kiepe.INDUSTRY

EMERGENCY STOP SWITCH

PAS

 # 91.057 560.xxx

APPLICATION

Kiepe pull-rope emergency stop switches type PAS are used in accordance with the requirements of EN 620 as well as BGI 710 and in confirmity with DIN EN ISO 13850 as emergency stop devices as supplementary safety measures on conveyor belt systems and finishing and processing machines. The pull rope is tensioned on one side of the actuating shaft.

With the KIEPE pull-rope-system functionally aligned, the emergency stop signal can be triggered over a distance of 30 m with a maximum temperature variation of +/-20°C in the application. Less temperature variation allows a longer installation length f.ex. for applications in production halls.

Kiepe pull rope emergency stop switches type PAS comply with Machinery Directive 2006/42/EG. The device must only be used in electrical control circuits.

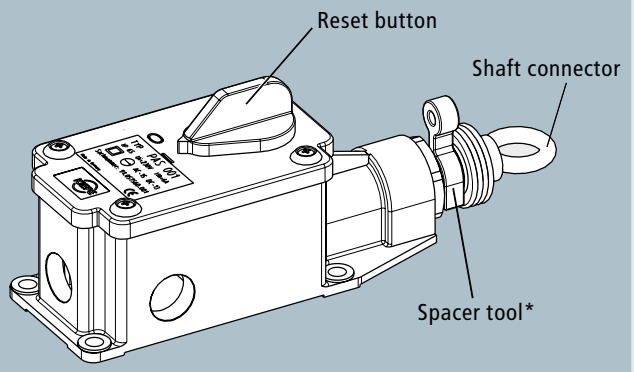
The PAS plastic housing offers space for 1 SPDT and 1 N.C. contact. Taking into consideration the safety data and maintenance recoomendations, the pull rope emergency stop switch type PAS can be used in safety circuits in accordance with **DIN EN ISO 13849 up to Performance Level d (PLd).**

FUNCTION

The emergency stop signal can be activated by pulling or breaking of the pull wire or by pushing the blue emergency stop button when the switch is correctly adjusted. The spacer tool* helps to find the correct operating position for a proper work and has to be removed after adjustment. The microswitches are actuated by a spring supported cam disc at the same time. The emergency stop signal is performed with positive-making normally closed (NC) contacts in accordance with the closed circuit principle. After the emergency stop function is triggered, the switching mechanism is locked in the shut-off position "0". The blue reset button can only be removed to positon "1", when the actuating shaft is back in operating position.

In position "1", the switching contacts are reactivated and the conveyor belt is prepared for start up the belt conveyor.

Note: *Resetting the pull rope emegrency stop switch must not cause in starting up the conveyor system.*



*Note: Store the spacer tool for further adjustments in future.

TECHNICAL DATA

Designation	Pull rope emergency stop switch type PAS emergency stop device with latching function
Type of actuation	Unidirectional for single-side pull rope installation, integrated wire-break detection
Complies with	DIN EN 60947-5-5; IEC 60947-5-5
Suited for	Control circuits in accordance with DIN EN 60204 -1
Pull rope length (with external spring)	depending on temperature fluctuations in application 1x 30m at 40 Kelvin 1x 50m at 25 Kelvin 1x 75m at 17 Kelvin
Mechanics	
Enclosure	Thermoplastic resin, yellow, similar to RAL 1004
Reset button	PARA, blue, similar to RAL 5010
Mounting	4 x M6
Net Weight (typic)	0.4 kg
Electrical System	
Switching system	Positive-opening snap-action switches; according DIN EN 60947-5-1; cam operated
Cable entries	3x M20 x 1.5 threaded holes with 1x cable gland (sealing Ø 6 mm ...Ø 12 mm) 2x Dummy screw
Utilization category: U_e/I_e	AC-15: 230 V / 1,5 A DC-13: 24 V / 2,0 A
Connection cross section (max.)	2.5 mm^2
Protective conductor connection	Protection class II, Protective insulation
Rated insulation voltage U_i	AC 250 V
Rated impulse withstand voltage U_{imp}	2.5 kV, degree of pollution III
Conventional thermal current I_{th}	6 A

Ambient conditions in accordance with DIN EN 60947-5-5		
Ambient temperature Protection	-25°C... + 70°C	
Rating (EN 60529)	IP 65	

