EMC cable glands

"UL/CSA Listed"

Use

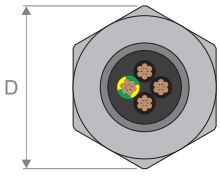
In the industrial sector, electromagnetic compatibility (EMC) is an essential requirement to ensure the proper operation of machines and electronic systems that are sensitive to electromagnetic interference. Such undesirable effects, however, can be effectively mitigated by ensuring proper shielding of all system components, and not only the cables.
As passive components, cable glands must ensure that the quality of the shielding at critical interconnection points remains intact and that no loss in shielding effectiveness occurs. EMC cable glands ensure the continuity of the shielding at cable entry points, actively contributing to the maintenance of the system's EMC performance. They are particularly suitable for applications involving variable frequency drives (VFDs), where high EMC effectiveness is required to reduce electromagnetic interference. Thanks to the elastic conductive contact system, the cable shield is clamped directly and uniformly, ensuring high EMC performance with low transfer impedance, without any risk of damage to the shield during installation or removal. The special design geometry allows a uniform distribution of the clamping force on the cable, ensuring mechanical stability and long-term reliability. Complete with an O-ring on the thread, these cable glands are available with short or long threads and can be installed either with a locknut or directly into threaded entries. The sealing gasket provides good chemical resistance and offers a degree of protection up to IP69, while complying with Type 4X requirements, making the product suitable for harsh industrial environments and outdoor applications.

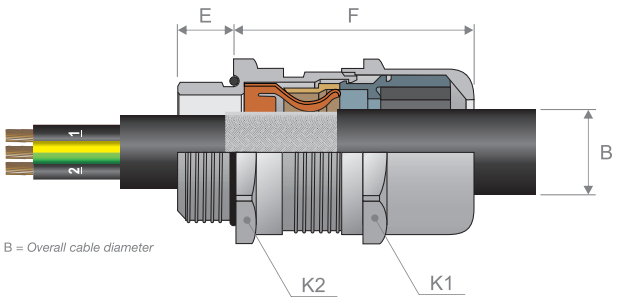
Technical data

Characteristics	Value/property
Material	Nickel-plated brass, AISI 303 and AISI 316L stainless steel
Sealing ring material	Copper alloy
Sealing ring material	Chloroprene, watertight seal on outer sheath of cable
O-ring material	NBR
Compatible cables	Non-armoured shielded cables. Cable/cable gland matching table in Appendix R3.
Temperature range	-20°C, +100°C
Protection class(1)	UL Type 1, 4X, 12, 13 IP66, IP68(2), IP69
Standards of construction	EN/IEC 62444, EN 60423, ASME B1.20.1 UL 50E, UL 514B (ccn QCRV, QCRV7) CSA C22.2 N. 18.3, CSA C22.2 N. 94.2
Standards of use	NPFA 70 (NEC), NFPA 79, UL 508a CSA C22.1 (CE Code), CSA C22.2 N.301, CSA C22.2 N.286 UL 50E, UL 514B, CSA C22.2 N. 18.3, CSA C22.2 N. 94.2 IEC 61000-5-2

(1) Only if installed with original accessories.
(2) IP68 tested at 5 bar for 30 min.

Coding and dimensions





Code	Material	Thread	Sizes [mm (inch)] B Min	B Max	D	K1	K2	E	F
PCM360_M012X010ON (2)	ON	M12 X 1.5	3,0 (0,118)	6,5 (0,256)	15,5 (0,610)	14,0 (0,551)	14,0 (0,551)	6,0 (0,236)	30,0 (1,181)
PCM360_M016X010ON (2)	ON	M16 X 1.5	5,0 (0,197)	10,0 (0,394)	22,0 (0,866)	20,0 (0,787)	20,0 (0,787)	6,0 (0,236)	35,0 (1,378)
PCM360_M020X010ON (1)	ON	M20 X 1.5	6,0 (0,236)	12,0 (0,472)	24,5 (0,965)	22,0 (0,866)	22,0 (0,866)	6,0 (0,236)	33,5 (1,319)

