

Position switch NZ.RS with roller plunger



- **Version C** according to EN 50041 (steel roller $\varnothing$ 12 mm)
- **LED optional**
- **Plug connector optional**
- **ATEX approval optional**



Approach direction

Horizontal
Can be adjusted in 90° steps.

LED function display (optional)

A function display is available for the following voltage ranges:

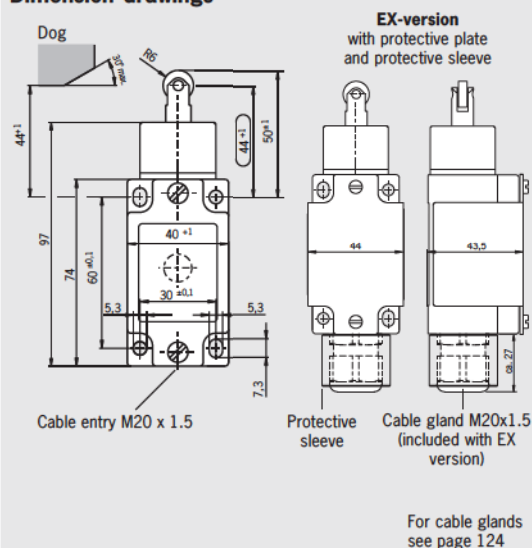
- AC/DC 12-60 V red or yellow
- AC 110 V $\pm$ 15% red
- AC 230 V $\pm$ 15% red

Switching elements (see also page 13/14)

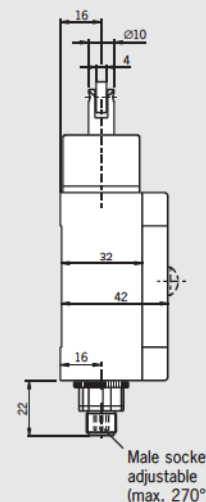
- **511** Snap-action switching element
1 NC $\ominus$ + 1 NO
- **528H** Slow-action switching element
1 NC $\ominus$ + 1 NO
- **538H** Slow-action switching element
2 NC $\ominus$
- **2121H** Slow-action switching element
4 NC $\ominus$
- **2131H** Slow-action switching element
3 NC $\ominus$ + 1 NO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

Cable entry M20 x 1.5

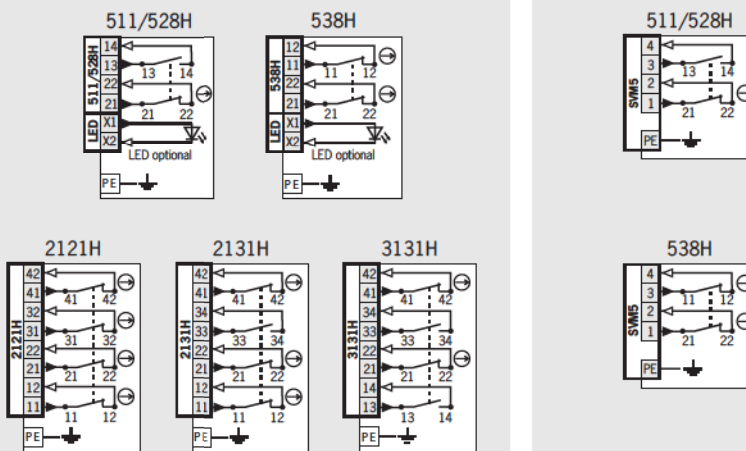
Dimension drawings



Plug connector SVM5 M12 plug, 5-pin



Wiring diagrams Switch not actuated



Ordering table

Series	Actuator	Connection	Switching element	Version	Function display			
					Without LED	12-60 V red LED	110 V red LED	12-60 V yellow LED
NZ	RS Roller plunger	1 Cable entry M20 x 1.5	511 ¹⁾		079 960 ¹⁾	089 053 ¹⁾	089 055 ¹⁾	086 528 ¹⁾
			1 NC $\ominus$ + 1 NO		NZ1RS-511-M	NZ1RS-511L060-M	NZ1RS-511L220-M	NZ1RS-511L060GE-M
			528H		089 627	086 413	091 291	On request
			1 NC $\ominus$ + 1 NO		NZ1RS-528-M	NZ1RS-528L060-M	NZ1RS-528L220-M	
			538H		090 936	090 555	On request	090 424
			2 NC $\ominus$		NZ1RS-538-M	NZ1RS-538L060-M		NZ1RS-538L060GE-M
			2121H		087 595	-	-	-
			4 NC $\ominus$		NZ1RS-2121-M			
		2 Plug connector SVM5 (M12 plug)	2131H		089 633	-	-	-
			3 NC $\ominus$ + 1 NO		NZ1RS-2131-M			
			3131H		089 631	-	-	-
			2 NC $\ominus$ + 2 NO		NZ1RS-3131-M			
			3131H	ATEX incl. cable gland	094 169 ²⁾	-	-	-
			2 NC $\ominus$ + 2 NO		NZ1RS-3131-M-EX			
		2 Plug connector SVM5 (M12 plug)	511		090 027	On request	-	098 651
			1 NC $\ominus$ + 1 NO		NZ2RS-511SVM5			NZ2RS-511SVM5L060GE
			528H		090 963	On request	-	On request
		2 Plug connector SVM5 (M12 plug)	1 NC $\ominus$ + 1 NO		NZ2RS-528SVM5			On request
			538H		090 964	On request	-	On request
			2 NC $\ominus$		NZ2RS-538SVM5			On request

1) No BG approval for switching element 511

2) Ex II 3 G Ex nC IIC T5 (reduced resistance to impact acc. to EN 61241-1; max. 4 J) / Ex II 3 D Ex tD A22 T90°C (reduced resistance to impact acc. to EN 61241-1; max. 4 J)

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
Actuating force, min.	15						N

Switching element	 		Value		Unit
Parameter					
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			Value		Unit
Parameter					
Connection			Screw terminal		
Version			M20 x 1.5		
Conductor cross-section max.			Per wire 1.5 mm ²		
Degree of protection according to IEC 60529			IP 67		
Rated insulation voltage U _i			250		V AC/DC
Switching element	Snap-action switching element		Slow-action switching element		
	511		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)			Value		Unit
Parameter					
Connection			Plug connector		
Version			M12 (4-pin + PE), male socket adjustable (max. 270°) for elbow connector		
Degree of protection according to IEC 60529			IP 67 ²⁾		
Rated insulation voltage U _i			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)