Reliability and Safety Data		
Electrical reliability	@ DC-13: 24 V / 2 A	B10d = 200,000 cycles
	@ AC-15: 230 V / 1,5 A	B10d = 840,000 cycles
Mechanical reliability		840,000 cycles
Safety classification	DIN EN ISO 13849-1	Up to PLd
Depending upon system architecture	DIN EN 62061	Up to SIL2

SELECTION TABLE

Switch type	N C	SPDT			Part-No.
PAS 001	1	1			91.057 560.001
PAS 101, stainless	1	1			91.057 560.101
Spare parts and accessories					
Cable gland M20 x 1.5 (Sealing range 6 mm ... 12 mm)					113.51.00.15.10
Dummy screw M20 x 1.5					113.43.87.15.01
Tension spring XL, 2,5 m rope support distance					580.00.50.01.01
PAS Pull Rope Mounting Set complete, Steel galv. Components as in assembly diagram			incl. pull rope incl. pull rope incl. pull rope	10 m 20 m 30 m	95.302 953.101 95.302 953.103 95.302 953.104
Fixing Foot S1					96.038 986.110

MOUNTING

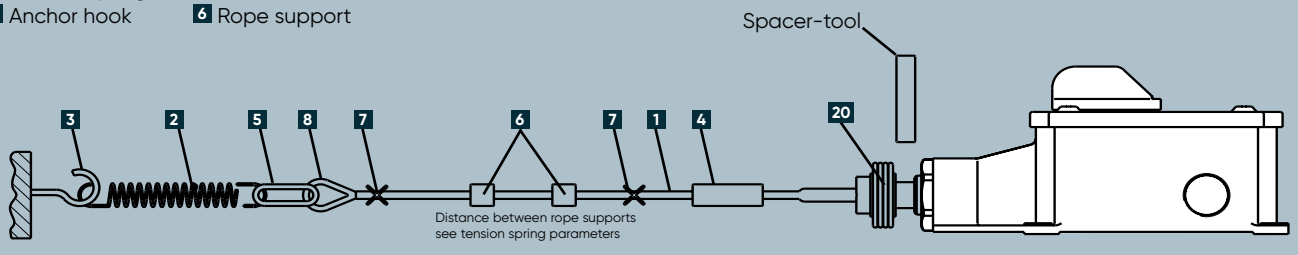
Pull-rope emergency stop switches of type PAS are fastened to the substructure in the installation position using 4 M6 screws each.
The electrical connection is made when the device is open via the cable gland included in the scope of delivery to the connection terminals of a circuit board. The pull rope is tensioned with the tension spring between the anchor hook and the mounting ring of the switch until the spacer can be easily removed from the switch.

This is the operating point. The switch can only be reset at the operating point. The spacer must be removed and the bellows attached to the housing.

Note:
The tension springs are designed for cable systems with Kiepe devices at the recommended temperature changes in a straight installation.

MOUNTING DIAGRAM

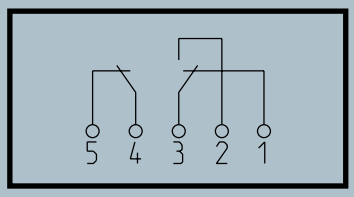
1 Pull rope
2 Tension spring
3 Anchor hook
4 Turnbuckle
5 Quick link
6 Rope support
7 2x Clamps
8 Thimble

