

# BNM type



FLAMEPROOF EX D • INCREASED SAFETY EX E • FOR INDOOR & OUTDOOR APPLICATIONS  
FOR UNARMoured CABLES • OUTER SHEATH SEAL



## 1 Cable glands BNM type (code: BNM)

Flameproof Ex d Barrier Cable Glands sealed with sealing compound. The sealing ring blocks the cable on the cable outer sheath. The addition of male thread on the backnut allows the cable gland to be coupled to a conduit fitting. Metric cable glands are made according to EN 62444 standard. Maintenance and installation operations and product selection must be done in accordance with IEC EN 60079-14 and 17 standards.

**Application fields** Surface - Group II • Mines - Group I

### Approvals / Certifications

ATEX INERIS 06 ATEX 0014X

IEC Ex: IEC Ex INE 10.0010X

EAC: RU C-IT.AЯ 45.B.00909

Type examination certificate: INERIS 17 ATEX 3009X (Ex nR IIC Gc)

### Protection type

Ex db IIC • Ex eb II (gas) • Ex tb IIIC (dusts) • Ex db I • Ex eb I (mines)

### EPL (Equipment protection level)

**Zone 1-2:** Mb mines • Gb, Gc gas

**Zone 21-22:** Db Dc combustible dusts

### Execution

Ex db IIC • Ex eb II • Ex tb IIIC • Ex db I • Ex eb I Db according to

**ATEX:** EN 60079-0:2012 • EN 60079-1:2014 • EN 60079-7:2015 • EN 60079-31:2014 • EN 60529:1991

**IEC Ex:** IEC 60079-0:2011 • IEC 60079-1:2014 • IEC 60079-7:2015 • IEC 60079-15:2010 • IEC 60079-31:2013 • IEC 60529:1989

## 5 Ambient temperatures in services: sealing washers materials

EPDM seals + Resin CW1302+HY1300: -40°C ÷ + 100°C (code: **EP**)

Silicone seals + Resin CW1302+HY1300: -65°C ÷ + 180°C (code: **SI**)

EPDM seals + Resin RCN EPR+EPH: -40°C ÷ + 100°C (code: **EP**)

Silicone seals + Resin RCN EPR+EPH: -60°C ÷ + 150°C (code: **SI**)

### Cable type

Unarmoured

## 6 Available materials

Brass (code: **OT**) • Nickel-plated brass (code: **ON**)

AISI316L Stainless steel (code: **S6**) • Aluminium (code: **AL**)

AVP Steel (code: **AVP**)

### Available threads

ISO 262 Metrical • ISO 228 • DIN 40430 Pg

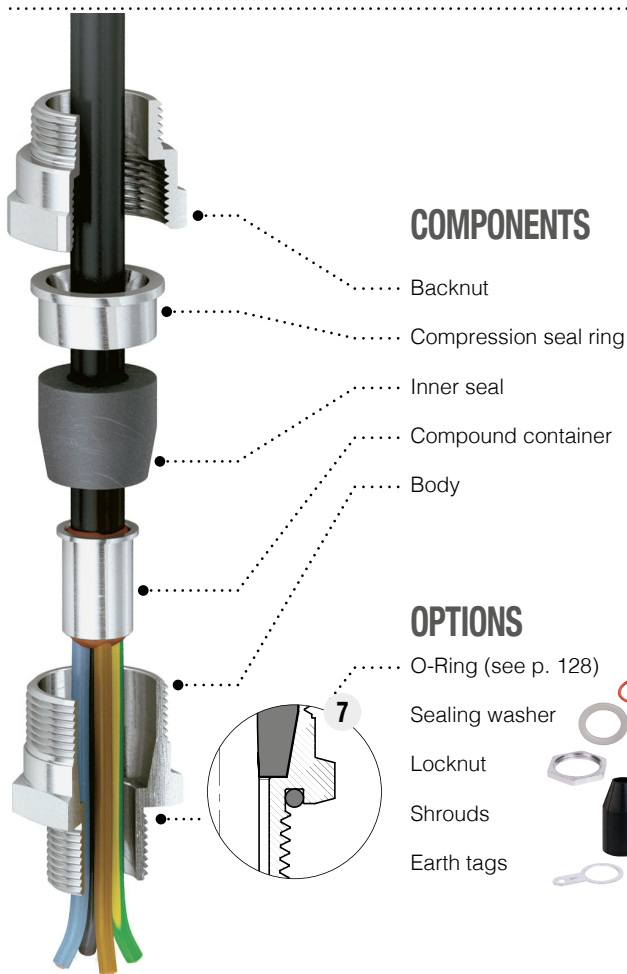
ANSI B1.20.1 NPT • EN 10226 Gk (only for ATEX)

