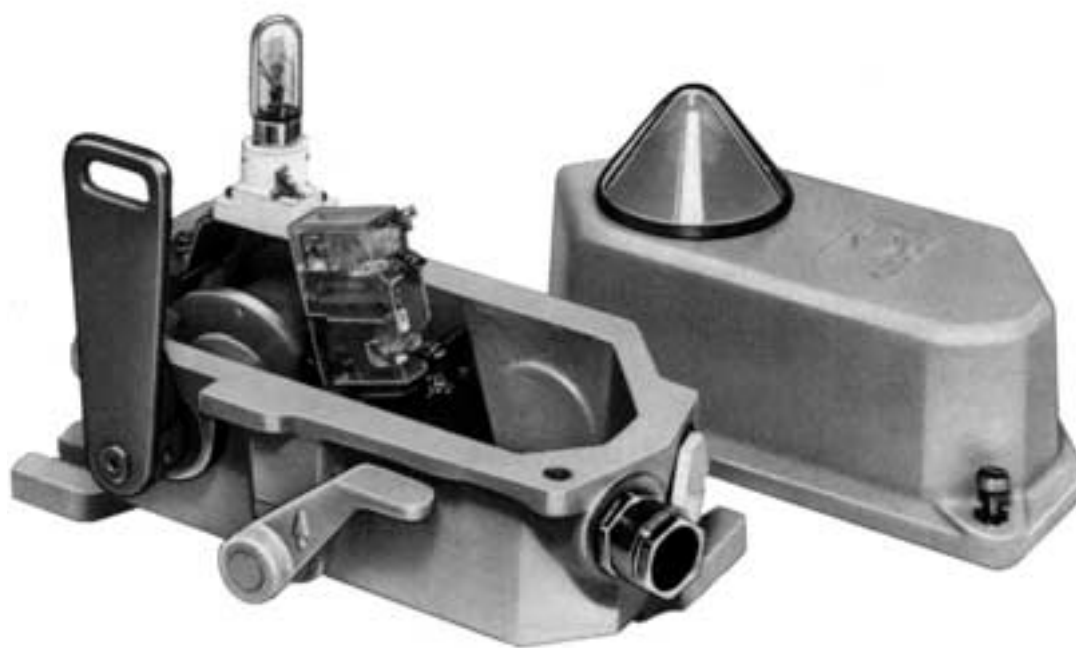


Belt Conveyor Pull Rope Switch



Type SEB, SEBd 

Edition 359



CE

Application

Kiepe Pull Rope Switches of type SEB and SEB d (EExd – flameproof) provide a switching system to isolate the power to conveyor systems and other process equipment in event of an emergency. The cast iron housed devices have been designed for a maximum of safe operation under severe conditions.

Kiepe Pull Rope Switches and accessories meet the requirements of international safety standards with respect to personnel safety and equipment.

Operation

Kiepe Pull Rope Switches are actuated by a plastic coated steel wire rope placed along-side the conveyor. Pulling on the rope at any point will trip and automatically lock the switches, deenergizing the conveyor starter contactor. Each switch is bi-directional in operation and has two ropes fitted to it from opposite directions terminating with a spring at the anchor points. The springs will operate the switch in the event of rope breakage. The length of rope in either directions may be up to 50 meters. After tripping, the mechanical latch can be released only on the switch itself by the reset lever or a key (optional).

The field of application for Kiepe Pull Rope Switches has been widened by providing this device in a cast iron housing. This type is suitable for use in seaports as well as coal and salt mining operations where aggressive atmosphere exists.

Technical Data

Device complies with	EN 60947-5-1 EN 418 EN 60204 VDE 0110 UVV-VBG 10
Housing	Cast iron
Finish	2-Component DD-tile enamel Enclosure yellow, RAL 1004 Actuating lever red, RAL 3000 Reset lever blue, RAL 5010
Mounting	By means of 2 oblong bolts for M10 bolts
Protection	IP 65 acc. to EN 60529
Mounting Position	see drawing installation

SEB

Cable Entry	2 x M 25 x 1,5
Rated Insulation Voltage	U_i : 380 V AC, 440 V DC
Earth	inside the housing M5
Ambient temperature	- 40° C ... + 85° C
Switching System	max. 3 NC/NO cam operated switching elements, positive make/break!
Conventional Thermal Current	I_{th} : 10A
Rated Operational Voltage	U_e : 240 V AC, 250 V DC
Breaking Capacity	I_e/U_e : 5A/230 V AC
Dome light (optional)	230V/6W, E14 base
Options	Ventilation duct to avoid condensation (IP 54)

SEBd

PTB-Certificate	Ex-79 / 1016 X
Ex-Protection	EExd IIc T6, flameproof
Ambient temperature	- 25° C ... + 70° C
Switching System	EExd – enclosed switching elements 2 N.O. / 2 N.C.
Breaking Capacity	I_e/U_e : 5A/230 V AC

Both connecting cables (length 5 m) are moulded into the switching elements. The connecting cables should be wired to a junction box of EExe-protection (increased safety).

Note: The devices may be used in control circuits only!



