


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

## Selection table for safety switches GP

Connection					
<p><b>M</b></p> 	<p><b>SR11</b></p>	<p>Thread M20 x 1.5 for cable gland</p> <p>Plug connector; 11 pin + PE</p>			
		Switching element			
		<p><b>Two contacts</b></p>	<p><b>Four contacts</b></p>	<p>1 NC ⊖ + 1 NO,</p> <p>2 NC ⊖</p> <p>2 NC ⊖ + 2 NO,</p> <p>3 NC ⊖ + 1 NO,</p> <p>4 NC</p>	
Connection		Switching element			Page
<b>M</b>	<b>SR11</b>	<b>Two contacts</b>	<b>Four contacts</b>		
●		●	●		32
	●		●		33

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

## Safety switch GP

- ▶ Cable entry M20 x 1.5
- ▶ Plug connector optional



### Approach direction



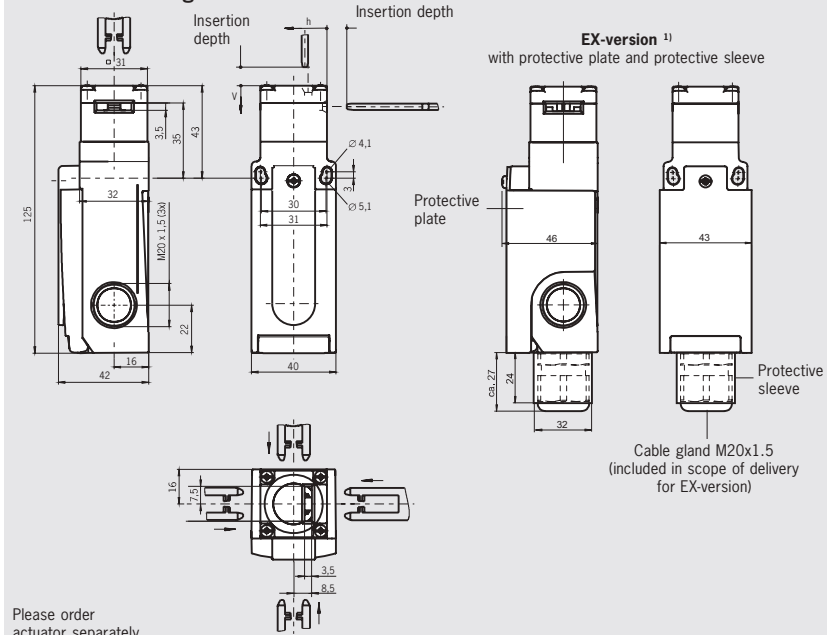
Horizontal and vertical  
Can be adjusted in 90° steps

### Switching elements

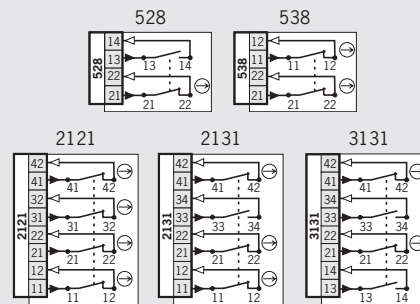
- ▶ **528** Slow-action switching element  
1 NC  $\ominus$  + 1 NO
- ▶ **538** Slow-action switching element  
2 NC  $\ominus$
- ▶ **2121** Slow-action switching element  
4 NC  $\ominus$
- ▶ **2131** Slow-action switching element  
3 NC  $\ominus$  + 1 NO
- ▶ **3131** Slow-action switching element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

