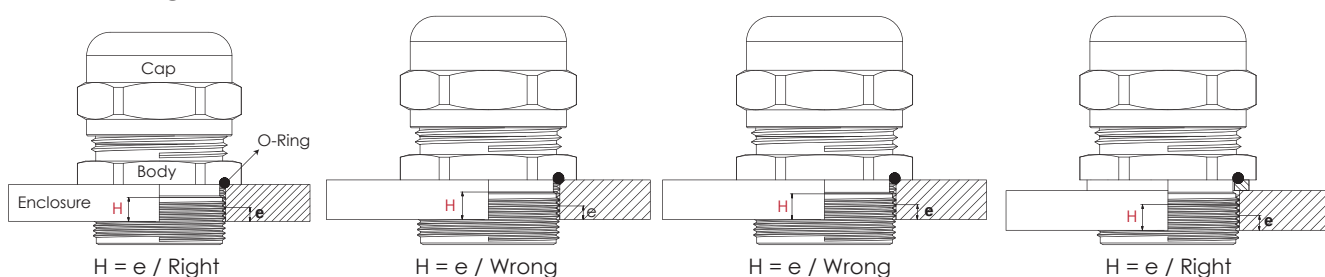


Relevant Lock Nut Thickness

Size	H (±0,5 mm)
M12 Pg 7 to Pg 9	2,8
M16 Pg 11 to Pg 16	3,0
M20 Pg 21	3,5
M25 Pg 29	4,0
M40 to M50 Pg 36 to Pg 42	5,0
- Pg 48	5,5
M63 -	6,0



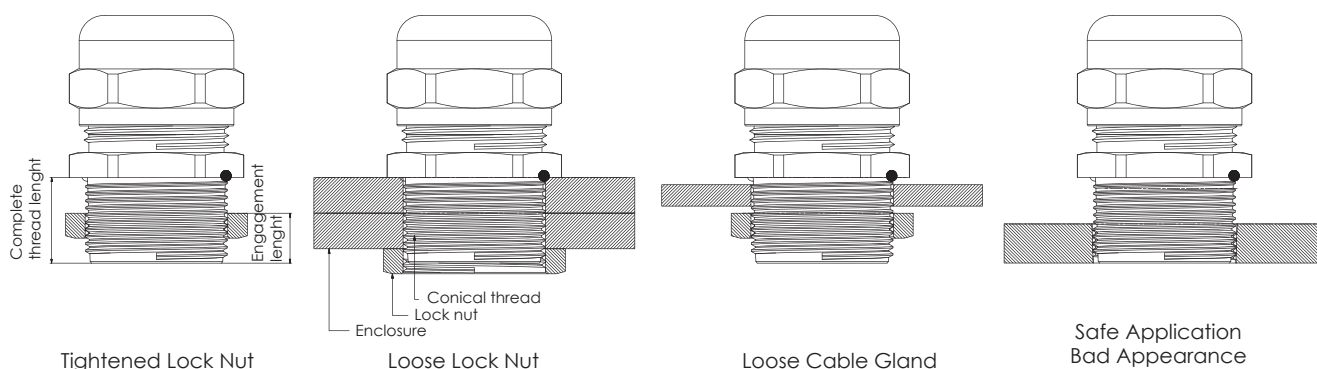
Assembling with lock nut on **threaded** enclosure



Complementary Instruction

- The engaged thread length "e" must be equal or longer than relevant lock nut thickness "H"
- The thread dimensions and tolerances on threaded enclosures must be convenient with the relevant thread standard.
- Firstly, the gland body must be mounted to the enclosure.
- The body or the lock nut must be tightened according to torque indicated on the instruction chart.
- As much as possible double wrench have to be used for non threaded enclosures.
- For cable assembling the cap must be tightened according to torque indicated on the instruction chart.
- During the cable assembling or disassembling gland body must be keep fixed. Double wrench have to be used for this purpose.

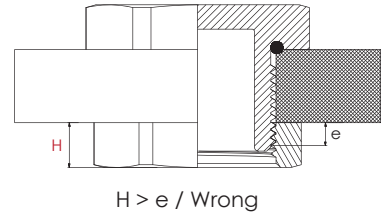
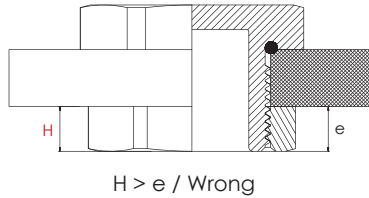
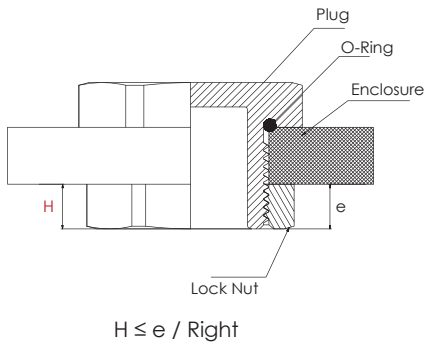
Npt threads application



Thread standard	ANSI B1.20.1
Thread name	National Pipe Threads
Thread definition	NPT is an US Standard for "Tapered Threads" used in threaded pipes and fittings. The thread can provide an effective seal for liquids, gases, hydraulic, fluids and steam. They are used generally for steel, brass, cast-iron, PTFE, PVC, PA materials.
Other Appellations	MPT : Male Pipe Threads FPT : Female Pipe Threads
Applications	The NPT threads are always used for male and female pipe / fitting joints. Regarding the conicity of the thread they are not suitable for lock-nut applications.
"Cable Glands" and "Electrical Fitting" applications	The NPT threaded cable glands or male threaded electrical fittings as reducers, blind stops etc must used a NPT female threaded enclosures or cabinets. The usage of lock nuts for NPT threads is not a recommended application. According the relevant standard, the male and female threads have a defined engagement length. When we use a lock nut (even if is NPT threaded), we know that this one will be blocked, after the defined length portion of the male thread. In result we can not be sure that this blocking distance will be suitable for the wall thickness of the enclosure or cabinet. If we are using an equivalent parallel thread lock nut the result will be worst because the male and female thread, will not be in complete contact.

Plug Assembling Instruction

Assembling with lock nut on **non threaded** enclosure

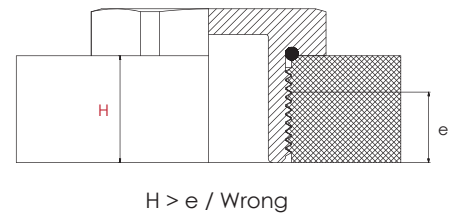
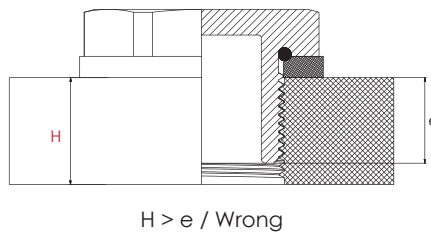
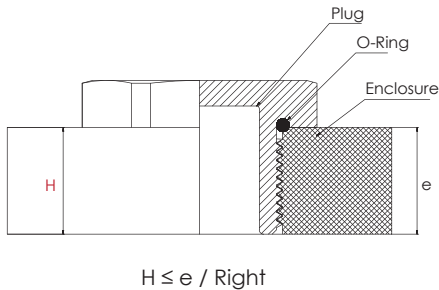


Relevant Lock Nut Thickness

Size	H (±0,5 mm)
M12 Pg 7 to Pg 9	2,8
M16 Pg 11 to Pg 16	3,0
M20 Pg 21	3,5
M25 Pg 29	4,0
M40 to M50 Pg 36 to Pg 42	5,0
- Pg 48	5,5
M63 -	6,0



Assembling with lock nut on **threaded** enclosure



Complementary Instructions:

- The engaged thread length "e" must be equal or longer than relevant lock nut thickness "H"
- The thread dimensions and tolerances on threaded enclosures must be convenient with the relevant thread standard.
- Firstly, the blind stop must be mounted to the enclosure.
- The blind stop or the lock nut must be tightened according to torque indicated on the instruction chart.
- As much as possible double tool have to be used for non threaded enclosures.(Screw driver+wrench)

Standard Glands with Thread, Brass

Brass cable glands with lamellar clamping

- For metal machines and housings.
- For standard industrial applications in harsh environments.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

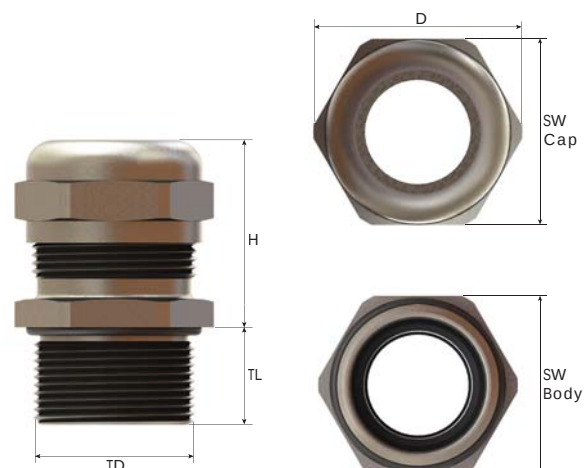
Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	Clamping Insert	PA 6 (Polyamide 6)	
	O-Ring	NBR	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-40 °C to +150 °C
Thread Type		• Metric EN 60423 • NPT ANSI B1.20.1 • PG DIN 40430 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Lock nuts • Dome plugs • Reducing seals • Flat cable seals • Multihole seals • Gaskets	
Remarks		• Different sealing types available. • Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet.	
Approvals			
		Certificate Number	Standards
		40040034	acc. to DIN EN 62444
		E199260	acc. to UL514
Some approvals do not cover all sizes. For more approvals: see our webpage.			

Some approvals do not cover all sizes. For more approvals: see our webpage.



Standard Glands with Thread, Brass



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Outer Seal Ø min-max mm	Double Seal Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
M12x1,5	2,0 - 5,0		6,0	12	14	14	15,5	22,0	BMBD-0S	50
			12,0						BMBE-0SR	
	3,0 - 6,5		6,0						BMBC-ES	
M16x1,5			12,0	16	17	18	20,0	23,0	BMBC-ES	50
	2,0 - 6,0		7,0						BMBD-01	
			12,0						BMBE-01R	
	3,0 - 7,0		7,0		20	20	22,0	28,5	BMBC-01	
			12,0						BMBE-01	
	4,0 - 8,0		7,0						BMBC-01	
M20x1,5			12,0	20	17	18	20,0	23,0	BMBC-01	50
	5,0 - 10,0		7,0						BMBE-01	
			12,0						BMBC-01	
	5,0 - 9,0		8,0		22	22	24,5	26,5	BMBD-02	
			12,0						BMBC-02R	
	6,0 - 12,0		8,0						BMBC-02	
M25x1,5			12,0	25	24	24	26,8	28,0	BMBC-02S	25
	7,0 - 13,0		8,0						BMBC-02S	
	10,0 - 14,0		8,0						BMBC-02S	
			12,0		24	27	30,0	28,0	BMBD-03	
	7,0 - 12,0		8,0						BMBC-03R	
			12,0						BMBC-03S	
	9,0 - 16,0		8,0		30	30	33,0	32,0	BMBC-03SR	
			12,0						BMBC-03S	
	10,0 - 14,0		8,0						BMBC-03	
			12,0		24	27	29,8	27,7	BMBC-03	
	11,0 - 17,0		8,0						BMBC-03	
	13,0 - 18,0		8,0						BMBC-03	
M32x1,5			12,0	32	27	27	30,0	32,5	BMBC-03S	25
			12,0						BMBC-03S	
			12,0						BMBC-03S	
	9,0 - 16,0		9,0		30	34	37,5	33,0	BMBD-04	
			15,0						BMBC-04R	
	12,0 - 20,0		9,0						BMBC-04S	
M40x1,5			15,0	40	30	34	37,5	33,0	BMBC-04SR	10
	13,0 - 18,0		9,0						BMBC-04	
			15,0						BMBC-04	
	15,0 - 21,0		8,0		34	34	37,0	36,0	BMBC-04	
			15,0						BMBC-04	
	18,0 - 25,0		9,0						BMBC-04	
M50x1,5			15,0	50	40	40	44,5	44,0	BMBC-04S	5
			15,0						BMBC-04S	
			15,0						BMBC-04S	
	12,0 - 20,0		9,0		43	43	48,4	38,0	BMBD-05	
			15,0						BMBC-05R	
	18,0 - 25,0		9,0						BMBC-05	
M63x1,5			15,0	63	43	43	48,4	43,5	BMBC-05	5
			15,0						BMBC-05	
			15,0						BMBC-05	
	16,0 - 23,0		9,0		50	50	55,5	52,4	BMBD-05	
			15,0						BMBC-05R	
	19,0 - 28,0		9,0						BMBC-05	
M63x1,5			15,0	63	50	50	55,5	52,4	BMBC-05	5
			15,0						BMBC-05	
			15,0						BMBC-05	
	22,0 - 32,0		9,0		58	58	64,0	52,0	BMBD-06	
			15,0						BMBC-06R	
	27,0 - 38,0		9,0						BMBC-06	
M63x1,5			15,0	63	64	68	75,0	52,8	BMBC-06	5
			15,0						BMBC-06	
			15,0						BMBC-06	
	29,0 - 35,0		10,0		75	75	83,0	50,0	BMBC-06S	
			14,0						BMBC-06S	
			18,0						BMBC-06S	
M63x1,5			18,0	63	75	75	83,0	50,0	BMBC-06S	5
			18,0						BMBC-06S	
			18,0						BMBC-06S	
	34,0 - 44,0		10,0		75	75	83,0	50,0	BMBC-06S	
			14,0						BMBC-06S	
			18,0						BMBC-06S	
M63x1,5			18,0	63	75	75	83,0	50,0	BMBC-06S	5
			18,0						BMBC-06S	
			18,0						BMBC-06S	
	37,0 - 53,0		10,0		75	75	83,0	50,0	BMBC-06S	
			18,0						BMBC-06S	
			18,0						BMBC-06S	

Standard Glands with Thread, Brass

Brass cable glands with lamellar clamping

- For metal machines and housings.
- For standard industrial applications in harsh environments.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

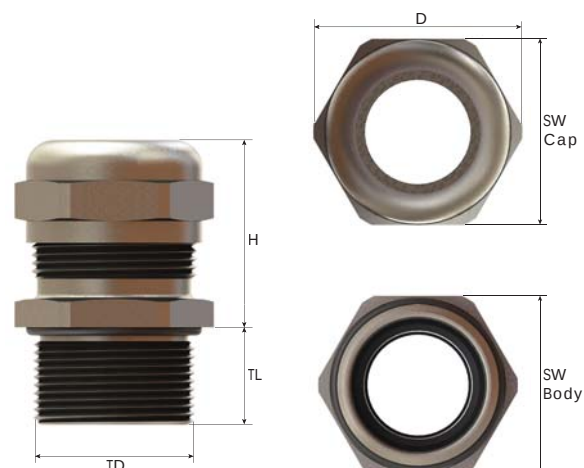
Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	Clamping Insert	PA 6 (Polyamide 6)	
	O-Ring	NBR	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-40 °C to +150 °C
Thread Type		• Metric EN 60423 • NPT ANSI B1.20.1 • PG DIN 40430 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Lock nuts • Dome plugs • Reducing seals • Flat cable seals • Multihole seals • Gaskets	
Remarks		• Different sealing types available. • Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet.	
Approvals			
		Certificate Number	Standards
		40040034	acc. to DIN EN 62444
		E199260	acc. to UL514
Some approvals do not cover all sizes. For more approvals: see our webpage.			

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Standard Glands with Thread, Brass

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

Size	Clamping Range Ø min-max		Thread Length TL		Thread Ø TD		Spanner Width				Outer Ø D		max. Height H		Part Number	Packing Unit
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
NPT 3/8"	2,0 - 6,0	0.079 - 0.236	11,5	0.453	17,14	0.673	17	0.669	19	0.748	21,0	0.827	23,0	0.906	BNBD-01	50
	3,0 - 7,0	0.118 - 0.276					20	0.787	20	0.787	22,0	0.866	29,5	1.161	BNBD-01S	
	4,0 - 8,0	0.157 - 0.315					17	0.669	19	0.748	21,0	0.827	23,0	0.906	BNBC-01	
	5,0 - 10,0	0.197 - 0.394					20	0.787	20	0.787	22,0	0.866	29,5	1.161	BNBC-01S	
NPT 1/2"	5,0 - 9,0	0.197 - 0.354	13,0	0.512	21,34	0.839	22	0.866	22	0.866	24,5	0.965	25,5	1.004	BNBD-02	50
	6,0 - 12,0	0.236 - 0.472					24	0.945	24	0.945	26,8	1.055	28,0	1.102	BNBC-02	
	7,0 - 12,0	0.276 - 0.472					24	0.945	24	0.945	26,8	1,055	28,0	1.102	BNBD-02S	25
	10,0 - 14,0	0.394 - 0.551													BNBC-02S	
NPT 3/4"	9,0 - 16,0	0.354 - 0.630	13,0	0.512	26,67	1.051	30	1.181	30	1.181	33,0	1.299	35,5	1.398	BNBD-03	25
	13,0 - 18,0	0.512 - 0.709					30	1.181	30	1.181	33,0	1.299	35,5	1.398	BNBC-03	
NPT 1"	12,0 - 20,0	0.472 - 0.787	13,0	0.512	33,4,0	1.315	40	1.575	43	1.693	48,5	1,909	43,0	1.693	BNBD-04	10
	18,0 - 25,0	0.709 - 0.984													BNBC-04	

Thread Type **PG** acc. to DIN 40430

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
PG 7	2,0 - 5,0	6,0	12,5	14	14	15,5	22,0	BSBD-01	50
	3,0 - 6,5	10,0						BSBE-01R	
		10,0						BSBC-01	
PG 9	2,0 - 6,0	6,0	15,2	17	17	18,9	23,5	BSBE-01	50
		10,0						BSBD-02	
		10,0						BSBE-02R	
	4,0 - 8,0	6,0						BSBC-02	
PG 11	3,0 - 7,0	6,0	18,6	20	20	22,0	26,0	BSBD-02	50
		10,0						BSBE-02R	
		10,0						BSBC-02	
	5,0 - 10,0	6,0						BSBE-02	
PG 13,5	5,0 - 9,0	6,5	20,4	22	22	24,5	24,5	BSBD-03	50
		10,0						BSBE-03R	
		10,0						BSBC-03	
	6,0 - 12,0	6,5						BSBE-03	
PG 16	7,0 - 12,0	6,5	22,5	24	24	26,5	28,0	BSBD-04	25
		10,0						BSBE-04R	
		10,0						BSBC-04	
	10,0 - 14,0	6,5						BSBE-04	
PG 21	9,0 - 16,0	7,2	28,3	30	30	33,0	32,5	BSBD-05	25
		12,0						BSBE-05R	
		12,0						BSBC-05	
	13,0 - 18,0	7,2						BSBE-05	
PG 29	12,0 - 20,0	8,0	37,0	40	40	44,5	38,5	BSBD-06	10
		12,0						BSBE-06R	
		12,0						BSBC-06	
	18,0 - 25,0	8,0						BSBE-06	
PG 36	20,0 - 26,0	9,0	47,0	50	50	55,5	48,0	BSBD-07	5
		14,0						BSBE-07R	
		14,0						BSBC-07	
	22,0 - 32,0	9,0						BSBE-07	
PG 42	25,0 - 31,0	12,0	54,0	58	58	64,0	48,5	BSBD-08	5
		16,0						BSBE-08R	
		16,0						BSBC-08	
	30,0 - 38,0	12,0						BSBE-08	
PG 48	29,0 - 35,0	14,0	59,3	64	64	70,0	53,0	BSBD-09	5
		18,0						BSBE-09R	
		18,0						BSBC-09	
	34,0 - 44,0	14,0						BSBE-09	

Standard Glands with Thread, Stainless Steel

Stainless steel cable glands with lamellar clamping

- For high quality machines and housings.
- For high quality applications in corrosive environments.
- Applications: Outdoor, food industry, pharmaceutical industry and other sensitive applications.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

Technical Details

Material	Body	Stainless steel 1.4305 (AISI 303)	
	Cap	Stainless steel 1.4305 (AISI 303)	
	Seal	CR (Chloroprene Rubber)	
	Clamping Insert	PA 6 (Polyamide 6)	
	O-Ring	NBR	
Protection Class		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-40 °C to +150 °C
Thread Type		• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Lock nuts • Dome plugs • Reducing seals • Flat cable seals • Multihole seals • Gaskets	
Remarks		• Different sealing types available. • Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet.	
Approvals			
		Certificate Number	Standards
		40040034	acc. to DIN EN 62444
		E199260	acc. to UL514
Some approvals do not cover all sizes. For more approvals: see our webpage.			

Some approvals do not cover all sizes. For more approvals: see our webpage.



Standard Glands with Thread, Stainless Steel



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Outer Seal Ø min-max mm	Double Seal Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
M12x1,5	2,0 - 5,0		6,0	12,0	14	14	15,5	22,0	BMSC-0S	50
			12,0						BMSC-0SR	
	3,0 - 6,5		6,0						BMSC-E5	
M16x1,5			12,0	16,0	17	19	20,8	23,0	BMSC-E5	50
	2,0 - 6,0		7,0						BMSC-01	
			12,0						BMSC-01R	
	3,0 - 7,0		7,0		20	20	22,0	28,5	BMSC-E1	
			12,0						BMSC-E1R	
	4,0 - 8,0		7,0						BMSC-01	
M20x1,5			12,0	20,0	17	19	20,8	23,0	BMSC-E1	50
	5,0 - 10,0		7,0						BMSC-E1	
			12,0						BMSC-E1	
	5,0 - 9,0		8,0		22	22	24,5	24,0	BMSC-E2	
			12,0						BMSC-E2R	
	6,0 - 12,0		8,0						BMSC-E2	
M25x1,5			12,0	25,0	24	24	26,8	28,5	BMSC-E2S	50
	7,0 - 13,0		8,0						BMSC-02S	
	10,0 - 14,0		8,0						BMSC-02S	
			12,0		24	27	29,7	27,5	BMSC-03	
	7,0 - 12,0		8,0						BMSC-03R	
			12,0						BMSC-03S	
M32x1,5			12,0	32,0	30	30	33,0	32,0	BMSC-03SR	25
	9,0 - 16,0		8,0						BMSC-03	
			12,0						BMSC-03	
	10,0 - 14,0		8,0		24	27	29,7	27,5	BMSC-E3	
			12,0						BMSC-E3	
	11,0 - 17,0		8,0						BMSC-E3S	
M40x1,5			12,0	40,0	30	30	33,0	32,0	BMSC-03S	10
	13,0 - 18,0		8,0						BMSC-03S	
			12,0						BMSC-03S	
	15,0 - 21,0		9,0		34	34	37,0	36,0	BMSC-E4	
			15,0						BMSC-E4	
	18,0 - 25,0		9,0						BMSC-E4S	
M50x1,5			15,0	50,0	40	43	48,4	38,0	BMSC-04S	5
	12,0 - 20,0		9,0						BMSC-04S	
			15,0						BMSC-04S	
	16,0 - 23,0		9,0		43	46	51,4	40,6	BMSC-E5	
			15,0						BMSC-E5	
	18,0 - 25,0		9,0						BMSC-E5	
M63x1,5			15,0	63,0	50	50	55,5	52,4	BMSC-05S	5
	20,0 - 26,0		9,0						BMSC-05S	
			15,0						BMSC-05S	
	22,0 - 32,0		9,0		58	58	64,0	52,0	BMSC-E6	
			15,0						BMSC-E6	
	27,0 - 38,0		9,0						BMSC-E6S	
M75x1,5			15,0	75,0	65	65	71,0	50,0	BMSC-06S	5
	29,0 - 35,0		10,0						BMSC-06S	
			14,0						BMSC-06S	
			18,0		65	70	77,0	53,0	BMSC-E7	
	34,0 - 44,0		10,0						BMSC-E7	
			14,0						BMSC-E7	
M90x1,5			18,0	90,0	75	75	83,0	50,0	BMSC-E7S	5
			18,0						BMSC-E7S	
	37,0 - 53,0		10,0						BMSC-E7S	
			18,0		75	75	83,0	50,0	BMSC-E7S	
			18,0						BMSC-E7S	
			18,0						BMSC-E7S	

Standard Glands with Thread, Stainless Steel

Stainless steel cable glands with lamellar clamping

- For high quality machines and housings.
- For high quality applications in corrosive environments.
- Applications: Outdoor, food industry, pharmaceutical industry and other sensitive applications.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

Technical Details

Material	Body	Stainless steel 1.4305 (AISI 303)	
	Cap	Stainless steel 1.4305 (AISI 303)	
	Seal	CR (Chloroprene Rubber)	
	Clamping Insert	PA 6 (Polyamide 6)	
	O-Ring	NBR	
Protection Class		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature	Permanent	-20 °C to +100 °C	Intermittent
			-40 °C to +150 °C
Thread Type		• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Lock nuts • Dome plugs • Reducing seals • Flat cable seals • Multihole seals • Gaskets	
Remarks		• Different sealing types available. • Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet.	
Approvals			
		Certificate Number	Standards
		40040034	acc. to DIN EN 62444
		E199260	acc. to UL514
Some approvals do not cover all sizes. For more approvals: see our webpage.			

Some approvals do not cover all sizes. For more approvals: see our webpage.



Standard Glands with Thread, Stainless Steel

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

Size	Clamping Range Ø min-max		Thread Length TL		Thread Ø TD		Spanner Width SW Cap		Spanner Width SW Body		Outer Ø D		max. Height H		Part Number	Packing Unit
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
NPT 3/8"	2,0 - 6,0	0.079 - 0.236	11,5	0.453	17,14	0.673	17	0.669	19	0.748	21,0	0.827	23,0	0.906	BNSD-01	50
	3,0 - 7,0	0.118 - 0.276					20	0.787	20	0.787	22,0	0.866	29,5	1.161	BNSD-01S	
	4,0 - 8,0	0.157 - 0.315					17	0.669	19	0.748	21,0	0.827	23,0	0.906	BNSC-01	
	5,0 - 10,0	0.197 - 0.394					20	0.787	20	0.787	22,0	0.866	29,5	1.161	BNSC-01S	
NPT 1/2"	5,0 - 9,0	0.197 - 0.354	13,0	0.512	21,34	0.839	22	0.866	27	1.062	30,5	1.200	29,1	1.145	BNSD-02	50
	6,0 - 12,0	0.236 - 0.472					24	0.945	24	0.945	26,8	1.055	28,0	1.102	BNSD-02	
	7,0 - 12,0	0.276 - 0.472													BNSD-02S	25
	10,0 - 14,0	0.394 - 0.551													BNSC-02S	
NPT 3/4"	9,0 - 16,0	0.354 - 0.630	13,0	0.512	26,67	1.051	30	1.181	30	1.181	33,0	1.299	35,5	1.398	BNSD-03	25
	13,0 - 18,0	0.512 - 0.709													BNSC-03	
NPT 1"	12,0 - 20,0	0.472 - 0.787	13,0	0.512	33,40	1.315	40	1.575	43	1.693	48,5	1.909	43,0	1.693	BNSD-04	10
	18,0 - 25,0	0.709 - 0.984													BNSC-04	

Thread Type **PG** acc. to DIN 40430

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
PG 7	2,0 - 5,0	6,0	12,5	14	14	15,5	22,0	BSSD-01	50
		10,0						BSSE-01R	
	3,0 - 6,5	10,0						BSSC-01	
PG 9	2,0 - 6,0	6,0	15,2	17	19	21,0	23,0	BSSE-01	50
		10,0						BSSD-02	
	4,0 - 8,0	10,0						BSSE-02	
PG 11	3,0 - 7,0	6,0	18,6	22	22	24,0	25,5	BSSD-03	50
		10,0						BSSE-03R	
	5,0 - 10,0	10,0						BSSC-03	
PG 13,5	5,0 - 9,0	6,5	20,4	22	22	24,5	24,0	BSSE-03	50
		10,0						BSSD-04	
	6,0 - 12,0	10,0						BSSE-04R	
PG 16	7,0 - 12,0	6,5	22,5	24	24	26,5	27,5	BSSC-04	25
		10,0						BSSE-04	
	10,0 - 14,0	10,0						BSSD-05	
PG 21	9,0 - 16,0	7,2	28,3	30	30	33,0	32,5	BSSE-05	25
		12,0						BSSD-06	
	13,0 - 18,0	12,0						BSSE-06R	
PG 29	12,0 - 20,0	8,0	37,0	41	41	45,5	38,5	BSSC-06	20
		12,0						BSSE-06	
	18,0 - 25,0	12,0						BSSD-07	
PG 36	20,0 - 26,0	9,0	47,0	50	50	55,5	46,0	BSSE-07	15
		14,0						BSSD-08	
	22,0 - 32,0	14,0						BSSE-08R	
PG 42	25,0 - 31,0	12,0	54,0	60	60	66,5	48,0	BSSC-08	12
		16,0						BSSE-08	
	30,0 - 38,0	16,0						BSSD-09	
PG 48	29,0 - 35,0	14,0	59,3	65	65	72,0	49,5	BSSE-09	12
		18,0						BSSD-10	
	34,0 - 44,0	18,0						BSSE-10R	

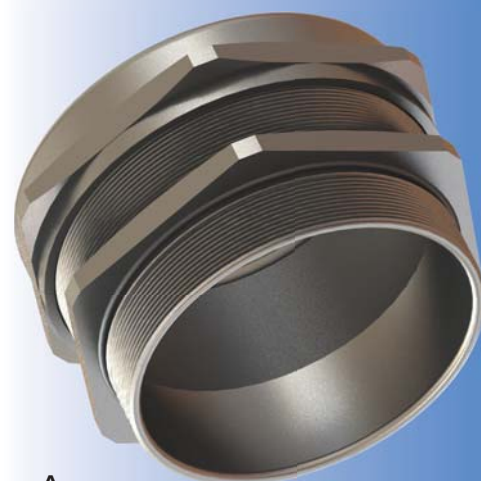
Compression Type Glands with Thread, Brass

Cable glands for cables with large diameters

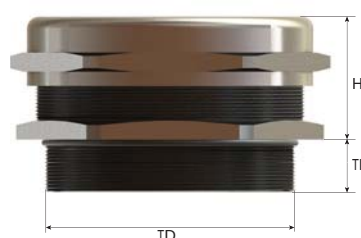
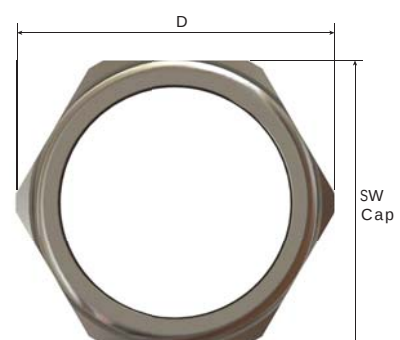
- For metal machines and housings.
- For standard industrial applications in harsh environments.
- For use of cables with large diameters.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Technical Details			
Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	O-Ring	NBR	
Protection Class		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature	Permanent		Intermittent
	-20 °C to +100 °C		-40 °C to +150 °C
Thread Type		• Metric EN 60423 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Lock nuts • Gaskets	
Remarks		• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	



A

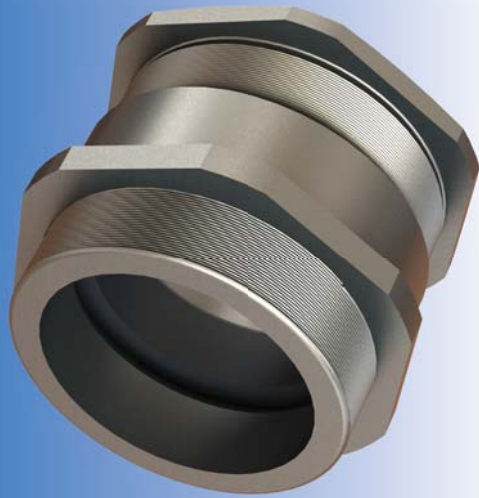


Thread Type **METRIC** acc. to EN 60423 (Type **A**)

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
				SW Cap mm	SW Body mm				
M72x2,0	56,0 - 62,0	16,0	72,0	77	77	86,0	41,0	BDSM-08	4
M75x1,5	56,0 - 62,0	16,0	75,0	77	77	86,0	41,0	BDSM-09S	4
M75x2,0	56,0 - 62,0	16,0	75,0	77	77	86,0	41,0	BDSM-09	4
M80x2,0	50,0 - 56,0	18,0	80,0	90	90	100,0	50,0	BDSM-10R	2
	60,0 - 64,0						47,0	BDSM-10	
M85x2,0	63,0 - 70,0	22,0	85,0	95	95	106,2	53,0	BDSM-11R	2
	68,0 - 76,0						51,0	BDSM-11	
M90x2,0	68,0 - 77,0	22,0	90,0	95	100	112,0	51,0	BDSM-12	2

Compression Type Glands with Thread, Brass

Industrial Application



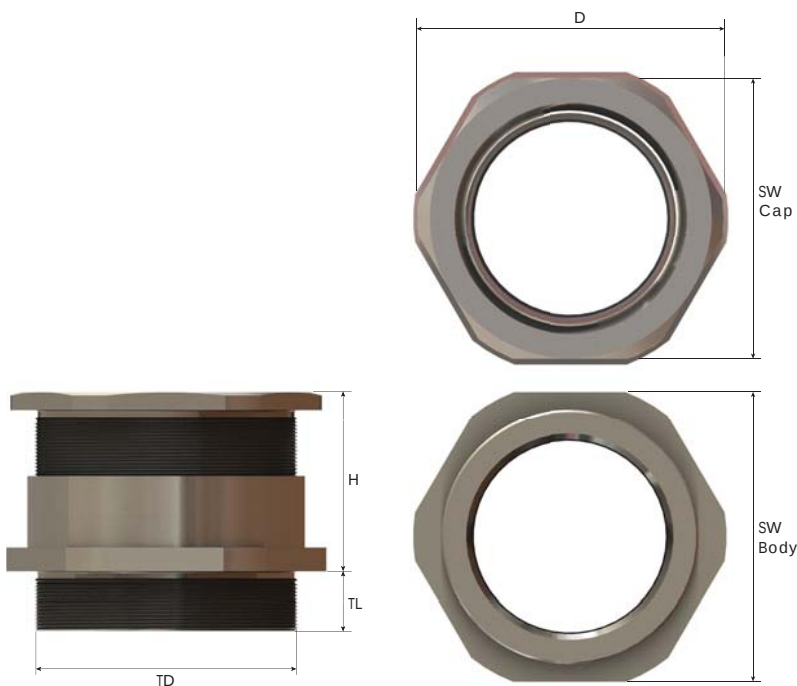
B

Cable glands for cables with large diameters

- For metal machines and housings.
- For standard industrial applications in harsh environments.
- For use of cables with large diameters.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	O-Ring	NBR	
Protection Class		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-40 °C to +150 °C
Thread Type		• Metric EN 60423 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Lock nuts • Gaskets	
Remarks		• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	



Thread Type **METRIC** acc. to EN 60423 (Type B)

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
				SW Cap mm	SW Body mm				
M110x2,0	60,0 - 82,0	25,0	110,0	120	125	134,0	74,5	BDSM-13	2

Snap-In Glands without Thread, Brass

Brass cable glands, front-side assembly, without thread

- Specially designed cable glands - easy to assemble to housings without threaded holes.
- Easy assembly: push cable gland and turn body clockwise - insert cable - tighten cap.
- Perfectly fit to wall thickness 0,5 mm to 4,0 mm.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Easy disassembly (with separate tool).

Technical Details

Material	Body	Brass, Nickel plated
	Lower Body	PA 6 (Polyamide 6)
	Cap	Brass, Nickel plated
	Seal	CR (Chloroprene Rubber)
	Clamping Insert	PA 6 (Polyamide 6)
	Gasket	CR (Chloroprene Rubber)
Protection Class	IP 68 - 5 Bar, 30 min IP 66	
Flammability	V2 according to UL94	
Operating Temperature	Permanent	Intermittent
	-20 °C to +100 °C	-30 °C to +150 °C
Cable Type	Non armoured	
Accessories	• Dome plugs	
	• Reducing seals	
	• Flat cable seals	
	• Multihole seals	
	• Disassembly tool (one piece included per packing unit)	
Remarks	• Different sealing types available.	
	• Manufactured according to DIN EN 62444/50262.	

Approvals

	Certificate Number	Standards
	SERCOVAM RES 107572	acc. to UL514B §8.26.7



Assembling

Push

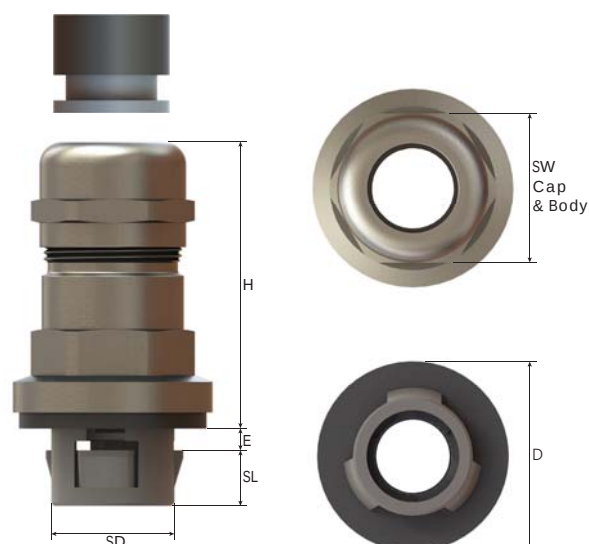
Tighten

Disassembling

Push

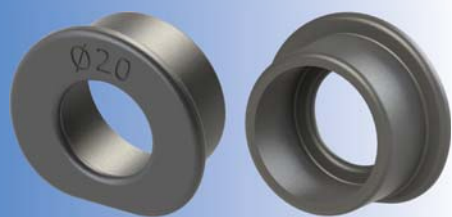
Collect

Snap-In Glands without thread, Brass



wall thickness (E) : 0,5 - 4,0 mm

Size	Clamping Range Outer Seal Ø min-max mm	Double Seal Ø min-max mm	Snap Length SL mm	Snap Ø SD mm	Hole Ø HD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
16	3,0 - 7,0	-	9,0	16,0	16,2 - 16,4	20	20	28,3	45,0	BBOS-11R	100
	5,0 - 10,0	-								BBOS-11	
20	5,0 - 9,0	3,0 - 7,0	9,0	20,0	20,2 - 20,4	22	22	32,3	44,0	BBOS-DS-11	
	6,0 - 12,0	-								BBOS-12R	50
	8,0 - 13,0	5,0 - 9,0								BBOS-12	
25	11,0 - 17,0	-	9,0	25,0	25,2 - 25,4	27	27	38,5	46,0	BBOS-DS-12	25
	11,0 - 15,0	-								BBOS-EU-13R	
	15,0 - 21,0	8,0 - 13,0								BBOS-EU-13	
32	16,0 - 23,0	-	9,0	32,0	32,2 - 32,4	34	34	45,5	54,0	BBOS-EU-DS-13	20
	19,0 - 28,0	-								BBOS-EU-14R	
	16,0 - 23,0	11,0 - 16,0								BBOS-EU-14	
40	19,0 - 28,0	-	9,0	40,0	40,2 - 40,4	43	43	58,0	60,0	BBOS-EU-DS-14	10
	19,0 - 28,0	-								BBOS-EU-15R	
	19,0 - 28,0	16,0 - 21,0								BBOS-EU-15	



Snap-In Gland Disassembling Tool

Tool to disassemble Snap-In Glands

Technical Details

Material Plastic

Size	ID mm	H mm	Part Number	Packing Unit
16	16,0	13,0	BEX-16	10
20	20,0	13,0	BEX-20	10
25	25,0	13,0	BEX-25	10
32	32,0	13,0	BEX-32	10
40	40,0	15,5	BEX-40	10

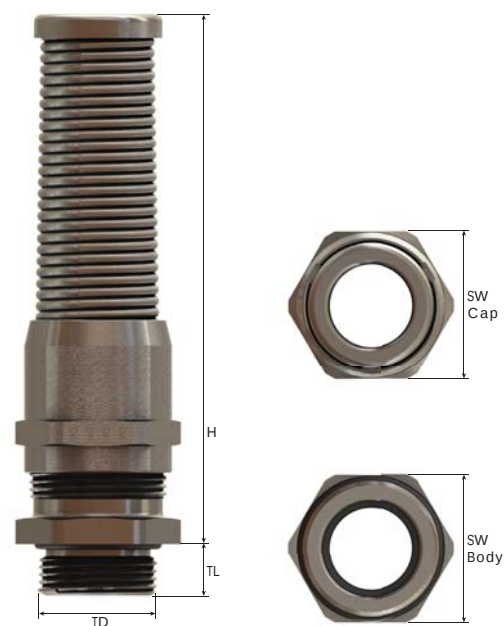
Cable Protection Glands Brass

Cable protection glands with lamellar clamping, brass

- For metal machines and housings.
- For cable bending protection.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	Clamping Insert	PA 6 (Polyamide 6)	
	Bending Spiral	Stainless steel (AISI 301)	
	Bending Spiral Ring	Brass, Nickel plated	
	O-Ring	CR (Chloroprene Rubber)	
Protection Class		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature	Permanent	-20 °C to +100 °C	Intermittent
			-40 °C to +150 °C
Thread Type		• Metric EN 60423 • PG DIN 40430 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Lock nuts • Reducing seals • Flat cable seals • Multihole seals • Gaskets	
Remarks		• Different sealing types available. • Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
				SW Cap mm	SW Body mm				
M16x1,5	3,0 - 7,0	6,0	16,0	20	20	22,0	72,3	BMBDSP-01	o.r.
	5,0 - 10,0							BMBCSP-01	

Thread Type **PG** acc. to DIN 40430

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
				SW Cap mm	SW Body mm				
PG 13,5	5,0 - 9,0	6,5	20,4	22	22	24,5	85,2	BSBDSP-04	o.r.
	6,0 - 12,0							BSBCSP-04	

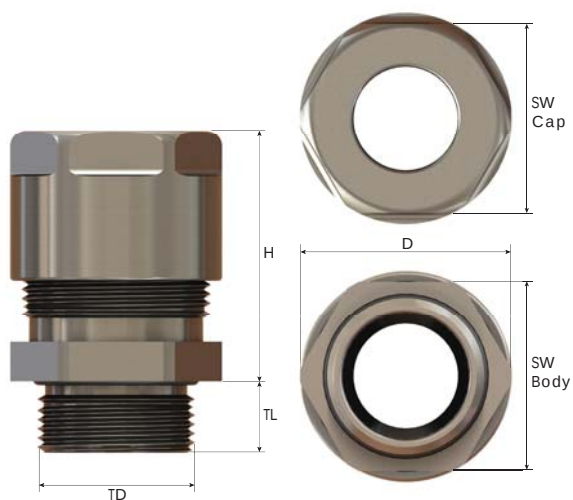


Cable glands for high quality sealing and strain relief

- For metal machines and housings.
- For demands of high quality sealing and strain relief.
- Single seal for full clamping range.
- For standard industrial applications in harsh environments.
- Easy assembly: install cable gland - insert cable - tighten cap.
- Reliable performance for standard industrial applications.

Technical Details

Material	Body	Brass, Nickel plated
	Cap	Brass, Nickel plated
	Seal	CR (Chloroprene Rubber)
	O-Ring	NBR
Protection Class		IP 68 - 5 Bar, 30 min
Flammability		V2 according to UL94
Operating Temperature		Permanent -20 °C to +100 °C
Thread Type		• Metric EN 60423 • Other thread types also available upon request.
Cable Type		Non armoured
Accessories		• Lock nuts • Dome plugs • Gaskets
Remarks		• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number		Packing Unit
				SW Cap mm	SW Body mm			Brass, Nickel plated	Brass, Black Chromate	
M16x1,5	4,0 - 11,0	8,0	16,0	21	21	23,3	29,5	BMNGB-01	BMNGC-01	o.r.
M20x1,5	5,0 - 13,0	9,0	20,0	24	24	26,8	32,0	BMNGB-02	BMNGC-02	
M25x1,5	6,5 - 15,5	10,0	25,0	28	28	30,8	36,0	BMNGB-03S	BMNGC-03S	o.r.
	10,0 - 20,0			30	30	33,5	44,5	BMNGB-03L	BMNGC-03L	

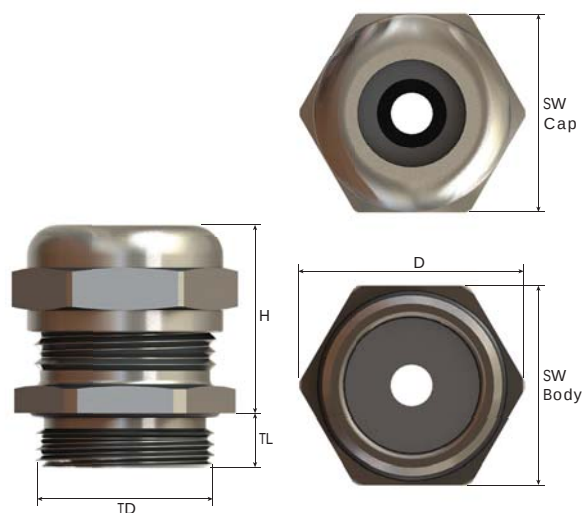
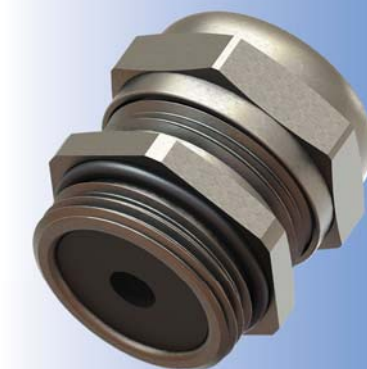
Double Seal Glands Compact Design, Brass

Double seal glands, compact design

- For metal machines and housings.
- For standard industrial applications in harsh environments.
- Compact design.
- Double seal optimizes the cable range used.
- Easy assembly: install cable gland - insert cable - tighten cap.
- Special design for high quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	O-Ring	NBR	
Protection Class		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature	Permanent	-20 °C to +100 °C	Intermittent
			-40 °C to +150 °C
Thread Type		• Metric EN 60423 • PG DIN 40430 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Lock nuts • Dome plugs • Gaskets	
Remarks		• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	



Thread Type METRIC acc. to EN 60423

Size	Clamping Range		Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
	Outer Seal Ø min-max mm	Double Seal Ø min-max mm			SW Cap mm	SW Body mm				
M12x1,5	4,0 - 6,0	-	6,0	12,0	14	14	15,8	18,0	BDSM-05	50
M16x1,5	6,5 - 9,0	4,0 - 6,0	5,1	16,0	18	18	20,0	18,5	BDSM-01	50
M20x1,5	7,0 - 12,0	4,5 - 7,0	6,0	20,0	22	22	24,5	21,0	BDSM-02	50
M25x1,5	14,0 - 17,5	10,0 - 13,0	7,0	25,0	28	28	31,0	22,5	BDSM-03	25
M32x1,5	19,0 - 23,5	14,5 - 18,0	8,0	32,0	35	35	38,8	25,5	BDSM-04	25
M40x1,5	23,5 - 27,0	16,5 - 23,5	8,0	40,0	43	43	47,0	36,0	BDSM-05	20

Thread Type PG acc. to DIN 40430

Size	Clamping Range		Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
	Outer Seal Ø min-max mm	Double Seal Ø min-max mm			SW Cap mm	SW Body mm				
PG 7	4,0 - 7,0	-	6,0	12,5	14	14	16,5	18,0	BDSP-01	50
PG 9	6,0 - 10,0	4,0 - 6,0	6,0	15,2	18	18	20,0	18,5	BDSP-02	50
PG 11	7,0 - 12,0	4,5 - 7,0	6,0	18,6	22	22	24,5	20,5	BDSP-03	50
PG 13,5	10,0 - 15,0	8,0 - 10,0	6,0	20,4	24	24	26,5	21,0	BDSP-04	50
PG 16	10,0 - 15,0	8,0 - 10,0	6,0	22,5	24	25	27,5	21,0	BDSP-05	25
PG 21	13,0 - 20,0	10,0 - 13,0	7,6	28,3	32	32	35,5	25,0	BDSP-06	25
PG 29	21,5 - 28,0	19,0 - 21,5	8,0	37,0	40	40	45,2	25,5	BDSP-07	20
PG 36	30,0 - 35,0	26,0 - 30,0	8,0	47,0	50	50	56,9	28,3	BDSP-08	15
PG 42	39,0 - 44,5	35,0 - 39,0	10,0	54,0	58	58	64,0	32,5	BDSP-09	12
PG 48	40,0 - 48,0	37,0 - 40,0	11,0	59,3	64	64	70,0	34,2	BDSP-10	12

Double Seal Glands Compact Design, Brass

Industrial Application



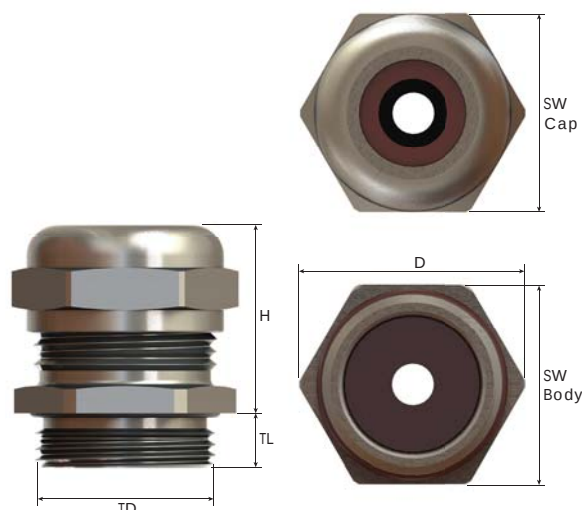
Double seal glands, compact design, large temperature range

- For metal machines and housings.
- For standard industrial applications in harsh environments.
- Compact design.
- Double seal optimizes the cable range used.
- Easy assembly: install cable gland - insert cable - tighten cap.
- Special design for high quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	Silicone	
	O-Ring	Silicone	
Protection Class		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature	Permanent		Intermittent
	-40 °C to +300 °C		-40 °C to +300 °C
Thread Type		• Metric EN 60423 • PG DIN 40430 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Lock nuts • Dome plugs • Gaskets	
Remarks		• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	

Large Temperature Range



Thread Type METRIC acc. to EN 60423

Size	Clamping Range		Thread Length	Thread Ø		Spanner Width		Outer Ø	max. Height	Part Number	Packing Unit
	Outer Seal Ø min-max mm	Double Seal Ø min-max mm	TL mm	TD mm	SW Cap mm	SW Body mm	D mm		H mm		
M12x1,5	4,0 - 6,0	-	6,0	12,0	14	14	15,8	18,0	18,0	BDSM-05(SIL)	50
M16x1,5	6,5 - 9,0	4,0 - 6,0	5,1	16,0	18	18	20,0	18,5	18,5	BDSM-01(SIL)	50
M20x1,5	7,0 - 12,0	4,5 - 7,0	6,0	20,0	22	22	24,5	21,0	21,0	BDSM-02(SIL)	50
M25x1,5	14,0 - 17,5	10,0 - 13,0	7,0	25,0	28	28	31,0	22,5	22,5	BDSM-03(SIL)	25
M32x1,5	19,0 - 23,5	14,5 - 18,0	8,0	32,0	35	35	38,8	25,5	25,5	BDSM-04(SIL)	25
M40x1,5	19,5 - 27,0	16,5 - 23,5	8,0	40,0	43	43	47,0	36,0	36,0	BDSM-05(SIL)	20

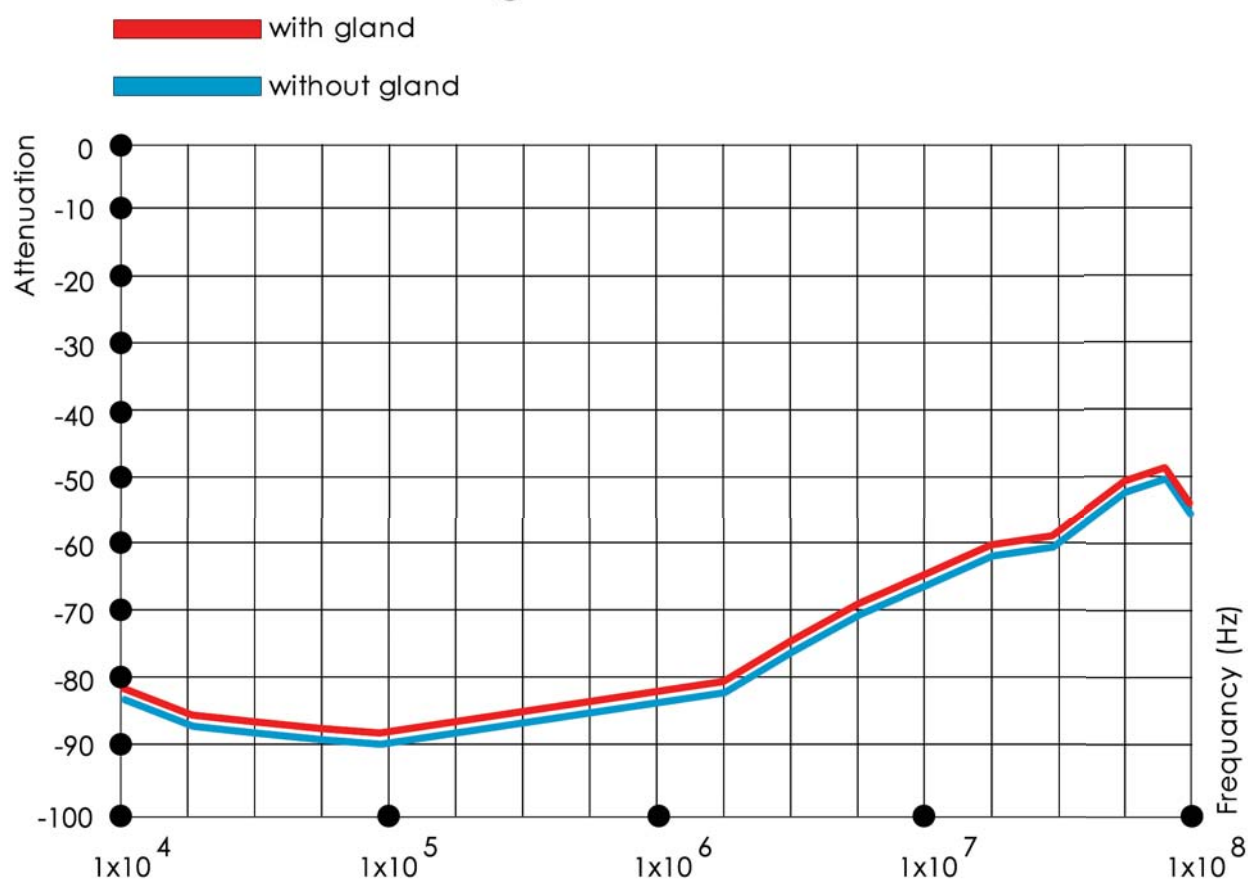
Thread Type PG acc. to DIN 40430

Size	Clamping Range		Thread Length	Thread Ø		Spanner Width		Outer Ø	max. Height	Part Number	Packing Unit
	Outer Seal Ø min-max mm	Double Seal Ø min-max mm	TL mm	TD mm	SW Cap mm	SW Body mm	D mm		H mm		
PG 7	4,0 - 7,0	-	6,0	12,5	14	14	16,5	18,0	18,0	BDSP-01(SIL)	50
PG 9	6,0 - 10,0	4,0 - 6,0	6,0	15,2	18	18	20,0	18,5	18,5	BDSP-02(SIL)	50
PG 11	7,0 - 12,0	4,5 - 7,0	6,0	18,6	22	22	24,5	20,5	20,5	BDSP-03(SIL)	50
PG 13,5	10,0 - 15,0	8,0 - 10,0	6,0	20,4	24	24	26,5	21,0	21,0	BDSP-04(SIL)	50
PG 16	10,0 - 15,0	8,0 - 10,0	6,0	22,5	24	25	27,5	21,0	21,0	BDSP-05(SIL)	25
PG 21	13,0 - 20,0	10,0 - 13,0	7,6	28,3	32	32	35,5	25,0	25,0	BDSP-06(SIL)	25
PG 29	21,5 - 28,0	19,0 - 21,5	8,0	37,0	40	40	45,2	25,5	25,5	BDSP-07(SIL)	20
PG 36	30,0 - 35,0	26,0 - 30,0	8,0	47,0	50	50	56,9	28,3	28,3	BDSP-08(SIL)	15
PG 42	39,0 - 44,5	35,0 - 39,0	10,0	54,0	58	58	64,0	32,5	32,5	BDSP-09(SIL)	12
PG 48	40,0 - 48,0	37,0 - 40,0	11,0	59,3	64	64	70,0	34,2	34,2	BDSP-10(SIL)	12

EMC 2 Cable Glands Brass

These EMC cable glands combine several advantages in one product. First, you get the same clamping ranges as the standard brass glands. The protection class is IP68. In order to get a low electrical impedance between the cable gland and the braiding of the cable the cable gland does not have to be disassembled. Secondly, a perfect shielding will be achieved by just tightening the dome nut. This high tech cable gland consists of a nickel plated brass body, PA6 clamping insert, an EMC contact element and choloprene seal. The components are pre-assembled.

EMC Test: Screening attenuation

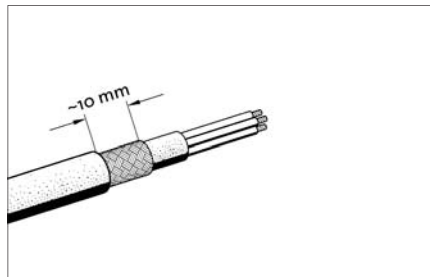


EMC 2 Cable Glands Brass

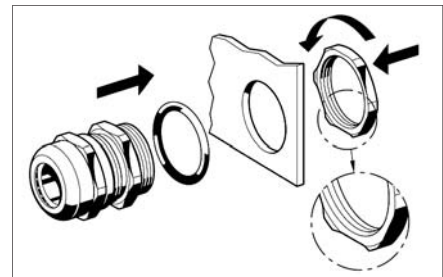
Installation instructions for EMC cable glands

To install an EMC cable gland remove approx. 5 – 10 mm (0.20 – 0.39) of the insulation of the cable. Insert the cable in to the cable gland and adjust it without the contact elements touching the braiding. Tighten the cap and conductivity will be established. The design of the contact elements will adapt to different cable diameters according to the clamping range of the cable glands. Since the clamping insert of the cable gland is as long as the gland itself electrical shortcuts between the body and individual wires will be avoided.

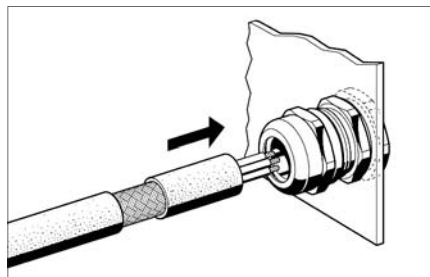
Tightening the dome nut will have three different effects: The cable will be centered in the cable gland, the chloroprene seal will ensure IP 68 protection, and the design of the dome cap will provide appropriate strain relief. All is done by just one turn of the dome cap. Even uninstalling the cable is easy; open the dome cap and pull the cable out of the cable gland together with the insert, which can then be removed easily.



