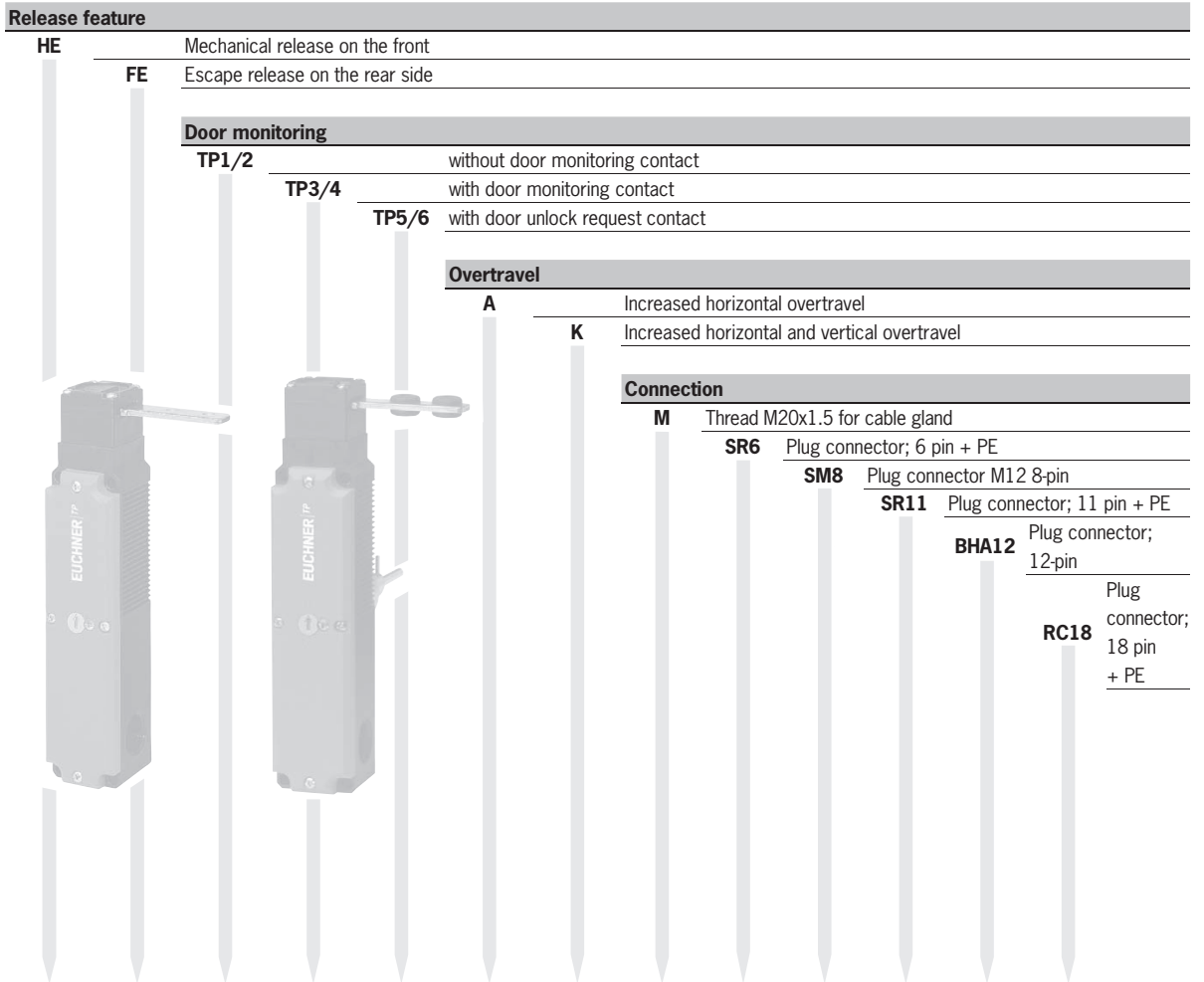


Selection table for safety switches TP with guard locking and guard lock monitoring



