

Model NSR12-BM Belt Misalignment Switch

Description

NSR12-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 distrupting 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. Enclosure is aluminum cast and other parts are made of CuZn39Pb3 (brass). NSR12-BM series products do not require any maintenance. It offers an economical solution to short distance conveyor belt and machinery safety applications.

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 25°, 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.

Technical Specifications

- Enclosure: Aluminium Casting
- Micro Switch Rating: 230 VAC 10A / AC-15, Ue 250V, le 3A →
- Output Signal: (2) SDPT Stop
- Cable Gland: 3 x PG16
- Temperature Rating: -35°C to +80°C
- Contact Angle: 15° Alarm Model: 25°
- Contact Type: Snap-action
- Protection Class: IP65
- Enclosure Color: Red (RAL 3020)
- Weight: 1.9 kg
- Mounting Orientation: It is suitable for double-sided use.
- Impact Rating: IK09 (EN 62262)
- Warranty Period: 12 Months

Options

| Without Reset Lever |
|---|
| Custom Contact Angles |

Mounting Bracket

Custom Arm Dimensions

Safety Standards

Electrical Safety FN 60947 Mechanical Safety EN 60204 **Outdoor Safety** EN 60529 Impact Resistance EN 62262

Certificates

CE FRI

Micro switches are VDE approved.



Model Specifications

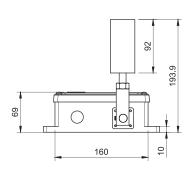
| Model | Alarm | | | Stop | | | Reset |
|---------------|-------|----|-------|------|----|-------|-----------|
| | NC | NO | Angle | NC | NO | Angle | |
| NSR12-BM | | | | 1 | 1 | 25° | Available |
| NSR12-BM-A01 | | | | 1 | 1 | 25° | - |
| NSR12-BM-A11 | 1 | 1 | 15° | 1 | 1 | 35° | Available |
| NSR12-BM-A11B | 1 | 1 | 15° | 1 | 1 | 35° | - |
| NSR12-BM-22 | | | | 2 | 2 | 25° | Available |
| NSR12-BM-A02 | | | | 2 | 2 | 25° | - |

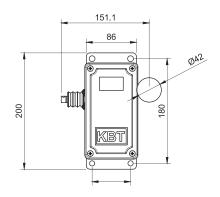
Spare Parts

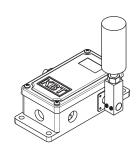
| Model | Features |
|-----------|---|
| KB-NRP-K5 | 1NO+1NC |
| KB-R-05 | PG16 Cable Gland |
| KB-KT-05 | PG16 Blind Plug |
| BA-06 | Mounting Bracket (Can be made in custom dimensions) |
| TSR-11-PR | Roller Arm |
| KB-GVD-06 | Enclosure |

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

Technical Drawing







Dimensions are in mm.

www.kbtelektrik.com