Selection Table and Accessories

Type	Reset by		Dome Light —⊗—	No. of Switch Elements N.C. N.O.		Ordering Code	WEIGHT kg/unit
	Lever	Key					
SEB 001	x			1	1	91.042780.001	5,5
SEB 002	x			2	2	91.042780.002	5,6
SEB 003	x			3	3	91.042780.003	5,7
SEB 007	x		x	1	1	91.042780.007	5,6
SEB 008	x		x	2	2	91.042780.008	5,7
SEB 009	x		x	3	3	91.042780.009	5,8
SEB 004		x		1	1	91.042780.004	5,5
SEB 005		x		2	2	91.042780.005	5,6
SEB 006		x		3	3	91.042780.006	5,7
SEB 010		x	x	1	1	91.042780.010	5,6
SEB 011		x	x	2	2	91.042780.011	5,7
SEB 012		x	x	3	3	91.042780.012	5,8
SEBd	x			2	2	91.046159.001	6,75

Accessories

	Ordering Code	Weight kg
Pull rope, flexible steel wire, plastic coated, 5 mm Ø	94.045731.002	5,0/100 m
red colour (available in 50 and 100 m length)		
Eyebolt M 12 x 60 for rope guidance	94.045727.001	11,0/100 ea.
Eyebolt M 12 x 200 for rope guidance	94.045727.002	21,0/100 ea.
Tension spring, stainless steel, 230 mm x 29 mm Ø	94.000026.683	11,0/100 ea.
Swing hook M 10 to attach the tension spring to	94.045728.001	13,0/100 ea.
the conveyor		
Turnbuckle (metal, 2 eye)	94.045729.002	8,0/100 ea.
Turnbuckle (metal, 1 eye, 1 hook)	215.22800201	8,0/100 ea.
Rope clamp, egg form	94.047869.002	4,0/100 ea.
Chain link	94.047870.001	3,6/100 ea.
Switch element SN 13 as spare parts	92.042010.009	3,0/100 ea.
4-wire terminal	96.042882.001	— —

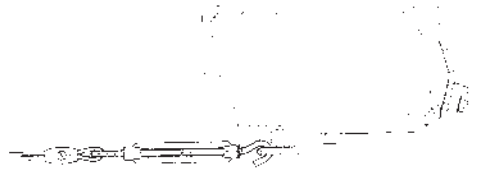
Installation

The switches are easily installed on the conveyor structure. Flexible vinyl coated steel wire is available for the pull rope. One egg formed clamp is used for each fastening point of the pull rope. For guiding the pull rope, eye bolts are used at intervals up to 4 m. Stainless steel springs at the end of the pull rope serve to tension the rope and ensure operation of the switch in the event of rope breakage (Fail safe).

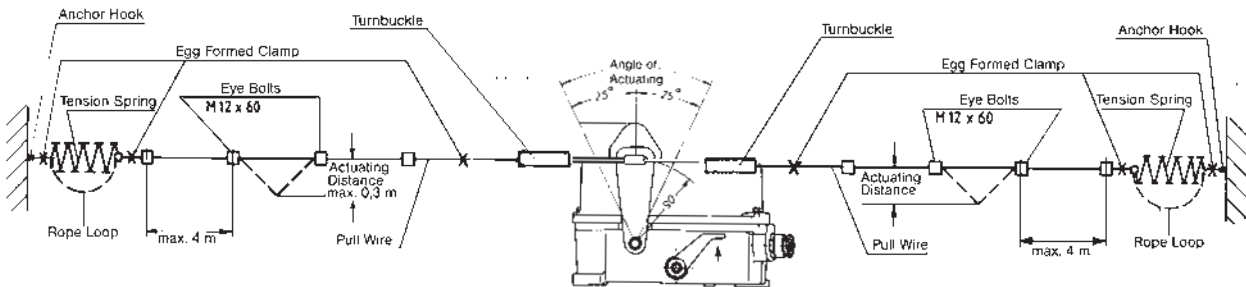
The spring pretension is adjusted by means of turnbuckles which can simply be attached onto the actuating lever. Since the switches are bi-directional in operation, variations of temperature which can influence the rope length become balanced by means of the two springs.

Adjustment

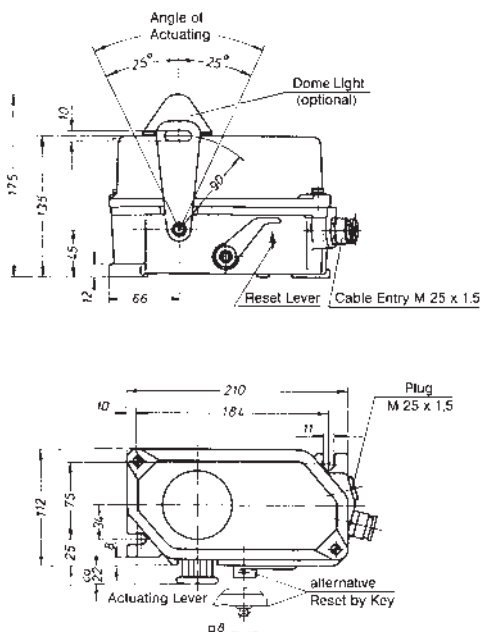
1. Install the pull rope on one side of the actuating lever according to the drawing below.
2. Adjust the rope tension in such a way that the spring will properly operate the switch. Maximum extension of the spring is 500mm. Now detach again the turnbuckle.
3. Repeat procedure 1. and 2. on the other side.
4. To limit the actuating distance of the pull rope and to avoid an inadmissible extension of the spring, a rope loop of approx. 40 to 60 mm longer than the tensioned spring is to install in parallel to the spring.
5. Reset the switch. The system is now ready for operation.



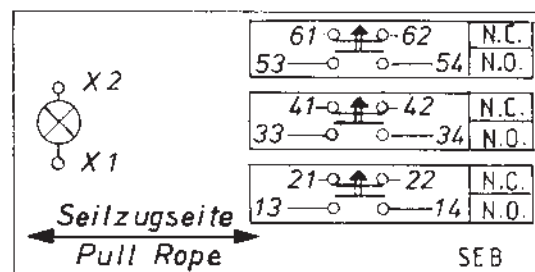
Drawing Installation



Dimensions



Contact Arrangements



Subject to change without notice.



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