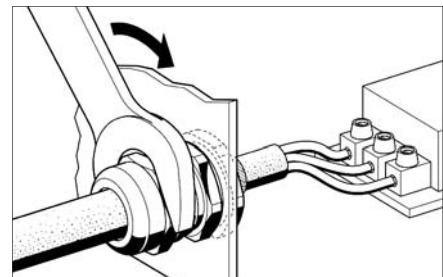
Remove outer sheath
of shielded cable



Tighten the cable
gland to the housing



Insert cable until
EMC spring



Lock and tight
the cap

EMC 2 Cable Glands Brass

EMC cable glands with fixed spring contact

- Specially designed EMC protective cable glands.
- Long-lasting contact by high definition contact spring.
- Easy assembly: install cable gland - prepare cable sheath - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for EMC applications.

Technical Details

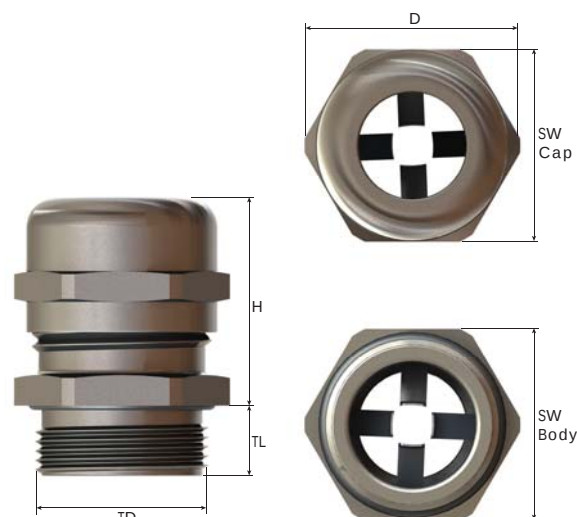
Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	Clamping Insert	PA 6 (Polyamide 6)	
	Contact Spring	Special Copper Alloy	
	O-Ring	NBR	
Protection Class		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-40 °C to +150 °C
Thread Type		• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1 • Other thread types also available upon request.	
Cable Type		Non armoured, Shielded	
Accessories		• Lock nuts • Dome plugs • Gaskets	
Remarks		• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet.	



Thread Type METRIC acc. to EN 60423

Size	Clamping Range		Shield Diameter Ø min-max mm	Thread Length		Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
	Outer Seal Ø min-max mm	Double Seal Ø min-max mm		TL mm	SW Cap mm		SW Body mm					
M12x1,5	3,0 - 6,5		2,5	6,0	12,0	12,	14	14	15,5	22,0	BMEM-0S	50
											BMEN-0S	
M16x1,5	4,0 - 8,0		3,0	7,0	12,0	16,0	17	18	20,0	23,0	BMEM-01	50
											BMEN-01	
M20x1,5	4,5 - 10,0		3,5	6,5		20,0	20	20	22,0	29,0	BMEM-01S	50
											BMEN-02	
M25x1,5	6,0 - 12,0		4,5	8,0	12,0	25,0	22	22	24,5	24,5	BMEM-02	25
											BMEN-03	
M32x1,5	10,0 - 14,0		8,5	8,0	12,0	32,0	24	27	29,8	28,0	BMEM-03	20
											BMEN-03	
M40x1,5	13,0 - 18,0		11,0	8,0		40,0	30	30	33,0	37,5	BMEM-03S	15
											BMEN-04	
M50x1,5	18,0 - 25,0		14,0	9,0	15,0	50,0	30	34	37,5	32,5	BMEM-04	10
											BMEN-04	
M63x1,5	22,0 - 32,0		16,0	9,0		63,0	40	40	44,5	44,0	BMEM-04S	12
											BMEN-05	
M12x1,5	18,0 - 25,0		20,0	9,0	15,0	50,0	40	43	48,5	38,0	BMEM-05	20
											BMEN-05	
M16x1,5	22,0 - 32,0		20,0	9,0		64	50	50	55,5	52,5	BMEM-05S	15
											BMEN-06	
M20x1,5	34,0 - 44,0	27,0 - 35,0	26,0	9,0		64	64	68	70,0	54,0	BMEM-06	10
											BMEN-06S	
M25x1,5	34,0 - 44,0		31,0	14,0		63,0	64	68	75,0	53,0	BMEM-07	12
											BMEN-07	

EMC 2 Cable Glands Brass



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

Size	Clamping Range Ø min-max		Shield Diameter Ø min-max		Thread Length TL		Thread Ø TD		Spanner Width				Outer Ø D		max. Height H		Part Number	Packing Unit
	mm	inch	mm	inch	mm	inch	mm	inch	SW Cap mm	inch	SW Body mm	inch	mm	inch	mm	inch		
NPT 3/8"	5,0 - 10,0	0.197 - 0.394	4,0	0.157	11,5	0.453	17,14	0.675	20	0.787	20	0.787	22,0	0.866	29,5	1.161	BNEM-01	50
NPT 1/2"	6,0 - 12,0	0.236 - 0.472	5,0	0.197	13,0	0.512	21,34	0.840	22	0.866	22	0.866	24,5	0.965	25,5	1.004	BNEM-02	50
NPT 3/4"	13,0 - 18,0	0.512 - 0.709	11,0	0.433	13,0	0.512	26,67	1.050	30	1.181	30	1.181	33,0	1.299	35,5	1.398	BNEM-03	25
NPT 1"	18,0 - 25,0	0.709 - 0.984	16,0	0.630	13,0	0.512	33,40	1.315	40	1.575	43	1.693	48,5	1.909	43,0	1.693	BNEM-04	10

Thread Type **PG** acc. to DIN 40430

Size	Clamping Range Ø min-max mm	Shield Diameter Ø min-max mm	Thread Length TL		Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
			mm	inch							
PG 7	3,0 - 6,5	2,5	6,0		12,5	14	14	15,5	22,0	BSEM-01	50
			8,0							BSEN-01	
PG 9	4,0 - 8,0	3,0	6,0		15,2	17	17	18,9	23,2	BSEM-02	50
			10,0							BSEN-02	
PG 11	5,0 - 10,0	4,0	6,0		18,6	20	20	22,0	26,0	BSEM-03	50
			10,0							BSEN-03	
PG 13,5	6,0 - 12,0	5,0	6,5		20,4	22	22	24,5	24,5	BSEM-04	50
			10,0							BSEN-04	
PG 16	10,0 - 14,0	8,5	6,5		22,5	24	24	26,5	28,0	BSEM-05	25
			10,0							BSEN-05	
PG 21	13,0 - 18,0	11,0	7,2		28,3	30	30	33,0	32,5	BSEM-06	25
			12,0							BSEN-06	
PG 29	18,0 - 25,0	16,0	8,0		37,0	40	40	44,5	38,0	BSEM-07	20
			12,0							BSEN-07	
PG 36	22,0 - 32,0	20,0	9,0		47,0	50	50	55,5	48,0	BSEM-08	15
			14,0							BSEN-08	
PG 42	30,0 - 38,0	28,0	12,0		54,0	58	58	64,0	48,0	BSEM-09	12
			16,0							BSEN-09	
PG 48	34,0 - 44,0	31,0	14,0		59,3	64	64	70,0	52,4	BSEM-10	12
			18,0							BSEN-10	

EMC 3 Cable Glands Brass

The new generation of Bimed's EMC and derivation gland shows significant advantages compared to other existing cable glands. The patented contact system inside the gland allows all degrees of freedom which are necessary to install a cable easily; the cable can be pulled forward and backward inside the gland without damaging the cable shielding. This is realized by specially designed contact elements. This feature is most advantageous when connectorizing the single cores of the cable.

Also the cable can easily be rotated inside the gland without damaging the cable shielding – most important when installing the gland at an industrial connector. The unique mechanism of the integrated contact system therefore show the following features:

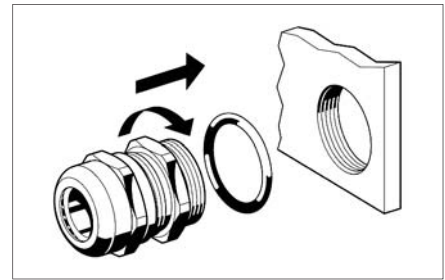
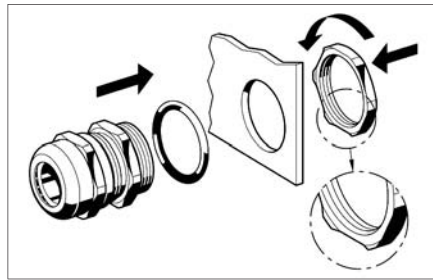
For small cable diameters in the lower clamping range of the gland the contact system won't touch the cable braiding during the installation process at all. For bigger cable diameters in the upper clamping range of the gland, the contact system will rotate freely inside the gland together with the cable itself. Only when tightening the cap the contact element will be fixed and will be pressed against the cable shielding to ensure a low resistance electrical contact between gland and cable braiding. Simultaneously IP68 protection class and cable anchorage according to the EN 62444 is achieved.

This straight forward application and convenient installation of the gland saves a lot of time and therefore a lot of money. Shielding and derivation tests performed with this gland show exceptional values. So this EMC and derivation gland from Bimed will be used wherever an outstanding performance is needed. Simple application, fast installation together with the patented contact system makes Bimed's gland unique among the cable glands

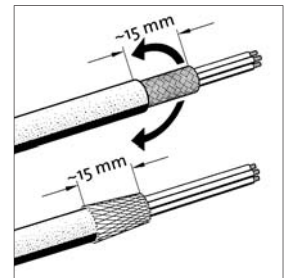
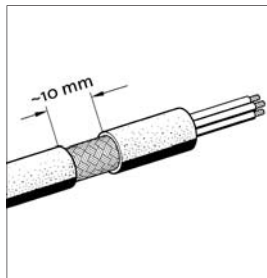
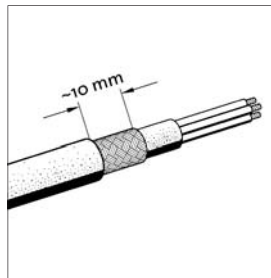


EMC 3 Cable Glands Brass

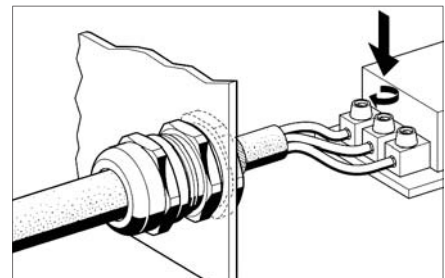
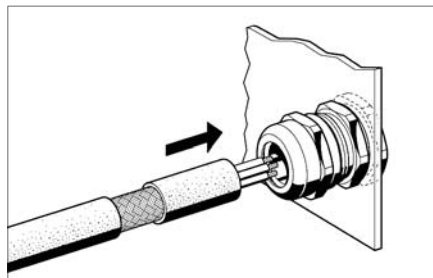
Installation instructions for EMC cable glands



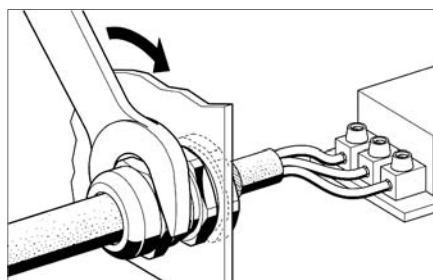
Tighten the cable gland to the housing with the amount of torque as indicated.
If necessary use our EMC lock nuts. For EMC lock nuts please contact us



Remove outer sheath of shielded cable



Insert cable into gland until screen and EMC insert contact is achieved then connect single cores



Lock the cap and tighten with the amount of torque as indicated

EMC 3 Cable Glands Brass

EMC cable glands with moving spring contact

- Specially designed EMC protective cable glands.
- Long-lasting contact by high definition contact spring.
- Moving spring contact offers reduced risk of sheath damage.
- Easy assembly: install cable gland - prepare cable sheath - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for EMC applications.
- Up-to-date international approvals.

Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	Clamping Insert	PA 6 (Polyamide 6)	
	Contact Spring	Special Copper Alloy	
	O-Ring	NBR	

Protection Class	IP 68 - 5 Bar, 30 min		
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Flammability	V2 according to UL94		
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Operating Temperature	Permanent	Intermittent	
	-20 °C to +100 °C	-40 °C to +150 °C	

Thread Type	• Metric EN 60423 • Other thread types also available upon request.		
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Cable Type	Non armoured, Shielded		
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Accessories	• Lock nuts • Dome plugs • Gaskets		
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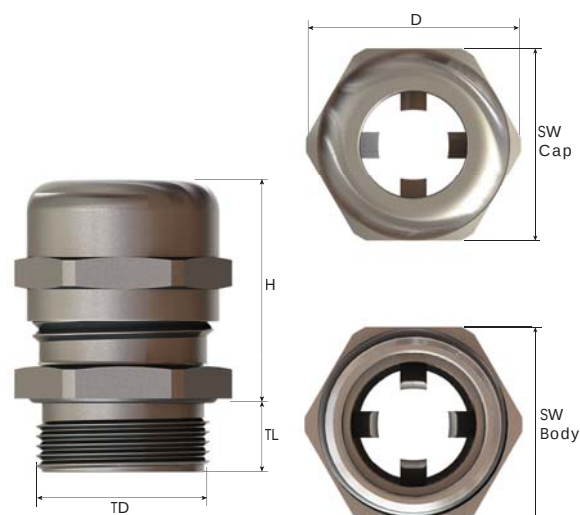
Remarks	• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet.		
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Approvals

	Certificate Number	Standards
	E199260	acc. to UL514



EMC 3 Cable Glands Brass



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	Shield Diameter Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
M12x1,5	3,0 - 6,5	2,5	6,0	12,0	14	14	15,5	22,0	BMEM-ES	50
M16x1,5	5,0 - 10,0	4,0	7,0	16,0	20	20	22,0	29,0	BMEM-E1	50
M20x1,5	6,0 - 12,0	5,0	8,0	20,0	22	22	24,5	27,5	BMEM-E2	50
M25x1,5	11,0 - 17,0	9,5	8,0	25,0	27	27	30,0	30,7	BMEM-E3	25
M32x1,5	15,0 - 21,0	13,5	8,0	32,0	34	34	37,0	38,0	BMEM-E4	25
M40x1,5	19,0 - 28,0	17,0	9,0	40,0	43	43	48,5	43,0	BMEM-E5	20
M50x1,5	27,0 - 38,0	25,0	9,0	50,0	58	58	64,0	54,5	BMEM-E6	12
M63x1,5	34,0 - 44,0	31,0	14,0	63,0	64	68	75,0	57,0	BMEM-E7	12

EMC 4 Cable Glands Brass

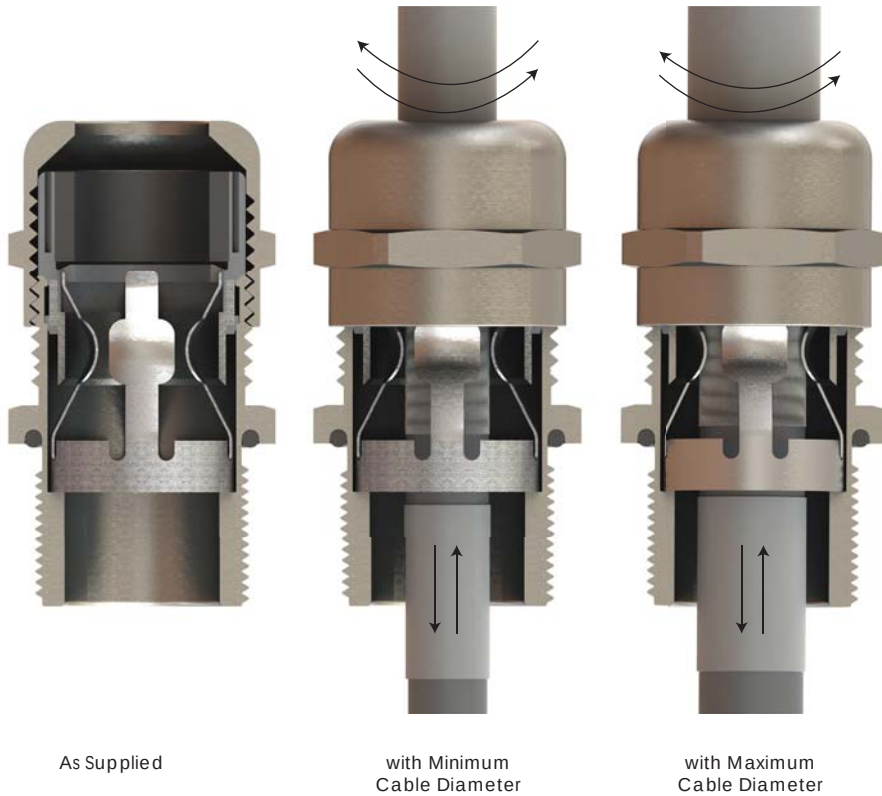
These cable glands are developed according to end users' requirements. Their features can be summarized as follows:

- Easy insertion of the cable from the two sides of the gland.
- Open contact fingers in loose position.
- Free radial and axial movement of the cable.
- Easy radial and axial movement of the cable, even in contact position without any damage to the braid with the help of rounded contact finger surfaces.
- Large contact surfaces of the fingers allow low contact resistance even on loosely woven cable braids (the contact surfaces do not sink into the braided wires).
- High contact performance even under vibrating conditions with help of the reduced distance between the "sealing clamping level" and "EMC contact level".



EMC 4 Cable Glands Brass

Industrial Application



EMC 4 Cable Glands Brass

EMC cable glands with open moving spring contact

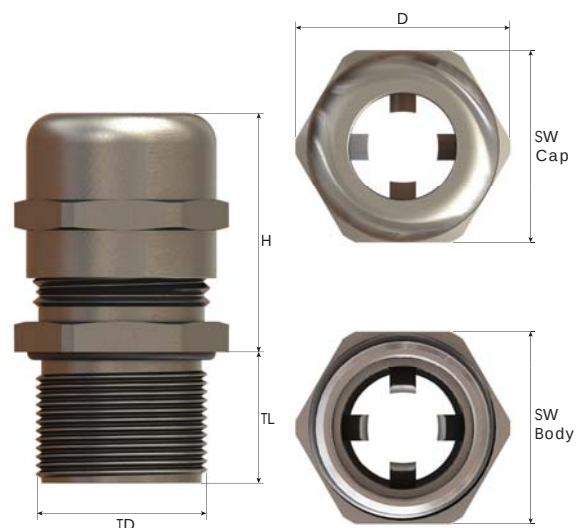
- Specially designed EMC protective cable glands.
- Vibration proof EMC performance.
- Long-lasting contact by high definition contact spring.
- Moving spring contact offers reduced risk of sheath damage.
- Easy assembly and disassembly of cable. Spring closes and opens according to fastening of the cap.
- Easy movement of cable as long as not fastened.
- Easy assembly: install cable gland - prepare cable sheath - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for EMC applications.
- Up-to-date international approvals.

Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	Clamping Insert	PA 6 (Polyamide 6)	
	Contact Spring	Special Copper Alloy	
	O-Ring	NBR	
Protection Class		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-40 °C to +150 °C
Thread Type		• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1 • Other thread types also available upon request.	
Cable Type		Non armoured, Shielded	
Accessories		• Lock nuts • Dome plugs • Gaskets	
Remarks		• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet.	
Approvals			
	Certificate Number	Standards	
	40039349	acc. to DIN EN 62444	
	E199260	acc. to UL514	



EMC 4 Cable Glands Brass



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	Shield Diameter Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
M12x1,5	3,0 - 6,5	2,0 - 5,0	6,0	12,0	14	14	15,5	28,0	BMEM-ES(M12T)	50
M16x1,5	5,0 - 10,0	3,5 - 8,0	6,0	16,0	20	20	22,0	33,0	BMEM-E1(M16T)	50
M20x1,5	6,0 - 12,0	4,5 - 10,0	6,0	20,0	22	22	24,5	32,0	BMEM-E2S(M20T)	50
	7,5 - 14,0	5,5 - 11,5	8,0		24	26	26,8	40,0	BMEM-E2(M20T)	
M25x1,5	10,0 - 18,0	7,0 - 14,0	8,0	25,0	30	30	33,0	43,0	BMEM-E3(M25T)	25
M32x1,5	16,0 - 25,0	12,0 - 20,0	9,0	32,0	40	40	43,5	53,0	BMEM-E4(M32T)	25
M40x1,5	22,0 - 32,0	18,0 - 27,0	9,0	40,0	50	50	55,5	60,5	BMEM-E5(M40T)	20
M50x1,5	30,0 - 38,0	26,0 - 34,0	9,0	50,0	58	58	64,0	73,0	BMEM-E6(M50T)	12
M63x1,5	34,0 - 44,0	30,0 - 40,0	14,0	63,0	64	68	75,0	59,0	BMEM-E7(M63T)	12
	37,0 - 53,0	33,0 - 49,0	10,0		75	75	83,0	75,0	BMEM-E7L(M63T)	

EMC 4 Cable Glands Brass

EMC cable glands with open moving spring contact

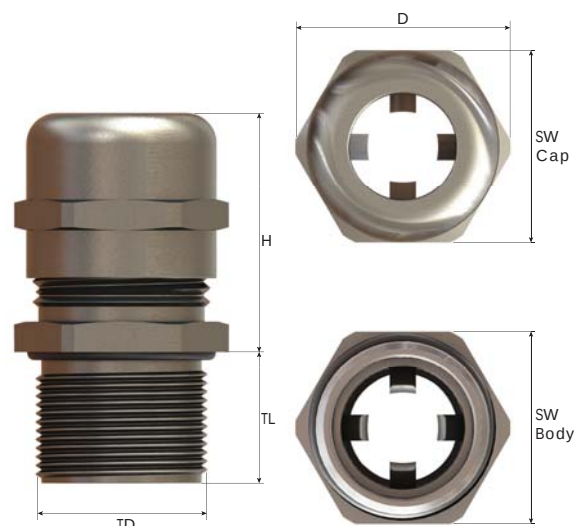
- Specially designed EMC protective cable glands.
- Vibration proof EMC performance.
- Long-lasting contact by high definition contact spring.
- Moving spring contact offers reduced risk of sheath damage.
- Easy assembly and disassembly of cable. Spring closes and opens according to fastening of the cap.
- Easy movement of cable as long as not fastened.
- Easy assembly: install cable gland - prepare cable sheath - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for EMC applications.
- Up-to-date international approvals.

Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	Clamping Insert	PA 6 (Polyamide 6)	
	Contact Spring	Special Copper Alloy	
	O-Ring	NBR	
Protection Class		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-40 °C to +150 °C
Thread Type		• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1 • Other thread types also available upon request.	
Cable Type		Non armoured, Shielded	
Accessories		• Lock nuts • Dome plugs • Gaskets	
Remarks		• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet.	
Approvals			
	Certificate Number	Standards	
	40039349	acc. to DIN EN 62444	
	E199260	acc. to UL514	



EMC 4 Cable Glands Brass



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

Size	Clamping Range Ø min-max		Shield Diameter Ø min-max		Thread Length TL		Thread Ø TD		Spanner Width SW Cap		Spanner Width SW Body		Outer Ø D		max. Height H		Part Number	Packing Unit
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
NPT 1/4"	3,0 - 6,5	0.118 - 0.256	2,0 - 5,0	0.079 - 0.197	11,5	0.453	13,72	0.540	14	0.551	15	0.591	16,5	0.610	28,0	1.102	BNEM-ES(NPT1/4"T)	50
NPT 3/8"	5,0 - 10,0	0.197 - 0.394	3,5 - 8,0	0.138 - 0.315	11,5	0.453	17,14	0.675	20	0.787	20	0.787	22,0	0.744	33,0	1.299	BNEM-E1(NPT3/8"T)	50
NPT 1/2"	6,0 - 12,0	0.236 - 0.472	4,5 - 10,0	0.177 - 0.394	15,0	0.591	21,34	0.840	22	0.866	22	0.866	24,5	0.866	37,5	1.476	BNEM-E2S(NPT1/2"T)	50
	7,5 - 14,0	0.295 - 0.551	5,5 - 11,5	0.217 - 0.453					24	0.945	24	0.945	26,8		39,5	1.555	BNEM-E2(NPT1/2"T)	
NPT 3/4"	10,0 - 18,0	0.394 - 0.709	7,0 - 14,0	0.276 - 0.551	15,0	0.591	26,67	1.050	30	1.181	30	1.181	33,0	0.965	42,5	1.673	BNEM-E3(NPT3/4"T)	25
NPT 1"	16,0 - 25,0	0.630 - 0.984	12,0 - 20,0	0.472 - 0.787	20,0	0.787	33,40	1.315	40	1.575	40	1.575	43,3	1.055	52,5	2.067	BNEM-E4(NPT1"T)	25
NPT 1 1/4"	22,0 - 32,0	0.866 - 1.260	18,0 - 27,0	0.709 - 1.063	20,0	0.787	42,16	1.660	50	1.969	50	1.969	55,4	1.299	62,0	2.441	BNEM-E5(NPT1 1/4"T)	20
NPT 1 1/2"	30,0 - 38,0	1.181 - 1.496	26,0 - 34,0	1.024 - 1.339	22,0	0.866	48,26	1.900	58	2.283	58	2.283	64,0	1.713	72,0	2.835	BNEM-E6(NPT1 1/2"T)	10
NPT 2"	34,0 - 44,0	1.339 - 1.732	30,0 - 40,0	1.181 - 1.575	22,0	0.866	60,325	2.375	64	2.520	68	2.677	75,0	2.185	71,5	2.815	BNEM-E7(NPT2"T)	5

Thread Type **PG** acc. to DIN 40430

Size	Clamping Range Ø min-max mm	Shield Diameter Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
PG 7	3,0 - 6,5	2,0 - 5,0	6,0	12,5	14	15	16,5	28,0	BSEM-E1(Pg7T)	50
PG 11	5,0 - 10,0	3,5 - 8,0	6,0	18,6	20	21	23,0	33,0	BSEM-E3(Pg11T)	50
PG 13,5	6,0 - 12,0	4,5 - 10,0	6,5	20,4	22	22	24,5	31,5	BSEM-E4(Pg13,5T)	50
PG 16	7,5 - 14,0	5,5 - 11,5	6,5	22,5	24	25	27,5	39,5	BSEM-E5(Pg16T)	25
PG 21	10,0 - 18,0	7,0 - 14,0	7,0	28,3	32	30	35,5	42,5	BSEM-E6(Pg21T)	25
PG 29	16,0 - 25,0	12,0 - 20,0	9,0	37,0	40	40	43,5	52,5	BSEM-E7(Pg29T)	25
PG 36	22,0 - 32,0	18,0 - 27,0	9,0	47,0	50	50	55,5	60,5	BSEM-E8(Pg36T)	20
PG 42	30,0 - 38,0	26,0 - 34,0	12,0	54,0	58	60	66,5	72,5	BSEM-E9(Pg42T)	10
PG 48	34,0 - 44,0	30,0 - 40,0	14,0	59,3	64	68	75,0	58,5	BSEM-E10(Pg48T)	5

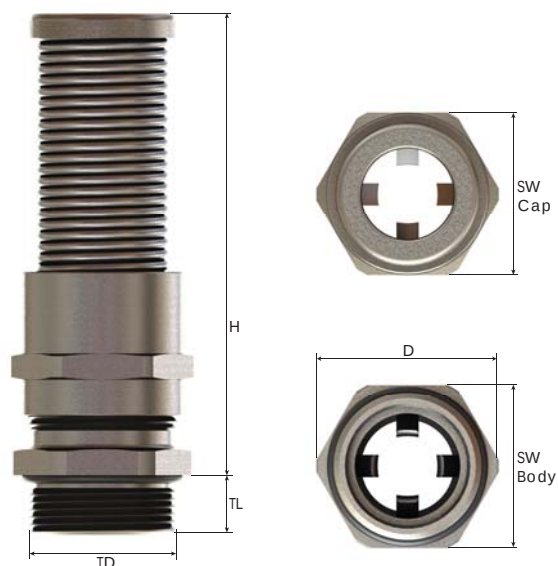
Cable Protection Glands, EMC Brass

EMC cable protection glands with lamellar clamping

- For cable bending protection.
- Specially designed EMC protective cable glands.
- Long-lasting contact by high definition contact spring.
- Easy assembly: install cable gland - prepare cable sheath - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for EMC applications.

Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	Clamping Insert	PA 6 (Polyamide 6)	
	Bending Spiral	Stainless steel (AISI 301)	
	Bending Spiral Ring	Brass, Nickel plated	
	Contact Spring	Special Copper Alloy	
Protection Class	O-Ring	CR (Chloroprene Rubber)	
		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature	Permanent	-20 °C to +100 °C	Intermittent
			-40 °C to +150 °C
Thread Type		• Metric EN 60423 • Other thread types also available upon request.	
Cable Type		Non armoured, Shielded	
Accessories		• Lock nuts • Gaskets	
Remarks		• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	Shield Diameter Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
					SW Cap mm	SW Body mm				
M16x1,5	5,0 - 10,0	3,5	7,0	16,0	20	20	22,0	74,2	BMEMSP-E1	o.r.
M20x1,5	6,0 - 12,0	4,5	8,0	20,0	22	22	24,5	66,0	BMEMSP-E2	o.r.
M25x1,5	11,0 - 17,0	9,5	8,0	25,0	27	27	30,0	74,5	BMEMSP-E3	o.r.



RJ 45 Cable Glands Brass

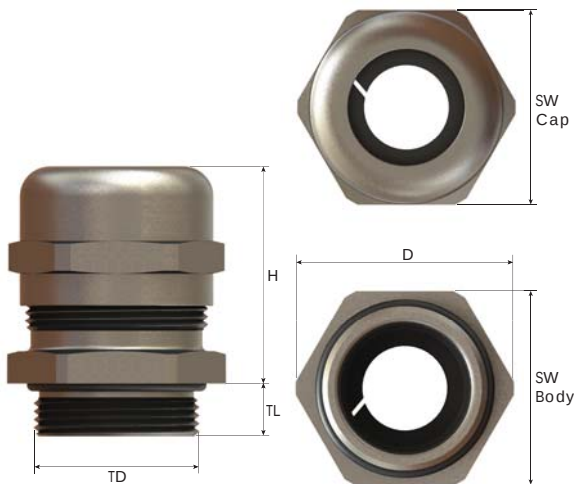
Industrial Application

Cable glands for RJ 45 cables

- For standard industrial applications using data cables with pre-assembled cables with RJ 45 connectors.
- For metal machines and housings.
- For industrial applications in harsh environments.
- Easy assembly: feed connector through cable gland - assemble splitted seal around cable - insert seal into gland body - install cable gland - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
Protection Class		IP 68 - 5 Bar, 30 min	
Flammability		V2 according to UL94	
Operating Temperature	Permanent	-20 °C to +100 °C	Intermittent
			-40 °C to +150 °C
Thread Type		• Metric EN 60423 • PG DIN 40430 • Other thread types also available upon request.	
Cable Type		Non armoured	
Accessories		• Lock nuts • Dome plugs • Gaskets	
Remarks		• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	



Thread Type METRIC acc. to EN 60423

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
M20x1,5	6,0	8,0	20,0	24	24	26,8	28,0	BMBCRJ-02S	o.r.
		12,0						BMBCRJ-02S	
M25x1,5	6,0	8,0	25,0	24	27	29,8	27,7	BMBCRJ-03	o.r.
		12,0						BMBCRJ-03	
M32x1,5	6,0	9,0	32,0	30	34	37,5	32,3	BMBCRJ-04	o.r.
		15,0						BMBCRJ-04	

Thread Type PG acc. to DIN 40430

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
PG 16	6,0	6,5	22,5	24	24	26,5	28,0	BSBCRJ-05	o.r.
		10,0						BSBCRJ-05	
PG 21	6,0	7,2	28,3	30	30	33,0	32,5	BSBCRJ-06	o.r.
		12,0						BSBCRJ-06	

Snap-In Glands, EMC Brass

EMC cable glands with open moving spring contact, front-side assembly, without thread

- Specially designed EMC protective cable glands - easy to assemble to housings without threaded holes.
- Vibration proof EMC performance.
- Long-lasting contact by high definition contact spring.
- Moving spring contact offers reduced risk of sheath damage.
- Easy assembly and disassembly of cable. Spring closes and opens according to fastening of the cap.
- Easy movement of cable as long as not fastened.
- Easy assembly: push cable gland and turn body clockwise - prepare cable sheath - insert cable - tighten cap.
- Perfectly fit to wall thickness 0,5 mm to 4,0 mm.
- High quality strain relief and sealing, reliable performance for EMC applications.

Technical Details

Material	Body	Brass, Nickel plated	
	Lower Body	PA 6 (Polyamide 6)	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	Clamping Insert	PA 6 (Polyamide 6)	
	Contact Spring	Special Copper Alloy	
	Gasket	CR (Chloroprene Rubber)	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-30 °C to +150 °C
Cable Type		Non armoured, Shielded	
Accessories		• Dome plugs • Disassembly tool (one piece included per packing unit)	
Remarks		• Manufactured according to DIN EN 62444/50262.	

Approvals

	Certificate Number	Standards
	SERCOVAM RES 107572	acc. to UL514B §8.26.7



Assembling

Push

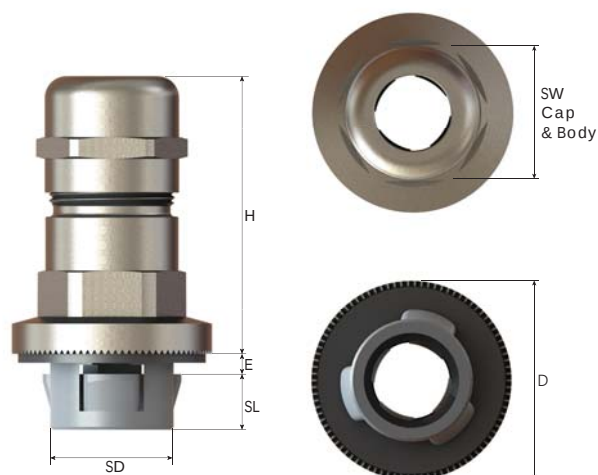
Tighten

Disassembling

Push

Collect

Snap-In Glands, EMC Brass



wall thickness (E) : 0,5 - 4,0 mm

Size	Clamping Range Ø min-max mm	Shield Diameter Ø min-max mm	Snap Length SL mm	Snap Ø SD mm	Hole Ø HD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
20	6,0 - 12,0	4,5 - 10,0	9,0	19,9	20,2 - 20,6	22	22	32,3	50,5	BMEOS-E2S(T)	50



Snap-In Gland Disassembling Tool

Size	ID Ø mm	H mm	Part Number	Packing Unit
20	20,0	13,0	BEX-20	10

Armoured Cable Glands

Cable glands for armoured cables

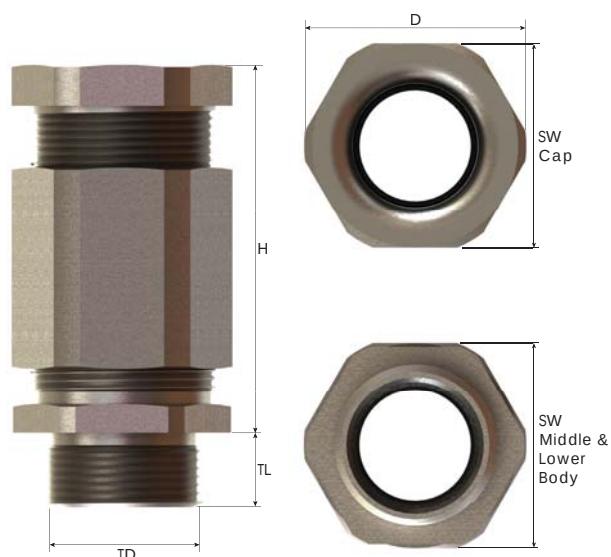
- Specially designed cable glands for armoured cables. Large temperature range applications.
- Easy assembly: install cable gland - prepare steel wires - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	Brass - Brass, Nickel plated - Stainless Steel - Aluminium
	Cap	Brass - Brass, Nickel plated - Stainless Steel - Aluminium
	Seal	CR (Chloroprene Rubber)
	Swivel Braid Ring	Brass - Brass, Nickel plated- Stainless Steel - Aluminium
Protection Class		IP 66
Operating Temperature	Permanent	
		-40 °C to +100 °C
Thread Type		• Metric EN 60423 • NPT ANSI B1.20.1 • Other thread types also available upon request.
Cable Type		SWA, SWB, AWA, STA and Shielded
Accessories		• Lock nuts • Gaskets • Shroud
Remarks		• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.



Armoured Cable Glands



Industrial Application

Order Encoding

Part Number	Size	• M: Metric • N: NPT Thread	• C: Chloroprene Sealing	• B: Brass • X: Stainless steel • BN: Nickel Plated • A: Aluminium Material	Locknut	• S: Shroud
KBET	5	M	C	B	L	S

Thread Type METRIC acc. to EN 60423

Size	Clamping Range Ø min-max mm	Armour Wire Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	SW Cap mm	Spanner Width SW Middle Body mm	SW Lower Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
M16x1,5	8,0 - 15,0	0,3 - 1,3	9,0	16,0	25	25	24	27,5	40,5	KBET01MC	100
M20x1,5	8,0 - 15,0	0,3 - 1,3	9,0	20,0	25	25	24	27,5	40,5	KBET1MC	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET1LMC	
M25x1,5	8,0 - 15,0	0,3 - 1,3	9,0	25,0	25	25	25	27,5	40,5	KBET2SMC	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET2MC	
	18,0 - 27,0	0,4 - 1,6			40	40	40	44,5	48,2	KBET2LMC	
M32x1,5	18,0 - 27,0	0,4 - 1,6	9,0	32,0	40	40	40	44,5	48,2	KBET3SMC	30
	23,0 - 33,0	0,4 - 2,0			43	43	43	48,5	51,7	KBET3MC	
M40x1,5	29,0 - 40,0	0,4 - 2,0	9,0	40,0	52	52	52	59,0	55,2	KBET4MC	25
M50x1,5	35,0 - 48,0	0,4 - 2,5	9,0	50,0	60	60	60	66,5	67,5	KBET5SMC	20
	42,0 - 56,0	0,6 - 2,5			75	74	70	83,0	74,3	KBET5MC	
M63x1,5	42,0 - 56,0	0,6 - 2,5	9,0	63,0	75	74	70	83,0	74,3	KBET6SMC	10
	53,0 - 66,0				85	85	80	94,0	75,3	KBET6MC	
M75x1,5	53,0 - 66,0	0,6 - 2,5	9,0	75,0	85	85	80	94,0	75,3	KBET7SMC	5
	63,0 - 75,0				95	95	90	105,0	78,8	KBET7MC	

Thread Type NPT acc. to ANSI B1.20.1

Size	Clamping Range Ø min-max mm	Armour Wire Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	SW Cap mm	Spanner Width SW Middle Body mm	SW Lower Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
NPT 3/8"	8,0 - 15,0	0,3 - 1,3	16,0	17,1	25	25	24	27,5	40,5	KBET01NC	100
NPT 1/2"	8,0 - 15,0	0,3 - 1,3	16,0	21,3	25	25	24	27,5	40,5	KBET1NC	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET1LNC	
NPT 3/4"	8,0 - 15,0	0,3 - 1,3	16,0	26,7	25	25	27	27,5	40,5	KBET2SNC	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET2NC	
	18,0 - 27,0	0,4 - 1,6			40	40	40	44,5	48,2	KBET2LNC	
NPT 1"	18,0 - 27,0	0,4 - 1,6	21,0	33,4	40	40	40	44,5	48,2	KBET3SNC	30
	23,0 - 33,0	0,4 - 2,0			43	43	43	48,5	51,7	KBET3NC	
NPT 1 1/4"	29,0 - 40,0	0,4 - 2,0	21,0	42,2	52	52	52	59,0	55,2	KBET4NC	25
NPT 1 1/2"	35,0 - 48,0	0,4 - 2,5	21,0	48,3	60	60	60	66,5	67,5	KBET5SNC	20
	42,0 - 56,0	0,6 - 2,5			75	74	70	83,0	74,3	KBET5NC	
NPT 2"	42,0 - 56,0	0,6 - 2,5	21,0	60,3	75	74	70	83,0	74,3	KBET6SNC	10
	53,0 - 66,0				85	85	80	94,0	75,3	KBET6NC	
NPT 2 1/2"	53,0 - 66,0	0,6 - 2,5	21,0	73,0	85	85	80	94,0	75,3	KBET7SNC	5
	63,0 - 75,0				95	95	90	105,0	78,8	KBET7NC	

Armoured Cable Glands Increased Temperature

Cable glands for armoured cables

- Specially designed cable glands for armoured cables, increased temperature design.
- Easy assembly: install cable gland - prepare steel wires - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	Brass - Brass, Nickel plated - Stainless Steel - Aluminium
	Cap	Brass - Brass, Nickel plated - Stainless Steel - Aluminium
	Seal	NBR
	Swivel Braid Ring	Brass - Brass, Nickel plated - Stainless Steel - Aluminium
Protection Class	IP 66	
Operating Temperature	Permanent -30 °C to +120 °C	
Thread Type	• Metric EN 60423 • NPT ANSI B1.20.1 • Other thread types also available upon request.	
Cable Type	SWA, SWB, AWA, STA and Shielded	
Accessories	• Lock nuts • Gaskets • Shroud	
Remarks	• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	



Order Encoding

Part Number	Size	•M: Metric •N: NPT Thread	•N: NBR Sealing	•B: Brass •X: Stainless steel •BN: Nickel Plated •A: Aluminium Material	Locknut	•S: Shroud
KBET	5	M	N	B	L	S

Thread Type METRIC acc. to EN 60423

	Clamping Range	Armour Wire	Thread Length	Thread Ø		Spanner Width		Outer Ø	max. Height		
Size	Ø min-max	Ø min-max	TL	TD	SW Cap	SW Middle Body	SW Lower Body	D	H	Part Number	Packing Unit
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M16x1,5	8,0 - 15,0	0,3 - 1,3	9,0	16,0	25	25	24	27,5	40,5	KBET01MN	100
M20x1,5	8,0 - 15,0	0,3 - 1,3	9,0	20,0	25	25	24	27,5	40,5	KBET1MN	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET1LMN	
M25x1,5	8,0 - 15,0	0,3 - 1,3	9,0	25,0	25	25	25	27,5	40,5	KBET2SMN	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET2MN	
	18,0 - 27,0	0,4 - 1,6			40	40	40	44,5	48,2	KBET2LMN	
M32x1,5	18,0 - 27,0	0,4 - 1,6	9,0	32,0	40	40	40	44,5	48,2	KBET3SMN	30
	23,0 - 33,0	0,4 - 2,0			43	43	43	48,5	51,7	KBET3MN	
M40x1,5	29,0 - 40,0	0,4 - 2,0	9,0	40,0	52	52	52	59,0	55,2	KBET4MN	25
	35,0 - 48,0	0,4 - 2,5	9,0	50,0	60	60	60	66,5	67,5	KBET5SMN	20
M50x1,5	42,0 - 56,0	0,6 - 2,5			75	74	70	83,0	74,3	KBET5MN	
	42,0 - 56,0	0,6 - 2,5	9,0	63,0	75	74	70	83,0	74,3	KBET6SMN	10
53,0 - 66,0	85				85	80	94,0	75,3	KBET6MN		
M75x1,5	53,0 - 66,0	0,6 - 2,5	9,0	75,0	85	85	80	94,0	75,3	KBET7SMN	5
	63,0 - 75,0				95	95	90	105,0	78,8	KBET7MN	

Thread Type NPT acc. to ANSI B1.20.1

	Clamping Range	Armour Wire	Thread Length	Thread Ø		Spanner Width		Outer Ø	max. Height		
Size	Ø min-max	Ø min-max	TL	TD	SW Cap	SW Middle Body mm	SW Lower Body mm	D	H	Part Number	Packing Unit
	mm	mm	mm	mm	mm			mm	mm		
NPT 3/8"	8,0 - 15,0	0,3 - 1,3	16,0	17,1	25	25	24	27,5	40,5	KBET01NN	100
NPT 1/2"	8,0 - 15,0	0,3 - 1,3	16,0	21,3	25	25	24	27,5	40,5	KBET1NN	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET1LNN	
NPT 3/4"	8,0 - 15,0	0,3 - 1,3	16,0	26,7	25	25	27	27,5	40,5	KBET2SNN	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET2NN	
NPT 1"	18,0 - 27,0	0,4 - 1,6	21,0	33,4	40	40	40	44,5	48,2	KBET2LNN	30
	18,0 - 27,0	0,4 - 1,6			40	40	40	44,5	48,2	KBET3SNN	
	23,0 - 33,0	0,4 - 2,0			43	43	43	48,5	51,7	KBET3NN	
NPT 1 1/4"	29,0 - 40,0	0,4 - 2,0	21,0	42,2	52	52	52	59,0	55,2	KBET4NN	25
NPT 1 1/2"	35,0 - 48,0	0,4 - 2,5	21,0	48,3	60	60	60	66,5	67,5	KBET5SNN	20
	42,0 - 56,0	0,6 - 2,5			75	74	70	83,0	74,3	KBET5NN	
NPT 2"	42,0 - 56,0	0,6 - 2,5	21,0	60,3	75	74	70	83,0	74,3	KBET6SNN	10
	53,0 - 66,0				85	85	80	94,0	75,3	KBET6NN	
NPT 2 1/2"	53,0 - 66,0	0,6 - 2,5	21,0	73,0	85	85	80	94,0	75,3	KBET7SNN	5
	63,0 - 75,0				95	95	90	105,0	78,8	KBET7NN	

Armoured Cable Glands Large Temperature Range

Industrial Application



Cable glands for armoured cables

- Specially designed cable glands for armoured cables. Large temperature range applications.
- Easy assembly: install cable gland - prepare steel wires - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Body	Brass - Brass, Nickel plated - Stainless Steel - Aluminium
	Cap	Brass - Brass, Nickel plated - Stainless Steel - Aluminium
	Seal	Silicone
	Swivel Braid Ring	Brass - Brass, Nickel plated - Stainless Steel - Aluminium
Protection Class	IP 66	
Operating Temperature	Permanent	
Thread Type	-60 °C to +180 °C	
	• Metric EN 60423	
	• NPT ANSI B1.20.1	
	• Other thread types also available upon request.	
Cable Type	SWA, SWB, AWA, STA and Shielded	
Accessories	• Lock nuts • Gaskets • Shroud	
Remarks	• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.	

Order Encoding

Part Number	Size	• M: Metric • N: NPT Thread	• S: Silicone Sealing	• B: Brass • X: Stainless steel • BN: Nickel Plated • A: Aluminium Material	Locknut	• S: Shroud
KBET	5	M	S	B	L	S

Thread Type METRIC acc. to EN 60423

Size	Clamping Range Ø min-max mm	Armour Wire Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	SW Cap mm	Spanner Width SW Middle Body mm	SW Lower Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
M16x1,5	8,0 - 15,0	0,3 - 1,3	9,0	16,0	25	25	24	27,5	40,5	KBET01MS	100
M20x1,5	8,0 - 15,0	0,3 - 1,3	9,0	20,0	25	25	24	27,5	40,5	KBET1MS	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET1LMS	
M25x1,5	8,0 - 15,0	0,3 - 1,3	9,0	25,0	25	25	25	27,5	40,5	KBET2SMS	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET2MS	
	18,0 - 27,0	0,4 - 1,6			40	40	40	44,5	48,2	KBET2LMS	
M32x1,5	18,0 - 27,0	0,4 - 1,6	9,0	32,0	40	40	40	44,5	48,2	KBET3SMS	30
	23,0 - 33,0	0,4 - 2,0			43	43	43	48,5	51,7	KBET3MS	
M40x1,5	29,0 - 40,0	0,4 - 2,0	9,0	40,0	52	52	52	59,0	55,2	KBET4MS	25
	35,0 - 48,0	0,4 - 2,5			60	60	60	66,5	67,5	KBET5SMS	20
M50x1,5	42,0 - 56,0	0,6 - 2,5	9,0	50,0	75	74	70	83,0	74,3	KBET5MS	
M63x1,5	42,0 - 56,0	0,6 - 2,5	9,0	63,0	75	74	70	83,0	74,3	KBET6SMS	10
	53,0 - 66,0				85	85	80	94,0	75,3	KBET6MS	
M75x1,5	53,0 - 66,0	0,6 - 2,5	9,0	75,0	85	85	80	94,0	75,3	KBET7SMS	5
	63,0 - 75,0				95	95	90	105,0	78,8	KBET7MS	

Thread Type NPT acc. to ANSI B1.20.1

Size	Clamping Range Ø min-max mm	Armour Wire Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	SW Cap mm	Spanner Width SW Middle Body mm	SW Lower Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
NPT 3/8"	8,0 - 15,0	0,3 - 1,3	16,0	17,1	25	25	24	27,5	40,5	KBET01NS	100
NPT 1/2"	8,0 - 15,0	0,3 - 1,3	16,0	21,3	25	25	24	27,5	40,5	KBET1NS	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET1LNS	
NPT 3/4"	8,0 - 15,0	0,3 - 1,3	16,0	26,7	25	25	27	27,5	40,5	KBET2SNS	50
	13,5 - 21,0	0,4 - 1,3			30	30	29	33,0	41,5	KBET2NS	
	18,0 - 27,0	0,4 - 1,6			40	40	40	44,5	48,2	KBET2LNS	
NPT 1"	18,0 - 27,0	0,4 - 1,6	21,0	33,4	40	40	40	44,5	48,2	KBET3SNS	30
	23,0 - 33,0	0,4 - 2,0			43	43	43	48,5	51,7	KBET3NS	
NPT 1 1/4"	29,0 - 40,0	0,4 - 2,0	21,0	42,2	52	52	52	59,0	55,2	KBET4NS	25
	35,0 - 48,0	0,4 - 2,5			60	60	60	66,5	67,5	KBET5SNS	20
NPT 1 1/2"	42,0 - 56,0	0,6 - 2,5	21,0	48,3	75	74	70	83,0	74,3	KBET5NS	
NPT 2"	42,0 - 56,0	0,6 - 2,5	21,0	60,3	75	74	70	83,0	74,3	KBET6SNS	10
	53,0 - 66,0				85	85	80	94,0	75,3	KBET6NS	
NPT 2 1/2"	53,0 - 66,0	0,6 - 2,5	21,0	73,0	85	85	80	94,0	75,3	KBET7SNS	5
	63,0 - 75,0				95	95	90	105,0	78,8	KBET7NS	

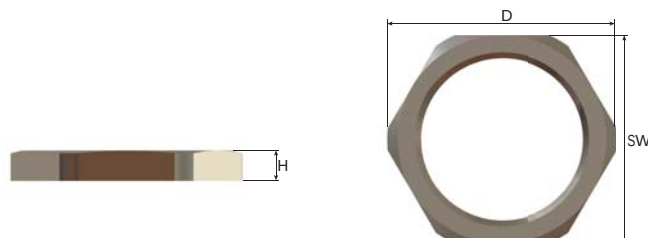
Lock Nuts Metal

Lock Nuts, Metal

- For standard industrial applications in harsh environments.
- Safe fastening of cable glands.

Technical Details

Material	Brass, Nickel plated Stainless Steel
Thread Type	• Metric EN 60423 • NPSL ANSI B1.20.1 • PG DIN 40430 • G (PF) DIN ISO 228



Thread Type **METRIC** acc. to EN 60423

Size	Brass, Nickel Plated			Part Number	Stainless Steel			Part Number	Packing Unit
	SW mm	Outer Ø D mm	max. Height H mm		SW mm	Outer Ø D mm	max. Height H mm		
M12x1,5	15,0	16,6	2,8	BMBL-01	15,0	16,6	2,8	BMBLS-01	100
M16x1,5	19,0	21,0	3,0	BMBL-02	19,0	21,0	3,0	BMBLS-02	100
M20x1,5	24,0	26,5	3,5	BMBL-03	24,0	26,5	3,5	BMBLS-03	100
M25x1,5	30,0	33,0	4,0	BMBL-04	30,0	33,0	4,0	BMBLS-04	100
M32x1,5	36,0	39,5	5,0	BMBL-05	36,0	39,5	5,0	BMBLS-05	50
M40x1,5	46,0	51,0	5,0	BMBL-06	46,0	51,0	5,0	BMBLS-06	50
M50x1,5	60,0	66,0	5,0	BMBL-07	60,0	66,0	5,0	BMBLS-07	10
M63x1,5	70,0	77,0	6,0	BMBL-08	70,0	77,0	6,0	BMBLS-08	10
M72x2,0	77,0	86,0	7,0	BMBL-09	77,0	86,0	7,0	BMBLS-09	10
M75x1,5	80,0	89,0	7,0	BMBL-10S	80,0	89,0	7,0	BMBLS-10S	5
M75x2,0	80,0	89,6	7,0	BMBL-10	80,0	89,6	7,0	BMBLS-10	5
M80x2,0	90,0	100,0	8,0	BMBL-11	90,0	100,0	8,0	BMBLS-11	5
M85x2,0	95,0	106,2	8,0	BMBL-12	95,0	106,2	8,0	BMBLS-12	5
M90x1,5	100,0	112,0	8,0	BMBL-13S	100,0	112,0	8,0	BMBLS-13S	5
M90x2,0	100,0	112,0	8,0	BMBL-13	100,0	112,0	8,0	BMBLS-13	5
M100x1,5	120,0	128,0	10,0	BMBL-14	120,0	128,0	10,0	BMBLS-14	5
M110x1,5	130,0	145,0	10,0	BMBL-15	130,0	145,0	10,0	BMBLS-15	5

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

Size	Brass, Nickel Plated						Part Number	Stainless Steel						Packing Unit	
	SW		Outer Ø D		max. Height H			SW		Outer Ø D		max. Height H			
	mm	inch	mm	inch	mm	inch		mm	inch	mm	inch	mm	inch		
NPSL 1/4"	17,0	0.669	18,8	0.740	5,0	0.197	BNLN-01S	17,0	0.669	18,8	0.740	5,0	0.197	BNLNS-01S	100
NPSL 3/8"	24,0	0.945	26,5	1.043	5,0	0.197	BNLN-01	24,0	0.945	26,5	1.043	5,0	0.197	BNLNS-01	100
NPSL 1/2"	24,0	0.945	26,5	1.043	5,0	0.197	BNLN-02	24,0	0.945	26,5	1.043	5,0	0.197	BNLNS-02	100
NPSL 3/4"	34,0	1.339	37,5	1.476	6,0	0.236	BNLN-03	35,0	1.339	39,0	1.476	6,0	0.236	BNLNS-03	100
NPSL 1"	42,0	1.654	46,4	1.827	6,0	0.236	BNLN-04	46,0	1.654	51,0	1.827	6,0	0.236	BNLNS-04	100
NPSL 1 1/4"	52,0	2.047	57,4	2.260	7,0	0.276	BNLN-05	55,0	2.047	61,0	2.260	7,0	0.276	BNLNS-05	100
NPSL 1 1/2"	60,0	2.362	65,1	2.563	7,0	0.276	BNLN-06	60,0	2.362	65,1	2.563	7,0	0.276	BNLNS-06	100
NPSL 2"	74,0	2.913	81,8	3.220	8,0	0.315	BNLN-07	74,0	2.913	81,8	3.220	8,0	0.315	BNLNS-07	100
NPSL 2 1/2"	80,0	3.150	89,0	3.504	10,0	0.394	BNLN-08	80,0	3.150	89,0	3.504	10,0	0.394	BNLNS-08	50
NPSL 3"	95,0	3.740	105,0	4.134	10,0	0.394	BNLN-09	95,0	3.740	105,0	4.134	10,0	0.394	BNLNS-09	25
NPSL 3 1/2"	115,0	4.528	128,5	5.059	10,0	0.394	BNLN-10	115,0	4.528	128,5	5.059	10,0	0.394	BNLNS-10	10
NPSL 4"	130,0	5.118	145,0	5.709	10,0	0.394	BNLN-11	130,0	5.118	145,0	5.709	10,0	0.394	BNLNS-11	10
NPSL 5"	160,0	6.299	178,5	7.028	12,0	0.472	BNLN-12	160,0	6.299	178,5	7.028	12,0	0.472	BNLNS-12	10

Thread Type **PG** acc. to DIN 40430

Size	Brass, Nickel Plated			Part Number	Stainless Steel			Part Number	Packing Unit
	SW mm	Outer Ø D mm	max. Height H mm		SW mm	Outer Ø D mm	max. Height H mm		
PG 7	15,0	16,6	2,8	BSL-01	17,0	18,6	2,8	BSLS-01	100
PG 9	18,0	20,0	2,8	BSL-02	19,0	21,0	2,8	BSLS-02	100
PG 11	21,0	23,5	3,0	BSL-03	22,0	24,5	3,0	BSLS-03	100
PG 13,5	23,0	25,5	3,0	BSL-04	24,0	26,5	3,0	BSLS-04	100
PG 16	26,0	29,0	3,0	BSL-05	27,0	30,0	3,0	BSLS-05	100
PG 21	32,0	35,5	3,5	BSL-06	32,0	35,5	3,5	BSLS-06	100
PG 29	41,0	45,0	4,0	BSL-07	41,0	45,0	4,0	BSLS-07	50
PG 36	51,0	56,0	5,0	BSL-08	60,0	66,0	5,0	BSLS-08	25
PG 42	60,0	66,0	5,0	BSL-09	60,0	66,0	5,0	BSLS-09	10
PG 48	64,0	70,5	5,5	BSL-10	65,0	71,5	5,5	BSLS-10	10

Thread Type **G (Pf)** acc. to DIN ISO 228

Size	Brass, Nickel Plated			Part Number	Stainless Steel			Part Number	Packing Unit
	SW mm	Outer Ø D mm	max. Height H mm		SW mm	Outer Ø D mm	max. Height H mm		
G 3/8"	22,0	24,5	5,0	BPFL-01	22,0	24,5	5,0	BPFLS-01	100
G 1/2"	27,0	30,0	5,0	BPFL-02	27,0	30,0	5,0	BPFLS-02	100
G 3/4"	33,0	36,5	5,0	BPFL-03	36,0	39,5	5,0	BPFLS-03	100
G 1"	43,0	46,5	5,0	BPFL-04	46,0	51,0	5,0	BPFLS-04	50
G 1 1/4"	48,0	53,0	5,0	BPFL-05	50,0	55,5	5,0	BPFLS-05	25
G 1 1/2"	55,0	61,0	5,0	BPFL-06	55,0	61,0	5,0	BPFLS-06	10
G 2"	64,0	70,5	5,5	BPFL-07	65,0	71,5	5,5	BPFLS-07	10
G 4"	130,0	145,0	8,0	BPFL-11	130,0	145,0	8,0	BPFLS-11	5

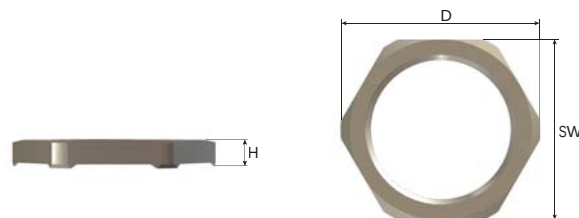


Lock Nuts, Metal, EMC

- For EMC applications of high quality metal machines and housings.
- For high quality applications in corrosive environments.
- Safe fastening of EMC cable glands.

