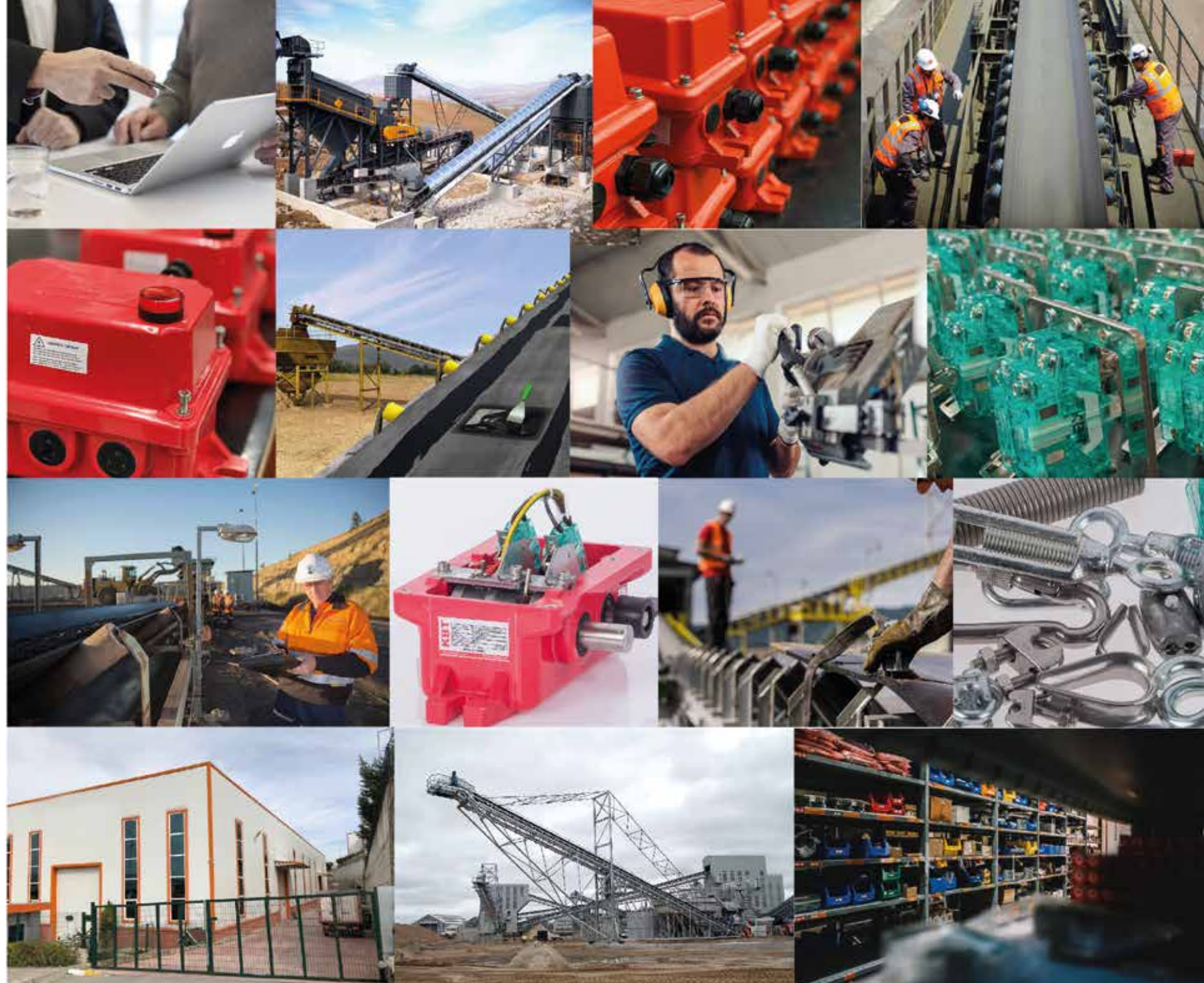


KBT[®]

Conveyor Belt Security Solutions

We Are Always On The Safety Side!







