

# **Belt Conveyor Pull Rope Switch**

# **PAS**



#### **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. The pull rope is tensioned on one side of the actuating shaft.

The devices are suitable primarily for indoor use and applications where the ambient temperature varies only in a small range. With the pull-rope-system functionally aligned, the emergency stop signal can be triggered over a distance of 30 m.

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 recommendations, 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 e (PLe).

### FUNCTION

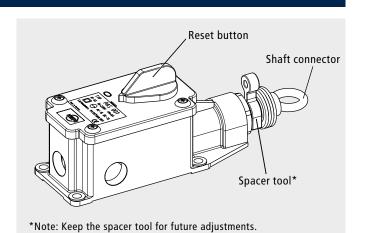
TECHNICAL DATA

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 but shall not cause the start up.



Designation  Pull rope emergency stop switch type PAS emergency stop device with latching function  Type of actuation  Pull and wire-break detection; snap action, single-side rope installation  Complies with  DIN EN ISO 13850; DIN EN 60947-5-5; DIN EN 60947-5-1;  Suited for  Control unsits and systems in accordance with DIN EN 60204  Mechanics  Enclosure  PBT yellow; RAL 1004			
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December 1997 - December 1997	PBT yellow; RAL 1004		
Reset button IXEF; blue, similar to RAL 5010	IXEF; blue, similar to RAL 5010		
Mounting 4 x M6	4 x M6		
Pull rope length Up to 30 m	Up to 30 m		
Weight 0.4 kg			
Electrical System			
Switching system 1 SPDT, 1 N.C.; cam operated, positive-making snap-action switches			
Cable entry 3 x M20x1.5 threaded holes with 3x dummy screw; 1x cable gland; Sealing area Ø 6 mm Ø 12 mm			
Utilization category: $U_e/I_e$ AC-15: 230 V / 1,5 A DC-13: $60$ V / 0,5 A DC-13: $24$ V / 2,0 A			
Connection cross section 1 mm <sup>2</sup> 2.5 mm <sup>2</sup>	1 mm <sup>2</sup> 2.5 mm <sup>2</sup>		
Rated insulation voltage U <sub>i</sub> AC 250 V			
Rated impulse withstand voltage U <sub>imp</sub> 2.5 kV, degree of pollution III			
Conventional thermal current I <sub>th</sub> 6A			
Contact reliability 10 million switching operations (mechanically)			

Ambient conditions in accordance with DIN EN 60947-5-5					
Ambient temperature Protection	-25°C + 70°C				
Rating	IP 65 (EN 60529)				
Safety data in accordance with DIN EN ISO 13849 and EN 61062:					
Safety functions	Emergency stop incl. latching Manual reset, Wire-break-detection				
Usable in risk zone	Up to PLe (depending on customer application (DIN EN ISO 13849))				
B10d-value	10.000 actuations				

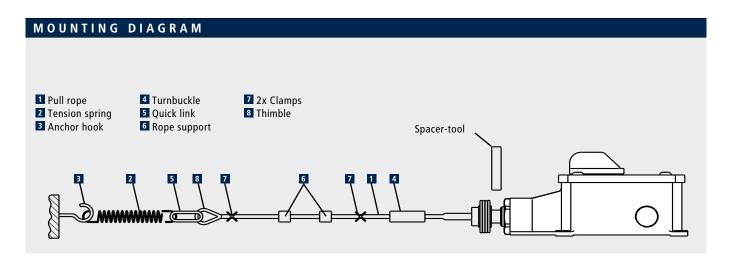
SELECTION TABL	E		
Switch type	N C	SPDT	Part-No.
PAS 001	1	1	91.057 560.001
PAS 101, stainless	1	1	91.057 560.101
Spare parts and accessorie	es		
Cable gland M20 x 1.5 (Sealing range 6 mm 12 mm)			113.51.00.15.10
Dummy screw M20 x 1.5			113.43.87.15.01

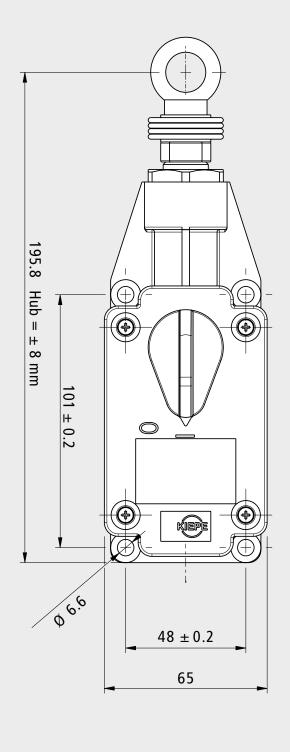
## MOUNTING

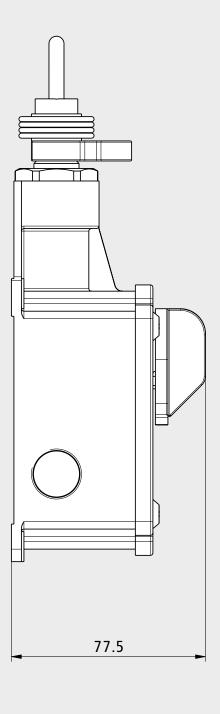
Pull-rope emergency stop switches of types PAS are each fastened to the substructure in installation position with 4x M6 screws.

Electrical connection is performed with the device open on a connector block, using the cable gland included in the delivery.

The pull rope 1 is connected to the shaft connector and the external spring 2 and has to be tensioned with spring and turnbuckle 4 till the spacer can be removed easily. This is the correct operating position.







Subject to change without notice.