

Cable entries

Features

- Ex e terminal boxes are dispensed with
- Suitable for cables with 1 to max. 25 cores
- Sleeves from M16 x 1.5 to M48 x 1.5
- Compact, space-saving design
- The cores are connected directly to the electrical load at the Ex d side, intermediate terminal positions are dispensed with
- Rated insulation voltage of up to 1000 V for small dimensions
- Permanent heat resistance up to +110 °C

Description

Flameproof Ex d cable entries are elements which allow electrical cables to be introduced into an Ex d enclosure, without danger of explosion.

The additional Ex e terminal housing is not required. A main distribution box may be used or the connections can be made outside the Ex-zone.

The cable entry consists of a threaded metal sleeve, in which a sheathed cable is anchored and encapsulated. The individual cores are then connected directly inside the flameproof enclosure. The length of cores and cables are customer-tailored. All cables come with standard green-yellow earth leads. The length of engaged thread between the sleeve and the flameproof "d" enclosure must comply with DIN EN 60079-0: 2006 and DIN EN 60079-1.

The cable entry is normally inserted from the inside of the flameproof enclosure. A special version can be supplied for insertion from the outside, provided that removal is possible with a special tool only. After installation, the cable entry must be protected against turning and loosening, corresponding recommendations can be found under accessories.

All line bushings have been certified by the Federal Physical-Technical Institute in accordance with the European standards DIN EN 60079-0 and DIN EN 60079-1 concerning electrical operating equipment for hazardous areas for above-ground (II) and underground (I) according to ATEX.

When the 94/9/EC guideline comes into force on 01/07/2003, explosion protected operating equipment must be properly installed in accordance with DIN EN 60079-14.

Among other things, section 10.4.2 requires that cast, pressure-proof cable insertions according to DIN EN 60079-1: 2007 are used for operating equipment with an internal ignition source for the explosion subgroup IIC and operating equipment with an enclosure volume greater than 2 dm³ in Zone 1.

BARTEC offers a wide range of products with EC model test certification.



Explosion protection

Cable entry screwable

ATEX Ex II 2G Ex d IIC T6 bis T4 Gb

Certification

PTB 97 ATEX 1079 X

IECEX Ex d IIC T6 bis T4 Gb

Certification

IECEX PTB 13.0051 X

Cable entry pluggable

ATEX Ex II 2G Ex d IIC Gb

Ex II 2D Ex tb IIIC Db

Certification

PTB 03 ATEX 1197 U

IECEX Ex d IIC Gb

Ex tb IIIC Db IP 6X

Certification

IECEX PTB 13.0050 U

Other approvals and certificates, see www.bartec-group.com

Working temperature

-60 °C to +110 °C depending on the lead used (temperature ranges apply to "fixed installation" of leads)

Ambient temperature

depending on the design and the leads

Standard versions*:

Cores depending on the working temperature and voltage

- Ölflex® 100, Ölflex® 110
- H07RN-F, Ozoflex-Plus
- radiation cross-linked polyolefin copolymer
- NSSHÖU

max. number of cores in shielded cable

threaded: 25 cores
non-threaded: 47 cores

Cross-section

0.25 mm² to 150 mm²

Sleeve size

metric: M24 x 1.5 to M48 x 1.5
non-threaded: ∅ 22 mm to ∅ 36 mm

Sleeve material

Metal, bare, varnished or galvanised

Rated voltage

300 V/500 V/750 V/1 000 V

Rated currents

see following table based on VDE 0298-04

* all other versions on request. Please use the customer requirements form at the end of the chapter!

