

Selection table for safety switches NM with separate actuator

Connection							
M	Thread M16x1.5 for cable glands						
SM4	Plug connector M12 4-pin						
Housing							
	Short		Long				
Switching element							
	One contact		1 NC ⊖				
	Two contacts		1 NC ⊖ + 1 NO, 2 NC ⊖				
	Three contacts		2 NC ⊖ + 1 NO, 3 NC ⊖				
Connection		Housing		Switching element			Page
M	SM4	Short	Long	One contact	Two contacts	Three contacts	
●		●		●	●		22
	●		●		●	●	23

Safety Switches with Separate Actuator, Plastic Housing **EUCHNER**



Safety switch NM..VZ

- ▶ Cable entry M16 x 1.5
- ▶ M12 plug connector optional



Approach direction



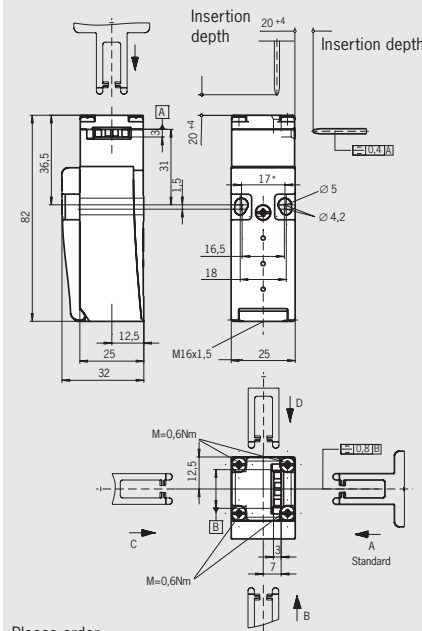
Horizontal and vertical
Can be adjusted in 90° steps

Switching elements

- ▶ **ES01** Slow-action switching element
1 NC ⊖
- ▶ **ES11** Slow-action switching element
1 NC ⊖ + 1 NO
- ▶ **ES02** Slow-action switching element
2 NC ⊖
- ▶ **ES12** Slow-action switching element
2 NC ⊖ + 1 NO
- ▶ **ES03** Slow-action switching element
3 NC ⊖

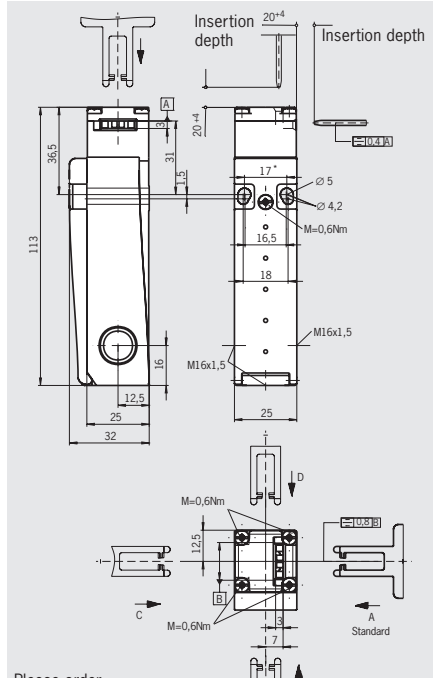
Cable entry M16 x 1.5 Short housing

Dimension drawing



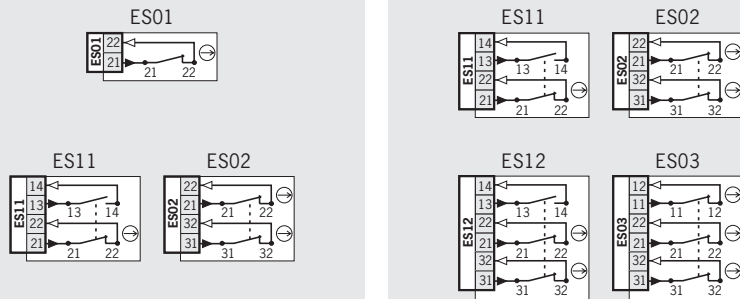
Please order actuator separately (see pages 88-89) For cable glands see page 104

