

Belt Conveyor - Pull Rope Switch

NTS



APPLICATION

Kiepe pull-rope emergency stop switches type NTS are used in accordance with the requirements of EN 620 as well as BGI 710 and in conformity with DIN EN ISO 13850 as emergency stop devices as supplementary safety measures on conveyor belt systems. The pull rope is symmetrically tensioned on both sides of the red release lever.

The devices are suitable for outdoor use and applications where the ambient temperature varies considerably.

With the pull-rope system functionally aligned, the emergency stop signal can be triggered over a distance of up to about 100 m for each switch.

Kiepe pull-rope emergency stop switch types NTS comply with Machinery Directive 2006/42/EC.

They must only be used in control electrical circuits.

The NTS BMC-plastic housing offers space for up to 3 simultaneously switching NO and NC contacts. Taking into consideration the safety data and maintenance recommendations, the pull-rope emergency stop switch type NTS can be used in safety circuits in accordance with **DIN EN ISO 13849 up to Performance Level e** (PLe).

FUNCTION

The pull-rope emergency stop switch is actuated by a pull rope connected on both sides of the red release lever. The contacts are actuated by a spring supported cam disc (snap action function). At the same time, up to three NC and NO contacts are actuated simultaneously and a cross comparison of the contacts can be performed with an external control unit. 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". When the blue reset lever is actuated in switch position "1", the switching contacts are reactivated and the conveyor belt is prepared for being turned back on again.

Resetting the pull-rope emergency stop switch must not cause the conveyor system to start up.

TECHNICAL DATA

Designation	Pull-rope emergency stop switch type NTS Emergency stop device with latching function		
Type of actuation	Bidirectional; spring-loaded ("snap action")		
Complies with	DIN EN ISO 13850; DIN EN 60204-1; DIN EN 60947-5-5; DIN EN 60947-5-1; EN 620; BGI 710		
Suited for	Control units and systems in accordance with DIN EN 60204		
Mechanics			
Enclosure	Bulk moulding compound (BMC)		
Finish	Enclosure – yellow (similar to RAL 1004) Release lever – red (similar to RAL 3000) Reset lever – blue (similar to RAL 5010)		
Mounting	4 slotted holes for M8 screws		
Installation position	Horizontal, tilt angle up to about 15°		
Pull-rope length	Up to approx. 100 m		
Actuation force	30 N ± 10 N		
Weight	2.02 kg		
Weight			
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Safety data in accordance with DIN EN ISO 13849 and EN 61062

Safety functions

Emergency stop incl. latching Manual reset Up to PLe (depending on customer application) 24,000 actuations

Usable in accordance with DIN EN ISO 13849-1 B10d value

SELECTION TABLE

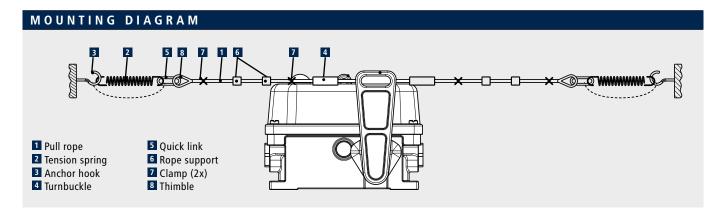
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MOUNTING

Pull-rope emergency stop switches of types NTS are each fastened to the substructure in installation position with 4 M8 screws, centered between the anchor hook **3** of the pull-rope system (see the mounting diagram).

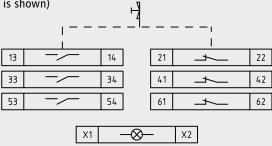
Electrical connection is performed with the device open using the screwed cable gland included in the delivery, directly on the screw joints of the switching elements and the lamp fitting (option) as well as the protective conductor connection. The pull-rope **1** is tensioned by tension springs **2** between the anchor hooks **3** and fastened onto the red release lever.

After the tension springs **2** have been adjusted, the actuation force and path for triggering the switch must be tested to ensure compliance with specified requirements.

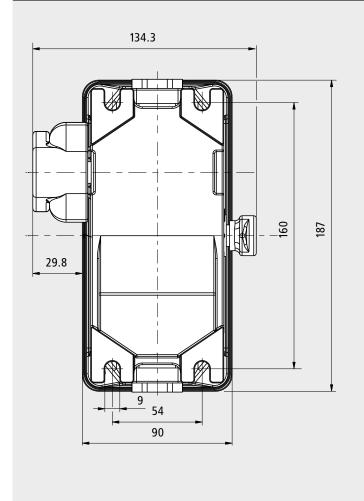


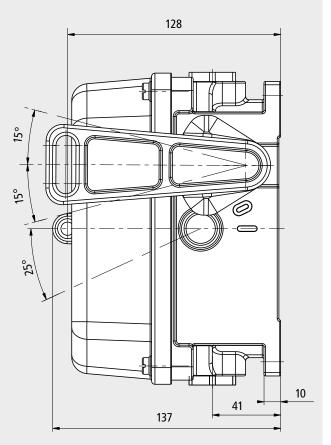
CONNECTION DIAGRAM

Switching elements according to DIN EN 60617 (the maximum configuration with 3NO/3NC is shown)



DIMENSIONS





Subject to change without notice.

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