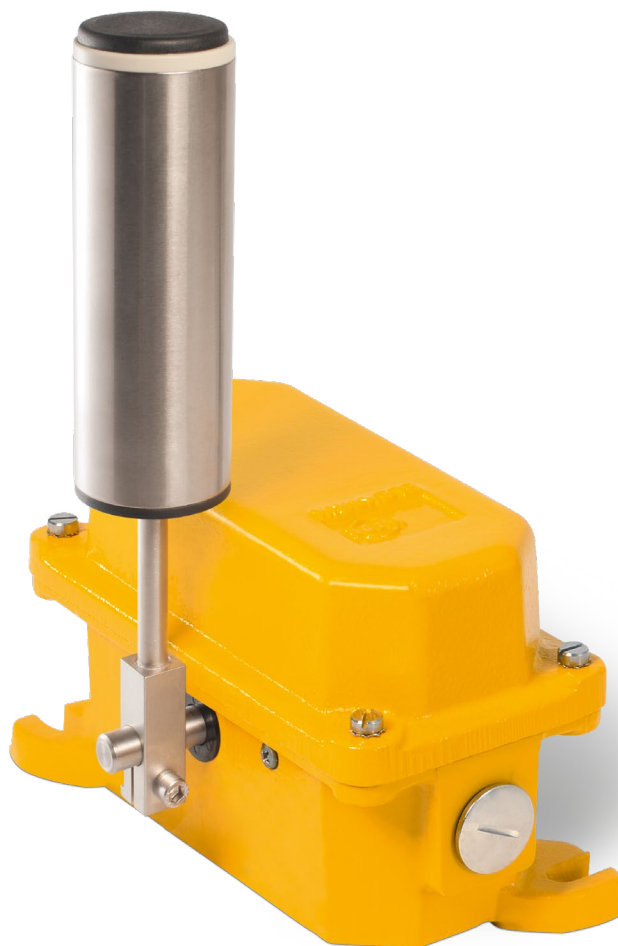


BELT MISALIGNMENT SWITCH

SEL

92.056 979.xxx



APPLICATION

Kiepe belt misalignment switches type SEL are used to monitor the misalignment of conveyor belt systems in accordance with the requirements of EN 620. They are used to protect the system from damage or destruction in the event of belt misalignment and are installed in pairs on both sides of the upper or lower run in areas at risk. The ball-bearing actuating roller made of alloy steel and with a large roller diameter is resistant to wear that occurs when the moving belt touches the roller.

The Kiepe belt misalignment switch type SEL conforms to the Low Voltage Directive 2014/35/EU and is UKCA compliant. It has a robust cast iron housing and can be equipped with up to 4 positively actuated changeover contacts with snap-action function. It has two adjustable switching points.

Note:

The misalignment switch may only be used in control circuits.

FUNCTION

The misalignment switch type SEL switches when the actuating roller is approached and deflected by the misaligned conveyor belt in the direction of rotation of the roller lever. The stainless steel roller lever is mounted on ball bearings, making it better able to absorb lateral forces and impacts.

The switching angle can be set for each switching contact using an adjustable roller. In addition to the safety cut-out, this also enables an advance warning to be realized. When the belt is running correctly, the roller lever resets itself automatically.

TECHNICAL DATA

Designation	Misalignment Switch Type SEL
Type of actuation	Bidirectional (double-side) via roller lever
Complies with	DIN EN 60947-5-1
Suited for	Control units in accordance with DIN EN 60204-1
Mechanics	
Enclosure	Cast iron
Coating	PU 2K-paint yellow, RAL 1004
Actuating lever	Stainless steel; Ø 50 mm, ball-bearing roller <u>Type 312</u> : Lever: bronze; Roller: stainless steel, Ø 108 mm
Mounting	2 x M10
Deflection of roller lever (max.)	+/-75°
Weight	4.5 kg
Electrical system	
Switching system (max.)	4 SPDT (snap action) positive-opening switches, self-cleaning
Switching range	2x 12,5°, adjustable +/-10° 2x 18°, fix
Cable entry (included in scope of delivery)	2x M25x1,5 with red transport lock 1x screwed cable gland: sealing area Ø11mm to Ø16mm; 1x dummy screw
Utilization category	AC-15: 230 V; 1.5 A DC-13: 60 V; 0.5 A DC-13: 24 V; 2 A
Connection cross section (max.)	2,5mm ²
Protective conductor connection	Protection Class I / protective earthing
Rated insulation voltage U _i	250 V
Rated impulse withstand voltage U _{imp}	2.5kV, Overvoltage category II, degree of pollution 3
Conventional thermal current I _{th}	6 A
Ambient conditions according to DIN EN 60947-5-5	
Permissible ambient temperature	-25°C... +60°C
Protection rating (according to EN 60529)	IP65 / IP67
Reliability	
Contact reliability	>30.000 operations at 100% I _e