“

Human and Machine Safety,

The KBT brand offers you products manufactured in accordance with the heavy industry so that you can reliably protect and monitor your conveyor belt systems. All products are 100% manufactured in Turkey all, kinds of customization are provided when desired. All models in our product group are designed to withstand extreme conditions and are produced in high quality.

Our goal is to support you in the field of 'monitoring' in heavy industry conveyor belt systems. It is also to maximize your safety responsibility by supporting you. The important advantages we offer to our valued customers are; our technical excellence, our industrial expertise, our short delivery times and high quality product production.

We have been in the industry for many years, our market experience, proximity to end users and many years of experience in mechanical engineering, they're all reflected in our products. Our products had experienced professional R&D processes and past so many tests to get the highest standards. In this sense, we claim that we're one of the candidates of leading the world's heavy industry equipment market.

In this sense 'KBT' brand is the world's leading heavy industry industrial security is a candidate to be among the equipment providers. We provide versatile service to our customers with Lever Belt Misalignment Switches, Pull Cord Emergency Switch, Tilt Switch and many different products.

”

Port Applications

Aviation / Marine Industry

Paper Production Industry

Rubber / Plastic Production

Automation Solutions

Iron and Steel Factories

Machinery and Plants

Power Plants

Cement Plants

Mining

Oil and Gas Industry

Bulk and Material Handling Systems

Excellence

Customer satisfaction is our number one priority. For us quality is more than producing a good product. Customized solutions in design is fully integrated into our production and it forms part of our daily work life. As the KBT team, we are responsible for the quality and success of our products and this is our greatest feature.

All KBT Team members are trained to the highest standard for provide "Best in Class" Service and Support. We spend a lot of time working on research and development of our products and the constant and innovative pursuits. KBT provides your technical needs with superior technical expertise, excellent market knowledge and customer relationships built on trust.



Customer Satisfaction



Qualified Personnel



Flawless Production Process



Delivery Reliability



Short Delivery Times

Heavy Industry Solutions

- ▶ Pull Cord Emergency Switch
- ▶ Lever Belt Misalignment Switches
- ▶ Position Switch
- ▶ Tilt Switch
- ▶ Speed Sensor
- ▶ Danger Zone Exproof Area
- ▶ Bus Security Interface

We Are Always On The Safety Side!

All products produced for bulk material handling systems are manufactured to resistant heavy industry conditions. Control equipment working on the belt as %100 performs security related tasks.

KBT Products are highly protected against injury and damage. It has also been successfully preferred worldwide for many years.

We are getting better every day.

We have invented the phrase "**KBT Trust**" to guarantee our responsibilities to quality, reliability and especially cost.

It's been observed that the KBT project, which was launched to support the country economy, has become a successful brand in worldwide and we always aim for higher quality production. The purpose of the company since the very beginning is the highest level of innovative security and customer satisfaction.

KBT has evolved and expanded steadily and successfully, KBT is one of the pioneers in Heavy Industry Conveyor Belt technology.

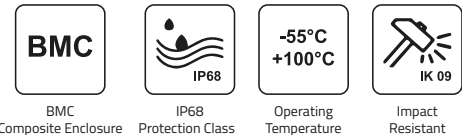
*" With the pleasure of seeing that our works is permanent,
We continue our way by increasing our speed. "*

TPR22 SERIES

TPR22 series has BMC composite enclosure. TPR22 series is resistant to heavy conditions and is not affected by corrosion. All the mechanical parts inside of this product are made of aluminum casting and stainless steel material. It is offered to customers with a cost advantage compared to the market. The product enclosure structure has IP68 protection class and full performance operation is provided for extremely dusty environments.

Important Usage Areas;

- ▶ Cement Plants
- ▶ Mining Industry
- ▶ Fertilizer Industry
- ▶ Chemical Industry
- ▶ Oil Gas Industry
- ▶ Energy Production Industry



TPR22 Series Product Types and Features

TPR22-BM SERIES



TPR22-BM series is mounted on the right and left sides of the conveyor belt. These products are security components that give an alarm or stop the conveyor systems in order to detect the position in case of belt slippage.