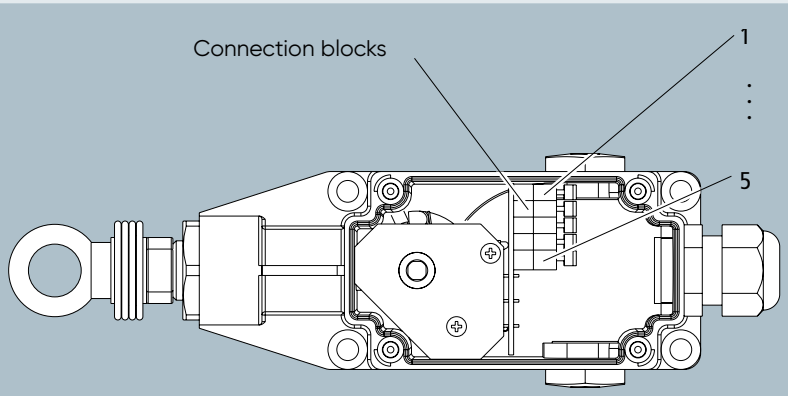


Note:
Fix the bellow seal **20** *after removal of the spacer tool.*

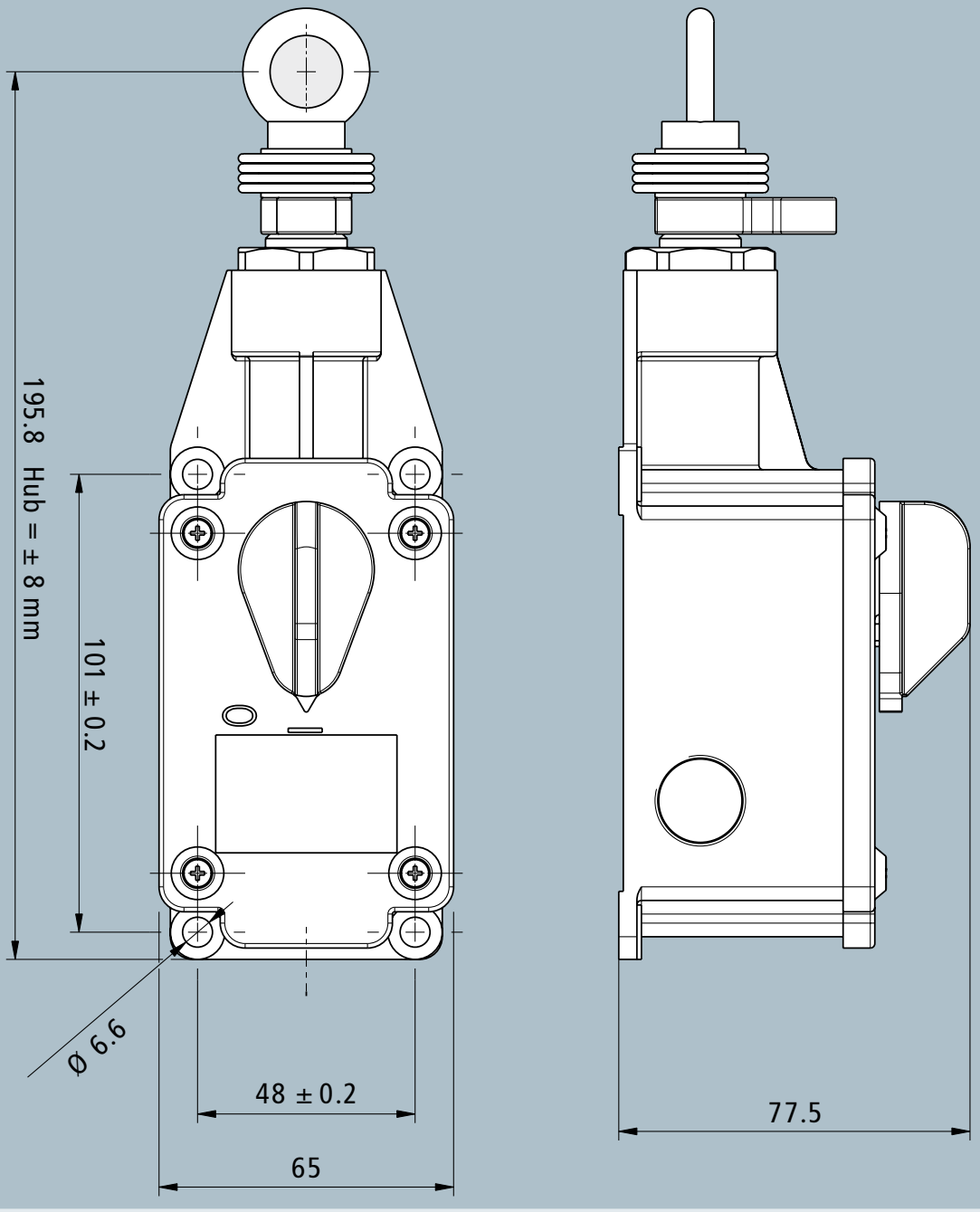
CONNECTION DRAWING

Connection Drawing





DIMENSIONS



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