Cable entry M16 x 1.5 Long housing



Please order actuator separately (see pages 88-89) For cable glands see page 104

Wiring diagrams Actuator inserted

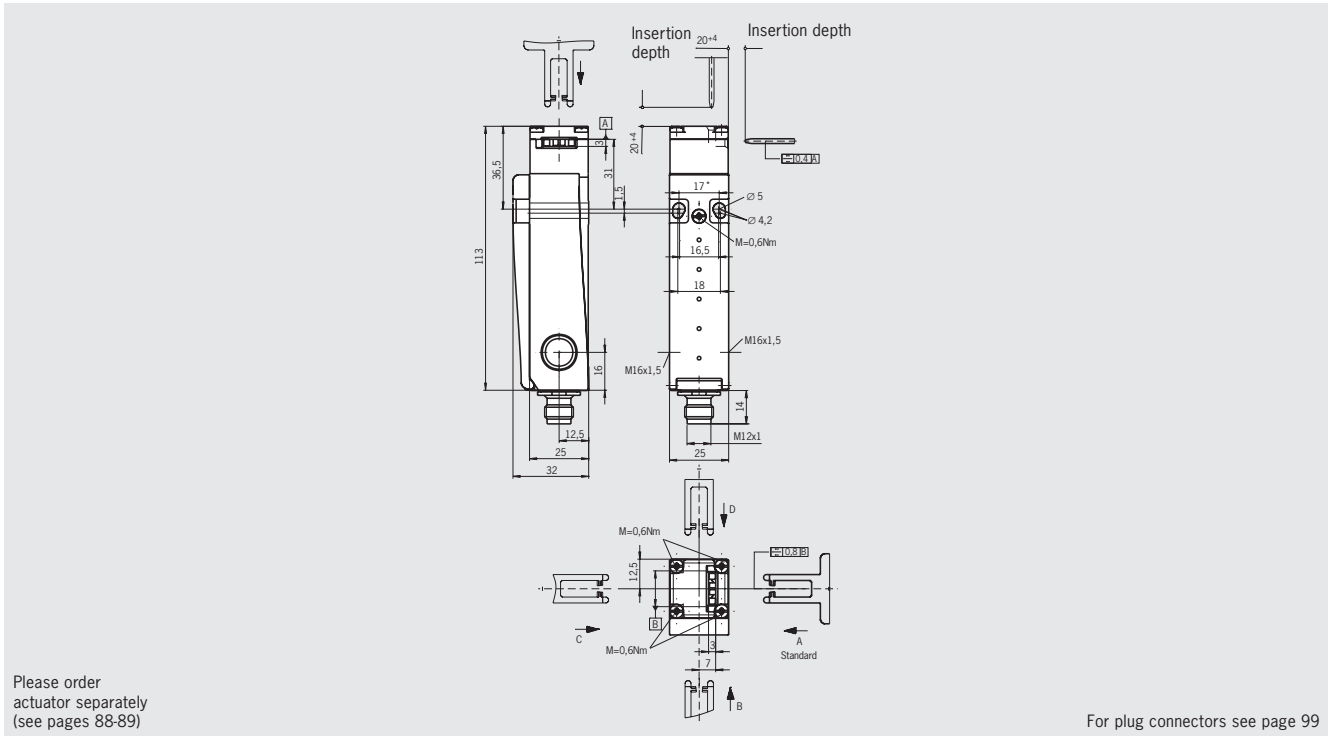


Ordering table

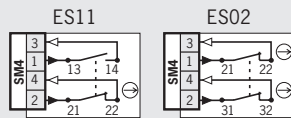
Series	Actuator	Connection	Housing	Switching element	Order No. / Item
NM	VZ Separate actuator	Cable entry 1 x M16 x 1.5	Short 	01 1 NC ⊖	084451 NM01VZA-M
				11 1 NC ⊖ + 1 NO	094471 NM11VZA-MC2069
				02 2 NC ⊖	094470 NM02VZA-MC2069
				11 1 NC ⊖ + 1 NO	084452 NM11VZA-M
		Cable entry 3 x M16 x 1.5	Long 	02 2 NC ⊖	084453 NM02VZA-M
				12 2 NC ⊖ + 1 NO	084454 NM12VZA-M
				03 3 NC ⊖	084455 NM03VZA-M




Plug connector M12 4-pin, long housing



Wiring diagrams Actuator inserted



Ordering table

Series	Actuator	Connection	Housing	Switching element	Order No. / Item
NM	VZ Separate actuator	Plug connector M12	Long 	11 1 NC ⊖ + 1 NO	085626 NM11VZA-SM4
				02 2 0 ⊖	084564 NM02VZA-SM4

For safety precautions see page 160
For technical data see page 117



Safety switch NM..VZ



The technical data on switches and switching elements apply to all connections. Further technical data are given for the connection selected.