- ▶ Alarm and Stop Different Angle Option
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ Optional Arm Length and Diameter
- ▶ IP 68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Reset Latch Cancel

TPR22-PR SERIES



The products are mounted on the belt with the steel rope pulled parallel to the conveyor belt. When the operator pulls the rope at any point, the system is stopped or an alarm is provided.

- ▶ 2x50 m Right Left Rope Connection Distance
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ IP 68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Signal Lamp
- ▶ Easy Installation

TPR22-PS SERIES



The position switch is used to monitor the position of the heavy moving mechanism of the tension mechanism or conveyor belt systems.

- ▶ BMC Composite Enclosure Inoxidable
- ▶ Resistant to Impact and Heavy Conditions
- ▶ 3NO / 3NC Contact Mechanism
- ▶ IP68 Protection Class
- ▶ CE, EAC Standards

TPR22-EX SERIES

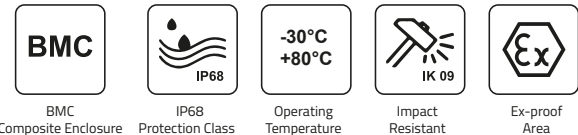
This product, which has all the features of the TPR 22 Series, is specially produced for explosive dust and gaseous environments.

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

It is possible to make customizations in the product upon request. M25 has two EX-specific cable outlets.

Important Usage Areas;

- ▶ Cement Plants
- ▶ Mining Industry
- ▶ Fertilizer Plants
- ▶ Chemical Industry
- ▶ Oil Gas Industry
- ▶ Energy Production Industry



TPR22-EX Series

Product Types and Features

TPR22-BM-EX SERIES



These products, which are mounted on the right and left sides of the conveyor belt in explosive environments, are conveyor safety components that give an alarm to detect the position of the belt or stop the conveyor systems.

- ▶ Alarm and Stop Different Angle Option
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ Optional Arm Length and Diameter
- ▶ IP 68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Reset Latch Cancel

TPR22-PR-EX SERIES



TPR22-PR-EX is used in explosive environment. The products are mounted on the belt with the steel rope pulled parallel to the conveyor belt. The operator provides stop or alarm action by pulling the rope at any point.

- ▶ 2x50 m Right Left Rope Connection Distance
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ IP 68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Signal Lamp
- ▶ Easy Installation

TPR22-PS-EX SERIES



TPR22-PS-EX is used in explosive environment. The position switch is used to monitor the position of the heavy moving mechanism of the tension mechanism or conveyor belt systems.

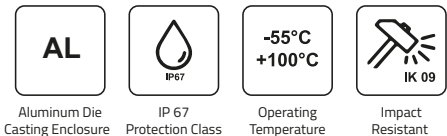
- ▶ Alarm and Stop Different Angle Option
- ▶ 3NO / 3NC Contact Mechanism
- ▶ Resistant to Impact and Heavy Conditions
- ▶ IP68 Protection Class
- ▶ CE, EAC Standards
- ▶ Optional Reset Latch Cancel

NSR22 SERIES

NSR22 Series has a cast enclosure structure. NSR22 series is resistant to all heavy conditions and impacts. The internal mechanical parts of this product are made of aluminum casting and stainless steel. It has IP67 protection class. Full performance operation has been provided for environments with conveyor belts carrying stones and hard materials.

Important Usage Areas;

- ▶ Quarry
- ▶ Colliery
- ▶ Iron and Steel Plants
- ▶ Mining Industry
- ▶ Port Operator
- ▶ Concrete Plant



NSR22 Series Product Types and Features

NSR22-BM SERIES



NSR22-BM series is mounted on the right and left sides of the conveyor belt. These products are security components that give an alarm or stop the conveyor systems in order to detect the position in case of belt slippage.

- ▶ Different Angle Option For Alarm and Stop
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ Optional Arm Length and Diameter
- ▶ IP 68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Reset Latch Cancel

NSR22-PR SERIES



NSR22-PR is mounted on the belt with the steel rope pulled parallel to the conveyor belt. When the operator pulls the rope at any point, the system is stopped or an alarm is provided.

- ▶ 2x50 m Right Left Rope Connection Distance
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ IP 68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Signal Lamp
- ▶ Easy Installation

NSR22-PS SERIES



The position switch is used to monitor the position of the heavy moving mechanism of the tension mechanism or conveyor belt systems.