Code	Material	Thread	Sizes [mm (inch)]						
			B		D	K1	K2	E	F
			Min	Max					
PCM360_M020X020ON [1]	ON	M20 X 1.5	7,5 (0,295)	14,0 (0,551)	26,8 (1,055)	24,0 (0,945)	24,0 (0,945)	8,0 (0,315)	41,5 (1,634)
PCM360_M025X010ON [1]	ON	M25 X 1.5	10,0 (0,394)	18,0 (0,709)	33,0 (1,299)	30,0 (1,181)	30,0 (1,181)	8,0 (0,315)	44,5 (1,752)
PCM360_M032X010ON [1]	ON	M32 X 1.5	16,0 (0,630)	25,0 (0,984)	44,5 (1,752)	40,0 (1,575)	40,0 (1,575)	9,0 (0,354)	55,0 (2,165)
PCM360_M040X010ON [1]	ON	M40 X 1.5	22,0 (0,866)	32,0 (1,260)	55,5 (2,185)	50,0 (1,969)	50,0 (1,969)	9,0 (0,354)	62,5 (2,461)
PCM360_M050X010ON [1]	ON	M50 X 1.5	30,0 (1,181)	38,0 (1,496)	64,0 (2,520)	58,0 (2,283)	58,0 (2,283)	9,0 (0,354)	74,0 (2,913)
PCM360_M063X010ON [1]	ON	M63 X 1.5	34,0 (1,339)	44,0 (1,732)	75,0 (2,953)	64,0 (2,520)	68,0 (2,677)	14,0 (0,551)	60,0 (2,362)
PCM360_M063X020ON [1]	ON	M63 X 1.5	37,0 (1,457)	53,0 (2,087)	83,0 (3,268)	75,0 (2,953)	75,0 (2,953)	10,0 (0,394)	75,0 (2,953)
PCM360_N025X010ON [2]	ON	NPT 1/4"	3,0 (0,118)	6,5 (0,256)	16,5 (0,650)	14,0 (0,551)	15,0 (0,591)	11,5 (0,453)	30,0 (1,181)
PCM360_N037X010ON [2]	ON	NPT 3/8"	5,0 (0,197)	10,0 (0,394)	22,0 (0,866)	20,0 (0,787)	20,0 (0,787)	11,5 (0,453)	35,0 (1,378)
PCM360_N050X010ON [1]	ON	NPT 1/2"	6,0 (0,236)	12,0 (0,472)	24,5 (0,965)	22,0 (0,866)	22,0 (0,866)	15,0 (0,591)	39,5 (1,555)
PCM360_N050X020ON [1]	ON	NPT 1/2"	7,5 (0,295)	14,0 (0,551)	26,8 (1,055)	24,0 (0,945)	24,0 (0,945)	15,0 (0,591)	41,5 (1,634)
PCM360_N075X010ON [1]	ON	NPT 3/4"	10,0 (0,394)	18,0 (0,709)	33,0 (1,299)	30,0 (1,181)	30,0 (1,181)	15,0 (0,591)	43,5 (1,713)
PCM360_N100X010ON [1]	ON	NPT 1"	16,0 (0,630)	25,0 (0,984)	44,5 (1,752)	40,0 (1,575)	40,0 (1,575)	20,0 (0,787)	54,0 (2,126)
PCM360_N125X010ON [1]	ON	NPT 1"1/4	22,0 (0,866)	32,0 (1,260)	55,5 (2,185)	50,0 (1,969)	50,0 (1,969)	20,0 (0,787)	63,0 (2,480)
PCM360_N150X010ON [1]	ON	NPT 1"1/2	30,0 (1,181)	38,0 (1,496)	64,0 (2,520)	58,0 (2,283)	58,0 (2,283)	22,0 (0,866)	73,0 (2,874)
PCM360_N200X010ON [1]	ON	NPT 2"	34,0 (1,339)	44,0 (1,732)	75,0 (2,953)	64,0 (2,520)	68,0 (2,677)	22,0 (0,866)	73,0 (2,874)