SELECTION TABLE

Type	Roller lever	Contact configuration SPDT	Ventilation membran	Order number
SEL 011	Ø 50	2		92.056 979.011
SEL 313 with 3 cable glands	Ø 50	2	x	92.056 979.313
SEL 902 (2x 47 kOhm, integrated cable break detection)	Ø 50			92.056 979.902
SEL 312	Ø 108			91.056 979.312

Equipment options:

Devices for two-wire bus-system, gold contacts, LED lamp

Spare parts and accessories:

Cable gland M25x1,5; sealing area Ø11mm to Ø16 mm	113.52.02.20.01
Screw plug; M25 x 1,5	113.52.87.20.02
Roller lever, stainless steel, Ø 50 mm	93.055 201.101
Roller lever, Ø108 mm	92.043 542.001

MOUNTING

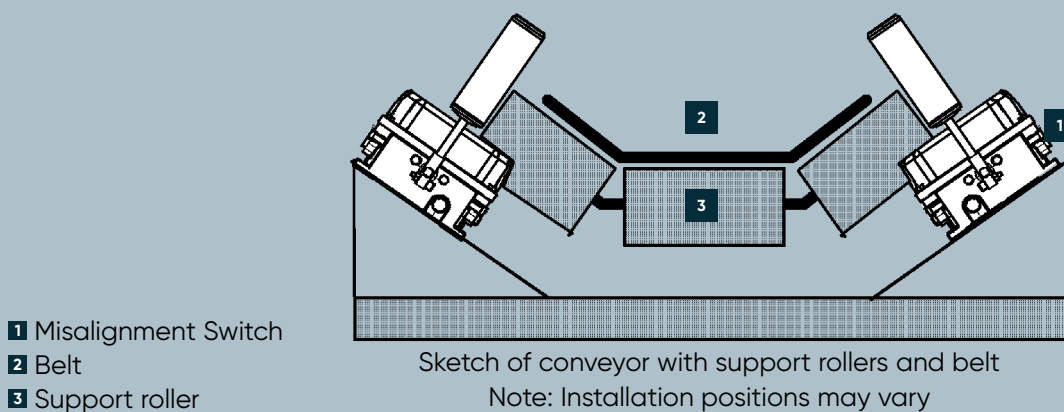
Misalignment switches of type SEL **1** are fastened to a sub-structure with 2 M10 screws each. In the event of misalignment, the belt **2** must not leave the lateral guide rollers **3**. The position of the belt misalignment switches must be selected so that the actuating roller of the belt misalignment switch is preferably approached vertically by the belt **2**. During normal operation, the actuating roller of the belt misalignment switch is not touched. The roller lever is interchangeable and can be freely fixed in the direction of rotation on the switch axis.

The electrical connection is made when the device is open via the cable gland included in the scope of delivery directly to the connection glands of the switching elements.

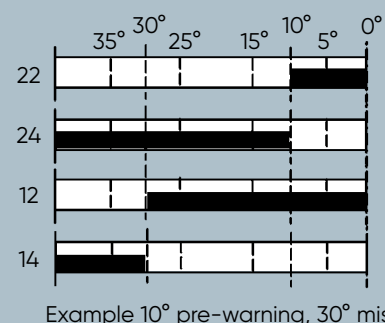
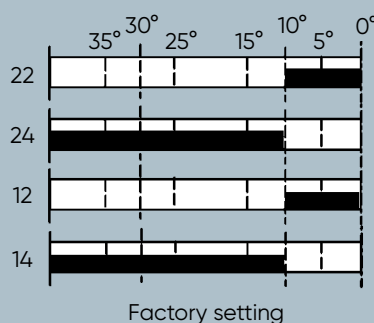
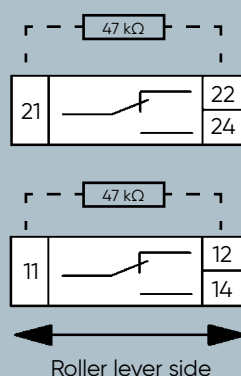
Note:

The red transport locks must be completely removed and replaced with the supplied screw plugs.

