

# **PNAFB**

## Barrier cable glands for unarmoured cables



#### Reference standards

Reference standards	
Directive 2014/34/EU	
Execution	©    2 G Ex db / Ex eb/ Ex ia/   C Gb ©    2 D Ex tb    C Db ©    3 G Ex nR   C Gc ©    3 D Ex tc    C Dc
Rules of compliance	EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-7; EN/IEC 60079-11; EN/IEC 60079-15; 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 ÷ +100 °C (Rubber rings SILICON)
Other Available Certificates	IECEx: IECEx INE 11.0017X ECASEx: 23-06-22481/Q23-06-048569/NB0002 INMETRO: CEPEL 12.2177X KC: in progress

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

#### Classification

Group II - Category 2G 2D / 3G 3D

#### **Mechanical characteristics**

Body / cap	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
Chamber for sealing	OT-58 brass OT-58 nickel plated brass (on demand) AISI- 316L stainless steel (on demand)

#### **Applications**

For unarmoured cables only			
Suitable for flexible conduit coupling connection by threaded cap (uni iso 228)			
Single compression type suitable for indoor and outdoor use			
Single compression - on cable (inner sealing)			
Sealing with proper resin into "chamber of sealing"			

#### **On Request Accessories**

- Locknuts, Gaskets, PVC Shrouds, Earthing Tags, Sealing, (See DL-NW-PTD-ET bulletin)















Cable gland selection table

Size -	Entry thread size						Inner sheath dia.		Female thread	Hexagon	Material	
	Metric	(2)	NPT	(2)	ISO 228	(2)	min [mm]	max [mm]	UNI ISO 228 (4)	[mm]		(3
00	ISO-M16 ISO-M20	М	3/8" NPT 1/2" NPT	N	3/8" 1/2"	G	4,0 7,0 4,0 7.0	7,0 10,0 7,0 10.0	3/8" 1/2"	24,0 32,0	Nickel pl. brass Stainless steel Nickel pl. brass Stainless steel	10 (X 10 (X
01	ISO-M20	М	1/2" NPT	N	1/2"	G	5,5 8,0	8,0 10,5	1/2"	32,0	Nickel pl. brass Stainless steel	10 (X
02	ISO-M25	М	3/4" NPT	N	3/4"	G	10,5 13,0	13,0 15,5	3/4"	36,0	Nickel pl. brass Stainless steel	OI X
03	ISO-M32	М	1" NPT	N	1"	G	15,0 18,0	18,0 21,0	1"	45,0	Nickel pl. brass Stainless steel	10 (X
04	ISO-M40	М	1 1/4" NPT	N	1 1/4"	G	21,0 24,0	24,0 27,0	1 1/4"	53,0	Nickel pl. brass Stainless steel	10 (X
05	ISO-M50	М	1 1/2" NPT	N	1 1/2"	G	24,0 27,0 30,0	27,0 30,0 33,0	1 1/2"	61,0	Nickel pl. brass Stainless steel	10 (X
06	ISO-M63	М	2" NPT	N	2"	G	36,0 39,0	39,0 42,0	2"	71,0	Nickel pl. brass Stainless steel	OI X
07	ISO-M75	М	2 1/2" NPT	N	2 1/2"	G	42,0 45,0 48,0 51,0	45,0 48,0 51,0 54,0	2 1/2"	84,0	Nickel pl. brass Stainless steel	10 X
08	ISO-M90	М	3" NPT	N	3"	G	52,0 56,0 59,0 62,0 65,0	56,0 59,0 62,0 65,0 68,0	3"	101,0	Nickel pl. brass Stainless steel	10 (X
09	ISO-M100	М	4" NPT	N	4"	G	68,0 74,0 80,0 86,0	74,0 80,0 86,0 92,0	4"	126,0	Nickel pl. brass Stainless steel	10 XX
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	00	Metric	Size         Metric         (2)           00         ISO-M16 ISO-M20         M           01         ISO-M20         M           02         ISO-M25         M           03         ISO-M32         M           04         ISO-M40         M           05         ISO-M50         M           06         ISO-M63         M           07         ISO-M75         M           08         ISO-M90         M	Metric         (2)         NPT           00         ISO-M16 ISO-M20         M         3/8" NPT 1/2" NPT           01         ISO-M20         M         1/2" NPT           02         ISO-M25         M         3/4" NPT           03         ISO-M32         M         1" NPT           04         ISO-M40         M         1 1/4" NPT           05         ISO-M50         M         1 1/2" NPT           06         ISO-M63         M         2" NPT           07         ISO-M75         M         2 1/2" NPT           08         ISO-M90         M         3" NPT	Size         Metric         (2)         NPT         (2)           00         ISO-M16 ISO-M20         M         3/8" NPT 1/2" NPT         N           01         ISO-M20         M         1/2" NPT         N           02         ISO-M25         M         3/4" NPT         N           03         ISO-M32         M         1" NPT         N           04         ISO-M40         M         1 1/4" NPT         N           05         ISO-M50         M         1 1/2" NPT         N           06         ISO-M63         M         2" NPT         N           07         ISO-M75         M         2 1/2" NPT         N           08         ISO-M90         M         3" NPT         N	Size         Metric         (2)         NPT         (2)         ISO 228           00         ISO-M16 ISO-M20         M         3/8" NPT NPT         N         3/8" 1/2"           01         ISO-M20         M         1/2" NPT         N         1/2"           02         ISO-M25         M         3/4" NPT         N         3/4"           03         ISO-M32         M         1" NPT         N         1"           04         ISO-M32         M         1 1/4" NPT         N         1 1/4"           05         ISO-M40         M         1 1/2" NPT         N         1 1/2"           06         ISO-M50         M         1 1/2" NPT         N         2"           07         ISO-M63         M         2" NPT         N         2 1/2"           08         ISO-M90         M         3" NPT         N         3"	Size         Metric         (2)         NPT         (2)         ISO 228         (2)           00         ISO-M16 ISO-M20         M         3/8" NPT 1/2" NPT         N         3/8" ISO-M2" G           01         ISO-M20         M         1/2" NPT         N         1/2" G           02         ISO-M25         M         3/4" NPT         N         3/4" G           03         ISO-M25         M         1" NPT         N         1" G           04         ISO-M32         M         1" NPT         N         1 1/4" G           05         ISO-M40         M         1 1/2" NPT         N         1 1/2" G           05         ISO-M50         M         1 1/2" NPT         N         1 1/2" G           06         ISO-M63         M         2" NPT         N         2" G           07         ISO-M75         M         2 1/2" NPT         N         2 1/2" G           08         ISO-M90         M         3" NPT         N         3" G	Netric   (2)   NPT   (2)   ISO 228   (2)   min   min	Netric   (2)	Metric   (2)   NPT   (2)   ISO 228   (2)   min   max   (Imea)   (228 (4))	Netric   Carro   Netro   Netro   Carro   Netro   Net	New North Color   New North

