



- Current lead-in for Ex d enclosures
- 1 to 72 conductors combined in one current lead-in
- Series: screw-in, plug-in
- For voltages up to max. 1000 V
- For size conductor up to 70 mm²

E10

WebCode 8174A





The conductor bushings are used to provide the wire connection between „flameproof“ enclosures and „increased safety“ enclosures.

The conductors are potted with high-quality, creepage-resistant PU-resin and are thus insulated from the enclosure wall.

	IECEX / ATEX					
Zone	0	1	2	20	21	22
Installation in		•	•			





Selection Table										
Product variant	8174/1 Conductor bushing (screwable)									
Min. conductor cross section	0.5 mm ²									
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	6	7 A	750 V	–	M24	1000 mm	1000 mm	8174/102-0613-11	139365	165 g
	12	7 A	750 V	–	M33	1000 mm	1000 mm	8174/103-1213-11	139354	315 g
	24	6 A	750 V	–	M33	1000 mm	1000 mm	8174/103-2413-11	139343	555 g
		6 A	750 V	–	M33	2500 mm	2500 mm	8174/103-2413-22	139345	4.85 kg
	48	4.5 A	750 V	–	M42	1000 mm	1000 mm	8174/104-4813-11	139316	1.1 kg

Selection Table

Product variant		8174/1 Conductor bushing (screwable)								
Min. conductor cross section		0.75 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	6	9 A	750 V	–	M24	1000 mm	1000 mm	8174/102-0601-11	139497	201 g
		9 A	500 V	–	M24	1000 mm	1000 mm	8174/102-0661-11	167164	201 g
	8	9 A	750 V	–	M24	1000 mm	1000 mm	8174/102-0801-11	139490	253 g
		12	9 A	750 V	–	M33	1000 mm	1000 mm	8174/103-1201-11	139473
	21	–	750 V	–	M42	1000 mm	1000 mm	8174/104-2101-11	139574	480 g
		–	750 V	–	M42	600 mm	600 mm	8174/104-2101-66	139576	100 g
	24	7.5 A	750 V	–	M33	1000 mm	1000 mm	8174/103-2401-11	139452	699 g
	48	5.5 A	750 V	–	M42	1000 mm	1000 mm	8174/104-4801-11	139428	1.38 kg
	60	6 A	750 V	–	M48	1000 mm	1000 mm	8174/105-6001-11	139415	1.71 kg
	Product variant		8174/1 Conductor bushing (screwable)							
Min. conductor cross section		1.5 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	2	15 A	750 V	–	M24	1000 mm	1000 mm	8174/102-0202-11	139351	130 g
		15 A	750 V	–	M16	1000 mm	1000 mm	8174/110-0202-11	139588	112 g
	4	15 A	750 V	–	M24	1000 mm	1000 mm	8174/102-0402-11	139369	210 g
		15 A	750 V	–	M16	1000 mm	1000 mm	8174/110-0402-11	139582	192 g
	6	15 A	750 V	–	M24	1000 mm	1000 mm	8174/102-0602-11	139578	285 g
		15 A	750 V	–	M33	1000 mm	1000 mm	8174/103-0602-11	139486	3.7 kg
	8	15 A	750 V	–	M33	1000 mm	1000 mm	8174/103-0802-11	139563	395 g
	12	15 A	750 V	–	M33	1000 mm	1000 mm	8174/103-1202-11	139553	506 g
	16	13 A	750 V	–	M33	1000 mm	1000 mm	8174/103-1602-11	139549	715 g
	21	–	750 V	–	M42	1000 mm	1000 mm	8174/104-2102-11	139594	630 g
	24	11.5 A	750 V	–	M42	1000 mm	1000 mm	8174/104-2402-11	139538	1.1 kg
	36	9.5 A	750 V	–	M42	1000 mm	1000 mm	8174/104-3602-11	139531	1.58 kg





