

PAP – PAPDL

Cable glands for armoured cables



Mechanical characteristics

Body/cab	OT-58 brass (ON) - AISI-316L stainless steel (XX) marine grade copper free aluminium (on project request only)
Finishes	full nickel plating treatment (brass material only)
Rubber rings	EPDM rubber 50-60 shore hardness (standard supply) Silicon rubber 60 shore hardness (on demand only)
O-ring	silicon rubber – 60 shore hardness
Skid washer	nylon 6.0

Installation

hazardous areas – Zone 1/2 (Gases) – Zone 21/22 (Dusts)

Classification

Group II – Category 2G 2D / 3G 3D

Reference standards

Directive 2014/34/EU	
Execution	II 2 G Ex db / Ex eb/ Ex ia/ IIC Gb II 2 D Ex tb IIIC Db II 3 G Ex nR IIC Gc /II 3 D Ex tc IIIC Dc
Rules of compliance	EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-7; EN/IEC 60079-11; EN/IEC 60079-31
EU type-examination certificate	INERIS 09 ATEX 0028X INERIS 23 ATEX 3004X (Ex nR only)
Protection degree	IP66 or IP66/68
Ambient temperature	–40 °C ÷ +90 °C (Rubber rings EPDM-60) –60 °C ÷ +180 °C (Rubber rings SILICON)
Other available certificates	CCOE PESO: P531870 ECASEx: 23-06-22481/Q23-06-048569/NB0002 KC: in progress BS standard: EPTI 22 IEC 0423 IECEX: IECEX INE 11.0017X INMETRO: CEPEL 12.2177X RINA: ELE411722CS Russian Marine Certificate (RMRS): 19.02521.280 CCC 2023122313116542 Deluge certification* for sizes 1÷6 with silicon rubber rings only: SIR20200310-001, SIR20200310-002, SIR20200310-003, SIR20200311-004, SIR20200311-005, SIR20200311-006 according to Shell DTS-01:91

*on request only

Applications

For steel wire armoured cables (swa) for steel tape armoured cables
Double Compression Type For Indoor And Outdoor Use
Provided armour clamping using clamping arrangements suitable for all armour wire/braid types
Internal lead device for electrical bond of cable lead inner sheath
Double compression – under armour and overall of armour cable (inner and outer sealing)

On Request Accessories

- Locknuts, Gaskets, PVC Shrouds, Earthing Tags, Sealing
(See DL-NW-PTD-ET bulletin)
- Deluge option from size 1 to size 6 with silicon rubber
rings only



Cable gland selection table

Code (1)	Size	Entry thread size				Dia. under armour		Outer sheath Dia.		Hexagon	Material	(3)				
		Metric	(2)	NPT	(2)	ISO 228	(2)	min (mm)	max (mm)	min (mm)			max (mm)	(mm)		
PAP#	00	ISO-M16	M	3/8"NPT	N	3/8"	G	4,0	7,0	10,0	15,0	24,0	Nickel pl. brass	ON		
								7,0	10,0				Stainless steel	XX		
		ISO-M20	M	1/2"NPT	N	1/2"	G	4,0	7,0	10,0	15,0	32,0	Nickel pl. brass	ON		
								7,0	10,0				Stainless steel	XX		
PAP# PAPDL#*	01	ISO-M20	M	1/2"NPT	N	1/2"	G	5,5	8,0	10,0	15,0	32,0	Nickel pl. brass	ON		
								8,0	10,5				14,0	19,0	Stainless steel	XX
								10,5	13,0							
	02	ISO-M25	M	3/4"NPT	N	3/4"	G	10,5	13,0	15,0	20,0	36,0	Nickel pl. brass	ON		
								13,0	15,5				19,0	24,0	Stainless steel	XX
								15,5	18,0							
	03	ISO-M32	M	1"NPT	N	1"	G	15,0	18,0	20,0	26,0	45,0	Nickel pl. brass	ON		
								18,0	21,0				25,0	31,0	Stainless steel	XX
								21,0	24,0							
	04	ISO-M40	M	1 1/4" NPT	N	1 1/4"	G	21,0	24,0	26,0	32,0	53,0	Nickel pl. brass	ON		
								24,0	27,0				31,0	37,0	Stainless steel	XX
								27,0	30,0				34,0	40,0		
	05	ISO-M50	M	1 1/2" NPT	N	1 1/2"	G	24,0	27,0	30,0	37,0	61,0	Nickel pl. brass	ON		
								27,0	30,0				36,0	43,0	Stainless steel	XX
								30,0	33,0				40,0	47,0		
	06	ISO-M63	M	2"NPT	N	2"	G	36,0	39,0	42,0	48,0	71,0	Nickel pl. brass	ON		
								39,0	42,0				47,0	53,0	Stainless steel	XX
								42,0	45,0				50,0	56,0		
PAP#	07	ISO-M75	M	2 1/2" NPT	N	2 1/2"	G	42,0	45,0	52,0	58,0	84,0	Nickel pl. brass	ON		
								45,0	48,0				58,0	64,0	Stainless steel	XX
								48,0	51,0				61,0	67,0		
								51,0	54,0							
PAP#	08	ISO-M90	M	3"NPT	N	3"	G	52,0	56,0	65,0	72,0	101,0	Nickel pl. brass	ON		
								56,0	59,0				71,0	78,0	Stainless steel	XX
								59,0	62,0				74,0	81,0		
								62,0	65,0							
PAP#	09	ISO-M100	M	4"NPT	N	4"	G	68,0	74,0	81,0	88,0	126,0	Nickel pl. brass	ON		
								74,0	80,0				88,0	96,0	Stainless steel	XX
								80,0	86,0				96,0	104,0		
								86,0	92,0							

