

TPR22-BM Series
NSR22-BM Series
NSR66-BM Series
NSR66-BM3 Series
NSR22-PS Series
TPR22-PS Series
NSR66-PS Series
NSR66-PS3 Series

BELT MISALIGNMENT SWITCH INSTALLATION AND OPERATING MANUAL

INFORMATIONS

NSR / TPR Series conveyor belt misalignment switches are designed to stop conveyor systems during emergency or maintenance and repair work. Designed to withstand heavy conditions, makes it suitable for most industrial applications that are reliable in the long term. With belt misalignment switches, the system saves money by reducing down-time and maintenance costs.

This type of belt misalignment switches are mounted on the left and right sides of the belt in pairs. In case of misalignment of the belt, it is shifted against the reset force of the inner spring by touching the lever. Max. lever sliding angle is 75 °.

In case the belt deviates from the target; The latch can be released by lifting the reset handle. Reset can also be done automatically.

SAFETY WARNING

Ensure that the conveyor is electrically isolated and stationary before carrying out any work any conveyor equipment. Only a competent electrician should carry out electrical installation, repairs or maintenance.

PREPARATIONS REQUIRED BEFORE INSTALLATION

- 1- In order to install the switch or switches, flat and solid console or consoles should be determined in the frame of the conveyor belt and the mounting points should be planned.
- 2- Necessary mechanical and electrical hand tools for installation must be provided.
- 3- Necessary work clothes should be put-on in terms of work safety.
- 4- Before electrical connection, electrical energy should be disabled.

MECHANICAL INSTALLATION

1- Adjust the switch as the switch roller points towards the belt area, note that the conveyor belt is in its normal position and the carrying roller is at a medium height. It should have the same height as the edge of the belt. The switch is fixed with two suitable screws.

2- The alignment switches are used on either side of conveyor systems to provide a fail-safe stop mechanism for belts that have misaligned left or right. They are typically installed at the header and tail pulleys on all conveyors and at trippers drive on belts. Once activated these switches isolate the control circuits of the motors driving the conveyors and other process equipment.

3- The alignment switch roller surface should not be in contact with the belt under correct alignment conditions. We recommend a 10 mm clearance as per diagram below.

4- The alignment switch must be installed so that the roller on the lever is always at 90 degree to the conveyor belt for correct operation as per diagram below

NOTE

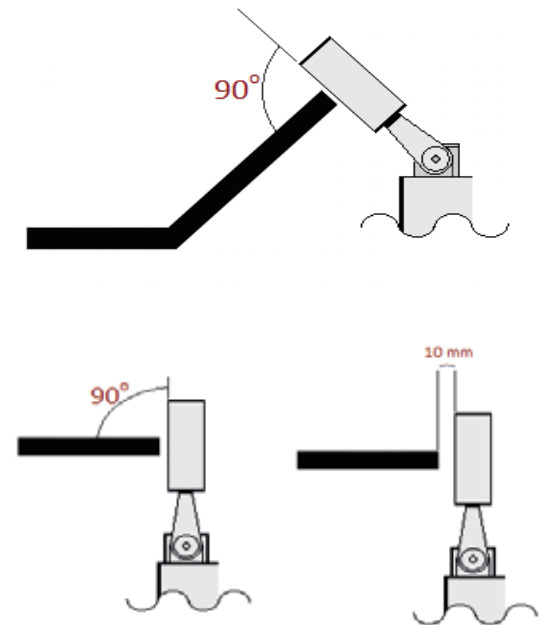
Firstly; Complete the mechanical installation of the switch, then complete the electrical installation. After all operations are completed, the electrical energy can be activated and conveyor operation can be started.

ELECTRICAL INSTALLATION

Open the cover of switch by loosening the four slotted lid screws. There are max. 3 micro switches in the installation space of the switch. Wire the contacts according to the requirements demanded by the line at-site. After wards put on the cover again and tighten screws with a torque of 3 Nm. Tighten the cable screwing according to the instructions. However, at a maximum torque of 6 Nm.

Control: It must be checked whether the switch is operationalized mechanically and electrically or not before the system turn on.

Maintenance: There is no need of any maintenance works for KBT conveyor belt safety switches due to proven construction and high material quality.



