

# PAP – PAPDL

## Cable glands for armoured cables



### 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: 14-KB4BO-0427X ÷ 14-KB4BO-0444X BS standard: EPTI 22 IEC 0423 IECEx: IECEx INE 11.0017X INMETRO: CEPEL 12.2177X EAC: TC RU C-IT.BH02.B.00587 (-75 °C ÷ +180 °C) RINA: ELE411722CS Russian Marine Certificate (RMRS): 19.02521.280 CCC 2023122313116542 Deluge certification* for sizes 1÷6 with <b>silicon rubber rings only</b> : 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 and for lead inner sheath 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

### Mechanical characteristics

Body/cab	OT-58 marine 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



**Cable gland selection table**

Code (1)	Size	Entry thread size					Dia. under armour		Outer sheath Dia.		Hexagon (mm)	Material	(3)	
		Metric	(2)	NPT	(2)	ISO 228	(2)	min (mm)	max (mm)	min (mm)				max (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	
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
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
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
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
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
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
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
08	ISO-M90	M	3"NPT	N	3"	G	51,0	54,0	61,0	67,0	101,0	Nickel pl. brass	ON	
							52,0	56,0				65,0	72,0	Stainless steel
09	ISO-M100	M	4"NPT	N	4"	G	56,0	59,0	71,0	78,0	126,0	Nickel pl. brass	ON	
							59,0	62,0				74,0	81,0	Stainless steel
09	ISO-M100	M	4"NPT	N	4"	G	62,0	65,0	81,0	88,0	126,0	Nickel pl. brass	ON	
							65,0	68,0				88,0	96,0	Stainless steel
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
09	ISO-M100	M	4"NPT	N	4"	G	80,0	86,0	96,0	104,0	126,0	Nickel pl. brass	ON	
							86,0	92,0				96,0	104,0	Stainless steel

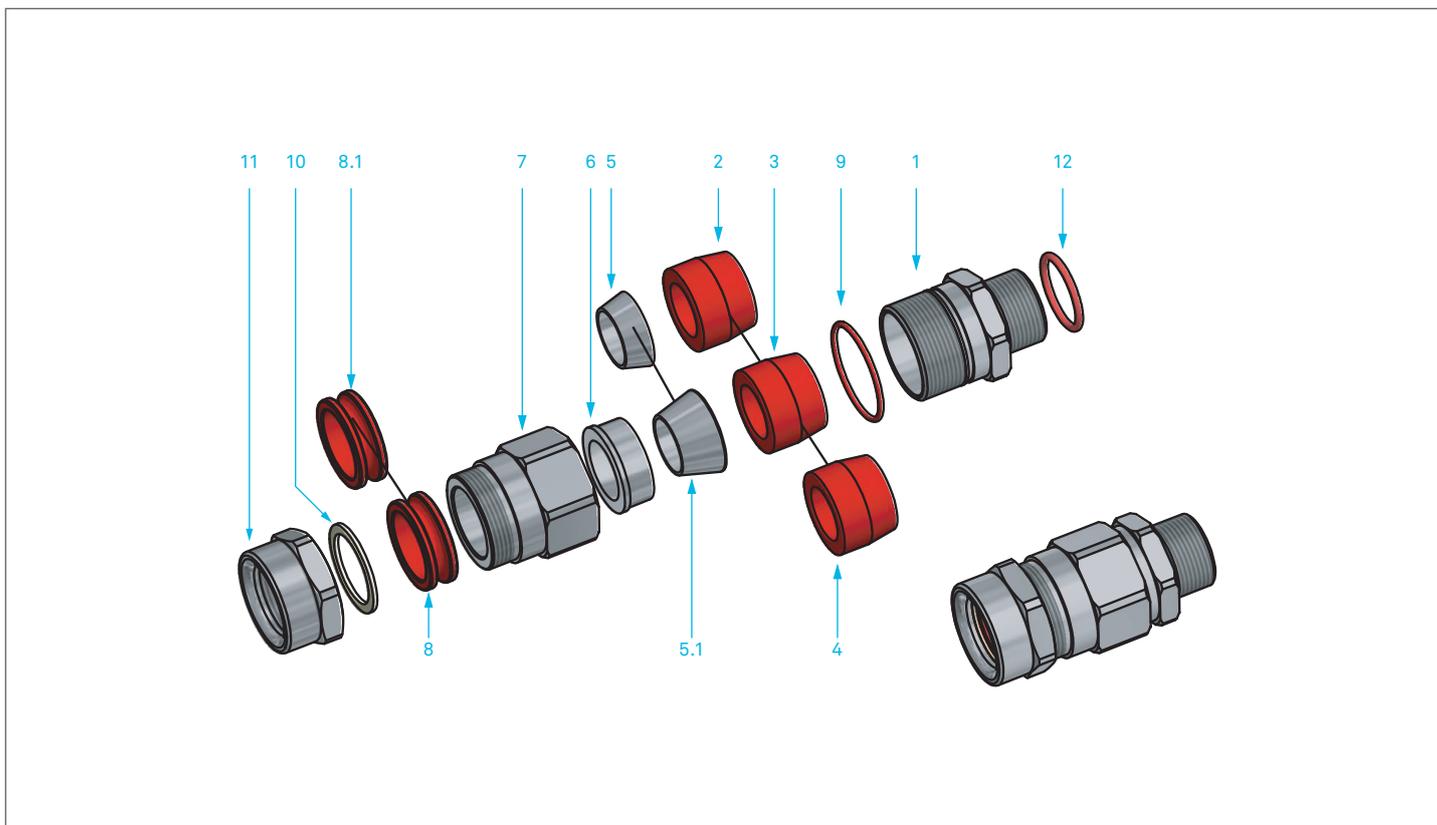


P	A	P	#												
					0	1	M	O	N						→ PAP#01MON (non-barrier cable gland nickel plated brass ISO-M20 thr.)
P	A	P	#												
					0	3	N	X	X						→ PAP#03NXX (non-barrier cable gland stainless steel 1"NPT THR.)
P	A	P	D	L	#										
					0	3	N	X	X						→ PAPDL#03NXX (non-barrier cable gland stainless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