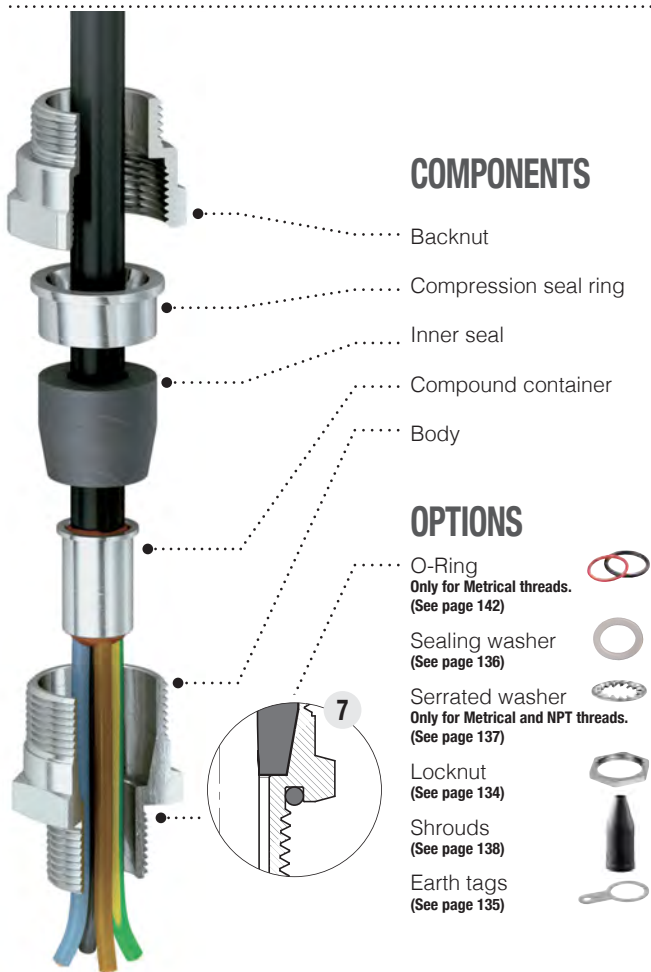


# BNM type



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 certificate: INERIS 06 ATEX 0014X  
Type examination certificate: INERIS 17 ATEX 3009X (Ex nR IIC Gc)  
IEC Ex certificate: IEC Ex INE 10.0010X  
UKCA certificate: CML 21UKEX1590X;  
UKCA certificate (Cat 3): CML 21UKEX1591X  
EAC certificate: HACTXOJI RU C-IT.AЯ45.B.00909  
CCC Ex NEPSI Certificate: Nr. 2021322313003706

**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 IEC 60079-0:2018 • EN 60079-1:2014 • EN IEC 60079-7:2015/A1:2018 • EN 60079-15:2010 • EN 60079-31:2014 • EN 60529:1991  
**IEC Ex:** IEC 60079-0:2017 • IEC 60079-1:2014 • IEC 60079-7:2015/A1:2017 • IEC 60079-15:2017 • IEC 60079-31:2013 • IEC 60529:1989+A1:1999+A2:2013

**5 Ambient temperatures in services: sealing washers materials**

EPDM seals + Resin RCN SFR+SFH: -40°C ÷ +100°C (code: **EP**)  
Silicone seals + Resin RCN SFR+SFH: -50°C ÷ +149°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 witch 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.

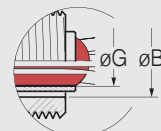


COMPOUND	Application	LIQUID	SOLID
Mixing time	Gun	By hand	
Full cure time	-	30 min	
Installation	16 to 24 min at 24°C	4 hours	
	Vertical position	Any Orientation	

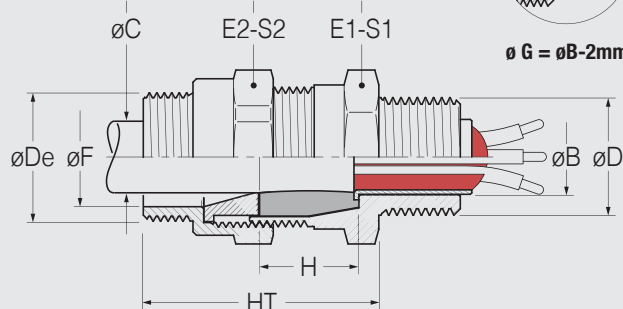
## EXAMPLE CODE

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	Ø D Thread code	Ø De 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	1 / 4"	1 / 4"	M16x1,5	<b>3 / 8"</b>	/	3 / 8"	/	101	11	51	20	24	26	24	26	
16 (SI)	4 ÷ 6 6 ÷ 8 8 ÷ 10	<b>M16x1,5</b> M20x1,5	<b>3 / 8"</b> 1 / 2"	Pg9 <b>Pg11</b> Pg13,5	<b>3 / 8"</b> 1 / 2"	<b>3 / 8"</b> 1 / 2"	M16x1,5	<b>3 / 8"</b>	/	3 / 8"	/	101	11	51	20	24	26	24	26	
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	52	20	30	33	32	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	52	20	35	38	36	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	62	25	42	47	45	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	62	25	48	53	50	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	62	25	55	60	57	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	63	25	68	74	67	73	
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	62	25	80	86	80	88	
90a	54 ÷ 58 58 ÷ 62	M75x1,5	<b>3"</b>	/	<b>3"</b>	<b>3"</b>	M90x2	<b>3"</b>	/	3"	/	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	77	30	100	107	100	107	

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