- ▶ Different Angle Option For Alarm and Stop
- ▶ 3NO / 3NC Contact Mechanism
- ▶ Heavy Duty Roller Arm
- ▶ IP68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Reset Latch Cancel

LGT SERIES


The LGT Series provides a fast solution for detecting the warning point in the conveyor belt system with its signal lamp on it. TPR Series products are composite enclosures. NSR Series is a metal casting enclosure. Products can be controlled by profibus communication upon request.

Important Usage Areas;

- ▶ Quarry
- ▶ Colliery
- ▶ Iron and Steel Plants
- ▶ Mining Industry
- ▶ Port Operator
- ▶ Concrete Plant

AL

Aluminum Die Casting Enclosure




IP 68 Protection Class

-55°C

+100°C

Operating Temperature



IK 09 Impact Resistant

BMC

BMC Composite Enclosure

LGT Series

Product Types and Features

NSR22-PR-LGT SERIES



NSR22-PR-LGT is used for position tracking on the conveyor belt.

- ▶ Position Control with External Signal Lamp
- ▶ Aluminum Die Casting
- ▶ 2x50 m Right Left Rope Connection Distance
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ CE, EAC Certificates

TPR22-PR-LGT SERIES



TPR22-PR-LGT is used for position tracking on the conveyor belt.

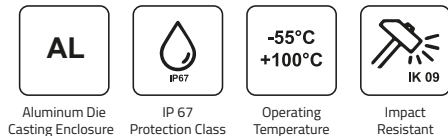
- ▶ Position Control with External Signal Lamp
- ▶ BMC Composite Enclosure
- ▶ 2x50 m Right Left Rope Connection Distance
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ CE, EAC Certificates

NSR66 SERIES

NSR66 Series has a cast enclosure structure. NSR66 series is resistant to all heavy conditions and impacts. The internal mechanical parts of this product are made of aluminum casting and stainless steel. It has IP67 protection class. Full performance operation has been provided for environments with conveyor belts carrying stones and hard materials. NSR 66 Series provides easy installation in chassis with different mounting holes compared to other products due to its screw connection at two points.

Important Usage Areas;

- ▶ Quarry
- ▶ Colliery
- ▶ Iron and Steel Plants
- ▶ Mining Industry
- ▶ Port Operator
- ▶ Concrete Plant



NSR66 Series

Product Types and Features

NSR66-PR SERIES



NSR 66 Series is mounted on the belt with a rope pulled parallel to the conveyor belt. At any point, when the operator pulls the rope, the system can be stopped or an alarm is provided.

- ▶ 2x50 m Right Left Rope Connection Distance
- ▶ 2NO / 2NC Snap Action Contact Structure
- ▶ IP 67 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Signal Lamp
- ▶ Easy Installation

NSR66-BM SERIES



TPR66-BM series is mounted on the right and left sides of the conveyor belt. These products are security components that give an alarm or stop the conveyor systems in order to detect the position in case of belt slippage.

- ▶ Alarm and Stop Different Angle Option
- ▶ 2NO / 2NC Snap Action Contact Structure
- ▶ Optional Arm Length and Diameter
- ▶ IP 67 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Reset Latch Cancel

NSR66-PS / BD3 SERIES



The Position Switch is used to monitor the position of the heavy moving mechanism or the weight tensioning mechanism of conveyor belt systems. **Belt Damage Detector** detects the point of damage in the conveyor belt system.

- ▶ Alarm and Stop Different Angle Option
- ▶ 2NO / 2NC Snap Action Contact Structure
- ▶ Heavy Duty Roller Arm
- ▶ IP 67 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Reset Latch Cancel

Tilt Switch Series

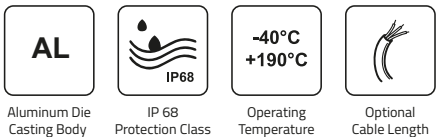
Product Types and Features

Tilt Switch

It has a product group with a cast body and a stainless steel body. It is suitable for all ambient conditions. There are 3m and 8m cable lengths in standard. It can be produced in different cable lengths upon request. Products have a special cable protection structure for heavy conditions.