### Degree of protection

The cable glands degree of protection is **IP66** or **IP66/68**, 30-meters depth for 7 days according to the IEC EN 60529 standard; the degree of protection IP 68 is obtained by using flat sealing rings on cable glands with cylindrical threads. Without gaskets, the degree of protection is IP 66. If the cable glands with cylindrical or tapered threads are screwed on the threaded hole of an apparatus, in order to guarantee an IP66 or IP66/68 degree of protection, threaded parts must be sealed with Loctite or similar. In order to maintain the IPX8 degree of protection, the cable entry shall be fitted on enclosure which satisfies an immersion test under 30 meters of water during 7 days. Metric cable glands are made in accordance to EN 62444 Standard.

## 0 Kit version (code: KIT)

Includes cable glands and the requested complete series of the rubber seals accompanying the size.



### COMPONENTS

- Backnut
- Compression seal ring
- Inner seal
- Compound container
- Body

### OPTIONS

- O-Ring (see p. 128)
- Sealing washer
- Locknut
- Shrouds
- Earth tags

**COMPOUND**  
Application  
Mixing time  
Gel time  
Full cure time  
Installation

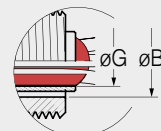
**LIQUID**  
Gun  
2 min  
80 min  
24 hours  
Vertical position

**SOLID**  
By hand  
30 min  
-  
4 hours  
Any Orientation

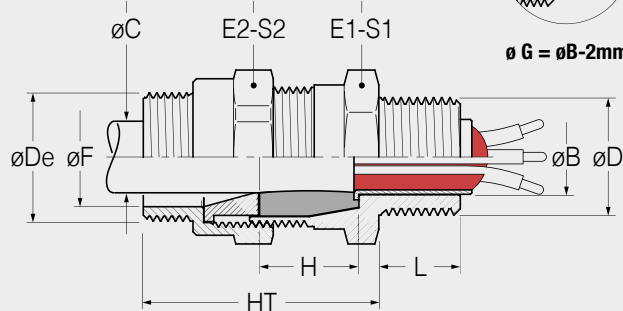
## EXAMPLE CODE

See page 56

## TECHNICAL DRAWING



$$\varnothing G = \varnothing B - 2\text{mm} \sim$$



0	1	2	3	4	4E	5	6	7
<b>KIT</b>	<b>BNM.</b>	<b>25.</b>	<b>13.</b>	<b>N25.</b>	<b>N25.</b>	<b>EP.</b>	<b>ON.</b>	<b>OR</b>
Optional code	Type	Size	Ø C Max	Thread code	Thread code	Seals material code	Material code	Optional code
Kit series			Inner seal (10,5 ÷ 13)	See tab. page 57	See tab. page 57	EP-SI	OT-ON-S6 AL-AVP	O-Ring