### Cable entry M20 x 1.5

#### Dimension drawing



#### Wiring diagrams Actuator inserted



### Ordering table

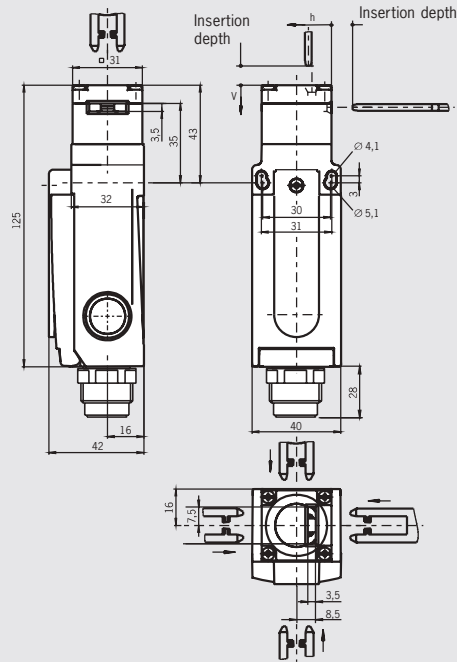
Series	Connection	Switching element	Version	Order No. / Item
GP	1 Cable entry 3 x M20 x 1.5	<b>528</b> 1 NC $\ominus$ + 1 NO		<b>089 725</b> GP1-528A-M
		<b>538</b> 2 NC $\ominus$		<b>090 250</b> GP1-538A-M
		<b>2121</b> 4 NC $\ominus$		<b>090 252</b> GP1-2121A-M
		<b>2131</b> 3 NC $\ominus$ + 1 NO		<b>090 255</b> GP1-2131A-M
		<b>2131</b> 3 NC $\ominus$ + 1 NO	ATEX Incl. cable gland	<b>095 702</b> <sup>1)</sup> GP1-2131A-M-EX
		<b>3131</b> 2 NC $\ominus$ + 2 NO		<b>090 258</b> GP1-3131A-M

1) II 3 G Ex nC IIC T5  
 II 3 D Ex tD A22 T90°C



**Plug connector SR11**  
11-pin + PE

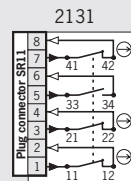
**Dimension drawing**



Please order actuator separately (see pages 78-81)

For plug connectors see page 88

**Wiring diagrams** Actuator inserted



**Ordering table**

Series	Connection	Switching element	Order No. / Item
GP	2 Plug connector <b>SR11</b>	<b>2131</b> 3 NC $\ominus$ + 1 NO	<b>096 227</b> GP2-2131ASR11


For safety precautions see page 132  
For technical data see page 99






## Safety switch GP




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		2 x 10 <sup>6</sup> operating cycles	
Ambient temperature		- 20 ... + 80	°C
Weight		approx. 0.16	kg
Max. approach speed		20	m/min
Actuating force		10	N
Extraction force		20	N
Retention force		2	N
Insertion depth (minimum required travel + permissible overtravel)	Standard actuators	Overtravel actuator	
Approach direction side (h)	28 + 2	28 + 7	mm
Approach direction from top (v)	29.5 + 1.5	29.5 + 7	mm

Switching element		 	
Parameter		Value	Unit
Switching principle		Slow-action switching element	
Switching elements with 2 switching elements		<b>528</b> 1 NC $\ominus$ + 1 NO	<b>538</b> 2 NC $\ominus$
Switching elements with 4 switching elements		<b>2121</b> 4 NC $\ominus$	<b>2131</b> 3 NC $\ominus$ + 1 NO
Switching current, min., at 24 V DC		1	mA
Switching voltage, min., at 10 mA		12	V
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		0.34 ... 1.5	mm <sup>2</sup>
Degree of protection according to IEC 60529		IP 67	
Rated insulation voltage U <sub>i</sub>		250	V AC/DC
Rated impulse withstand voltage U <sub>imp</sub>		2.5	kV
Conventional thermal current I <sub>th</sub>		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 <sub>e</sub> 4 A U <sub>e</sub> 230 V	
	DC-13	I <sub>e</sub> 4 A U <sub>e</sub> 24 V	

Plug connector SR11 connection			
Parameter		Value	Unit
Connection		Plug connector	
Version		11-pin + PE	
Degree of protection according to IEC 60529		IP 65 <sup>1)</sup>	
Rated insulation voltage U <sub>i</sub>		50	V AC/DC
Rated impulse withstand voltage U <sub>imp</sub>		1.5	kV
Conventional thermal current I <sub>th</sub>		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 <sub>e</sub> 4 A U <sub>e</sub> 50 V	
	DC-13	I <sub>e</sub> 4 A U <sub>e</sub> 24 V	

1) Screwed tight with the related plug connector (see page 87-88)