Important Usage Areas;

- ▶ Quarry
- ▶ Colliery
- ▶ Iron and Steel Plants
- ▶ Cement Factories
- ▶ Mining Industry
- ▶ Port Operator
- ▶ Concrete Plant



SS-43 SERIES



The tilt switch probe with a stainless steel body is preferred for places with dust and corrosion.

- ▶ Easy Installation
- ▶ 1NO / 1NC Snap Action Contact Structure
- ▶ IP 68 Protection Class
- ▶ CE, EAC Certificates

CB-39 SERIES



The tilt switch probe, which has a complete cast aluminum body resistant to heavy and difficult conditions, is suitable for long-term use with its special cable

- ▶ Easy Installation
- ▶ 1NO / 1NC Snap Action Contact Structure
- ▶ IP 68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Cable Protection Choice

SS-55 SERIES



The tilt switch probe with a stainless steel body has a high performance in controlling materials such as sand and gravel with its propeller structure.

- ▶ Easy Installation
- ▶ 1NO / 1NC Snap Action Contact Structure
- ▶ IP 68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Cable Protection Choice

Tilt Switch Accessory

Various accessories are used to facilitate the use of the tilt switch control system and to provide solutions for different applications. Accessories can be mounted directly on the product. PLC connection is made without being obliged to the control unit. Panel mounting and panel type control unit is available upon request.

Important Usage Areas;

- ▶ Quarry
- ▶ Colliery
- ▶ Iron and Steel Plants
- ▶ Mining Industry
- ▶ Port Operator
- ▶ Concrete Plant



Tilt Switch Accessory Series

Product Types and Features

FLOAT BALL ve FLAT PADDLE



It can be mounted directly to the product. It has a different application-specific structure.

- ▶ Float Ball for CB-39 Series:KCT601
- ▶ Float Ball for SS-43 Series:KCT602
- ▶ Flat Paddle for CB-39 Series:KCT101
- ▶ Flat Paddle for SS-43 Series:KCT102

CONTROL PANEL



KT25-DIN Mounting Type
KT20-P Panel Type

- ▶ 115/230 VAC, 50/60 HZ
- ▶ (2)SPDT-10Amp@115/230VAC, 7Amp@30VDC non-inductive
- ▶ (1) NO-2Amp@115/230VAC,3Amp@20VDC
- ▶ KT25-DIN (1) NO—2 Amp@115/230 VAC, 3 Amp@24VDC
- ▶ It can be set to 1,2,4 and 6 seconds
- ▶ Temperature All Models -40°C (-40°F) +50°C (+122°F)
- ▶ Protection KT20-P IP65 (NEMA 4)
- ▶ **KT25-DIM IP20 (NEMA 1)**

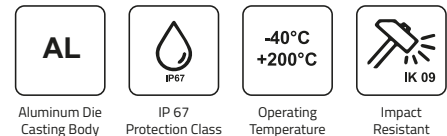
NSR51 SERIES

Heavy industry Limit Switch

Model NSR51 Heavy duty type industrial limit switches are used for control and security purposes in machinery and industrial equipment. It is suitable for use in environments with high temperatures. It is mostly preferred in furnaces and high temperature regions in iron and steel factories. VDE approved micro switches are used in the products. All products are produced in accordance with CE and EAC standards. Single and double roller arm structure and roller long arm options are available. All parts are made of stainless steel.

Important Usage Areas;

- ▶ Iron and Steel Plants
- ▶ Crane Application
- ▶ High Furnace
- ▶ Mining Industry
- ▶ Port Operator



NSR51 Series

Product Types and Features

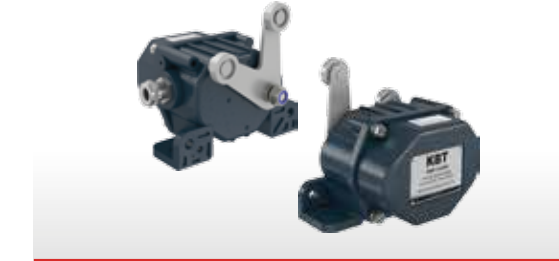
NSR51-LS SERIES



It is specially designed for machine and crane applications. It works with a single reel arm. The micro switch of the product can operate at different angles.