Technical Details

Material	Brass, Nickel plated Stainless Steel
Thread Type	• Metric EN 60423 • PG DIN 40430



Thread Type **METRIC** acc. to EN 60423

Size	SW mm	Brass, Nickel Plated			Part Number	SW mm	Stainless Steel			Part Number	Packing Unit
		Outer Ø D mm	max. Height H mm				Outer Ø D mm	max. Height H mm			
M12x1,5	15	16,5	3,3		BMEL-01	15	16,5	3,3		BMELS-01	50
M16x1,5	19	21,0	3,5		BMEL-02	19	21,0	3,5		BMELS-02	50
M20x1,5	24	26,5	3,5		BMEL-03	24	26,5	3,5		BMELS-03	50
M25x1,5	30	33,0	3,5		BMEL-04	30	33,0	3,5		BMELS-04	25
M32x1,5	36	39,5	4,0		BMEL-05	36	39,5	4,0		BMELS-05	25
M40x1,5	46	51,0	4,6		BMEL-06	46	51,0	4,6		BMELS-06	20
M50x1,5	60	66,0	5,6		BMEL-07	60	66,0	5,6		BMELS-07	15
M63x1,5	70	77,0	6,7		BMEL-08	70	77,0	6,7		BMELS-08	12

Thread Type **PG** acc. to DIN 40430

Size	SW mm	Brass, Nickel Plated			Part Number	SW mm	Stainless Steel			Part Number	Packing Unit
		Outer Ø D mm	max. Height H mm				Outer Ø D mm	max. Height H mm			
PG 7	15	16,5	3,3		BSEL-01	15	16,5	3,3		BSELS-01	50
PG 9	18	20,0	3,3		BSEL-02	18	20,0	3,3		BSELS-02	50
PG 11	21	23,5	3,5		BSEL-03	21	23,5	3,5		BSELS-03	50
PG 13,5	23	25,5	3,5		BSEL-04	23	25,5	3,5		BSELS-04	50
PG 16	26	29,0	3,5		BSEL-05	26	29,0	3,5		BSELS-05	25
PG 21	32	35,5	4,0		BSEL-06	32	35,5	4,0		BSELS-06	25
PG 29	41	45,0	4,6		BSEL-07	41	45,0	4,6		BSELS-07	20
PG 36	51	56,0	5,6		BSEL-08	51	56,0	5,6		BSELS-08	15
PG 42	60	66,0	5,6		BSEL-09	60	66,0	5,6		BSELS-09	12
PG 48	64	70,5	6,1		BSEL-10	64	70,5	6,1		BSELS-10	12

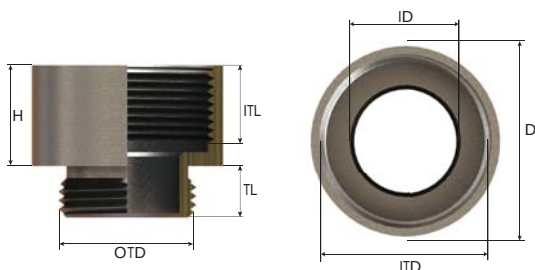
Enlargers Brass

Enlargers for different thread sizes

- For metal machines and housings.
- Enlargers for the transition of different thread types and sizes.

Technical Details

Material	Brass, Nickel plated
Thread Type	• Metric EN 60423 • PG DIN 40430
Accessories	• Lock nuts • Gaskets
Remarks	• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.



Thread Type **METRIC - METRIC** acc. to EN 60423

Size Outer Thread OTD	Size Inner Thread ITD	Thread Length TL mm	Inner Thread Length ITL mm	Inner Ø ID mm	Outer Ø D mm	Height H mm	Part Number	Packing Unit
M12x1,5	M16x1,5	6,0	7,0	8,0	18,0	9,0	MME-01	200
M16x1,5	M20x1,5	6,0	10,0	12,0	22,0	11,6	MME-02	150
M20x1,5	M25x1,5	7,0	8,5	16,0	27,0	10,5	MME-03	120
M25x1,5	M32x1,5	8,0	9,5	20,5	34,0	11,5	MME-04	100
M32x1,5	M40x1,5	8,0	8,5	26,0	42,0	14,5	MME-05	50
M40x1,5	M50x1,5	8,0	15,0	35,5	52,0	19,5	MME-06	20
M50x1,5	M63x1,5	9,0	9,5	45,0	65,0	22,5	MME-07	10

Thread Type **PG - PG** acc. to DIN 40430

Size Outer Thread OTD	Size Inner Thread ITD	Thread Length TL mm	Inner Thread Length ITL mm	Inner Ø ID mm	Outer Ø D mm	Height H mm	Part Number	Packing Unit
PG 7	PG 9	5,0	5,0	8,0	17,0	10,0	PPE-01	200
PG 9	PG 11	6,0	7,0	11,7	20,0	10,5	PPE-02	200
	PG 13,5		9,0	11,5	22,0	11,5	PPE-03	150
PG 11	PG 13,5	6,0	8,5	13,8	22,0	11,5	PPE-04	150
	PG 16	6,5	8,5		24,0	10,5	PPE-05	
	PG 21		10,0		30,0	14,5	PPE-06	
PG 13,5	PG 16	6,5	8,5	16,4	24,0	10,5	PPE-07	120
	PG 21		10,0	16,5	30,0	14,5	PPE-08	
PG 16	PG 21	6,5	10,0	17,6	29,7	12,0	PPE-09	100
	PG 29	7,0	12,0	17,5	40,0	16,0	PPE-10	70
PG 21	PG 29	7,0	14,0	24,0	39,0	16,0	PPE-11	70
PG 29	PG 36	8,0	17,5	32,0	50,0	19,5	PPE-12	50
PG 36	PG 42	9,0	19,0	38,0	57,0	22,0	PPE-13	30
PG 42	PG 48	10,0	19,5	49,2	64,0	23,0	PPE-14	10

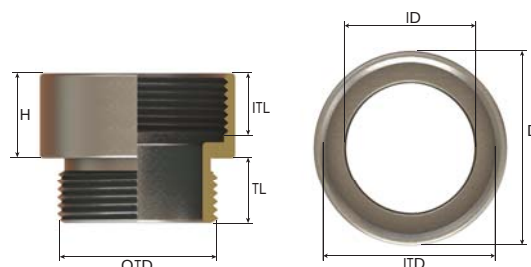


Adaptors for different threads

- For metal machines and housings.
- Adaptors for the transition of different thread types and sizes.

Technical Details

Material	Brass, Nickel plated
Thread Type	• Metric EN 60423 • PG DIN 40430
Accessories	• Lock nuts • Gaskets
Remarks	• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.



Thread Type **METRIC - PG** acc. to EN 60423 / DIN 40430

Size Outer Thread OTD	Size Inner Thread ITD	Thread Length TL mm	Inner Thread Length ITL mm	Inner Ø		Outer Ø		Height H mm	Part Number	Packing Unit
				ID mm	D mm					
M12x1,5	PG 9	6,0	7,0	8,0	17,0	9,0		9,0	MPE-01	200
M16x1,5	PG 11	6,0	7,5	12,0	20,0	9,0		9,0	MPE-02	150
M20x1,5	PG 16	8,0	8,5	16,0	24,0	10,5		10,5	MPE-03	120
M25x1,5	PG 21	9,0	10,0	20,5	30,0	12,5		12,5	MPE-04	100
M32x1,5	PG 29	8,0	13,0	27,5	40,0	16,0		16,0	MPE-05	70
M40x1,5	PG 36	9,0	14,0	35,5	50,0	18,5		18,5	MPE-06	50
M50x1,5	PG 42	9,0	18,0	45,5	57,0	22,0		22,0	MPE-07	30
M63x1,5	PG 48	9,0	18,0	56,0	64,0	23,0		23,0	MPE-08	20

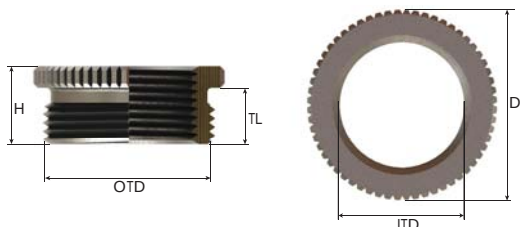
Reducers Brass

Reducers for different thread sizes

- For metal machines and housings.
- Reducers for the transition of different thread types and sizes.

Technical Details

Material	Brass, Nickel plated
Thread Type	• Metric EN 60423 • PG DIN 40430
Accessories	• Lock nuts • Gaskets
Remarks	• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.



Thread Type METRIC - METRIC acc. to EN 60423

Size Outer Thread OTD	Size Inner Thread ITD	Thread Length TL mm	Outer Ø D mm	Height H mm	Part Number	Packing Unit
M16x1,5	M12x1,5	6,5	18,0	9,5	MMR-01	200
M20x1,5	M12x1,5	6,5	22,0	9,5	MMR-02	180
	M16x1,5			9,0	MMR-03	150
M25x1,5	M16x1,5	6,5	28,0	9,0	MMR-04	130
	M20x1,5	8,0	30,0	11,5	MMR-05	120
M32x1,5	M20x1,5	8,0	39,0	11,5	MMR-06	100
	M25x1,5				MMR-07	
M40x1,5	M25x1,5	9,0	50,0	12,5	MMR-08	80
	M32x1,5				MMR-09	
M50x1,5	M32x1,5	10,0	64,0	14,0	MMR-10	60
	M40x1,5				MMR-11	50
M63x1,5	M40x1,5	10,0	71,6	18,0	MMR-12	30
	M50x1,5				MMR-13	20

Thread Type PG - METRIC acc. to DIN 40430 / EN 60423

Size Outer Thread OTD	Size Inner Thread ITD	Thread Length TL mm	Outer Ø D mm	Height H mm	Part Number	Packing Unit
PG 16	M20x1,5	6,0	24,0	9,0	PMR-01	100
PG 21	M20x1,5				PMR-02	80
	M25x1,5	7,0	30,0	10,0	PMR-03	50
PG 29	M25x1,5	8,0	39,0	11,5	PMR-04	30

Thread Type PG - PG acc. to DIN 40430

Size Outer Thread OTD	Size Inner Thread ITD	Thread Length TL mm	Outer Ø D mm	Height H mm	Part Number	Packing Unit
PG 9	PG 7	6,0	17,0	8,5	PPR-01	200
PG 11	PG 7	6,0	20,0	9,0	PPR-02	200
	PG 9				PPR-03	
PG 13,5	PG 7				PPR-04	150
	PG 9	6,5	22,0	9,0	PPR-05	
	PG 11				PPR-06	
PG 16	PG 7	6,5	24,0	9,5	PPR-07	120
	PG 9				PPR-08	
	PG 11	6,0		9,0	PPR-09	100
	PG 13,5				PPR-10	
PG 21	PG 11				PPR-11	80
	PG 13,5	7,0	30,0	10,0	PPR-12	
	PG 16				PPR-13	
PG 29	PG 13,5				PPR-14	60
	PG 16	8,0	39,0	11,5	PPR-15	
	PG 21			11,4	PPR-16	50
PG 36	PG 21	9,0	50,0	12,4	PPR-17	30
	PG 29	9,1		12,5	PPR-18	
PG 42	PG 29			14,0	PPR-19	25
	PG 36	10,0	57,0	14,1	PPR-20	
PG 48	PG 36				PPR-21	20
	PG 42	10,0	64,0	14,0	PPR-22	10

Further Accessories for Metals

Dome Plugs		
	Dome Plugs	
		27
Replacement Seals		
	Reducing Seals	
		132
	Double Seals	
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	Flat Cable Seals	
		134
	Multihole Seals	
		135-136
Gaskets		
	Gaskets	
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Serrated Washer		
	Serrated Washer	
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Metal Cable Glands and Accessories Applications

Plastic & Metal Enclosures



Sata Transmission



Remote Monitoring Systems



Electronic Balast



Control Boxes



Compressors



Low Voltage Fields



Main Low Voltage Switchboards



Transformers



Renewable Energy



Power Supply Control & Monitoring



Telecommunication Systems



Switching of Relay
Disconnectors
Contactors
Circuit Breakers



Metal Cable Glands and Accessories Applications

Cutch-Brake Units



Low & High Voltage Cabinets



Engine Connections



Machine Control Panels



Marine Asynchronous Motors



Incremental Encoders



Three-Phase Asynchronous Motors



Motor Applications



Electro Powered Cranes



Oil Pump Electrical Cabinets



Junction Boxes



Railway Systems



Polyamide PRESSURE BALANCE ELEMENTS for Industrial Application



Ventilation Glands
Ventilation Plugs

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Metal **PRESSURE BALANCE ELEMENTS** **for Industrial Application**



Ventilation Glands
Ventilation Plugs
Further Accessories
Applications

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Ventilation Glands Polyamide

Cable glands with integrated ventilation

- Balances pressure differences between inner housing and the outside environment.
- Prevents damages according to pressure differences.
- Prevents the formation of water condensation in tightly-sealed standard housings.
- Advantages of cable gland and pressure balance element combined in one product.
- Properties of the ventilation membrane stay the same independent of cable diameter and torque.
- Membrane properties: hydrophobic, oleophobic.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

Technical Details

Material	Body	PA 6 (Polyamide 6)	
	Cap	PA 6 (Polyamide 6)	
	Seal	CR (Chloroprene Rubber)	
	Vent Membran	PTFE	
	Gasket	NBR	
Protection Class		IP 66 IP 67	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-30 °C to +150 °C
Cable Type		Non armoured	
Thread Type		• Metric EN 60423 • PG DIN 40430 • Other thread types also available upon request.	
Accessories		• Lock nuts • Dome plugs • Gaskets	
Remarks		• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all colours or sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet.	

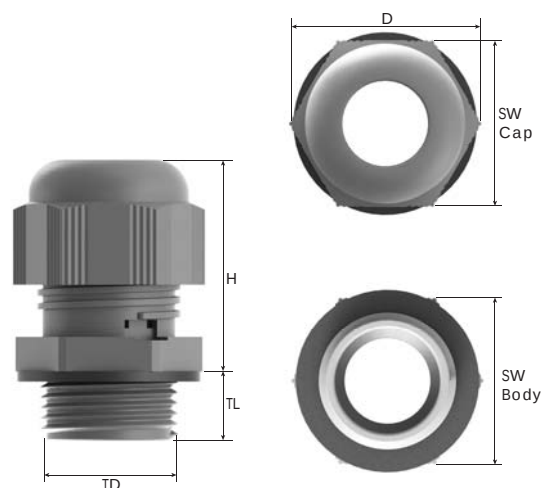
Approvals

	Certificate Number	Standards
	40040032	acc. to DIN EN 62444
	E199260	acc. to UL514

Some approvals do not cover all sizes or colours. For more approvals: see our webpage.



Ventilation Glands Polyamide



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Inner Seal Ø min-max mm	Range Doble Seal Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Average Air Flow for ΔP = 70 mbar l/h	Water Intrusion Pressure bar	Part Number			Packing Unit
					SW Cap mm	SW Body mm					RAL 7035 light grey	RAL 7001 grey	RAL 9005 black	
M12x1,5	2,0 - 6,0	-	8,0	12,0	19	19	21,9	25,5	25	0,1	BMVG-1SR	BMVG-0SR	BMVG-2SR	100
	4,0 - 8,0	3,0 - 5,0									BMVG-1S	BMVG-0S	BMVG-2S	
M16x1,5	2,0 - 6,0	-	10,0	16,0	19	19	21,9	25,5	25	0,1	BMVGD-1S	BMVGD-0S	BMVGD-2S	50
	4,0 - 8,0	3,0 - 5,0									BMVG-11R	BMVG-01R	BMVG-21R	
M20x1,5	5,0 - 9,0	-	10,0	20,0	24	24	27,0	30,0	40	0,1	BMVG-11	BMVG-01	BMVG-21	50
	6,0 - 12,0	5,0 - 8,5									BMVGD-11	BMVGD-01	BMVGD-21	
											BMVG-12R	BMVG-02R	BMVG-22R	
											BMVG-12	BMVG-02	BMVG-22	
											BMVGD-12	BMVGD-02	BMVGD-22	

Thread Type **PG** acc. to DIN 40430

Size	Clamping Inner Seal Ø min-max mm	Range Doble Seal Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Average Air Flow for ΔP = 70 mbar l/h	Water Intrusion Pressure bar	Part Number			Packing Unit
					SW Cap mm	SW Body mm					RAL 7035 light grey	RAL 7001 grey	RAL 9005 black	
PG 9	2,0 - 6,0	-	8,0	15,2	19	19	21,9	25,5	25	0,1	BSVG-12R	BSVG-02R	BSVG-22R	50
	4,0 - 8,0	3,0 - 5,0									BSVG-12	BSVG-02	BSVG-22	
PG 11	2,0 - 6,0	-	8,0	18,6	22	19	24,9	25,0	25	0,1	BSVGD-12	BSVGD-02	BSVGD-22	50
	4,0 - 8,0	3,0 - 5,0									BSVG-13R	BSVG-03R	BSVG-23R	
PG 13,5	5,0 - 9,0	-	9,0	20,4	24	24	27,0	30,0	40	0,1	BSVGD-13	BSVGD-03	BSVGD-23	50
	6,0 - 12,0	5,0 - 8,5									BSVG-14R	BSVG-04R	BSVG-24R	
											BSVG-14	BSVG-04	BSVG-24	
											BSVGD-14	BSVGD-04	BSVGD-24	

Ventilation Plugs Polyamide

Ventilation plugs

- Balances pressure differences between inner housing and the outside environment.
- Prevents damages according to pressure differences.
- Prevents the formation of water condensation in tightly-sealed standard housings.
- Membrane properties: hydrophobic, oleophobic.

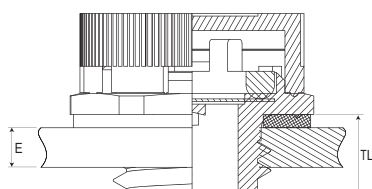
Technical Details

Material	Body	PA 6 (Polyamide 6)	
	Vent Membran	Acrylic co-polymer on nylon-support	
	O-Ring	NBR	
Protection Class	IP 68 / IP 67 (for water intrusion pressure 0.1 bar)		
Flammability	V2 according to UL94		
Operating Temperature	Permanent	Intermittent	
	-20 °C to +100 °C	-30 °C to +150 °C	
Thread Type	• Metric EN 60423 • without thread		
Accessories	• Lock nuts • Gaskets		
Remarks	• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes		



PLASTIC VENTILATION PLUGS ASSEMBLING INSTRUCTIONS

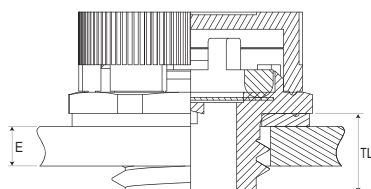
Threaded Enclosure
Flat Gasket Application



E= min. 3,0 mm

Flat Gasket (Ø 18,0 x Ø 10,8 x 1,0) mm

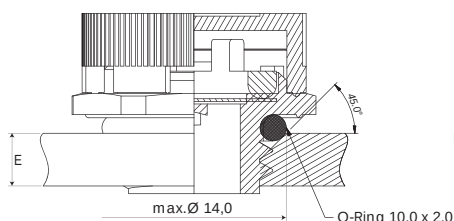
Non Threaded Enclosure
Flat Gasket Application



E= max. 1,0 mm for 6,0 mm plug thread lenght

E= max. 5,0 mm for 10,0 mm plug thread lenght

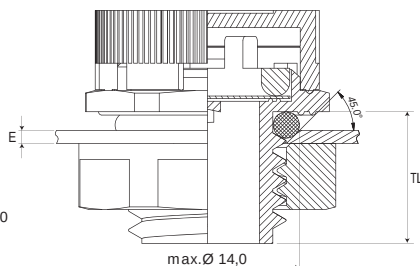
Threaded Enclosure
O-Ring Application



E= min. 4,0 mm

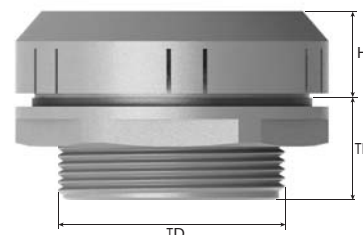
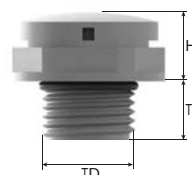
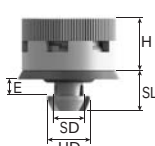
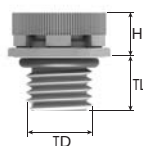
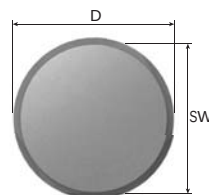
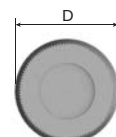
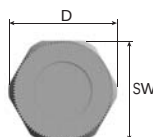
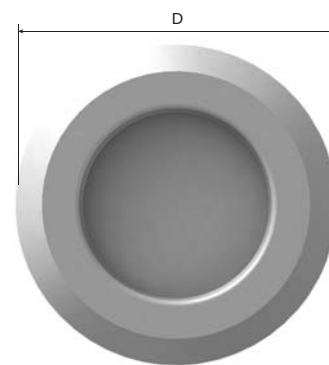
Recommended Plug and Lock Nut
tightening torque 0,5 - 1,0 Nm
for all types

Non Threaded Enclosure
O-Ring Application



E= max. 1,0 for 6,0 mm Plug thread lenght

E= max. 5,0 for 10,0 mm Plug thread lenght



A

B

E

F

Ventilation Plugs Polyamide

Thread Type **METRIC** acc. to EN 60423

Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer Ø D mm	max. Height H mm	Average Air Flow for $\Delta P = 70$ mbar l/h	Water Intrusion Pressure bar	Design Type	RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit
M12x1,0	6,6	12,0	17	18,5	7,6	16	0,9	A	SBVPA-11	SBVPA-01	SBVPA-21	500
						25	0,5		MBVPA-11	MBVPA-01	MBVPA-21	
						120	0,2		HBVPA-11	HBVPA-01	HBVPA-21	
						300	0,1		UHBVPA-11	UHBVPA-01	UHBVPA-21	
M12x1,5	6,0	12,0	17	18,5	7,6	16	0,9	A	SBVPB-11	SBVPB-01	SBVPB-21	500
	10,0					25	0,5		SBVPB-11L	SBVPB-01L	SBVPB-21L	
	6,0					42	0,9	E	MBVPB-11	MBVPB-01	MBVPB-21	
	10,0					120	0,5		MBVPB-11L	MBVPB-01L	MBVPB-21L	
	10,0		24	26,0	11,7	300	0,1		SBVPD-11	SBVPD-01	SBVPD-21	
	6,0					450	0,2	A	MBVPD-11	MBVPD-01	MBVPD-21	
	10,0					750	0,1		HBVPB-11	HBVPB-01	HBVPB-21	
	6,0					120	0,2		HBVPB-11L	HBVPB-01L	HBVPB-21L	
	10,0		17	18,5	7,6	300	0,1	E	UHBVPB-11	UHBVPB-01	UHBVPB-21	
	6,0					450	0,2		UHBVPB-11L	UHBVPB-01L	UHBVPB-21L	
	10,0					750	0,1		HBVPD-11	HBVPD-01	HBVPD-21	
	10,0					1200	0,1		UHBVPD-11	UHBVPD-01	UHBVPD-21	
M16x1,5	10,0	16,0	24	26,0	11,7	42	0,9	E	SBVPF-11	SBVPF-01	SBVPF-21	500
						120	0,5		MBVPF-11	MBVPF-01	MBVPF-21	
						450	0,2		HBVPF-11	HBVPF-01	HBVPF-21	
						750	0,1		UHBVPF-11	UHBVPF-01	UHBVPF-21	
M20x1,5	10,0	20,0	24	26,0	11,7	42	0,9	E	SBVPE-11	SBVPE-01	SBVPE-21	500
						120	0,5		MBVPE-11	MBVPE-01	MBVPE-21	
						450	0,2		HBVPE-11	HBVPE-01	HBVPE-21	
						750	0,1		UHBVPE-11	UHBVPE-01	UHBVPE-21	
M40x1,5	18,0	40,0	-	55,3	15,5	120	0,9	F	SBVPX-18S	SBVPX-08S	SBVPX-28S	1
						375	0,5		MBVPX-18S	MBVPX-08S	MBVPX-28S	
						1350	0,2		HBVPX-18S	HBVPX-08S	HBVPX-28S	
						2200	0,1		UHBVPX-18S	UHBVPX-08S	UHBVPX-28S	

wall thickness (E) : 2,5 mm

Size	Snap Length SL mm	Snap Ø SD mm	Hole max. Ø HD mm	Outer Ø D mm	max. Height H mm	Average Air Flow for $\Delta P = 70$ mbar l/h	Water Intrusion Pressure bar	Design Type	RAL 7035 light grey	Part Number RAL 7001 grey	RAL 9005 black	Packing Unit
Quick Fit 5,5	7,5	5,5	6,4	17,0	9,3	16	0,9	B	SBVQ-M11	SBVQ-M01	SBVQ-M21	500
						25	0,5		MBVQ-M11	MBVQ-M01	MBVQ-M21	
						120	0,2		HBVQ-M11	HBVQ-M01	HBVQ-M21	
						300	0,1		UHBVQ-M11	UHBVQ-M01	UHBVQ-M21	

Ventilation Glands Brass

Cable glands with integrated ventilation

- Balances pressure differences between inner housing and the outside environment.
- Prevents damages according to pressure differences.
- Prevents the formation of water condensation in tightly-sealed standard housings.
- Advantages of cable gland and pressure balance element combined in one product.
- Properties of the ventilation membrane stay the same independent of cable diameter and torque.
- Membrane properties: hydrophobic, oleophobic.
- For metal machines and housings.
- For industrial applications in harsh environments.
- Easy assembly: install cable gland - insert cable - tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

Technical Details

Material	Body	Brass, Nickel plated	
	Cap	Brass, Nickel plated	
	Seal	CR (Chloroprene Rubber)	
	Clamp. Insert	PA 6 (Polyamide 6)	
	Vent Membran	PTFE	
	O-Ring	NBR	
Protection Class		IP 66 IP 67	
Flammability		V2 according to UL94	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-30 °C to +150 °C
Cable Type		Non armoured	
Thread Type		• Metric EN 60423 • PG DIN 40430 • Other thread types also available upon request.	
Accessories		• Lock nuts • Dome plugs • Gaskets	
Remarks		• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet.	

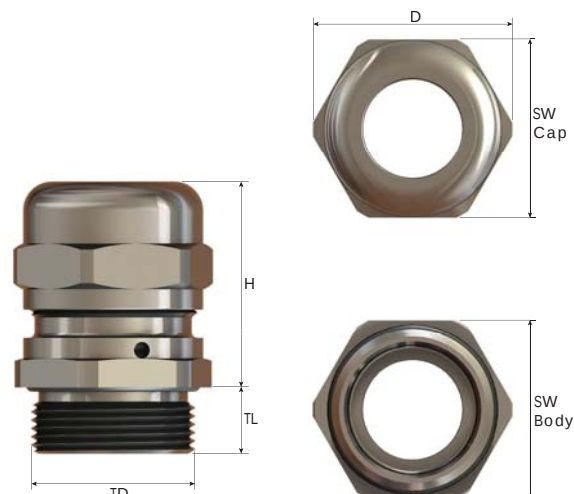
Approvals

	Certificate Number	Standards
	40040032	acc. to DIN EN 62444
	E199260	acc. to UL514

Some approvals do not cover all sizes. For more approvals: see our webpage.



Ventilation Glands Brass



Industrial Application

Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range		Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Average Air Flow for ΔP = 70 mbar l/h	Water Intrusion Pressure bar	Part Number	Packing Unit								
	Inner Seal Ø min-max mm	Double Seal Ø min-max mm			SW Cap mm	SW Body mm														
M12x1,5	2,0 - 6,0	-	6,0	12,0	17	17	18,9	30,5	25	0,1	BMBCVG-0SR	50								
	4,0 - 8,0	3,0 - 5,0									BMBCVG-0S									
M16x1,5	2,0 - 6,0	-	5,0	16,0	17	17	18,9	27,0	25	0,1	BMBDVG-0S	50								
	3,0 - 7,0		8,0		20	20	22,0	33,5	35		BMBCVG-01R									
	4,0 - 8,0	3,0 - 5,0	5,0		17	17	18,9	27,0	25		BMBCVG-01LR									
											BMBCVG-01									
	5,0 - 10,0	3,0 - 7,0	8,0		20	20	22,0	33,5	35		BMBDVG-01									
											BMBDVG-01L									
M20x1,5	5,0 - 9,0	-	8,0	20,0	22	22	24,5	29,5	50	0,1	BMBCVG-02R	50								
	6,0 - 12,0	5,0 - 8,5									BMBCVG-02									
											BMBDVG-02									

Thread Type **PG** acc. to DIN 40430

Size	Clamping Range		Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Average Air Flow for ΔP = 70 mbar l/h	Water Intrusion Pressure bar	Part Number	Packing Unit
	Inner Seal Ø min-max mm	Double Seal Ø min-max mm			SW Cap mm	SW Body mm						
PG 7	2,0 - 6,0	-	8,0	12,5	17	17	18,9	30,5	25	0,1	BSBCVG-01R	50
	4,0 - 8,0	3,0 - 5,0									BSBCVG-01 BSBDVG-01	
PG 9	2,0 - 6,0	-	6,0	15,2	17	17	18,9	27,0	25	0,1	BSBCVG-02R	
	4,0 - 8,0	-									BSBCVG-02 BSBDVG-02	
		3,0 - 5,0										
PG 11	3,0 - 7,0	-	8,0	18,6	20	20	22,0	33,5	35	0,1	BSBCVG-03R	50
	5,0 - 10,0	-									BSBCVG-03 BSBDVG-03	
		3,0 - 7,0										
PG 13,5	5,0 - 9,0	-	6,5	20,4	22	22	24,5	29,5	50	0,1	BSBCVG-04R	50
	6,0 - 12,0	-									BSBCVG-04 BSBDVG-04	
		5,0 - 8,5										

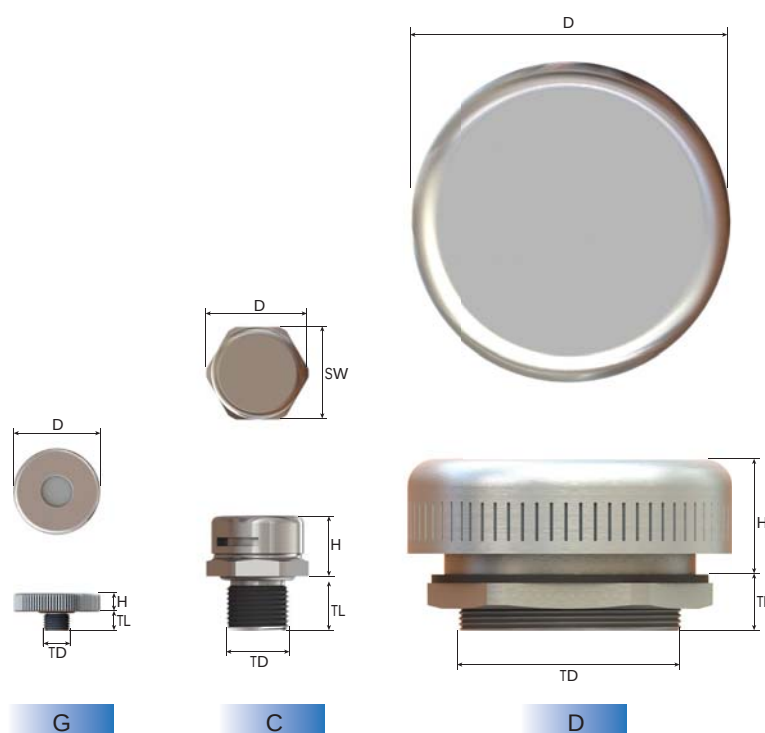
Ventilation Plugs Metal

Ventilation plugs for pressure balancing

- Balances pressure differences between inner housing and the outside environment.
- Prevents damages according to pressure differences.
- Prevents the formation of water condensation in tightly-sealed standard housings.
- Membrane properties: hydrophobic, oleophobic.
- For metal machines and housings.
- For industrial applications in harsh environments.

Technical Details

Material	Body	Stainless steel / Aluminium	
	Vent Membran	Acrylic co-polymer on nylon-support	
	O-Ring	NBR	
Protection Class	IP 68 / IP 67 (for water intrusion pressure 0.1 bar)		
Operating Temperature	Permanent		Intermittent
	-20 °C to +100 °C		-30 °C to +150 °C
Thread Type	• Metric EN 60423 • PG DIN 40430 • Other thread types also available upon request.		
Accessories	• Lock nuts • Gaskets		
Remarks	• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.		



Ventilation Plugs Metal

Thread Type **METRIC** acc. to EN 60423 (Stainless Steel)

Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer Ø D mm	max. Height H mm	Average Air Flow for ΔP = 70 mbar l/h	Water Intrusion Pressure bar	Design Type	Part Number	Packing Unit
M12x1,0	10,0	12,0	17	18,8	11,0	16	0,9	C	SBBVP-01S	50
						25	0,5		MBBVP-01S	
						120	0,2		HBBVP-01S	
						300	0,1		UHBBVP-01S	
M12x1,5	6,0	12,0	17	18,8	11,0	16	0,9	C	SBBVP-01	50
	10,0					25	0,5		MBBVP-01	
	6,0					120	0,2		HBBVP-01	
	10,0					300	0,1		UHBBVP-01	
	6,0					16	0,9		SBBVP-01L	
	10,0					25	0,5		MBBVP-01L	
M16x1,5	6,0	16,0	18	18,8	11,0	16	0,9	C	SBBVP-02	50
	10,0					25	0,5		MBBVP-02	
	6,0					120	0,2		HBBVP-02	
	10,0					300	0,1		UHBBVP-02	
	6,0					16	0,9		SBBVP-02L	
	10,0					25	0,5		MBBVP-02L	
M20x1,5	6,0	20,0	22	24,5	11,0	16	0,9	C	SBBVP-03	50
	10,0					25	0,5		MBBVP-03	
	6,0					120	0,2		HBBVP-03	
	10,0					300	0,1		UHBBVP-03	
	6,0					16	0,9		SBBVP-03L	
	10,0					25	0,5		MBBVP-03L	
M40x1,5	10,0	40,0	-	58,0	20,7	120	0,9	D	SBBVPX-05	1
						375	0,5		MBBVPX-05	
						1350	0,2		HBBVPX-05	
						2200	0,1		UHBBVPX-05	

Thread Type **METRIC** acc. to EN 60423 (Aluminium)

Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer Ø D mm	max. Height H mm	Average Air Flow for ΔP = 70 mbar l/h	Water Intrusion Pressure bar	Design Type	Part Number	Packing Unit
M4x0,7	3	4,0		12,3	2,7	4	0,9	G	SBAVP-01	50
						7	0,5		MBAVP-01	
						35	0,2		HBAVP-01	
						100	0,1		UHBAVP-01	
M8x0,75	8	8,0		12,3	2,7	4	0,9	G	SBAVP-02	50
						7	0,5		MBAVP-02	
						35	0,2		HBAVP-02	
						100	0,1		UHBAVP-02	

Thread Type **PG** acc. to DIN 40430 (Stainless Steel)

Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer Ø D mm	max. Height H mm	Average Air Flow for ΔP = 70 mbar l/h	Water Intrusion Pressure bar	Design Type	Part Number	Packing Unit
PG 7	10,5	12,5	17	18,8	11,0	16	0,9	C	SBBVP-0S	50
						25	0,5		MBBVP-0S	
						120	0,2		HBBVP-0S	
						300	0,1		UHBBVP-0S	

Further Accessories for Ventilation Glands & Plugs

Dome Plugs

Dome Plugs



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Lock Nuts

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Gaskets



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Metal

LIQUID TIGHT CONDUIT FITTINGS & ACCESSORIES

for Industrial Application



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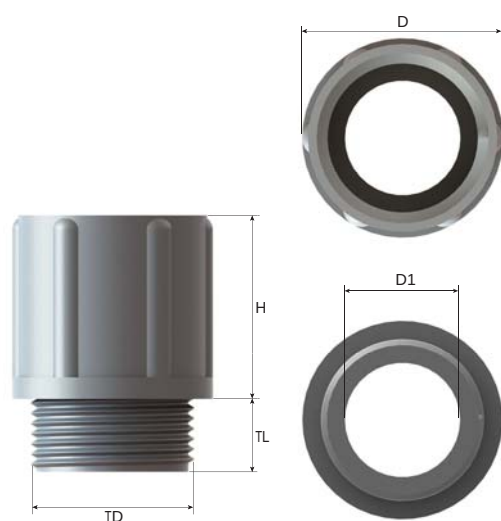
Straight Conduit Fittings Polyamide

Straight Conduit Fittings, Polyamide

- Halogen free.
- No toxic fumes when involved in a fire.
- For flexible spiral conduits.
- One side with standard metric or PG thread and special thread for conduit spiral on the other side.

Technical Details

Material	Polyamide 6 Halogene free
Protection Class	IP 54
Operating Temperature	Permanent -20 °C to +80 °C
Thread Type	Metric, according to EN 60423 PG, according to DIN 40430
Accessories	• Lock nuts
Remarks	• We recommend the use of lock nuts to ensure IP rating for rough surfaces or through holes.



Thread Type **METRIC** acc. to EN 60423

Size	Conduit Size	Thread Length TL mm	Thread Ø TD mm	Outer Ø D mm	Inner Ø D1 mm	Height H mm	Part Number RAL 7035 light grey	Packing Unit
M16x1,5	12,0 x 15,0	8,0	16,0	18,5	10,0	21,3	BCM-01	50
M20x1,5	15,0 x 19,0	8,0	20,0	22,7	15,0	24,5	BCM-02	50
	16,0 x 21,0	9,0		24,5	13,0	25,5	BCM-03	
M25x1,5	18,0 x 22,0	10,0	25,0	26,0	18,0	25,5	BCM-04	50
M32x1,5	23,1 x 28,3	11,0	32,0	32,0	27,0	27,5	BCM-05	25
M40x1,5	31,0 x 36,4	11,0	40,0	41,0	31,8	32,5	BCM-06	10
M50x1,5	40,0 x 46,2	14,0	50,0	51,9	40,5	39,8	BCM-07	10
M63x1,5	50,5 x 57,0	14,0	63,0	61,9	51,0	43,0	BCM-08	10

Thread Type **PG** acc. to DIN 40430

Size	Conduit Size	Thread Length TL mm	Thread Ø TD mm	Outer Ø D mm	Inner Ø D1 mm	Height H mm	Part Number RAL 7035 light grey	Packing Unit
Pg 7	10,0 x 12,8	8	12,40	21,3	16,0	7,0	BCF-01	100
Pg 9	12,0 x 15,0	8	15,00	21,3	18,5	10,0	BCF-02	50
Pg 11	15,0 x 19,0	8	18,40	24,5	22,5	13,5	BCF-03	50
Pg 13,5	16,0 x 21,0	9	20,30	25,5	24,5	14,5	BCF-04	50
Pg 16	18,0 x 22,0	10	22,40	25,5	26,0	16,0	BCF-05	25
Pg 21	23,1 x 28,3	11	28,15	27,5	32,0	21,5	BCF-06	25
Pg 29	31,0 x 36,4	11	36,80	32,5	41,0	31,8	BCF-07	10
Pg 36	40,0 x 46,2	14	46,80	39,8	52,0	41,0	BCF-08	10
Pg 48	50,5 x 57,0	14	59,15	43,0	61,9	51,5	BCF-09	10

Enclosure Couplings Polyamide

Industrial Application

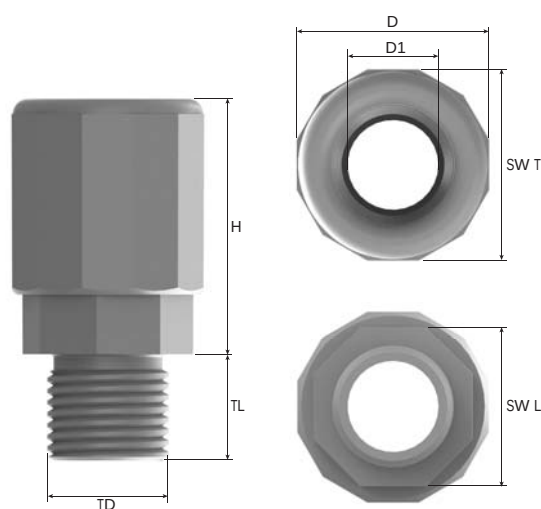


Enclosure Coupling

- Halogen free.
- No toxic fumes when involved in a fire.
- For conduit tubes.
- One side with standard metric threads and special fitting for conduit tubes on the other side.

Technical Details

Material	Fitting	Polyamide 6 Halogene free
	Seal	TPE V0 Halogene free
Protection Class	IP 67	
Operating Temperature	Permanent	
	-20 °C to +80 °C	
Thread Type	Metric, according to EN 60423 and EN 62444	
Accessories	Lock nuts	
Remarks	• We recommend the use of lock nuts to ensure IP rating for rough surfaces or through holes.	



Thread Type **METRIC** acc. to EN 60423

Size	Conduit Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	Inner Ø D1 mm	Height H mm	Part Number	Packing Unit
				SW Body T mm	SW Body L mm				RAL 7035 light grey	
M16x1,5	16,0	14	16	26	21	26,3	16,5	34,7	BRCF-01	10
M20x1,5	20,0	14	20	30	25	31,1	20,5	34,7	BRCF-02	10
M25x1,5	25,0	14	25	35	30	36,0	25,1	34,7	BRCF-03	10
M32x1,5	32,0	14	32	42	37	43,2	32,6	34,5	BRCF-04	10
M40x1,5	40,0	19	40	50	45	51,5	40,4	42,5	BRCF-05	10
M50x1,5	50,0	19	50	62	55	63,4	50,7	42,5	BRCF-06	5

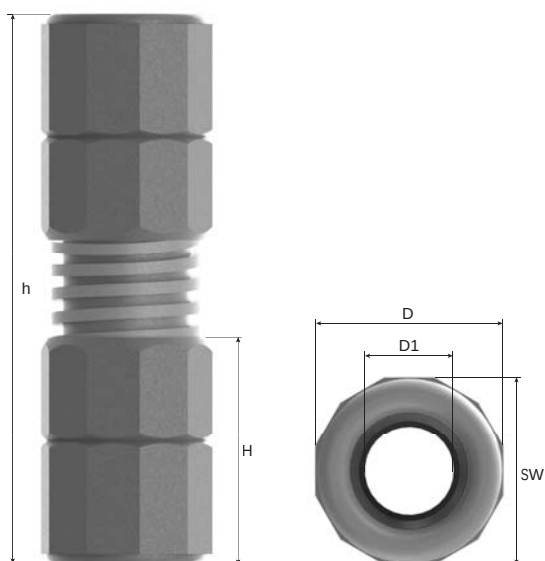
Flexible Fittings Polyamide

Flexible Fitting Set

- Halogen free.
- No toxic fumes when involved in a fire.
- For conduit tubes.
- For all kind of curves in electrical installations.
- Combination of two conduit unions with a flexible conduit.

Technical Details

Material	Fitting	Polyamide 6 Halogene free
	Seal	TPE V0 Halogene free
Protection Class		IP 67
Operating Temperature		Permanent -20 °C to +80 °C
Remarks		• It is the combination of two conduit unions with a suitable flexible conduit. • It may be used for all kind of curves in the electrical installation. • This set can be easily fitted with the right conduits.

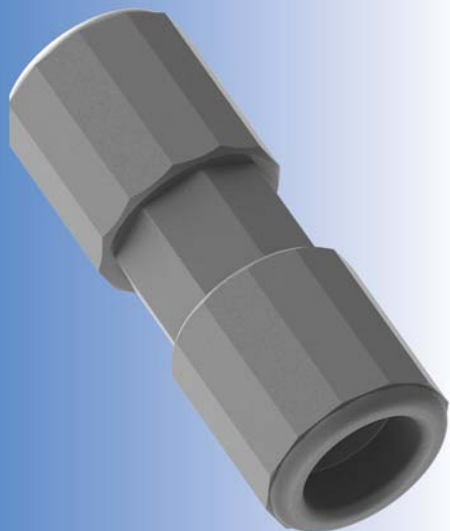


Flexible Fitting Set

Size	Conduit Size	Fitting set Length h mm	Spanner Width SW Body mm	Outer Ø D mm	Inner Ø D1 mm	Height H mm	Part Number	Packing Unit
							RAL 7035 light grey	
M16	16,0	210	26	26	16,5	48,6	BRC90F-01	10
M20	20,0	240	30	31	20,4	48,0	BRC90F-02	10
M25	25,0	290	35	36	25,3	49,0	BRC90F-03	10
M32	32,0	400	42	43	32,2	49,0	BRC90F-04	10
M40	40,0	420	50	52	40,5	61,5	BRC90F-05	10
M50	50,0	440	62	63	50,5	61,5	BRC90F-06	5

Straight Couplings Polyamide

Industrial Application

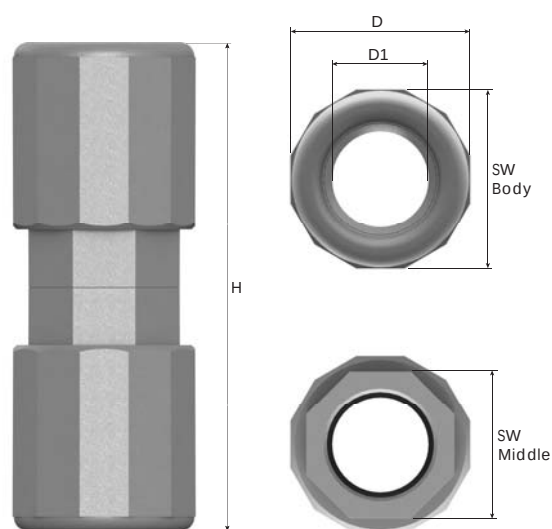


Straight Coupling

- Halogen free.
- No toxic fumes when involved in a fire.
- For connecting two conduit tubes.

Technical Details

Material	Fitting	Polyamide 6 Halogene free
	Seal	TPE V0 Halogene free
Protection Class		IP 67
Operating Temperature		Permanent -20 °C to +80 °C



Straight Coupling

Size	Conduit Size	Spanner Width		Outer Ø D mm	Inner Ø D1 mm	Height H mm	Part Number	Packing Unit
		SW Body mm	SW Middle mm				RAL 7035 light grey	
M16	16,0	26	21	26,3	16,3	69,5	BRCC-01	10
M20	20,0	30	25	31,0	20,3	67,3	BRCC-02	10
M25	25,0	35	30	36,0	25,3	69,4	BRCC-03	10
M32	32,0	42	37	43,5	32,2	69,5	BRCC-04	10
M40	40,0	50	45	52,0	40,4	85,0	BRCC-05	10
M50	50,0	62	55	63,3	50,0	85,0	BRCC-06	5

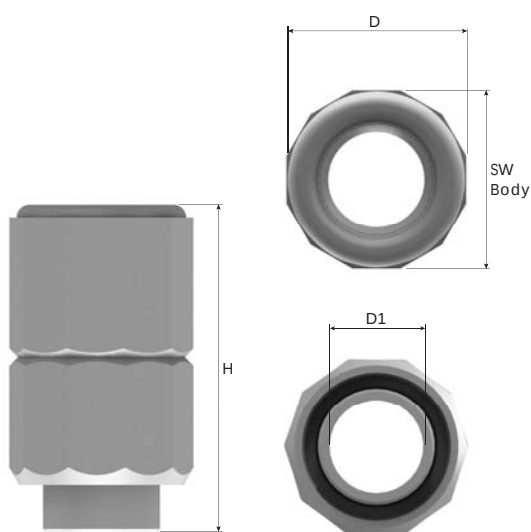
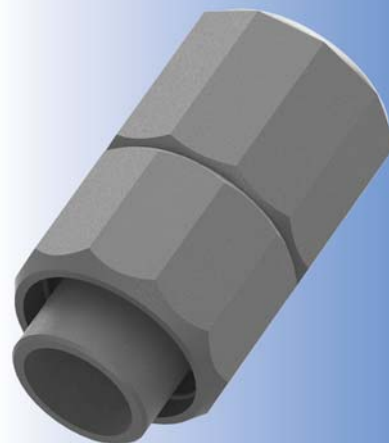
Conduit Union Polyamide

Conduit Union

- Halogen free.
- No toxic fumes when involved in a fire.
- For connecting flexible conduits with conduit tubes.

Technical Details

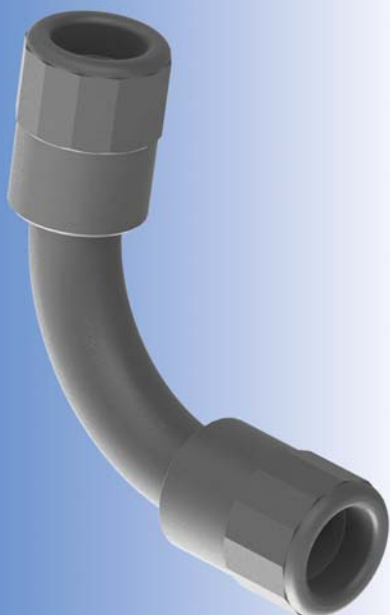
Material	Fitting	Polyamide 6 Halogene free
	Seal	TPE V0 Halogene free
Protection Class		IP 67
Operating Temperature		Permanent -20 °C to +80 °C



Conduit Union

Size	Conduit Size	Spanner Width SW Body mm	Outer Ø D mm	Inner Ø D1 mm	Height H mm	Part Number	Packing Unit
						RAL 7035 light grey	
M16	16,5	26	26	12,0	49,0	BRCM-01	10
M20	20,4	30	31	16,0	49,0	BRCM-02	10
M25	25,3	35	36	20,5	49,0	BRCM-03	10
M32	32,3	42	43	26,0	49,0	BRCM-04	10
M40	40,4	50	52	33,5	61,5	BRCM-05	10
M50	50,5	62	63	44,0	61,5	BRCM-06	5

Bend Couplings Polyamide

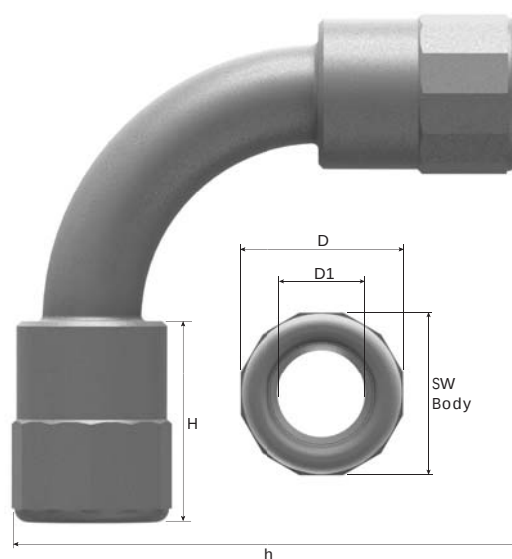


Bend Coupling

- Halogen free.
- No toxic fumes when involved in a fire.
- For connecting two conduit tubes by a 90° tube.