Release feature		Door monitoring			overtravel		Connection						Page
HE	FE	TP1/2	TP3/4	TP5/6	A	K	M	SR6	SM8	SR11	BHA12	RC18	
•		•			•		•						44
•		•			•			•		•			45
•		•				•	•						46
•		•				•		•		•			47
•			•		•		•						48 - 51
•			•		•			•	•				52
•			•		•					•			53
•			•			•	•	•					54
•			•			•		•		•			55
•				•	•		•			•			56
•	•		•		•		•			•			57
•			•		•						•	•	58
•	•		•		•							•	59



Safety switch TP with guard locking and guard lock monitoring

- ▶ Mechanical release on the front
- ▶ Without door monitoring contact
- ▶ Increased horizontal overtravel



Approach direction



Horizontal and vertical
Can be adjusted in 90° steps
Increased overtravel for horizontal approach direction.

Mechanical release

Is used for releasing the guard locking with the aid of a tool. To protect against tampering, the mechanical release is sealed with sealing lacquer.

Solenoid operating voltage

- ▶ AC/DC 24 V +10%, -15%
- ▶ AC 110 V +10%, -15%
- ▶ AC 230 V +10%, -15%

LED function display (optional)

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

- ▶ AC/DC 24 V +10%, -15%

Guard locking types

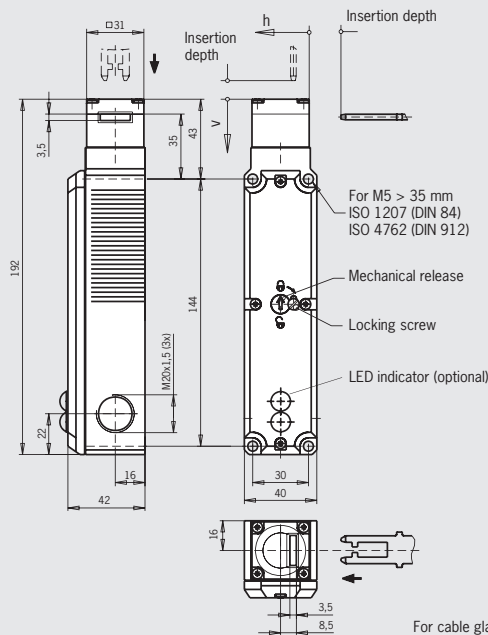
- TP1** Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the guard locking solenoid.
- TP2** Open-circuit current principle, guard locking by applying voltage to the guard locking solenoid. Release by spring force.

Switching elements

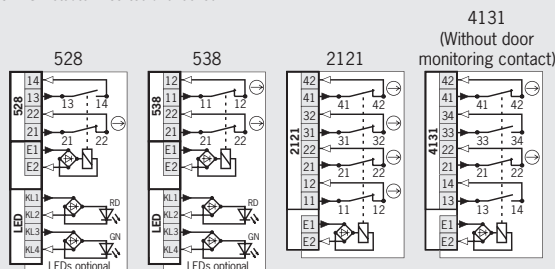
- ▶ **528** Slow-action switching contact 1 NC + 1 NO
- ▶ **538** Slow-action switching contact 2 NC
- ▶ **2121** Slow-action switching contact 4 NC
- ▶ **4131** Slow-action switching contact 2 NC + 2 NO

Cable entry M20 x 1.5

Dimension drawing



Wiring diagrams Actuator inserted and locked



For switching functions see technical data on Page 131

Ordering table

Series	Connection	Guard locking	Switching element	Version	Solenoid operating voltage		
					AC/DC 24 V	AC 110 V	AC 230 V
TP	M Cable entry 3 x M20 x 1.5	1 Mechanical	528 1 NC + 1 NO		084295 TP1-528A024M	084300 TP1-528A110M	084304 TP1-528A230M
			528 1 NC + 1 NO	024L LED indicator AC/DC 24 V	094058 TP1-528A024L024M	-	-
			538 2 NC		084310 TP1-538A024M	084315 TP1-538A110M	084320 TP1-538A230M
			538 2 NC	024L LED indicator AC/DC 24 V	093459 TP1-538A024L024M	-	-
			4131 2 NC + 2 NO		084115 TP1-4131A024M	084116 TP1-4131A110M	084117 TP1-4131A230M
		2 Electrical	528 1 NC + 1 NO		084325 TP2-528A024M	084330 TP2-528A110M	084332 TP2-528A230M
			538 2 NC		084333 TP2-538A024M	084334 TP2-538A110M	084335 TP2-538A230M
			2121 4 NC		096528 TP2-2121A024M	-	-
			4131 2 NC + 2 NO		084125 TP2-4131A024M	084126 TP2-4131A110M	084128 TP2-4131A230M