Selection chart

Sleeve type	Code no.	Nominal power	Code no.	Conductors cross section mm ²	Code no.	Sleeve size	Code no.
screw-in, metric	0	on order	0	special cross section	A	M24 x 1,5 ∅ = 22 mm	2
				0,25	C		
				0,35	D		
		NSSHöu	1	0,5	E	M36 x 1,5	4
				0,75	F		
screw-in NPT	1	H05GG-F Radox, Betaflam	3	1	G	M48 x 1,5	7
				1,5	H		
		Ölflex 100 Ölflex 110	5	2,5	J	∅ = 36 mm	5
				4	K		
		H07RN-F bzw. A07RN-F, (Ozoflex-Plus)	6	6	L	special sizes	9
				10	M		
				16	N		
pluggable	6	LiYY/Ölflex-EB	7	25	P	special sizes	9
				35	Q		
				50	R		
		ÖLFLEX CY	8	70	S		
				95	T		
				120	U		
				150	V		

Complete order no. 07-92 [] [] - [] [] / G

Please insert correct code.
Technical data subject to change without notice.

Number of cores

e.g. 02 = 2 cores; 21 = 21 cores; etc.
1... 47 shielded cable sleeve
51... 97 shielded cable boss side

Core length: on request

Cable length: on request

Core marking: in accordance with current standards

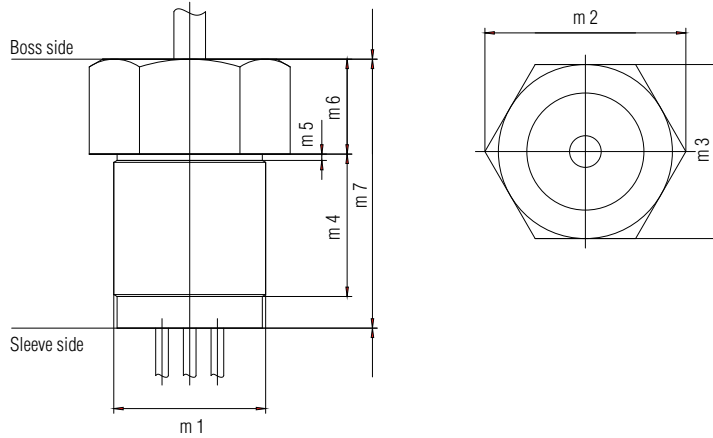
Other cables:

e.g. shielded or blue cable for intrinsically safe circuits on request.

Customer requirements form at the end of the chapter.

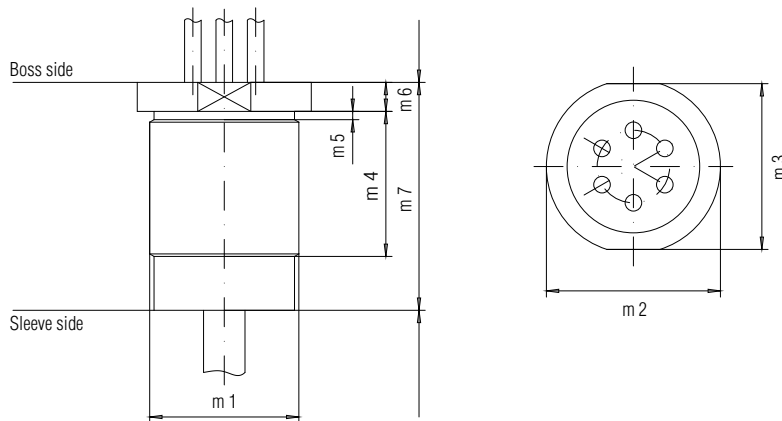


Dimensions Shielded cable Boss side



m 1	m 3	m 4	m 5	m 6	m 7
M24 x 1.5	SW 27	20	max. 2.5	26	46
M36 x 1.5	SW 41	30	max. 2.5	25	55

Dimensions Shielded cable Sleeve side



m 1	m 2	m 3	m 4	m 5	m 6	m 7
M24 x 1.5 ¹⁾	-	SW 27	30	max. 2.5	5	46
M25 x 1.5 ¹⁾	-	SW 27	35	max. 2.5	5	46
M36 x 1.5	∅ 42	SW 40	35	max. 2.5	7	55
M48 x 1.5	∅ 55	SW 50	35	max. 2.5	10	75

¹⁾ Convenient in hex version

Other fittings and special sleeves on request.