Technical Details

Material	Fitting	Polyamide 6 Halogene free
	Seal	TPE V0 Halogene free
Protection Class		IP 67
Operating Temperature		Permanent -20 °C to +80 °C



Bend Coupling

Size	Conduit Size	Fitting Length h mm	Spanner Width SW Body mm	Outer Ø D mm	Inner Ø D1 mm	Height H mm	Part Number	Packing Unit
							RAL 7035 light grey	
M16	16,0	78	26	26	16,4	32,8	BRC90R-01	10
M20	20,0	90	30	31	20,4	32,5	BRC90R-02	10
M25	25,0	107	35	36	25,4	32,5	BRC90R-03	10
M32	32,0	114	42	43	32,0	32,8	BRC90R-04	10
M40	40,0	138	50	52	40,2	32,8	BRC90R-05	10

Liquid Tight Conduit Fittings Straight (Male), Brass

Liquid Tight Conduit Fittings Straight (Male), Brass

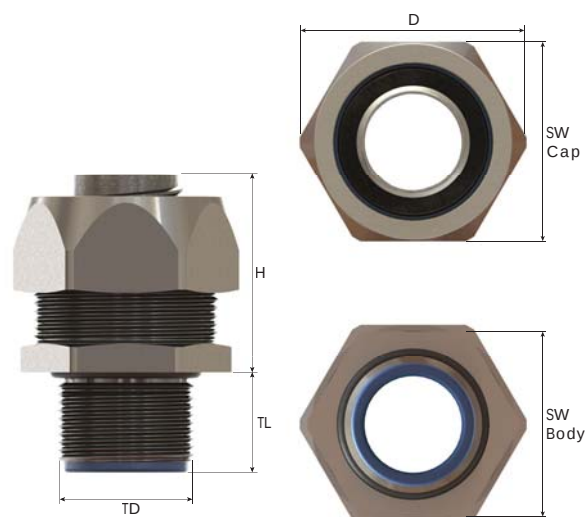
- Fittings for Sealtite® conduits.
- For metal machines and housings.
- For standard industrial applications in harsh environments.
- Great corrosion protection.
- Easy assembly.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Cap	Brass, Nickel plated			
	Body	Brass, Nickel Plated			
	Ferrule	Brass nickel plated or Steel zinc plated			
	Prot.Bushing	Polyamide 6 V2	Metric	Pg	Npt
	Seal Ring	Polyamide 6 V2			
	O-Ring	NBR			
Protection Class		IP 65 IP 66			
Operating Temperature		Permanent -45 °C to +105 °C			
Cable Type		Non armoured			
Thread Type		• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1			
Accessories		• Lock nuts			
Remarks		• Also available in Stainless Steel			



Liquid Tight Conduit Fittings Straight (Male), Brass



Thread Type **METRIC** acc. to EN 60423

Size	For Sealite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
M12x1,5	1/4"	5,2	10,0	12,0	22,0	20,0	24,5	21,0	BBFM-01	50
M16x1,5	5/16"	8,3	11,5	16,0	26,0	24,0	29,0	23,5	BBFM-02(S)	50
	3/8"	10,2						23,0	BBFM-02	
M20x1,5	3/8"	10,2	13,0	20,0	26,0	24,0	29,0	23,5	BBFM-03(S)	50
	1/2"	13,5			29,0	27,0	32,7	24,5	BBFM-03	
M25x1,5	3/4"	18,5	15,0	25,0	35,0	33,0	38,7	24,5	BBFM-04	25
M32x1,5	1"	23,5	15,0	32,0	45,0	43,0	50,0	32,0	BBFM-05	10
M40x1,5	1 1/4"	31,8	16,0	40,0	54,0	52,0	60,0	36,5	BBFM-06	5
M50x1,5	1 1/2"	36,8	18,0	50,0	63,0	60,0	69,3	38,5	BBFM-07	5
M63x1,5	2"	47,8	20,0	63,0	77,0	74,0	85,0	45,0	BBFM-08	4

Thread Type **PG** acc. to DIN 40430

Size	For Sealite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
Pg 7	1/4"	5,2	10,0	12,5	22,0	20,0	24,5	20,5	BBFB-01	50
Pg 9	1/4"	5,2	10,0	15,2	22,0	20,0	24,5	20,5	BBFB-02	50
	5/16"	8,3							BBFB-02(A)	
	3/8"	10,2	11,5		26,0	24,0	29,0	23,5	BBFB-02(B)	
BBFB-02(C)										
Pg 11	3/8"	10,2	11,5	18,6	26,0	24,0	29,0	23,5	BBFB-03	25
Pg 13,5	3/8"	10,2	11,5	20,4	26,0	24,0	29,0	23,5	BBFB-04	10
Pg 16	1/2"	13,5	13,0	22,5	29,0	27,0	32,7	24,0	BBFB-05	5
Pg 21	3/4"	18,5	15,0	28,3	35,0	33,0	38,7	24,5	BBFB-06	5
Pg 29	1"	23,5	15,0	37,0	45,0	43,0	50,0	32,0	BBFB-07	4
Pg 36	1 1/4"	31,8	16,0	47,0	54,0	52,0	60,0	36,5	BBFB-08	4
Pg 42	1 1/2"	36,8	18,0	54,0	63,0	60,0	69,3	39,0	BBFB-09	2
Pg 48	2"	47,8	20,0	59,3	77,0	74,0	85,0	44,5	BBFB-10	2

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

Size	For Sealite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
Npt 1/4"	1/4"	5,2	10,0	13,7	22,0	20,0	24,5	20,5	BBFN-0S	50
Npt 3/8"	3/8"	10,2	10,0	17,1	22,0	20,0	24,5	23,5	BBFN-01(S)	50
			11,5		26,0	24,0	29,0		BBFN-01	
Npt 1/2"	3/8"	10,2	13,0	21,3	26,0	24,0	29,0	23,5	BBFN-02(S)	25
	1/2"	13,6			29,0	27,0	32,7	24,0	BBFN-02	10
Npt 3/4"	3/4"	18,5	15,0	26,7	35,0	33,0	38,7	24,5	BBFN-03	5
Npt 1"	1"	23,5	15,0	33,4	45,0	43,0	50,0	31,5	BBFN-04	5
Npt 1 1/4"	1 1/4"	31,8	16,0	42,2	54,0	52,0	60,0	37,0	BBFN-05	4
Npt 1 1/2"	1 1/2"	36,8	18,0	48,3	63,0	60,0	69,3	38,5	BBFN-06	2
Npt 2"	2"	47,8	20,0	60,3	77,0	74,0	85,0	45,5	BBFN-07	2

Liquid Tight Conduit Fittings (45°), Brass

Liquid Tight Conduit Fittings 45°, Brass

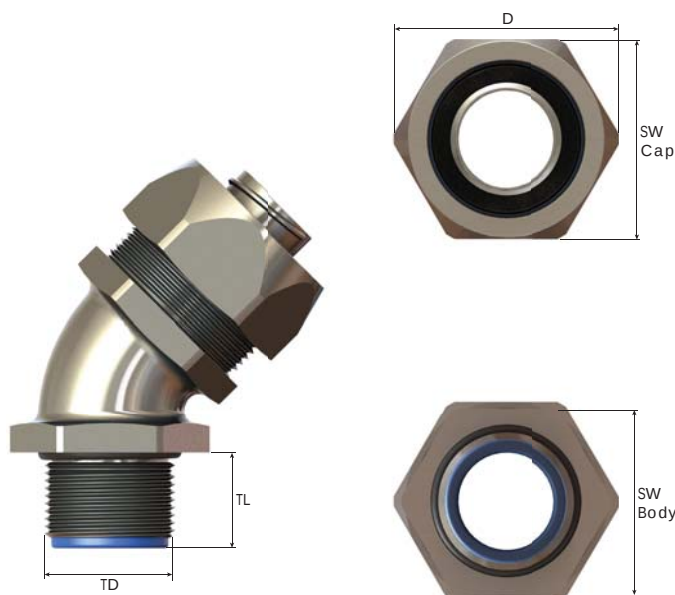
- Fittings for Sealtite conduits.
- For metal machines and housings.
- For standard industrial applications in harsh environments.
- Great corrosion protection.
- Easy assembly.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Cap	Brass, Nickel plated			
	Body	Brass, Nickel Plated			
	Ferrule	Brass nickel plated or Steel zinc plated			
	Prot.Bushing	Polyamide 6 V2	Metric	Pg	Npt
	Seal Ring	Polyamide 6 V2			
	O-Ring	NBR			
Protection Class		IP 65 IP 66			
Operating Temperature		Permanent -45 °C to +105 °C			
Cable Type		Non armoured			
Thread Type		• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1			
Accessories		• Lock nuts			
Remarks		• Also available in Stainless Steel			



Liquid Tight Conduit Fittings 45°, Brass



Thread Type METRIC acc. to EN 60423

Size	For Sealite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	Part Number	Packing Unit
					SW Cap mm	SW Body mm			
M16x1,5	5/16"	8,3	11,5	16,0	26,0	22,0	29,0	BBFM-02(S) 45	50
	3/8"	10,2						BBFM-02 45	
M20x1,5	3/8"	10,2	13,0	20,0	26,0	22,0	29,0	BBFM-03(S) 45	50
	1/2"	13,5						BBFM-03 45	
M25x1,5	3/4"	18,5	15,0	25,0	35,0	33,0	38,7	BBFM-04 45	25
M32x1,5	1"	23,5	15,0	32,0	45,0	42,0	50,0	BBFM-05 45	10
M40x1,5	1 1/4"	31,8	16,0	40,0	54,0	51,0	60,0	BBFM-06 45	5
M50x1,5	1 1/2"	36,8	18,0	50,0	63,0	60,0	69,3	BBFM-07 45	5
M63x1,5	2"	47,8	20,0	63,0	77,0	74,0	85,0	BBFM-08 45	4

Thread Type PG acc. to DIN 40430

Size	For Sealite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	Part Number	Packing Unit
					SW Cap mm	SW Body mm			
Pg 11	5/16"	8,3	11,5	18,6	26,0	22,0	29,0	BBFB-03(S) 45	50
	3/8"	10,2						BBFB-03 45	
Pg 13,5	3/8"	10,2	11,5	20,4	26,0	22,0	29,0	BBFB-04 45	50
Pg 16	1/2"	13,5	13,0	22,5	29,0	27,0	32,7	BBFB-05 45	50
Pg 21	3/4"	18,5	15,0	28,3	35,0	33,0	38,7	BBFB-06 45	25
Pg 29	1"	23,5	15,0	37,0	45,0	42,0	50,0	BBFB-07 45	10
Pg 36	1 1/4"	31,8	16,0	47,0	54,0	51,0	60,0	BBFB-08 45	5
Pg 42	1 1/2"	36,8	18,0	54,0	63,0	60,0	69,3	BBFB-09 45	5
Pg 48	2"	47,8	20,0	59,3	77,0	74,0	85,0	BBFB-10 45	4

Thread Type NPT acc. to ANSI B1.20.1

Size	For Sealite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	Part Number	Packing Unit
					SW Cap mm	SW Body mm			
Npt 1/2"	3/8"	10,2	13,0	21,3	26,0	22,0	29,0	BBFN-02(S) 45	50
	1/2"	13,5						BBFN-02 45	
Npt 3/4"	3/4"	18,5	15,0	26,7	35,0	33,0	38,7	BBFN-03 45	25
Npt 1"	1"	23,5	15,0	33,4	45,0	42,0	50,0	BBFN-04 45	10
Npt 1 1/4"	1 1/4"	31,8	16,0	42,2	54,0	51,0	60,0	BBFN-05 45	5
Npt 1 1/2"	1 1/2"	36,8	18,0	48,3	63,0	60,0	69,3	BBFN-06 45	5
Npt 2"	2"	47,8	20,0	60,3	77,0	74,0	85,0	BBFN-07 45	4

Liquid Tight Conduit Fittings (90°), Brass

Liquid Tight Conduit Fittings (90°), Brass

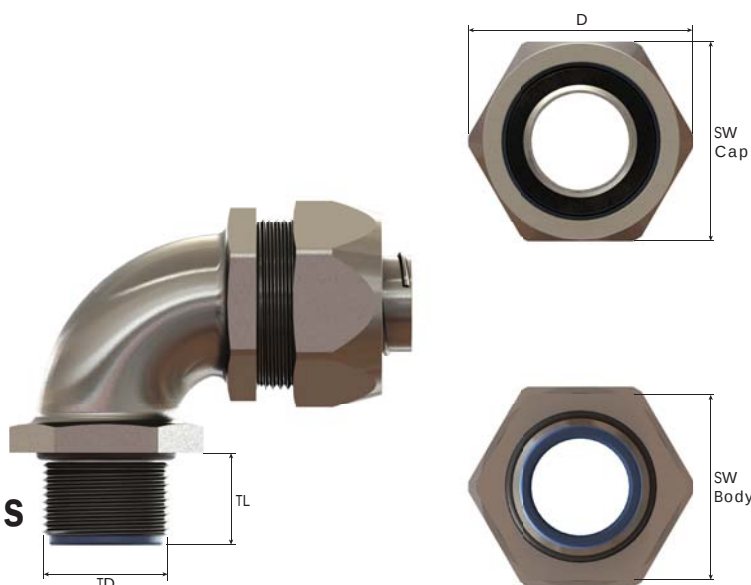
- Fittings for Sealtite® conduits.
- For metal machines and housings.
- For standard industrial applications in harsh environments.
- Great corrosion protection.
- Easy assembly.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Cap	Brass, Nickel plated			
	Body	Brass, Nickel Plated			
	Ferrule	Brass nickel plated or Steel zinc plated			
	Prot.Bushing	Polyamide 6 V2	Metric	Pg	Npt
	Seal Ring	Polyamide 6 V2			
	O-Ring	NBR			
Protection Class		IP 65 IP 66			
Operating Temperature		Permanent -45 °C to +105 °C			
Cable Type		Non armoured			
Thread Type		• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1			
Accessories		• Lock nuts			
Remarks		• Also available in Stainless Steel			



Liquid Tight Conduit Fittings (90°), Brass



Thread Type METRIC acc. to EN 60423

Size	For Sealite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	Part Number	Packing Unit
					SW Cap mm	SW Body mm			
M16x1,5	5/16"	8,3	11,5	16,0	26,0	22,0	29,0	BBFM-02(S) 90	50
	3/8"	10,2						BBFM-02 90	
M20x1,5	3/8"	10,2	13,0	20,0	26,0	22,0	29,0	BBFM-03(S) 90	50
	1/2"	13,5						BBFM-03 90	
M25x1,5	3/4"	18,5	15,0	25,0	35,0	33,0	38,7	BBFM-04 90	25
M32x1,5	1"	23,5	15,0	32,0	45,0	42,0	50,0	BBFM-05 90	10
M40x1,5	1 1/4"	31,8	16,0	40,0	54,0	51,0	60,0	BBFM-06 90	5
M50x1,5	1 1/2"	36,8	18,0	50,0	63,0	60,0	69,3	BBFM-07 90	5
M63x1,5	2"	47,8	20,0	63,0	77,0	74,0	85,0	BBFM-08 90	4

Thread Type PG acc. to DIN 40430

Size	For Sealite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	Part Number	Packing Unit
					SW Cap mm	SW Body mm			
Pg 11	5/16"	8,3	11,5	18,6	26,0	22,0	29,0	BBFB-03(S) 90	50
	3/8"	10,2						BBFB-03 90	
Pg 13,5	3/8"	10,2	11,5	20,4	26,0	22,0	29,0	BBFB-04 90	50
Pg 16	1/2"	13,5	13,0	22,5	29,0	27,0	32,7	BBFB-05 90	50
Pg 21	3/4"	18,5	15,0	28,3	35,0	33,0	38,7	BBFB-06 90	25
Pg 29	1"	23,5	15,0	37,0	45,0	42,0	50,0	BBFB-07 90	10
Pg 36	1 1/4"	31,8	16,0	47,0	54,0	51,0	60,0	BBFB-08 90	5
Pg 42	1 1/2"	36,8	18,0	54,0	63,0	60,0	69,3	BBFB-09 90	5
Pg 48	2"	47,8	20,0	59,3	77,0	74,0	85,0	BBFB-10 90	4

Thread Type NPT acc. to ANSI B1.20.1

Size	For Sealite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	Part Number	Packing Unit
					SW Cap mm	SW Body mm			
Npt 1/2"	3/8"	10,2	13,0	21,3	26,0	22,0	29,0	BBFN-02(S) 90	50
	1/2"	13,5						BBFN-02 90	
Npt 3/4"	3/4"	18,5	15,0	26,7	35,0	33,0	38,7	BBFN-03 90	25
Npt 1"	1"	23,5	15,0	33,4	45,0	42,0	50,0	BBFN-04 90	10
Npt 1 1/4"	1 1/4"	31,8	16,0	42,2	54,0	51,0	60,0	BBFN-05 90	5
Npt 1 1/2"	1 1/2"	36,8	18,0	48,3	63,0	60,0	69,3	BBFN-06 90	5
Npt 2"	2"	47,8	20,0	60,3	77,0	74,0	85,0	BBFN-07 90	4

Liquid Tight Conduit Fittings (Straight), Female

Liquid Tight Conduit Fittings Straight (Female), Brass

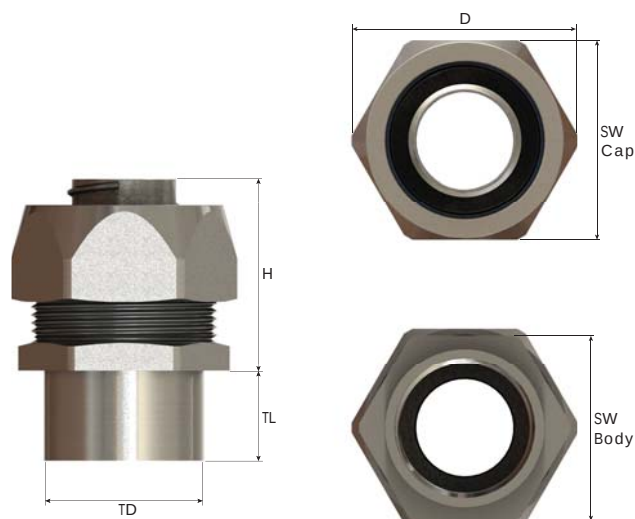
- Fittings for Sealtite® conduits.
- For metal machines and housings.
- For standard industrial applications in harsh environments.
- Great corrosion protection.
- Easy assembly.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Cap	Brass, Nickel plated
	Body	Brass, Nickel Plated
	Ferrule	Brass nickel plated or Steel zinc plated
	Seal Ring	Polyamide 6 V2
	O-Ring	NBR
Protection Class		IP 65 IP 66
Operating Temperature		Permanent -45 °C to +105 °C
Cable Type		Non armoured
Thread Type		• Metric EN 60423 • PG DIN 40430 • NPT ANSI B1.20.1



Liquid Tight Conduit Fittings (Straight), Female



Thread Type **METRIC** acc. to EN 60423

Size	For Sealrite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
M16x1,5	5/16"	8,3	11,5	16,0	26,0	24,0	29,0	23,5	BBFM-02(S) F	50
	3/8"	10,2						23,0	BBFM-02 F	
M20x1,5	1/2"	13,5	13,0	20,0	29,0	27,0	32,7	24,5	BBFM-03 F	50
M25x1,5	3/4"	18,5	15,0	25,0	35,0	33,0	38,7	24,5	BBFM-04 F	25
M32x1,5	1"	23,5	15,0	32,0	45,0	43,0	50,0	32,0	BBFM-05 F	10
M40x1,5	1 1/4"	31,8	16,0	40,0	54,0	52,0	60,0	36,5	BBFM-06 F	5
M50x1,5	1 1/2"	36,8	18,0	50,0	63,0	60,0	69,3	38,5	BBFM-07 F	5
M63x1,5	2"	47,8	20,0	63,0	77,0	74,0	85,0	45,0	BBFM-08 F	4

Thread Type **PG** acc. to DIN 40430

Size	For Sealrite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
Pg 11	5/16"	8,3	11,5	18,6	26,0	24,0	29,0	23,5	BBFB-03(S) F	50
	3/8"	10,2						23,5	BBFB-03 F	
Pg 13,5	3/8"	10,2	11,5	20,4	26,0	24,0	29,0	23,5	BBFB-04 F	50
Pg 16	1/2"	13,5	13,0	22,5	29,0	27,0	32,7	24,0	BBFB-05 F	50
Pg 21	3/4"	18,5	15,0	28,3	35,0	33,0	38,7	24,5	BBFB-06 F	25
Pg 29	1"	23,5	15,0	37,0	45,0	43,0	50,0	32,0	BBFB-07 F	10
Pg 36	1 1/4"	31,8	16,0	47,0	54,0	52,0	60,0	36,5	BBFB-08 F	5
Pg 42	1 1/2"	36,8	18,0	54,0	63,0	60,0	69,3	39,0	BBFB-09 F	5
Pg 48	2"	47,8	20,0	59,3	77,0	74,0	85,0	44,5	BBFB-10 F	4

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

Size	For Sealrite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW Cap mm	Spanner Width SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
Npt 1/2	3/8"	10,2	13,0	21,3	26,0	24,0	29,0	23,5	BBFN-02(S) F	50
	1/2"	13,5			29,0	27,0	32,7	24,0	BBFN-02 F	
Npt 3/4	3/4"	18,5	15,0	26,7	35,0	33,0	38,7	24,5	BBFN-03 F	25
Npt 1	1"	23,5	15,0	33,4	45,0	43,0	50,0	31,5	BBFN-04 F	10
Npt 1 1/4	1 1/4"	31,8	16,0	42,2	54,0	52,0	60,0	37,0	BBFN-05 F	5
Npt 1 1/2	1 1/2"	36,8	18,0	48,3	63,0	60,0	69,3	38,5	BBFN-06 F	5
Npt 2	2"	47,8	20,0	60,3	77,0	74,0	85,0	45,5	BBFN-07 F	4

Liquid Tight Cable Hose Fittings (Male), Brass

Liquid Tight Cable Hose Fittings (Male), Brass

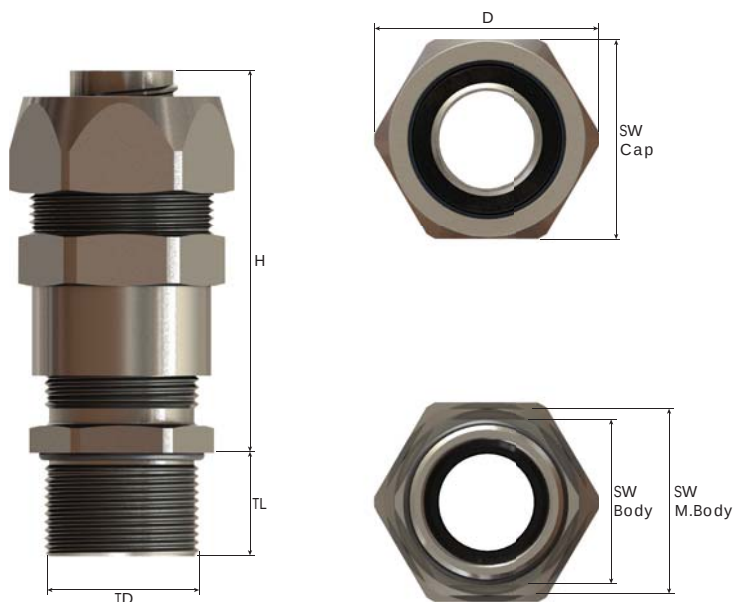
- Conduit fittings with integrated cable gland – safe clamping and sealing of the cable
- Fittings for Sealtite conduits.
- For metal machines and housings.
- For standard industrial applications in harsh environments.
- Great corrosion protection.
- Easy assembly.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	Cap	Brass, Nickel plated
	Body	Brass, Nickel Plated
	Ferrule	Brass nickel plated or Steel zinc plated
	Seal Ring	Polyamide 6 V2
	O-Ring	NBR
Protection Class		IP 65 IP 66
Operating Temperature		Permanent -45 °C to +105 °C
Cable Type		Non armoured
Thread Type		• Metric EN 60423 • PG DIN 40430
Accessories		• Lock nuts



Liquid Tight Cable Hose Fittings (Male), Brass



Industrial Application

Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	For Sealtite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	SW Cap mm	Spanner Width SW M. Body mm	SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
M16x1,5	4,0 - 8,0	5/16"	8,3	12,0	16,0	26,0	24,0	18,0	29,0	47,0	BBFM-02(S) CH	50
		3/8"	10,2								BBFM-02 CH	
M20x1,5	6,0 - 10,0	3/8"	10,2	12,0	20,0	26,0	24,0	22,0	29,0	47,0	BBFM-03(S) CH	25
		1/2"	13,5								BBFM-03 CH	
M25x1,5	13,0 - 18,0	3/4"	18,5	12,0	25,0	29,0	33,0	30,0	38,7	61,5	BBFM-04 CH	25
M32x1,5	18,0 - 23,5	1"	23,5	15,0	32,0	35,0	43,0	40,0	50,0	73,0	BBFM-05 CH	25
M40x1,5	22,0 - 31,5	1 1/4"	31,8	15,0	40,0	45,0	52,0	50,0	58,3	86,5	BBFM-06 CH	10

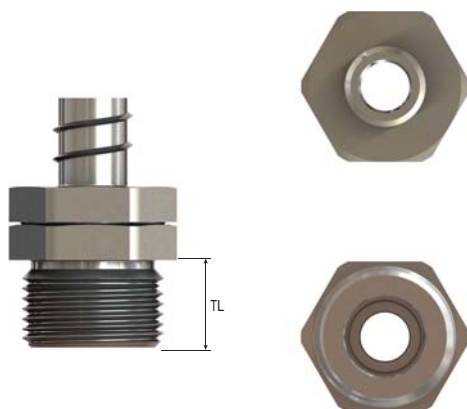
Thread Type **PG** acc. to DIN 40430

Size	Clamping Range Ø min-max mm	For Sealtite Nominal Size inch	Max. Internal Ø mm	Thread Length TL mm	Thread Ø TD mm	SW Cap mm	Spanner Width SW M. Body mm	SW Body mm	Outer Ø D mm	max. Height H mm	Part Number	Packing Unit
Pg 9	4,0 - 8,0	5/16"	8,3	12,0	15,2	26,0	24,0	17,0	29,0	47,0	BBFB-02(S) CH	50
		3/8"	10,2								BBFB-02 CH	
Pg 11	5,0 - 10,0	3/8"	10,2	15,0	18,6	26,0	24,0	20,0	29,0	47,0	BBFB-03 CH	50
Pg 13,5	6,0 - 10,0	3/8"	10,2	15,0	20,4	26,0	24,0	22,0	29,0	47,0	BBFB-04 CH	25
Pg 16	10,0 - 14,0	1/2"	13,5	15,0	22,5	29,0	27,0	24,0	32,7	51,5	BBFB-05 CH	25
Pg 21	13,0 - 18,0	3/4"	18,5	15,0	28,3	35,0	33,0	30,0	38,7	56,5	BBFB-06 CH	25
Pg 29	18,0 - 25,0	1"	23,5	15,0	37,0	45,0	43,0	40,0	50,0	67,5	BBFB-07 CH	10

Straight Swivel Fittings Male

Technical Details

Material	Brass, Nickel plated or Stainless Steel AISI 303
Thread Type	Metric acc. to EN 60423



Ferrules

Size	Max. Internal Ø mm	Thread Length	Part Number	Packing Unit
		TL mm		
M12x1,5	1/4"	8,0	BMSSW-0S	500
M16x1,5	1/4"	10,0	BMSSW-01	500



Ferrules for Fittings

Industrial Application

Technical Details

Material	(R) Brass Nickel Plated or (S) Steel Zinc Plated
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Ferrules

For Sealtite Ø inch	Max. Internal Ø mm	Part Number	Packing Unit
1/4"	5,2	FER-01	100
5/16"	8,3	FER-02	100
3/8"	10,2	FES-03	100
1/2"	13,5	FES-04	100
3/4"	18,5	FES-05	100
1"	23,5	FES-06	50
1 1/4"	31,8	FER-07	30
1 1/2"	36,8	FER-08	20
2"	47,8	FER-09	20
2 1/2"	59,1	FER-10	10

Further Accessories for Fittings

Lock Nuts	
Polyamide Lock Nuts	
	22
Polyamide Lock Nuts without Flange	
	23
Metal Lock Nuts	
	72

Rigid & Liquid Tight Conduit Fittings Applications

Machine Tools



Transformer Connections



Wet and Corrosive environments, including power generations, petrochemical, paper mills, food, beverage, pharmaceutical plants and anywhere high performance is required.

Console Wiring



Computer Power Distribution



Motor Applications



Oiltight, Liquidtight or Raintight box and enclosures



Air Conditioning and Heating



Outdoor Lighting



Flexibility and Protection against entry liquids, vapors or solids, such as machine tool building, robotic assembly

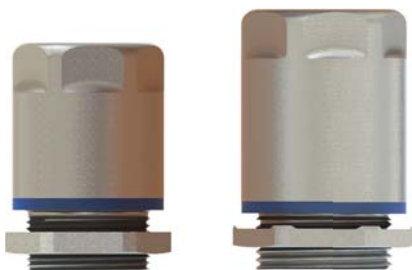


Stainless Steel HYGIENIC GLANDS for Industrial Application



Hygienic Glands
Hygienic Glands, EMC

116 - 117
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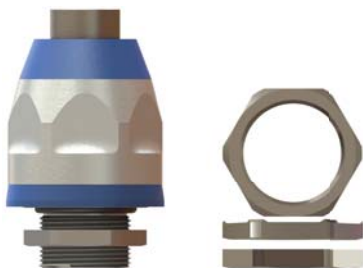


Stainless Steel Liquidtight HYGIENIC CONDUIT FITTINGS for Industrial Application



Hygienic Fittings
Further Accessories
Applications

120 - 121
122
123



Hygienic Glands Stainless Steel

Cable glands for hygienic requirements

- For applications in manufacturing and packaging of food and pharmaceuticals, clean room technology, biotechnology, chemical industry.
- Smooth finish prevents harmful micro organisms to adhere on the surface.
- No threads are exposed.
- Gasket material according to FDA guideline 21 CFR 177.2600.
- Cleaning of cable glands is easier, faster and less expensive.
- Reliable strain relief due to strain relief element separated from grommet.
- Suitable for high pressure steam cleaning.
- Lock nut included.
- Assembling tool included.

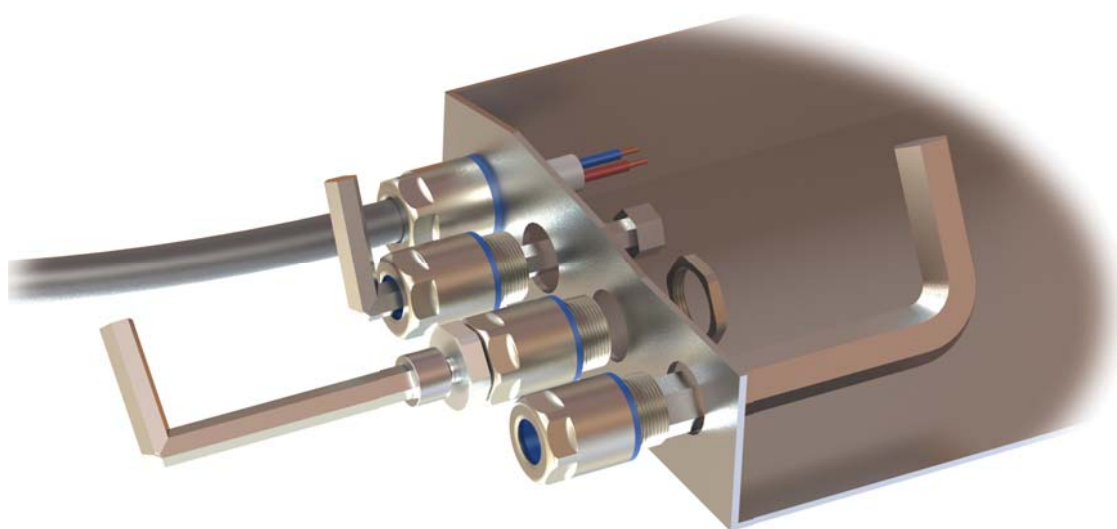
Technical Details

Material	Body	Stainless steel 1.4305 (AISI 303)	
	Cap	Stainless steel 1.4305 (AISI 303)	
	Clamp. Insert	POM	
	Gasket	TPE	
	Lock Nut	Stainless steel 1.4305 (AISI 303)	
Protection Class		IP 68 - 5 Bar, 30 min IP 69	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-40 °C to +150 °C
Cable Type		Non armoured	
Thread Type		• Metric EN 60423 • Other thread types also available upon request.	
Accessories		• Lock nuts (included) • Dome plugs • Assembling tools	
Remarks		• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet.	

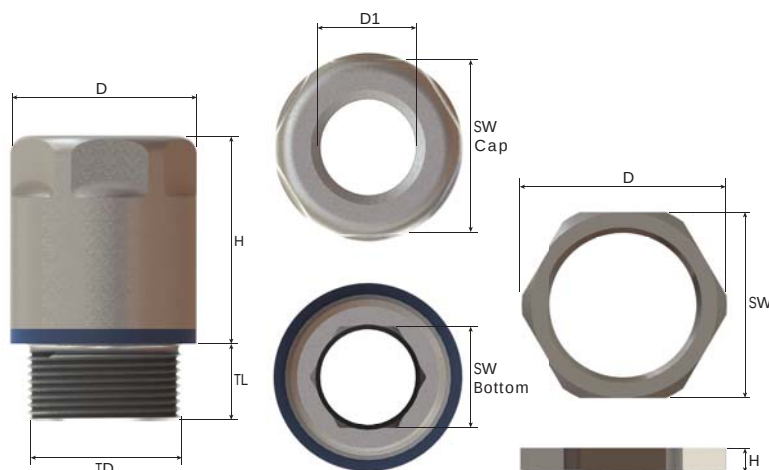
Approvals

	Certificate Number	Standards
	40040032	acc. to DIN EN 62444
	E199260	acc. to UL514
	485TUM2016 No.15/2015	acc. to EHEDG-Doc. 2, 3rd edition, 2004,

Some approvals do not cover all sizes. For more approvals: see our webpage.



Hygienic Glands Stainless Steel



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	Thread Length TL mm	Thread TD mm	Spanner Width		Outer Ø D mm	Inner Ø D1 mm	max. Height H mm	Lock Nut			Part Number	Packing Unit
				SW Cap mm	SW Bottom mm				SW mm	D mm	H mm		
M12x1,5	3,0 - 6,5	6,0	12,0	14	7	15,6	6,8	21,5	15	16,6	2,8	BMFGX-0S	o.r.
M16x1,5	5,0 - 10,0	7,0	16,0	18	10	20,2	10,3	23,0	19	21,0	3,0	BMFGX-01S	o.r.
M20x1,5	6,0 - 12,0	10,0	20,0	22	13	24,1	12,3	27,0	24	26,5	3,5	BMFGX-02S	o.r.
M25x1,5	12,0 - 17,0	14,0	25,0	28	17	30,1	17,3	29,5	30	33,0	4,0	BMFGX-03S	o.r.

Hygienic Gland Tightening Tool

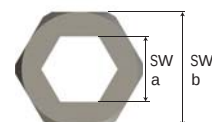
Technical Details

Material Metal



Tightening Tool

Gland Size	Allen Screw SW a mm	Outer Spanner Width SW b mm	Tool Height h mm	Part Number	Packing Unit
M12	5,0	7,0	5,0	BMFGT-01	o.r.
M16	6,0	10,0	5,0	BMFGT-02	o.r.
M20	8,0	13,0	8,0	BMFGT-03	o.r.
M25	10,0	17,0	8,0	BMFGT-04	o.r.



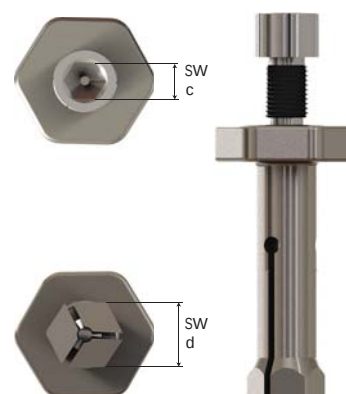
Hygienic Gland Special Tool

Technical Details

Material Metal

Special Tool

Gland Size	Allen Screw SW c mm	Outer Spanner Width SW d min - max mm	Part Number	Packing Unit
M16	6,0	9,0 - 10,0	BMFGST-02	o.r.
M20	8,0	11,0 - 13,0	BMFGST-03	o.r.
M25	8,0	15,0 - 17,0	BMFGST-04	o.r.



Hygienic Glands, EMC Stainless Steel

EMC cable glands for hygienic requirements

- For EMC applications in manufacturing and packaging of food and pharmaceuticals, clean room technology, biotechnology, chemical industry.
- Long-lasting contact by high definition contact spring.
- Moving spring contact offers reduced risk of sheath damage.
- Smooth finish prevents harmful micro organisms to adhere on the surface.
- No threads are exposed.
- Gasket material according to FDA guideline 21 CFR 177.2600.
- Cleaning of cable glands is easier, faster and less expensive.
- Reliable strain relief due to strain relief element separated from grommet.
- Suitable for high pressure steam cleaning.
- EMC lock nut included.
- Assembling tool included.

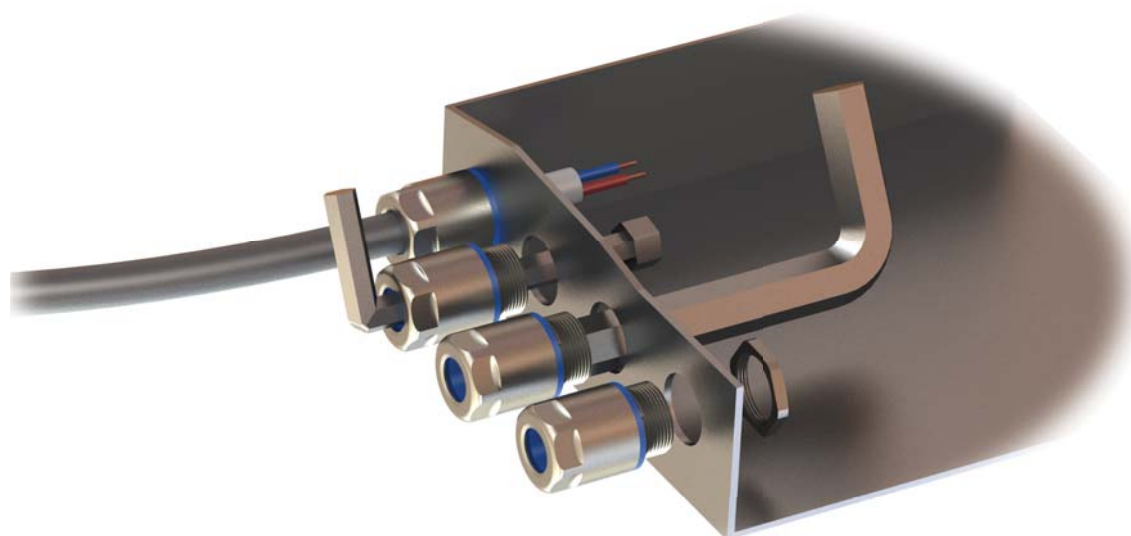
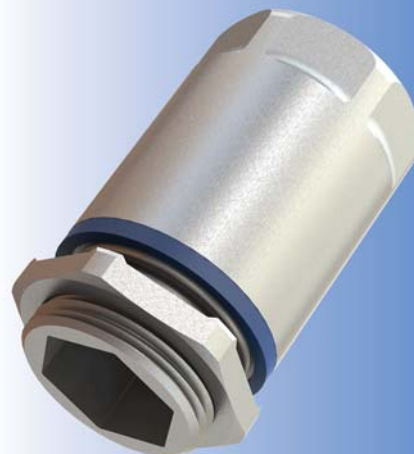
Technical Details

Material	Body	Stainless steel 1.4305 (AISI 303)	
	Cap	Stainless steel 1.4305 (AISI 303)	
	Clamp. Insert	POM	
	Contact Spring	Special Copper Alloy	
	Gasket	TPE	
	Lock Nut	Stainless steel 1.4305 (AISI 303)	
Protection Class	IP 68 - 5 Bar, 30 min IP 69		
Operating Temperature	Permanent	Intermittent	
	-20 °C to +100 °C		-40 °C to +150 °C
Cable Type	Non armoured, Shielded		
Thread Type	• Metric EN 60423 • Other thread types also available upon request.		
Accessories	• Lock nuts (included) • Dome plugs • Assembling tools		
Remarks	• Manufactured according to DIN EN 62444/50262. • We recommend the use of lock nuts to ensure IP rating for rough surfaces or through holes. • Some approvals do not cover all sizes. Note: Applications of most cable glands don't require same parameters applied to tests. For applications strictly acc. to the approval definitions please consult data sheet. Note: When using special tool – do not damage contact springs.		

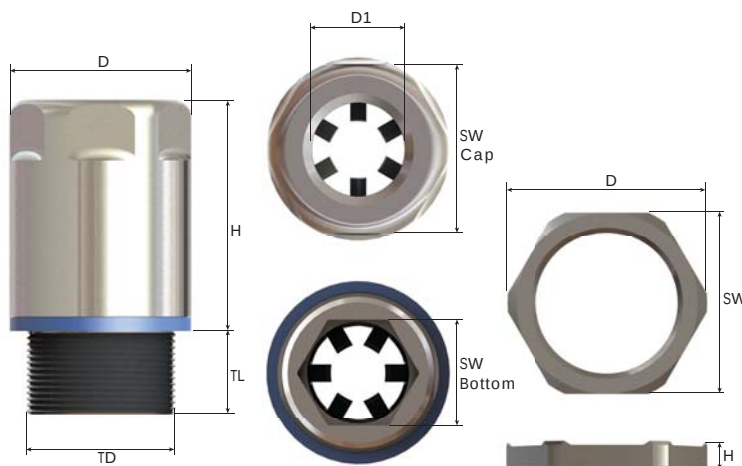
Approvals

	Certificate Number	Standards
	40040032	acc. to DIN EN 62444

Some approvals do not cover all sizes. For more approvals: see our webpage.



Hygienic Glands, EMC Stainless Steel



Thread Type **METRIC** acc. to EN 60423

Size	Clamping Range Ø min-max mm	Shield Diameter Ø min-max mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø D mm	Inner Ø D1 mm	max. Height H mm	Lock Nut			Part Number	Packing Unit
					SW Cap mm	SW Bottom mm				SW mm	D mm	H mm		
M16x1,5	5,0 - 10,0	4	7	16	18	10	20,2	10,3	28,5	19	21,0	3,0	BMEFGX-01	o.r.
M20x1,5	6,0 - 12,0	5	10	20	22	13	24,1	12,3	33,0	24	26,5	3,5	BMEFGX-02	o.r.
M25x1,5	12,0 - 17,0	10	14	25	28	17	30,1	17,3	38,0	30	33,0	4,0	BMEFGX-03	o.r.

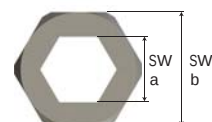
Hygienic Gland Tightening Tool

Technical Details

Material Metal

Tightening Tool

Gland Size	Allen Screw SW a mm	Outer Spanner Width SW b mm	Tool Height h mm	Part Number	Packing Unit
M16	6,0	10,0	5,0	BMFGT-02	o.r.
M20	8,0	13,0	8,0	BMFGT-03	o.r.
M25	10,0	17,0	8,0	BMFGT-04	o.r.



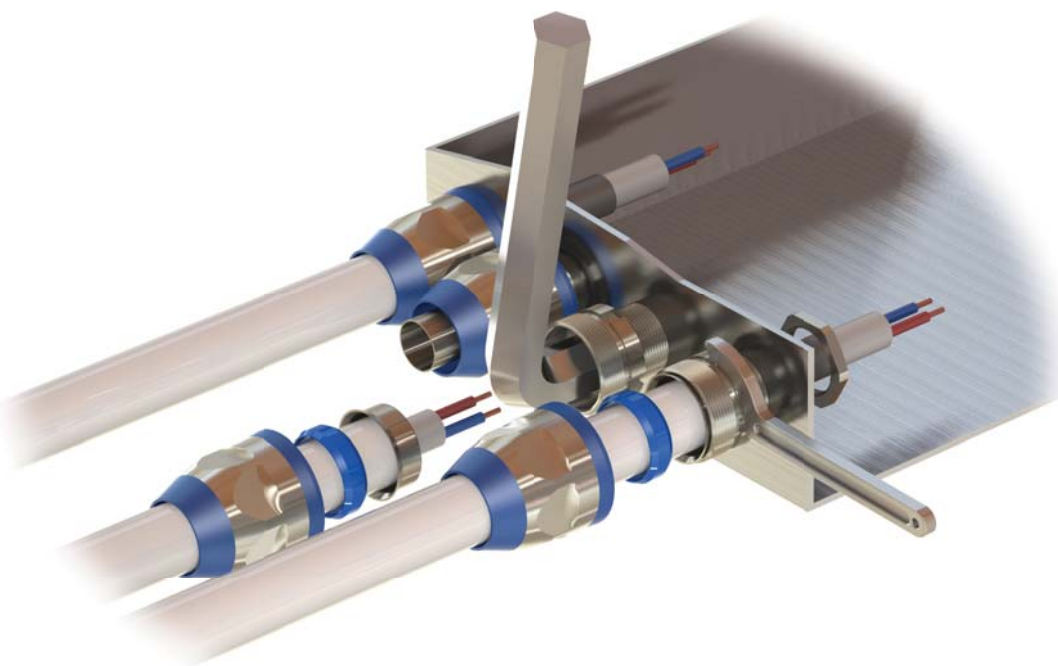
Hygienic Conduit Fittings Stainless Steel

Stainless steel Hygienic Conduit Fittings

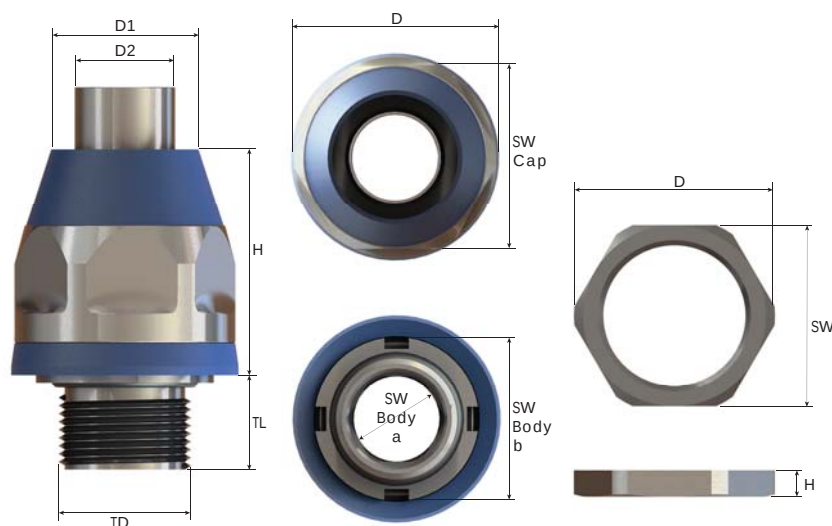
- Stainless steel Hygienic Conduit Fittings are used in all areas where cleanliness is a necessity. Avoiding build-up of dirt is most important in the following industries:
- Manufacturing and packaging of food and pharmaceuticals
- Clean room technology
- Biotechnology
- Chemical industry
- Due to the special design of our Hygienic Conduit Fittings they provide the following benefits:
- smooth finish prevents harmful micro organisms to adhere to the surface no threads are exposed
- cleaning of fittings is easier, faster and less expensive compared to traditional stainless steel cable glands
- upper protective cap avoids dirt to enter the system
- suitable for high pressure steam cleaning

Technical Details

Material	Body	Stainless steel 1.4404 (AISI 316L)	
	Cap	Stainless steel 1.4404 (AISI 316L)	
	Gasket	TPE, according to FDA guideline 21 CFR 177.2600	
	Pressure Ring	Polyamide 6	
	O-Ring	NBR	
	Ferrule	Brass, Nickel plated	
Protection Class		IP 68 (5 bar, 30 min), according to EN 60 529 IP 69K, according to DIN 40050-9	
Operating Temperature		Permanent	Intermittent
		-20 °C to +100 °C	-40 °C to +150 °C
Thread Type		Metric, according to EN 60423 PG and NPT upon request	
Accessories		• Lock nuts	
Remarks		• Smooth finish prevents harmful micro organisms to adhere to the surface • No threads are exposed • Cleaning of fittings is easier, faster and less expensive compared to traditional stainless steel cable glands • Suitable for high pressure steam cleaning • Manufacturing and packaging of food and pharmaceuticals • Clean room technology, Biotechnology, Chemical industry	



Hygienic Conduit Fittings Stainless Steel



Thread Type **METRIC** acc. to EN 60423

Size	Conduit Size	Thread Length TL mm	Thread Ø TD mm	SW Cap mm	Spanner Width SW Body a mm	Spanner Width SW Body b Ø mm	Conduit Outer Ø D1 mm	Conduit Inner Ø D2 mm	Outer Ø D mm	max. Height H mm	Lock Nut SW mm	Lock Nut D mm	Lock Nut H mm	Part Number	Packing Unit
M16x1,5	3/8"	11,5	16,0	27	11,0	24,0	17,2	12,0	31,1	36,8	19	21,0	3,0	BMHFX-01	o.r.
M20x1,5	1/2"	13,0	20,0	30	14,0	27,0	20,5	15,0	34,0	37,3	24	26,5	3,5	BMHFX-02	o.r.
M25x1,5	3/4"	15,0	25,0	36	19,0	33,0	25,8	20,0	41,0	42,4	30	33,0	4,0	BMHFX-03	o.r.
M32x1,5	1"	15,0	32,0	46	25,0	42,0	32,4	25,7	52,7	51,3	36	39,5	5,0	BMHFX-04	o.r.
M40x1,5	1 1/4"	16,0	40,0	54	32,0	50,0	41,2	34,2	62,0	58,9	46	51,0	5,0	BMHFX-05	o.r.
M50x1,5	1 1/2"	18,0	50,0	63	36,0	58,0	46,9	39,2	70,0	63,3	60	66,0	5,0	BMHFX-06	o.r.
M63x1,5	2"	20,0	63,0	77	48,0	72,0	59,0	50,0	84,6	68,6	70	77,0	6,0	BMHFX-07	o.r.

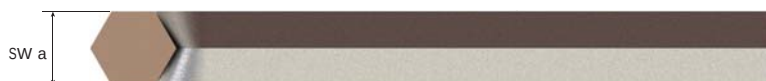
Hygienic Fitting Tightening Tool

Technical Details

Material Metal

Tightening Tool

Fitting Size	Allen Screw SW a mm	Spanner Ø SW b mm
M16	11,0	24,0
M20	14,0	27,0
M25	19,0	33,0
M32	25,0	42,0
M40	32,0	50,0
M50	36,0	58,0
M63	48,0	72,0



Further Accessories for Hygienic Glands & Fittings

Lock Nuts

Stainless Steel Lock Nuts



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Stainless Steel EMC Lock Nuts



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Food , Beverage and Pharmaceuticals Processing Machinery



Packaging for food, Beverage and Pharmaceuticals



Stainless Steel Control Cabinets and Monitoring Systems



Stainless Steel Control Enclosures for Food and Pharmaceuticals



Relation of glands & special seals

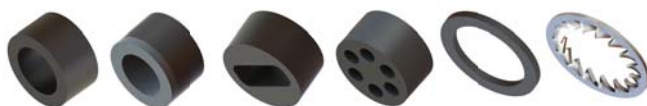
ACCESSORIES

for Industrial Application



Reducing Seals, Single
Reducing Seals, Double
Flat cable Seals
Multihole Seals
Gaskets
Serrated Washers

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Relation of glands & spacial seals ACCESSORIES for Industrial Application



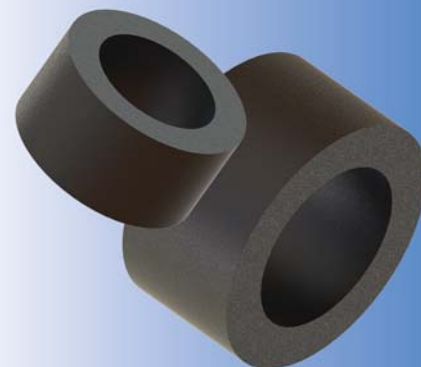
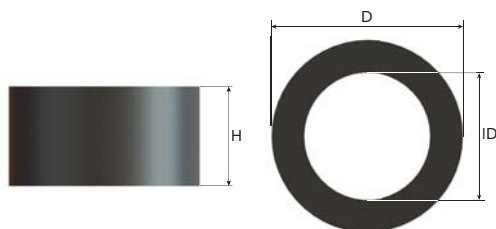
Reducing Seals Single, Rubber

Reducing seals, single

- For reducing the clamping ranges of cable glands.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	• CR (Chloroprene) • NBR • Silicone • EPDM
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Reducing seals, single

Clamping Range Reducing Seal Ø min-max mm	Replaced Standard Seal Ø min-max mm	Seal Dimensions			CR	NBR	Part Number Silicone		EPDM	Packing Unit
		Inner Ø ID mm	Outer Ø D mm	Height H mm	black	black	red	transparent	black	
2,0 - 5,0	3,0 - 6,5	5,2	8,6	7,1	MS-0SC	MS-0SN	MS-0SSR	MS-0SST	MS-0SE	o.f.
2,0 - 6,0	4,0 - 8,0	6,3	10,9	7,0	MS-01C	MS-01N	MS-01SR	MS-01ST	MS-01E	o.f.
3,0 - 7,0	5,0 - 10,0	7,3	13,7	10,1	MS-01LC	MS-01LN	MS-01LSR	MS-01LST	MS-01LE	o.f.
5,0 - 9,0	6,0 - 12,0	9,4	16,0	8,4	MS-02C	MS-02N	MS-02SR	MS-02ST	MS-02E	o.f.
7,0 - 12,0	10,0 - 14,0	12,4	18,0	9,3	MS-02LC	MS-02LN	MS-02LSR	MS-02LST	MS-02LE	o.f.
9,0 - 13,0	11,0 - 17,0	13,5	20,4	10,7	MS-03LC	MS-03LN	MS-03LSR	MS-03LST	MS-03LE	o.f.
9,0 - 16,0	13,0 - 18,0	16,4	22,9	12,2	MS-03C	MS-03N	MS-03SR	MS-03ST	MS-03E	o.f.
11,0 - 15,0	15,0 - 21,0	15,5	25,4	14,2	MS-04LC	MS-04LN	MS-04LSR	MS-04LST	MS-04LE	o.f.
12,0 - 20,0	18,0 - 25,0	20,5	30,4	14,0	MS-04C	MS-04N	MS-04SR	MS-04ST	MS-04E	o.f.
16,0 - 23,0	19,0 - 28,0	23,5	33,40	17,0	MS-05LC	MS-05LN	MS-05LSR	MS-05LST	MS-05LE	o.f.
20,0 - 26,0	22,0 - 32,0	26,5	40,0	16,8	MS-05C	MS-05N	MS-05SR	MS-05ST	MS-05E	o.f.
25,0 - 31,0	30,0 - 38,0	31,5	45,0	16,5	MS-06C	MS-06N	MS-06SR	MS-06ST	MS-06E	o.f.
29,0 - 35,0	34,0 - 44,0	35,5	51,0	16,5	MS-07C	MS-07N	MS-07SR	MS-07ST	MS-07E	o.f.

Reducing Seals Double, Rubber



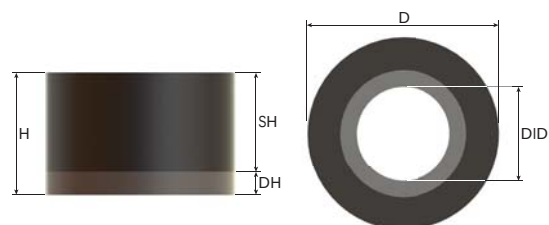
Reducing seals, Double

- For reducing the clamping ranges of cable glands.
- Double seal optimizes the range used.
- Special design for high quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material

- CR (Chloroprene)
- NBR
- Silicone
- EPDM



Reducing seals, double

Clamping Range		Replaced Standard Seal Ø min-max mm	Height DH mm	Seal Dimensions					Height H mm	CR		NBR	Part Number		EPDM black	Packing Unit
Inner Seal Ø min-max mm	Outer Seal Ø min-max mm			Inner Ø DID mm	Height SH mm	Outer Ø D mm	black	black		Silicone						
										red	transparent					
2,0 - 4,0	3,0 - 6,5	3,0 - 6,5	2,0	4,2	7,1	8,6	9,1	MDS-05C	MDS-05N	MDS-05SR	MDS-05ST	MDS-05E	O.F.			
3,0 - 5,0	4,0 - 8,0	4,0 - 8,0	2,0	5,2	7,5	10,7	9,5	MDS-01C	MDS-01N	MDS-01SR	MDS-01ST	MDS-01E	O.F.			
3,0 - 7,0	5,0 - 10,0	5,0 - 10,0	2,0	7,2	10,4	13,7	12,1	MDS-01LC	MDS-01LN	MDS-01LSR	MDS-01LST	MDS-01LE	O.F.			
5,0 - 8,5	6,0 - 12,0	6,0 - 12,0	2,0	8,7	8,2	16,0	10,2	MDS-02C	MDS-02N	MDS-02SR	MDS-02ST	MDS-02E	O.F.			
7,0 - 12,0	10,0 - 14,0	10,0 - 14,0	2,0	11,3	9,3	18,0	11,3	MDS-02LC	MDS-02LN	MDS-02LSR	MDS-02LST	MDS-02LE	O.F.			
8,0 - 13,0	11,0 - 17,0	11,0 - 17,0	2,5	13,2	10,7	20,4	13,2	MDS-03LC	MDS-03LN	MDS-03LSR	MDS-03LST	MDS-03LE	O.F.			
9,0 - 14,0	13,0 - 18,0	13,0 - 18,0	2,5	14,2	12,2	22,9	14,7	MDS-03C	MDS-03N	MDS-03SR	MDS-03ST	MDS-03E	O.F.			
11,0 - 16,0	15,0 - 21,0	15,0 - 21,0	2,5	16,3	14,2	25,4	16,7	MDS-04LC	MDS-04LN	MDS-04LSR	MDS-04LST	MDS-04LE	O.F.			
13,0 - 20,0	18,0 - 25,0	18,0 - 25,0	2,5	20,5	14,0	30,4	16,5	MDS-04C	MDS-04N	MDS-04SR	MDS-04ST	MDS-04E	O.F.			
16,0 - 21,0	19,0 - 28,0	19,0 - 28,0	2,5	21,3	17,0	33,4	19,5	MDS-05LC	MDS-05LN	MDS-05LSR	MDS-05LST	MDS-05LE	O.F.			
20,0 - 26,0	22,0 - 32,0	22,0 - 32,0	2,5	26,5	16,8	40,0	19,5	MDS-05C	MDS-05N	MDS-05SR	MDS-05ST	MDS-05E	O.F.			
21,0 - 31,0	30,0 - 38,0	30,0 - 38,0	3,0	31,4	17,2	46,0	20,2	MDS-06C	MDS-06N	MDS-06SR	MDS-06ST	MDS-06E	O.F.			
27,0 - 35,0	34,0 - 44,0	34,0 - 44,0	3,0	35,4	18,5	51,0	21,5	MDS-07C	MDS-07N	MDS-07SR	MDS-07ST	MDS-07E	O.F.			

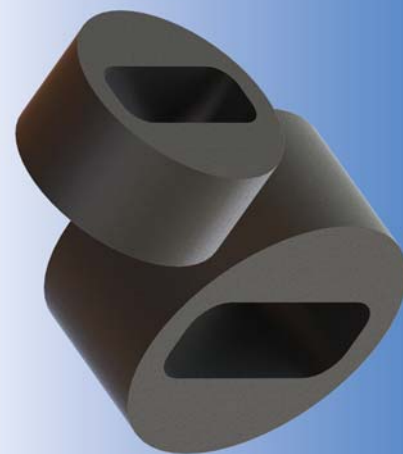
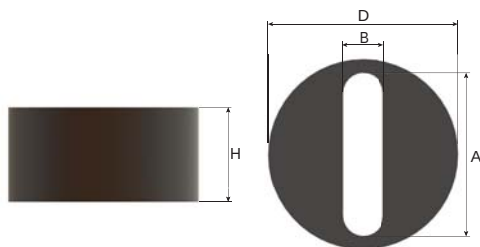
Flat Cable Seals Rubber

Flat cable seals

- To modify the clamping range to the shape of flat cables.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material	• CR (Chloroprene) • NBR • Silicone • EPDM
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Flat Cable Seals

Cable Dimensions		Replaced Standard Seal Ø min-max mm	Seal Dimensions		CR	NBR	Part Number		EPDM	Packing Unit
Width A mm	Height B mm		Outer Ø D mm	Height H mm	black	black	Silicone red	transparent	black	
19,0	5,8	11,0 - 17,0	20,4	12,2	MFS-03C	MFS-03N	MFS-03SR	MFS-03ST	MFS-03E	o.f.
19,0	5,8	15,0 - 21,0	25,4	14,2	MFS-04C	MFS-04N	MFS-04SR	MFS-04ST	MFS-04E	o.f.
22,0	7,8				MFS-04LC	MFS-04LN	MFS-04LSR	MFS-04LST	MFS-04LE	o.f.
31,0	5,5	19,0 - 28,0	33,4	17,0	MFS-05LC	MFS-05LN	MFS-05LSR	MFS-05LST	MFS-05LE	o.f.
	11,0				MFS-05C	MFS-05N	MFS-05SR	MFS-05ST	MFS-05E	o.f.
43,0	5,5	34,0 - 44,0	51,0	16,5	MFS-06C	MFS-06N	MFS-06SR	MFS-06ST	MFS-06E	o.f.
	11,0				MFS-06MC	MFS-06MN	MFS-06MSR	MFS-06MST	MFS-06ME	o.f.
	15,5				MFS-06LC	MFS-06LN	MFS-06LSR	MFS-06LST	MFS-06LE	o.f.