PCM360_M012X010A3 [2]	A3	M12 X 1.5	3,0 (0,118)	6,5 (0,256)	15,5 (0,610)	14,0 (0,551)	14,0 (0,551)	6,0 (0,236)	30,0 (1,181)
PCM360_M016X010A3 [2]	A3	M16 X 1.5	5,0 (0,197)	10,0 (0,394)	22,0 (0,866)	20,0 (0,787)	20,0 (0,787)	6,0 (0,236)	35,0 (1,378)
PCM360_M020X010A3 [1]	A3	M20 X 1.5	6,0 (0,236)	12,0 (0,472)	24,5 (0,965)	22,0 (0,866)	22,0 (0,866)	6,0 (0,236)	33,5 (1,319)
PCM360_M020X020A3 [1]	A3	M20 X 1.5	7,5 (0,295)	14,0 (0,551)	26,8 (1,055)	24,0 (0,945)	24,0 (0,945)	8,0 (0,315)	41,5 (1,634)
PCM360_M025X010A3 [1]	A3	M25 X 1.5	10,0 (0,394)	18,0 (0,709)	33,0 (1,299)	30,0 (1,181)	30,0 (1,181)	8,0 (0,315)	44,5 (1,752)
PCM360_M032X010A3 [1]	A3	M32 X 1.5	16,0 (0,630)	25,0 (0,984)	44,5 (1,752)	40,0 (1,575)	40,0 (1,575)	9,0 (0,354)	55,0 (2,165)
PCM360_M040X010A3 [1]	A3	M40 X 1.5	22,0 (0,866)	32,0 (1,260)	55,5 (2,185)	50,0 (1,969)	50,0 (1,969)	9,0 (0,354)	62,5 (2,461)
PCM360_M050X010A3 [1]	A3	M50 X 1.5	30,0 (1,181)	38,0 (1,496)	64,0 (2,520)	58,0 (2,283)	58,0 (2,283)	9,0 (0,354)	74,0 (2,913)
PCM360_M063X010A3 [1]	A3	M63 X 1.5	34,0 (1,339)	44,0 (1,732)	75,0 (2,953)	64,0 (2,520)	68,0 (2,677)	14,0 (0,551)	60,0 (2,362)
PCM360_M063X020A3 [1]	A3	M63 X 1.5	37,0 (1,457)	53,0 (2,087)	83,0 (3,268)	75,0 (2,953)	75,0 (2,953)	10,0 (0,394)	75,0 (2,953)
PCM360_N025X010A3 [2]	A3	NPT 1/4"	3,0 (0,118)	6,5 (0,256)	16,5 (0,650)	14,0 (0,551)	15,0 (0,591)	11,5 (0,453)	30,0 (1,181)
PCM360_N037X010A3 [2]	A3	NPT 3/8"	5,0 (0,197)	10,0 (0,394)	22,0 (0,866)	20,0 (0,787)	20,0 (0,787)	11,5 (0,453)	35,0 (1,378)
PCM360_N050X010A3 [1]	A3	NPT 1/2"	6,0 (0,236)	12,0 (0,472)	24,5 (0,965)	22,0 (0,866)	22,0 (0,866)	15,0 (0,591)	39,5 (1,555)
PCM360_N050X020A3 [1]	A3	NPT 1/2"	7,5 (0,295)	14,0 (0,551)	26,8 (1,055)	24,0 (0,945)	24,0 (0,945)	15,0 (0,591)	41,5 (1,634)
PCM360_N075X010A3 [1]	A3	NPT 3/4"	10,0 (0,394)	18,0 (0,709)	33,0 (1,299)	30,0 (1,181)	30,0 (1,181)	15,0 (0,591)	43,5 (1,713)
PCM360_N100X010A3 [1]	A3	NPT 1"	16,0 (0,630)	25,0 (0,984)	44,5 (1,752)	40,0 (1,575)	40,0 (1,575)	20,0 (0,787)	54,0 (2,126)
PCM360_N125X010A3 [1]	A3	NPT 1"1/4	22,0 (0,866)	32,0 (1,260)	55,5 (2,185)	50,0 (1,969)	50,0 (1,969)	20,0 (0,787)	63,0 (2,480)