Selection chart

Ex d cable entries 300/500 V - cable, Öiflex 100/110

Number of cores	Conductor cross section mm ²	Current carrying capacity (A) in continuous operation (rel.values) ¹⁾ Max. permissible operating temperature at the conductor +80 °C. Max. current-carrying capacity based on VDE 0298-4. Table 11, gap 4	Thread size	Order no. please indicate core and cable length in plain text	Shielded cable	Shielded cable
					Sleeve side	Boss side
6 15 25	0,75 0,75 0,75	6 A	M24 x 1,5 M36 x 1,5 M48 x 1,5	07-9205- 07-9205- 07-9205-	F062 F154 F257	F562 F654 -
6 14 25	1,5 1,5 1,5	16 A	M24 x 1,5 M36 x 1,5 M48 x 1,5	07-9205- 07-9205- 07-9205-	H062 H144 H257	H562 H644 -
3 7 18	2,5 2,5 2,5	20 A	M24 x 1,5 M36 x 1,5 M48 x 1,5	07-9205- 07-9205- 07-9205-	J032 J074 J187	J532 J574 -

Ex d cable entries 450/750 V - cable H07RN-F, Ozoflex-Plus

		Max. permissible operating temperature at the conductor +60 °C. Max. current-carrying capacity based on VDE 0298-4. Table 13, gap 8				
5 7	1,5 1,5	16 A	M24 x 1,5 M36 x 1,5	07-9206- 07-9206-	H052 H074	H552 H574
3 7 19	2,5 2,5 2,5	23 A	M24 x 1,5 M36 x 1,5 M48 x 1,5	07-9206- 07-9206- 07-9206-	J032 J074 J197	J532 J574 -
5	4	30 A	M36 x 1,5	07-9206-	K054	K554
5	6	38 A	M36 x 1,5	07-9206-	L054	L554
5	10	54 A	M48 x 1,5	07-9206-	M057	-
5	16	71 A	M48 x 1,5	07-9206-	N057	-

Ex d cable entries 1000 V - cable NSSHÖU

		Max. permissible operating temperature at the conductor +90 °C. Max. current-carrying capacity based on VDE 0298-4. Table 15, gap 21 and 4				
5 10	1,5 1,5	20 A	M24 x 1,5 M36 x 1,5	07-9201- 07-9201-	H052 H104	H552 H604
3 7 19	2,5 2,5 2,5	30 A	M24 x 1,5 M36 x 1,5 M48 x 1,5	07-9201- 07-9201- 07-9201-	J032 J074 J197	J532 J574 -
5	4	41 A	M36 x 1,5	07-9201-	K054	K554
4 5	6 6	53 A	M36 x 1,5 M48 x 1,5	07-9201- 07-9201-	L044 L057	L544 -
5	10	74 A	M48 x 1,5	07-9201-	M057	-
5	16	99 A	M48 x 1,5	07-9201-	N057	-
1	25	176 A	M36 x 1,5	07-9201-	P014	P514
1	35	218 A	M36 x 1,5	07-9201-	Q014	Q514
1	50	276 A	M36 x 1,5	07-9201-	R014	R514
1	70	347 A	M36 x 1,5	07-9201-	S014	S514
1	95	416 A	M48 x 1,5	07-9201-	T017	-
1	120	488 A	M48 x 1,5	07-9201-	U017	-

¹⁾ When determining the maximum current carrying capacity of the cores, their self-heating and enclosure heating on site at maximum ambient temperature must be taken into consideration.

Other fittings and special sleeves on request. It is essential to submit a customer requirements form that has been filled in correctly and completely. The form can be found in the catalogue at the end of the chapter.

Technical data subject to change without notice.