kiepe.INDUSTRY

BELT MONITORING

BLS

 # 92.047 392.xxx

APPLICATION

Conveyor belts are subjects to wear and tear during operation. For this reason, repair measures like vulcanization and splicing have to be carried out from time to time.

In large conveyor plants, impending belt damages are not always noticed. The Kiepe belt wear monitor type BLS® enables the following belt damages to be detected at an early stage:

- parts of the belt have come off in shreds
- steel ropes stand off from the belt
- belt edges are torn
- facings of a repair point have come off
- splices are defective

Rubber shreds protruding from the belt can get caught in a carrying roller station - in the worst case - tear up the belt or belt facing on the whole length. The same applies for broken and drooping steel ropes of an armoured belt.

If only drooping rubber shreds and ropes are to be detected, the monitor is to be installed under the upper belt. In this case one or two tripping ropes are tightened across the conveyor belt with one rope end fixed to the conveyor belt structure. The other rope end is attached to a catch which is pushed over a pull-off device carrying an inductive proximity switch and/or magnetic switch. When the tensioned tripping rope is touched by a rubber shred or rope, the catch separates from the switch and an electrical signal is initiated.

In order to cover the entire belt width, it makes sense to install the system at points where the conveyor belt is only slightly troughed, e.g. in front of the drive pulley or behind a feeding point.

If rubber flaps or torn ropes that protrude upwards and could get caught in an idler on the lower belt are also to be detected, an additional belt tear monitoring system must be installed under the lower belt.

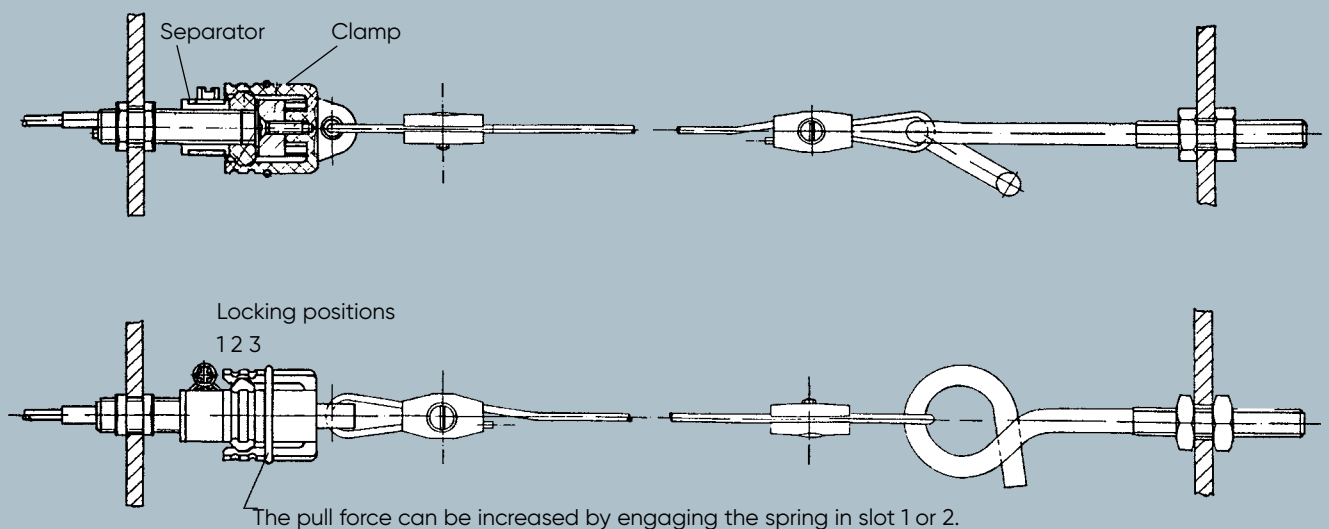
TECHNICAL DATA

	BLS 001 Magnetic switch Reed contact - NO contact	**BLS 011** Proximity switch pnp - NO contact	**BLS 711** Proximity switch pnp - NO contact
Degree of protection	IP 67	IP 67	IP 67
Temperature range	- 25 °C ...+ 80 °C	- 25 °C ...+ 70 °C	-40°C...+60°C
Enclosure	Brass, M12 x 1	Brass, M12 x 1	Stainless Steel, PTFE, M12 x 1
Operation voltage	AC/DC 230 V	DC 10 ... 30 V	DC 10 ... 30 V
Switching current	3 A	400 mA	200 mA
Cable length / number of conductors	1m / 2-wire (2 x 0,75 mm^2)	2m / 3-wire (3 x 0,34 mm^2)	2m / 3-wire (3 x 0,34 mm^2)
Ordering code	92.047 392.001	92.047 392.011	92.047 392.711

Supplied with swing hook, 2 rope clamps amd 5 m tripping cable.

Accessories		
	for Type	Ordering Code
Separator (spare part)	BLS	94.047 386.001
Clamp (complete, magnet)	BLS x01	94.047 385.901
Clamp (complete, plate)	BLS x11	94.047 385.911

DRAWING INSTALLATION



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