- ▶ Movement in Right and Left Direction
- ▶ 2NO / 2NC Snap Action Contact Structure
- ▶ IP67 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation

NSR51-LS2 SERIES



This product, which is specially designed for machine and crane applications, works with double round roller arms moving to both sides.

- ▶ Movement in Right and Left Direction
- ▶ Double Roller Arm Structure
- ▶ 2NO / 2NC Snap Action Contact Structure
- ▶ IP67 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation

NSR51-BM SERIES



Used in the conveyor belt system, this product is resistant to high temperatures and its arm structure gives contact at an angle.

- ▶ Alarm and Stop Different Angle Option
- ▶ 2NO / 2NC Snap Action Contact Structure
- ▶ Heavy Duty Roller Arm
- ▶ IP67 Protection Class
- ▶ CE, EAC Certificates
- ▶ Optional Reset Latch Cancel

NSR55-BM, TPR55-BM, NSR75-PR Product Types and Features

NSR55-BM, TPR55-BM, NSR75-PR SERIES

NSR55-BM

It is suitable for use in conveyor belt systems with its NSR55 roller arm tube. With its metal body, it is resistant to outdoor and heavy conditions. The product is used in smaller and indoor bands. It can give control at different angles. NSR55-BM series products do not require maintenance.

TPR55-BM

TPR 55-BM is suitable for use in conveyor belt systems with its roller arm structure. With its TPR55-BM bmc composite body, it is suitable for outdoor environments and heavy conditions. The product is used in smaller and indoor belts. It can give control at different angles. TPR55-BM series products do not require any maintenance.

NSR75-PR

Specially designed for machine and conveyor applications. This product can work with 75 meters or 235 meters of rope connection on one side. It has a simple assembly structure with the connection accessories used. With its metal body structure, it works with high performance in outdoor and heavy conditions.

Important Usage Areas;

- ▶ Iron and Steel Plants
- ▶ Crane Application
- ▶ High Furnace
- ▶ Mining Industry
- ▶ Port Operator



NSR55-BM SERIES



NSR55-BM Series is suitable for all conveyor belt. It eliminates slipping of the belt system and following it in the wrong direction.

- ▶ Movement in Right and Left Direction
- ▶ Movement Angle: 15° and 180°
- ▶ 2NO / 2NC Snap Action Contact Structure
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation

TPR55-BM SERIES



TPR55-BM Series is suitable for all conveyor belt. It eliminates slipping of the belt system and following it in the wrong direction.

- ▶ Movement in Right and Left Direction
- ▶ Movement Angle: 15° and 180°
- ▶ 2NO / 2NC Snap Action Contact Structure
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation

NSR75-PR SERIES



NSR 75-PR Series products can be connected up to a length of 125 meters. It is used for emergency stop duty and safety for the machine and conveyor system.

- ▶ 75 meter and 125 meter rope option
- ▶ IP66 Protection Class
- ▶ Tension Indicator
- ▶ Emergency Stop Button
- ▶ 2 N.C + 2 N.O or 3 N.C + 1 N.O

Conveyor Belt Switch Connection Accessories

Wire rope and connection accessories are needed to mount all rope pulled products to the machine system or conveyor belt. The steel rope is PVC insulated. It is produced as 3mm or 5mm steel rope option inside. All other accessories are available in two different options as stainless steel or galvanized casting. We know that it is important to assemble the products with work safety and quality connection equipment. For this, we apply high quality production standards.

