



- Power supply in Ex d enclosures
- One to 72 cores are combined in one conductor bushing
- Versions: Screwable, pluggable
- For voltages up to max. 1000 V
- For conductor cross-sections up to 70 mm²

E10

MY R. STAHL 8174A





The conductor bushings are used to connect the conductors between enclosures with the "flameproof" and "increased safety" types of protection.

The cores are moulded with high-quality, leakage-current-resistant PU resin, meaning that they are 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

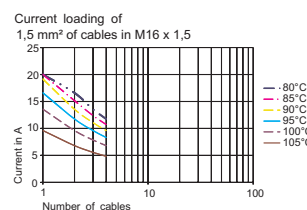
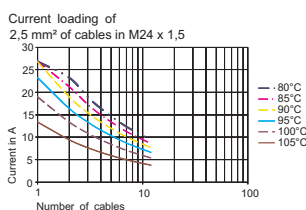
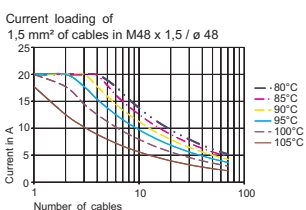
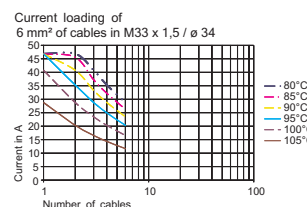
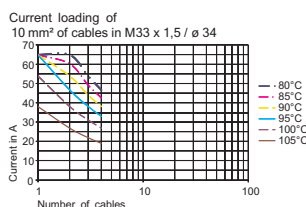
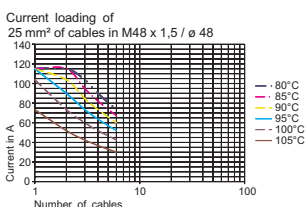
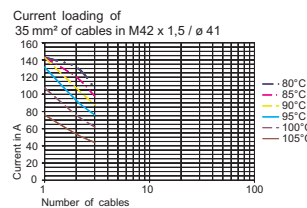
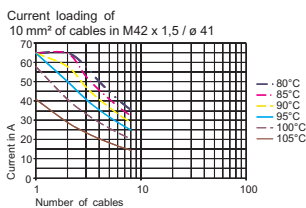
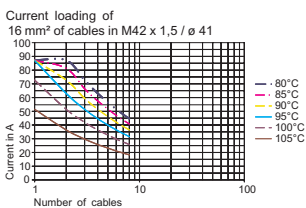
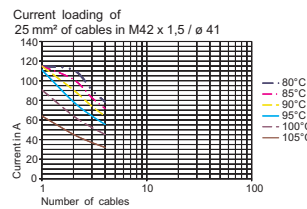
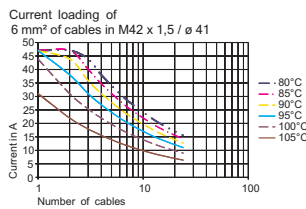
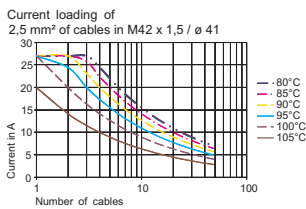
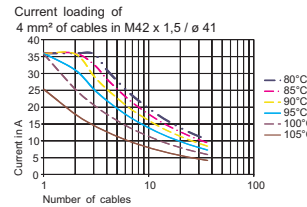
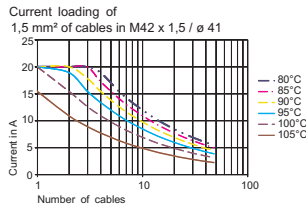
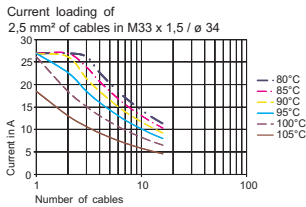
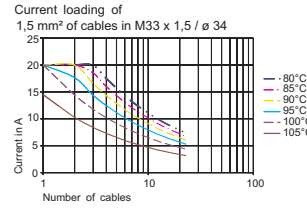
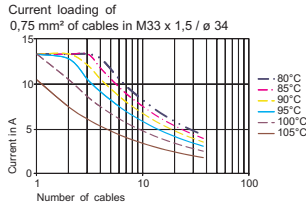
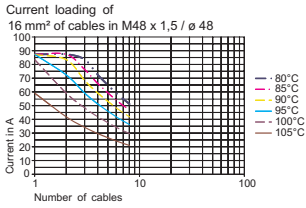
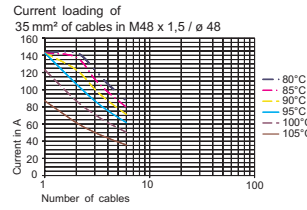
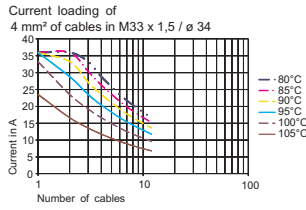
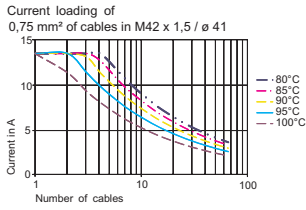
Product variant		8174/2 conductor bushing (pluggable)								
Min. conductor cross section		10 mm ²								
Figure	Number of core ends	Rated operational current	Rated operational voltage AC	Socket diameter	Thread size	Ex d conductor length	Ex e conductor length	Product Type	Art. No.	Weight
	3	45 A	750 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