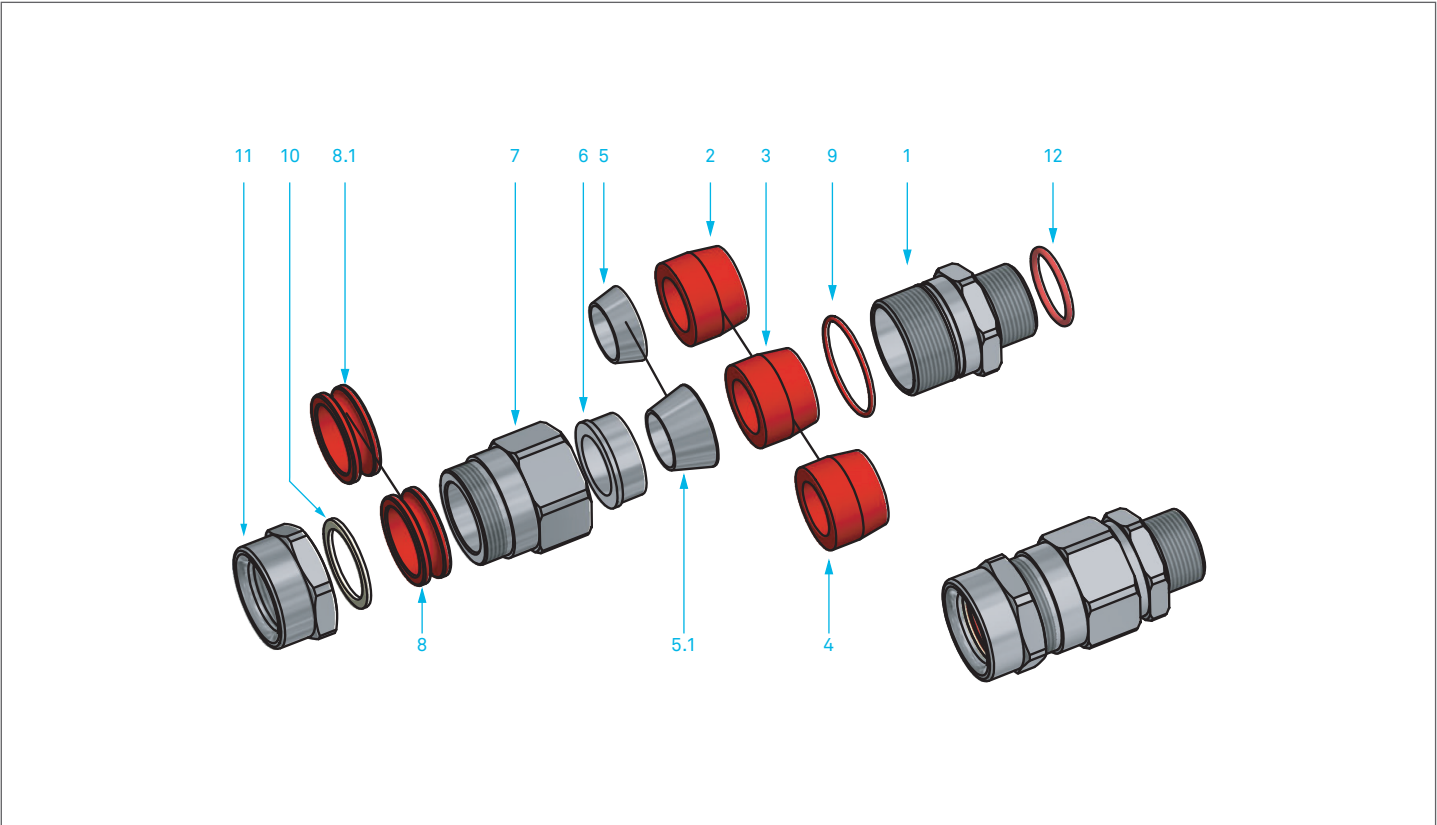


P	A	P	#			0	1	M	O	N	→ PAP#01MON (non-barrier cable gland nickel plated brass ISO-M20 thr.)
P	A	P	#			0	3	N	X	X	→ PAP#03NXX (non-barrier cable gland stainless steel 1"NPT THR.)
P	A	P	D	L	#	0	3	N	X	X	→ PAPDL#03NXX (non-barrier cable gland stainless steel with deluge)

Cable gland ordering examples

Legend											
(1) –	cable gland type/model					PAP# = Non-barrier cable gland					
(2) –	threading					M = ISO METRIC pitch 1,5mm / N = NPT (ANSI/ASME B1.20.1) – G = ISO-228					
(3) –	cable gland material					ON – nickel plated brass / XX = AISI-316L stainless steel					

PAP – PAPDL dimensional



1	Body
2 - 3 - 4	Inner sealing ring for armoured cable
5 - 5.1	Armour clamping cone
6	Armour clamping ring for armoured cable
7	Gland barrel
8 - 8.1	Outer sealing silicon ring
9	Deluge* silicon rubber o-ring
10	Anti rubbing washer
11	Gland nut
12	Silicon o. ring (only for isometric body)
*on request, from size 1 to 6 only	

REMARK:
Due to the development of the national and international specifications and of the technology, the above technical characteristics showed on this bulletin can be considered as binding on our confirmation only.