Important Usage Areas;

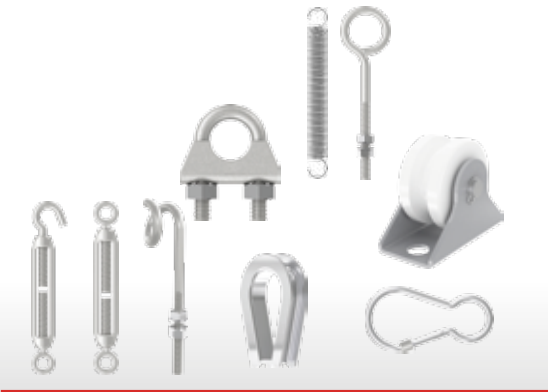
- ▶ All Rope Emergency Stop Switch Connections
- ▶ Machine Safety
- ▶ Product Ports
- ▶ Conveyor Belts Located Outside
- ▶ Indoor Conveyor Belts

Steel Rope



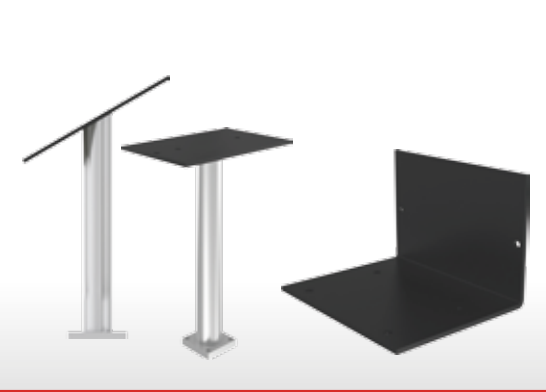
- ▶ Steel Wire Rope: SR-050-03
- ▶ 2mm PVC Coating on 3mm Steel
- ▶ Diameter: 5mm / Color: Red
- ▶ Steel Wire Rope: SR-070-05
- ▶ 2mm PVC Coating on 5mm Steel
- ▶ Diameter: 7mm / Color: Red

Connection Accessories



- ▶ Rope Tension Spring
- ▶ Rope Tensioner Device
- ▶ Rope Terminal
- ▶ Radansa
- ▶ Rope Hanger Apparatus
- ▶ Carabiner Lock
- ▶ Direction Roller

Connection Feet



- ▶ TPR 22-NSR 22 / PR Series Mounting Plate
- ▶ TPR 22-NSR 22 / BM Series Mounting Plate
- ▶ TPR22-NSR22-PR-BM / Four Hole Mounting Brackets

NSR55-PS, ROTARY LIMIT SWITCH SERIES

NSR55-PS

NSR55 position limit switch is suitable for use in crane and machine systems. It is suitable for outdoor and heavy conditions with its metal body. The product can be used in smaller and indoor spaces. It can give control at different angles. NSR55-PS series products do not need maintenance.

Rotary Limit Switch

Rotary Limit Switch is used to control the movements of industrial machines. The Rotary Limit Switch, also known as rotary cam switch, is used in many limit determination applications. Generally, it has been the choice of crane and elevator manufacturers.

KSA Series Rotary Limit Switch features: With 1:6 turn to 1: 100 turn ratio, it is suitable to use from 2 switches to 4 switches.

Important Usage Areas;

- ▶ Machine Safety
- ▶ Crane Application



NSR55-PS, ROTARY LIMIT SWITCH Series

Product Types and Features

NSR55-PS SERIES



NSR55 position limit switch performs 4-step control with crane plus arm structure and 2-step control with 2-direction arm structure.

- ▶ Movement in Right and Left Direction
- ▶ Movement Angle: 150 and 180
- ▶ 2NO / 2NC Snap Action Contact Structure
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation

ROTARY LIMIT SWITCH



The KSA Series Rotary Limit Switch features are suitable for use from 2 switches to 4 switches, with a 1:6 turn ratio to 1:100 turns.

- ▶ IP67 Protection Class
- ▶ 2, 3 and 4 Contact Options at Different Angles
- ▶ Snap Action Contact Structure
- ▶ -20°C + 80°C Operating Temperature
- ▶ CE, EAC Certificates
- ▶ Easy Installation



Our Certificates

You can easily use our products manufactured in accordance with international security standards and necessary certificates to your system.

It has standards such as CE, EAC, TSE, ISO9001, ATEX.



References

We share some of our important business partners in many parts of the world with you.

We owe our success in the industry to our customers and to our customers who always support us and contribute to our development. With the pleasure of seeing that our works is permanent. We continue our way by increasing our speed.

References





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