Selection Table										
Product variant		8174/1 Conductor bushing (screwable)								
Min. conductor cross section		2.5 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	4	20 A	750 V	–	M24	1000 mm	1000 mm	8174/102-0403-11	139638	305 g
	6	–	750 V	–	M33	1000 mm	1000 mm	8174/103-0603-11	139630	465 g
	12	19.5 A	750 V	–	M33	1000 mm	1000 mm	8174/103-1203-11	139624	855 g
	24	15 A	750 V	–	M42	1000 mm	1000 mm	8174/104-2403-11	139616	1.7 kg
Product variant		8174/1 Conductor bushing (screwable)								
Min. conductor cross section		4 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	3	–	750 V	–	M33	600 mm	300 mm	8174/103-0304-0503-69	139692	470 g
	6	25 A	750 V	–	M33	1000 mm	1000 mm	8174/103-0604-11	139669	627 g
	18	22 A	750 V	–	M42	1000 mm	1000 mm	8174/104-1804-11	139660	1.79 kg
Product variant		8174/1 Conductor bushing (screwable)								
Min. conductor cross section		6 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	6	33 A	750 V	–	M33	1000 mm	1000 mm	8174/103-0605-11	139727	885 g
Product variant		8174/1 Conductor bushing (screwable)								
Min. conductor cross section		10 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	3	45 A	750 V	–	M33	1000 mm	1000 mm	8174/103-0306-11	139810	753 g
	6	45 A	750 V	–	M42	1000 mm	1000 mm	8174/104-0606-11	139788	1.49 kg
Product variant		8174/1 Conductor bushing (screwable)								
Min. conductor cross section		16 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	4	61 A	750 V	–	M42	1000 mm	1000 mm	8174/104-0407-11	139844	1.59 kg
	6	61 A	750 V	–	M42	1000 mm	1000 mm	8174/104-0607-11	139837	2.39 kg
Product variant		8174/1 Conductor bushing (screwable)								
Min. conductor cross section		35 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	3	103 A	750 V	–	M42	1000 mm	1000 mm	8174/104-0309-11	139910	2.28 kg
	4	103 A	750 V	–	M48	1000 mm	1000 mm	8174/105-0409-11	139901	3.02 kg
		103 A	1000 V	–	M48	600 mm	1300 mm	8174/105-0418-63	217649	3.1 kg

Selection Table

Product variant		8174/1 Conductor bushing (screwable)								
Min. conductor cross section		50 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	1	132 A	1000 V	–	M33	1000 mm	1000 mm	8174/103-0110-11	139920	1.3 kg
	3	132 A	1000 V	–	M48	1000 mm	1000 mm	8174/105-0310-11	139916	3.81 kg
Product variant		8174/1 Conductor bushing (screwable)								
Min. conductor cross section		70 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	1	165 A	1000 V	–	M33	1000 mm	1000 mm	8174/103-0111-11	139928	1.8 kg
Product variant		8174/2 Conductor bushing (pluggable)								
Min. conductor cross section		0.5 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	12	7 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-1213-33	139359	421 g
	24	6 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-2413-33	139348	733 g
	48	4.5 A	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-4813-33	139324	1.4 kg
	60	4.5 A	750 V	ø 48	M56	1300 mm	1300 mm	8174/205-6013-33	139335	1.78 kg
Product variant		8174/2 Conductor bushing (pluggable)								
Min. conductor cross section		0.75 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	4	9 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-0401-33	139504	244 g
		–	500 V	ø 34	M42	1300 mm	1300 mm	8174/203-0461-33	167172	244 g
	12	9 A	750 V	ø 34	M42	2500 mm	2500 mm	8174/203-1201-22	139477	915 g
		9 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-1201-33	139478	515 g
		9 A	500 V	ø 34	M42	2500 mm	2500 mm	8174/203-1261-22	167173	915 g
		9 A	500 V	ø 34	M42	1300 mm	1300 mm	8174/203-1261-33	167174	915 g
		–	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-2101-33	139823	897 g
	24	7.5 A	750 V	ø 34	M42	2500 mm	2500 mm	8174/203-2401-22	139456	1.58 kg
		7.5 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-2401-33	139457	920 g
		7.5 A	500 V	ø 34	M42	1300 mm	1300 mm	8174/203-2461-33	167176	1.58 kg
	48	5.5 A	750 V	ø 41	M48	2500 mm	2500 mm	8174/204-4801-22	139431	1.78 kg
		5.5 A	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-4801-33	139432	1.78 kg