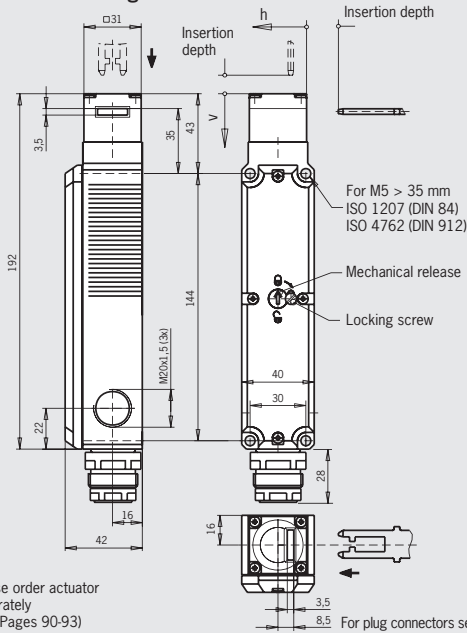
1) With cable entry M, DC 24 V / AC 110 V



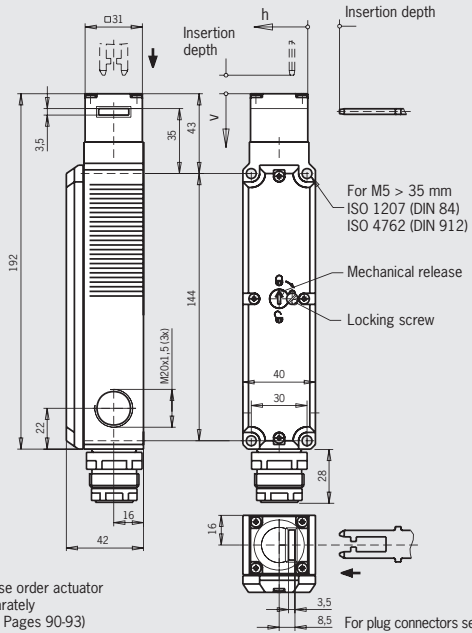
Plug connector SR6 6-pin + PE

Plug connector SR11 11-pin + PE

Dimension drawing

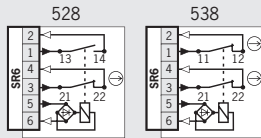


Please order actuator separately (See Pages 90-93)
For plug connectors see page 100



Please order actuator separately (See Pages 90-93)
For plug connectors see page 100

Wiring diagrams Actuator inserted and locked



For switching functions see technical data on Page 131

For switching functions see technical data on Page 131

Ordering table

Series	Connection	Guard locking	Switching element	Solenoid operating voltage		
				AC/DC 24 V	AC 110 V	AC 230 V
TP	SR6 Plug connectors	1 Mechanical	528 1 NC ⊕ + 1 NO	087431 TP1-528A024SR6	087435 TP1-528A110SR6	087438 TP1-528A230SR6
			538 2 NC ⊖	087433 TP1-538A024SR6	087436 TP1-538A110SR6	087439 TP1-538A230SR6
		2 Electrical	528 1 NC ⊕ + 1 NO	087441 TP2-528A024SR6	087444 TP2-528A110SR6	087448 TP2-528A230SR6
			538 2 NC ⊖	087442 TP2-538A024SR6	087446 TP2-538A110SR6	087449 TP2-538A230SR6
	SR11 Plug connectors	1 Mechanical	4131 2 NC ⊕ + 2 NO	088202 TP1-4131A024SR11	-	-
		2 Electrical	4131 2 NC ⊕ + 2 NO	088203 TP2-4131A024SR11	-	-

2) Only with solenoid voltage AC/DC 24 V