
 TECHNICAL DATA SHEET

ABB cable glands – C1 series

Ex d e armoured cable glands



Features & Benefits:

- Double compression, inner cable and outer sheath
- Deluge proof
- Good corrosion resistance
- Captive internal parts
- Available as a kit, complete with locknut, earth tag, sealing washer and shroud

Applications:

- Suitable for Ex d Ex e and Ex tb applications
- Also suitable for use in Ex i, Ex p and Ex nR applications in accordance with EN/IEC 60079-14
- Gas zones 1, 2 and dust zones 21, 22
- Control panels and junction boxes
- Light fixture and housings
- Machine building
- Heat tracing
- Suitable for cable types:
 - SWA (Steel Wire Armoured),
 - SWB (Steel Wire Braid)
 - AWA (Aluminium Wire Armoured)
 - STA (Steel Tape Armoured)

Material:

- Nickel plated brass or stainless steel 316L
- Chloroprene or silicone seals

ATEX/IECEX metallic cable glands for armoured cable with a double compression configuration

Certifications / Standards:


ATEX: CESI13ATEX041X

IECEX: IECEX CES 13.0014X

EACEx: RU C-GB.AA87.B.00198

CNEEx: CNEEx15.1692X

DNV: TAE00000Y3

UL: E477121

Environmental ratings:
Working Temperature:

- Normal use: -40°C to +100°C (-40°F to 212°F)

Ingress protection:

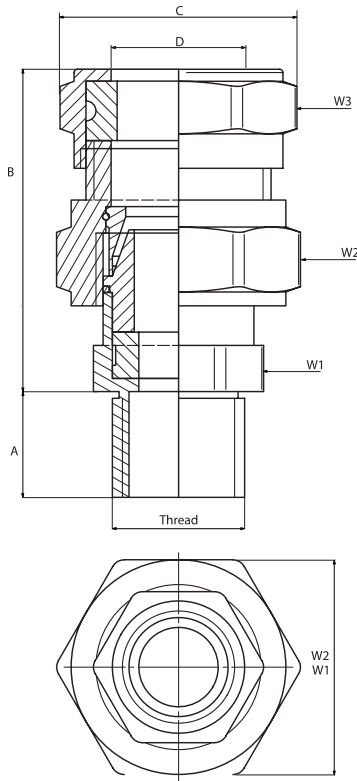
- IP66
- IP68 (5 bar 30 mins)

Chemical resistance guide:

- See publication TDS000081

Conforms to:

- EN/IEC: 60079-0, 60079-1, 60079-7, 60079-34, 62444
- UL514B, UL2225
- Ex II 2 GD
- Ex e IIC Gb
- Ex tb IIIC Db
- Class 1 Zone 1 AEx e IIC
- ATEX Directive: 2014/34/EU
- RoHS (Restriction of Hazardous Substances Directive) 2011/65/EU Incorporating 2015/863 amendment to Annex II
- WEEE (Waste Electrical & Electronic Equipment Directive) 2002/96/EC
- LVD (Low Voltage Directive) 2014/35/EU