Multihole Seals Rubber

Industrial Application



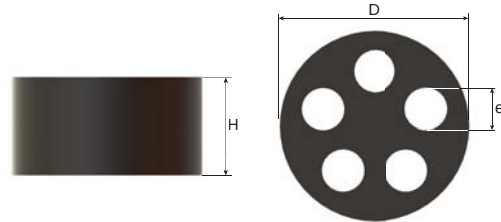
Multihole seals

- To use a number of small cables in one cable gland.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

Technical Details

Material

- CR (Chloroprene)
- NBR
- Silicone
- EPDM



Multihole Seals

Nr. of Cores n	Core Ø e mm	Replaced Standard Seal Ø min-max mm	Seal Dimensions		Part Number					Packing Unit
			Outer Ø D mm	Height H mm	CR black	NBR black	Silicone red	Silicone transparent	EPDM black	
2	3,0	4,0 - 8,0	10,9	7,0	MMS-012C	MMS-012N	MMS-012SR	MMS-012ST	MMS-012E	o.r.
4	4,0				MMS-011C	MMS-011N	MMS-011SR	MMS-011ST	MMS-011E	
2	3,0	5,0 - 10,0	13,7	10,4	MMS-013C	MMS-013N	MMS-013SR	MMS-013ST	MMS-013E	o.r.
2	2,0				MMS-016C	MMS-016N	MMS-016SR	MMS-016ST	MMS-016E	
2	3,0				MMS-017C	MMS-017N	MMS-017SR	MMS-017ST	MMS-017E	
2	4,0				MMS-014C	MMS-014N	MMS-014SR	MMS-014ST	MMS-014E	
2	4,5				MMS-015C	MMS-015N	MMS-015SR	MMS-015ST	MMS-015E	
2	5,0				MMS-018C	MMS-018N	MMS-018SR	MMS-018ST	MMS-018E	
3	4,0	6,0 - 12,0	16,0	8,4	MMS-019C	MMS-019N	MMS-019SR	MMS-019ST	MMS-019E	o.r.
2	5,0				MMS-025C	MMS-025N	MMS-025SR	MMS-025ST	MMS-025E	
2	6,0				MMS-021C	MMS-021N	MMS-021SR	MMS-021ST	MMS-021E	
3	4,0				MMS-022C	MMS-022N	MMS-022SR	MMS-022ST	MMS-022E	
3	5,0				MMS-023C	MMS-023N	MMS-023SR	MMS-023ST	MMS-023E	
4	3,0				MMS-024C	MMS-024N	MMS-024SR	MMS-024ST	MMS-024E	
2	4,0	10,0 - 14,0	18,0	9,3	MMS-026C	MMS-026N	MMS-026SR	MMS-026ST	MMS-026E	o.r.
2	6,0				MMS-02AC	MMS-02AN	MMS-02ASR	MMS-02AST	MMS-02AE	
2	7,0				MMS-02CC	MMS-02CN	MMS-02CSR	MMS-02CST	MMS-02CE	
3	4,0				MMS-028C	MMS-028N	MMS-028SR	MMS-028ST	MMS-028E	
3	6,0				MMS-029C	MMS-029N	MMS-029SR	MMS-029ST	MMS-029E	
4	5,0				MMS-02DC	MMS-02DN	MMS-02DSR	MMS-02DST	MMS-02DE	
5	4,0	11,0 - 17,0	20,4	10,7	MMS-02BC	MMS-02BN	MMS-02BSR	MMS-02BST	MMS-02BE	o.r.
2	6,0				MMS-02EC	MMS-02EN	MMS-02ESR	MMS-02EST	MMS-02EE	
3	6,0				MMS-03CC	MMS-03CN	MMS-03CSR	MMS-03CST	MMS-03CE	
3	7,0				MMS-03EC	MMS-03EN	MMS-03ESR	MMS-03EST	MMS-03EE	
4	5,0				MMS-03DC	MMS-03DN	MMS-03DSR	MMS-03DST	MMS-03DE	
5	4,0				MMS-03FC	MMS-03FN	MMS-03FSR	MMS-03FST	MMS-03FE	
6	4,0	13,0 - 18,0	22,9	12,2	MMS-03GC	MMS-03GN	MMS-03GSR	MMS-03GST	MMS-03GE	o.r.
7	3,0				MMS-03HC	MMS-03HN	MMS-03HSR	MMS-03HST	MMS-03HE	
2	6,0				MMS-03IC	MMS-03IN	MMS-03ISR	MMS-03IST	MMS-03IE	
2	6,6				MMS-03JC	MMS-03JN	MMS-03JSR	MMS-03JST	MMS-03JE	
3	7,0				MMS-031C	MMS-031N	MMS-031SR	MMS-031ST	MMS-031E	
3	8,0				MMS-032C	MMS-032N	MMS-032SR	MMS-032ST	MMS-032E	
4	6,0	13,0 - 18,0	22,9	12,2	MMS-033C	MMS-033N	MMS-033SR	MMS-033ST	MMS-033E	o.r.
4	6,6				MMS-034C	MMS-034N	MMS-034SR	MMS-034ST	MMS-034E	
4	7,0				MMS-035C	MMS-035N	MMS-035SR	MMS-035ST	MMS-035E	
8	1,5				MMS-036C	MMS-036N	MMS-036SR	MMS-036ST	MMS-036E	
					MMS-037C	MMS-037N	MMS-037SR	MMS-037ST	MMS-037E	
					MMS-038C	MMS-038N	MMS-038SR	MMS-038ST	MMS-038E	
					MMS-039C	MMS-039N	MMS-039SR	MMS-039ST	MMS-039E	
					MMS-03AC	MMS-03AN	MMS-03ASR	MMS-03AST	MMS-03AE	
					MMS-03BC	MMS-03BN	MMS-03BSR	MMS-03BST	MMS-03BE	

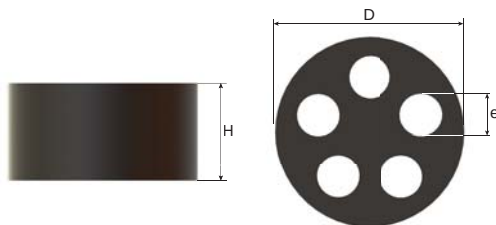
Multihole Seals Rubber

Multihole seals

- To use a number of small cables in one cable gland.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

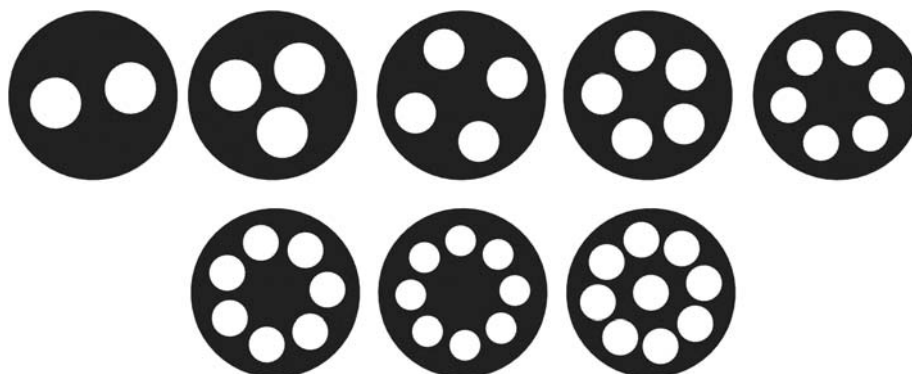
Technical Details

Material	• CR (Chloroprene) • NBR • Silicone • EPDM
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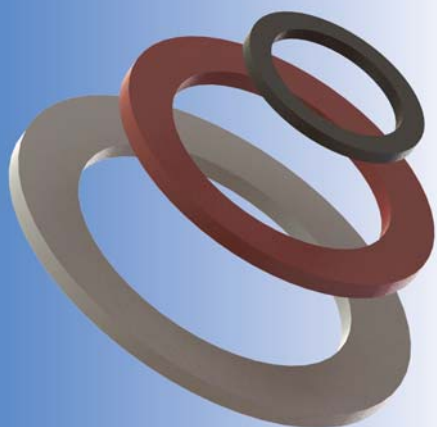


Multihole Seals

Nr. of Cores n	Core Ø e mm	Replaced Standard Seal Ø min-max mm	Seal Dimensions Outer Ø D mm	Height H mm	CR	NBR	Silicone		EPDM	Packing Unit
					black	black	red	transparent	black	
2	7,0	15,0-21,0	25,4	14,2	MMS-04CC	MMS-04CN	MMS-04CSR	MMS-04CST	MMS-04CE	o.r.
	8,0				MMS-04AC	MMS-04AN	MMS-04ASR	MMS-04AST	MMS-04AE	
	9,0				MMS-04DC	MMS-04DN	MMS-04DSR	MMS-04DST	MMS-04DE	
3	8,0				MMS-04BC	MMS-04BN	MMS-04BSR	MMS-04BST	MMS-04BE	
	6,0				MMS-04HC	MMS-04HN	MMS-04HSR	MMS-04HST	MMS-04HE	
4	7,0				MMS-04IC	MMS-04IN	MMS-04ISR	MMS-04IST	MMS-04IE	
	8,0				MMS-04EC	MMS-04EN	MMS-04ESR	MMS-04EST	MMS-04EE	
5	6,0				MMS-04FC	MMS-04FN	MMS-04FSR	MMS-04FST	MMS-04FE	
	5,0				MMS-04JC	MMS-04JN	MMS-04JSR	MMS-04JST	MMS-04JE	
6	6,0				MMS-04KC	MMS-04KN	MMS-04KSR	MMS-04KST	MMS-04KE	
	4,0				MMS-04MC	MMS-04MN	MMS-04MSR	MMS-04MST	MMS-04ME	
8	5,0				MMS-04NC	MMS-04NN	MMS-04NSR	MMS-04NST	MMS-04NE	
	3,0				MMS-04LC	MMS-04LN	MMS-04LSR	MMS-04LST	MMS-04LE	
9	4,0				MMS-04OC	MMS-04ON	MMS-04OSR	MMS-04OST	MMS-04OE	
	8,0				MMS-041C	MMS-041N	MMS-041SR	MMS-041ST	MMS-041E	
2	9,0	MMS-042C	MMS-042N	MMS-042SR	MMS-042ST	MMS-042E				
	7,5	MMS-043C	MMS-043N	MMS-043SR	MMS-043ST	MMS-043E				
3	8,0	MMS-044C	MMS-044N	MMS-044SR	MMS-044ST	MMS-044E				
	8,0	MMS-045C	MMS-045N	MMS-045SR	MMS-045ST	MMS-045E				
4	8,5	MMS-046C	MMS-046N	MMS-046SR	MMS-046ST	MMS-046E				
	5,0	MMS-049C	MMS-049N	MMS-049SR	MMS-049ST	MMS-049E				
5	6,0	MMS-047C	MMS-047N	MMS-047SR	MMS-047ST	MMS-047E				
	7,5	MMS-048C	MMS-048N	MMS-048SR	MMS-048ST	MMS-048E				
2	10,0	MMS-051C	MMS-051N	MMS-051SR	MMS-051ST	MMS-051E				
3	10,0	MMS-052C	MMS-052N	MMS-052SR	MMS-052ST	MMS-052E				
4	8,0	MMS-053C	MMS-053N	MMS-053SR	MMS-053ST	MMS-053E				
	8,0	MMS-054C	MMS-054N	MMS-054SR	MMS-054ST	MMS-054E				
5	9,0	MMS-055C	MMS-055N	MMS-055SR	MMS-055ST	MMS-055E				
	7,0	MMS-056C	MMS-056N	MMS-056SR	MMS-056ST	MMS-056E				
6	6,0	MMS-057C	MMS-057N	MMS-057SR	MMS-057ST	MMS-057E				
	7,0	MMS-058C	MMS-058N	MMS-058SR	MMS-058ST	MMS-058E				



Gaskets Rubber, Polyamide, Fibre



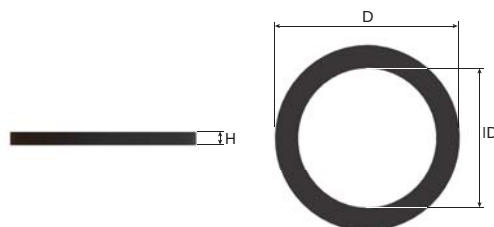
Gaskets

- To ensure IP rating for rough surfaces or through holes.

Technical Details

Material

- CR (Chloroprene)
- NBR
- Silicone
- Polyamide 6
- Fibre



Gaskets

Size	Outer Ø D mm	Inner Ø ID mm	Height H mm	Part Number				Polyamide white	Fibre green	Packing Unit
				CR black	NBR black	Silicone red	transparent			
M12	15,5	10,3	1,5	BMSW-21C	BMSW-21N	BMSW-21SR	BMSW-21ST			O.r.
M16	21,5	15,5	1,5	BMSW-22C	BMSW-22N	BMSW-22SR	BMSW-22ST			O.r.
	19,6	15,7						BMSW-PA2	BMSW-FB2	
M20	26,0	18,5	1,5	BMSW-23C	BMSW-23N	BMSW-23SR	BMSW-23ST			O.r.
	23,8	19,7						BMSW-PA3	BMSW-FB3	
M25	31,5	23,3	1,5	BMSW-24C	BMSW-24N	BMSW-24SR	BMSW-24ST			O.r.
	32,2	24,7						BMSW-PA4	BMSW-FB4	
M32	38,5	30,5	1,5	BMSW-25C	BMSW-25N	BMSW-25SR	BMSW-25ST			O.r.
	39,6	31,7						BMSW-PA5	BMSW-FB5	
M40	48,5	38,5	1,5	BMSW-26C	BMSW-26N	BMSW-26SR	BMSW-26ST			O.r.
	49,6	39,7						BMSW-PA6	BMSW-FB6	
M50	58,0	48,0	1,5	BMSW-27C	BMSW-27N	BMSW-27SR	BMSW-27ST			O.r.
	62,0	49,7						BMSW-PA7	BMSW-FB7	
M63	70,0	61,2	1,5	BMSW-28C	BMSW-28N	BMSW-28SR	BMSW-28ST			O.r.
	78,4	62,7						BMSW-PA8	BMSW-FB8	
M75	86,0	74,5	1,5	BMSW-29C	BMSW-29N	BMSW-29SR	BMSW-29ST			O.r.
	93,4	74,7						BMSW-PA9	BMSW-FB9	
M90	102,0	89,5	1,5	BMSW-30C	BMSW-30N	BMSW-30SR	BMSW-30ST			O.r.
	112,0	89,7						BMSW-PA10	BMSW-FB10	
M100	124,6	99,7	1,5					BMSW-PA11	BMSW-FB11	O.r.
M110	123,0	109,5	1,5	BMSW-31C	BMSW-31N	BMSW-31SR	BMSW-31ST			O.r.

Serrated Washer

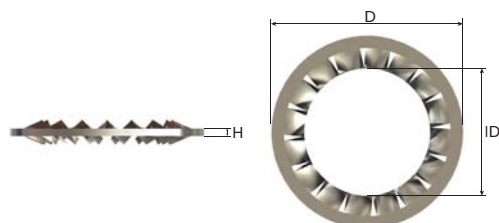
Brass Nickel plated, Stainless Steel

Serrated washers

- To fix lock nuts when mechanical stress occurs.

Technical Details

Material	• Brass, Nickel plated • Stainless Steel
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Serrated Washers

Size	Inner Ø D mm	Outer Ø D mm	Height H mm	Part Number		Packing Unit
				Brass Nickel plated	Stainless Steel	
M16 / NPT 3/8"	16,3	25,5	1,5	BMTW-02BN	BMTW-02X	O.f.
M20 / NPT 1/2"	21,4	32,5	1,5	BMTW-03BN	BMTW-03X	O.f.
M25 / NPT 3/4"	26,7	40,0	1,5	BMTW-04BN	BMTW-04X	O.f.
M32 / NPT 1"	33,5	43,5	1,5	BMTW-05BN	BMTW-05X	O.f.
M40 / NPT 1 1/4"	42,2	64,5	1,5	BMTW-06BN	BMTW-06X	O.f.
M50 / NPT 1 1/2"	50,7	80,0	1,5	BMTW-07BN	BMTW-07X	O.f.
M63 / NPT 2"	63,4	100,0	1,5	BMTW-08BN	BMTW-08X	O.f.
M75 / NPT 2 1/2"	76,4	112,0	1,5	BMTW-09BN	BMTW-09X	O.f.
M90 / NPT 3"	90,5	135,0	1,5	BMTW-10BN	BMTW-10X	O.f.
M100 / NPT 3 1/2"	102,1	145,0	1,5	BMTW-11BN	BMTW-11X	O.f.

Clearance Hole Diameter

• for non-threaded holes with use of lock nuts

Thread Type
metric

acc. to EN 60423

Size	Outer Diameter		Clearance Hole Diameter	
	mm	inch	mm	inch
M4x0,7	4	0.157	4,2	0.165
M8x0,75	8	0.315	8,2	0.323
M12x1,0	12	0.472	12,2	0.480
M12x1,5				
M16x1,5	16	0.630	16,2	0.638
M20x1,5	20	0.787	20,2	0.795
M25x1,5	25	0.984	25,2	0.992
M32x1,5	32	1.260	32,2	1.268
M40x1,5	40	1.575	40,2	1.583
M50x1,5	50	1.969	50,2	1.976
M63x1,5	63	2.480	63,2	2.488
M72x2,0	72	2.835	72,2	2.843
M75x1,5	75	2.953	75,2	2.961
M75x2,0	75	2.953	75,2	2.961
M80x2,0	80	3.150	80,2	3.157
M85x2,0	85	3.346	85,2	3.354
M90x2,0	90	3.543	90,2	3.551
M110x2,0	110	4.331	110,2	4.339

Thread Type
NPT

acc. to ANSI B1.20.1

Size	Outer Diameter		Clearance Hole Diameter	
	mm	inch	mm	inch
NPT 1/4"	13,72	0.540	14,61	0.575
NPT 3/8"	17,15	0.675	18,24	0.718
NPT 1/2"	21,34	0.840	22,23	0.875
NPT 3/4"	26,67	1.050	28,17	1.109
NPT 1"	33,40	1.315	34,93	1.375
NPT 1 1/4"	42,16	1.660	44,04	1.734
NPT 1 1/2"	48,26	1.900	50,39	1.984
NPT 2"	60,33	2.375	62,71	2.469

Thread Type
PG

acc. to DIN 40430

Size	Outer Diameter		Clearance Hole Diameter	
	mm	inch	mm	inch
PG 7	12,5	0.492	12,7	0.500
PG 9	15,2	0.598	15,4	0.606
PG 11	18,6	0.732	18,8	0.740
PG 13,5	20,4	0.803	20,7	0.815
PG 16	22,5	0.886	22,8	0.898
PG 21	28,3	1.114	28,6	1.126
PG 29	37,0	1.457	37,4	1.472
PG 36	47,0	1.850	47,5	1.870
PG 42	54,0	2.126	54,5	2.146
PG 48	59,3	2.335	59,8	2.354

Thread Type
G

acc. to DIN ISO 228

Size	Outer Diameter		Clearance Hole Diameter	
	mm	inch	mm	inch
G 1/4"	13,157	0.518	13,5	0.531
G 3/8"	16,662	0.656	17,0	0.669
G 1/2"	20,955	0.825	21,3	0.839
G 3/4"	26,441	1.041	26,8	1.055
G 1"	33,249	1.309	33,7	1.327
G 1 1/2"	47,803	1.882	48,3	1.902

CABLE GLANDS & ACCESSORIES for GLOBAL HAZARDOUS APPLICATION

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 for 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

FUNCTION DESCRIPTION				
	Sealing of the cable	Screen-Armor of the cable	Traction Relief	Double Sealing cable and jacket
1 Function	X			
2 Function	X	X		
3 Function	X	X	X	
4 Function	X	X	X	X



CABLE GLANDS & ACCESSORIES for HAZARDOUS APPLICATION			
■	4 Function Cable Glands		
●	Orion, Double Compression Glands	138	141
●	Orion Offshore, Armoured Glands	142	145
●	Orion Universal, Armoured Glands	146	149
■	1 Function Cable Glands		
●	E-Octans, Glands	152	155
●	E-Vela, EMC Glands	156	157
●	Norma, Glands	158	159
●	Crater, Glands	160	161
■	Liquid Tight and Flexible Conduit Fittings		
●	E-Hydrus, Straight Fittings	164	165
●	E-Scorpius, 45° Fittings	166	167
●	E-Lupus, 90° Fittings	168	169
●	E-Corvus, Flexible Fittings	170	171
■	Rigid Conduit Fittings		
●	E-Carina, Straight Fittings	174	175
●	E-Cygnus, Swivel Fittings	176	177
●	Phoenix, Swivel Fittings, Multihole	178	179
■	Polyamide Glands & Plugs		
●	Lyra, Glands	182	183
●	Vega, Hi Impact Glands	184	185
●	Gemini, for Heat Trace Glands	186	187
●	Hi-Gemini, for Heat Trace Glands	188	189
●	Draco, Plugs	190	191
●	Hi-Draco, Plugs	192	193
●	Cetus, Dome Plugs	194	195
■	Adaptors & Plugs		
●	Apus, Enlargers	198	199
●	Grus, Reducers	200	201
●	Aries, Couplings	202	203
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CABLE GLANDS for Gas & Dust Application



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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.

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.

4 Function Ex d/e Glands

ORION



Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material	
		CR (Chloroprene Rubber)	Silicone
		-40°C / +100°C	-60°C / +130°C
LT Version		-40°C / +80°C	-60°C / +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 KBA.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +100°C IP66/68 IECEx CES 13.0013X / CESI 13 ATEX 033X	
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	

Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012 EN 60079-1:2014 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
	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
	Nº TC RU C-TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ P MЭК 60079-0:2011 ГОСТ P MЭК 60079-7:2012 ГОСТ P MЭК 60079-31:2010 ГОСТ P MЭК 60079-14:2008
	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/15-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2009 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2009

For more information see our webpage.

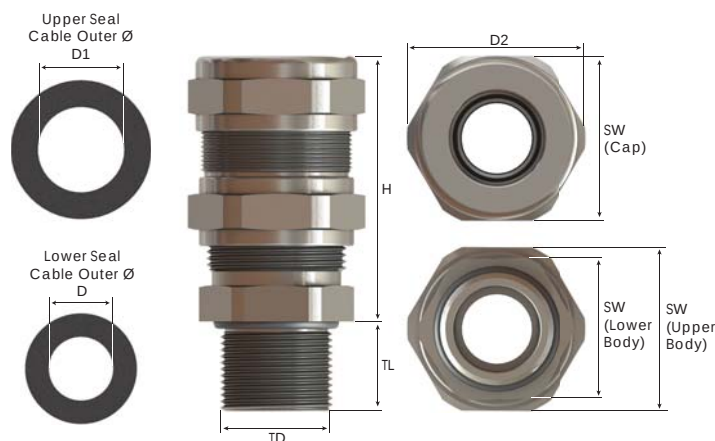
Order Encoding											
Part Number	Size	•M: Metric •N: NPT •C: PF •P: PG •G: Gas Thread	for Lower Temperature	•B: Brass •X: Stainless steel •BN: Nickel Plated •Z: Galvanised Material	•C: Chloroprene •S: Silicone Seal	-	•GC: Chloroprene •GS: Silicone •GF: Fiber Gasket	Serrated Washer	Lock Nut	Shroud	Earth Tag
KBA	5	N	LT	B	C	-	GC	SW	L	S	E

LT*: For temperature information, please see technical details.

LT*: For temperature information, please see technical details.

ORION

4 Function Ex d/e Glands



Hazardous Application

Thread Type METRIC acc. to ISO 965-3											
Size	Clamping Range Ø min-max		Armour Wire Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width			Outer min. Ø D2 mm	max. Height H mm	Part Number
	D mm	D1 mm				SW Cap mm	SW Upper Body mm	SW Lower Body mm			
M16x1.5	3,0 - 8,5	6,0 - 12,0	1,2	16,0	16,0	22,0	26,0	26,0	29,0	47,5	KBA01SM
	6,0 - 12,0	8,5 - 16,0				25,0	29,0	29,0	31,5	50,0	KBA01M
M20x1.5	3,0 - 8,5	6,0 - 12,0	1,2	16,0	20,0	24,0	26,0	26,0	29,0	47,5	KBA1SM
	6,0 - 12,0	8,5 - 16,0	1,3			25,0	29,0	29,0	31,5	49,0	KBA1M
	8,5 - 14,5	12,0 - 20,0				28,0	30,0	32,0	35,0	56,4	KBA1MLT*
	12,0 - 14,5	16,0 - 20,0								52,0	KBA1LM
M25x1.5	3,0 - 8,5	6,0 - 12,0	1,2	16,0	25,0	29,0	26,0	26,0	29,0	47,5	KBA2XSM
	6,0 - 12,0	8,5 - 16,0		18,0		29,0	29,0	29,0	31,5	50,5	KBA2SM
	8,5 - 14,5	12,0 - 16,0		16,0		29,0	30,0	32,0	35,0	56,4	KBA2XMMLT*
	12,0 - 16,0	16,0 - 21,0	1,3	18,0		32,0	34,0	34,0	37,0	54,5	KBA2M
	8,5 - 16,0	12,0 - 21,0				59,5	KBA2MLT*				
	12,0 - 20,0	16,0 - 26,0				60,5	KBA2LM				
	6,0 - 12,0	8,5 - 16,0				36,0	40,0	40,0	44,0	60,5	KBA2LM
	12,0 - 20,0	16,0 - 26,0				36,0	29,0	29,0	31,5	50,5	KBA3XSM
M32x1.5	12,0 - 20,0	16,0 - 26,0	1,2	18,0	32,0	40,0	40,0	40,0	44,0	62,0	KBA3SM
	8,5 - 16,0	12,0 - 21,0	1,3			36,0	34,0	34,0	37,0	59,5	KBA3XMMLT*
	15,0 - 26,0	20,0 - 33,0	1,6			48,0	52,0	52,0	57,0	78,5	KBA3M
	12,0 - 20,0	16,0 - 26,0	1,6			45,0	40,0	40,0	44,0	62,0	KBA4XSM
	15,0 - 26,0	20,0 - 33,0	1,8			48,0	52,0	52,0	57,0	78,5	KBA4SM
M50x1.5	20,0 - 32,0	29,0 - 41,0	1,6	18,0	50,0	55,0	60,0	60,0	66,0	89,5	KBA4M
	15,0 - 26,0	20,0 - 33,0	1,8			54,0	52,0	52,0	57,0	78,4	KBA5XSM
	20,0 - 32,0	29,0 - 41,0	2,2			55,0	60,0	60,0	66,0	89,9	KBA5XMM
	22,0 - 35,0	33,0 - 48,0	1,8			60,0	70,0	75,0	82,0	96,5	KBA5SM
	27,0 - 41,0	36,0 - 52,0	2,2			70,0		74,0	83,0	100,0	KBA5M
	22,0 - 35,0	33,0 - 48,0	2,7			18,0	63,0	68,0	70,0	75,0	82,0
27,0 - 41,0	36,0 - 52,0	70,0		74,0	83,0			100,0		KBA6XMM	
35,0 - 45,0	43,0 - 57,0	20,0		75,0	80,0			80,0	89,5	106,0	KBA6SM
40,0 - 52,0	47,0 - 60,0			85,0	85,0			85,0	94,0	108,0	KBA6M
35,0 - 45,0	43,0 - 57,0			80,0	80,0			89,5	106,0	KBA7XSM	
M75x1.5	40,0 - 52,0	47,0 - 60,0	3,0	20,0	75,0	85,0	85,0	85,0	94,0	108,0	KBA7SM
	45,0 - 60,0	54,0 - 70,0				90,0	95,0	100,0	110,5	125,0	KBA7M
	40,0 - 52,0	47,0 - 60,0				100,0	85,0	85,0	94,0	108,0	KBA8XSM
M90x1.5	45,0 - 60,0	54,0 - 70,0	3,0	20,0	90,0	95,0	95,0	100,0	110,5	124,0	KBA8SM
	60,0 - 72,0	63,0 - 80,0				110,0	115,0	115,0	127,0	154,0	KBA8M
	45,0 - 60,0	54,0 - 70,0				3,0	20,0	110,0	120,0	95,0	100,0
60.072,0	63,0 - 80,0	3,5	115,0	115,0	127,0	154,0			KBA10M		

4 Function Ex d/e Glands

ORION

Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material	
		CR (Chloroprene Rubber)	Silicone
		-40°C / +100°C	-60°C / +130°C
LT Version		-40°C / +80°C	-60°C / +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 KBA.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +100°C IP66/68 IECEx CES 13.0013X / CESI 13 ATEX 033X	
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	

Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012 EN 60079-1:2014 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
	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
	Nº TC RU C-TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ P MЭК 60079-0:2011 ГОСТ P MЭК 60079-7:2012 ГОСТ P MЭК 60079-31:2010 ГОСТ P MЭК 60079-14:2008
	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/15-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2009 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2009

For more information see our webpage.

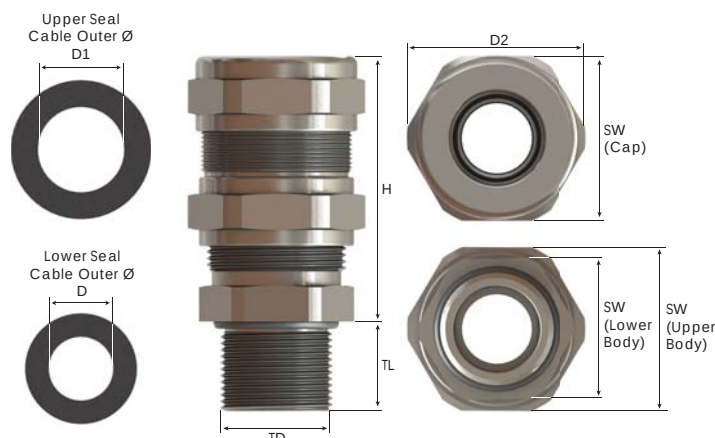


Order Encoding											
Part Number	Size	•M: Metric •N: NPT •C: PF •P: PG •G: Gas Thread	for Lower Temperature	•B: Brass •X: Stainless steel •BN: Nickel Plated •Z: Galvanised Material	•C: Chloroprene •S: Silicone Seal	-	•GC: Chloroprene •GS: Silicone •GF: Fiber Gasket	Serrated Washer	Lock Nut	Shroud	Earth Tag
KBA	5	N	LT	B	C	-	GC	SW	L	S	E
LTT: For temperature information, please see technical details.											

LT*: For temperature information, please see technical details.

ORION

4 Function Ex d/e Glands



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

Size	Clamping Range Ø min-max		Armour Wire Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width			Outer min. Ø D2 mm	max. Height H mm	Part Number	
	D mm	D1 mm				SW Cap mm	SW Upper Body mm	SW Lower Body mm				
NPT 3/8"	3,0 - 8,5	6,0 - 12,0	1,2	16,0	17,1	22,0	26,0	26,0	29,0	47,5	KBA01SN	
	6,0 - 12,0	8,5 - 16,0				25,0	29,0	29,0	31,5	50,0	KBA01N	
NPT 1/2"	3,0 - 8,5	6,0 - 12,0	1,2	16,0	21,3	24,0	26,0	26,0	29,0	47,5	KBA1SN	
	6,0 - 12,0	8,5 - 16,0				25,0	29,0	29,0	31,5	49,0	KBA1N	
	8,5 - 14,5	12,0 - 20,0				28,0	30,0	32,0	35,0	56,4	KBA1NLT*	
	12,0 - 14,5	16,0 - 20,0								52,0	KBA1LN	
NPT 3/4"	3,0 - 8,5	6,0 - 12,0	1,2	16,0	26,7	29,0	26,0	26,0	29,0	47,5	KBA2XSN	
	6,0 - 12,0	8,5 - 16,0		18,0			29,0	29,0	31,5	50,5	KBA2SN	
	8,5 - 14,5	12,0 - 20,0	1,6	16,0			30,0	32,0	35,0	56,4	KBA2XMNLT*	
	8,5 - 16,0	12,0 - 21,0	1,2	18,0			32,0	34,0	34,0	37,0	59,5	KBA2NLT*
	12,0 - 16,0	16,0 - 21,0							54,5	KBA2N		
	12,0 - 20,0	16,0 - 26,0	1,6	16,0			36,0	40,0	40,0	44,0	60,5	KBA2LN
NPT 1"	6,0 - 12,0	8,5 - 16,0	1,6	21,0	33,4	36,0	29,0	29,0	31,5	50,5	KBA3XSN	
	12,0 - 20,0	16,0 - 26,0				40,0	40,0	40,0	44,0	62,0	KBA3SN	
	8,5 - 16,0	12,0 - 21,0	1,8			36,0	34,0	34,0	37,0	59,5	KBA3XMNLT*	
	15,0 - 26,0	20,0 - 33,0				48,0	52,0	52,0	57,0	78,5	KBA3N	
	12,0 - 20,0	16,0 - 26,0				45,0	40,0	40,0	44,0	62,0	KBA4XSN	
NPT 1 1/4"	15,0 - 26,0	20,0 - 33,0	1,8	21,0	42,1	48,0	52,0	52,0	57,0	78,5	KBA4SN	
	20,0 - 32,0	29,0 - 41,0	2,2	18,0		55,0	60,0	60,0	66,0	89,5	KBA4N	
	15,0 - 26,0	20,0 - 33,0	2,2	21,0		48,2	54,0	52,0	52,0	57,0	78,4	KBA5XSN
20,0 - 32,0	29,0 - 41,0	55,0			60,0		60,0	66,0	88,7	KBA5XMN		
NPT 1 1/2"	22,0 - 35,0	33,0 - 48,0	2,7		60,0		70,0	75,0	82,0	96,5	KBA5SN	
	27,0 - 41,0	36,0 - 52,0			70,0			74,0	83,0	100,0	KBA5N	
NPT 2"	22,0 - 35,0	33,0 - 48,0	2,7	21,0	60,3	68,0	70,0	75,0	82,0	96,5	KBA6XSN	
	27,0 - 41,0	36,0 - 52,0				70,0		74,0	83,0	100,0	KBA6XMN	
	35,0 - 45,0	43,0 - 57,0	3,5	20,0		75,0	80,0	80,0	89,5	106,0	KBA6SN	
	40,0 - 52,0	47,0 - 60,0	3,0	21,0		85,0	85,0	85,0	94,0	108,0	KBA6N	
	NPT 2 1/2"	35,0 - 45,0	43,0 - 57,0	3,0		21,0	73,0	80,0	80,0	80,0	89,5	105,5
40,0 - 52,0		47,0 - 60,0	20,0		85,0	85,0		85,0	94,0	108,0	KBA7SN	
45,0 - 60,0		54,0 - 70,0			90,0	95,0		100,0	110,5	125,0	KBA7N	
NPT 3"	40,0 - 52,0	47,0 - 60,0	3,0	21,0	88,9	95,0	85,0	85,0	94,0	108,0	KBA8XSN	
	45,0 - 60,0	54,0 - 70,0					95,0	100,0	110,5	124,0	KBA8SN	
	60,0 - 72,0	63,0 - 80,0					110,0	115,0	115,0	127,0	154,0	KBA8N
NPT 3 1/2"	45,0 - 60,0	54,0 - 70,0	3,5	21,0	101,6	110,0	95,0	100,0	110,5	124,0	KBA9SN	
	60,0 - 72,0	63,0 - 80,0					115,0	115,0	127,0	154,0	KBA9N	

4 Function Ex d/e Glands

ORION
OFFSHORE



Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material		
		CR (Chloroprene Rubber)	Silicone
		-40°C / +100°C	-60°C / +130°C
	LT Version	-40°C / +80°C	-60°C / +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 KBAO.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +100°C IP66/68 IECEx CES 13.0013X / CESI 13 ATEX 033X		
Thread Type	• 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	• Lock nuts • Gaskets • Serrated Washers • Shrouds • Earth tags		

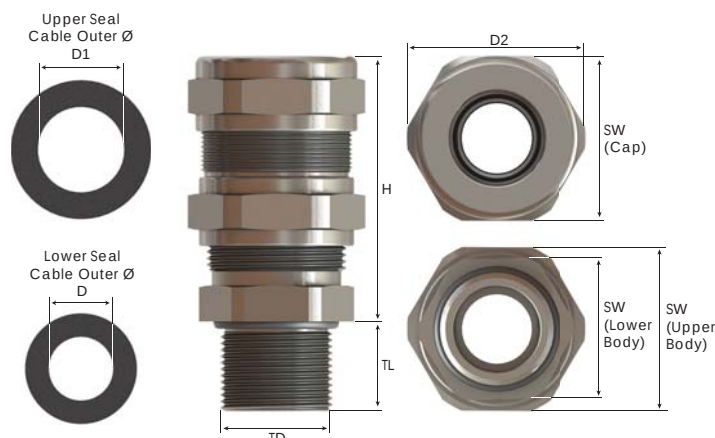
Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012 EN 60079-1:2014 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
	20150612-E474828	UL 2225, CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA C22.2 No. 60079-7:12 CAN/CSA-C22.2 No. 60079-31:12
	№ TC RU C- TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ Р МЭК 60079-0:2011 ГОСТ Р МЭК 60079-7:2012 ГОСТ Р МЭК 60079-31:2010 ГОСТ Р МЭК 60079-14:2008
	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/15-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2009 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2009

For more information see our webpage.

Order Encoding											
Part Number	Size	•M: Metric •N: NPT •C: PF •P: PG •G: Gas Thread	for Lower Temperature	•B: Brass •X: Stainless steel •BN: Nickel Plated •Z: Galvanised Material	•C: Chloroprene •S: Silicone Seal		•GC: Chloroprene •GS: Silicone •GF: Fiber Gasket	Serrated Washer	Lock Nut	Shroud	Earth Tag
KBAO	5	N	LT*	B	C	-	GC	SW	L	S	E

ORION OFFSHORE

4 Function Ex d/e Glands



Hazardous Application

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

Size	Clamping Range Ø min-max		Shielded Wire Ø	Thread Length TL mm	Thread Ø TD mm	Spanner Width			Outer min. Ø D2 mm	max. Height H mm	Part Number
	D	D1				SW Cap mm	SW Upper Body mm	SW Lower Body mm			
	mm	mm									
M16x1.5	3,0 - 8,5	6,0 - 12,0	0,5	16,0	16,0	22,0	26,0	26,0	29,0	47,5	KBAO01SM
	6,0 - 12,0	8,5 - 16,0				25,0	29,0	29,0	31,5	50,0	KBAO01M
M20x1.5	3,0 - 8,5	6,0 - 12,0	0,5	16,0	20,0	24,0	26,0	26,0	29,0	47,5	KBAO1SM
	6,0 - 12,0	8,5 - 16,0				25,0	29,0	29,0	31,5	49,0	KBAO1M
	8,5 - 14,5	12,0 - 20,0	0,7			28,0	30,0	32,0	35,0	56,4	KBAO1MLT*
	12,0 - 14,5	16,0 - 20,0								52,0	KBAO1LM
M25x1.5	3,0 - 8,5	6,0 - 12,0	0,5	16,0	25,0	29,0	26,0	26,0	29,0	47,5	KBAO2XSM
	6,0 - 12,0	8,5 - 16,0		18,0		29,0	29,0	29,0	31,5	50,5	KBAO2SM
	8,5 - 14,5	12,0 - 16,0	0,7	18,0		29,0	30,0	32,0	35,0	56,4	KBAO2XMMLT*
	12,0 - 16,0	16,0 - 21,0				32,0	34,0	34,0	37,0	54,5	KBAO2M
	8,5 - 16,0	12,0 - 21,0								59,5	KBAO2MLT*
	12,0 - 20,0	16,0 - 26,0				36,0	40,0	40,0	44,0	60,5	KBAO2LM
M32x1.5	6,0 - 12,0	8,5 - 16,0	0,7	18,0	32,0	36,0	29,0	29,0	31,5	50,5	KBAO3XSM
	12,0 - 20,0	16,0 - 26,0	0,5			40,0	40,0	40,0	44,0	62,0	KBAO3SM
	8,5 - 16,0	12,0 - 21,0	0,7			36,0	34,0	34,0	37,0	59,5	KBAO3XMMLT*
	15,0 - 26,0	20,0 - 33,0				48,0	52,0	52,0	57,0	78,5	KBAO3M
	12,0 - 20,0	16,0 - 26,0				0,7	18,0	40,0	40,0	44,0	62,0
M40x1.5	15,0 - 26,0	20,0 - 33,0	0,7	18,0	40,0	48,0	52,0	52,0	57,0	78,5	KBAO4SM
	20,0 - 32,0	29,0 - 41,0				55,0	60,0	60,0	66,0	89,5	KBAO4M
	15,0 - 26,0	20,0 - 33,0				0,7	18,0	50,0	54,0	52,0	52,0
20,0 - 32,0	29,0 - 41,0	55,0	60,0	60,0	66,0				89,9	KBAO5XMM	
22,0 - 35,0	33,0 - 48,0	60,0	70,0	75,0	82,0				96,5	KBAO5SM	
27,0 - 41,0	36,0 - 52,0	70,0		74,0	83,0				100,0	KBAO5M	
M63x1.5	22,0 - 35,0	33,0 - 48,0	0,9	18,0	63,0				68,0	70,0	75,0
	27,0 - 41,0	36,0 - 52,0				70,0	74,0	83,0	100,0		KBAO6XMM
	35,0 - 45,0	43,0 - 57,0		20,0		75,0	80,0	80,0	89,5	106,0	KBAO6SM
	40,0 - 52,0	47,0 - 60,0				85,0	85,0	85,0	94,0	108,0	KBAO6M
M75x1.5	35,0 - 45,0	43,0 - 57,0	0,9	20,0	75,0	85,0	80,0	80,0	89,5	106,0	KBAO7XSM
	40,0 - 52,0	47,0 - 60,0	1,0				85,0	85,0	94,0	108,0	KBAO7SM
	45,0 - 60,0	54,0 - 70,0	0,9				90,0	95,0	100,0	110,5	125,0
M90x1.5	40,0 - 52,0	47,0 - 60,0	1,0	20,0	90,0	100,0	85,0	85,0	94,0	108,0	KBAO8XSM
	45,0 - 60,0	54,0 - 70,0				95,0	95,0	100,0	110,5	124,0	KBAO8SM
	60,0 - 72,0	63,0 - 80,0				110,0	115,0	115,0	127,0	154,0	KBAO8M
M110x1.5	45,0 - 60,0	54,0 - 70,0	1,0	20,0	110,0	120,0	95,0	100,0	110,5	124,0	KBAO10SM
	60,072,0	63,0 - 80,0	1,5			115,0	115,0	127,0	154,0	KBAO10M	

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Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material		
		CR (Chloroprene Rubber)	Silicone
		-40°C / +100°C	-60°C / +130°C
	LT Version	-40°C / +80°C	-60°C / +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 KBAO.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +100°C IP66/68 IECEx CES 13.0013X / CESI 13 ATEX 033X		
Thread Type	• 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	• Lock nuts • Gaskets • Serrated Washers • Shrouds • Earth tags		

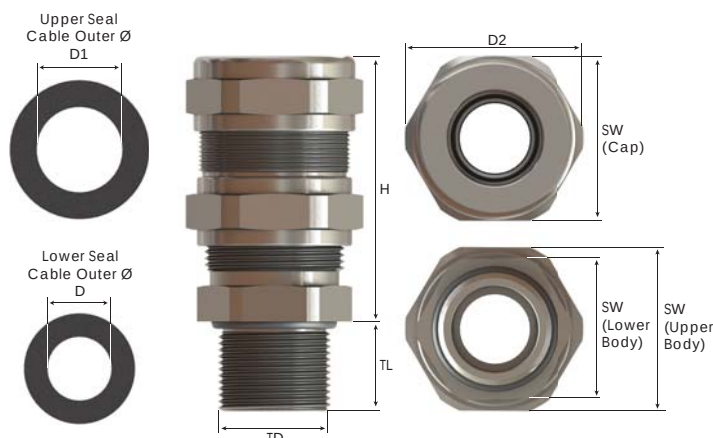
Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012 EN 60079-1:2014 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
	20150612-E474828	UL 2225, CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA C22.2 No. 60079-7:12 CAN/CSA-C22.2 No. 60079-31:12
	№ TC RU C-TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	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/15-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2009 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2009

For more information see our webpage.

Order Encoding											
Part Number	Size	•M: Metric •N: NPT •C: PF •P: PG •G: Gas Thread	for Lower Temperature	•B: Brass •X: Stainless steel •BN: Nickel Plated •Z: Galvanised Material	•C: Chloroprene •S: Silicone Seal		•GC: Chloroprene •GS: Silicone •GF: Fiber Gasket	Serrated Washer	Lock Nut	Shroud	Earth Tag
KBAO	5	N	LT*	B	C	-	GC	SW	L	S	E

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Hazardous Application

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

Size	Clamping Range Ø min-max		Armour Wire Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width			Outer min. Ø D2 mm	max. Height H mm	Part Number	
	D mm	D1 mm				SW Cap mm	SW Upper Body mm	SW Lower Body mm				
NPT 3/8"	3,0 - 8,5	6,0 - 12,0	0,5	16,0	17,1	22,0	26,0	26,0	29,0	47,5	KBAO01SN	
	6,0 - 12,0	8,5 - 16,0				25,0	29,0	29,0	31,5	50,0	KBAO01N	
NPT 1/2"	3,0 - 8,5	6,0 - 12,0	0,5	16,0	21,3	24,0	26,0	26,0	29,0	47,5	KBAO1SN	
	6,0 - 12,0	8,5 - 16,0				25,0	29,0	29,0	31,5	49,0	KBAO1N	
	8,5 - 14,5	12,0 - 20,0				0,7	28,0	30,0	32,0	35,0	56,4	KBAO1NLT*
	12,0 - 14,5	16,0 - 20,0				0,5					52,0	KBAO1LN
NPT 3/4"	3,0 - 8,5	6,0 - 12,0	0,5	16,0	26,7	29,0	26,0	26,0	29,0	47,5	KBAO2XSN	
	6,0 - 12,0	8,5 - 16,0		18,0			29,0	29,0	31,5	50,5	KBAO2SN	
	8,5 - 14,5	12,0 - 20,0	0,7	16,0			30,0	32,0	35,0	56,4	KBAO2XMNLT*	
	8,5 - 16,0	12,0 - 21,0		18,0			32,0	34,0	34,0	37,0	59,5	KBAO2NLT*
	12,0 - 16,0	16,0 - 21,0	0,5	16,0			36,0	40,0	40,0	44,0	60,5	KBAO2LN
	12,0 - 20,0	16,0 - 26,0	0,7									
NPT 1"	6,0 - 12,0	8,5 - 16,0	0,7	21,0		33,4	36,0	29,0	29,0	31,5	50,5	KBAO3XSN
	12,0 - 20,0	16,0 - 26,0					40,0	40,0	40,0	44,0	62,0	KBAO3SN
	8,5 - 16,0	12,0 - 21,0					36,0	34,0	34,0	37,0	59,5	KBAO3XMNLT*
	15,0 - 26,0	20,0 - 33,0					48,0	52,0	52,0	57,0	78,5	KBAO3N
NPT 1 1/4"	12,0 - 20,0	16,0 - 26,0	0,7	21,0		42,1	45,0	40,0	40,0	44,0	62,0	KBAO4XSN
	15,0 - 26,0	20,0 - 33,0		48,0			52,0	52,0	57,0	78,5	KBAO4SN	
	20,0 - 32,0	29,0 - 41,0		18,0	55,0		60,0	60,0	66,0	89,5	KBAO4N	
	15,0 - 26,0	20,0 - 33,0		0,9	21,0		48,2	54,0	52,0	52,0	57,0	78,4
20,0 - 32,0	29,0 - 41,0	55,0	60,0		60,0	66,0		88,7	KBAO5XMN			
22,0 - 35,0	33,0 - 48,0	60,0	70,0		75,0	82,0		96,5	KBAO5SN			
27,0 - 41,0	36,0 - 52,0	70,0			74,0	83,0		100,0	KBAO5N			
NPT 2"	22,0 - 35,0	33,0 - 48,0	0,9	21,0	60,3	68,0	70,0	75,0	82,0	96,5	KBAO6XSN	
	27,0 - 41,0	36,0 - 52,0				70,0		74,0	83,0	100,0	KBAO6XMN	
	35,0 - 45,0	43,0 - 57,0	0,9	20,0		75,0	80,0	80,0	89,5	106,0	KBAO6SN	
	40,0 - 52,0	47,0 - 60,0	1,0	21,0		85,0	85,0	85,0	94,0	108,0	KBAO6N	
NPT 2 1/2"	35,0 - 45,0	43,0 - 57,0	1,0	21,0	73,0	80,0	80,0	80,0	89,5	105,5	KBAO7XSN	
	40,0 - 52,0	47,0 - 60,0		85,0		85,0	85,0	94,0	108,0	KBAO7SN		
	45,0 - 60,0	54,0 - 70,0		90,0		95,0	100,0	110,5	125,0	KBAO7N		
NPT 3"	40,0 - 52,0	47,0 - 60,0	1,5	21,0	88,9	95,0	85,0	85,0	94,0	108,0	KBAO8XSN	
	45,0 - 60,0	54,0 - 70,0				95,0	95,0	100,0	110,5	124,0	KBAO8SN	
NPT 3 1/2"	60,0 - 72,0	63,0 - 80,0	1,5	21,0	101,6	110,0	115,0	115,0	127,0	154,0	KBAO8N	
	45,0 - 60,0	54,0 - 70,0				95,0	100,0	110,5	124,0	KBAO9SN		
	60,0 - 72,0	63,0 - 80,0				115,0	115,0	127,0	154,0	KBAO9N		

4 Function Ex d/e Glands

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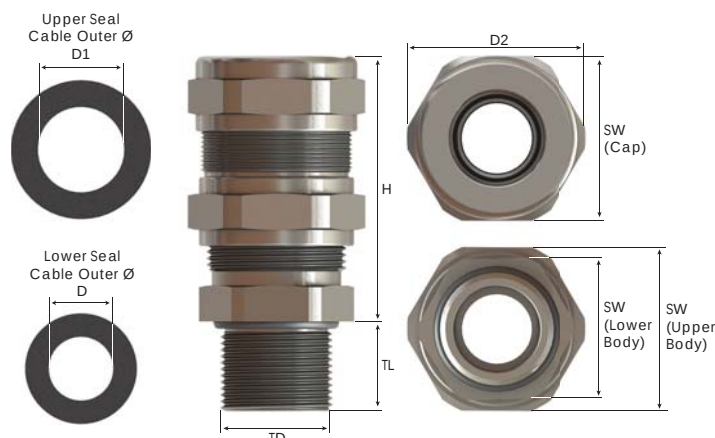
Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature	Seal Material		
		CR (Chloroprene Rubber)	Silicone
		-40°C / +100°C	-60°C / +130°C
	LT Version	-40°C / +80°C	-60°C / +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 KBAU.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +100°C IP66/68 IECEx CES 13.0013X / CESI 13 ATEX 033X		
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 - SWB - STA - PWA - AWA - Shielded		
Accessories	• Lock nuts • Gaskets • Serrated Washers • Shrouds • Earth tags.		

Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012 EN 60079-1:2014 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
	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
	№ TC RU C- TR.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	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/15-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2009 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2009

For more information see our webpage.

Order Encoding											
Part Number	Size	•M: Metric •N: NPT •C: PF •P: PG •G: Gas Thread	for Lower Temperature	•B: Brass •X: Stainless steel •BN: Nickel Plated •Z: Galvanised Material	•C: Chloroprene •S: Silicone Seal	-	•GC: Chloroprene •GS: Silicone •GF: Fiber Gasket	Serrated Washer	Lock Nut	Shroud	Earth Tag
KBA11	5	N	LT*	B	C	-	GC	SW	L	S	E

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Hazardous Application

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

Size	Clamping Range Ø min-max		Armor Wire Ø mm	Shielded Wire Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width			Outer min. Ø D2 mm	max. Height H mm	Part Number			
	D	D1					SW Cap mm	SW Upper Body mm	SW Lower Body mm						
	mm	mm													
M16x1,5	3,0 - 8,5	6,0 - 12,0	1,2	0,5	16,0	16,0	22,0	26,0	26,0	29,0	47,5	KBAU01SM			
	6,0 - 12,0	8,5 - 16,0					25,0	29,0	29,0	31,5	50,0	KBAU01M			
M20x1,5	3,0 - 8,5	6,0 - 12,0	1,2	0,5	16,0	20,0	24,0	26,0	26,0	29,0	47,5	KBAU1SM			
	6,0 - 12,0	8,5 - 16,0					25,0	29,0	29,0	31,5	49,0	KBAU1M			
	8,5 - 14,5	12,0 - 20,0					28,0	30,0	32,0	35,0	56,4	KBAU1MLT*			
	12,0 - 14,5	16,0 - 20,0									52,0	KBAU1LM			
M25x1,5	3,0 - 8,5	6,0 - 12,0	1,2	0,5	16,0	25,0	29,0	26,0	26,0	29,0	47,5	KBAU2XSM			
	6,0 - 12,0	8,5 - 16,0			18,0		29,0	29,0	29,0	31,5	50,5	KBAU2SM			
	8,5 - 14,5	12,0 - 16,0			16,0		29,0	30,0	32,0	35,0	56,4	KBAU2XMMLT*			
	12,0 - 16,0	16,0 - 21,0	1,3	0,7	18,0	32,0	34,0	34,0	37,0	54,5	KBAU2M				
	8,5 - 16,0	12,0 - 21,0								59,5	KBAU2MLT*				
	12,0 - 20,0	16,0 - 26,0								36,0	40,0	40,0	44,0	60,5	KBAU2LM
	6,0 - 12,0	8,5 - 16,0								1,6	0,7	36,0	29,0	29,0	31,5
	M32x1,5	12,0 - 20,0	16,0 - 26,0	1,2	0,5	18,0	32,0	40,0	40,0	40,0	44,0	62,0	KBAU3SM		
8,5 - 16,0		12,0 - 21,0	1,3	0,7	36,0			34,0	34,0	37,0	59,5	KBAU3XMMLT*			
15,0 - 26,0		20,0 - 33,0	1,6		48,0			52,0	52,0	57,0	78,5	KBAU3M			
12,0 - 20,0		16,0 - 26,0	1,6	0,7	18,0			40,0	45,0	40,0	40,0	44,0	62,0	KBAU4XSM	
15,0 - 26,0	20,0 - 33,0	1,8	48,0			52,0	52,0		57,0	78,5	KBAU4SM				
20,0 - 32,0	29,0 - 41,0	1,6	55,0			60,0	60,0		66,0	89,5	KBAU4M				
15,0 - 26,0	20,0 - 33,0	1,8	54,0			52,0	52,0		57,0	78,4	KBAU5XSM				
M50x1,5	20,0 - 32,0	29,0 - 41,0	2,2	0,7	18,0	50,0	55,0	60,0	60,0	66,0	89,9	KBAU5XMM			
	22,0 - 35,0	33,0 - 48,0	1,8				60,0		75,0	82,0	96,5	KBAU5SM			
	27,0 - 41,0	36,0 - 52,0	2,2				70,0	70,0	74,0	83,0	100,0	KBAU5M			
	22,0 - 35,0	33,0 - 48,0	2,7				0,9	18,0	68,0		75,0	82,0	96,5	KBAU6XSM	
27,0 - 41,0	36,0 - 52,0	70,0		70,0	74,0	83,0			100,0	KBAU6XMM					
35,0 - 45,0	43,0 - 57,0	20,0		75,0	80,0	80,0		89,5	106,0	KBAU6SM					
40,0 - 52,0	47,0 - 60,0			85,0	85,0	85,0		94,0	108,0	KBAU6M					
M75x1,5	35,0 - 45,0	43,0 - 57,0	3,0	0,9	20,0	75,0	85,0	80,0	80,0	89,5	106,0	KBAU7XSM			
	40,0 - 52,0	47,0 - 60,0		1,0				85,0	85,0	94,0	108,0	KBAU7SM			
	45,0 - 60,0	54,0 - 70,0		0,9			90,0	95,0	100,0	110,5	125,0	KBAU7M			
M90x1,5	40,0 - 52,0	47,0 - 60,0	3,0	1,0	20,0	90,0	100,0	85,0	85,0	94,0	108,0	KBAU8XSM			
	45,0 - 60,0	54,0 - 70,0					95,0	95,0	100,0	110,5	124,0	KBAU8SM			
	60,0 - 72,0	63,0 - 80,0					110,0	115,0	115,0	127,0	154,0	KBAU8M			
M110x1,5	45,0 - 60,0	54,0 - 70,0	3,0	1,0	20,0	110,0	120,0	95,0	100,0	110,5	124,0	KBAU10SM			
	60,0 - 72,0	63,0 - 80,0	3,5	1,5				115,0	115,0	127,0	154,0	KBAU10M			

4 Function Ex d/e Glands

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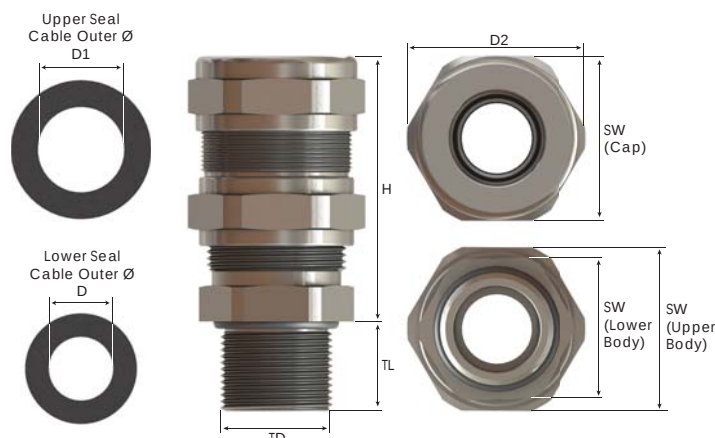
Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Inner Part	Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	CR (Chloroprene Rubber)	Silicone	
	-40°C / +100°C	-60°C / +130°C	
	-40°C / +80°C	-60°C / +80°C	
LT Version			
Equipment For	Gas & Dust potentially explosive atmospheres		
Suitable for use in	Group II	Gas Group IIC	ZONE1/ZONE2 ZONE21/ZONE 22
	Group III	Dust Group IIIC	
Equipment Marking	Ex II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db		
Marking Example	BMD KBAU.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +100°C IP66/68 IECEx CES 13.0013X / CESI 13 ATEX 033X		
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 - SWB - STA - PWA - AWA - Shielded		
Accessories	• Lock nuts • Gaskets • Serrated Washers • Shrouds • Earth tags		

Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012 EN 60079-1:2014 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2014 Edition:7 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
	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
	№ TC RU C- TR.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	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/15-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2009 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2009

For more information see our webpage.

Order Encoding											
Part Number	Size	•M: Metric •N: NPT •C: PF •P: PG •G: Gas Thread	for Lower Temperature	•B: Brass •X: Stainless steel •BN: Nickel Plated •Z: Galvanised Material	•C: Chloroprene •S: Silicone Seal	-	•GC: Chloroprene •GS: Silicone •GF: Fiber Gasket	Serrated Washer	Lock Nut	Shroud	Earth Tag
KBAU	5	N	LT*	B	C	-	GC	SW	L	S	E

ORION UNIVERSAL 4 Function Ex d/e Glands



Hazardous Application

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

Size	Clamping Range Ø min-max		Armor Wire Ø mm	Shielded Wire Ø mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width			Outer min. Ø D2 mm	max. Height H mm	Part Number
	D mm	D1 mm					SW Cap mm	SW Upper Body mm	SW Lower Body mm			
NPT 3/8"	3,0 - 8,5	6,0 - 12,0	1,2	0,5	16,0	17,14	22,0	26,0	26,0	29,0	47,5	KBAU01SN
	6,0 - 12,0	8,5 - 16,0					25,0	29,0	29,0	31,5	50,0	KBAU01LN
NPT 1/2"	3,0 - 8,5	6,0 - 12,0	1,2	0,5	16,0	21,34	24,0	26,0	26,0	29,0	47,5	KBAU11SN
	6,0 - 12,0	8,5 - 16,0					25,0	29,0	29,0	31,5	49,0	KBAU11LN
	8,5 - 14,5	12,0 - 20,0					28,0	30,0	32,0	35,0	56,4	KBAU11NLT
	12,0 - 14,5	16,0 - 20,0					1,2	0,5	52,0	52,0	KBAU11LN	
NPT 3/4"	3,0 - 8,5	6,0 - 12,0	1,2	0,5	16,0	26,67	29,0	26,0	26,0	29,0	47,5	KBAU21SN
	6,0 - 12,0	8,5 - 16,0	1,3	0,7	18,0			29,0	29,0	31,5	50,5	KBAU21LN
	8,5 - 14,5	12,0 - 20,0			16,0			30,0	32,0	35,0	56,4	KBAU21NLT
	8,5 - 16,0	12,0 - 21,0	1,6	18,0	32,0		34,0	34,0	37,0	59,5	KBAU21LN	
	12,0 - 16,0	16,0 - 21,0	1,2						0,5	54,5	54,5	KBAU21LN
	12,0 - 20,0	16,0 - 26,0	1,3						0,7	16,0	36,0	40,0
NPT 1"	6,0 - 12,0	8,5 - 16,0	1,6	0,7	21,0	33,40	36,0	29,0	29,0	31,5	50,5	KBAU31SN
	12,0 - 20,0	16,0 - 26,0	1,8				40,0	40,0	40,0	44,0	62,0	KBAU31LN
	8,5 - 16,0	12,0 - 21,0	1,6				36,0	34,0	34,0	37,0	59,5	KBAU31NLT
	15,0 - 26,0	20,0 - 33,0	1,8				48,0	52,0	52,0	57,0	78,5	KBAU31LN
NPT 1 1/4"	12,0 - 20,0	16,0 - 26,0	2,2	0,7	21,0	42,16	45,0	40,0	40,0	44,0	62,0	KBAU41SN
	15,0 - 26,0	20,0 - 33,0	1,8				48,0	52,0	52,0	57,0	78,5	KBAU41LN
	20,0 - 32,0	29,0 - 41,0	2,2				55,0	60,0	60,0	66,0	89,5	KBAU41NLT
	15,0 - 26,0	20,0 - 33,0	2,7				0,9	21,0	48,26	54,0	52,0	52,0
20,0 - 32,0	29,0 - 41,0	55,0		60,0	60,0	66,0				88,7	KBAU51LMN	
22,0 - 35,0	33,0 - 48,0	60,0		70,0	75,0	82,0				96,5	KBAU51LN	
27,0 - 41,0	36,0 - 52,0	70,0		70,0	74,0	83,0				100,0	KBAU51LN	
NPT 2"	22,0 - 35,0	33,0 - 48,0	3,0	0,9	21,0	60,33	68,0	70,0	75,0	82,0	96,5	KBAU61SN
	27,0 - 41,0	36,0 - 52,0		1,0			70,0		74,0	83,0	100,0	KBAU61LMN
	35,0 - 45,0	43,0 - 57,0		0,9			75,0		80,0	89,5	106,0	KBAU61LN
	40,0 - 52,0	47,0 - 60,0		1,0			85,0		85,0	85,0	94,0	108,0
NPT 2 1/2"	35,0 - 45,0	43,0 - 57,0	3,0	1,0	21,0	73,03	80,0	80,0	80,0	89,5	105,5	KBAU71SN
	40,0 - 52,0	47,0 - 60,0			20,0		85,0	85,0	85,0	94,0	108,0	KBAU71LN
	45,0 - 60,0	54,0 - 70,0			90,0		95,0	100,0	110,5	125,0	KBAU71LN	
NPT 3"	40,0 - 52,0	47,0 - 60,0	3,5	1,5	21,0	88,9	95,0	85,0	85,0	94,0	108,0	KBAU81SN
	45,0 - 60,0	54,0 - 70,0	3,0	1,0			95,0	100,0	110,5	124,0	KBAU81LN	
	60,0 - 72,0	63,0 - 80,0	3,5	1,5			110,0	115,0	115,0	127,0	154,0	KBAU81LN
NPT 3 1/2"	45,0 - 60,0	54,0 - 70,0	3,5	1,5	21,0	101,60	110,0	95,0	100,0	110,5	124,0	KBAU91SN
	60,0 - 72,0	63,0 - 80,0						115,0	115,0	127,0	154,0	KBAU91LN

CABLE GLANDS for Gas & Dust Application



E-Octans
E-Vela
E-Norma
Crater

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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.

1 Function Ex d/e Glands

E-OCTANS

Technical Details			
Material	Body, Cap Seal	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material	
		CR (Chloroprene Rubber)	Silicone
Ex d/tb		-40°C / +80°C	-60°C / +80°C
Ex e/tb		-40°C / +80°C	-60°C / +140°C
Equipment For			
Suitable for use in		Group II Group III	Gas Group IIC Dust Group IIIC
Equipment Marking		Ex II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db	
Marking Example		BMD EBU.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +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 - Serrated Washers - Shrouds - Earth tags - Dome plugs - Flat cable seals	

Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014 EN 60079-1:2007
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2006 Edition:4 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.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008 e 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.



