

Cable Glands for SWA and AWA Cables

ORION for Mining Application



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

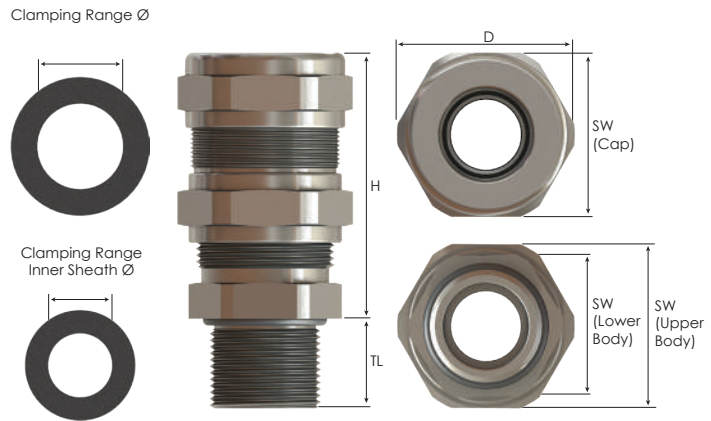
-For more information see our webpage.

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

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

ORION for Mining Application

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Mining Application

Thread Type METRIC acc. to ISO 965-3

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









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

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

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

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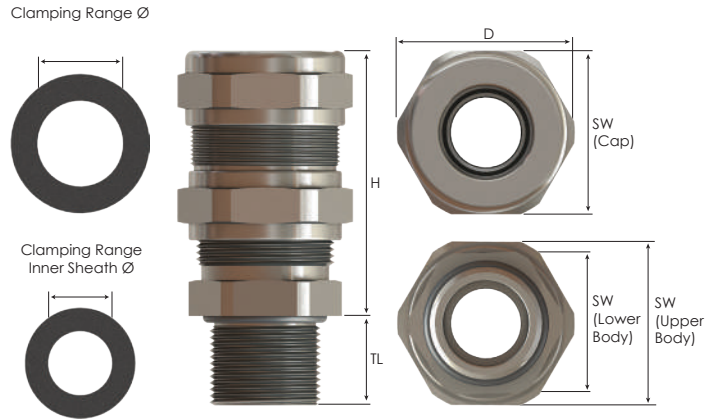
* The standard marking consists ATEX & IECEx only. Marking acc. to other standards on request.

Order Coding

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

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Thread Type NPT acc. to ANSI ASME B1.20.1										
Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length mm	Spanner Width			Outer Ø mm	max. Height mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
NPT 1/2"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	21,0	26	26	24	29,0	49,5	KBA1SN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	21,0	29	29	25	31,5	51,0	KBA1N
	8,5 - 14,5	12,0 - 20,0	0,90 - 1,30	21,0	32	30	28	35,0	54,0	KBA1LN
NPT 3/4"	3,0 - 8,5	6,0 - 12,0	0,70 - 1,20	21,0	26	26	29	31,5	50,0	KBA2XSN
	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	21,0	29	29	29	31,5	52,5	KBA2SN
	8,5 - 16,0	12,0 - 21,0	0,70 - 1,20	21,0	34	34	32	37,0	56,5	KBA2N
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	21,0	40	40	36	44,0	62,5	KBA2LN
NPT 1"	6,0 - 12,0	8,5 - 16,0	0,70 - 1,25	26,0	29	29	36	39,8	52,5	KBA3XSN
	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	26,0	40	40	40	44,0	64,0	KBA3SN
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	26,0	52	52	48	57,0	80,5	KBA3N
NPT 1 1/4"	12,0 - 20,0	16,0 - 26,0	1,30 - 1,70	28,0	40	40	45	50,0	64,0	KBA4XSN
	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	28,0	52	52	48	57,0	81,0	KBA4SN
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	28,0	60	60	55	66,0	92,0	KBA4N
NPT 1 1/2"	15,0 - 26,0	20,0 - 33,0	1,20 - 1,80	28,0	52	52	54	60,0	81,0	KBA5XSN
	20,0 - 32,0	29,0 - 41,0	1,60 - 2,20	28,0	60	60	55	66,0	92,0	KBA5XMN
	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	28,0	75	70	60	83,0	100,0	KBA5SN
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	28,0	74	70	70	81,8	104,5	KBA5N
NPT 2"	22,0 - 35,0	33,0 - 48,0	2,00 - 2,80	28,0	75	70	68	83,0	100,0	KBA6XSN
	27,0 - 41,0	36,0 - 52,0	1,80 - 2,80	28,0	74	70	70	81,8	104,5	KBA6XMN
	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	28,0	80	80	75	89,5	109,5	KBA6SN
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	28,0	85	85	85	94,0	111,5	KBA6N
NPT 2 1/2"	45,0 - 52,0	54,0 - 70,0	1,30 - 2,50	28,0	100	95	90	110,5	128,5	KBA6LN
	35,0 - 45,0	43,0 - 57,0	1,80 - 2,80	41,0	80	80	80	89,5	109,0	KBA7XSN
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	41,0	85	85	85	94,0	111,5	KBA7SN
NPT 3"	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	41,0	100	95	90	110,5	127,5	KBA7N
	40,0 - 52,0	47,0 - 60,0	1,80 - 2,80	43,0	85	85	95	105,0	111,5	KBA8XSN
	45,0 - 60,0	54,0 - 70,0	1,00 - 2,30	43,0	100	95	95	110,5	127,5	KBA8SN
60,0 - 72,0	63,0 - 80,0	1,00 - 3,50	43,0	115	115	110	127,0	158,0	KBA8N	

Thread Type NPT acc. to ANSI ASME B1.20.1 (LT Type)										
Outer Thread Size (Male)	Clamping Range		Armour Wire Ø min-max mm	Outer Thread Length TL mm	Spanner Width			Outer Ø mm	max. Height mm	Part Number
	Inner Sheath Ø min-max mm	Ø min-max mm			Cap SW Cap mm	Upper Body SW Upper Body mm	Lower Body SW Lower Body mm			
NPT 3 1/2"	70,0 - 82,0	78,0 - 90,0	1,5 - 4,4	45,0	120	120	115	134,0	159,5	KBA9MNLT
NPT 4"	80,0 - 92,0	88,0 - 100,0	1,2 - 4,0	46,0	135	135	135	150,0	169,0	KBA10SNLT
	90,0 - 101,0	98,0 - 110,0	2,1 - 5,4	46,0	145	145	145	162,0	180,0	KBA10NLT
NPT 5"	100,0 - 115,0	109,0 - 123,0	2,0 - 5,4	48,0	160	160	160	176,0	202,0	KBA11SNLT