

FLAMEPROOF EX D • INCREASED SAFETY EX E • FOR INDOOR & OUTDOOR APPLICATIONS



Coupling Female-Female adaptors (code: M)

The adaptors are also available in version female-female, suitable to transform the cable entries from male to female. Can also be used to connect different types or dimensions of thread. The exagonal adaptors fit spanner up to 55 mm while the cylindrical ones fit larger sizes.

Main regulatory requirements:

The user have to use only one adaptor for the assembly of a cable entry. The user have not to close an adaptor or a coupling with a plug. These accessories are intended for the assembly of a cable entry only. Accessories in aluminium are suitable only for Group II (Surface).

Application fields Surface - Group II • Mines - Group I

Approvals / Certifications

ATEX INERIS 12 ATEX 0089X
IEC Ex: IEC Ex INE 10.0014X
EAC: RU C-IT.АЯ 45.B.00909
CCC Ex NEPSI Certificate: Nr. 2021322313003705

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

Ambient temperatures in services: sealing washers materials

Nylon sealing washer -40°C ÷ + 100°C
Silicone sealing washer -65°C ÷ + 220°C
PTFE sealing washer -65°C ÷ + 220°C
Without sealing washer -70°C ÷ +400°C

Available materials

Brass (code: **OT**) • Nickel-plated brass (code: **ON**)
AISI316L Stainless steel (code: **S6**) • Aluminium (code: **AL**)

Available threads

ISO 262 Metrical • ISO 228 • DIN 40430 Pg
ANSI B1.20.1 NPT • EN 10226 Gk (only for ATEX)

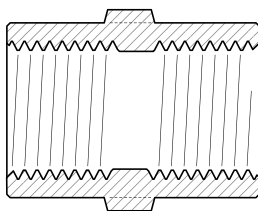
Degree of protection

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.

EXAMPLE CODE

M.	I20.	N25.	ON
Coupling Type	Female Thread code <small>See tab. page 19</small>	Female Thread code <small>See tab. page 19</small>	Material code •
OT	Brass		
ON	Nickel-plated brass		
S6	AISI316L Stainless steel		
AL	Aluminium		

TECHNICAL DRAWING



AVAILABLE COMBINATIONS

See table "A" Adaptors - page 124

Table of protection modes of adaptors, nipples and couplings

BRASS - NICKEL PLATED BRASS - AISI 316L

Ex db + Ex eb + Ex nR
 Ex eb + Ex nR

		FEMALE																																																				
		ISO 262									ISO 228								DIN 40430							NPT						EN 10226																						
		M12x1,5	M16x1,5	M20x1,5	M25x1,5	M32x1,5	M40x1,5	M50x1,5	M63x1,5	M75x1,5	M90x2	G1/8"	G1/4"	G3/8"	G1/2"	G3/4"	G1"	G1"1/4	G1"1/2	G2"	G2"1/2	G3"	Pg7	Pg9	Pg11	Pg13,5	Pg16	Pg21	Pg29	Pg36	Pg42	Pg48	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT	1"1/4 NPT	1"1/2 NPT	2" NPT	2"1/2 NPT	3" NPT	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"
MALE	ISO 262	M12x1,5																																																				
		M16x1,5																																																				
		M20x1,5																																																				
		M25x1,5																																																				
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		M50x1,5																																																				
		M63x1,5																																																				
		M75x1,5																																																				
		M90x2																																																				
ISO 228	G1/8"																																																					
	G1/4"																																																					
	G3/8"																																																					
	G1/2"																																																					
	G3/4"																																																					
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	G1"1/4																																																					
	G1"1/2																																																					
	G2"																																																					
	G2"1/2																																																					
G3"																																																						
DIN 40430	Pg7																																																					
	Pg9																																																					
	Pg11																																																					
	Pg13,5																																																					
	Pg16																																																					
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	Pg36																																																					
	Pg42																																																					
	Pg48																																																					
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	1/4" NPT																																																					
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	1"1/2 NPT																																																					
	2" NPT																																																					
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3" NPT																																																						
EN 10226	1/8"																																																					
	1/4"																																																					
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3"																																																						

Table of protection modes of adaptors, nipples and couplings

ALUMINIUM

Ex db + Ex eb + Ex nR
Ex eb + Ex nR

		ISO 262										ISO 228						DIN 40430						NPT						EN 10226																								
		FEMALE																																																				
		M12x1,5	M16x1,5	M20x1,5	M25x1,5	M32x1,5	M40x1,5	M50x1,5	M63x1,5	M75x1,5	M90x2	G1/8"	G1/4"	G3/8"	G1/2"	G3/4"	G1"	G1"1/4	G1"1/2	G2"	G2"1/2	G3"	Pg7	Pg9	Pg11	Pg13,5	Pg16	Pg21	Pg29	Pg36	Pg42	Pg48	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT	1"1/4 NPT	1"1/2 NPT	2" NPT	2"1/2 NPT	3" NPT	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"
MALE		Ex db + Ex eb + Ex nR																																																				
		Ex eb + Ex nR																																																				
ISO 262	M12x1,5	Ex db + Ex eb + Ex nR																																																				
	M16x1,5	Ex db + Ex eb + Ex nR																																																				
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	M63x1,5	Ex db + Ex eb + Ex nR																																																				
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	M90x2	Ex db + Ex eb + Ex nR																																																				
ISO 228	G1/8"	Ex db + Ex eb + Ex nR																																																				
	G1/4"	Ex db + Ex eb + Ex nR																																																				
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	G1"1/4	Ex db + Ex eb + Ex nR																																																				
	G1"1/2	Ex db + Ex eb + Ex nR																																																				
	G2"	Ex db + Ex eb + Ex nR																																																				
	G2"1/2	Ex db + Ex eb + Ex nR																																																				
G3"	Ex db + Ex eb + Ex nR																																																					
DIN 40430	Pg7	Ex db + Ex eb + Ex nR																																																				
	Pg9	Ex db + Ex eb + Ex nR																																																				
	Pg11	Ex db + Ex eb + Ex nR																																																				
	Pg13,5	Ex db + Ex eb + Ex nR																																																				
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NPT	1/8" NPT	Ex db + Ex eb + Ex nR																																																				
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	3/8" NPT	Ex db + Ex eb + Ex nR																																																				
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	3/4" NPT	Ex db + Ex eb + Ex nR																																																				
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	1"1/2 NPT	Ex db + Ex eb + Ex nR																																																				
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	2"1/2 NPT	Ex db + Ex eb + Ex nR																																																				
3" NPT	Ex db + Ex eb + Ex nR																																																					
EN 10226	1/8"	Ex db + Ex eb + Ex nR																																																				
	1/4"	Ex db + Ex eb + Ex nR																																																				
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