



# NSR55-BM Limit Switch - Conveyor Belt Alingment Switch

#### Specifications

It is designe to alert and turn off the conveyor system in case of misalignment of the conveyorl belt. Its resistance to heavy conditions makes it reliable in the long term and suitable for most industrial applications. Enclosure structure is resistant to corrosion by being covered with metal casting and static paint. Shaft and lever Shaft and lever mechanisms are made of stainless steel. The handle mechanism has a stainless steel cylindrical structure and works with two bearings inside. NSR55-BM Arm belt slide switches (limit switches) are mounted on both sides of the conveyor belt to be connected to the chassis. The belt slding switch, also called the limit switch, is desgined to prevent damage to the belts and equipment due to the misalignment of the conveyor belt.

Limit switches and specific limit switches used as industrial automation systems save time by reducing system downtime and maintenance costs. The cylinder arm of the specific limit switch is placed approximately 15cm from the normal belt position. When the belt starts to slide, it comes into contact with the roller arm. As a result of the application of more force on the band arm, the cylinder arm moves from its current position and the micro switch is triggered at 15 ° and activates the alarm. Thus, corrective action can be taken. If the band continues to slide, the system is stopped by activating the second micro switch at 18 ° position. Alarm contact structure is offered optionally. All products are manufactured in accordance with CE standards and meet EAC standards for the Russian market. NSR55-BM series products do not require any maintenance. Please check manual file for product usage.

## **Technicial Specifications**

- Body : Zinc Alloy
- Cable Entry: Pg13,5
- Temperature Degree : -35°C +90°C
- Angle of Contact : 15° and 18°
- Enclosure Color : Red (RAL 3020) + Black (RAL 9005)
- Weight : 1,155 Kg
- Montage Structure : Mounting on the body
- Product Specific Application : Conveyor Belt Shift Monitoring
- Contact Operation : Sudden moving
- Minimum Opening Torque: 1 N.mMinimum Operating Speed: 0,01
- Number of Steps : 2 m/min
- Maximum Movement Angle : -90 ° / 90 °
- Mechanical Durability: 300000 movements
- Warranty : 36 Moths



#### **Electrical Structure**

- Contact Insulation Form : Za
- Contact Code Display : AC-15 (Ue = 240 V), Ie = 3 A approve DC-13 (Ue = 250 V), Ie = 0,27 A approve
- [Ui] Nominal Insulation Voltage: 500 V
- Maximum Resistance Between Terminals : 25 MOhm
- [Uimp] Nominal Impact Withstand Voltage: 6 kV
- Short Circuit Protection: 10 A
- Electrical Durability : 5000000 motion

#### **Model Specifications List**

Model		Alarm	)	Stop			Reset
	NC	NO	Angle	NC	NO	Angle	
NSR55-BM	1	1	15°	1	1	18°	**

#### Options

- Adjustable Angle
- Arm Length and Diameter

#### Environment

- Impact Resistance : 18 ms for 30 gn
- Protection Class : IP65
- Vibration Resistance : 9 gn (f= 10...500 Hz)

### Safety Approvals

Russian Market

Electrical Safety EN 60947
Mechanical Safety EN 60204
Outdoor Security EN 60529
Current Certificate C€

EAC

### **Technical Drawing**

