

Conveyor Belt Misalignment Switch

LHP_{x-xx/x-L} and -L50

LHM_{x-xx/x-L} and -L50



Installation and operating instructions

Principle: Before any work shall be carried out it has to be checked that the circuits are isolated and any specific and general security instruction has been fulfilled.

Conveyor belt misalignment switches of this type are provided to be installed pair-wise left and right of the belt. In case that the belt should misalign from the given track, the roller lever of one of these switches will be touched by the flank of the belt and displaced against the resetting force of an internal spring. Actuation of the contacts and latching (latching only versions with „w“) is being effected in snap-action characteristic at a displacement of approximately 7cm. The maximum displacement angle of the roller lever is 75°. In case the amount of offtrack is reduced, release of the latching is possible by elevating the blue release lever (only versions with type figures "w") or reset happens automatically (only versions without type figure "w"). In addition to these functions, all switches ending with „V“ are equipped additional with leading contacts commutating at a displacement of approx. 4cm allowing earlier warning.

Pre-mounting -L: Erect the switch onto its feet that way that the identification plate is at the left side. Screw out the screw of the shaft showing to you together with the washer by aid of a 10 mm wrench. Take the enclosed roller lever that way that the decreased bore is at your side. Pin this lever with roller upwards left onto the free shaft end and tighten with the previously screwed out screw and washer with a torque of 8 Nm.

Pre-mounting -L50: Erect the switch onto its feet that way that the identification plate is at the left side. Take the enclosed roller and pin it with roller upwards left (approx 11 o'clock) onto the free shaft end and tighten the inbus-screw of the hub.

Mounting: To install the switch a plane and stable console is necessary at the belt frame. Adjust the switch that way the lever shows into direction of the belt area. Taking into consideration that the conveying belt is in its normal position, middle height of the roller lever has to be at the same height as the edge of the belt. There should be as much air between the roller and the edge of the belt as a deviation of the conveying belt could be tolerated. Fixing of the switch is to be effected with two suitable screws M10 (max 10,5mm) at the slotted foot.

Electrical installation: Open lid by loosening the four slotted lid screws. Inside are up to 4 micro switches in the installation space. The corresponding function of each switching contact is being printed on it. Wire the contacts according to the requirements demanded by the line at-site. Afterwards put on the cover again and tighten screws with a torque of 3 Nm. Tighten the cable screwing according to the instructions of the manufacturer, however, at a maximum torque of 6 Nm.

Check: Please check any electrical and mechanical function after completion of installation.

Maintenance: There is no need of any maintenance works for DUK conveyor belt deviation switches due to proven construction and high material quality.

Technical Data

Conforms to standard	EN60947, EN 60529, EN 60204
Switch angle	25°
Leading contact („V“)	15°
Max. displacement	75°
Roller lever	“-L50“ stainless steel ø50mm, stepless adjustable, double stainless steel ball bearing
	“-L“ stainless steel ø40mm, fix on the switch shaft, double ball bearing
Cable inlet	2x M25 threaded holes
Contacts	NC contact snap action, direct opening NO contact snap action
Protection	IP 67
Housing material	Glass fibre reinforced polyester (LHPx-xx/x-L), cast iron (LHMx-xx/x-L)
Housing colour	Yellow RAL 1003 or Red RAL 3000
Weight	LHP... 2.9kg LHM... 6.2kg
Fixing	2 holes for M10-screws
Operating temperature	-40°C up to +85°C