Selection Table										
Product variant		8174/2 Conductor bushing (pluggable)								
Min. conductor cross section		1.5 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	6	15 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-0602-33	139572	445 g
	12	15 A	750 V	ø 34	M42	2500 mm	2500 mm	8174/203-1202-22	139556	733 g
		15 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-1202-33	139557	733 g
	24	11.5 A	750 V	ø 41	M48	2500 mm	2500 mm	8174/204-2402-22	139542	2.56 kg
		11.5 A	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-2402-33	139543	1.4 kg
	50	9 A	750 V	ø 48	M56	2500 mm	2500 mm	8174/205-5002-22	139526	5.39 kg
		9 A	750 V	ø 48	M56	1300 mm	1300 mm	8174/205-5002-33	139527	2.82 kg
	Product variant		8174/2 Conductor bushing (pluggable)							
Min. conductor cross section		2.5 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	6	20 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-0603-33	139634	616 g
		-	750 V	ø 34	M42	2500 mm	2500 mm	8174/203-0603-22	139633	616 g
	12	19.5 A	750 V	ø 34	M42	2500 mm	2500 mm	8174/203-1203-22	139627	2.06 kg
		19.5 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-1203-33	139628	1.15 kg
	24	15 A	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-2403-33	139620	2.18 kg
	Product variant		8174/2 Conductor bushing (pluggable)							
Min. conductor cross section		4 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	3	25 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-0304-33	139677	468 g
	6	25 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-0604-33	139672	125 g
	12	25 A	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-1204-33	139667	1.59 kg
Product variant		8174/2 Conductor bushing (pluggable)								
Min. conductor cross section		6 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	3	33 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-0305-33	139738	670 g
	6	33 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-0605-33	139730	1.16 kg
	12	33 A	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-1205-33	139718	2.26 kg

