



-proof Conveyor Belt Misalignment Switch

LHPE-xx/x-L50-EX

LHME-xx/x-L50-EX



DITTELBACH UND KERZLER

Installation and operating instructions

Principle: Any installation works only by skilled staff knowing all details of any applicable standard, guideline and regulation. Before any work shall be carried out the circuits have to be isolated from the mains.

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 edge 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. The maximum displacement angle of the roller lever is 75°. In case that the amount of offtrack is reduced, release is manual 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 for pre-warning at low misalignment amounts.

Pre-mounting: Put the switch onto its feet that way that the identification plate is on 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: The mounting position of the enclosure is free, but be sure that the roller of the lever is not below the hub of the lever. Adjust the switch on a plane console 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 should be on the same height as the edge of the belt. There should be as much space between the roller and the edge of the belt as a deviation of the conveying belt could be tolerated (approximately 4cm). Fixing of the switch is to be effected with two suitable screws M10 (max 11mm) at the slotted feet.

Electrical installation: Open lid by loosening the four slotted lid screws. Each microswitch inside is equipped with 4 terminals. Each terminal is marked with a number. Terminals 1 and 2 indicate a NC-contact, terminals 3 and 4 indicate a NO-contact. The 2 cable inlets are M25-threaded. These ducts are closed exw by IP67-worthy blind plugs. They have to be exchanged against explosion protected cable glands or blind plugs before taking into service. The switch must be earthed, grounded, properly inside the enclosure (LHP...) or inside or outside (LHM...). Afterwards put on the lid again, take care for right sealing by the sealing ring, and tighten screws by a torque of 3 Nm. Tighten the cable glands and blind plugs according to the instructions of the manufacturer, however, by a maximum torque of 6 Nm.

Check: Please check any electrical and mechanical function after completion of installation and afterwards in intervals according to the applicable standards. Exchange every damaged switch! The roller of the actuation arm is subject to wear, spares are available by your supplier.

Maintenance: DUK misalignment switches are maintenance free.

Technical Data

Conforms to standards	EN 60079-31, EN60947-5-5 EN 60529, EN 60204
Travel for actuation	approx. LHP... and LHME... 4.5cm LHP... and LHM... 7cm
Leading contact (only „V“)	approx. LHPE... and LHME... 2.5cm LHP... and LHM... 3.5cm
Max. displacement	75°
Cable inlet	2x M25 threaded holes
Fixing	2 holes for M10-screws
Ambient temperature	-40°C up to +80°C
Max. surface temperature	90°C
Mounting position	free, roller of the lever not below the hub
Mounting	2 slotted feet for M10-screws