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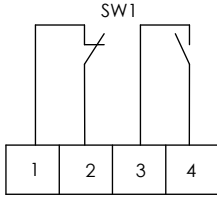
NSR66-PS3 Series

KBT

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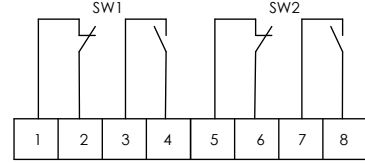
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TPR22/NSR22
1 CONTACT



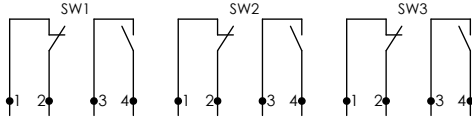
SIGNAL DEVICE POWER SUPPLY : ☐ 115 VAC
☐ 230 VAC

TPR22/NSR22
2 CONTACT



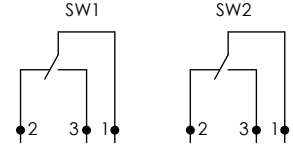
SIGNAL DEVICE POWER SUPPLY : ☐ 115 VAC
☐ 230 VAC

TPR22/NSR22
3 CONTACT

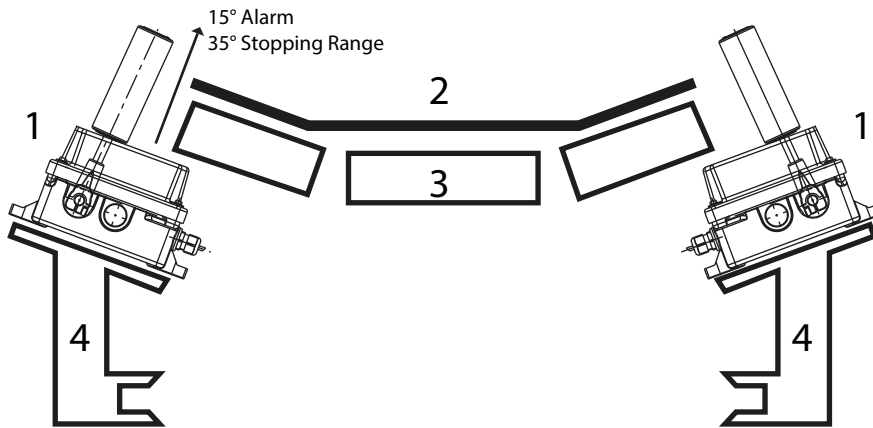


SIGNAL DEVICE POWER SUPPLY : ☐ 115 VAC
☐ 230 VAC

NS66 PR / NSR66 PR3



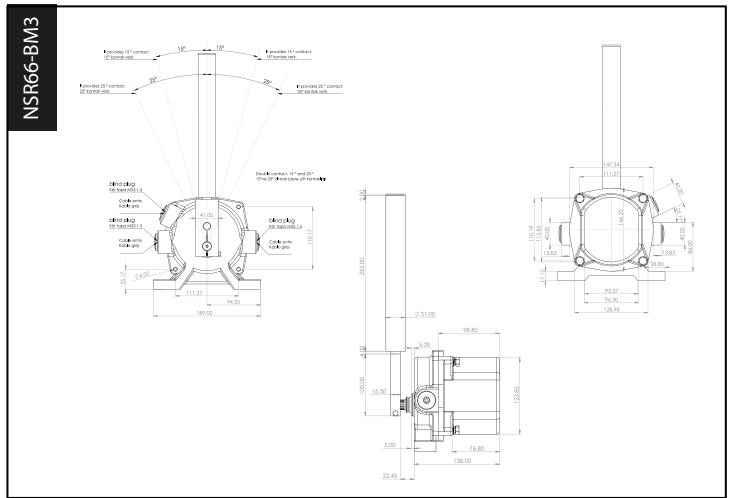
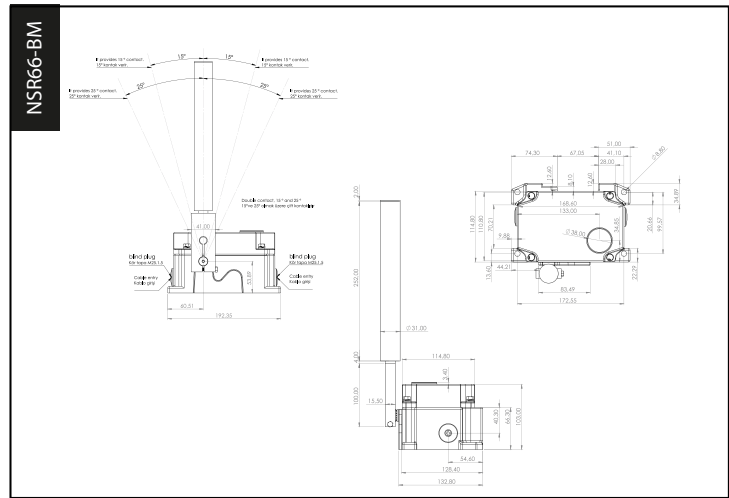
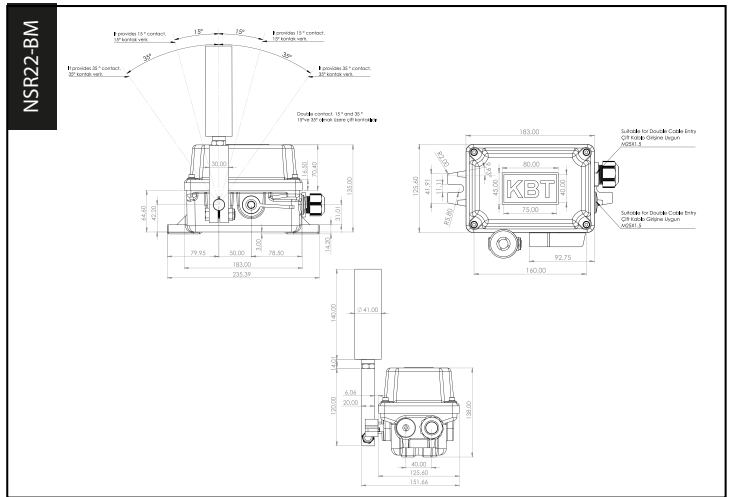
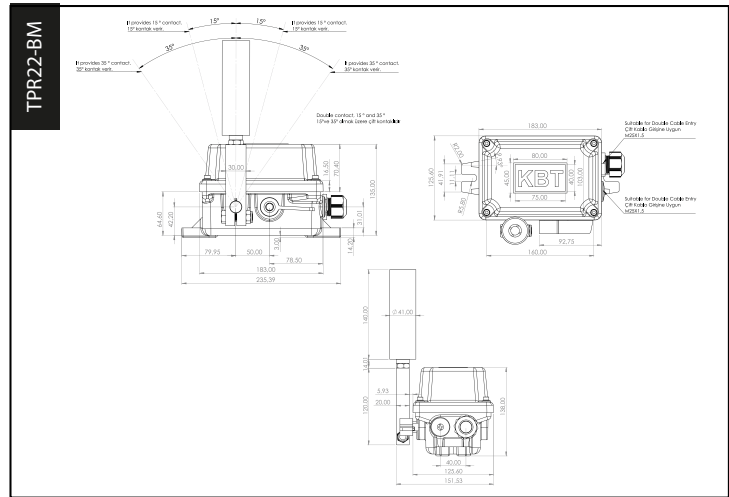
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- 1- Roller Belt Switch
- 2- Belt
- 3- Conveyor Support Roller
- 4- Mounting Plate

