

Safety switch NM..KB with roller arm



Approach direction



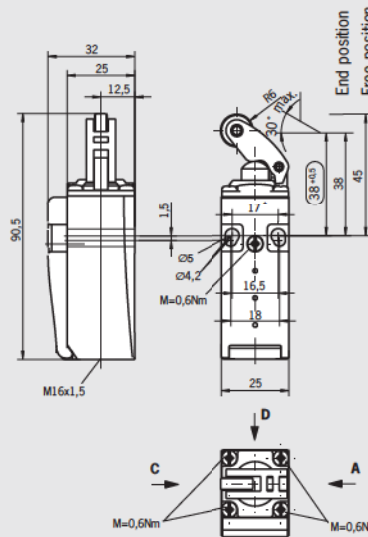
Horizontal
Can be adjusted in 90° steps.

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 ⊖

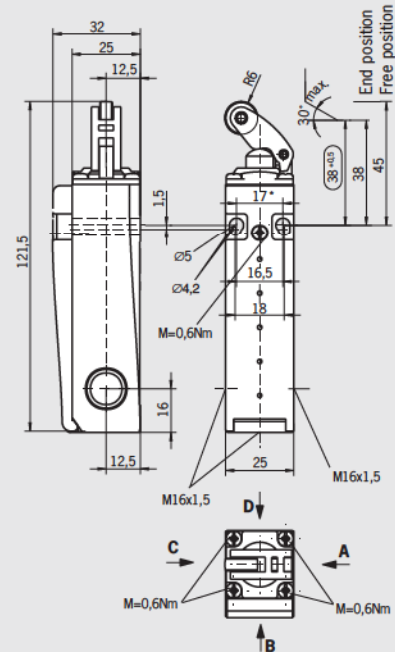
Cable entry M16 x 1.5 Short housing

Dimension drawing



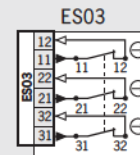
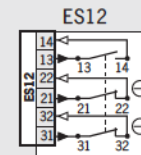
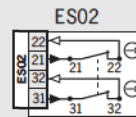
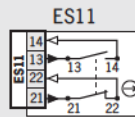
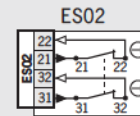
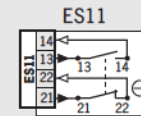
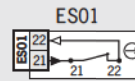
For cable glands see page 89

Cable entry M16 x 1.5 Long housing



For cable glands see page 89

Wiring diagrams Switch not actuated



Ordering table

Series	Actuator	Connection	Housing	Switching element	Order No. / Item
NM	KB Roller arm	Cable entry 1 x M16 x 1.5		01 1 NC ⊖	084 522 NM01KBAM
				11 1 NC ⊖ + 1 NO	095 371 NM11KBAM-MC2069
				02 2 NC ⊖	095 370 NM02KBAM-MC2069
				11 1 NC ⊖ + 1 NO	084 523 NM11KBAM
		Cable entry 3 x M16 x 1.5		02 2 NC ⊖	084 524 NM02KBAM
				12 2 NC ⊖ + 1 NO	084 525 NM12KBAM
				03 3 NC ⊖	084 526 NM03KBAM

Safety switch NM...



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

Switch				
Parameter	Value			Unit
Housing material	Reinforced thermoplastic			
Mechanical life	WO/RB	KB/HB	AV/AL/AG/AK	
	30 x 10 ⁶	20 x 10 ⁶	> 4 x 10 ⁶	Operating cycles
Weight	approx. 0.1			kg
Actuator material	Plastic; hinged actuators steel (stainless)			
Approach speed, max.	60			m/min
Actuating force	15			N

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 3 NC ⊖	
Switching current, min., at DC 24 V	1				mA
Switching voltage, min.	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}	2.3		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 85)