Selection Table

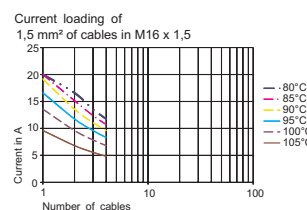
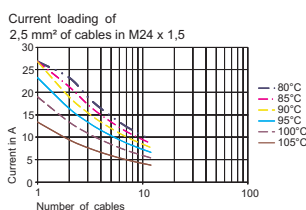
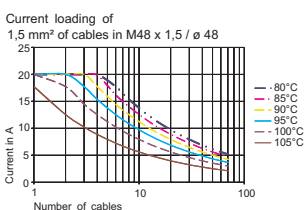
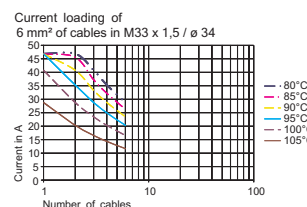
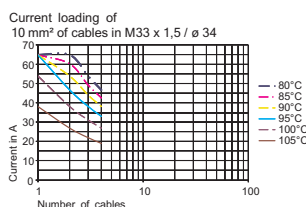
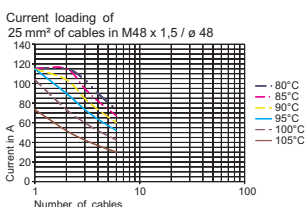
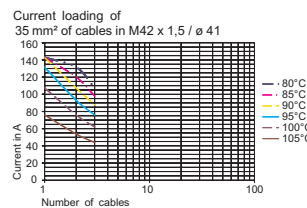
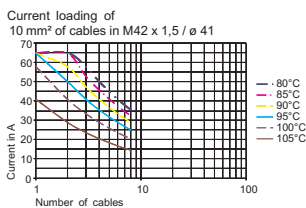
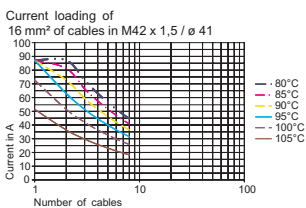
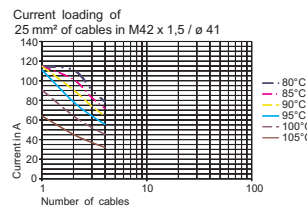
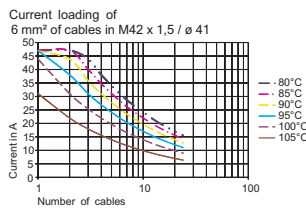
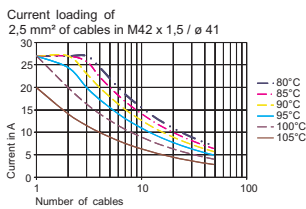
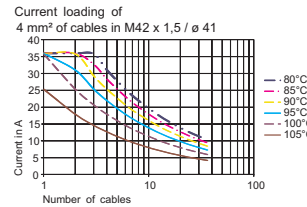
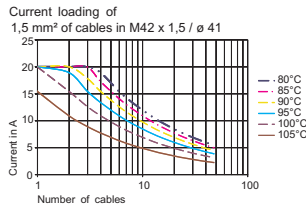
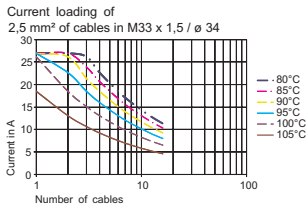
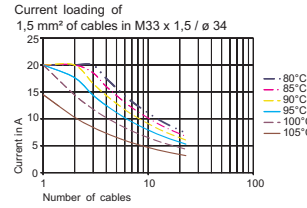
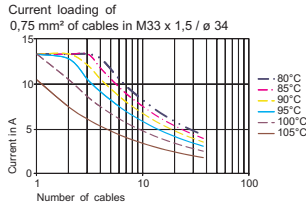
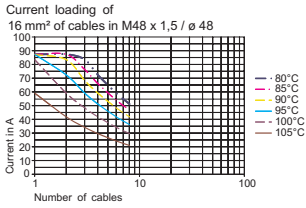
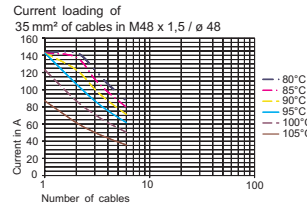
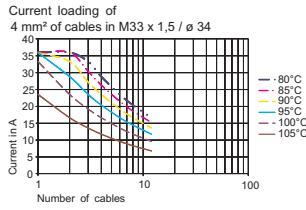
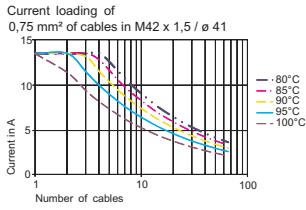
Product variant		8174/2 Conductor bushing (pluggable)								
Min. conductor cross section		10 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	3	45 A	750 V	ø 34	M42	1300 mm	1300 mm	8174/203-0306-33	139813	991 g
	4	45 A	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-0406-33	139803	1.33 kg
	6	45 A	750 V	ø 41	M48	2500 mm	2500 mm	8174/204-0606-22	139853	1.58 kg
		45 A	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-0606-33	139791	1.92 kg
Product variant		8174/2 Conductor bushing (pluggable)								
Min. conductor cross section		16 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	3	61 A	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-0307-33	139859	125 g
	4	61 A	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-0407-33	139847	2.05 kg
	6	61 A	750 V	ø 48	M56	1300 mm	1300 mm	8174/205-0607-33	139828	3.07 kg
Product variant		8174/2 Conductor bushing (pluggable)								
Min. conductor cross section		25 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	3	83 A	750 V	ø 41	M48	1300 mm	1300 mm	8174/204-0308-33	139882	2.21 kg
	4	83 A	750 V	ø 48	M56	1300 mm	1300 mm	8174/205-0408-33	139873	2.96 kg
Product variant		8174/2 Conductor bushing (pluggable)								
Min. conductor cross section		35 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	3	103 A	750 V	ø 48	M56	1300 mm	1300 mm	8174/205-0309-33	139909	1.95 kg
	4	103 A	750 V	ø 48	M56	1300 mm	1300 mm	8174/205-0409-33	139904	3.94 kg