Order Encoding													
Part Number	Size	Thread	Material	Seal	Dome Plug	Flat Seal	Gasket	Serrated Washer	Locknut	Shroud	Earth Tag	For Ex e	
EBU (*BUE)	5	N	B	C	-	D	F	GC	SW	L	S	E	(TL9)

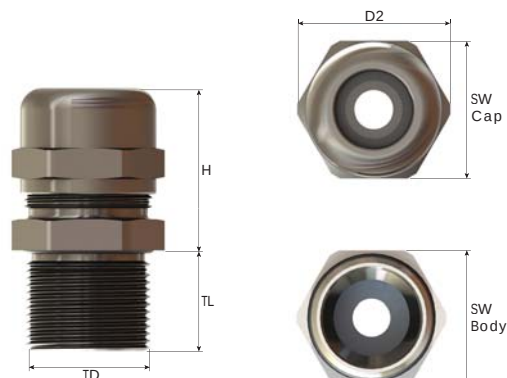
* BUE: Part Number is valid for Customs Union certificate.

Clamping Range (D)
Sealing Combinations



E-OCTANS

1 Function Ex d/e Glands



Hazardous Application

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

Size	Clamping Range Ø min-max D mm	Seal Combinations			Thread Length		Thread Ø TD mm	Spanner Width		Outer min. Ø D2 mm	max. Height H mm	Part Number
		S1 Ø mm	S2 Ø mm	S3 Ø mm	** Ex e min. TL mm	Ex d min. mm		SW Cap mm	SW Body mm			
M8x1,25	2,0 - 4,0	2,0 - 4,0	-	-	5,0	5,0	8,0	11	11	12,0	15,5	*EBU0XSM
M12x1,5	4,0 - 8,0	-	6,0 - 8,0	4,0 - 6,0	9,0	16,0	12,0	22	22	24,0	30,5	*EBU0SM
	3,0 - 8,0	6,0 - 8,0	3,0 - 6,0	-				20	20	22,0	27,0	*EBU0M
M16x1,5	3,0 - 9,0	6,0 - 9,0	3,0 - 6,0	-	9,0	16,0	16,0	20	20	22,0	27,0	EBU01SM
	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0				22	22	24,0	31,0	EBU01M
M20x1,5	3,0 - 9,0	6,0 - 9,0	3,0 - 6,0	-	9,0	16,0	20,0	20	22	24,0	27,0	EBU1SM
	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0				22				EBU1M
	10,0 - 16,0	14,5 - 16,0	12,0 - 14,5	10,0 - 12,0				28				EBU12M
M25x1,5	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	9,0	16,0	25,0	22	28	31,0	27,0	EBU2SM
	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0				28			30,5	EBU2M
	14,0 - 20,0	-	17,0 - 20,0	14,0 - 17,0				35	35	39,0	34,0	EBU23M
M32x1,5	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	9,0	16,0	32,0	28	35	39,0	31,5	EBU3SM
	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0				35			33,0	EBU3M
	22,0 - 28,0	27,0 - 28,0	24,0 - 27,0	22,0 - 24,0				45	45	50,0	41,0	EBU34M
M40x1,5	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0	9,0	18,0	40,0	35	45	50,0	33,0	EBU4SM
	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0				45			41,0	EBU4M
	26,0 - 34,0	31,0 - 34,0	28,0 - 31,0	26,0 - 28,0				50	50	55,5	44,0	EBU45M
M50x1,5	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	9,0	18,0	50,0	45	55	61,0	43,0	EBU5SM
	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0				50			44,0	EBU5M
	35,0 - 44,0	41,0 - 44,0	38,0 - 41,0	35,0 - 38,0				64	64	70,0	43,0	EBU56M
M63x1,5	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	9,0	18,0	63,0	50	68	75,0	42,0	EBU6SM
	35,0 - 45,0	41,0 - 45,0	38,0 - 41,0	35,0 - 38,0				64			43,0	EBU6M
	46,0 - 56,0	52,0 - 56,0	48,0 - 52,0	46,0 - 48,0				80	75	89,0	52,5	EBU67M
M75x1,5	35,0 - 45,0	41,0 - 45,0	38,0 - 41,0	35,0 - 38,0	9,0	20,0	75,0	64	80	89,0	45,0	EBU7SM
	46,0 - 62,0	56,0 - 62,0	51,0 - 56,0	46,0 - 51,0				80			52,0	EBU7M
	60,0 - 69,0	-	65,0 - 69,0	60,0 - 65,0				95	95	105,0	55,0	EBU78M
M90x1,5	46,0 - 62,0	56,0 - 62,0	51,0 - 56,0	46,0 - 51,0	9,0	20,0	90,0	80	95	105,0	52,0	EBU8SM
	60,0 - 75,0	70,0 - 75,0	65,0 - 70,0	60,0 - 65,0				95			55,0	EBU8M
	75,0 - 82,0	81,0 - 82,0	78,0 - 81,0	75,0 - 78,0				105	105	117,0	55,0	EBU810M
M100x1,5	60,0 - 75,0	70,0 - 75,0	65,0 - 70,0	60,0 - 65,0	9,0	20,0	100,0	95	105	117,0	55,0	EBU10SM
	75,0 - 85,0	81,0 - 85,0	78,0 - 81,0	75,0 - 78,0				105				EBU10M
M110x1,5	85,0 - 95,0	91,0 - 95,0	88,0 - 91,0	85,0 - 88,0	9,0	20,0	110,0	115	115	128,0	57,0	EBU11M
	75,0 - 85,0	81,0 - 85,0	78,0 - 81,0	75,0 - 78,0				105				EBU115XSM
M115x2,0	85,0 - 95,0	91,0 - 95,0	88,0 - 91,0	85,0 - 88,0	9,0	24,0	115,0	115	130	145,0	59,0	EBU115SM
	95,0 - 105,0	101,0 - 105,0	98,0 - 101,0	95,0 - 98,0				130				EBU115M
M130x2,0	105,0 - 115,0	111,0 - 115,0	108,0 - 111,0	105,108,0	9,0	24,0	130,0	140	140	156,0	65,5	EBU13M

* Only Ex e IIC Gb / Ex tb IIIC Db

1 Function Ex d/e Glands

E-OCTANS

Technical Details		
Material	Body, Cap Seal	Brass, Brass Nickel Plated, Stainless Steel, Aluminium
Protection Class		IP 68 - 5 Bar, 30 min IP 66
Operating Temperature	Seal Material	
	CR (Chloroprene Rubber)	Silicone
Ex d/tb		-40°C / +80°C
Ex e/tb		-40°C / +80°C
Equipment For	Gas & Dust potentially explosive atmospheres	
Suitable for use in	Group II Group III	Gas Group IIC Dust Group IIIC
Equipment Marking	Ex II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db	
Marking Example	BMD EBU.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +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 • Serrated Washers • Shrouds • Earth tags • Dome plugs • Flat cable seals	

Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014 EN 60079-1:2007
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2006 Edition:4 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.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ Р МЭК 60079-0:2011 ГОСТ Р МЭК 60079-7:2012 ГОСТ Р МЭК 60079-31:2010 ГОСТ Р МЭК 60079-14:2008
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008 e 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.



Order Encoding													
Part Number	Size	• M: Metric • N: NPT • C: PF • P: Pg • G: Gas	• B: Brass • X: Stainless steel • BN: Nickel Plated • A: Aluminium	• C: Chloroprene • S: Silicone	Dome Plug	Flat Seal	• GC: Chloroprene • GS: Silicone • GF: Fiber Gasket	Serrated Washer	Locknut	Shroud	Earth Tag	For Ex e	
EBU (*BUE)	5	N	B	C	-	D	F	GC	SW	L	S	E	(TL9)

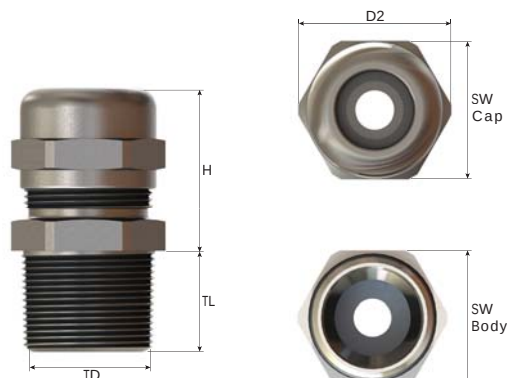
* BUE: Part Number is valid for Customs Union certificate.

Clamping Range (D)
Sealing Combinations



E-OCTANS

1 Function Ex d/e Glands



Hazardous Application

Thread Type NPT acc. to ANSI ASME B1.20.1												
Size	Clamping Range Ø min-max D mm	Seal Combinations			Thread Length Ex d min. TL mm	Thread Ø TD mm	Spanner Width		Outer min. Ø D2 mm	max. Height H mm	Part Number	
		S1 Ø mm	S2 Ø mm	S3 Ø mm			SW Cap mm	SW Body mm				
NPT 1/4"	4,0 - 8,0	-	6,0 - 8,0	4,0 - 6,0	16,0	13,7	22	22	24,0	30,5	*EBU0SN	
	3,0 - 8,0	6,0 - 8,0	3,0 - 6,0	-			20	20	22,0	27,0	*EBU0N	
NPT 3/8"	3,0 - 9,0	6,0 - 9,0	3,0 - 6,0	-	16,0	17,1	20	20	22,0	27,0	EBU01SN	
	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0			22	22	24,0	30,5	EBU01N	
NPT 1/2"	3,0 - 9,0	6,0 - 9,0	3,0 - 6,0	-	16,0	21,3	20	22	24,0	27,0	EBU1SN	
	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0			22		24,0	27,0	EBU1N	
	10,0 - 16,0	14,5 - 16,0	12,0 - 14,5	10,0 - 12,0			28	28	31,0	30,0	EBU12N	
	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0			22	28	31,0	27,0	EBU2SN	
NPT 3/4"	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	16,0	26,7	28		31,0	30,0	EBU2N	
	14,0 - 20,0	-	17,0 - 20,0	14,0 - 17,0			35	35	39,0	33,0	EBU23N	
	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0			28	35	39,0	31,0	EBU3SN	
NPT 1"	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0	20,0	33,4	35		39,0	33,0	EBU3N	
	22,0 - 26,0	-	24,0 - 26,0	22,0 - 24,0			45	45	50,0	40,0	EBU34N	
	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0			35	45	50,0	33,0	EBU4SN	
NPT 1 1/4"	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	20,0	42,2	45		50,0	40,5	EBU4N	
	26,0 - 34,0	31,0 - 34,0	28,0 - 31,0	26,0 - 28,0			50	50	55,5	43,5	EBU4SN	
	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0			45	55	61,0	42,5	EBU5SN	
NPT 1 1/2"	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	20,0	48,3	50		61,0	43,5	EBU5N	
	35,0 - 41,0	-	38,0 - 41,0	35,0 - 38,0			64	64	70,0	42,0	EBU56N	
	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0			50	68	75,0	41,5	EBU6SN	
NPT 2"	35,0 - 45,0	41,0 - 45,0	38,0 - 41,0	35,0 - 38,0	20,0	60,3	64		75,0	43,5	EBU6N	
	46,0 - 52,0	-	48,0 - 52,0	46,0 - 48,0			80	75	89,0	52,0	EBU67N	
	35,0 - 45,0	41,0 - 45,0	38,0 - 41,0	35,0 - 38,0			64	80	89,0	45,5	EBU7SN	
NPT 2 1/2"	46,0 - 62,0	56,0 - 62,0	51,0 - 56,0	46,0 - 51,0	21,0	73,0	80		89,0	52,0	EBU7N	
	60,0 - 64,0	-	-	60,0 - 64,0			95	95	105,0	55,0	EBU78N	
	46,0 - 62,0	56,0 - 62,0	51,0 - 56,0	46,0 - 51,0			80	95	105,0	52,0	EBU8SN	
NPT 3"	60,0 - 75,0	70,0 - 75,0	65,0 - 70,0	60,0 - 65,0	21,0	88,9	95		105,0	55,0	EBU8N	
	75,0 - 79,5	-	78,0 - 79,5	75,0 - 78,0			105	105	117,0	55,0	EBU810N	
	60,0 - 75,0	70,0 - 75,0	65,0 - 70,0	60,0 - 65,0			95	115	128,0	55,0	EBU108N	
NPT 4"	75,0 - 85,0	81,0 - 85,0	78,0 - 81,0	75,0 - 78,0	21,0	114,3	105		128,0	55,0	EBU10N	
	85,0 - 95,0	91,0 - 95,0	88,0 - 91,0	85,0 - 88,0			115	130	128,0	56,0	EBU11N	
	95,0 - 101,0	-	98,0 - 101,0	95,0 - 98,0			130		145,0	62,5	EBU115N	
NPT 5"	95,0 - 105,0	101,0 - 105,0	98,0 - 101,0	95,0 - 98,0	27,0	141,3	130	145	162,0	62,5	EBU13N	
	105,0 - 115,0	111,0 - 115,0	108,0 - 111,0	105,0 - 108,0			140		162,0	65,5	EBU130N	

* Only Ex e IIC Gb / Ex tb IIIC Db

1 Function Ex d/e Emc Glands

E-VELA

Technical Details				
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium		
	Seal	CR (Chloroprene Rubber), Silicone		
	Spring	Special Copper Alloy		
Protection Class		IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature		Seal Material		
		CR (Chloroprene Rubber)	Silicone	
		Ex d/tb Ex e/tb	-40°C / +80°C -40°C / +80°C -60°C / +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 d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db		
Marking Example		BMD EBS.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +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, Shielded		
Accessories		• Lock nuts • Gaskets • Serrated Washers • Shrouds • Earth tags • Dome plugs		

Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014 EN 60079-1:2007
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2006 Edition:4 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.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008 e 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.



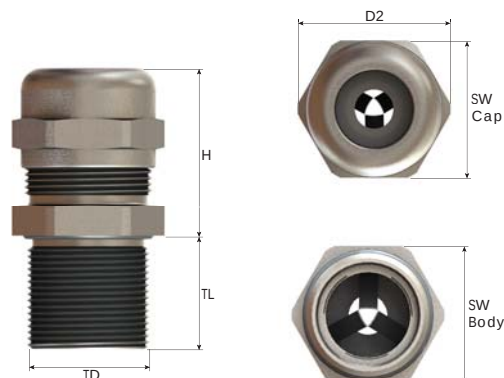
Order Encoding											
Part Number	Size	Thread	Material	Seal	Dome Plug	Gasket	Serrated Washer	Locknut	Shroud	Earth Tag	For Ex e
EBS	5	N	B	C	-	D	GC	SW	L	S	E (TL9)

Clamping Range (D)
Sealing Combinations



E-VELA

1 Function Ex d/e Emc Glands



Hazardous Application

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

Size	Clamping Range Ø min-max D mm	Shield wire Ø mm	Seal Combinations			Thread Length * Ex e min. TL mm	Ex d min. TL mm	Thread Ø TD mm	Spanner Width		Outer Ø min. D2 mm	max. Height H mm	Part Number
			S1 Ø mm	S2 Ø mm	S3 Ø mm				SW Cap mm	SW Body mm			
M16x1,5	4,0 - 8,0	2,5	6,0 - 8,0	4,0 - 6,0	-	9,0	16,0	16,0	20	20	22,0	28,5	EBS01MS
									22	22	24,5		EBS01M
M20x1,5	4,0 - 12,0	2,5 - 10,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	9,0	18,0	20,0	22	22	24,5	27,0	EBS1M
M25x1,5	10,0 - 18,0	8,0 - 14,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	9,0	16,0	25,0	28	28	31,0	30,5	EBS2M
M32x1,5	14,0 - 24,0	12,0 - 20,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0	9,0	19,0	32,0	35	35	39,0	33,0	EBS3M
M40x1,5	22,0 - 32,0	18,0 - 28,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	9,0	20,0	40,0	45	45	49,5	40,5	EBS4M
M50x1,5	26,0 - 35,0	22,0 - 31,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	9,0	20,0	50,0	55	50	61,0	43,5	EBS5M
M63x1,5	35,0 - 45,0	31,0 - 41,0	41,0 - 45,0	38,0 - 41,0	35,0 - 38,0	9,0	20,0	63,0	68	64	70,0	43,5	EBS6M
M75x1,5	46,0 - 62,0	42,0 - 58,0	56,0 - 62,0	51,0 - 56,0	46,0 - 51,0	9,0	20,0	75,0	80	80	89,0	51,0	EBS7M
M90x1,5	60,0 - 75,0	56,0 - 71,0	70,0 - 75,0	65,0 - 70,0	60,0 - 65,0	9,0	20,0	90,0	95	95	105,0	55,0	EBS8M
M100x1,5	75,0 - 85,0	71,0 - 81,0	81,0 - 85,0	78,0 - 81,0	75,0 - 78,0	9,0	20,0	100,0	105	105	117,0	54,5	EBS10M
M110x1,5	85,0 - 95,0	81,0 - 91,0	91,0 - 95,0	88,0 - 91,0	85,0 - 88,0	9,0	20,0	110,0	115	115	128,0	56,0	EBS11M

* Only Ex e IIC Gb / Ex tb IIC Db

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

Size	Clamping Range Ø min-max D mm	Shield wire Ø mm	Seal Combinations			Thread Length Ex d min. TL mm	Thread Ø TD mm	Spanner Width		Outer Ø min. D2 mm	max. Height H mm	Part Number
			S1 Ø mm	S2 Ø mm	S3 Ø mm			SW Cap mm	SW Body mm			
NPT 3/8"	4,0 - 8,0	2,5	6,0 - 8,0	4,0 - 6,0	-	16,0	17,1	20	20	22,0	28,5	EBS01NS
								22	22	24,5		EBS01N
NPT 1/2"	4,0 - 12,0	2,5 - 10,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	18,0	21,3	22	22	24,5	27,0	EBS1N
NPT 3/4"	10,0 - 18,0	8,0 - 14,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	16,0	26,6	28	28	31,0	30,5	EBS2N
NPT 1"	14,0 - 24,0	12,0 - 20,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0	20,0	33,4	35	35	39,0	33,0	EBS3N
NPT 1 1/4"	22,0 - 32,0	18,0 - 28,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	20,0	42,1	45	45	49,5	40,5	EBS4N
NPT 1 1/2"	26,0 - 35,0	22,0 - 31,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	20,0	48,2	55	50	61,0	43,5	EBS5N
NPT 2"	35,0 - 45,0	31,0 - 41,0	41,0 - 45,0	38,0 - 41,0	35,0 - 38,0	20,0	60,3	68	64	70,0	43,5	EBS6N
NPT 2 1/2"	46,0 - 62,0	52,0 - 58,0	56,0 - 62,0	51,0 - 56,0	46,0 - 51,0	21,0	73,0	80	80	89,0	55,0	EBS7N
NPT 3"	60,0 - 75,0	56,0 - 71,0	70,0 - 75,0	65,0 - 70,0	60,0 - 65,0	21,0	88,9	95	95	105,0	63,0	EBS8N
NPT 4"	75,0 - 85,0	71,0 - 81,0	81,0 - 85,0	78,0 - 81,0	75,0 - 78,0	21,0	114,0	105	115	128,0	54,5	EBS10N
NPT 4"	85,0 - 95,0	81,0 - 91,0	91,0 - 95,0	88,0 - 91,0	85,0 - 88,0	21,0	114,0	115	115	128,0	56,0	EBS11N

1 Function Ex e Glands

NORMA

Technical Details			
Material	Body, Cap Seal	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
Protection Class	EPDM, Silicone IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	EPDM	Silicone	
Ex e/tb	-40°C / +80°C		-60°C / +80°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 e IIC Gb / Ex tb IIIC Db		
Marking Example	BMD NBU.. Ex CE 0722 II 2GD Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +80°C IP66/68 IECEx IMQ 13.0006X / IMQ 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 • Serrated Washers • Earth tags		

Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014 EN 60079-1:2007
	IECEx IMQ 13.0006X	IEC 60079-0:201 Edition:6 IEC 60079-7:2006 Edition:4 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	№ TC RU C-TR.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008 e 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.

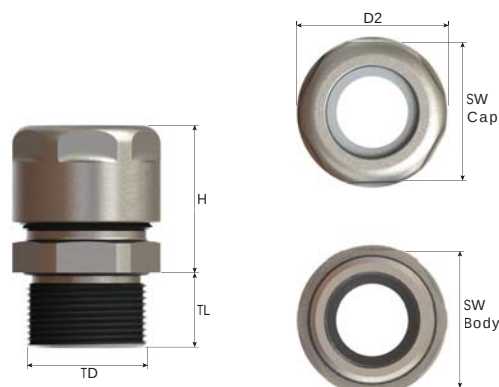


Order Encoding									
Part Number	Size	•M: Metric	•B: Brass		•GC: Chloroprene	Serrated Washer	Locknut	Earth Tag	
		•N: NPT	•X: Stainless steel		•GS: Silicone				
		•C: PF	•BN: Nickel Plated	•V: EPDM	•GF: Fiber				
		•G: Gas	•A: Aluminium	•S: Silicone	•GE: EPDM				
		Thread	Material	Seal	Gasket				
NBU	5	N	B	C	GC	SW	L	E	

Clamping Range (D)
Sealing Combinations



NORMA 1 Function Ex e Glands



Hazardous Application

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

Size	Clamping Range Ø min-max D mm	Seal Combinations		Thread Length Ex e min. TL mm	Thread Ø TD mm	Spanner Width		Outer Ø min. D2 mm	max. Height H mm	Part Number
		S1 Ø mm	S2 Ø mm			SW Cap mm	SW Body mm			
M12x1,5	4,0 - 7,0	4,0 - 7,0	-	9,0	12,0	14	14	15,5	23,6	NBU0XSM
M16x1,5	5,0 - 8,0	5,0 - 8,0	-	9,0	16,0	18	18	20,0	28,2	NBU01SM
M20x1,5	8,0 - 14,0	11,0 - 14,0	8,0 - 11,0	9,0	20,0	22	22	24,0	27,4	NBU1M
M25x1,5	10,0 - 16,0	13,0 - 16,0	10,0 - 13,0	9,0	25,0	27	27	30,0	27,9	NBU2M
M32x1,5	16,0 - 21,0	18,0 - 21,0	16,0 - 18,0	9,0	32,0	34	34	37,5	31,9	NBU3M
M40x1,5	18,0 - 27,0	22,0 - 27,0	18,0 - 22,0	9,0	40,0	42	42	46,5	38,4	NBU4M
M50x1,5	26,0 - 35,0	30,0 - 35,0	26,0 - 30,0	9,0	50,0	52	52	59,0	38,3	NBU5M
M63x1,5	32,0 - 49,0	40,0 - 49,0	32,0 - 40,0	12,0	63,0	65	65	72,0	57,3	NBU6M

* Only Ex e IIC Gb / Ex tb IIIC Db

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

Size	Clamping Range Ø min-max D mm	Seal Combinations		Thread Length Ex d min. TL mm	Thread Ø TD mm	Spanner Width		Outer Ø min. D2 mm	max. Height H mm	Part Number
		S1 Ø mm	S2 Ø mm			SW Cap mm	SW Body mm			
NPT 1/4"	4,0 - 7,0	4,0 - 7,0	-	16,0	13,7	14	14	15,5	39,6	NBU0XSN
NPT 3/8"	5,0 - 8,0	5,0 - 8,0	-	16,0	17,2	18	18	20,0	44,2	NBU01SN
NPT 1/2"	8,0 - 14,0	11,0 - 14,0	8,0 - 11,0	16,0	21,3	22	22	24,0	43,4	NBU1N
NPT 3/4"	10,0 - 16,0	13,0 - 16,0	10,0 - 13,0	16,0	26,7	27	27	30,0	43,9	NBU2N
NPT 1"	16,0 - 21,0	18,0 - 21,0	16,0 - 18,0	20,0	33,4	34	34	37,5	51,9	NBU3N
NPT 1 1/4"	18,0 - 27,0	22,0 - 27,0	18,0 - 22,0	20,0	42,2	42	42	46,5	58,4	NBU4N
NPT 1 1/2"	26,0 - 35,0	30,0 - 35,0	26,0 - 30,0	20,0	48,3	52	52	59,0	58,3	NBU5N
NPT 2"	32,0 - 49,0	40,0 - 49,0	32,0 - 40,0	20,0	60,3	65	65	72,0	77,3	NBU6N

1 Function Ex d/e Glands

CRATER



Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material	
		CR (Chloroprene Rubber)	Silicone
Ex d/e/tb		-40°C / +80°C	-60°C / +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 KBU.. Ex CE 0722 II 2GD Ex e IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +80°C IP66/68 IECEx CES 13.0013X / CESI 13 ATEX 033X	
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 • Serrated Washers • Earth tags	

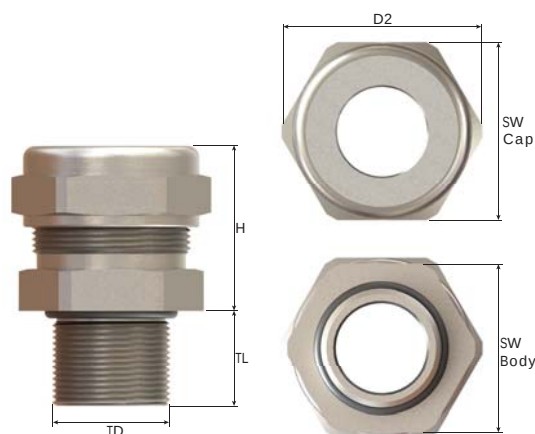
Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 033X	EN 60079-0:2012 EN 60079-1:2007 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0013X	IEC 60079-0:2011 Edition:6.0 IEC 60079-1:2007-04 Edition:6.0 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
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	MASC MS/15-0240X	SANS (IEC) 60079-0 : 2011 SANS (IEC) 60079-1 : 2009 SANS (IEC) 60079-7 : 2007 SANS (IEC) 60079-31 : 2009

For more information see our webpage.

Order Encoding								
Part Number	Size	Thread	Material	Seal	Gasket	Serrated Washer	Locknut	Earth Tag
KBU	5	N	B	C	-	GC	SW	L E

CRATER

1 Function Ex d/e Glands



Thread Type METRIC acc. to ISO 965-3								
Size	Clamping Range Ø min-max D mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer min. Ø D2 mm	max. Height H mm	Part Number
				SW Cap mm	SW Body mm			
M16x1.5	3,0 - 8,5	16,0	16,0	22	26	29,0	25,0	KBU01M
	6,0 - 12,0			25	29	31,5	28,5	KBU01LM
M20x1.5	6,0 - 12,0	16,0	20,0	25	29	31,5	27,5	KBU1M
	12,0 - 14,5			28	30	33,5	29,0	KBU1LM
M25x1.5	6,0 - 12,0	18,0	25,0	29	29	31,5	28,5	KBU2SM
	12,0 - 16,0			32	35	37,0	28,5	KBU2M
	12,0 - 20,0			36	40	44,5		KBU2LM
M32x1.5	12,0 - 20,0	18,0	32,0	40	40	44,5	33,5	KBU3SM
	15,0 - 26,0			48	52	57,0	41,0	KBU3M
M40x1.5	15,0 - 26,0	18,0	40,0	48	52	57,0	41,0	KBU4SM
	20,0 - 32,0			55	60	66,0	50,0	KBU4M
M50x1.5	22,0 - 35,0	18,0	50,0	60	70	77,0	50,5	KBU5SM
	27,0 - 41,0			70			54,0	KBU5M
M63x1.5	35,0 - 45,0	20,0	63,0	75	80	89,5	61,5	KBU6SM
	40,0 - 52,0			85	85	94,0	KBU6M	
M75x1.5	40,0 - 52,0	20,0	75,0	85	85	94,0	61,5	KBU7SM
	45,0 - 60,0			90	95	105,0	72,0	KBU7M
M90x1.5	45,0 - 60,0	20,0	90,0	95	95	105,0	72,0	KBU8SM
	60,0 - 72,0			110	115	127,0	84,0	KBU8M
Thread Type NPT acc. to ANSI ASME B1.20.1								
Size	Clamping Range Ø min-max D mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer min. Ø D2 mm	max. Height H mm	Part Number
				SW Cap mm	SW Lower Body mm			
NPT3/8"	3,0 - 8,5	16,0	17,2	22	26	29,0	25,0	KBU01N
	6,0 - 12,0			25	29	31,5	28,5	KBU01LN
NPT1/2"	6,0 - 12,0	16,0	21,3	25	29	31,5	27,5	KBU1N
	8,5 - 12,0			28	30	33,5	29,0	KBU1LN
NPT3/4"	6,0 - 12,0	18,0	26,7	29	29	31,5	28,5	KBU2SN
	12,0 - 16,0			32	35	37,0	28,5	KBU2N
	12,0 - 20,0			36	40	44,5		KBU2LN
NPT1"	12,0 - 20,0	21,0	33,4	40	40	44,5	33,5	KBU3SN
	15,0 - 26,0			48	52	57,0	41,0	KBU3N
NPT1 1/4"	15,0 - 26,0	21,0	42,2	48	52	57,0	41,0	KBU4SN
	20,0 - 32,0			55	60	66,0	50,0	KBU4N
NPT1 1/2"	22,0 - 35,0	21,0	48,3	60	70	77,0	50,5	KBU5SN
	27,0 - 41,0			70			54,0	KBU5N
NPT2"	35,0 - 45,0	20,0	60,3	75	80	89,5	61,5	KBU6SN
	40,0 - 52,0			85	85	94,0	KBU6N	
NPT2 1/2"	40,0 - 52,0	21,0	73,0	85	85	94,0	61,5	KBU7SN
	45,0 - 60,0			90	95	105,0	72,0	KBU7N
NPT3"	45,0 - 60,0	21,0	88,9	95	95	105,0	72,0	KBU8SN
	60,0 - 72,0			110	115	127,0	84,0	KBU8N



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

1 Function Ex d/e Liquid Tight Conduit Straight Fittings

E-HYDRUS

Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Seal	CR (Chloroprene Rubber), Silicone	
	Ferrule	Steel Zinc Plated, Brass Nickel Plated	
	Plastic Ring	Polyamide	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material CR (Chloroprene Rubber) Silicone Ex d/tb -40°C / +80°C -60°C / +80°C Ex e/tb -40°C / +80°C -60°C / +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 d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db	
Marking Example		BMD EBLs, Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +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 • Serrated Washers • Earth tags	

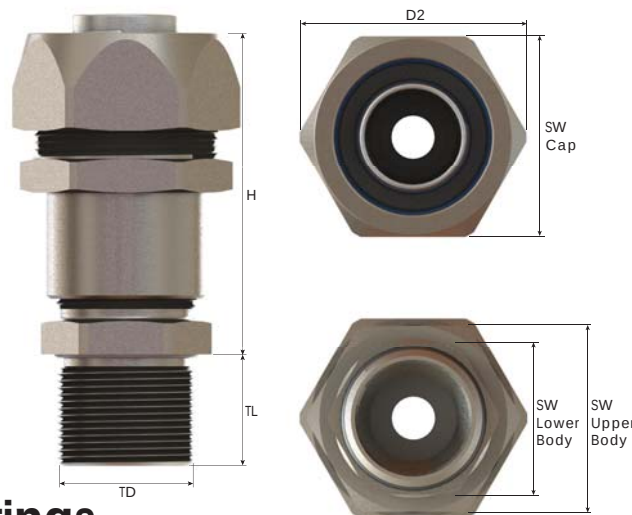
Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014 EN 60079-1:2007
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2006 Edition:4 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	№ TC RU C-TR.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ Р МЭК 60079-0:2011 ГОСТ Р МЭК 60079-7:2012 ГОСТ Р МЭК 60079-31:2010 ГОСТ Р МЭК 60079-14:2008
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008 e 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.



Order Encoding										
Part Number	Size	•M: Metric •N: NPT •C: PF •P: Pg •G: Gas Thread	•B: Brass •X: Stainless steel •BN: Nickel Plated •A: Aluminium Material	•C: Chloroprene •S: Silicone Seal		•GC: Chloroprene •GS: Silicone •GF: Fiber Gasket	Serrated Washer	Locknut	Earth Tag	For Ex e (TL9)
EBLS	5	M	B	C	-	GC	SW	L	E	

Clamping Range (D)
Sealing Combinations



E-HYDRUS

1 Function Ex d/e

Liquid Tight Conduit Straight Fittings

Hazardous Application

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

Size	Clamping Range Ø min-max	Seal Combinations			Thread Length * Ex e min. Ex d min.		Thread Ø	Spanner Width			Outer min. Ø	max. Height	Part Number
	D	S1 Ø	S2 Ø	S3 Ø	TL	TL	TD	SW Cap	SW Upper Body	SW Lower Body	D2	H	
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
M12x1,5	4,0 - 8,0	-	6,0 - 8,0	4 - 6	9,0	16,0	12,0	29	27	22	31,5	55,0	*EBLS02M
M16x1,5	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4 - 6	9,0	16,0	16,0	29	27	22	31,5	55,0	EBLS01M
M20x1,5	4,0 - 10,0	9,0 - 10,0	6,0 - 9,0	4 - 6	9,0	16,0	20,0	26	24	22	29,0	48,5	EBLS1SM
	4,0 - 12,0	9,0 - 12,0						29	27		31,5	51,0	EBLS1M
M25x1,5	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10 - 12	9,0	16,0	25,0	35	33	28	39,0	54,0	EBLS2M
M32x1,5	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14 - 17	9,0	16,0	32,0	45	43	35	50,0	62,0	EBLS3M
M40x1,5	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22 - 24	9,0	18,0	40,0	54	52	45	60,0	73,5	EBLS4M
M50x1,5	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26 - 28	9,0	18,0	50,0	63	60	55	69,3	79,5	EBLS5M

* Only Ex e/ Ex tb execution.

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

Size	Clamping Range Ø min-max	Seal Combinations			Thread Length Ex d min.	Thread Ø	Spanner Width			Outer min. Ø	max. Height	Part Number
	D	S1 Ø	S2 Ø	S3 Ø	TL	TD	SW Cap	SW Upper Body	SW Lower Body	D2	H	
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
NPT 1/4"	4,0 - 8,0	-	6,0 - 8,0	4,0 - 6,0	16,0	13,7	29	27	22	31,5	55,0	*EBLS02N
NPT 3/8"	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	16,0	17,1	29	27	22	31,5	55,0	EBLS01N
NPT 1/2"	4,0 - 10,0	9,0 - 10,0	6,0 - 9,0	4,0 - 6,0	16,0	21,3	26	24	22	29,0	48,5	EBLS1SN
	4,0 - 12,0	9,0 - 12,0					29	27		31,5	51,0	EBLS1N
NPT 3/4"	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	16,0	26,6	35	33	28	39,0	53,5	EBLS2N
NPT 1"	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0	20,0	33,4	45	43	35	50,0	62,0	EBLS3N
NPT 1 1/4"	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	20,0	42,1	54	52	45	60,0	73,5	EBLS4N
NPT 1 1/2"	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	20,0	48,2	63	60	55	69,3	79,5	EBLS5N

* Only Ex e/ Ex tb execution.

1 Function Ex d/e Liquid Tight Conduit 45° Fittings

Technical Details

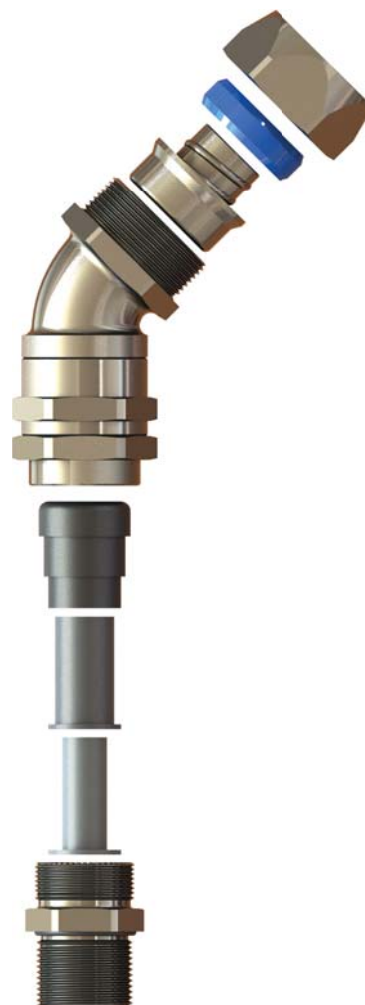
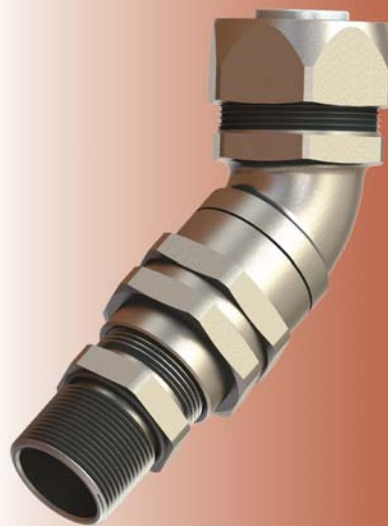
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Seal	CR (Chloroprene Rubber), Silicone	
	Ferrule	Steel Zinc Plated, Brass Nickel Plated	
	Plastic Ring	Polyamide	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material	
		CR (Chloroprene Rubber)	Silicone
Ex d/tb		-40°C / +80°C	-60°C / +80°C
Ex e/tb		-40°C / +80°C	-60°C / +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 d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db	
Marking Example		BMD EBLQ.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +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 Armor	
Accessories		• Lock nuts • Gaskets • Serrated Washers • Earth tags	

Approvals

	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014 EN 60079-1:2007
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2006 Edition:4 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	№ TC RU C-TR.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008 e 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.

E-SCORPIUS



Order Encoding

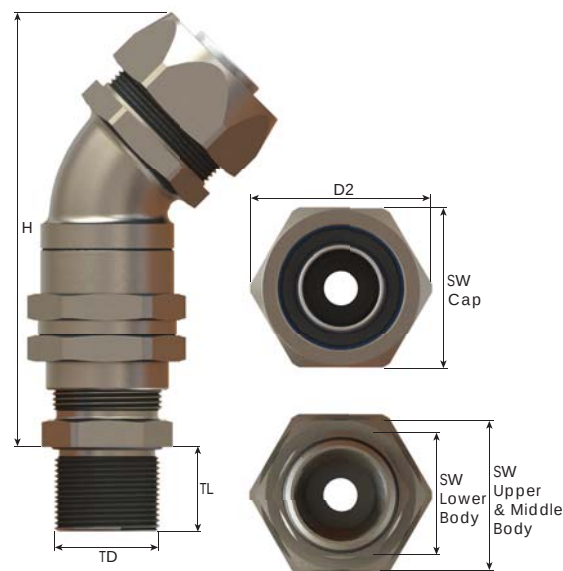
Part Number	Size	Thread	Material	Seal	Gasket	Serrated Washer	Locknut	Earthtag	For Ex e
EBLQ	5	M	B	C	-	GC	SW	L	E (TL9)

Clamping Range (D)
Sealing Combinations



E-SCORPIUS

1 Function Ex d/e Liquid Tight Conduit 45° Fittings



Hazardous Application

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

Size	Clamping Range Ø min-max	Seal Combinations			Thread Length * Ex e min. Ex d min.		Thread Ø	Spanner Width				Outer min. Ø	max. Height	Part Number
		S1 Ø	S2 Ø	S3 Ø	TL	TL		SW Cap mm	SW Upper Body mm	SW Middle Body mm	SW Lower Body mm			
	D mm	S1 Ø mm	S2 Ø mm	S3 Ø mm	TL mm	TL mm	TD mm				D2 mm	H mm		
M12x1,5	4,0 - 8,0	-	6,0 - 8,0	4,0 - 6,0	9,0	16,0	12,0	29	27	27	22	31,5	86,5	*EBLQ02M
M16x1,5	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	9,0	16,0	16,0	29	27	27	22	31,5	86,5	EBLQ01M
M20x1,5	4,0 - 10,0	9,0 - 10,0	6,0 - 9,0	4,0 - 6,0	9,0	16,0	20,0	26	22	27	22	30,0	81,0	EBLQ15M
	4,0 - 12,0	9,0 - 12,0						29	27			31,5	83,0	EBLQ1M
M25x1,5	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	9,0	16,0	25,0	35	33	33	28	39,0	94,5	EBLQ2M
M32x1,5	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0	9,0	16,0	32,0	45	42	42	35	50,0	111,5	EBLQ3M
M40x1,5	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	9,0	18,0	40,0	54	51	51	45	60,0	131,5	EBLQ4M
M50x1,5	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	9,0	18,0	50,0	63	60	60	55	69,3	143,5	EBLQ5M

* Only Ex e/ Ex tb execution.

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

Size	Clamping Range Ø min-max	Seal Combinations			Thread Length Ex d min.	Thread Ø	Spanner Width				Outer min. Ø	max. Height	Part Number
		S1 Ø	S2 Ø	S3 Ø			TL	TD	SW Cap mm	SW Upper Body mm			
	D mm	S1 Ø mm	S2 Ø mm	S3 Ø mm	TL mm	TD mm					D2 mm	H mm	
NPT 1/4"	4,0 - 8,0	-	6,0 - 8,0	4,0 - 6,0	16,0	13,7	29	27	27	22	31,5	86,5	*EBLQ02N
NPT 3/8"	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	16,0	17,1	29	27	27	22	31,5	86,5	EBLQ01N
NPT 1/2"	4,0 - 10,0	9,0 - 10,0	6,0 - 9,0	4,0 - 6,0	16,0	21,3	26	22	27	22	30,0	81,0	EBLQ15N
	4,0 - 12,0	9,0 - 12,0					29	27			31,5	83,0	EBLQ1N
NPT 3/4"	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	16,0	26,6	35	33	33	28	39,0	94,0	EBLQ2N
NPT 1"	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0	20,0	33,4	45	42	42	35	50,0	111,5	EBLQ3N
NPT 1 1/4"	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	20,0	42,1	54	51	51	45	60,0	131,5	EBLQ4N
NPT 1 1/2"	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	20,0	48,2	63	60	60	55	69,3	143,5	EBLQ5N

* Only Ex e/ Ex tb execution.

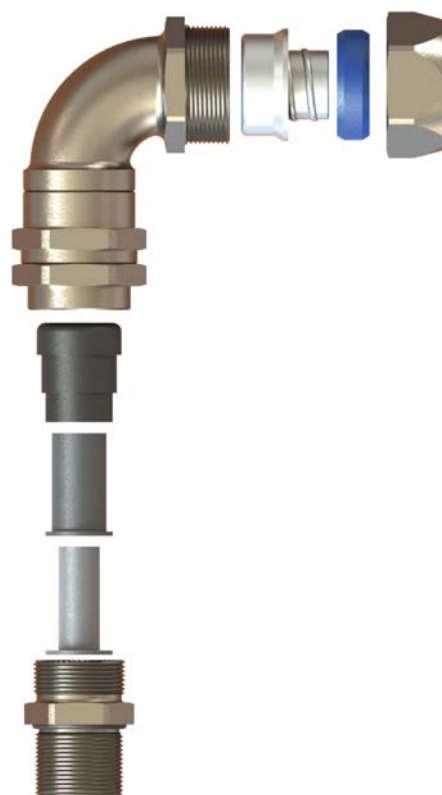
1 Function Ex d/e Liquid Tight Conduit 90° Fittings

E-LUPUS

Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Seal	CR (Chloroprene Rubber), Silicone	
	Ferrule	Steel Zinc Plated, Brass Nickel Plated	
	Plastic Ring	Polyamide	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material CR (Chloroprene Rubber) Silicone Ex d/tb -40°C / +80°C -60°C / +80°C Ex e/tb -40°C / +80°C -60°C / +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 d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db	
Marking Example		BMD EBLN.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +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 Armor	
Accessories		• Lock nuts • Gaskets • Serrated Washers • Earth tags	

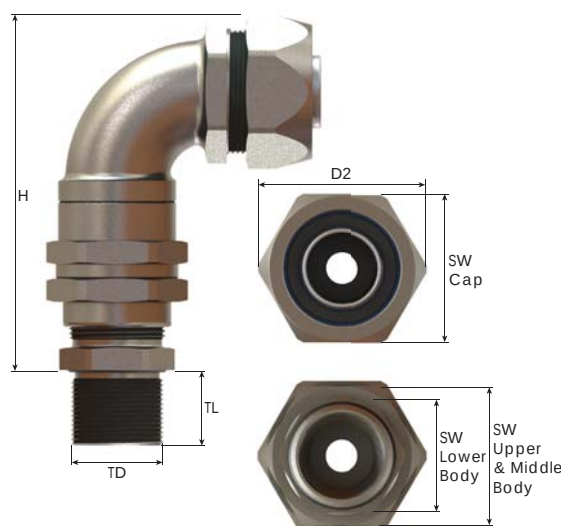
Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014 EN 60079-1:2007
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2006 Edition:4 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	№ TC RU C-TR.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ Р МЭК 60079-0:2011 ГОСТ Р МЭК 60079-7:2012 ГОСТ Р МЭК 60079-31:2010 ГОСТ Р МЭК 60079-14:2008
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008 e 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.



Order Encoding										
Part Number	Size	Thread	Material	Seal	Gasket	Serrated Washer	Locknut	Earthtag	For Ex e	
EBLN	5	M	B	C	-	GC	SW	L	E	(TL9)

Clamping Range (D)
Sealing Combinations



E-LUPUS

1 Function Ex d/e Liquid Tight Conduit 90° Fittings

Hazardous Application

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

Size	Clamping Range Ø min-max	Seal Combinations			Thread Length * Ex e min. Ex d min.		Thread Ø	Spanner Width				Outer min. Ø D2	max. Height H	Part Number
		S1 Ø	S2 Ø	S3 Ø	TL	TL		SW Cap mm	SW Upper Body mm	SW Middle Body mm	SW Lower Body mm			
	D mm	S1 Ø mm	S2 Ø mm	S3 Ø mm	TL mm	TL mm	TD mm					mm	mm	
M12x1,5	4,0 - 8,0	-	6,0 - 8,0	4,0 - 6,0	9,0	16,0	12,0	29	27	27	22	31,5	81,5	*EBLN02M
M16x1,5	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	9,0	16,0	16,0	29	27	27	22	31,5	81,5	EBLN01M
M20x1,5	4,0 - 10,0	9,0 - 10,0	6,0 - 9,0	4,0 - 6,0	9,0	16,0	20,0	26	22	27	22	30,0	73,0	EBLN1SM
	4,0 - 12,0	9,0 - 12,0						29	27			31,5	77,5	EBLN1M
M25x1,5	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	9,0	16,0	25,0	35	33	33	28	39,0	88,0	EBLN2M
M32x1,5	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0	9,0	16,0	32,0	45	42	42	35	50,0	102,0	EBLN3M
M40x1,5	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	9,0	18,0	40,0	54	51	51	45	60,0	120,0	EBLN4M
M50x1,5	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	9,0	18,0	50,0	63	60	60	55	69,3	135,0	EBLN5M

* Only Ex e/ Ex tb execution.

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

Size	Clamping Range Ø min-max	Seal Combinations			Thread Length Ex d min.	Thread Ø	Spanner Width				Outer min. Ø	max. Height	Part Number
		S1 Ø	S2 Ø	S3 Ø			SW Cap	SW Upper Body	SW Middle Body	SW Lower Body			
	D mm	S1 Ø mm	S2 Ø mm	S3 Ø mm	TL mm	TD mm	mm	mm	mm	mm	D2 mm	H mm	
NPT 1/4"	4,0 - 8,0	-	6,0 - 8,0	4,0 - 6,0	16,0	13,7	29	27	27	22	31,5	81,5	*EBLN02N
NPT 3/8"	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	16,0	17,1	29	27	27	22	31,5	81,5	EBLN01N
NPT 1/2"	4,0 - 10,0	9,0 - 10,0	6,0 - 9,0	4,0 - 6,0	16,0	21,3	26	22	27	22	30,0	73,0	EBLN1SN
	4,0 - 12,0	9,0 - 12,0					29	27			31,5	77,5	EBLN1N
NPT 3/4"	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	16,0	26,6	35	33	33	28	39,0	88,0	EBLN2N
NPT 1"	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0	20,0	33,4	45	42	42	35	50,0	102,0	EBLN3N
NPT 1 1/4"	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	20,0	42,1	54	51	51	45	60,0	120,0	EBLN4N
NPT 1 1/2"	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	20,0	48,2	63	60	60	55	69,3	135,0	EBLN5N

* Only Ex e/ Ex tb execution.

1 Function Ex d/e Flexible Conduit Straight Fittings

E-CORVUS



Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material CR (Chloroprene Rubber) Silicone Ex d/tb -40°C / +80°C -60°C / +80°C Ex e/tb -40°C / +80°C -60°C / +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 d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db	
Marking Example		BMD EBMC.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +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 Armor	
Accessories		• Lock nuts • Gaskets • Serrated Washers • Earth tags	

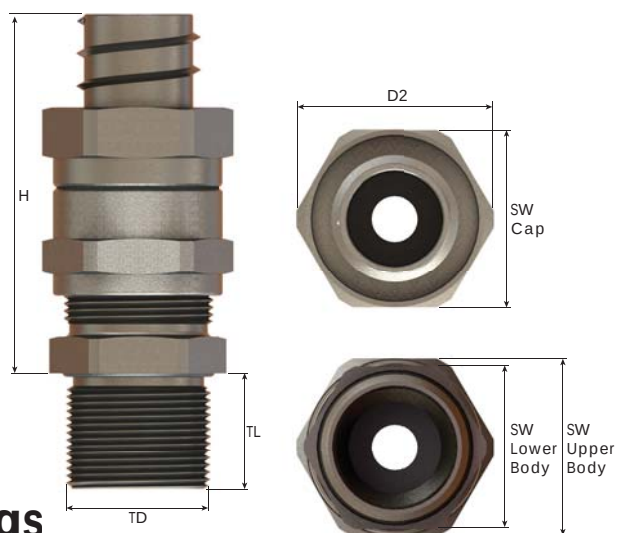
Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014 EN 60079-1:2007
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2006 Edition:4 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	№ TC RU C- TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ Р МЭК 60079-0:2011 ГОСТ Р МЭК 60079-7:2012 ГОСТ Р МЭК 60079-31:2010 ГОСТ Р МЭК 60079-14:2008
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008 e 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.



Order Encoding									
Part Number	Size	Thread	Material	Seal	Gasket	Serrated Washer	Locknut	Earthtag	For Ex e
EBMC	5	M	B	C	-	GC	SW	L	E (TL9)

Clamping Range (D)
Sealing Combinations



E-CORVUS

1 Function Ex d/e

Flexible Conduit Straight Fittings

Hazardous Application

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

Size	Clamping Range Ø min-max	Seal Combinations			Thread Length * Ex e min. Ex d min.		Thread Ø TD	Spanner Width			Outer min. Ø D2	max. Height H	Part Number
		S1 Ø	S2 Ø	S3 Ø	TL	TL		SW Cap mm	SW Middle Body mm	SW Lower Body mm			
	D mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M12x1,5	4,0 - 8,0	-	6,0 - 8,0	4,0 - 6,0	9,0	16,0	12,0	24	24	22	26,5	40,5	*EBMC0SM
M16x1,5	3,0 - 9,0	6,0 - 9,0	3,0 - 6,0	-	9,0	16,0	16,0	20	20	20	22,0	36,0	EBMC01SM
	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0				24	24	22	26,5	40,5	EBMC01M
M20x1,5	3,0 - 9,0	6,0 - 9,0	3,0 - 6,0	-	9,0	16,0	20,0	20	20	22	22,0	36,0	EBMC1SM
	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0				24	24	22	26,5	36,5	EBMC1M
	10,0 - 16,0	14,5 - 16,0	12,0 - 14,5	10,0 - 12,0				29	29	28	31,5	39,5	EBMC12M
M25x1,5	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	9,0	16,0	25,0	29	29	28	31,5	40,0	EBMC2M
	14,0 - 20,0	-	17,0 - 20,0	14,0 - 17,0				36	36	35	39,8	45,0	EBMC23M
M32x1,5	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0	9,0	16,0	32,0	36	36	35	39,8	44,5	EBMC3M
	22,0 - 28,0	27,0 - 28,0	24,0 - 27,0	22,0 - 24,0				45	45	45	50,0	52,0	EBMC34M
M40x1,5	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	9,0	18,0	40,0	45	45	45	50,0	52,0	EBMC4M
	26,0 - 34,0	31,0 - 34,0	28,0 - 31,0	26,0 - 28,0				52	52	50	59,0	57,5	EBMC45M
M50x1,5	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	9,0	18,0	50,0	52	52	55	59,0	57,5	EBMC5M
	35,0 - 44,0	41,0 - 44,0	38,0 - 41,0	35,0 - 38,0				65	65	64	72,0	56,0	EBMC56M
M63x1,5	35,0 - 45,0	41,0 - 45,0	38,0 - 41,0	35,0 - 38,0	9,0	18,0	63,0	65	65	68	72,0	56,5	EBMC6M
M75x1,5	46,0 - 59,0	56,0 - 59,0	51,0 - 56,0	46,0 - 51,0	9,0	20,0	75,0	80	80	80	89,0	67,0	EBMC7M

* Only Ex e/ Ex tb execution.

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

Size	Clamping Range Ø min-max D mm	Seal Combinations			Thread Length Ex d min. TL mm	Thread Ø TD mm	Spanner Width			Outer min. Ø D2 mm	max. Height H mm	Part Number
		S1 Ø mm	S2 Ø mm	S3 Ø mm			SW Cap mm	SW Middle Body mm	SW Lower Body mm			
NPT 1/4"	4,0 - 8,0	-	6,0 - 8,0	4,0 - 6,0	16,0	13,7	24	24	22	26,5	40,5	*EBMC0SN
NPT 3/8"	3,0 - 9,0	6,0 - 9,0	3,0 - 6,0	-			20	20	20	22,0	36,0	EBMC01SN
	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	16,0	17,2	24	24	22	26,5	40,5	EBMC01N
NPT 1/2"	3,0 - 9,0	6,0 - 9,0	3,0 - 6,0	-			20	20	22	22,0	36,0	EBMC1SN
	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	16,0	21,3	24	24	22	26,5	37,0	EBMC1N
NPT 3/4"	10,0 - 16,0	14,5 - 16,0	12,0 - 14,5	10,0 - 12,0			29	29	28	31,5	39,5	EBMC12N
	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	16,0	26,7	29	29	28	31,5	39,5	EBMC2N
NPT 1"	14,0 - 20,0	-	17,0 - 20,0	14,0 - 17,0			36	36	35	39,8	44,0	EBMC23N
	14,0 - 24,0	20,0 - 24,0	17,0 - 20,0	14,0 - 17,0	20,0	33,4	36	36	35	39,8	44,0	EBMC3N
NPT 1 1/4"	22,0 - 28,0	27,0 - 28,0	24,0 - 27,0	22,0 - 24,0			45	45	45	50,0	51,5	EBMC34N
	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	20,0	42,2	45	45	45	50,0	52,0	EBMC4N
NPT 1 1/2"	26,0 - 34,0	31,0 - 34,0	28,0 - 31,0	26,0 - 28,0			52	52	50	59,0	57,5	EBMC45N
	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	20,0	48,3	52	52	55	59,0	57,5	EBMC5N
NPT 2"	35,0 - 44,0	41,0 - 44,0	38,0 - 41,0	35,0 - 38,0			65	65	64	72,0	55,0	EBMC56N
	35,0 - 45,0	41,0 - 45,0	38,0 - 41,0	35,0 - 38,0	20,0	60,3	65	65	68	72	56,5	EBMC6N
NPT 2 1/2"	46,0 - 59,0	56,0 - 59,0	51,0 - 56,0	46,0 - 51,0	21,0	73,0	80	80	80	89	67	EBMC7N

* Only Ex e/ Ex tb execution.

bimed

RIGID CONDUIT FITTINGS for Gas & Dust Application



E-Carina
E-Cygnus
Phoenix

174 - 175
176 - 177
178 - 179

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



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.

1 Function Ex d/e Rigid Conduit Fittings

E-CARINA



Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material CR (Chloroprene Rubber) Silicone Ex d/tb -40°C / +80°C -60°C / +80°C Ex e/tb -40°C / +80°C -60°C / +140°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 d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db	
Marking Example		BMD EBM.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +80°C IP66/68 IECEx IMQ 13.0006X / IMQ 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 Armor	
Accessories		• Lock nuts • Gaskets • Serrated Washers • Earth tags • Flat cable Seals	

Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014 EN 60079-1:2007
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2006 Edition:4 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	Ne TC RU C- TR.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ Р МЭК 60079-0:2011 ГОСТ Р МЭК 60079-7:2012 ГОСТ Р МЭК 60079-31:2010 ГОСТ Р МЭК 60079-14:2008
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008 e 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.