Code	Material	Thread	Sizes [mm (inch)]						
			B		D	K1	K2	E	F
			Min	Max					
PCM360_N150X010A3 (1)	A3	NPT 1"1/2	30,0 (1,181)	38,0 (1,496)	64,0 (2,520)	58,0 (2,283)	58,0 (2,283)	22,0 (0,866)	73,0 (2,874)
PCM360_N200X010A3 (1)	A3	NPT 2"	34,0 (1,339)	44,0 (1,732)	75,0 (2,953)	64,0 (2,520)	68,0 (2,677)	22,0 (0,866)	73,0 (2,874)
PCM360_M012X010A6 (2)	A6	M12 X 1.5	3,0 (0,118)	6,5 (0,256)	15,5 (0,610)	14,0 (0,551)	14,0 (0,551)	6,0 (0,236)	30,0 (1,181)
PCM360_M016X010A6 (2)	A6	M16 X 1.5	5,0 (0,197)	10,0 (0,394)	22,0 (0,866)	20,0 (0,787)	20,0 (0,787)	6,0 (0,236)	35,0 (1,378)
PCM360_M020X010A6 (1)	A6	M20 X 1.5	6,0 (0,236)	12,0 (0,472)	24,5 (0,965)	22,0 (0,866)	22,0 (0,866)	6,0 (0,236)	33,5 (1,319)
PCM360_M020X020A6 (1)	A6	M20 X 1.5	7,5 (0,295)	14,0 (0,551)	26,8 (1,055)	24,0 (0,945)	24,0 (0,945)	8,0 (0,315)	41,5 (1,634)
PCM360_M025X010A6 (1)	A6	M25 X 1.5	10,0 (0,394)	18,0 (0,709)	33,0 (1,299)	30,0 (1,181)	30,0 (1,181)	8,0 (0,315)	44,5 (1,752)
PCM360_M032X010A6 (1)	A6	M32 X 1.5	16,0 (0,630)	25,0 (0,984)	44,5 (1,752)	40,0 (1,575)	40,0 (1,575)	9,0 (0,354)	55,0 (2,165)
PCM360_M040X010A6 (1)	A6	M40 X 1.5	22,0 (0,866)	32,0 (1,260)	55,5 (2,185)	50,0 (1,969)	50,0 (1,969)	9,0 (0,354)	62,5 (2,461)
PCM360_M050X010A6 (1)	A6	M50 X 1.5	30,0 (1,181)	38,0 (1,496)	64,0 (2,520)	58,0 (2,283)	58,0 (2,283)	9,0 (0,354)	74,0 (2,913)
PCM360_M063X010A6 (1)	A6	M63 X 1.5	34,0 (1,339)	44,0 (1,732)	75,0 (2,953)	64,0 (2,520)	68,0 (2,677)	14,0 (0,551)	60,0 (2,362)
PCM360_M063X020A6 (1)	A6	M63 X 1.5	37,0 (1,457)	53,0 (2,087)	83,0 (3,268)	75,0 (2,953)	75,0 (2,953)	10,0 (0,394)	75,0 (2,953)
PCM360_N025X010A6 (2)	A6	NPT 1/4"	3,0 (0,118)	6,5 (0,256)	16,5 (0,650)	14,0 (0,551)	15,0 (0,591)	11,5 (0,453)	30,0 (1,181)
PCM360_N037X010A6 (2)	A6	NPT 3/8"	5,0 (0,197)	10,0 (0,394)	22,0 (0,866)	20,0 (0,787)	20,0 (0,787)	11,5 (0,453)	35,0 (1,378)
PCM360_N050X010A6 (1)	A6	NPT 1/2"	6,0 (0,236)	12,0 (0,472)	24,5 (0,965)	22,0 (0,866)	22,0 (0,866)	15,0 (0,591)	39,5 (1,555)
PCM360_N050X020A6 (1)	A6	NPT 1/2"	7,5 (0,295)	14,0 (0,551)	26,8 (1,055)	24,0 (0,945)	24,0 (0,945)	15,0 (0,591)	41,5 (1,634)
PCM360_N075X010A6 (1)	A6	NPT 3/4"	10,0 (0,394)	18,0 (0,709)	33,0 (1,299)	30,0 (1,181)	30,0 (1,181)	15,0 (0,591)	43,5 (1,713)
PCM360_N100X010A6 (1)	A6	NPT 1"	16,0 (0,630)	25,0 (0,984)	44,5 (1,752)	40,0 (1,575)	40,0 (1,575)	20,0 (0,787)	54,0 (2,126)
PCM360_N125X010A6 (1)	A6	NPT 1"1/4	22,0 (0,866)	32,0 (1,260)	55,5 (2,185)	50,0 (1,969)	50,0 (1,969)	20,0 (0,787)	63,0 (2,480)
PCM360_N150X010A6 (1)	A6	NPT 1"1/2	30,0 (1,181)	38,0 (1,496)	64,0 (2,520)	58,0 (2,283)	58,0 (2,283)	22,0 (0,866)	73,0 (2,874)
PCM360_N200X010A6 (1)	A6	NPT 2"	34,0 (1,339)	44,0 (1,732)	75,0 (2,953)	64,0 (2,520)	68,0 (2,677)	22,0 (0,866)	73,0 (2,874)