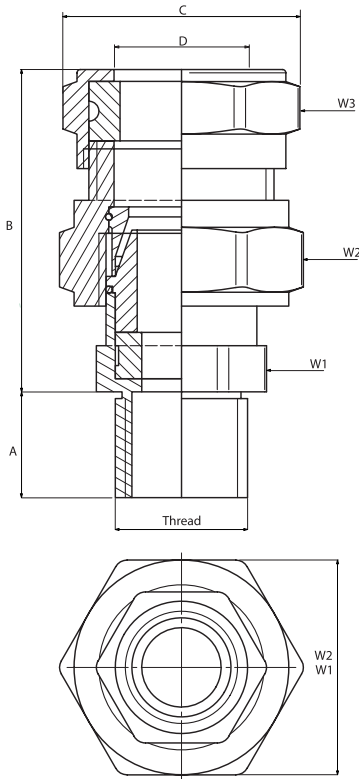
Product selection									
Part no:	Standard size (metric)	Cable range Ø					Nominal dimensions		
		Inner Min. (mm/in)	Outer Min. (mm/in)	A	B	C	W1	W2	W3
EXN03MSC1	M16x1.5	3.0 - 8.5	6.0 - 12.0	16.0	47.5	29.0	22.0	26.0	26.0
		0.118 - 0.335	0.236 - 0.472	0.63	1.87	1.142	0.866	1.024	1.024
EXN03MMC1	M16x1.5	6.0 - 12.0	8.5 - 16.0	16.0	50.0	31.5	25.0	29.0	29.0
		0.236 - 0.472	0.335 - 0.630	0.63	1.969	1.24	0.984	1.142	1.142
EXN04MSC1	M20x1.5	3.0 - 8.5	6.0 - 12.0	16.0	47.5	29.0	24.0	26.0	26.0
		0.118 - 0.335	0.236 - 0.472	0.63	1.87	1.142	0.945	1.024	1.024
EXN04MMC1	M20x1.5	6.0 - 12.0	8.5 - 16.0	16.0	47.0	31.5	25.0	29.0	29.0
		0.236 - 0.472	0.335 - 0.630	0.63	1.929	1.24	0.984	1.142	1.142
EXN04MLC1	M20x1.5	12.0 - 14.5	16.0 - 20.0	16.0	52.0	35.0	28.0	30.0	32.0
		0.472 - 0.571	0.630 - 0.787	0.63	2.047	1.378	1.102	1.181	1.26
EXN05MSC1	M25x1.5	6.0 - 12.0	8.5 - 16.0	18.0	50.5	31.5	29.0	29.0	29.0
		0.236 - 0.472	0.335 - 0.630	0.709	1.988	1.24	1.142	1.142	1.142
EXN05MMC1	M25x1.5	12.0 - 16.0	16.0 - 21.0	18.0	54.5	37.0	32.0	34.0	34.0
		0.472 - 0.630	0.630 - 0.827	0.709	2.146	1.457	1.26	1.339	1.339
EXN05MLC1	M25x1.5	12.0 - 20.0	16.0 - 26.0	18.0	60.5	44.0	36.0	40.0	40.0
		0.472 - 0.787	0.630 - 1.024	0.709	2.382	1.732	1.417	1.575	1.575
EXN06MSC1	M32x1.5	12.0 - 20.0	16.0 - 26.0	18.0	62.0	44.0	40.0	40.0	40.0
		0.472 - 0.787	0.630 - 1.024	0.709	2.441	1.732	1.575	1.575	1.575
EXN06MMC1	M32x1.5	15.0 - 26.0	20.0 - 33.0	18.0	78.5	57.0	48.0	52.0	52.0
		0.591 - 1.024	0.787 - 1.299	0.709	3.091	2.244	1.89	2.047	2.047
EXN07MSC1	M40x1.5	15.0 - 26.0	20.0 - 33.0	18.0	78.5	57.0	48.0	52.0	52.0