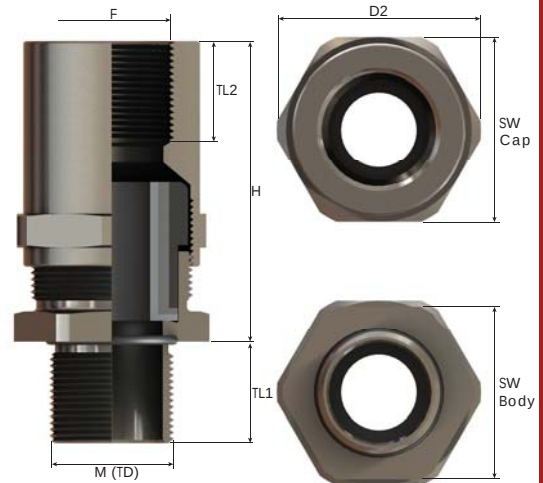
Order Encoding																
Part Number	Thread Size	• M: Metric • N: NPT • C: PF • P: Pg • G: Gas Thread	Pipe Size	• M: Metric • N: NPT • C: PF • P: Pg • G: Gas Pipe Thread	• B: Brass • X: Stainless steel • BN: Nickel Plated • A: Aluminium Material	• C: Chloroprene • S: Silicone Seal	Flat Seal	• GC: Chloroprene • GS: Silicone • GF: Fiber Gasket	Serrated Washer	Locknut	Earthtag	*For Ex e (TL9)				
EBM	5	M	5	N	B	C	F	GC	SW	L	E					

Clamping Range (D)
Sealing Combinations



E-CARINA

1 Function Ex d/e Rigid Conduit Fittings



Hazardous Application

Thread Type METRIC acc. to ISO 965-3																
Thread Size M	Pipe Thread Size F	Clamping Range Ø min-max D mm	Seal Combinations			Thread Length			Thread Ø TD mm	Spanner Width		Outer min. Ø D2 mm	max. Height H mm	Design Type TDM TDF	Part Number	
			S1 Ø mm	S2 Ø mm	S3 Ø mm	TL1* mm	TL1 mm	TL2 mm		SW Cap mm	SW Body mm					
M12x1,5	NPT 1/4"	4,0 - 8,0	-	6,0 - 8,0	4,0 - 6,0	9,0	16,0	16,0	12,0	24	22	26,5	60,0	M12 1/4"	EBM0SM0SN	
	NPT 3/8"													M12 3/8"	EBM0SM01N	
M16x1,5	NPT 1/4"	4,0 - 8,0	-	6,0 - 8,0	4,0 - 6,0	9,0	16,0	16,0	16,0	24	22	26,5	60,0	M16 1/4"	EBM01M0SN	
	NPT 3/8"													M16 3/8"	EBM01M01N	
M20x1,5	NPT 1/2"	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	9,0	16,0	16,0	20,0	30	28	33,0	46,0	M16 1/2"	EBM01M12N	
	NPT 3/8"													M20 3/8"	EBM12M01N	
M25x1,5	NPT 1/2"	10,0 - 16,0	14,5 - 16,0	12,0 - 14,5	10,0 - 12,0	9,0	16,0	16,0	25,0	24	22	26,5	43,0	M20K 1/2"K	EBM1M1N	
	NPT 3/4"													M20 1/2"	EBM12M12N	
M32x1,5	NPT 1/2"	10,0 - 18,0	14,5 - 16,0	12,0 - 14,5	10,0 - 12,0	9,0	16,0	16,0	32,0	30	28	33,0	46,0	M20 3/4"	EBM12M23N	
	NPT 3/4"													M25 1/2"	EBM23M12N	
M40x1,5	NPT 1"	14,0 - 20,0	-	17,0 - 20,0	14,0 - 17,0	9,0	16,0	20,0	40,0	35	35	39,0	49,0	M25K 3/4"K	EBM2M2N	
	NPT 3/4"													M25 3/4"	EBM23M23N	
M50x1,5	NPT 1 1/4"	26,0 - 34,0	31,0 - 34,0	28,0 - 31,0	26,0 - 28,0	9,0	18,0	20,0	50,0	45	45	49,5	60,0	M25 1"	EBM23M34N	
	NPT 1 1/2"													M32 3/4"	EBM34M23N	
M63x1,5	NPT 1 1/2"	35,0 - 41,0	41,0 - 44,0	38,0 - 41,0	35,0 - 38,0	9,0	18,0	20,0	63,0	35	35	39,0	53,0	M32K 1"K	EBM3M3N	
	NPT 2"													M32 1"	EBM34M34N	
M75x1,5	NPT 2 1/2"	60,0 - 64,0	-	65,0 - 69,0	60,0 - 64,0	9,0	20,0	21,0	75,0	45	45	49,5	60,5	M32 1 1/4"	EBM34M45N	
	NPT 3"													M40 1"	EBM45M34N	
M90x1,5	NPT 3"	75,0 - 79,5	81,0 - 82,0	78,0 - 81,0	75,0 - 78,0	9,0	20,0	21,0	90,0	50	50	56,0	62,0	M40K 1 1/4"K	EBM4M4N	
	NPT 4"													M40 1 1/2"	EBM45M56N	
M100x1,5	NPT 4"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	20,0	21,0	110,0	55	55	61,0	63,5	M40 1 1/2"	EBM45M56N	
	NPT 4"													M50 1 1/4"	EBM5M45N	
M110x1,5	NPT 4"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	20,0	21,0	110,0	55	55	61,0	63,5	M50K 1 1/2"K	EBM5M5N	
	NPT 4"													M50 1 1/2"	EBM56M56N	
M120x1,5	NPT 4"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	20,0	21,0	110,0	55	55	61,0	63,5	M50 2"	EBM56M67N	
	NPT 4"													M63 1 1/2"	EBM67M56N	
M130x1,5	NPT 4"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	20,0	21,0	110,0	55	55	61,0	63,5	M63 2"	EBM6M6N	
	NPT 4"													M63 2"	EBM67M67N	
M140x1,5	NPT 4"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	20,0	21,0	110,0	55	55	61,0	63,5	M63 2 1/2"	EBM67M78N	
	NPT 4"													M75K 2 1/2"K	EBM7M7N	
M150x1,5	NPT 4"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	20,0	21,0	110,0	55	55	61,0	63,5	M75 2 1/2"	EBM78M78N	
	NPT 4"													M75 3"	EBM78M810N	
M160x1,5	NPT 4"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	20,0	21,0	110,0	55	55	61,0	63,5	M90 2 1/2"	EBM810M78N	
	NPT 4"													M90 3"	EBM8M8N	
M170x1,5	NPT 4"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	20,0	21,0	110,0	55	55	61,0	63,5	M90K 3"K	EBM810M810N	
	NPT 4"													M90K 4"K	EBM810M10N	
M180x1,5	NPT 4"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	20,0	21,0	110,0	55	55	61,0	63,5	M100 3"	EBM10M810N	
	NPT 4"													M100K 4"K	EBM10M10N	
M190x1,5	NPT 4"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	20,0	21,0	110,0	55	55	61,0	63,5	M110 4"	EBM11M11N	
	NPT 4"															

* Only Ex e IIC Gb / Ex tb IIIC Db

1 Function Ex d/e Rigid Conduit Swivel Fittings

E-CYGNUS



Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Wire Ring	Steel	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material CR (Chloroprene Rubber) Silicone Ex d/tb -40°C / +80°C -60°C / +80°C Ex e/tb -40°C / +80°C -60°C / +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 d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db	
Marking Example		BMD EBMS.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +80°C IP66/68 IECEx IMQ 13.0006X / IMQ 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 Armor	
Accessories		• Lock nuts • Gaskets • Serrated Washers • Earth tags	

Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014 EN 60079-1:2007
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2006 Edition:4 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7
	№ TC RU C-TR.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ Р МЭК 60079-0:2011 ГОСТ Р МЭК 60079-7:2012 ГОСТ Р МЭК 60079-31:2010 ГОСТ Р МЭК 60079-14:2008
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008 e 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.

Order Encoding												
Part Number	Thread Size	• M: Metric • N: NPT • C: PF • P: Pg • G: Gas	Pipe Size	• M: Metric • N: NPT • C: PF • P: Pg • G: Gas	Pipe Thread	Material	• C: Chloroprene • S: Silicone • GF: Fiber	Gasket	Serrated Washer	Locknut	Earthtag	*For Ex e (TL9)
EBMS	5	M	5	N	B	C	-	GC	SW	L	E	

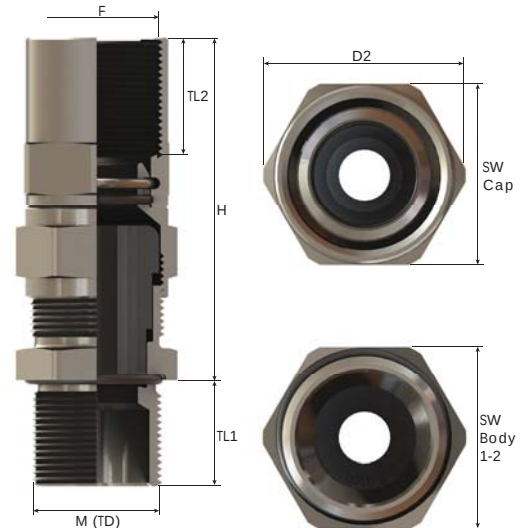
Clamping Range (D)
Sealing Combinations



E-CYGNUS

1 Function Ex d/e

Rigid Conduit Swivel Fittings



Hazardous Application

Thread Type METRIC acc. to ISO 965-3																	
Thread Size	Pipe Thread Size	Clamping Range Ø min-max D	Seal Combinations			Thread Length			Thread Ø	Spanner Width			Outer min. Ø	max. Height	Design Type	Part Number	
M	F	mm	S1 Ø mm	S2 Ø mm	S3 Ø mm	TL1*	TL1 mm	TL2	TD mm	SW Cap mm	SW Body 1 mm	SW Body 2 mm	D2 mm	H mm	TDM TDF		
M16x1,5	NPT 3/8"	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	9,0	16,0	16,0	16,0	22	27	27	30,0	54,5	M16 3/8"	EBMS01M01N	
	NPT 1/2"															EBMS01M12N	
M20 x1,5	NPT 3/8"	4,0 - 12,0	9,0 - 12,0	6,0 - 9,0	4,0 - 6,0	9,0	16,0	16,0	20,0	28	27	27	31,0	54,5	M20 3/8"	EBMS12M01N	
	NPT 1/2"															EBMS12M11N	
	NPT 3/4"	10,0 - 16,0	14,5 - 16,0	12,0 - 14,5	10,0 - 12,0	9,0	16,0	16,0	20,0	28	30	32	35,5	56,0	M20 1/2"	EBMS12M12N	
	NPT 1"															EBMS12M23N	
M25 x1,5	NPT 3/4"	10,0 - 18,0	14,5 - 18,0	12,0 - 14,5	10,0 - 12,0	9,0	16,0	16,0	25,0	35	30	32	39,0	56,0	M25 1/2"	EBMS23M12N	
	NPT 1"															EBMS23M23N	
	NPT 1 1/4"	14,0 - 20,0	-	17,0 - 20,0	14,0 - 17,0	9,0	16,0	20,0	32,0	45	40	40	44,5	59,0	M25 3/4"	EBMS23M23N	
	NPT 1 1/2"															EBMS23M34N	
M32 x1,5	NPT 1 1/2"	22,0 - 28,0	27,0 - 28,0	24,0 - 27,0	22,0 - 24,0	9,0	16,0	20,0	32,0	45	45	48	53,3	70,0	M32 1"	EBMS32M12N	
	NPT 1 3/4"															EBMS32M23N	
	NPT 2"	22,0 - 32,0	27,0 - 32,0	24,0 - 27,0	22,0 - 24,0	9,0	16,0	20,0	40,0	50	45	48	55,5	70,0	M40 1"	EBMS40M12N	
	NPT 2 1/2"															EBMS40M23N	
M40 x1,5	NPT 2 1/2"	26,0 - 34,0	31,0 - 34,0	28,0 - 31,0	26,0 - 28,0	9,0	16,0	20,0	50,0	64	50	50	70,0	75,0	M50 1 1/4"	EBMS50M12N	
	NPT 3"															EBMS50M23N	
	NPT 3 1/2"	26,0 - 35,0	31,0 - 35,0	28,0 - 31,0	26,0 - 28,0	9,0	16,0	20,0	50,0	64	55	55	61,0	75,0	M50 1 1/2"	EBMS50M34N	
	NPT 4"															EBMS50M45N	
M50 x1,5	NPT 4"	35,0 - 44,0	41,0 - 44,0	38,0 - 41,0	35,0 - 38,0	9,0	16,0	20,0	63,0	75	64	64	83,0	75,0	M63 1 1/2"	EBMS63M12N	
	NPT 4 1/2"															EBMS63M23N	
	NPT 5"	35,0 - 45,0	41,0 - 45,0	38,0 - 41,0	35,0 - 38,0	9,0	16,0	20,0	75,0	80	75	75	89,0	85,5	M75 2"	EBMS75M12N	
	NPT 5 1/2"															EBMS75M23N	
M63 x1,5	NPT 5 1/2"	46,0 - 52,0	56,0 - 62,0	51,0 - 56,0	46,0 - 51,0	9,0	16,0	20,0	90,0	95	80	80	105,0	90,0	M90 2 1/2"	EBMS90M12N	
	NPT 6"															EBMS90M23N	
	NPT 6 1/2"	46,0 - 56,0	52,0 - 56,0	48,0 - 52,0	46,0 - 48,0	9,0	16,0	20,0	100,0	105	95	95	117,0	90,0	M100 3"	EBMS100M12N	
	NPT 7"															EBMS100M23N	
M75 x1,5	NPT 7"	60,0 - 69,0	65,0 - 69,0	60,0 - 65,0	60,0 - 65,0	9,0	16,0	20,0	110,0	115	105	105	128,0	91,0	M110 4"	EBMS110M12N	
	NPT 8"															EBMS110M23N	
	NPT 8 1/2"	60,0 - 75,0	70,0 - 75,0	65,0 - 70,0	60,0 - 65,0	9,0	16,0	20,0	120,0	120	110	110	135,0	90,0	M120 4"	EBMS120M12N	
	NPT 9"															EBMS120M23N	
M90 x1,5	NPT 9"	75,0 - 85,0	81,0 - 85,0	78,0 - 81,0	75,0 - 78,0	9,0	16,0	20,0	130,0	125	120	120	145,0	90,0	M130 4"	EBMS130M12N	
	NPT 10"															EBMS130M23N	
	NPT 10 1/2"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	16,0	20,0	140,0	130	125	125	155,0	90,0	M140 4"	EBMS140M12N	
	NPT 11"															EBMS140M23N	
M100 x1,5	NPT 11"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	16,0	20,0	150,0	135	130	130	165,0	90,0	M150 4"	EBMS150M12N	
	NPT 12"															EBMS150M23N	
	NPT 12 1/2"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	16,0	20,0	160,0	140	135	135	175,0	90,0	M160 4"	EBMS160M12N	
	NPT 13"															EBMS160M23N	
M110 x1,5	NPT 13"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	16,0	20,0	170,0	145	140	140	185,0	90,0	M170 4"	EBMS170M12N	
	NPT 14"															EBMS170M23N	
	NPT 14 1/2"	85,0 - 95,0	92,0 - 95,0	89,0 - 92,0	85,0 - 89,0	9,0	16,0	20,0	180,0	150	145	145	195,0	90,0	M180 4"	EBMS180M12N	
	NPT 15"															EBMS180M23N	

* Only Ex e IIC Gb / Ex tb IIIC Db

1 Function Ex d/e Rigid Conduit Swivel Fittings with Multihole Seal

PHOENIX



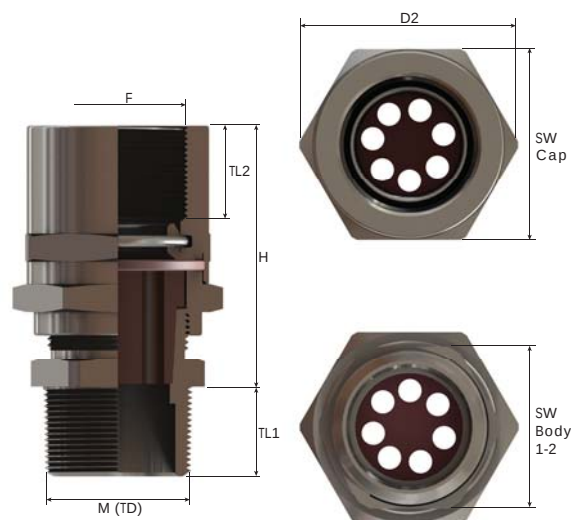
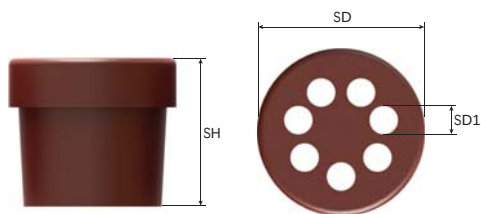
Technical Details			
Material	Body, Cap	Brass, Brass Nickel Plated, Stainless Steel, Aluminium	
	Wire Ring	Steel	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material Silicone	
Ex e/tb		-60°C / +80°C	
Equipment For		Gas & Dust potentially 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 e IIC Gb / Ex tb IIIC Db	
Marking Example		BMD SV.. Ex CE 0722 II 2GD Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +80°C IP66/68 IECEx IMQ 14.0002X / IMQ 13 ATEX 029X	
Thread Type		• 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 Armor	
Accessories		• Lock nuts • Gaskets • Serrated Washers • Earth tags	

Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 029X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2009
	IECEx IMQ 14.0002X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2006 Edition:4 IEC 60079-31:2008 Edition:1
	№ TC RU C-TR.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ Р МЭК 60079-0:2011 ГОСТ Р МЭК 60079-7:2012 ГОСТ Р МЭК 60079-31:2010 ГОСТ Р МЭК 60079-14:2008
	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN60079-1, IEC/EN 62444

For more information see our webpage.



Order Encoding												
Part Number	Max. Number of Hole	Seal Hole Cable Ø	Thread Size	• M: Metric • N: NPT Thread Type	Pipe Size	• M: Metric • N: NPT Pipe Type	• B: Brass • X: Stainless steel • BN: Nickel Plated • A: Aluminium Material	• C: Chloroprene • S: Silicone Seal	• GC: Chloroprene • GS: Silicone • GF: Fiber Gasket	Serrated Washer	Locknut	Earth tag
SV	7H	30	2	M	2	N	B	C	GC	SW	L	E



PHOENIX

1 Function Ex e

Rigid Conduit Swivel Fittings with Multihole Seal

Hazardous Application

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

Thread Size M	Pipe Thread Size F	Thread Length		SW Cap mm	Spanner Width		Outer min. Ø D2 mm	max. Height H mm	Seal Hole Cable Ø SD1 mm	Number of Holes	Part Number
		TL mm	TL1 mm		SW Middle Body mm	SW Body mm					
M20x1,5	M20x1,5	11,0	16,0	33,0	33,0	28,0	32,5	47,8	2,5	1 to 7	SV7H251M1M
									3,0	1 to 4	SV4H301M1M
	M25x1,5								2,5	1 to 7	SV7H251M2M
									3,0	1 to 4	SV4H301M2M
	NPT 3/4"		17,0						2,5	1 to 7	SV7H251M2N
M25x1,5	M20x1,5	11,0	16,0	33,0	33,0	28,0	32,5	47,8	3,0	1 to 4	SV4H301M2N
									2,5	1 to 7	SV7H252M1M
									3,0	1 to 4	SV4H302M1M
									3,6	1 to 3	SV3H362M1M
									4,0	1 to 7	SV7H402M1M
	M25x1,5								2,5	1 to 7	SV7H252M2M
									3,0	1 to 4	SV4H302M2M
									3,6	1 to 3	SV3H362M2M
									4,0	1 to 7	SV7H402M2M
									2,5	1 to 7	SV7H252M2N
									3,0	1 to 4	SV4H302M2N
									3,6	1 to 3	SV3H362M2N
NPT 3/4"									4,0	1 to 7	SV7H402M2N
	M20x1,5	16,0	17,0	33,0	33,0	28,0	32,5	45,8	2,5	1 to 7	SV7H252N1M
									3,0	1 to 4	SV4H302N1M
									3,6	1 to 3	SV3H362N1M
									4,0	1 to 7	SV7H402N1M
	M25x1,5								2,5	1 to 7	SV7H252N2M
									3,0	1 to 4	SV4H302N2M
									3,6	1 to 3	SV3H362N2M
									4,0	1 to 7	SV7H402N2M
									2,5	1 to 7	SV7H252N2N
									3,0	1 to 4	SV4H302N2N
									3,6	1 to 3	SV3H362N2N
	NPT 3/4"								4,0	1 to 7	SV7H402N2N



CABLE GLANDS and PLUGS for Gas & Dust Application



Lyra
Vega
Gemini
Hi-Gemini
Draco
Hi-Draco
Cetus

182 - 183
184 - 185
186 - 187
188 - 189
190 - 191
192 - 193
194 - 195



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



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 Ex e Glands 4 joule

LYRA



Technical Details			
Material	Body, Cap Seal	PA	
Protection Class		CR (Chloroprene Rubber)	
		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material Chloroprene Rubber	
	Ex e/tb / Ex tb	-40°C / +80°C	
	Ex-i	-40°C / +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 Group III	Gas Group IIC Dust Group IIIC	ZONE1/ZONE2 ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex e IIC Gb / Ex tb IIIC Db		
Marking Example	BMD BM-X2LC Ex CE 0722 II 2GD Ex e IIC Gb Ex tb IIIC Db IP66/68 Ta-40°C +80°C IMQ 13 ATEX 010X IECEx IMQ 13.0003X		
Type Protection	Ex e ; Ex tb ; Ex i		
Impact Test Result	4J		
Thread Type	• 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	• Lock nuts • Gaskets • Dome Plugs • Dust Plugs • Double Seals		

Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 010X	EN 60079-0:2012 EN 60079-7:2007 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.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	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.



Order Encoding									
Part Number	M: Metric N: NPT C: PF P: Pg G: Gas Thread	for Blue Cap I: Ex-i Ex-i	X: Standard SX: Small MX: Medium L: Long Thread Size	C: Chloroprene Seal	Double Seal	Dome Plug	Dust Plug	Gasket	Lock nut
B	M-	I	X2L	C	DS	P	DP	-	L

LYRA Polyamide Ex e Glands



Hazardous Application

Tread Type METRIC acc. to ISO 965-3								
Size	Clamping Range Ø min-max D mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer min. Ø D2 mm	max. Height H mm	Part Number
				SW Cap mm	SW Body mm			
M20x1,5	5,0 - 10,0	10	20,0	24	22	25,0	29,5	BM-SX2
	6,0 - 12,0	15			24	27,5	30,0	BM-X2
	10,0 - 14,0	10		27	27	31,0	33,0	BM-X2L
		15						BM-X3
M25x1,5	10,0 - 14,0	10	25,0	27	27	31,0	33,0	BM-X4
	15	BM-SX5						
	11,0 - 17,0	10		29	29	32,5	34,0	BM-SX6
	13,0 - 18,0	15		33	33	37,0	35,0	BM-XE25
13,0 - 18,0		10	32,0	36	33	37,0	36,0	BM-X5
15,0 - 21,0	41,0					42,0	BM-X6	
M32x1,5	18,0 - 25,0	15		42	42	47,5	40,5	BM-SX7
	M40x1,5	19,0 - 28,0		10	46	46	52,0	46,0
15		BM-XE40						
M50x1,5	22,0 - 32,0	18	50,0	53	53	60,0	50,0	BM-XE40L
	30,0 - 38,0	18						60
M63x1,5	34,0 - 44,0	18	63,0	65	65	72,0	54,0	BM-X9
								BM-X10

Thread Type PG acc. to DIN 40430								
Size	Clamping Range Ø min-max D mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer min. Ø D2 mm	max. Height H mm	Part Number
Pg 13,5	6,0 - 12,0	10	20,4	24	24	27,5	42,0	BP-X4
Pg 16	10,0 - 14,0	10	22,5	27	27	31,0	46,5	BP-X5
Pg 21	13,0 - 18,0	11	28,3	33	33	37,0	47,0	BP-X6
Pg 29	18,0 - 25,0	11	37,0	42	42	47,5	52,0	BP-X7
Pg 36	22,0 - 32,0	13	47,0	53	53	60,0	58,5	BP-X8
Pg 42	30,0 - 38,0	13	54,0	60	60	67,5	68,0	BP-X9
Pg 48	34,0 - 44,0	14	59,3	65	65	72,0	69,0	BP-X10

Thread Type NPT acc. to ANSI B1.20.1								
Size	Clamping Range Ø min-max D mm	Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer min. Ø D2 mm	max. Height H mm	Part Number
NPT1/2"	5,0 - 10,0	15	21,34	24	22	25,0	45,0	BN-SX2
	6,0 - 12,0				24	27,5		BN-X2
	10,0 - 14,0			27	27	31,0		BN-LX2
NPT3/4"	13,0 - 18,0	15	26,67	33	33	37,0	50,0	BN-X3
NPT1"	18,0 - 25,0	18	33,40	42	42	47,5	58,0	BN-X4
NPT1 1/4"	22,0 - 32,0	18	42,20	53	53	59,5	68,0	BN-X8
NPT1 1/2"	30,0 - 38,0	18	48,30	60	60	66,5	72,0	BN-X9
NPT2"	34,0 - 44,0	18	60,30	65	65	72,0	72,0	BN-X10

Polyamide Ex e Glands

7 joule

VEGA
High Impact

Technical Details			
Material	Body, Cap Seal	PA	
	Seal	CR (Chloroprene Rubber), Silicone, NBR (Nitrile Rubber)	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material	
		Nitrile Rubber	Chloroprene Rubber
Ex e/tb / Ex tb		-30°C / +70°C	-40°C / +70°C
Ex-i		-60°C / +70°C	-60°C / +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
		Group III	Dust Group IIIC
Equipment Marking		Ex II 2GD	ZONE1/ZONE2
		Ex e IIC Gb / Ex tb IIIC Db	ZONE21/ZONE 22
Marking Example		BMD EHBM-X.. Ex CE 0722 II 2GD Ex e IIC Gb Ex tb IIIC Db Ta-40°C +70°C IP66/68 IECEx IMQ 13.0003X / IMQ 13 ATEX 010	
Type Protection		Ex e ; Ex tb ; Ex i	
Impact Test Result		7J	
Thread Type		- Metric (M) ISO 965-3 - Other thread types also available upon request.	
Cable Type		Non Armoured	
Accessories		- Lock nuts - Gaskets - Dome Plugs - Double Seals	

* Operating Temperature (Silicone seal) Double seal version part number from SX1 to X6 -40°C / +70°C

Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 010X	EN 60079-0:2012 EN 60079-7:2007 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.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ Р МЭК 60079-0:2011 ГОСТ Р МЭК 60079-7:2012 ГОСТ Р МЭК 60079-31:2010 ГОСТ Р МЭК 60079-14:2008
	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

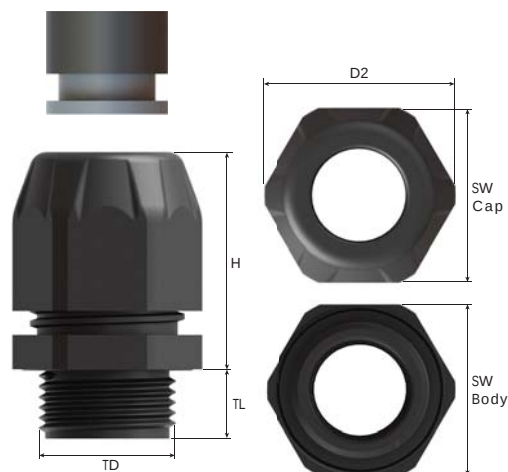
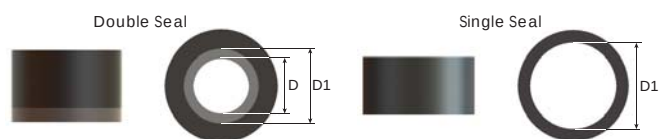
For more information see our webpage.



Order Encoding									
Part Number	M: Metric N: NPT C: PF P: Pg G: Gas Thread	for Blue Cap I: Ex-i Ex-i	X: Standard SX: Small MX: Medium L: Long Thread Size	A: without Flanged B: with Flanged Option	C: Chloroprene S: Silicone Seal	Double Seal	Dome Plug	Gasket GC: Chloroprene GS: Silicone GF: Fiber	Lock nut
EHIB	M-	I	X2L	A or B	C	DS	P	- GC	L

VEGA

Polyamide Ex e Glands



Thread Type METRIC acc. to ISO 965-3 (Single Seal Version)														
Size	Clamping Range Ø min-max Single Seal D1 mm		Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø min D2 mm	max. Height H mm	Part Number					
					SW Cap mm	SW Body mm								
M12x1.5	4.0 - 6.5		10.0 15.0	12,0	15.0	15.0	17.0	22.0	EHIBM-0XS EHIBM-XS					
M16x1.5	5.0 - 8.0		10.0 15.0	16,0	19.0	19.0	21.3	26.0	EHIBM-SX1 EHIBM-SX1L					
	6.0 - 10.0		10.0 15.0		22.0	22.0	25.0	29.5	EHIBM-X1 EHIBM-X1L					
M20x1.5	6.0 - 10.0		10.0	20,0	24.0	22.0	25.0	29.5	EHIBM-SX2 EHIBM-X2					
	7.0 - 12.0		15.0			24.0	27.5	30.0	EHIBM-X2L EHIBM-MX2					
	7.0 - 13.0		10.0		25.0	25.0	27.5	30.0	EHIBM-X3 EHIBM-X4					
	11.0 - 14.0		15.0		27.0	27.0	31.0	33.0	EHIBM-SX5 EHIBM-SX6					
M25x1.5	11.0 - 14.0		10.0 15.0	25,0	29.0	29.0	32.5	34.0	EHIBM-XE25 EHIBM-XE25L					
	12.0 - 17.0		15.0						33.0	33.0	37.0	35.0	EHIBM-X5 EHIBM-X6	
	14.0 - 18.0		10.0 15.0		32,0	36.0	36.0	41.0					42.0	EHIBM-SX7 EHIBM-XE32 EHIBM-XE32L
M32x1.5	14.0 - 18.0		10.0	36.0					42.0	42.0	47.5	40.5		EHIBM-X7 EHIBM-XE40
	16.0 - 21.0		15.0											46.0
M40x1.5	20.0 - 28.0		18.0	40,0	53.0	53.0	60.0	50.0	EHIBM-X9					
M50x1.5	31.0 - 38.0		18.0	50,0	60.0	60.0	67.5	54.0	EHIBM-X10					
M63x1.5	35.0 - 44.0		18.0	63,0	65.0	65.0	72.0	54.0						
Thread Type METRIC acc. to ISO 965-3 (Double Seal Version)														
Size	Clamping Range Ø min-max Outer Seal D mm		Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer Ø min D2 mm	max. Height H mm	*Part Number					
					SW Cap mm	SW Body mm								
M12x1.5	4.0 - 6.5	3.0 - 4.0	10.0 15.0	12,0	15.0	15.0	17.0	22.0	EHIBM-0XS(DS) EHIBM-XS(DS)					
M16x1.5	5.0 - 8.0	4.0 - 5.0	10.0 15.0	16,0	19.0	19.0	21.3	26.0	*EHIBM-SX1(DS) *EHIBM-SX1L(DS)					
	6.0 - 10.0	4.0 - 6.0	10.0 15.0		22.0	22.0	25.0	29.5	*EHIBM-X1(DS) *EHIBM-X1L(DS)					
M20x1.5	6.0 - 10.0	4.0 - 6.0	10.0	20,0	24.0	24.0	27.5	30.0	*EHIBM-SX2(DS) *EHIBM-X2(DS)					
	7.5 - 12.0	6.0 - 7.5	15.0						25.0	25.0	27.5	30.0	*EHIBM-X2L(DS) *EHIBM-MX2(DS)	
	7.0 - 13.0	4.0 - 7.0	10.0		27.0	27.0	31.0	33.0					*EHIBM-X3(DS) *EHIBM-X4(DS)	
	11.0 - 14.0	8.0 - 11.0	15.0						29.0	29.0	32.5	34.0	*EHIBM-SX5(DS) *EHIBM-SX6(DS)	
M25x1.5	11.0 - 14.0	8.0 - 11.0	10.0 15.0	25,0	33.0	33.0	37.0	35.0					*EHIBM-XE25(DS) *EHIBM-XE25L(DS)	
	13.0 - 17.0	9.0 - 13.0	10.0 15.0						36.0	36.0	41.0	42.0	*EHIBM-X5(DS) *EHIBM-X6(DS)	
	13.0 - 18.0	10.0 - 13.0	10.0										32,0	42.0
M32x1.5	13.0 - 18.0	10.0 - 13.0	10.0	36.0	42.0	42.0	47.5	40.5	EHIBM-X7(DS) EHIBM-XE40(DS)					
	16.0 - 21.0	12.0 - 16.0	15.0						46.0	46.0	52.0	46.0		
M40x1.5	21.0 - 28.0	17.0 - 21.0	18.0	40,0	53.0	53.0	60.0	50.0					EHIBM-X9(DS) EHIBM-X10(DS)	
M50x1.5	31.0 - 38.0	22.0 - 31.0	18.0	50,0	60.0	60.0	67.5	54.0						
M63x1.5	35.0 - 44.0	28.0 - 35.0	18.0	63,0	65.0	65.0	72.0	54.0						
* Operating Temperature (Silicone) -40°C / +70°C														

* Operating Temperature (Silicone) -40°C / +70°C

Polyamide Ex e Glands

4joule

GEMINI

for Non Circular
and Heat Trace Cable


Technical Details			
Material	Body, Cap Seal	PA	
Protection Class	CR (Chloroprene Rubber)		
	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	Chloroprene Rubber	Silicone	
Ex e/tb / Ex tb	-40°C / +80°C	-60°C / +80°C	
Ex-i	-40°C / +70°C	-60°C / +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 Group III	Gas Group IIC Dust Group IIIC	ZONE1/ZONE2 ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex e IIC Gb / Ex tb IIIC Db		
Marking Example	BMD BM-X2.. Ex CE 0722 II 2GD Ex e IIC Gb Ex tb IIIC Db IP66/68 Ta-40°C +80°C IMQ 13 ATEX 011X IECEx IMQ 13.0004X		
Type Protection	Ex e ; Ex tb ; Ex i		
Impact Test Result	4J		
Thread Type	• Metric (M) ISO 965-3 • Other thread types also available upon request.		
Cable Type	Non Armoured, Non Circular, Heat Trace		
Accessories	• Lock nuts • Gaskets • Dust plugs		

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.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	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

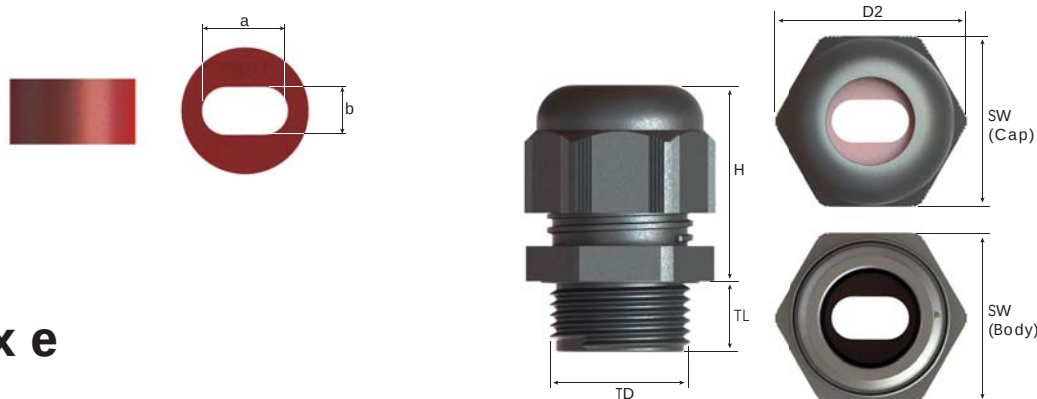
For more information see our webpage.



Order Encoding							
Part Number	M: Metric N: NPT C: PF P: Pg G: Gas Thread	for Blue Cap I: Ex-i	X: Standard S: Small MX: Medium L: Long Thread Size	Seal Hole	C: Chloroprene S: Silicone Seal	Gasket	Lock nut
B	M-	I	X2	axb	C	-	L

GEMINI

Polyamide Ex e Glands



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

Size	Sealing Hole Ø (±0,24) axb mm	Clamping Range Ø		Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer min. Ø D2 mm	max. Height H mm	Part Number			
		min. axb mm	max. axb mm			SW Cap mm	SW Body mm						
M20x1.5	10,0 x 4,0	10,0 x 3,3	10,4 x 4,0	10,0	20,0	24	24	27,5	40	BM-X2			
	108 x 6,0	9,3 x 5,8	108 x 6,0										
	11,0 x 6,5	9,0 x 6,0	11,3 x 8,0										
	10,0 x 4,0	10,0 x 3,3	10,4 x 4,0	15,0					27	27	31,0	45	BM-X2L
	108 x 6,0	9,3 x 5,8	108 x 6,0										
	11,0 x 6,5	9,0 x 6,0	11,3 x 8,0										
	108 x 6,0	10,1 x 5,3	11,9 x 7,2										
	12,8 x 5,0	12,1 x 4,3	12,8 x 5,3	10,0		27	27	31,0	42	BM-X3			
	12,4 x 6,5	11,9 x 5,8	13,4 x 8,9										
	108 x 6,0	10,1 x 5,3	11,9 x 7,2										
12,8 x 5,0	12,1 x 4,3	12,8 x 5,3	15,0	27	27	31,0	47	BM-X4					
12,4 x 6,5	11,9 x 5,8	13,4 x 8,9											
M25x1.5	10,0 x 4,0	10,0 x 3,3	10,4 x 4,0	10,0	25,0	29	24	27,5	40	BM-XSX5			
	108 x 6,0	9,3 x 5,8	108 x 6,0										
	11,0 x 6,5	9,0 x 6,0	11,3 x 8,0				27	31,0	42	BM-SX5			
	108 x 6,0	10,1 x 5,3	11,9 x 7,2										
	12,8 x 5,0	12,1 x 4,3	12,8 x 5,3			33	33	37,0	45	BM-X5			
	12,4 x 6,5	11,9 x 5,8	13,4 x 8,9										
	12,0 x 6,0	12,9 x 5,6	13,8 x 6,0										
	15,0 x 5,0	14,6 x 6,2	15,0 x 5,0										
	10,0 x 4,0	10,0 x 3,3	10,4 x 4,0			29	24	27,5	27,5	45	BM-XSX6		
	108 x 6,0	9,3 x 5,8	108 x 6,0										
	11,0 x 6,5	9,0 x 6,0	11,3 x 8,0										
	108 x 6,0	10,1 x 5,3	11,9 x 7,2										
	12,8 x 5,0	12,1 x 4,3	12,8 x 5,3	15,0		27	31,0	31,0	47	BM-SX6			
	12,4 x 6,5	11,9 x 5,8	13,4 x 8,9										
	12,0 x 6,0	12,9 x 5,6	13,8 x 6,0										
	15,0 x 5,0	14,6 x 6,2	15,0 x 6,2										
M32x1.5	12,0 x 6,0	12,9 x 5,6	13,8 x 6,0	10,0	32,0	36	33	37,0	50	BM-X6			
	15,0 x 5,0	14,6 x 6,2	15,0 x 6,2										
	15,0 x 5,0	14,6 x 6,2	15,0 x 6,2										

Polyamide Ex e Glands

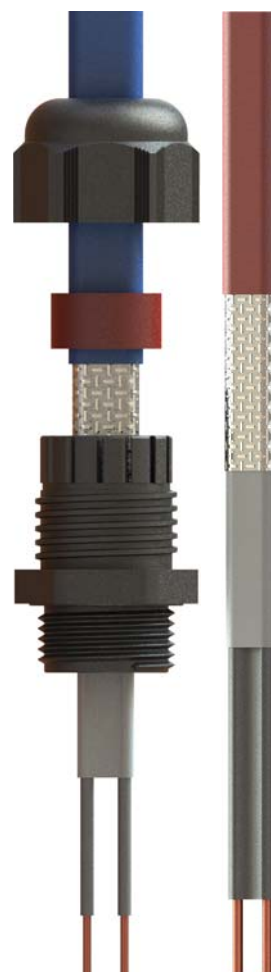
7 joule

Technical Details			
Material	Body, Cap Seal	PA	
Protection Class	CR (Chloroprene Rubber) IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	Chloroprene Rubber	Silicone	
Ex e/tb / Ex tb	-40°C / +80°C		-60°C / +80°C
Ex-i	-40°C / +70°C		-60°C / +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 Group III	Gas Group IIC Dust Group IIIC	ZONE1/ZONE2 ZONE21/ZONE 22
Equipment Marking	Ex II 2GD Ex e IIC Gb / Ex tb IIIC Db		
Marking Example	BMD HIBM-X2.. Ex CE 0722 II 2GD Ex e IIC Gb Ex tb IIIC Db IP66/68 Ta-40°C +80°C IMQ 13 ATEX 011X IECEx IMQ 13.0004X		
Type Protection	Ex e ; Ex tb ; Ex i		
Impact Test Result	7J		
Thread Type	- Metric (M) ISO 965-3 - Other thread types also available upon request.		
Cable Type	Non Armoured, Non Circular, Heat Trace		
Accessories	- Lock nuts - Gaskets - Dust plugs		

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.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	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

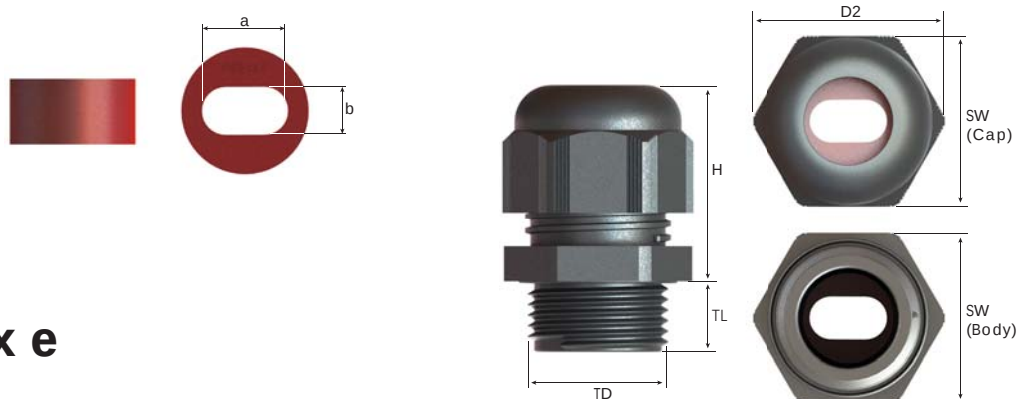
For more information see our webpage.

HI-GEMINI
for Non Circular
and Heat Trace Cable
High Impact



Order Encoding							
Part Number	M: Metric N: NPT C: PF P: Pg G: Gas Thread	for Blue Cap I: Ex-i	X: Standard SX: Small MX: Medium L: Long Thread Size	Sealing Hole	C: Chloroprene S: Silicone Seal	WC: Chloroprene WS: Silicone WF: Fiber Washer	Lock nut
HIB	M-	I	X2	axb	C	- WC	L

HI-GEMINI Polyamide Ex e Glands

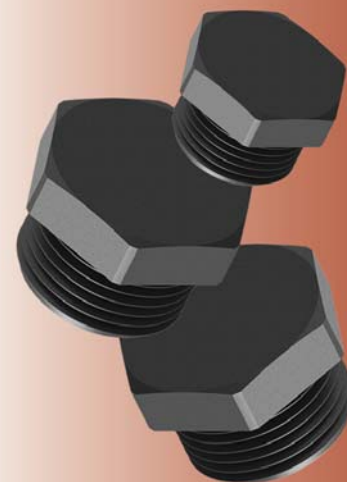


Thread Type **METRIC** acc. to ISO 965-3

Size	Sealing Hole Ø (±0,24) axb mm	Clamping Range Ø		Thread Length TL mm	Thread Ø TD mm	Spanner Width		Outer min. Ø D2 mm	max. Height H mm	Part Number
		min. axb mm	max. axb mm			SW Cap mm	SW Body mm			
M25x1.5	6,0 x 10,8	4,21 x 11,69	5,23 x 13,21	10,0	25,0	27	27	30,0	33,0	HIBM-SX5
	5,0 x 12,8	5,03 x 12,50	6,05 x 14,02							
	6,0 x 10,8	4,21 x 11,69	5,23 x 13,21			33	33	36,0	35,0	HIBM-X5
	5,0 x 12,8	5,03 x 12,50	6,05 x 14,02							
	5,0 x 15,0	6,09 x 13,72	7,11 x 15,24							
	6,0 x 10,8	4,21 x 11,69	5,23 x 13,21							
	5,0 x 12,8	5,03 x 12,50	6,05 x 14,02	29		29	31,5	34,0	HIBM-XEU25	
	5,0 x 15,0	6,09 x 13,72	7,11 x 15,24							
	6,0 x 10,8	4,21 x 11,69	5,23 x 13,21							
	5,0 x 12,8	5,03 x 12,50	6,05 x 14,02							
	6,0 x 10,8	4,21 x 11,69	5,23 x 13,21	15,0		27	27	30,0	33,0	HIBM-SX6
	5,0 x 12,8	5,03 x 12,50	6,05 x 14,02							
	5,0 x 15,0	6,09 x 13,72	7,11 x 15,24							
	6,0 x 10,8	4,21 x 11,69	5,23 x 13,21							
	5,0 x 12,8	5,03 x 12,50	6,05 x 14,02							
	5,0 x 15,0	6,09 x 13,72	7,11 x 15,24							
6,0 x 10,8	4,21 x 11,69	5,23 x 13,21	29	29	31,5	34,0	HIBM-XEU25L			
5,0 x 12,8	5,03 x 12,50	6,05 x 14,02								
5,0 x 15,0	6,09 x 13,72	7,11 x 15,24								

Polyamide Ex e Hexagonal Plugs 4 joule

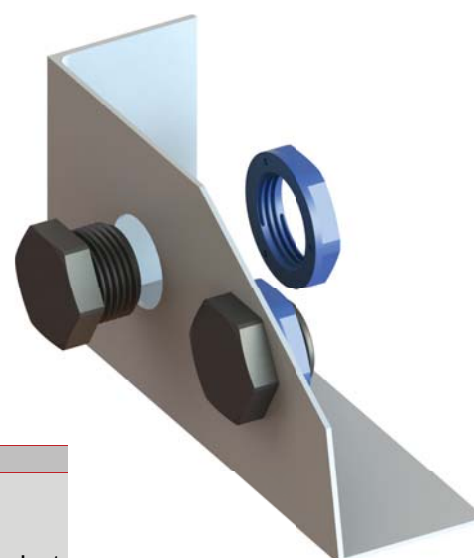
DRACO



Technical Details		
Material	Body, Cap Seal	PA
Protection Class	CR (Chloroprene Rubber), Silicone	
Operating Temperature	IP 68 - 5 Bar, 30 min IP 66	
Ex e/tb / Ex tb / Ex-i	Seal Material	Chloroprene Rubber
		Silicone
Equipment For	-40°C / +80°C	
Suitable for use in	• 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.	
	Group II	Gas Group IIC
Equipment Marking	Group III	Dust Group IIIC
Marking Example	Ex II 2GD Ex e IIC Gb / Ex tb IIIC Db BMD TP-X2C Ex CE 0722 II 2GD Ex e IIC Gb Ex tb IIIC Db IP66/68 Ta-40°C +80°C IMQ 13 ATEX 010X IECEx IMQ 13.0003X	
Type Protection	Ex e ; Ex tb ; Ex i	
Impact Test Result	4J	
Thread Type	• Metric (M) ISO 965-3	
Accessories	• Lock nuts • Gaskets	

Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 010X	EN 60079-0:2012 EN 60079-7:2007 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.Г505.B.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	DNV 14.0114 X	ABNT NBR IEC 60079-0:2008, 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.

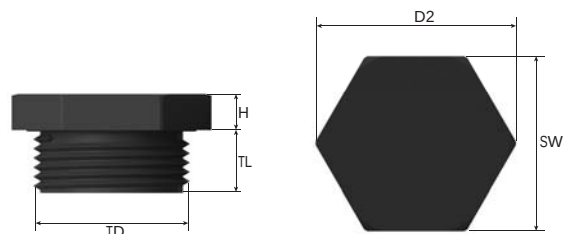


Order Encoding						
Part Number	•P: Metric •N: NPT Thread	for Blue Lock Nut I: Ex-i Ex-i	•X:Standard •SX: Small •MX: Medium •L: Long Thread Size	•C: Chloroprene •S: Silicone Seal	•GC: Chloroprene •GS: Silicone •GF: Fiber Gasket	Lock nut
T	P-	I	X2L	C	-	L

DRACO

Polyamide Ex e

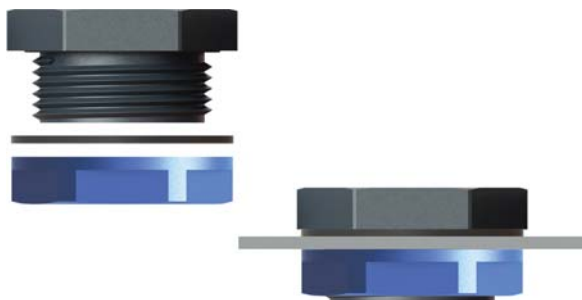
Hexagonal Plugs



Thread Type METRIC acc. to ISO 965-3						
Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer min. Ø D2 mm	max. Height H mm	Part Number
M12x1,5	10,0	12,0	15	16,5	5,0	TP-X02
M16x1,5	11,0	16,0	19	21,0	4,0	TP-X01
M20x1,5	11,0	20,0	23	25,0	6,0	TP-X1
M25x1,5	10,0	25,0	28	31,0	6,7	TP-X2
M32x1,5	15,5	32,0	36	35,5	7,5	TP-X3
M40x1,5	18,0	40,0	46	51,0	9,0	TP-X4
M50x1,5	18,0	50,0	55	61,0	9,8	TP-X5
M63x1,5	18,0	63,0	69	76,0	9,6	TP-X6

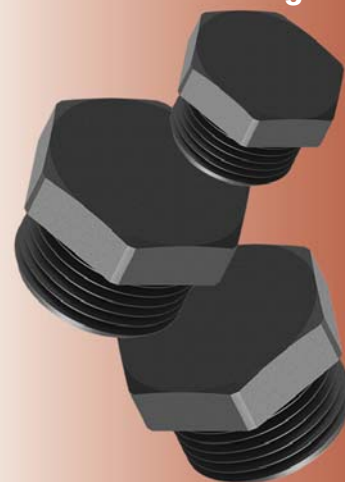
See Example "A" for IP protection degree and clamping note:

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



Polyamide Ex e Hexagonal Plugs 7 joule

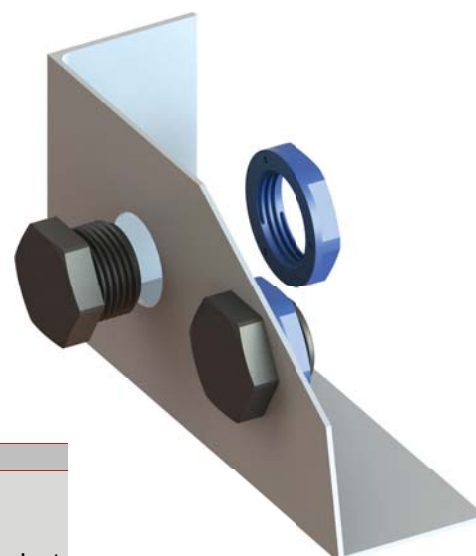
HI-DRACO
High Impact



Technical Details			
Material	Body, Cap	PA	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material Chloroprene Rubber Silicone -40°C / +70°C -60°C / +70°C	
Ex e/tb / Ex tb / Ex-i			
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
		Group III	Dust Group III C
Equipment Marking		Ex II 2GD Ex e IIC Gb / Ex tb IIIC Db	
Marking Example		BMD HITP-X2C Ex CE 0722 II 2GD Ex e IIC Gb Ex tb IIIC Db IP66/68 Ta-40°C +70°C IMQ 13 ATEX 010X IECEx IMQ 13.0003X	
Type Protection		Ex e ; Ex tb ; Ex i	
Impact Test Result		7J	
Thread Type		- Metric (M) ISO 965-3 - NPT (N) ANSI ASME B1.20.1	
Accessories		- Lock nuts - Gaskets	

Approvals		
	Certificate Number	Standards
	IMQ 13 ATEX 010X	EN 60079-0:2012 EN 60079-7:2007 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.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	DNV 14.0114 X	ABNT NBR IEC 60079-0:2008, 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

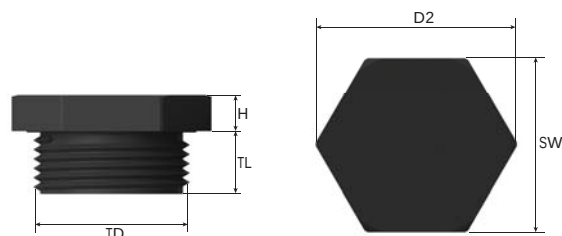
For more information see our webpage.



Order Encoding						
Part Number	•P: Metric •N: NPT Thread	for Blue Lock Nut I: Ex-i Ex-i	•X: Standard •SX: Small •MX: Medium •L: Long Thread Size	•C: Chloroprene •S: Silicone Seal	•GC: Chloroprene •GS: Silicone •GF: Fiber Gasket	Lock nut
HIT	P-	I	X2L	C	-	L

HI-DRACO

Polyamide Ex e Hexagonal Plugs



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

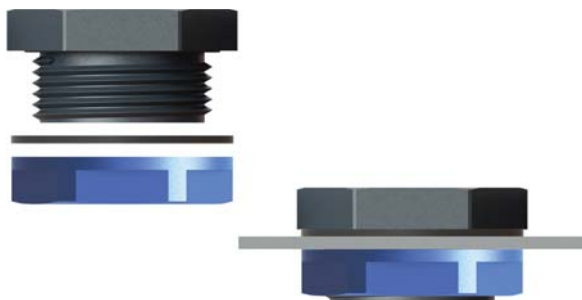
Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer min. Ø D2 mm	max. Height H mm	Part Number
M12x1.5	10,0	12,0	15,0	17,0	5,0	HITP-X02
M16x1.5	11,0	16,0	19,0	22,0	4,3	HITP-X01
	12,0					HITP-X01L
	15,0					HITP-X01HL
M20x1.5	11,0	20,0	23,0	26,0	6,0	HITP-X1
	12,0					HITP-X1L
	15,0					HITP-X1HL
M25x1.5	10,0	25,0	28,0	32,0	5,8	HITP-X2
	15,0					HITP-X2HL
	15,0					HITP-X3
M32x1.5	15,0	32,0	36,0	41,5	7,8	HITP-X3
M40x1.5	18,0	40,0	46,0	53,0	8,5	HITP-X4
M50x1.5	18,0	50,0	55,0	63,5	9,5	HITP-X5
M63x1.5	18,0	63,0	69,0	80,0	9,5	HITP-X6

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

Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer min. Ø D2 mm	max. Height H mm	Part Number
NPT 1/4"	10,0	13,7	15,0	7,0	5,0	HITN-X02
NPT 3/8"	15,0	17,1	19,0	11,0	4,3	HITN-X01HL
NPT 1/2"	15,0	21,3	23,0	13,5	6,0	HITN-X1HL
NPT 3/4"	15,0	26,7	28,0	18,8	5,8	HITN-X2HL
NPT 1"	15,0	33,4	36,0	25,0	7,8	HITN-X3
NPT 1 1/4"	18,0	42,1	46,0	32,0	8,5	HITN-X4
NPT 1 1/2"	18,0	48,3	55,0	40,0	9,5	HITN-X5
NPT 2"	18,0	60,3	69,0	52,0	9,5	HITN-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 nut painted **light blue**. The plugs must be supplied with the flat washer for IP protection degree.



Polyamide Dome Plugs for sealing cable insert

CETUS

Technical Details			
Material	Body, Cap	PA	
	Seal	CR (Chloroprene Rubber), Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material	
		Chloroprene Rubber	Silicone
Ex e/tb / Ex tb		-40°C / +70°C -60°C / +70°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 tb IIIC Db	
Marking Example			
Gland Marking for	Octans	BMD EBU.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +80°C IP66/68 IECEx CES 13.0006X / CESI 13 ATEX 018X	
	Vela	BMD EBS.. Ex CE 0722 II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db Ta-40°C +80°C IP66/68 IECEx CES 13.0006X / CESI 13 ATEX 018X	
	Lyra	BMD BM-X. Ex CE 0722 II 2GD Ex e IIC Gb Ex tb IIIC Db Ta-40°C +80°C IP66/68 IECEx IMQ 13.0003X / IMQ 13 ATEX 010X	
	Vega	BMD EHBM-X.. Ex CE 0722 II 2GD Ex e IIC Gb Ex tb IIIC Db Ta-40°C +70°C IP66/68 IECEx IMQ 13.0003X / IMQ 13 ATEX 010X	
Type Protection		Ex e ; Ex tb ; Ex i	
Impact Test Result		7J	
Thread Type		• Metric (M) ISO 965-3 • NPT (N) ANSI ASME B1.20.1 • Other thread types also available upon request.	
Accessories		• Lock nuts • Gaskets	
Remarks		• For standard Ex-Proof applications. • Sealing of cable glands when no cable is used.	



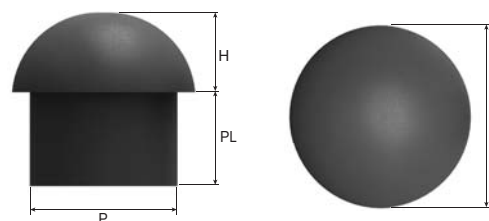
Approvals				
	Octans and Vela		Lyra and Vega	
	Certificate Number	Standards	Certificate Number	Standards
	IMQ 13 ATEX 018X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014 EN 60079-1:2007	IMQ 13 ATEX 010X	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2014
	IECEx IMQ 13.0006X	IEC 60079-0:2011 Edition:6 IEC 60079-7:2006 Edition:4 IEC 60079-31:2013 Edition:2 IEC 60079-1:2014 Edition:7	IECEx IMQ 13.0003X	IEC 60079-0:2011 Edition:6 IEC 60079-31:2013 Edition:2 IEC 60079-7:2006 Edition: 4
	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		UV resistance according to standard ISO 4892-2
	№ TC RU C-TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008	№ TC RU C-TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	DNV 12.0052 X	ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2009, ABNT NBR IEC 60079-7:2008 e ABNT NBR IEC 60079-31:2011	DNV 12.0051 X	ABNT NBR IEC 60079-0:2013, 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	E-14045	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 IEC/EN 62444

For more information see our webpage.



CETUS

Polyamide Dome Plugs for sealing cable insert



Dome plugs for Metal Glands (Octans & Vela)

Size	Plug Ø P mm	Dome Ø D mm	Plug Length PL mm	max. Height H mm	Clamping Ranges used for Dome Plug		Part Number RAL 9005 black	Packing Unit
					Octans Seals mm	Vela Seals mm		
15	5.8	15.0	10.0	4.0	3,0 - 6,0 / 4,0 - 6,0	4,0 - 6,0	BDPX-15-21	50
22	11.8	21.5	15.0	6.0	10,0 - 12,0	10,0 - 12,0	BDPX-22-20	25
28	16.8	27.5	17.0	8.0	14,0 - 17,0	14,0 - 17,0	BDPX-28-21	25
36	23.8	36.0	20.0	10.0	22,0 - 24,0	22,0 - 24,0	BDPX-36-21	20
40	27.8	40.0	24.0	10.0	26,0 - 28,0	26,0 - 28,0	BDPX-40-21	15
50	37.8	50.0	24.0	12.0	35,0 - 38,0	35,0 - 38,0	BDPX-50-21	10
63	47.8	63.0	26.0	14.0	46,0 - 48,0	-	BDPX-63-21	5

Dome plugs for Polyamide Glands (Lyra & Vega)

Size	Plug Ø	Dome Ø	Plug Length	max. Height	Dome Plug fits into Clamping Range Ø min-max				Part Number	Packing Unit
	P mm	D mm	PL mm	H mm	Standard Seal mm	Reducing Seal mm	Double Seal mm	Outer Seal mm	RAL 9005 black	
9	4,0	9,2	12,0	4,0	-	2,0 - 5,0	2,0 - 4,0	-	BDPX-09-21	100
	6,4				3,0 - 6,5	-	-	3,0 - 6,5	BDPX-09-22	
11	5,0	10,5	14,0	5,0	-	2,0 - 6,0	3,0 - 5,0	-	BDPX-11-21	50
	8,0		13,7	4,7	4,0 - 8,0	-	-	4,0 - 8,0	BDPX-11-22	
13	7,0	13,3	15,0	5,7	-	3,0 - 7,0	3,0 - 7,0	-	BDPX-13-21	50
	9,7		9,0	5,3	5,0 - 10,0	-	-	5,0 - 10,0	BDPX-13-22	
			15,0	5,7	-	-	-	-	BDPX-13-22S	
16	7,0	15,8	14,0	7,5	-	-	4,0 - 7,0	-	BDPX-16-20	50
	8,5		13,0	7,7	-	5,0 - 9,0	5,0 - 8,5	-	BDPX-16-21	
	12,0				6,0 - 12,0	-	-	6,0 - 12,0	BDPX-16-22	
	13,0		14,0	7,5	7,0 - 13,0	-	-	7,0 - 13,0	BDPX-16-23	
18	11,0	18,0	13,5	8,5	-	7,0 - 12,0	7,0 - 11,0	-	BDPX-18-21	50
	13,6				10,0 - 14,0	-	-	10,0 - 14,0	BDPX-18-22	
20	13,0	20,0	14,5	7,0	-	9,0 - 13,0	8,0 - 13,0	-	BDPX-20-21	50
	16,4				11,0 - 17,0	-	-	11,0 - 17,0	BDPX-20-22	
22	14,0	22,0	14,0	9,5	-	11,0 - 15,0	9,0 - 14,0	-	BDPX-22-21	25
	17,8				13,0 - 18,0	-	-	13,0 - 18,0	BDPX-22-22	
24	16,1	24,0	15,5	9,0	-	9,0 - 16,0	11,0 - 16,0	-	BDPX-24-21	25
	20,4				15,0 - 21,0	-	-	15,0 - 21,0	BDPX-24-22	
29	20,3	28,5	15,0	9,7	-	12,0 - 20,0	13,0 - 20,0	-	BDPX-29-21	25
	25,0				18,0 - 25,0	-	-	18,0 - 25,0	BDPX-29-22	
32	21,1	31,5	15,8	9,2	-	16,0 - 23,0	16,0 - 21,0	-	BDPX-32-21	10
	27,5				19,0 - 28,0	-	-	19,0 - 28,0	BDPX-32-22	
37	26,3	36,8	17,0	10,7	-	20,0 - 26,0	20,0 - 26,0	-	BDPX-37-21	10
	31,8				22,0 - 32,0	-	-	22,0 - 32,0	BDPX-37-22	
45	31,2	43,3	20,2	11,9	-	25,0 - 31,0	21,0 - 31,0	-	BDPX-45-21	10
	38,0				30,0 - 38,0	-	-	30,0 - 38,0	BDPX-45-22	
52	35,2	51,0	22,5	16,0	-	29,0 - 35,0	27,0 - 35,0	-	BDPX-52-21	10
	44,2				34,0 - 44,0	-	-	34,0 - 44,0	BDPX-52-22	

ADAPTORS and PLUGS for Gas & Dust Application



Apus, Enlargers
Grus, Reducers
Aries, Couplings
Pavo, Nipples
Aquila, Plugs

198 - 199
200 - 201
202 - 203
204 - 205
206 - 207



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



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.