Materials' description: ON = Nickel-plated brass, A3 = AISI 303 stainless steel, A6 = AISI 316L stainless steel (1) Certificato c(UL)us Listed (QCRV, QCRV7).

(1) c(UL)us Listed certified (ccn QCRV, QCRV7).

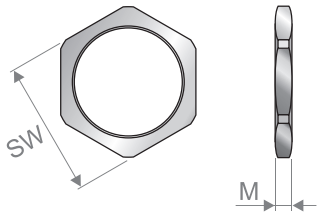
(2) c(UR)us Recognized certified (ccn QCRV2, QCRV8).

(3) Not c(UL)us Listed and c(UR)us Recognized certified.

- Locknuts are not included, provided separately.

- Due to the production tolerances to which electrical cables are subject, it is recommended to choose the correct cable gland by measuring the minimum and maximum diameter of the cable to be installed.

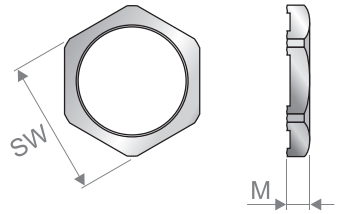
Lock nut



Code	Material	Thread	Tightening key [mm (inch)] SW	Sizes [mm (inch)] M
PCFM10_M016X	ON	M16x1,5	19,0 (0,748)	3,0 (0,118)
PCFM10_M020X	ON	M20x1,5	24,0 (0,945)	3,5 (0,138)
PCFM10_M025X	ON	M25x1,5	30,0 (1,181)	4,0 (0,157)
PCFM10_M032X	ON	M32x1,5	36,0 (1,417)	4,0 (0,157)
PCFM10_M040X	ON	M40x1,5	46,0 (1,811)	5,0 (0,197)
PCFM10_M050X	ON	M50x1,5	55,0 (2,165)	5,5 (0,217)
PCFM10_M063X	ON	M63x1,5	70,0 (2,756)	6,0 (0,236)
PCFM11_N050XON	ON	NPT 1/2"	24,0 (0,945)	5,0 (0,197)
PCFM11_N075XON	ON	NPT 3/4"	34,0 (1,339)	6,0 (0,236)
PCFM11_N100XON	ON	NPT 1"	42,0 (1,654)	6,0 (0,236)
PCFM11_N125XON	ON	NPT 1"1/4	52,0 (2,047)	7,0 (0,276)
PCFM11_N150XON	ON	NPT 1"1/2	60,0 (2,362)	7,0 (0,276)
PCFM10_M016XA6	A6	M16x1,5	19,0 (0,748)	3,0 (0,118)
PCFM10_M020XA6	A6	M20x1,5	24,0 (0,945)	3,5 (0,138)
PCFM10_M025XA6	A6	M25x1,5	30,0 (1,181)	3,5 (0,138)
PCFM10_M032XA6	A6	M32x1,5	36,0 (1,417)	4,5 (0,177)
PCFM10_M040XA6	A6	M40x1,5	46,0 (1,811)	4,5 (0,177)
PCFM10_M050XA6	A6	M50x1,5	55,0 (2,165)	5,5 (0,217)
PCFM10_M063XA6	A6	M63x1,5	70,0 (2,756)	6,0 (0,236)
PCFM11_N050XA6	A6	NPT 1/2"	24,0 (0,945)	5,0 (0,197)
PCFM11_N075XA6	A6	NPT 3/4"	35,0 (1,378)	6,0 (0,236)
PCFM11_N100XA6	A6	NPT 1"	46,0 (1,811)	6,0 (0,236)
PCFM11_N125XA6	A6	NPT 1"1/4	55,0 (2,165)	7,0 (0,276)
PCFM11_N150XA6	A6	NPT 1"1/2	60,0 (2,362)	7,0 (0,276)

Materials' description: ON = Nickel-plated brass, AI = AISI 316L stainless steel

Serrated lock nut



Code	Material	Thread	Tightening key [mm (inch)] SW	Sizes [mm (inch)] M
PCFM50_M016X	ON	M16x1,5	19,0 (0,748)	3,5 (0,138)
PCFM50_M020X	ON	M20x1,5	24,0 (0,945)	4,0 (0,157)
PCFM50_M025X	ON	M25x1,5	30,0 (1,181)	4,0 (0,157)
PCFM50_M032X	ON	M32x1,5	36,0 (1,417)	5,0 (0,197)
PCFM50_M040X	ON	M40x1,5	46,0 (1,811)	5,3 (0,209)
PCFM50_M050X	ON	M50x1,5	55,0 (2,165)	6,3 (0,248)
PCFM50_M063X	ON	M63x1,5	70,0 (2,756)	7,0 (0,276)

Materials' description: ON = Nickel-plated brass

Code composition

PC	□□□□	_	□	□□□	X	□□□	□□

Family	To be inserted
Cable gland	M360
Lock nut	FM10, FM11, FM50

Version	To be inserted
Metric	M
NPT	N

Thread	To be inserted
M16, M20, …, M100	016, 020, …, 100
NPT 1/2", 3/4", …, 4"	050, 075, …, 400

Material	To be inserted
Nickel-plated brass	ON
AISI 316L stainless steel	A3
AISI 316L stainless steel	A6

Diameter range
Code depending on the cable range.