Position switch NZ.PS with adjustable lever arm

- **Steel roller Ø 18**
- **LED optional**
- **Plug connector optional**

Approach direction

Horizontal
Switch head and lever arm can be adjusted in 90° steps.

Switching direction
Right, left or both sides (see page 9).

Lever arm adjustment
Lever arm length can be adjusted from 28 mm to 78 mm in steps of 12.5 mm.

LED function display (optional)
A function display is available for the following voltage ranges:

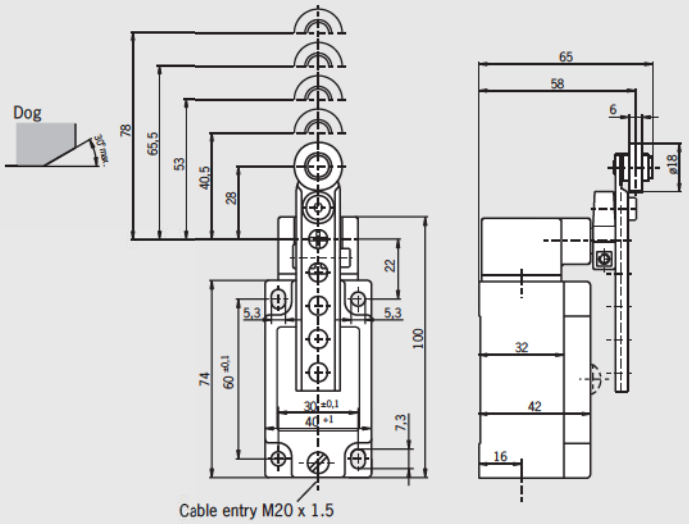
- AC/DC 12-60 V red or yellow
- AC 230 V ±15% red

Switching elements (see also page 13/14)

- **511** Snap-action switching element 1 NC ⊖ + 1 NO
- **528H** Slow-action switching element 1 NC ⊖ + 1 NO
- **538H** Slow-action switching element 2 NC ⊖
- **2121H** Slow-action switching element 4 NC ⊖
- **2131H** Slow-action switching element 3 NC ⊖ + 1 NO
- **3131H** Slow-action switching element 2 NC ⊖ + 2 NO

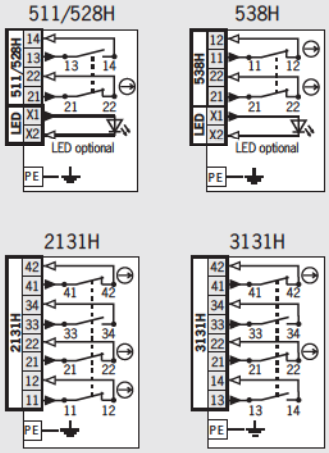
Cable entry M20 x 1.5

Dimension drawings



For cable glands see page 124

Wiring diagrams Switch not actuated



Ordering table

Series	Actuator	Connection	Switching element	Function display: Without LED	12-60 V red LED	230 V red LED	230 V yellow LED
NZ	PS Adjustable lever arm	1 Cable entry M20 x 1.5	**511** [1] 1 NC ⊖ + 1 NO	**088 613** [1] NZ1PS-511-M	On request	On request	On request
			528H 1 NC ⊖ + 1 NO	**090 874** NZ1PS-528-M	**090 430** NZ1PS-528L060-M	**093 521** NZ1PS-528L220-M	**093 523** NZ1PS-528L220GE-M
			538H 2 NC ⊖	**090 875** NZ1PS-538-M	On request	On request	On request
			2131H 3 NC ⊖ + 1 NO	**090 876** NZ1PS-2131-M	-	-	-
			3131H 2 NC ⊖ + 2 NO	**090 877** NZ1PS-3131-M	-	-	-

1) No BG approval for switching element 511

Position switch NZ...

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	Anodized die-cast alloy							
Mechanical life	30 x 10^6 operating cycles							
Ambient temperature	- 25 ... + 80							°C
Weight	Approx. 0.3							kg
Approach speed, min.	0.1							m/min
Approach speed max. [1] depending on actuator	**HB**	**HS**	**PB**	**PS**	**RG, RL, RS**	**RK**	**WO**	
	300	60	120	30	20	80	10	m/min
Actuating force, min.	15							N

Switching element

Parameter	Value			Unit
Switching principle	Snap-action switching element	Slow-action switching element		
Switching elements with 2 switching elements	**511** 1 NC + 1 NO	**528H** 1 NC + 1 NO	**538H** 2 NC	
Switching elements with 4 switching elements	-	**2121H** 4 NC	**2131H** 3 NC + 1 NO	**3131H** 2 NC + 2 NO
Min. switching current at 24 V DC	10	1		mA
Switching current max.	6	4		A
Contact closing time	< 4	-		ms
Contact bounce time	< 3	-		ms
Rated impulse withstand voltage U_{imp}	2.5			kV
Contact material	Silver alloy, gold flashed			

Connection, cable entry M20 x 1.5

Parameter		Value		Unit
Connection		Screw terminal		
Version		M20 x 1.5		
Conductor cross-section max.		Per wire 1.5 mm²		
Degree of protection according to IEC 60529		IP 67		
Rated insulation voltage U_i		250		V AC/DC
Switching element		Snap-action switching element **511**	Slow-action switching element **528H, 538H, 2121H, 2131H, 3131H**	
Conventional thermal current I_{th}		6	4	A
Short circuit protection according to IEC 60269-1 (control circuit fuse)		6	4	A gG
Utilization category to IEC 60947-5-1	AC-12	I_e 10 A U_e 230 V	-	
	AC-15	I_e 6 A U_e 230 V	I_e 4 A U_e 230 V	
	DC-13	I_e 6 A U_e 24 V	I_e 4 A U_e 24 V	

Connection, plug connector SVM 5 (M12)

Parameter		Value	Unit
Connection		Plug connector	
Version		M12 (4-pin + PE), male socket adjustable (max. 270o) for elbow connector	
Degree of protection according to IEC 60529		IP 67 [2]	
Rated insulation voltage Ui		30	V AC/DC
Switching element		Snap-action switching element **511**, Slow-action switching element **528H, 538H**	
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 30 V	
	DC-13	I_e 4 A U_e 24 V	

1) The approach speed given applies in conjunction with EUCHNER trip dogs at an approach angle of 30°. At a smaller approach angle this approach speed can be exceeded.

2) Screwed tight with the related plug connector (see page 124)