Ex d / e Enlargers

Technical Details			
Material	Body	Brass, Brass Bickel Plated Stainless Steel Galvanised Steel	
	Seal	CR (Chloroprene Rubber)	
Protection Class	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material Chloroprene Rubber		
	Ex d/e/tb	-40°C / +100°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 d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db	
Marking Example	BMD B-RB.. Ex 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 d ; Ex e ; Ex tb		
Thread Type	• Metric (M) EN 60423 • Npt (N) ANSI ASME B1.20.1 • Pg (P) DIN 40430 • Pf (PF) GAS UNI ISO 228/1		

Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 066X	EN 60079-0:2012 EN 60079-1:2007 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0022X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2007-04 Edition:6 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
	№ TC RU C- TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	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

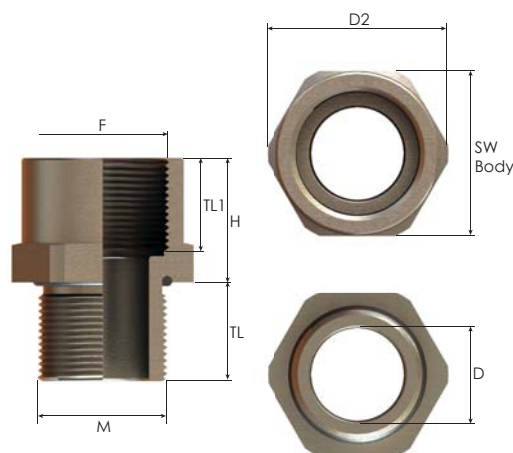
For more information see our webpage.



Size Selection Table										
Thread Type		Sizes & Code Nr.								
METRIC EN 60423 (M)		16	20	25	32	40	50	63	75	90
		01	1	2	3	4	5	6	7	8
NPT ANSI B1.20.1 (N)		3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
		01	1	2	3	4	5	6	7	8
PG DIN 40430 (P)		9	11	13,5	16	21	29	36	42	48
		2	3	4	5	6	7	8	9	10
PF GAS UNI ISO 228/1 (PF)		3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
		01	1	2	3	4	5	6	7	8

Order Encoding							
Code	Female Thread Size Code	•M: Metric •N: NPT •C: PF •P: Pg •G: Gas Female Thread	Male Thread Size Code	•M: Metric •N: NPT •C: PF •P: Pg •G: Gas Male Thread	B – Brass BN- Brass Nickel Plated X – Stainless Steel Z – Galvanised steel Material	•C: Chloroprene Sealing	Code Example
B-RB	01	M	01	M	BN	C	B-RB01M01MBNC

APUS Ex d / e Enlargers



Thread Type **METRIC** > **METRIC** acc. to EN 60423

Size		max. Cable Ø	Thread Length	Thread Length	Thread Ø	Thread Ø	Spanner Width	Outer min.	max. Height	Part Number
Female F	Male M	Male D mm	Female TL1 mm	Female TL mm	Female F mm	Male M mm	SW Body mm	Ø D2 mm	H mm	
M16x1.5	M16x1.5	10,0	15,0	15,0	16,0	16,0	22,0	24,0	34,0	B-RB01M01M
M20x1.5					20,0		25,0	27,5		B-RB1M01M
M25x1.5					25,0		30,0	33,0		B-RB2M01M
M20x1.5	M20x1.5	14,0	15,0	15,0	20,0	20,0	25,0	27,5	34,0	B-RB1M1M
M25x1.5					25,0		30,0	33,0		B-RB2M1M
M32x1.5					32,0		36,0	39,8		B-RB3M1M
M25x1.5	M25x1.5	19,0	15,0	15,0	25,0	25,0	30,0	33,0	34,0	B-RB2M2M
M32x1.5					32,0		36,0	39,8		B-RB3M2M
M40x1.5					40,0		45,0	50,0		B-RB4M2M
M32x1.5	M32x1.5	26,0	15,0	15,0	32,0	32,0	36,0	39,8	34,0	B-RB3M3M
M40x1.5					40,0		45,0	50,0		B-RB4M3M
M50x1.5					50,0		55,0	61,0		B-RB5M3M
M40x1.5	M40x1.5	34,0	18,0	18,0	40,0	40,0	45,0	50,0	40,0	B-RB4M4M
M50x1.5					50,0		55,0	61,0		B-RB5M4M
M50x1.5					50,0		55,0	61,0		B-RB5M5M
M63x1.5	M63x1.5	44,0	18,0	18,0	63,0	50,0	68,0	75,0	40,5	B-RB6M5M
M63x1.5					63,0		70,0	78,0		B-RB6M6M
M75x1.5					75,0		80,0	89,0		B-RB7M6M
M75x1.5	M75x1.5	69,0	18,0	18,0	75,0	75,0	85,0	94,0	40,5	B-RB7M7M
M90x1.5					90,0		95,0	105,0		B-RB8M7M
M90x1.5					90,0		100,0	111,0		B-RB8M8M
M110x1.5	M90x1.5	84,0	21,0	21,0	110,0	90,0	115,0	128,0	47,0	B-RB10M8M
M110x1.5					110,0		120,0	134,0		B-RB10M10M

Thread Type **METRIC** acc. to EN 60423 > **NPT** acc. to ANSI ASME B1.20.1

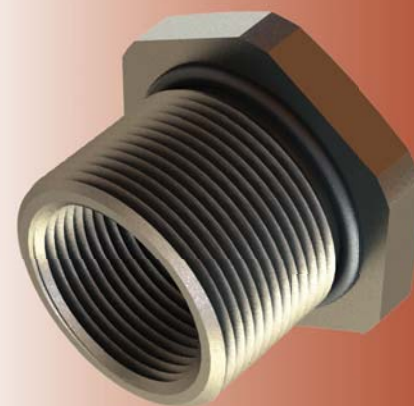
Size		max. Cable Ø	Thread Length	Thread Length	Thread Ø	Thread Ø	Spanner Width	Outer min.	max. Height	Part Number
Female F	Male M	Male D mm	Female TL1 mm	Female TL mm	Female F mm	Male M mm	SW Body mm	Ø D2 mm	H mm	
M16x1.5	NPT 3/8"	12,0	15,0	16,0	17,15	16,0	22,0	24,0	34,5	B-RB01M01N
M20x1.5						20,0	25,0	27,5	35,0	B-RB1M01N
M20x1.5						20,0	25,0	27,5	40,0	B-RB1M1N
M25x1.5	NPT 1/2"	14,5	15,0	21,0	21,34	25,0	30,0	33,0		B-RB2M1N
M25x1.5						25,0	30,0	33,0		B-RB2M2N
M32x1.5						32,0	36,0	39,8		B-RB3M2N
M32x1.5	NPT 1"	26,0	15,0	26,0	33,40	32,0	36,0	39,8	45,0	B-RB3M3N
M40x1.5						40,0	45,0	50,0		B-RB4M3N
M40x1.5						40,0	45,0	50,0	50,0	B-RB4M4N
M50x1.5	NPT 1 1/4"	35,0	18,0	28,0	42,16	50,0	55,0	61,0		B-RB5M4N
M50x1.5						50,0	55,0	61,0		B-RB5M5N
M63x1.5						63,0	68,0	75,0		B-RB6M5N
M63x1.5	NPT 2"	51,0	18,0	28,0	60,33	63,0	68,0	75,0	50,5	B-RB6M6N
M75x1.5						75,0	80,0	89,0		B-RB7M6N
M75x1.5						75,0	80,0	89,0	73,5	B-RB7M7N
M90x1.5	NPT 2 1/2"	62,0	28,0	41,0	73,03	90,0	95,0	105,0		B-RB8M7N
M90x1.5						90,0	95,0	105,0		B-RB8M8N
M110x1.5						110,0	115,0	128,0		B-RB10M8N
M110x1.5	NPT 4"	100,0	28,0	45,0	114,30	110,0	120,0	134,0	78,0	B-RB10M10N

Ex d / e Reducers

Technical Details			
Material	Body	Brass, Brass Bickel Plated Stainless Steel Galvanised Steel	
	Seal	CR (Chloroprene Rubber)	
Protection Class	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material Chloroprene Rubber		
	Ex d/e/tb	-40°C / +100°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 d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db	
Marking Example	BMD B-RA.. Ex 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 d ; Ex e ; Ex tb		
Thread Type	• Metric (M) EN 60423 • Npt (N) ANSI ASME B1.20.1 • Pg (P) DIN 40430 • Pf (PF) GAS UNI ISO 228/1		

Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 066X	EN 60079-0:2012 EN 60079-1:2007 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0022X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2007-04 Edition:6 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
	№ TC RU C- TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	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.

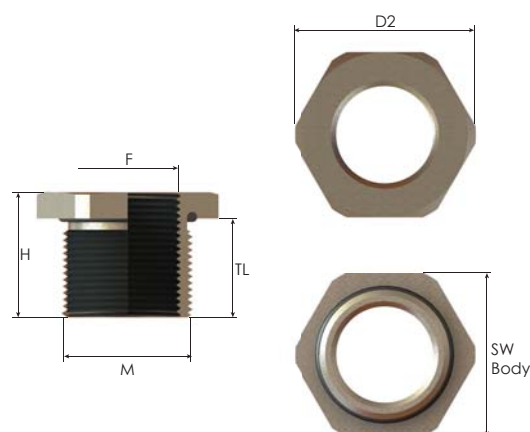


Size Selection Table											
Thread Type		Sizes & Code Nr.									
METRIC EN 60423 (M)		16	20	25	32	40	50	63	75	90	110
		01	1	2	3	4	5	6	7	8	10
NPT ANSI B1.20.1 (N)		3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
		01	1	2	3	4	5	6	7	8	10
PG DIN 40430 (P)		9	11	13,5	16	21	29	36	42	48	
		2	3	4	5	6	7	8	9	10	
PF GAS UNI ISO 228/1 (PF)		3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
		01	1	2	3	4	5	6	7	8	10

Order Encoding							
Code	Male Thread Size Code	•M: Metric •N: NPT •C: PF •P: Pg •G: Gas	Female Thread Size Code	•M: Metric •N: NPT •C: PF •P: Pg •G: Gas	Material	•C: Chloroprene Sealing	Code Example
		Male Thread		Female Thread			
B-RA	01	M	01	M	BN	C	B-RA01M01MBNC

GRUS

Ex d / e Reducers



Thread Type **METRIC** > **METRIC** acc. to EN 60423

Size		Thread Length TL mm	Thread Ø Male M mm	Thread Ø Female F mm	Spanner Width SW Body mm	Outer min. Ø D2 mm	max. Height H mm	Part Number
Male M	Female F							
M20x1.5	M16x1.5	15,0	20,0	16,0	25,0	27,5	19,0	B-RA1M01M
M25x1.5	M16x1.5	15,0	25,0	16,0	30,0	33,0	19,0	B-RA2M01M
	M20x1.5		32,0	20,0				B-RA2M1M
M32x1.5	M20x1.5	15,0	32,0	20,0	36,0	39,8	19,0	B-RA3M1M
	M25x1.5			25,0				B-RA3M2M
M40x1.5	M20x1.5	18,0	40,0	20,0	45,0	50,0	22,0	B-RA4M1M
	M25x1.5			25,0				B-RA4M2M
	M32x1.5			32,0				B-RA4M3M
M50x1.5	M32x1.5	18,0	50,0	32,0	55,0	61,0	23,0	B-RA5M3M
	M40x1.5			40,0				B-RA5M4M
M63x1.5	M40x1.5	18,0	63,0	40,0	70,0	78,0	23,0	B-RA6M4M
	M50x1.5			50,0				B-RA6M5M
M75x1.5	M50x1.5	18,0	75,0	50,0	85,0	94,0	24,0	B-RA7M5M
	M63x1.5			63,0				B-RA7M6M
M90x1.5	M63x1.5	21,0	90,0	63,0	100,0	111,0	29,0	B-RA8M6M
	M75x1.5			75,0				B-RA8M7M
M110x1.5	M75x1.5	21,0	110,0	75,0	120,0	134,0	31,0	B-RA10M7M
	M90x1.5			90,0				B-RA10M8M

Thread Type **METRIC** acc. to EN 60423 > **NPT** acc. to ANSI ASME B1.20.1

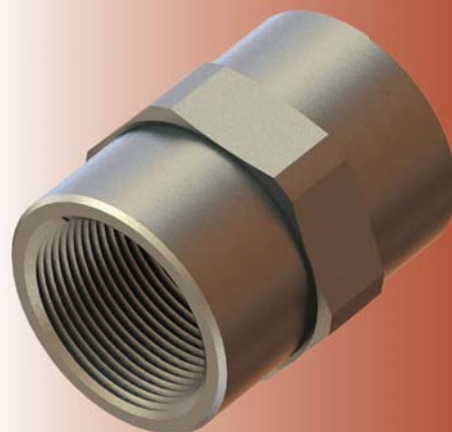
Size		Thread Length TL mm	Thread Ø Male M mm	Thread Ø Female F mm	Spanner Width	Outer min. Ø D2 mm	max. Height H mm	Part Number
Male M	Female F				SW Body mm			
M25x1.5	Npt 1/2"	15,0	25,0	21,34	30,0	33,0	21,0	B-RA2M1N
M32x1.5	Npt 1/2"	18,0	32,0	21,34	36,0	36,0	21,0	B-RA3M1N
	Npt 3/4"			26,67			26,0	B-RA3M2N
M40x1.5	Npt 3/4"	18,0	40,0	26,67	45,0	50,0	26,0	B-RA4M2N
	Npt 1"			33,40			28,0	B-RA4M3N
M50x1.5	Npt 1"	18,0	50,0	33,40	55,0	61,0	28,0	B-RA5M3N
	Npt 1 1/4"			42,16				B-RA5M4N
M63x1.5	Npt 1 1/4"	18,0	63,0	42,16	70,0	78,0	28,0	B-RA6M4N
	Npt 1 1/2"			48,26				B-RA6M5N
M75x1.5	Npt 1 1/2"	18,0	75,0	48,26	85,0	94,0	28,0	B-RA7M5N
	Npt 2"			60,33				B-RA7M6N
M90x1.5	Npt 2"	21,0	90,0	60,33	100,0	111,0	28,0	B-RA8M6N
	Npt 2 1/2"	31,0		73,03			41,0	B-RA8M7N
M110x1.5	Npt 2 1/2"	31,0	110,0	73,03	120,0	134,0	41,0	B-RA10M7N
	Npt 3"	33,0		88,90			43,0	B-RA10M8N

Ex d / e Couplings

Technical Details			
Material	Body	Brass, Brass Bickel Plated Stainless Steel	
	Seal	Galvanised Steel CR (Chloroprene Rubber)	
Protection Class	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material Chloroprene Rubber		
Ex d/e/tb	-40°C / +100°C		
Equipment For	• Gas & Dust potentially explosive atmospheres.		
Suitable for use in	Group II	Gas Group IIC	ZONE1/ZONE2 ZONE21/ZONE 22
	Group III	Dust Group IIIC	
Equipment Marking	Ex II 2GD Ex d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db		
Marking Example	BMD B-RM.. Ex 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 d ; Ex e ; Ex tb		
Thread Type	• Metric (M) EN 60423 • Npt (N) ANSI ASME B1.20.1 • Pg (P) DIN 40430 • Pf (PF) GAS UNI ISO 228/1		

Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 066X	EN 60079-0:2012 EN 60079-1:2007 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0022X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2007-04 Edition:6 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
	№ TC RU C-TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	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

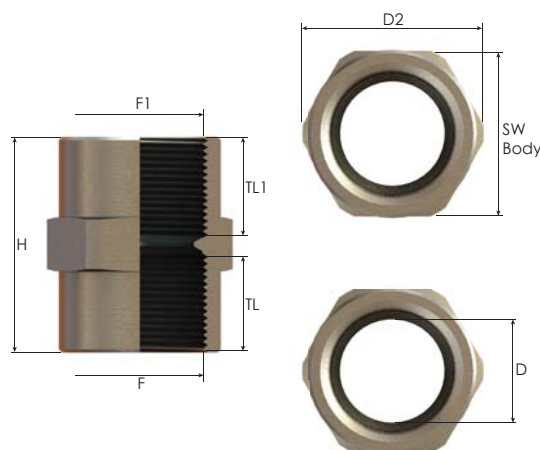
For more information see our webpage.



Size Selection Table											
Thread Type		Sizes & Code Nr.									
METRIC EN 60423 (M)		16	20	25	32	40	50	63	75	90	110
		01	1	2	3	4	5	6	7	8	10
NPT ANSI B1.20.1 (N)		3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
		01	1	2	3	4	5	6	7	8	10
PG DIN 40430 (P)		9	11	13,5	16	21	29	36	42	48	
		2	3	4	5	6	7	8	9	10	
PF GAS UNI ISO 228/1 (PF)		3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
		01	1	2	3	4	5	6	7	8	10

Order Encoding						
Code	Female Thread Size Code	•M: Metric •N: NPT •C: PF •P: Pg •G: Gas	Female Thread Size Code	•M: Metric •N: NPT •C: PF •P: Pg •G: Gas	Material B – Brass BN- Brass Nickel Plated X – Stainless Steel Z – Galvanised steel	Code Example
		Female Thread		Female Thread		
B-RM	01	M	01	M	BN	B-RM01M01MBNC

ARIES **Ex d / e Couplings**



Thread Type **METRIC** > **METRIC** acc. to EN 60423

Size		max. Cable Ø	Thread Length	Thread Length	Thread Ø	Thread Ø	Spanner Width	Outer min. Ø	max. Height	Part Number
Female F	Female F1	D mm	TL mm	TL1 mm	F mm	F1 mm	SW Body mm	D2 mm	H mm	
M16x1.5	M16x1.5	13,0	15,0	15,0	16,0	16,0	20,0	22,0	33,0	B-RM01M01M
M20x1.5	M16x1.5	13,5	15,0	15,0	20,0	16,0	25,0	27,5	33,0	B-RM1M01M
	M20x1.5	16,0				20,0				B-RM1M1M
M25x1.5	M20x1.5	17,0	15,0	15,0	25,0	20,0	32,0	35,5	33,0	B-RM2M1M
	M25x1.5	22,0				25,0				B-RM2M2M
M32x1.5	M25x1.5	22,0	15,0	15,0	32,0	25,0	36,0	39,8	34,0	B-RM3M2M
	M32x1.5	29,0				32,0				B-RM3M3M
M40x1.5	M32x1.5	29,0	18,0	15,0	40,0	32,0	45,0	50,0	37,0	B-RM4M3M
	M40x1.5	37,0				40,0			38,0	B-RM4M4M
M50x1.5	M40x1.5	37,5	18,0	18,0	50,0	40,0	55,0	61,0	40,0	B-RM5M4M
	M50x1.5	47,0				50,0				B-RM5M5M
M63x1.5	M50x1.5	47,0	18,0	18,0	63,0	50,0	68,0	75,0	41,0	B-RM6M5M
	M63x1.5	60,0				63,0				B-RM6M6M
M75x1.5	M63x1.5	60,0	18,0	18,0	75,0	63,0	80,0	89,0	41,0	B-RM7M6M
	M75x1.5	72,0				75,0				B-RM7M7M
M90x1.5	M75x1.5	72,0	21,0	18,0	90,0	75,0	95,0	105,0	45,0	B-RM8M7M
	M90x1.5	87,0		21,0		90,0				B-RM8M8M
M110x1.5	M110x1.5	107,0	21,0	21,0	110,0	110,0	120,0	134,0	45,0	B-RM10M10M

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

Size		max. Cable Ø	Thread Length	Thread Length	Thread Ø	Thread Ø	Spanner Width	Outer min. Ø	max. Height	Part Number
Female F	Female F1	D mm	TL mm	TL1 mm	F mm	F1 mm	SW Body mm	D2 mm	H mm	
NPT 3/8"	NPT 3/8"	12,5	15,0	15,0	17,15	17,15	20,0	22,0	32,0	B-RM02N02
NPT 1/2"	NPT 3/8"	13,0	15,0	15,0	21,34	17,15	25,0	27,5	33,0	B-RM1N02
	NPT 1/2"	16,0				21,34			32,0	B-RM1N1
NPT 3/4"	NPT 1/2"	16,0	15,0	15,0	26,67	21,34	32,0	35,5	33,0	B-RM2N1
	NPT 3/4"	21,0				26,67			32,0	B-RM2N2
NPT 1"	NPT 3/4"	21,0	15,0	15,0	33,40	26,67	36,0	39,8	33,0	B-RM3N2
	NPT 1"	27,0				33,40			32,0	B-RM3N3
NPT 1 1/4"	NPT 1"	35,5	18,0	15,0	42,16	33,40	45,0	50,0	37,0	B-RM4N3
	NPT 1 1/4"	36,0		18,0		42,16			38,0	B-RM4N4
NPT 1 1/2"	NPT 1 1/4"	41,5	18,0	18,0	48,26	42,16	55,0	61,0	39,0	B-RM5N4
	NPT 1 1/2"	41,5				48,26			38,0	B-RM5N5
NPT 2"	NPT 1 1/2"	41,5	18,0	18,0	60,33	48,26	65,0	72,0	42,0	B-RM6N5
	NPT 2"	53,5				60,33			38,0	B-RM6N6
NPT 2 1/2"	NPT 2"	53,5	28,0	18,0	73,03	60,33	80,0	89,0	51,0	B-RM7N6
	NPT 2 1/2"	64,0				73,03			60,0	B-RM7N7
NPT 3"	NPT 2 1/2"	64,0	28,0	28,0	88,90	73,03	95,0	105,0	53,0	B-RM8N7
	NPT 3"	80,0				88,90			58,0	B-RM8N8
NPT 4"	NPT 3"	81,0	28,0	28,0	114,30	88,90	120,0	134,0	59,0	B-RM10N8
	NPT 4"	105,0				114,30			59,0	B-RM10N10

Ex d / e Nipples

Technical Details			
Material	Body	Brass, Brass Bickel Plated Stainless Steel Galvanised Steel	
	Seal	CR (Chloroprene Rubber)	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material Chloroprene Rubber	
	Ex d/e/tb	-40°C / +100°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 d IIC Gb / Ex e IIC Gb / Ex tb IIIC Db	
Marking Example	BMD B-RN.. Ex 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 d ; Ex e ; Ex tb		
Thread Type	• Metric (M) EN 60423 • Npt (N) ANSI ASME B1.20.1 • Pg (P) DIN 40430 • Pf (PF) GAS UNI ISO 228/1		

Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 066X	EN 60079-0:2012 EN 60079-1:2007 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0022X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2007-04 Edition:6 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
	№ TC RU C-TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
	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.

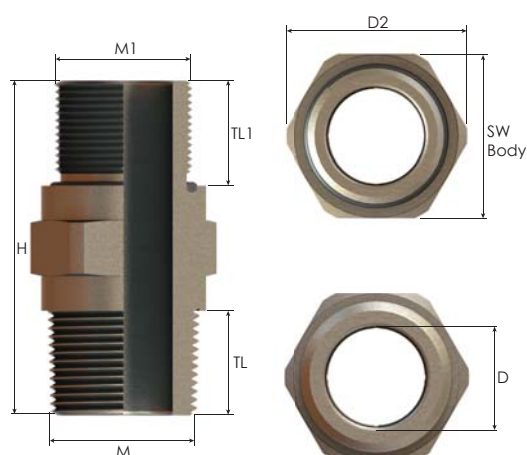


Size Selection Table											
Thread Type		Sizes & Code Nr.									
METRIC EN 60423 (M)		16	20	25	32	40	50	63	75	90	110
		01	1	2	3	4	5	6	7	8	10
NPT ANSI B1.20.1 (N)		3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
		01	1	2	3	4	5	6	7	8	10
PG DIN 40430 (P)		9	11	13,5	16	21	29	36	42	48	
		2	3	4	5	6	7	8	9	10	
PF GAS UNI ISO 228/1 (PF)		3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
		01	1	2	3	4	5	6	7	8	10

Order Encoding						
Code	Male Thread Size Code	•M: Metric •N: NPT •C: PF •P: Pg •G: Gas Male Thread	Male Thread Size Code	•M: Metric •N: NPT •C: PF •P: Pg •G: Gas Male Thread	B – Brass BN- Brass Nickel Plated X – Stainless Steel Z – Galvanised steel Material	•C: Chloroprene Sealing Code Example
B-RN	01	M	01	M	BN	C B-RN01M01MBNC

PAVO

Ex d / e Nipples



Thread Type **METRIC** > **METRIC** acc. to EN 60423

Size		max. Cable Ø	Thread Length	Thread Length	Thread Ø	Thread Ø	Spanner Width	Outer min. Ø	max. Height	Part Number
Male M	Male M1	D mm	TL mm	TL1 mm	M	M1 mm	SW Body mm	D2 mm	H mm	
M16x1.5	M16x1.5	10,0	15,0	15,0	16,0	16,0	20,0	22,0	48,0	B-RN01M01M
M20x1.5	M20x1.5	14,0	15,0	15,0	20,0	20,0	24,0	26,5	48,0	B-RN1M1M
M25x1.5	M25x1.5	19,0	15,0	15,0	25,0	25,0	32,0	35,5	50,0	B-RN2M2M
M32x1.5	M32x1.5	26,0	15,0	15,0	32,0	32,0	36,0	39,8	50,0	B-RN3M3M
M40x1.5	M40x1.5	34,0	18,0	18,0	40,0	40,0	45,0	50,0	56,0	B-RN4M4M
M50x1.5	M50x1.5	44,0	18,0	18,0	50,0	50,0	55,0	61,0	58,0	B-RN5M5M
M63x1.5	M63x1.5	57,0	18,0	18,0	63,0	63,0	70,0	78,0	58,0	B-RN6M6M
M75x1.5	M75x1.5	69,0	18,0	18,0	75,0	75,0	85,0	94,0	62,0	B-RN7M7M
M90x1.5	M90x1.5	84,0	21,0	21,0	90,0	90,0	100,0	111,0	68,0	B-RN8M8M
M110x1.5	M110x1.5	100,0	21,0	21,0	110,0	110,0	120,0	134,0	69,0	B-RN10M10M

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

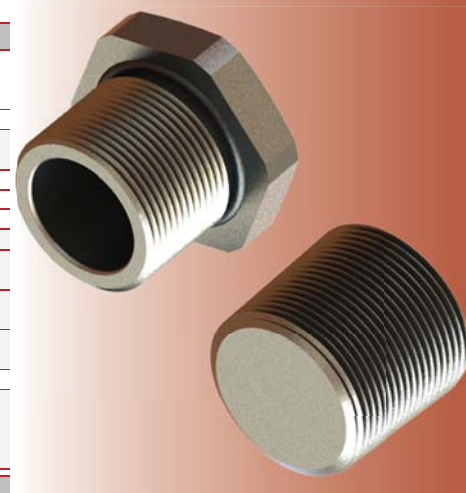
Size		max. Cable Ø	Thread Length	Thread Length	Thread Ø	Thread Ø	Spanner Width	Outer min. Ø	max. Height	Part Number
Male M	Male M1	D mm	TL mm	TL1 mm	M	M1 mm	SW Body mm	D2 mm	H mm	
NPT 3/8"	NPT 3/8"	12,0	16,0	16,0	17,15	17,15	20,0	22,0	50,0	B-RN01N01N
	NPT 1/2"			21,0		21,34	24,0	26,5	55,0	B-RN01N1N
NPT 1/2"	NPT 1/2"	15,5	21,0	21,0	21,34	21,34	24,0	26,5	60,0	B-RN1N1N
	NPT 3/4"					26,67	32,0	35,5	62,0	B-RN1N2N
NPT 3/4"	NPT 3/4"	19,0	21,0	21,0	26,67	26,67	32,0	35,5	62,0	B-RN2N2N
	NPT 1"			26,0		33,40	36,0	39,8	67,0	B-RN2N3N
NPT 1"	NPT 1"	25,0	26,0	26,0	33,40	33,40	36,0	39,8	72,0	B-RN3N3N
	NPT 1 1/4"			28,0		42,16	45,0	50,0	74,0	B-RN3N4N
NPT 1 1/4"	NPT 1 1/4"	33,0	28,0	28,0	42,16	42,16	45,0	50,0	76,0	B-RN4N4N
NPT 1 1/2"	NPT 1 1/2"	40,0	28,0	28,0	48,26	48,26	55,0	61,0	78,0	B-RN5N5N
NPT 2"	NPT 2"	52,0	28,0	28,0	60,33	60,33	65,0	72,0	78,0	B-RN6N6N
NPT 2 1/2"	NPT 2 1/2"	62,0	41,0	41,0	73,03	73,03	80,0	89,0	108,0	B-RN7N7N

Ex d / e Plugs

Technical Details			
Material	Body	Brass, Brass Bickel Plated Stainless Steel Galvanised Steel	
	Seal	CR (Chloroprene Rubber)	
Protection Class	IP 68 - 5 Bar, 30 min IP 66		
Operating Temperature	Seal Material		
	Chloroprene Rubber		
	Ex d/e/tb	-40°C / +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 B-TS.. Ex 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 d ; Ex e ; Ex tb		
Thread Type	• Metric (M) EN 60423 • Npt (N) ANSI ASME B1.20.1 • Pg (P) DIN 40430 • Pf (PF) GAS UNI ISO 228/1		

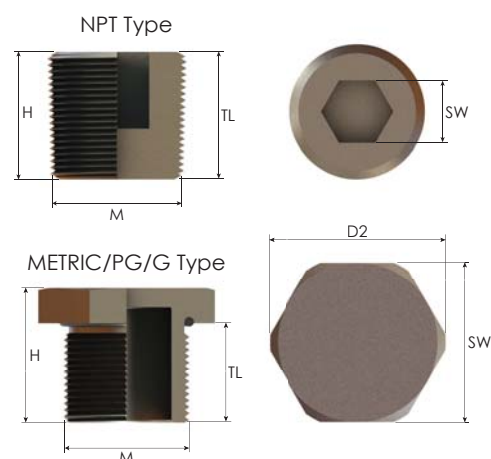
Approvals		
	Certificate Number	Standards
	CESI 13 ATEX 066X	EN 60079-0:2012 EN 60079-1:2007 EN 60079-7:2007 EN 60079-31:2009
	IECEx CES 13.0022X	IEC 60079-0:2011 Edition:6 IEC 60079-1:2007-04 Edition:6 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4
	№ TC RU C-TR.Г505.В.00840	ГОСТ IEC 60079-1:2011 ГОСТ P МЭК 60079-0:2011 ГОСТ P МЭК 60079-7:2012 ГОСТ P МЭК 60079-31:2010 ГОСТ P МЭК 60079-14:2008
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	E-14044	IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31, IEC/EN60079-1 & IEC/EN 62444

For more information see our webpage.



Order Encoding				
Code	Male Thread	Material	Sealing	Code Example
B-TS	M	BN	C	B-TS01BNC

Aquila Ex d / e Plugs



Thread Type **METRIC** acc. to EN 60423

Thread Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer min. Ø D2 mm	max. Height H mm	Part Number
M16x1.5	15,5	16,0	22,0	24,0	21,0	B-TS01M
M20x1.5	15,5	20,0	25,0	27,5	21,0	B-TS1M
M25x1.5	15,5	25,0	30,0	33,0	21,0	B-TS2M
M32x1.5	15,5	32,0	37,0	41,0	21,0	B-TS3M
M40x1.5	17,5	40,0	45,0	50,0	23,0	B-TS4M
M50x1.5	17,5	50,0	55,0	61,0	23,0	B-TS5M
M63x1.5	17,5	63,0	70,0	78,0	23,0	B-TS6M
M75x1.5	20,0	75,0	85,0	89,0	25,0	B-TS7M
M90x1.5	20,0	90,0	100,0	111,0	25,0	B-TS8M
M110x1.5	20,0	110,0	120,0	134,0	25,0	B-TS10M

Thread Type **PG** acc. to DIN 40430

Thread Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer min. Ø D2 mm	max. Height H mm	Part Number
Pg 9	16,5	15,2	20,0	22,0	22,0	B-TS2P
Pg 11	16,5	18,6	25,0	27,5	22,0	B-TS3P
Pg 13,5	16,5	20,4	25,0	27,5	22,0	B-TS4P
Pg 16	16,5	22,5	27,0	30,0	22,0	B-TS5P
Pg 21	17,0	28,3	35,0	39,0	22,0	B-TS6P
Pg 29	17,0	37,0	42,0	47,0	22,0	B-TS7P
Pg 36	17,0	47,0	55,0	61,0	22,0	B-TS8P
Pg 42	17,0	54,0	60,0	66,5	22,0	B-TS9P
Pg 48	17,0	59,3	65,0	72,0	22,0	B-TS10P

Thread Type **PF(G)** acc. to GAS UNI ISO 228/1

Thread Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer min. Ø D2 mm	max. Height H mm	Part Number
Pf 3/8"	17,5	17,14	22,0	24,0	23,0	B-TS01C
Pf 1/2"	18,0	21,34	25,0	27,5	23,0	B-TS1C
Pf 3/4"	18,0	26,67	32,0	35,5	23,0	B-TS2C
Pf 1"	22,0	33,40	37,0	41,0	27,0	B-TS3C
Pf 1 1/4"	22,0	42,16	45,0	50,0	27,0	B-TS4C
Pf 1 1/2"	22,0	48,26	55,0	61,0	27,0	B-TS5C
Pf 2"	22,0	60,33	65,0	72,0	27,0	B-TS6C
Pf 2 1/2"	22,0	73,03	85,0	94,0	30,0	B-TS7C
Pf 3"	22,0	88,90	95,0	105,0	30,0	B-TS8C
Pf 4"	22,0	114,30	120,0	134,0	30,0	B-TS10C

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

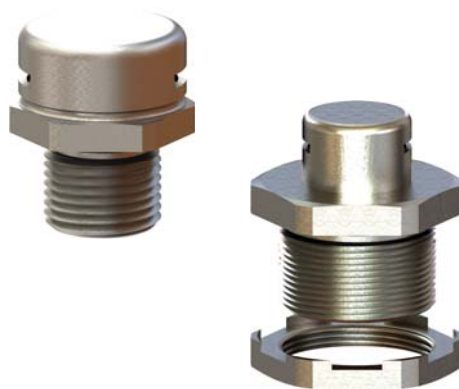
Thread Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer min. Ø D2 mm	max. Height H mm	Part Number
NPT3/8"	16,0	17,14	6,1	-	16,0	B-TS01N
NPT1/2"	21,0	21,34	10,1	-	21,0	B-TS1N
NPT3/4"	21,0	26,67	10,1	-	21,0	B-TS2N
NPT1"	26,0	33,40	14,1	-	26,0	B-TS3N
NPT1 1/4"	28,0	42,16	20,1	-	28,0	B-TS4N
NPT1 1/2"	28,0	48,26	25,1	-	28,0	B-TS5N
NPT2"	28,0	60,33	30,1	-	28,0	B-TS6N
NPT2 1/2"	41,0	73,03	45,1	-	41,0	B-TS7N
NPT3"	43,0	88,90	55,1	-	43,0	B-TS8N
NPT4"	45,0	114,30	65,1	-	45,0	B-TS10

PRESSURE BALANCE ELEMENTS for Gas & Dust Application



Hydra, Ventilation Plugs
Virgo, Drain Plugs

210 - 211
212 - 213



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



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.

Ex e Ventilation Plugs

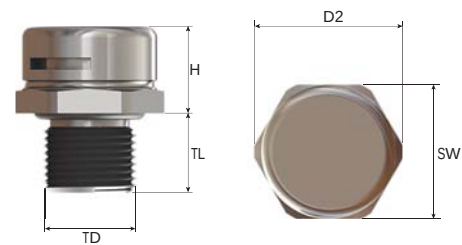
HYDRA

Technical Details			
Material	Body	Stainless Steel	
	Seal	CR (Chloroprene Rubber)	
Protection Class		IP 66 (EN 60529)	
Operating Temperature	Seal Material		
	Chloroprene Rubber		
Ex e/tb		-40°C / +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 tb IIIC Db	
Marking Example		RST DAE... IBExU 10 ATEX 1169 U Ex II2D	
Type Protection		Ex e ; Ex tb	
Thread Type		• Metric (M) EN 60423	
Approvals			
	Certificate Number	Standards	
	IBExU 10 ATEX 1169 U	EN 60079-0:2009	
		EN 60079-7:2007	
		EN 60079-31:2009	
For more information see our webpage.			

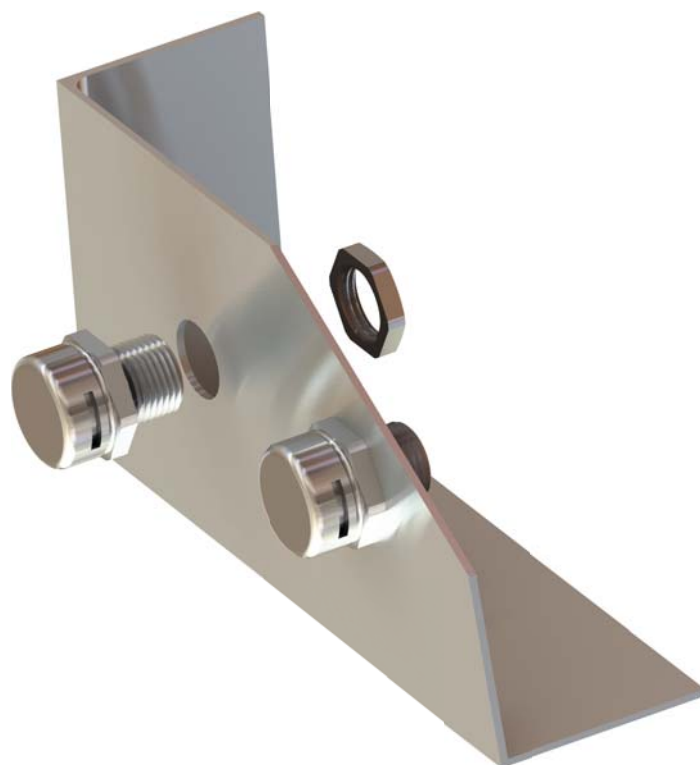


Order Encoding			
Type	Thread	Air Permeability	Code Examples
BBVP-X	M (Metric)	S-M-H-UH	MBBVP-X01 SBBVP-X01L HBBVP-X01 UHHBVP-X01L

HYDRA Ex e Ventilation Plugs



Thread Type METRIC acc. to EN 60423														
Size	Thread Length	Thread Ø	Spanner Width	Outer min. Ø	max. Height	ΔP=1 Psi=70 mBar Average Air Permeability in lt/hour				Water Instrusion pressure in Bar				Part Number
	TL mm	TD mm	SW mm	D2 mm	H mm	S	M	H	UH	S	M	H	UH	
M12x1.5	6,0	12,0	17,0	18,8	11,0	16,0	25,0	120,0	300,0	0,9	0,5	0,2	0,1	BBVP-X01
	10,0													BBVP-X01L



Ex e Drain Plugs

Technical Details			
Material	Body	Brass, Brass Bickel Plated Stainless Steel	
	Bushing	Bronze	
	Seal	Silicone	
Protection Class		IP 68 - 5 Bar, 30 min IP 66	
Operating Temperature		Seal Material Silicone	
Ex e/tb		-60°C / +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 e IIC Gb / Ex tb IIIC Db	
Marking Example		BMD BDRV.. Ex CE 0722 II 2GD Ex e IIC Gb Ex tb IIIC Db Ta-60°C +85°C IP66/68 IMQ 13 ATEX 030/IECEx IMQ 14.0003U	
Type Protection		Ex e ; Ex tb	
Thread Type		• Metric (M) EN 60423 • Npt (N) ANSI ASME B1.20.1	
Approvals			
	Certificate Number	Standards	
	IMQ 13 ATEX 030U	EN 60079-0:2012 EN 60079-7:2007 EN 60079-31:2009	
	IECEx IMQ 14.0003U	IEC 60079-0:2011 Edition:6.0 IEC 60079-31:2008 Edition:1 IEC 60079-7:2006-07 Edition:4	
For more information see our webpage.			

For more information see our webpage.

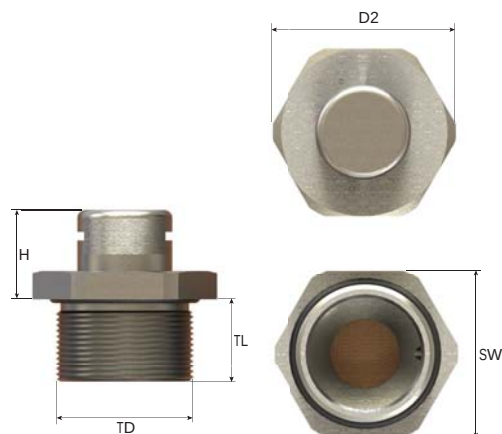


Drain Plug provides a method of effectively draining any moisture within an enclosure whilst allowing the air inside the enclosure to breathe with the surrounding atmosphere.

Order Encoding			
Type	Thread	Material	Code Examples
BDRV	M (Metric) N (Npt)	B (Brass) BN (Brass Nickel Plated) X (Stainless Steel)	BDRV-1MBN BDRV-2NX

VIRGO

Ex e Drain Plugs



Thread Type METRIC acc. to EN 60423						
Thread Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer min. Ø D2 mm	max. Height H mm	Part Number
M20x1,5	15,0	20,0	25	27,5	16,0	BDRV-1M
M25x1,5	15,0	25,0	30	33,0	16,0	BDRV-2M
Thread Type NPT acc. to ANSI ASME B1.20.1						
Thread Size	Thread Length TL mm	Thread Ø TD mm	Spanner Width SW mm	Outer min. Ø D2 mm	max. Height H mm	Part Number
NPT 1/2"	15,0	21,34	25	27,5	16,0	BDRV-1N
NPT 3/4"	15,0	26,67	30	33,0	16,0	BDRV-2N



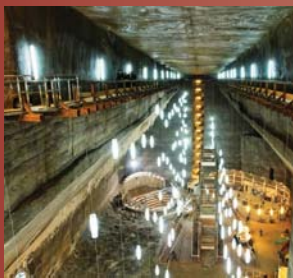
ACCESSORIES for Mining, Gas & Dust Application



Earth Tags
Shrouds
Flat Seals

216
217
218





Earth Tags

Technical Details

Material	Brass, Brass Bickel Plated Stainless Steel 304 Stainless Steel 316
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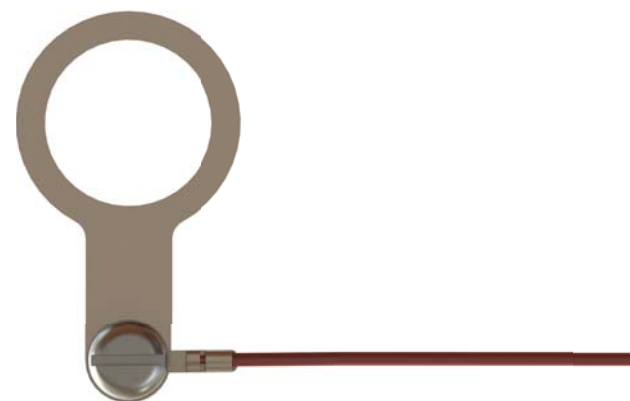
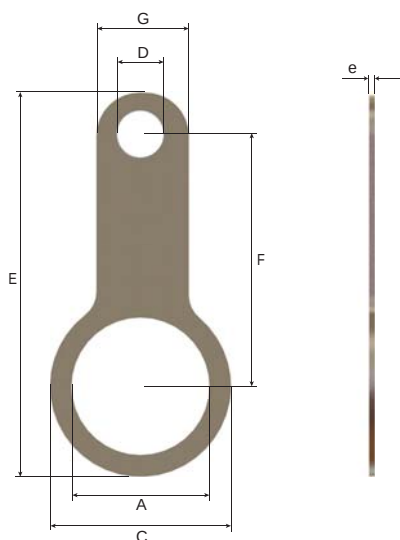
For more information see our webpage.

Size Selection Table

Thread Type	Sizes & Code Nr.											
METRIC	12	16	20	25	32	40	50	63	75	80	90	110
EN 60423 (M)	02	01	1	2	3	4	5	6	7	8	9	10
NPT	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2				
ANSI B1.20.1 (N)	02	01	1	2	3	4	5	6				

Order Encoding

Size	Material	Code Examples
BMET	B (Brass)	BMET01B
BNET	BN (Brass Nickel Plated)	BNET1BN
	X304	BMET2X304
	X316	BMET1X316



Type METRIC

Size	AØ mm	e mm	CØ mm	Dimensions DØ mm	E mm	F mm	G mm	Part Number
M12	12,20	1,5	22,0	6,2	46,00	30,0	12,0	BMET02
M16	16,20	1,5	25,0	6,2	48,75	30,0	12,5	BMET01
M20	20,20	1,5	28,6	6,2	53,55	33,0	12,5	BMET1
M25	25,20	1,5	34,0	6,2	59,50	36,0	13,0	BMET2
M32	32,20	1,5	42,0	12,2	73,00	41,0	22,0	BMET3
M40	40,20	1,5	54,0	14,2	86,50	46,5	26,0	BMET4
M50	50,20	1,5	67,0	14,2	111,50	63,5	29,0	BMET5
M63	63,20	1,5	77,0	14,2	125,50	72,5	29,0	BMET6
M75	75,20	1,5	89,0	14,2	137,50	77,0	32,0	BMET7
M80	80,20	1,5	100,0	14,2	158,0	91,5	32,0	BMET8
M90	90,20	1,5	109,5	14,2	167,00	94,5	35,5	BMET9
M110	110,20	1,5	138,0	14,2	214,00	125,0	40,0	BMET10

Type NPT

Size	AØ mm	e mm	CØ mm	Dimensions DØ mm	E mm	F mm	G mm	Part Number
NPT 1/4"	13,50	1,5	22,0	6,2	46,00	30,0	12,0	BNET02
NPT 3/8"	17,35	1,5	25,0	6,2	48,75	30,0	12,5	BNET01
NPT 1/2"	21,70	1,5	28,6	6,2	53,55	33,0	12,5	BNET1
NPT 3/4"	26,90	1,5	34,0	6,2	59,50	36,0	13,0	BNET2
NPT 1"	33,60	1,5	42,0	12,2	73,00	41,0	22,0	BNET3
NPT 1 1/4"	42,35	1,5	54,0	14,2	86,50	46,5	26,0	BNET4
NPT 1 1/2"	48,50	1,5	67,0	14,2	111,50	63,5	29,0	BNET5
NPT 2"	60,50	1,5	77,0	14,2	125,50	72,5	29,0	BNET6



Technical Details

Material Pvc

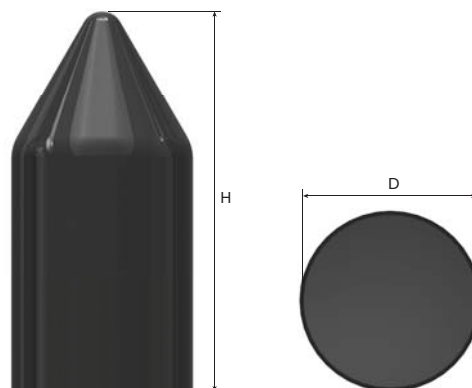
For more information see our webpage.

Size Selection Table

Size	Sizes & Code Nr.									
METRIC	16	20	25	32	40	50	63	75	90	110
EN 60423 (M)	01	1	2	3	4	5	6	7	8	10

Order Encoding

Type	Size	Gland Type	Code Examples
BMSH	M16	KBA (Orion) BU (Octans)	
BMSH	01	BA	BMSH01BA



ORION TYPE SHROUDS					OCTANS TYPE SHROUDS				
Size	Gland Code	D Ø mm	H mm	Part Number	Size	Gland Code	D Ø mm	H mm	Product Number
M16	KBA01S	29.1	67.0±2.0	BMSH01SKBA	M16	BU01	24.5	56.1±2.0	BMSH01BU
M20	KBA1S			BMSH1SKBA	M20	BU1			BMSH1BU
M16	KBA01	31.7	68.0±2.0	BMSH01KBA	M20	BU12	31.0	67.5±2.0	BMSH12BU
M20	KBA1			BMSH1KBA	M25	BU2			BMSH2BU
M25	KBA2S			BMSH2SKBA	M25	BU23			BMSH23BU
M20	KBA1L	35.2	76.6±2.0	BMSH1LKBA	M32	BU3	39.0	72.6±2.0	BMSH3BU
M25	KBA2S	37.2	78.6±2.0	BMSH2SKBA	M32	BU34			BMSH34BU
M25	KBA2			BMSH2KBA	M40	BU4	49.5	91.7±2.0	BMSH4BU
M25	KBA2L	44.2	81.6±2.0	BMSH2LKBA	M40	BU45			BMSH45BU
M32	KBA3S			BMSH3SKBA	M50	BU5			BMSH5BU
M32	KBA3	57.2	112.0±3.0	BMSH3KBA	M50	BU56	70.1	93.9±2.0	BMSH56BU
M40	KBA4S			BMSH4SKBA	M63	BU6			BMSH6BU
M40	KBA4	66.2	117.1±3.0	BMSH4KBA	M63	BU67			BMSH67BU
M50	KBA5S	82.2	132.6±3.0	BMSH5SKBA	M75	BU7	89.0	100.8±3.0	BMSH7BU
M50	KBA5	83.2	132.6±3.0	BMSH5KBA					
M63	KBA6S	89.7	148.0±3.0	BMSH6SKBA					
M63	KBA6	94.2	143.8±3.0	BMSH6KBA					
M75	KBA7S			BMSH7SKBA					
M75	KBA7	110.6	182.7±3.0	BMSH7KBA					
M90	KBA8S			BMSH8SKBA					

Flat Seals

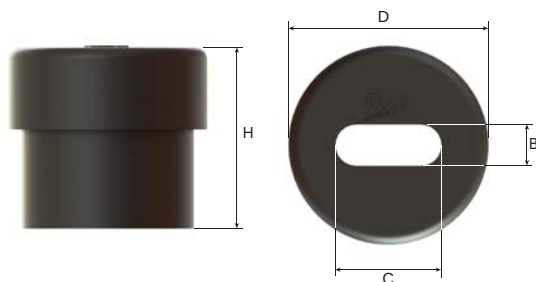
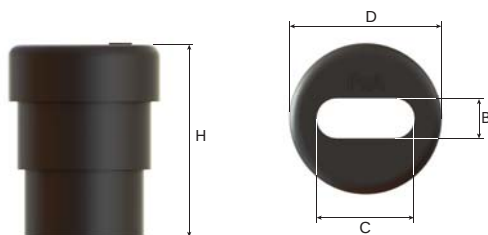
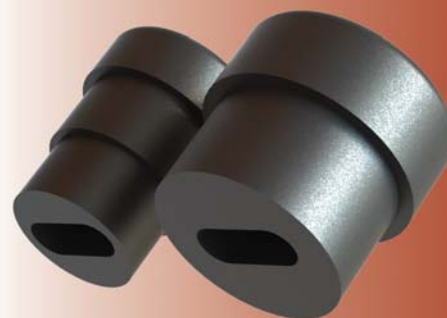
Technical Details

Material	Chloroprene - Silicone	
Operating Temperature	Chloroprene	Silicone -60°C / +140°C
	-40°C / +100°C	-60°C / +140°C

For more information see our webpage.

Order Encoding

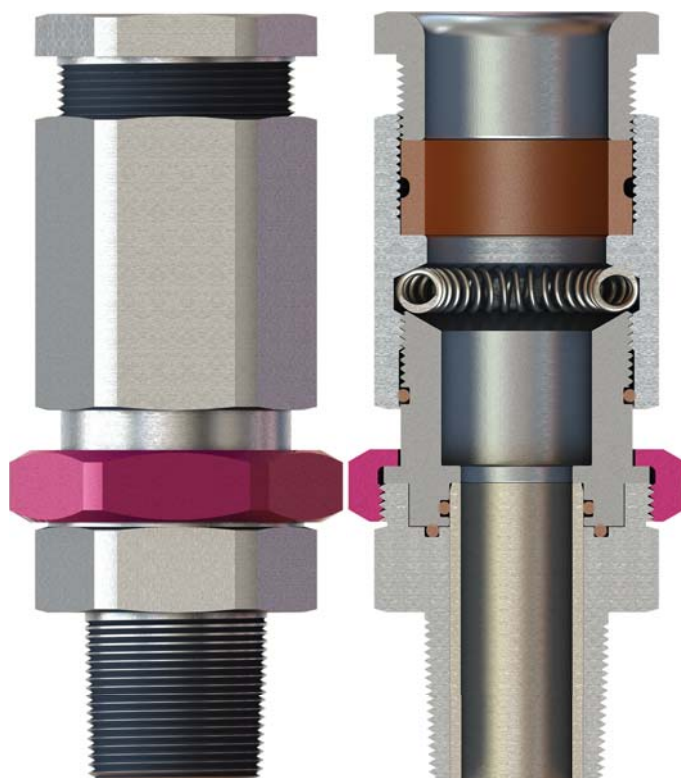
Gland Type	Seal Type	Flat Hole Dimension	Gland Size	Material	Code Examples
EBU (OCTANS)	Fx	A	1 (M 20)	C (Chloroprene) S (Silicone)	FxA1C
EBM (CARINA)		B	EN 60423		FxB1C
EBMS (CYGNUS)		C	1 (NPT 1/2")		FxC2S
EBLS (HYDRUS)		D	ANSI B1.20.1		FxD2C
EBLQ (SCORPIUS)		E	2 (M 25)		FxE1C
EBLN (LUPUS)		F	EN 60423		FxF2C
EBMC (CORVUS)		G	2 (NPT 3/4")		FxG2S
		H	ANSI B1.20.1		FxH2S



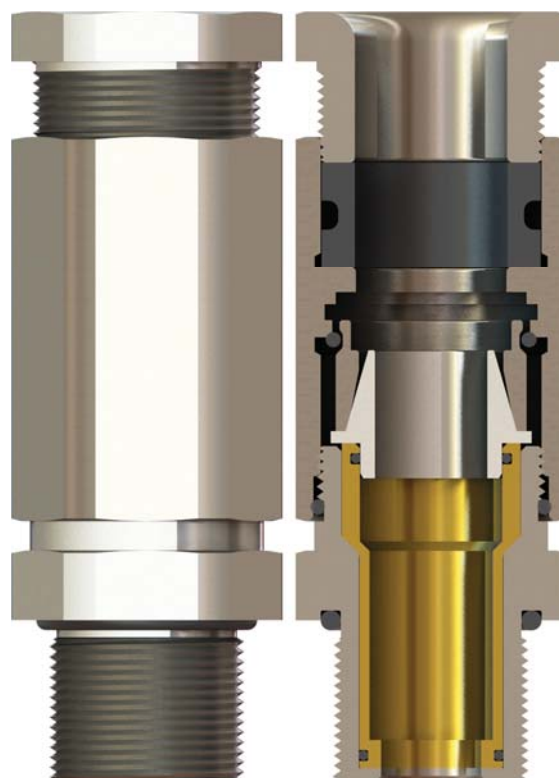
Size		Flat Hole Dimension		Seal Dimensions		Part Number
		A mm	B mm	D mm	H mm	
M 20	NPT 1/2"	5,00	12,20	19,00	24,20	FxA1
		6,00	8,50	19,00		FxB1
		5,50	11,70	19,00		FxC1
		6,00	12,20	19,00		FxD1
		6,30	10,80	19,00		FxE1
		6,70	12,70	19,00		FxG1
M 25	NPT 3/4"	5,00	12,80	24,20	22,00	FxA2
		6,00	8,50	24,20		FxB2
		5,50	11,70	24,20		FxC2
		6,00	14,00	24,20		FxD2
		9,10	12,30	24,20		FxE2
		7,35	13,35	24,20		FxF2
		6,80	15,30	24,20		FxG2
		5,50	10,70	24,20		FxH2

Further Accessories for Hazardous Applications

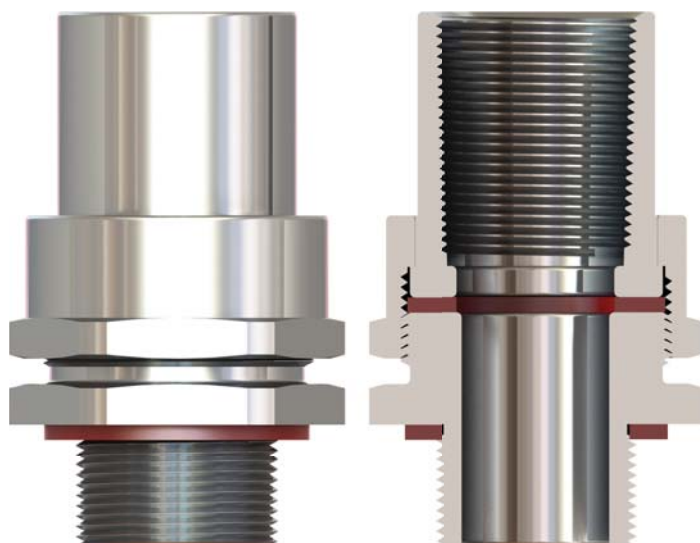
Lock Nuts		
Metal Standard Lock Nuts		
		72
Metal EMC Lock Nuts		
		73
Polyamide Lock Nuts		
		22-23
Replacement Seals		
Reducing Seals		
		126
Double Seals		
		127
Flat Cable Seals		
		128
Multihole Seals		
		129-130
Gaskets		
Gaskets		
		131
Washers		
Serrated Washers		
		132



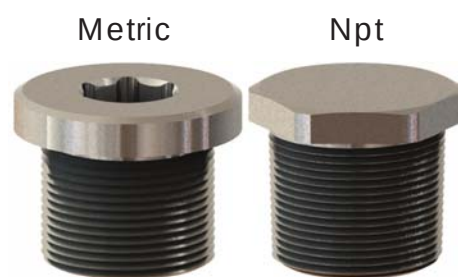
Ex-d Centaurus Teck Glands



Ex-d Centaurus Barrier Glands



Ex-d Union Fittings



Ex-d Plugs



A series of horizontal lines for writing, alternating between solid black lines and dashed black lines, providing a guide for letter height and placement.

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