Technical Data

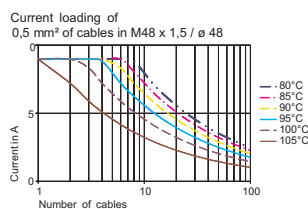
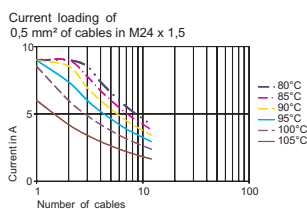
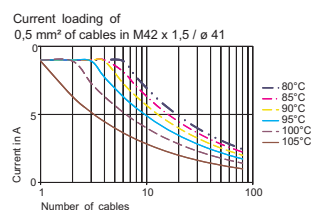
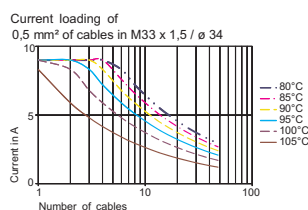
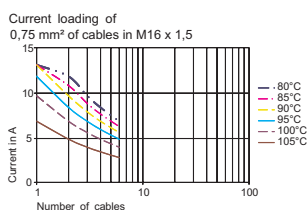
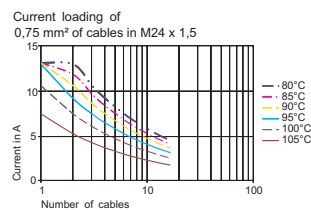
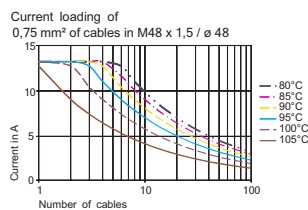
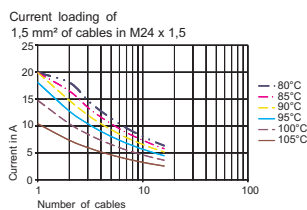
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Technical Drawings – Subject to Alterations




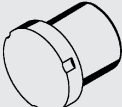
E10



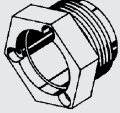
E10



Accessories

Figure	Description	Art. No.	Weight
Cheese head screw			
	M4 x 6 3 cheese-head screws are required per stopping plug or threaded element	109806	2 g
Jam nut			
	M24 x 1,5	108370	7 g
	M33 x 1,5	108375	36 g
	M42 x 1,5	108378	36 g
	M48 x 1,5	108379	45 g
	M16 x 1,5	108368	3 g
Split washer			
	M4 3 split washers are required per stopping plug or threaded element	252066	17 g
Stopping plugs			
	to close up unused thread fittings Note: cheese-head screws and split washers have to be ordered separately	-	-
	Ø 34 mm, M42 x 1,5	139720	267 g
	Ø 41 mm, M48 x 1,5	139732	267 g
	Ø 48 mm, M56 x 1,5	139740	267 g

Accessories

Figure	Description	Art. No.	Weight
Threaded piece			
	Note: Please order cheese-head screws and split washers separately	-	-
	for pluggable conductor bushings 8174/2 Drilled hole diameter Ø 34 mm Screw-in thread M42 x 1.5	140032	156 g
	for pluggable conductor bushings 8174/2 Drilled hole diameter Ø 41 mm Screw-in thread M48 x 1.5	140038	184 g
	for pluggable conductor bushings 8174/2 Drilled hole diameter Ø 48 mm Screw-in thread M56 x 1.5	140049	276 g

Note on Mounting

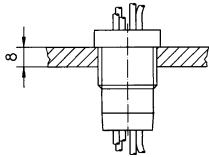


Fig. 1
Screwable conductor bushing 8174/1

The connection of the core lines outside the flameproof enclosure must be made via terminals or connection parts that meet the requirements of the "Increased Safety" degree of protection.
When installing cable bushings, the provisions of IEC/EN 60079-1 must be observed.
The screw-in depth must be at least 5 thread turns (with thread pitch 1.5 mm, 8 mm screw-in depth in the enclosure) (see Fig. 1).

The conductor bushings are usually screwed in from the inside of the flameproof enclosure (reverse installation is only possible with special fastening; on request). The bushings must be secured to protect against self-loosening, e.g. locking plates or gluing of the threaded surfaces.

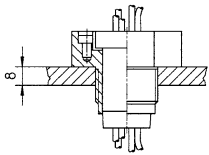


Fig. 2
Pluggable conductor bushing 8174/2, inserted in threaded piece

The plug-in conductor bushing can be inserted directly into a corresponding drilled hole in the enclosure wall, whereby a cylindrical gap between the enclosure and the bushing is used to provide a flameproof termination.
With this method, the tolerances from the operating instructions must be observed.
A simpler method of installation is to use a threaded piece that forms a thread gap on the outside (at least 5 thread turns according to tolerance ISO 965-1 and ISO 965-3b) and the cylinder gap inside as an ignition-proof termination (see Fig. 2).
The threaded piece is also secured against self-loosening by gluing or with a locking plate.