

Cable Glands

Series 8161



- > Explosion protection type "increased safety"
- > Degree of protection IP68
- > Ex e and Ex i versions
- > As single or multi-cable entry
- > Integrated plug (accessory) for closing unused cable entries
- > Cable diameter ranges from 4 ... 48 mm
- > Protective collar with sprayed-on sealing lip (up to M32 x 1.5)



02895E00



The cable glands Series 8161 are certified for use in "increased safety" type enclosures. For entry intrinsically safe circuits a version with blue cap nut is available.

Zone	ATEX / IECEx					
	0	1	2	20	21	22
For use in		x	x		x	x

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Selection Table

Version	Thread size	Number of entries	Cable dia. range [mm]	Width across flats [mm]	Packing unit	Order number	Weight
					pieces		
8161/5 Ex e (black)	M16 x 1.5	1	4 ... 9	SW 20	50	8161/5-M16-9	0.423
	M20 x 1.5	1	6 ... 13	SW 24	50	8161/5-M20-13	0.600
	M25 x 1.5	1	7 ... 17	SW 29	50	8161/5-M25-17	0.850
		4	4 ... 6	SW 29	50	8161/5-M25-96	1.000
	M32 x 1.5	1	13 ... 21	SW 36	25	8161/5-M32-21	0.789
		4	5 ... 7	SW 36	25	8161/5-M32-97	0.910
	M40 x 1.5	1	17 ... 28	SW 46	10	8161/5-M40-28	0.678
	M50 x 1.5	1	23 ... 35	SW 55	4	8161/5-M50-35	0.421
M63 x 1.5	1	31 ... 48	SW 68	1	8161/5-M63-48	0.120	
8161/6 Ex i (black with blue cap nut)	M16 x 1.5	1	4 ... 9	SW 20	50	8161/6-M16-9	0.425
	M20 x 1.5	1	6 ... 13	SW 24	50	8161/6-M20-13	0.011
	M25 x 1.5	1	7 ... 17	SW 29	50	8161/6-M25-17	0.850
		4	4 ... 6	SW 29	50	8161/6-M25-96	1.000
	M32 x 1.5	1	13 ... 21	SW 36	25	8161/6-M32-21	0.790
		4	5 ... 7	SW 36	25	8161/6-M32-97	0.910
	M40 x 1.5	1	17 ... 28	SW 46	10	8161/6-M40-28	0.056
	M50 x 1.5	1	23 ... 35	SW 55	4	8161/6-M50-35	0.360
M63 x 1.5	1	31 ... 48	SW 68	1	8161/6-M63-48	0.120	

Explosion Protection

Marking

IECEX	
Gas explosion protection	Ex e II
Dust explosion protection	Ex tD A21 IP66
Europe (ATEX)	
Gas explosion protection	⊕ II 2 G Ex e II
Dust explosion protection	⊕ II 2 D Ex tD A21 IP66

Certificates

IECEX	IECEX PTB 05.0016X
Europe (ATEX)	
Gas explosion protection	PTB 00 ATEX 3119 X
Dust explosion protection	PTB 00 ATEX 3119 X
Other certificates	Brazil (UL do Brasil), Canada (CSA), Russia (CTB), Kazakhstan (JSC), Belarus (Gospromnadzor)

Technical Data

Ambient conditions

Ambient temperature	- 40 ... + 75 °C
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Mechanical data

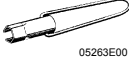
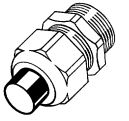
Degree of protection	IP66 IP68 at 6 bar 24 h
Material	
Cable gland	Polyamide, glass fibre reinforced, flame resistant, self-extinguishing
Impact strength	Impact energy high, 7 J
Colour	8161/5: black (Ex e) 8161/6: nozzle black, cap nut blue (Ex i)

Technical Data

Assembly / Installation

Thread size	Wall resp. flange thickness for installation cable glands				
	Wall resp. flange thickness for mounting in threaded holes		for mounting with locknuts in though holes		
	Wall in plastic [mm]	Wall in metal [mm]	Wall in plastic [mm]	Wall in metal [mm]	Minimum nutdepth (metal) [mm]
M16 x 1.5 M20 x 1.5 M25 x 1.5	≥ 5	≥ 3	2 ... 6.5	1 ... 6.5	3.0
M32 x 1.5 M40 x 1.5 M50 x 1.5 M63 x 1.5	≥ 5	≥ 3	2 ... 8	1 ... 8	3.5 4.0 5.5 5.5



Accessories and Spare Parts

Designation	Diagram	Description	Order number	Weight kg
Special key	 05263E00	For tightening cable glands and cap nuts		
		For cable glands		
		Thread size Packing unit		
		M16 x 1.5 1	114207	0.120
		M20 x 1.5 1	114208	0.132
		M25 x 1.5 1	114205	0.163
		M32 x 1.5 1	114209	0.237
Plug	 05572E00	in polyamide, red		
		For closing unused cable entries		
		for cable entries		
		Thread size Kind of entry Packing unit		
		M16 x 1.5 single 50	138406	0.061
		M20 x 1.5 single 50	138394	0.140
		M25 x 1.5 single 25	138382	0.130
M25 x 1.5 multi 50	138417	0.031		
M32 x 1.5 single 25	138422	0.206		
M32 x 1.5 multi 50	138412	0.044		

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Accessories and Spare Parts

Designation	Diagram	Description	Order number	Weight kg		
Flat gasket	 04968E00	as additional gasket for onerous mounting conditions for cable entries				
		Thread size	Type	Packing unit		
		M16 x 1.5	8161/-M16-9	50	138384	0.017
		M20 x 1.5	8161/-M20-13	50	138390	0.022
		M25 x 1.5	8161/-M25-..	50	138396	0.023
		M32 x 1.5	8161/-M32-..	25	138402	0.014
		M40 x 1.5	8161/-M40-28	10	138408	0.012
		M50 x 1.5	8161/-M50-35	4	138414	0.007
		M63 x 1.5	8161/-M63-48	1	138419	0.003
Lock nut	 05865E00	To fasten the cable glands in through holes For cable glands				
		Type	Thread size	Packing unit		
		Brass, nickel-plated	M16 x 1.5	50	138383	0.135
		Brass, nickel-plated	M20 x 1.5	50	138389	0.241
		Brass, nickel-plated	M25 x 1.5	50	138395	0.348
		Brass, nickel-plated	M32 x 1.5	25	138401	0.267
		Brass, nickel-plated	M40 x 1.5	10	138407	0.218
		Brass, nickel-plated	M50 x 1.5	4	138413	0.109
		M63 x 1.5	1	138418	0.054	

Dimensional Drawings (All Dimensions in mm) - Subject to Alterations

Thread size M	Dimensions [mm]							
	SW	d ₁	l ₁		l ₂	Cable dia. range	d ₂	d ₄
			min.	max.				
M16 x 1.5	20	22	31	37	9	4 ... 9	10.3	9.3
M20 x 1.5	24	27	36	45	10	6 ... 13	13.3	13.3
M25 x 1.5	29	32	38	47	10	10 ... 17 7 ... 12* 4 x 3 ... 6	17.3	17.3
M32 x 1.5	36	40	42	51	12	13 ... 21 4 x 5 ... 7	21.3	21.3
M40 x 1.5	46	51	52	65	12	17 ... 28	28.3	30
M50 x 1.5	55	61	59	72	14	23 ... 35	35.3	40
M63 x 1.5	68	75	64	78	15	31 ... 48	48.3	53

* Terminal capacity 7 ... 12 mm: with additional gasket.

The disc fitted to prevent the ingress of dust must be removed during installation.

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.