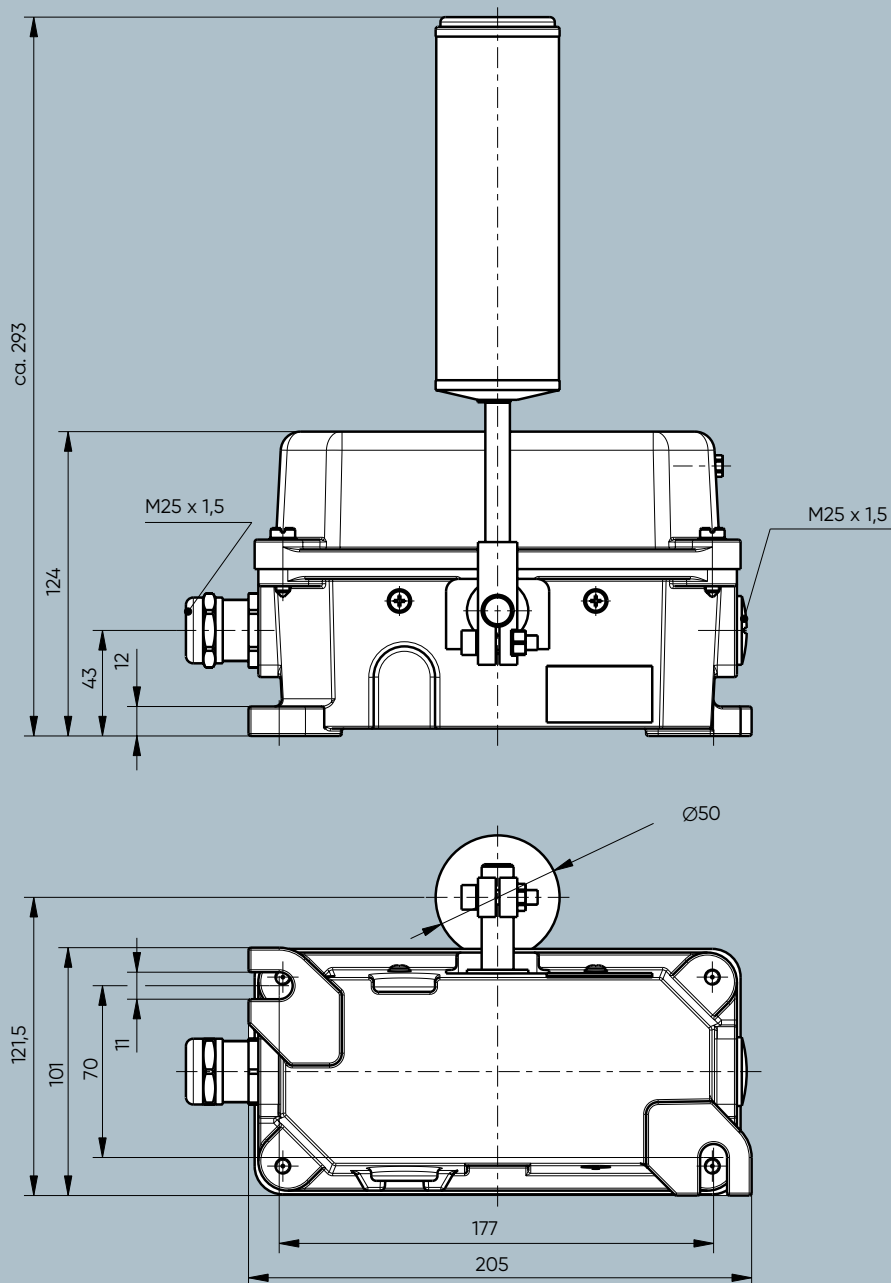
MOUNTING DIAGRAM



CONNECTION DRAWING



DIMENSIONS



**Roller lever
for Type SEL 312**

