

## Model TPR22-BM Belt Misalignment Switch

### Description

TPR22-BM Belt Misalignment Switches are designed to alarm and/or shut down a conveyor system in the event of belt drift and misalignment. They are mounted on both sides of the conveyor belt, with roller arm of the switch positioned 15 cm away from the belt. As the belt starts drifting into either side, it will first contact with the switch arm. Arm will roll without disrupting the belt. If belt continues to drift further the switch arm will rotate and actuate microswitches at specified angles.

The product is suitable for reliable long term usage in most industrial applications, thanks to its heavy-duty design. Its BMC (durable composite) enclosure is corrosion and oxidation proof. Shaft and arm mechanisms are made of stainless steel and all internal parts are metal cast. TPR22-BM series products do not require any maintenance.

With the single contact model, the system will stop when the switch arm rotates until 25°. With two contact model, the switch arm will actuate the alarm switch at 15° angle. Corrective action can be taken before further misalignment. If the belt drifts until the switch arm rotates until 35°, the second microswitch will be actuated and the system will stop. Contact structure can be customized.

All models conform to CE (European Union) and EAC (Eurasian Customs Union) standards. Microswitches used in these products are VDE approved.

For aluminium cast enclosure option, please see our product NSR22-BM.

### Technical Specifications

- Enclosure: BMC (Durable Composite)
- Micro Switch Rating: 400 VAC 6A / 230 VAC 8A / 24 VDC 10A (→)
- Output Signal: (1) SPDT shutdown, alarm can be added upon request.
- Cable Gland: 2 x M25
- Temperature Rating: -55°C to +100°C
- Contact Angle: 25° Alarm Model: 15° and 35°
- Contact Type: Snap-action
- Protection Class: IP68
- Enclosure Color: Red (RAL 3020)
- Weight: 3.1 kg
- Mounting Orientation: It is suitable for double-sided use.
- Impact Rating: IK09 (EN 62262)
- Warranty Period: 36 Months

### Options

- ATEX Zone 21 / Zone 22
- Without Reset Lever
- Bus Security Interface
- Custom Contact Angles
- Mounting Bracket
- Custom Arm Dimensions

### Safety Standards

- Electrical Safety EN 60947
- Mechanical Safety EN 60204
- Outdoor Safety EN 60529
- Impact Resistance EN 62262

### Certificates

- CE ENEC
- Micro switches are VDE approved.



### Model Specifications

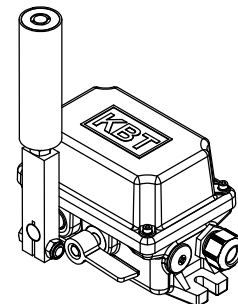
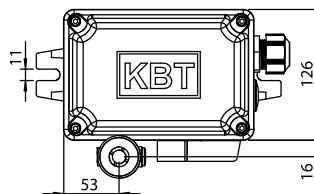
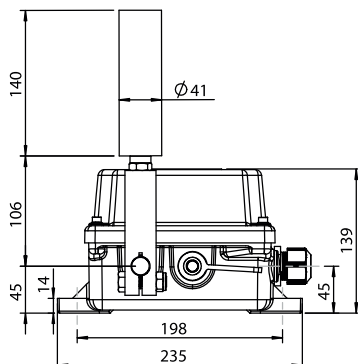
Model	Alarm			Stop			Reset
	NC	NO	Angle	NC	NO	Angle	
TPR22-BM				1	1	25°	Available
TPR22-BM-A01				1	1	25°	-
TPR22-BM-A11	1	1	15°	1	1	35°	Available
TPR22-BM-A11B	1	1	15°	1	1	35°	-
TPR22-BM-22				2	2	25°	Available
TPR22-BM-A02				2	2	25°	-
TPR22-BM-A22				2	2	35°	Available
TPR22-BM-A22B				2	2	35°	-
TPR22-BM-33				3	3	25°	Available
TPR22-BM-A03				3	3	25°	-
TPR22-BM-A33	1	1	15°	2	2	35°	Available
TPR22-BM-A33B	1	1	15°	2	2	35°	-

### Spare Parts

Model	Features
KB-826	1NO+1NC Switch
KB-R-01	M25x1,5 Cable Gland
KB-KT-01	M25 Blind Plug
KB-4-KN	4 Pin Connector
BA-11	Mounting Bracket (Can be made in custom dimensions)
KB-TGV-01	Enclosure
TSR-42-BM	Stainless Steel Roller Arm
KB-PM	Reset Lever

Please refer to the manual for instructions. See our KBT Accessories catalog for installation equipment.

### Technical Drawing



Dimensions are in mm.

www.kbtelektrik.com