SIZE	Ø C Min - Max Inner seal	Ø D - THREADS						Ø De - THREADS					DIMENSIONS							
		Cylindrical			Tapered			Cylindrical			Tapered		Weight	F	HT	H	E1	S1	E2	S2
		ISO 262	ISO 228	DIN 40430	NPT	EN 10226	ISO 262	ISO 228	DIN 40430	NPT	EN 10226									
16 (EP)	4 ÷ 7 7 ÷ 10	M12x1,5	1 / 4"	Pg7 Pg9	1 / 4"	1 / 4"	M16x1,5	<b>3 / 8"</b>	/	3 / 8"	/	101	11	20	24	26	24	26	26	
16 (SI)	4 ÷ 6 6 ÷ 8 8 ÷ 10	<b>M16x1,5</b> M20x1,5	<b>3 / 8"</b> 1 / 2"	<b>Pg11</b> Pg13,5	<b>3 / 8"</b> 1 / 2"	<b>3 / 8"</b> 1 / 2"														
20	5,5 ÷ 8 8 ÷ 10,5 10,5 ÷ 13	M16x1,5 <b>M20x1,5</b> M25x1,5	<b>1 / 2"</b> 3 / 4"	Pg11 <b>Pg13,5</b> Pg16	<b>1 / 2"</b> 3 / 4"	<b>1 / 2"</b> 3 / 4"	M20x1,5	<b>1 / 2"</b>	/	1 / 2"	/	174	15	20	30	33	32	35	35	
25	8 ÷ 10,5 10,5 ÷ 13 13 ÷ 15,5 15,5 ÷ 18	M20x1,5 <b>M25x1,5</b>	<b>3 / 4"</b> 1"	Pg16 Pg21	<b>3 / 4"</b> 1"	<b>3 / 4"</b> 1"	M25x1,5	<b>3 / 4"</b>	/	3 / 4"	/	206	19	20	35	38	36	39	39	
32	13 ÷ 15,5 15,5 ÷ 18 18 ÷ 21 21 ÷ 24	M25x1,5 <b>M32x1,5</b>	<b>1"</b>	Pg21 Pg29	<b>1"</b>	<b>1"</b>	M32x1,5	<b>1"</b>	/	1"	/	356	25	25	42	47	45	49	49	
40	21 ÷ 24 24 ÷ 27 27 ÷ 30	<b>M40x1,5</b>	<b>1" 1/4</b>	Pg29	<b>1" 1/4</b>	<b>1" 1/4</b>	M40x1,5	<b>1" 1/4</b>	/	1" 1/4	/	431	31	25	48	53	50	55	55	
50	24 ÷ 27 27 ÷ 30 30 ÷ 33 33 ÷ 36	M40x1,5 <b>M50x1,5</b>	<b>1" 1/2</b>	Pg36	<b>1" 1/2</b>	<b>1" 1/2</b>	M50x1,5	<b>1" 1/2</b>	/	1" 1/2	/	568	42	25	55	60	57	62	62	
63	36 ÷ 39 39 ÷ 42 42 ÷ 45	M50x1,5 <b>M63 x 1,5</b>	<b>2"</b>	Pg42 Pg48	<b>2"</b>	<b>2"</b>	M63 x 1,5	<b>2"</b>	/	2"	/	784	47	25	68	74	67	73	72	
75	45 ÷ 48 48 ÷ 51 51 ÷ 54	M63x1,5 <b>M75x1,5</b>	<b>2" 1/2</b>	Pg48	<b>2" 1/2</b>	<b>2" 1/2</b>	M75x1,5	<b>2" 1/2</b>	/	2" 1/2	/	1124	62	25	80	86	80	88	88	
90a	54 ÷ 58 58 ÷ 62	M75x1,5										2235								
90b	60 ÷ 64 64 ÷ 68	<b>M90x2</b>	<b>3"</b>	/	<b>3"</b>	<b>3"</b>	M90x2	<b>3"</b>	/	3"	/	1852	72	30	100	107	100	107	107	

• Standard Threads in bold • Dimensions are in millimeters • Weight in grams (gr) of brass version