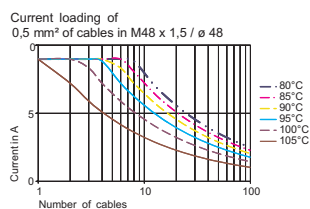
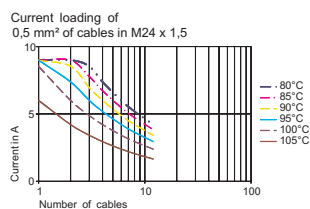
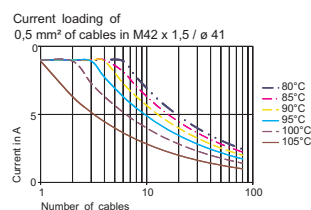
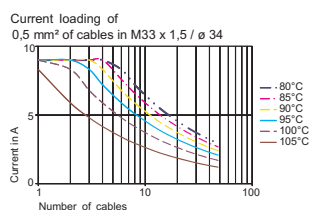
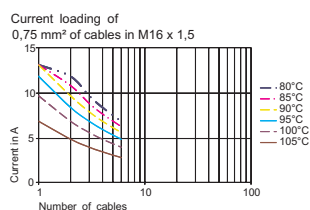
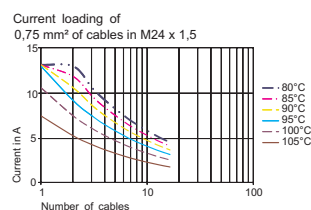
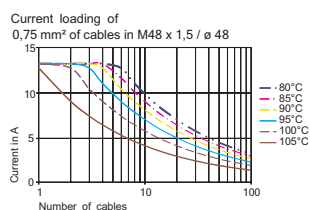
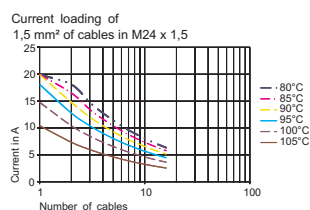
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Certificates	ATEX (PTB), China (CQST), IECEx (PTB)
Ambient Conditions	
Ambient temperature	-40 °C ... +110 °C

Technical Drawings – Subject to Alterations

E10



E10



Accessories

Figure	Description	Art. No.	Weight
Cheese-head screw			
	M4 x 6 Three cheese-head screws are required per stopping plug or threaded piece	109806	1 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 Three split washers are required per stopping plug or threaded piece	252066	0 g
Stopping plugs			
	for sealing unused threaded pieces Note: Please order cheese-head screws and split washers separately	-	-
	Dia. 34 mm, M42 x 1,5	139720	267 g
	Dia. 41 mm, M48 x 1,5	139732	267 g
	Dia. 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 dia. 34 mm Screw-in thread M42 x 1.5	140032	156 g
	for pluggable conductor bushings 8174/2 Drilled hole diameter dia. 41 mm Screw-in thread M48 x 1.5	140038	184 g
	for pluggable conductor bushings 8174/2 Drilled hole diameter dia. 48 mm Screw-in thread M56 x 1.5	140049	276 g

Notes on mounting

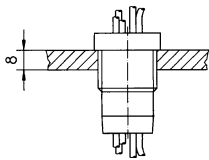


Fig. 1
Screwable conductor bushing 8174/1

The single cores must be connected outside the flameproof area using clamps or connecting parts which meet the requirements of the "increased safety" type of protection.
When installing conductor bushings, the provisions of IEC/EN 60079-1 must be complied with.
The screw-in depth must be at least equal to five load-bearing thread turns (with a 1.5 mm thread pitch, a screw-in depth of 8 mm in the enclosure) (see Fig. 1).

The conductor bushings are usually screwed in from the inside of the flameproof enclosure (installation the other way around is only possible with a special lock on request). The conductor bushings must be secured so that they cannot come loose, e.g. by using locking plates or by adhering the thread surfaces.

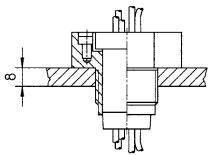


Fig. 2
Pluggable conductor bushing 8174/2,
inserted into threaded piece

The pluggable conductor bushing can be inserted directly into a suitable drilled hole in the enclosure wall, with the flameproof seal being formed by a cylindrical gap between the enclosure and bushing.
With this method, the tolerances from the operating instructions must be adhered to.
A threaded piece simplifies installation, as this forms a threaded gap on the outside (at least five thread turns according to the tolerance from ISO 965-1 and ISO 965-3b) and the cylindrical gap as a flameproof seal on the inside (see Fig. 2).
The threaded piece is also secured by adhesion or using a locking plate to prevent it coming loose.