

Model TPR22-BM-EX Belt Misalignment Switches

Specifications

The Model TPR22-BM-EX Belt misalignment switches are conveyor safety accessories designed to alarm and/or shut down conveyor systems in the event of a conveyor belt misalignment. The heavy duty rugged design makes them suitable for most industrial applications. Body structure is Bmc composite material, Explosive gas, environmental and corrosion resistant. Also It has Ex certificate. Shaft and arm mechanisms are made of stainless steel. The handle mechanism is cylindrical in structure and operates with two bearings. TPR22-BM-EX Belt misalignment switches, It is mounted on both sides of the conveyor belt to be attached to the chassis. It is designed to prevent damage to the belts and equipment due to the misalignment of the conveyor belt. System decreases downtime and maintenance costs and time can be saved. The roller arm of the switch is

placed about 15cm away from the normal belt position. If the belt begins to wander, it makes contact with the roller arm causing it to spin. As more force is applied to the roller arm it will rotate away from the normal position and at 15° it will actuate the first alarm micro switch. The first micro switch will annunciate the alarm condition to the control system so corrective action can be taken. If the belt continues to slip, the system is stopped by activating the second micro switch at 35° position. The alarm contact structure is available on request. It can be used with only one contact mechanism without using alarm contact. The micro switch used in the products is approved by VDE. All products are produced as accordance with CE standards. Also It meets EAC standards for the Russian market. TPR22-BM-EX series products do not require any maintenance.

Technical Specifications

- Region : Ex Zone 11 ve 21
- Enclosure : Bmc Hard Composite
- Micro Switch Values : 400VAC 6A / 230VAC 8A / 24VDC 10A
- Output Signal : (1) SPDT shutdown, alarm can be added upon request.
- Cable Entry : 2x M25
- Connector : M25 Ex Gland
- Temperature Rating : -30°C - +85°C
- Movement Angle : 25° **Optional** : 15° and 35°
- Contact Status : Snap - Action
- Protection Class : IP68
- Enclosure Color : Black RAL 7021
- Weight : 3.1 Kg
- Mounting Structure : It is suitable for double-sided use.

Options

- Bus Security Interface
- Adjustable Angle
- Casting Body
- Mounting Feet
- Arm Length and Diameter

Security Approvals

Electrical Security	EN60947
Mechanical Security	EN 60204
Outdoor Security	EN 60529
Current Certificate	CE
Russia Market	EAC
Micro Switch	VDE
Explosive Environment	EX - Zone 22 / Zone 21

Ex Definition

- II 2G Ex db IIC T6/T5 Gb,
- II 2D Ex tb IIIC
- T80 °C/T95 °C Db
- IECEX Ex db IIC T6/T5 Gb,
- Ex tb IIIC T80 °C/T95 °C Db

Model Specifications List

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

Spare Parts Accessories List

Model	Features
KB-826-EX	1NO+1NC Switch
KB-826-2-EX	2NO+2NC Switch
KB-826-3-EX	3NO+3NC Switch
KB-R-01-EX	M25x1,5 Cable Gland
KB-KT-01-EX	M25 Blind Plug
KB-4-KN-EX	4 Pin Connector
BA-11	Connection Mounting Foot
KB-TGV-01-EX	Body Cover
TSR-42-BM-EX	Bearing Stainless Arm
KB-PM-EX	Reset Lever

Please review the manual file for product use. Check the KBT Accessory catalog for mounting the products on the belt.