		0.591 - 1.024	0.787 - 1.299	0.709	3.091	2.244	1.89	2.047	2.047
EXN07MMC1	M40x1.5	20.0 - 32.0	29.0 - 41.0	18.0	89.5	66.0	55.0	60.0	60.0
		0.787 - 1.260	1.142 - 1.614	0.709	3.524	2.598	2.165	2.362	2.362
EXN08MSC1	M50x1.5	22.0 - 35.0	33.0 - 48.0	18.0	96.5	82.0	60.0	70.0	75.0
		0.866 - 1.378	1.299 - 1.890	0.709	3.799	3.228	2.362	2.756	2.953
EXN08MMC1	M50x1.5	27.0 - 41.0	36.0 - 52.0	18.0	100.0	83.0	70.0	70.0	74.0
		1.063 - 1.614	1.417 - 2.047	0.709	3.937	3.268	2.756	2.756	2.913
EXN09MSC1	M63x1.5	35.0 - 45.0	43.0 - 57.0	20.0	106.0	89.5	75.0	80.0	80.0
		1.378 - 1.772	1.693 - 2.244	0.787	4.173	3.524	2.953	3.15	3.15
EXN09MMC1	M63x1.5	40.0 - 52.0	47.0 - 60.0	20.0	108.0	94.0	85.0	85.0	85.0
		1.575 - 2.047	1.850 - 2.362	0.787	4.252	3.701	3.346	3.346	3.346
EXN10MSC1	M75x1.5	40.0 - 52.0	47.0 - 60.0	20.0	107.0	94.0	85.0	85.0	85.0
		1.575 - 2.047	1.850 - 2.362	0.787	4.252	3.701	3.346	3.346	3.346
EXN10MMC1	M75x1.5	45.0 - 60.0	54.0 - 70.0	20.0	125.0	110.5	90.0	95.0	100.0
		1.772 - 2.362	2.126 - 2.756	0.787	4.921	4.35	3.543	3.74	3.937
EXN11MSC1	M90x1.5	45.0 - 60.0	54.0 - 70.0	20.0	124.0	110.5	95.0	95.0	100.0
		1.772 - 2.362	2.126 - 2.756	0.787	4.882	4.35	3.74	3.74	3.937
EXN11MMC1	M90x1.5	60.0 - 72.0	63.0 - 80.0	20.0	154.0	127.0	110.0	115.0	115.0
		2.362 - 2.835	2.480 - 3.150	0.787	6.063	5.000	4.331	4.528	4.528
EXN12MSC1	M110x2.0	45.0 - 60.0	54.0 - 70.0	20.0	124.0	110.5	120.0	95.0	100.0
		1.772 - 2.362	2.126 - 2.756	0.787	4.882	4.35	4.724	3.74	3.937
EXN12MMC1	M110x2.0	60.0 - 72.0	63.0 - 80.0	20.0	154.0	127.0	120.0	115.0	115.0
		2.362 - 2.835	2.480 - 3.150	0.787	6.063	5.000	4.724	4.528	4.528