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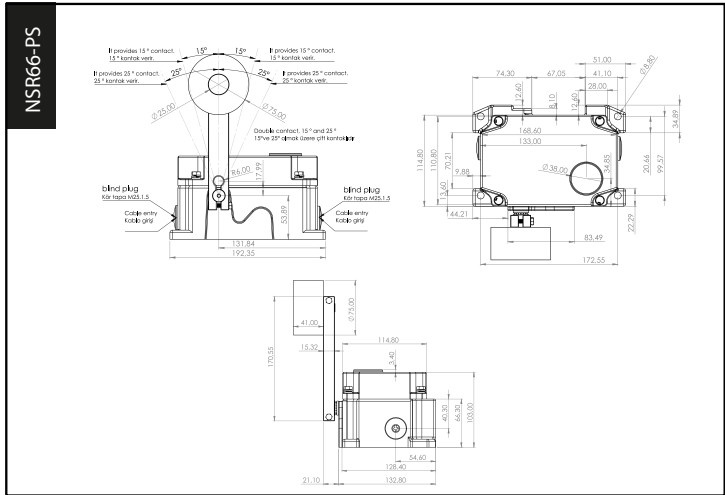
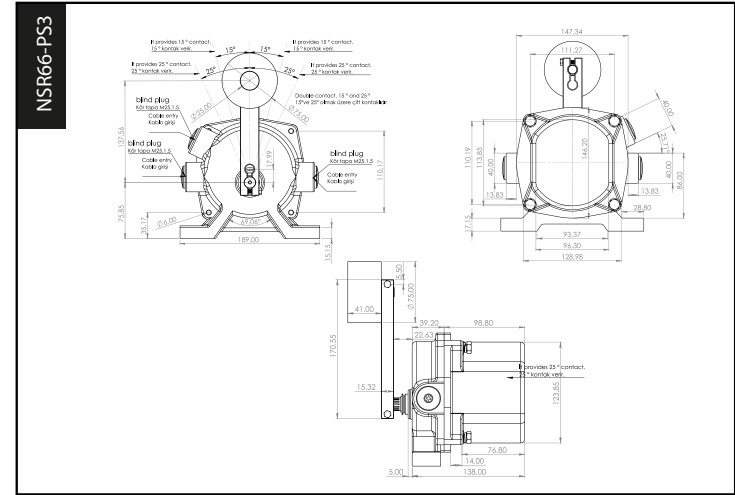
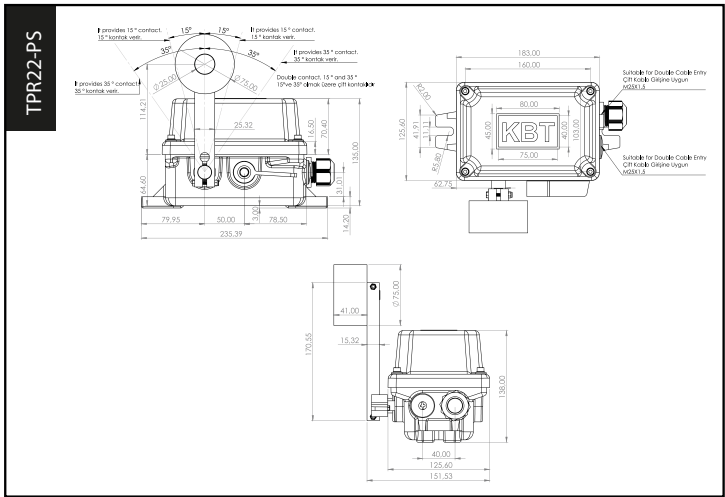
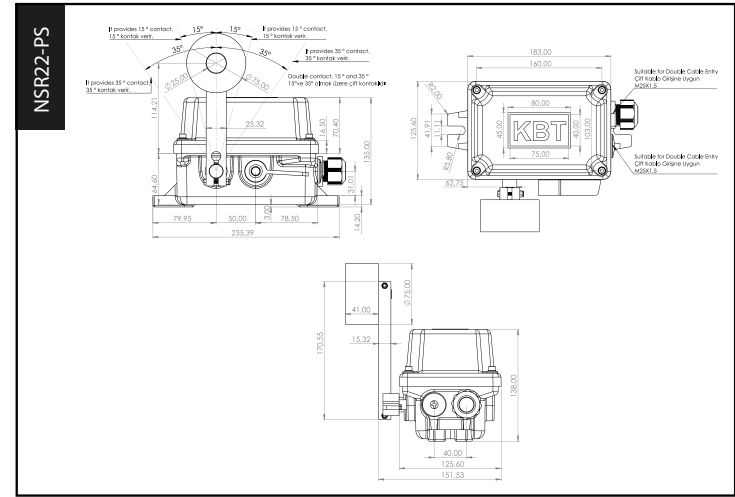
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KBT

Product Name

Model

Serial Nr

Year Production

IP 68 250DC V / 5A ☐ ☐

Made in TURKEY

www.kbtelektrik.com info@kbtelektrik.com

Protection Class (IP68, IP67)

Product Model

- Belt Misalignment Switch
- Pull Cord Switch
- Pull Cord Emergency Switch with Signal Lamp
- EX Conveyor Belt Switch
- Rope Connection Accessories
- Conveyor Belt Position Switch
- Conveyor Belt Damage Detector
- Mini Limit Switch
- Tilt Switch
- Tilt Switch Control Panels

Product Body Material

- TPR : BMC or ThermoPlastic Body
- NSR : Moulding (Metal) Body



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