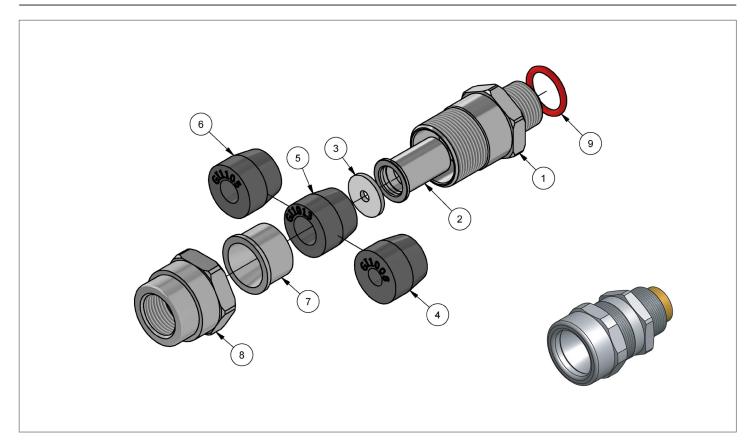
### Cable gland ordering examples

Legend
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(1) -	cable gland type/model	PNAFB# = 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	
(4) -	female thread	ISO-228 female thread suitable for flexible conduit coupling	



#### **PNAFB** dimensional



Barrier cable gland body
Sealing chamber
Resin seal rubber
Inner rubber seal
Pushing seal cone
Gland nut
Or gasket (metric thread only)

Flowable epoxy resin RSN#C0200		
Cable gland size	Resin quantity [g]	
0	4	
1	7	
2	12	
3	21	
4	36	
5	53	
6	86	
7	159	
8	250	
9	533	

#### 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.