* For Stainless Steel version use EXS e.g. EXS03MSC1

** For installation kits with locknuts, shrouds, earth tags, and sealing washer add K e.g. EXN04MMC1K

*** Silicone seals available upon request subject to minimum order quantities

Product must be installed in accordance with applicable national and local electrical codes.



Product selection									
Part no:	Standard size (NPT)	Cable range Ø					Nominal dimensions		
		Inner Min. (mm/in)	Outer Min. (mm/in)	A Min	B Min	C Min	W1	W2	W3
EXN03ASC1	3/8"	3.0 - 8.5	6.0 - 12.0	16.0	47.5	29.0	22.0	26.0	26.0
		0.118 - 0.335	0.236 - 0.472	0.63	1.87	1.142	0.866	1.024	1.024
EXN03AMC1	3/8"	6.0 - 12.0	8.5 - 16.0	16.0	50.0	31.5	25.0	29.0	29.0
		0.236 - 0.472	0.335 - 0.630	0.63	1.969	1.24	0.984	1.142	1.142
EXN04ASC1	1/2"	3.0 - 8.5	6.0 - 12.0	16.0	47.5	29.0	24.0	26.0	26.0
		0.118 - 0.335	0.236 - 0.472	0.63	1.87	1.142	0.945	1.024	1.024
EXN04AMC1	1/2"	6.0 - 12.0	8.5 - 16.0	16.0	49.0	31.5	25.0	29.0	29.0
		0.236 - 0.472	0.335 - 0.630	0.63	1.929	1.24	0.984	1.142	1.142
EXN04ALC1	1/2"	12.0 - 14.5	16.0 - 20.0	16.0	52.0	35.0	28.0	30.0	32.0
		0.472 - 0.571	0.630 - 0.787	0.63	2.047	1.378	1.102	1.181	1.26
EXN05ASC1	3/4"	6.0 - 12.0	8.5 - 16.0	18.0	50.5	31.5	29.0	29.0	29.0
		0.236 - 0.472	0.335 - 0.630	0.709	1.988	1.24	1.142	1.142	1.142
EXN05AMC1	3/4"	12.0 - 16.0	16.0 - 21.0	18.0	54.5	37.0	32.0	34.0	34
		0.472 - 0.630	0.630 - 0.827	0.709	2.146	1.457	1.26	1.339	1.339
EXN05ALC1	3/4"	12.0 - 20.0	16.0 - 26.0	18.0	60.5	44.0	36.0	40.0	40.0
		0.472 - 0.787	0.630 - 1.024	0.709	2.382	1.732	1.417	1.575	1.575
EXN06ASC1	1"	12.0 - 20.0	16.0 - 26.0	18.0	62.0	44.0	40.0	40.0	40.0
		0.472 - 0.787	0.630 - 1.024	0.709	2.441	1.732	1.575	1.575	1.575
EXN06AMC1	1"	20.0 - 32.0	29.0 - 41.0	18.0	89.5	66.0	55.0	60.0	60.0
		0.787 - 1.260	1.142 - 1.614	0.709	3.524	2.598	2.165	2.362	2.362
EXN07ASC1	1 1/4"	22.0 - 35.0	33.0 - 48.0	21.0	96.5	82.0	60.0	70.0	75.0
		0.866 - 1.378	1.299 - 1.890	0.827	3.799	3.228	2.362	2.756	2.953
EXN07AMC1	1 1/4"	27.0 - 41.0	36.0 - 52.0	21.0	100.0	83.0	70.0	70.0	74.0
		1.063 - 1.614	1.417 - 2.047	0.827	3.937	3.268	2.756	2.756	2.913
EXN08ASC1	1 1/2"	35.0 - 45.0	43.0 - 57.0	21.0	106.0	89.5	75.0	80.0	80.0
		1.378 - 1.772	1.693 - 2.244	0.827	4.173	3.524	2.953	3.15	3.15
EXN08AMC1	1 1/2"	40.0 - 52.0	47.0 - 60.0	21.0	108.0	94.0	85.0	85.0	85.0
		1.575 - 2.047	1.850 - 2.362	0.827	4.252	3.701	3.346	3.346	3.346
EXN09ASC1	2"	40.0 - 52.0	47.0 - 60.0	21.0	108.0	94.0	85.0	85.0	85.0
		1.575 - 2.047	1.850 - 2.362	0.827	4.252	3.701	3.346	3.346	3.346
EXN09AMC1	2"	45.0 - 60.0	54.0 - 70.0	21.0	125.0	110.5	90.0	95.0	100.0
		1.772 - 2.362	2.126 - 2.756	0.827	4.921	4.35	3.543	3.74	3.937
EXN10ASC1	2 1/2"	45.0 - 60.0	54.0 - 70.0	21.0	124.0	110.5	95.0	95.0	100.0
		1.772 - 2.362	2.126 - 2.756	0.827	4.882	4.35	3.74	3.74	3.937
EXN10AMC1	2 1/2"	60.0 - 72.0	63.0 - 80.0	21.0	154.0	127.0	110.0	115.0	115.0
		2.362 - 2.835	2.480 - 3.150	0.827	6.063	5.000	4.331	4.528	4.528
EXN11ASC1	3"	45.0 - 60.0	54.0 - 70.0	21.0	124.0	110.5	120.0	95.0	100.0
		1.772 - 2.362	2.126 - 2.756	0.827	4.882	4.350	4.724	3.74	3.937
EXN11AMC1	3"	60.0 - 72.0	63.0 - 80.0	21.0	154.0	127.0	120.0	115.0	115.0
		2.362 - 2.835	2.480 - 3.150	0.8	6.1	5.0	4.7	4.5	4.528
EXN12ASC1	3 1/2"	45.0 - 60.0	54.0 - 70.0	21.0	124.0	110.5	120.0	95	100.0
		1.772 - 2.362	2.126 - 2.756	0.787	4.882	4.35	4.724	3.74	3.937
EXN12AMC1	3 1/2"	60.0 - 72.0	63.0 - 80.0	21.0	154.0	127.0	120.0	115.0	115.0
		2.362 - 2.835	2.480 - 3.150	0.787	6.063	5	4.724	4.528	4.528

* For Stainless Steel version use EXS e.g. EXS03MSC1
 ** For installation kits with locknuts, shrouds, earth tags, and sealing washer add K e.g. EXN04MMC1K
 *** Silicone seals available upon request subject to minimum order quantities
 Product must be installed in accordance with applicable national and local electrical codes.

ABB Inc.
 Electrification products
 Memphis, Tennessee
 USA

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB Inc. does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB Inc. Copyright© 2017 ABB Inc. All rights reserved