Reliability values acc. to EN ISO 13849-1

Parameter	Value	Unit
B _{10d}	4 x 10 ⁶ operating cycles	

Switch



Parameter	Value	Unit
Housing material	Reinforced thermoplastic	
Mechanical life	10 ⁶ operating cycles	
Weight	approx. 0.1	kg
Max. approach speed	20	m/min
Actuating force	10	N
Extraction force	10	N
Retention force	2	N
Insertion depth	necessary minimum travel	20
	permissible overtravel	4

Switching element



Parameter	Value	Unit
Switching principle	Slow-action switching element	
Switching elements with 1 switching element	ES01 1 NC ⊖	
Switching elements with 2 switching elements	ES11 1 NC ⊖ + 1 NO ES02 2 NC ⊖ ES12 2 NC ⊖ + 1 NO ES03 2 NC ⊖	
Switching current, min., at DC 24 V	1	mA
Switching voltage, min., at 10 mA	12	V
Contact material	Silver alloy, gold flashed	

Connection, cable entry M16 x 1.5



Parameter	Value	Unit
Ambient temperature	- 20 ... + 80	°C
Connection	Screw terminal	
Version	M16 x 1.5	
Conductor cross-section	0.34 ... 1.5	mm ²
Degree of protection according to IEC 60529	IP 67	
Rated insulation voltage U _i	250	V AC/DC
Rated impulse withstand voltage U _{imp}	2.5	kV
Conventional thermal current I _{th}	4	A
Short circuit protection according to IEC 60269-1 (control circuit fuse)	4	A gG
Utilization category to IEC 60947-5-1	AC-15	I _e 4 A U _e 230 V
	DC-13	I _e 4 A U _e 24 V

Connection, plug connector SM 4 (M12)



Parameter	Value	Unit
Ambient temperature	- 20 ... + 60	°C
Connection	Plug connector	
Version	M12 (4-pin)	
Degree of protection according to IEC 60529	IP 67 ¹⁾	
Rated insulation voltage U _i	250	V AC/DC
Rated impulse withstand voltage U _{imp}	2.5	kV
Conventional thermal current I _{th}	1.5	A
Short circuit protection according to IEC 60269-1 (control circuit fuse)	4	A gG
Utilization category to IEC 60947-5-1	AC-15	I _e 4 A U _e 230 V
	DC-13	I _e 4 A U _e 24 V

1) Screwed tight with the related plug connector (see page 99)

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Limit Switches](#) category:

Click to view products by [Euchner](#) manufacturer:

Other Similar products are found below :

[6LS2-4PG](#) [5ML1-E1](#) [5ML31](#) [LZG1](#) [LZL1-6C](#) [622EN114-R](#) [622EN18-6](#) [622EN224-6B](#) [622EN230](#) [622EN237-R](#) [622EN69-3](#) [622EN85-RB](#)
[MA-10019](#) [6PA109](#) [7LS51](#) [83547001](#) [83725002](#) [83830001](#) [83840001](#) [83840701](#) [83841001](#) [83870104](#) [83881140](#) [8AS42](#) [8LS10](#) [8LS125-](#)
[4PG](#) [8LS152-4PGN20](#) [914CE16-3A](#) [914CE16-AQ](#) [914CE3-3L1](#) [915PA10](#) [91MCE16-P2O](#) [924CE16-Y3](#) [924CE1-S6](#) [924CE1-T25A](#)
[924CE1-T3](#) [924CE1-T9A](#) [924CE2-T9](#) [924CE31-Y20-X5](#) [924CE31-Y3L1](#) [GL-10054](#) [GL-85710](#) [GL-85714](#) [GLAB26J2B](#) [GLDB03C-6](#)
[GLZ324](#) [PS21R-NT11N7-YK0](#) [D4A-1106N](#) [D4A1201N](#) [D4A-3E02N](#)