

Selection table for safety switches NX

Connection			
W	Thread M20x1.5 for cable glands		
	Switching element		
	Four contacts 4 NC ⊖ or 3 NC ⊖ + 1 NO or 2 NC ⊖ + 2 NO		
			
Connection	Switching element		Page
W	Four contacts		
●	●		94

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



Safety switch NX

- ▶ Cable entry M20 x 1.5
- ▶ LED indicator optional



Approach direction



Horizontal and vertical
Can be adjusted in 90° steps

LED function display (optional)

A function display (2 LEDs, red and green) is available for the following voltage ranges:

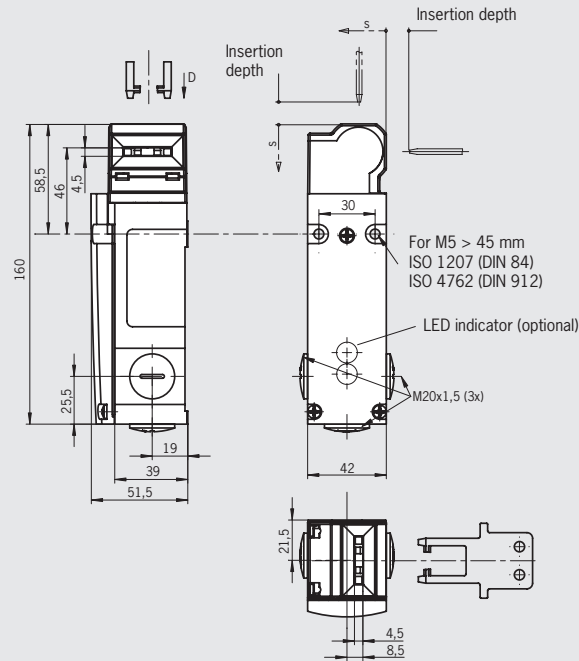
- ▶ DC 24 V +10%, -15%

Switching elements (See also page 13/14)

- ▶ **2121** Slow-action switching contact
4 NC ⊖
- ▶ **2131** Slow-action switching contact
3 NC ⊖ + 1 NO
- ▶ **3131** Slow-action switching contact
2 NC ⊖ + 2 NO

Cable entry M20 x 1.5

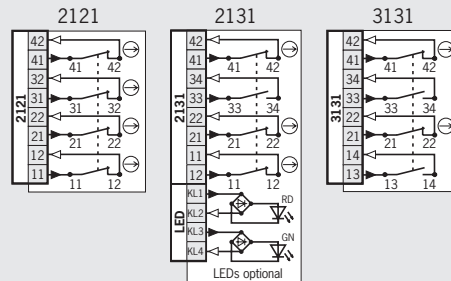
Dimension drawing



Please order actuator
separately
(see page 122)

For cable glands see page 132

Wiring diagrams Actuator inserted



Ordering table

Series	Connection	Switching element	Version	Order no./item
NX	1 Cable entry 3 x M20 x 1.5	2121 3 NC ⊖		092625 NX1-2121AM
		2131 3 NC ⊖ + 1 NO		092624 NX1-2131AM
		2131H 3 NC ⊖ + 1 NO	L024 LED indicator DC 24 V	091682 NX1-2131AL024-M
		3131 2 NC ⊖ + 2 NO		092626 NX1-3131AM

Safety switch NX



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
B10d	4.5 x 10 ⁶ operating cycles	

Switch



Parameter	Value		Unit
Housing material	Die-cast alloy, cathodically dipped		
Mechanical life	2 x 10 ⁶ operating cycles		
Ambient temperature	- 20 ... + 80		°C
Weight	Approx. 0.4		kg
Approach speed, max.	20		m/min
Actuating force	40		N
Extraction force	50		N
Retention force	10		N
Insertion depth	Standard actuator	Overtravel actuator	
Required insertion depth <i>s</i> _{min.}	32	32	mm
Maximum insertion depth <i>s</i> _{max.}	33	40	mm
Actuator travel (in the locked state)	6	13	mm

Switching element



Parameter	Value			Unit
Switching principle	Slow-action switching contact			
Switching element with 4 switching contacts	2121 4 NC ⊖	2131 3 NC ⊕ + 1 NO	3131 2 NC ⊕ + 2 NO	
Min. switching current 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		mm²
Degree of protection according to IEC 60529	IP 67		
Rated insulation voltage <i>U</i> _i	250		V AC/DC
Rated impulse withstand voltage <i>U</i> _{imp}	2.5		kV
Conventional thermal current <i>I</i> _{th}	4		A
Short circuit protection acc. to IEC 60269-1 (control circuit fuse)	4		A gG
Utilization category according to IEC 60947-5-1	AC-15	<i>I</i> _e 4 A <i>U</i> _e 230 V	
	DC-13	<i>I</i> _e 4 A <i>U</i> _e 24 V	

Switching functions NX

	Actuator Inserted	Actuator Removed
NX.-2131...		
NX.-3131...		
NX.-2121...		