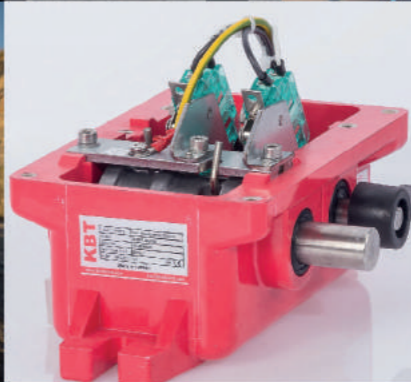
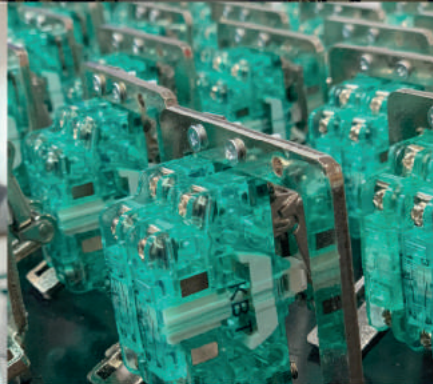


# KBT



**Conveyor Belt and Crane Machine 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

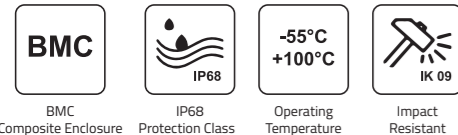
TPR22 series has **BMC composite** enclosure. TPR22 series is resistant to heavy conditions and is not affected by corrosion. All the mechanical parts inside of this product are made of aluminum casting and stainless steel material. It is offered to customers with a cost advantage compared to the market. 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

**PRO Series**

All products with the Pro series are products of maximum quality in our product group. The products in the Pro series have a long-term tested mechanical working structure with maximum impact resistance. The products in the entire series are in IP68 protection class and are considered to be our highest quality product.



## TPR22 Series Product Types and Features

PRO Series

### 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
- ▶ Optional Reset Cancellation
- ▶ IP68 Protection Class
- ▶ CE, EAC Certificates

### 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
- ▶ **Optional Signal Lamp and Alarm**
- ▶ Easy Installation
- ▶ IP68 Protection Class
- ▶ CE, EAC Certificates

### 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.

- ▶ Alarm and Stop Different Angle Option
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ Optional Arm Length and Diameter
- ▶ Optional Reset Cancellation
- ▶ IP68 Protection Class
- ▶ CE, EAC Certificates



## TPR22-EX Series Product Types and Features



### TPR22-EX SERIES

This product, which has all the features of the TPR22 Series, is specially produced for explosive dust and gaseous environments.

**Ex II 2D Ex tb IIIC Db IP68/6X T80°C**

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

**PRO Series**

All products with the Pro series are products of maximum quality in our product group. The products in the Pro series have a long-term tested mechanical working structure with maximum impact resistance. The products in the entire series are in IP68 protection class and are considered to be our highest quality product.



### 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
- ▶ Optional Reset Cancellation
- ▶ IP66 / IP68 Protection Class
- ▶ CE, EAC Certificates

### 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.

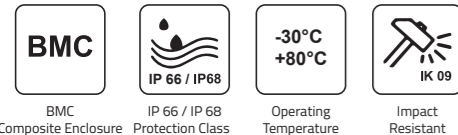
- ▶ 2x50 m Right Left Rope Connection Distance
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ **Optional Signal Lamp and Alarm**
- ▶ Easy Installation
- ▶ IP66 / IP68 Protection Class
- ▶ CE, EAC Certificates

### 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 Snap Action Contact Structure
- ▶ Optional Arm Length and Diameter
- ▶ Optional Reset Cancellation
- ▶ IP66 / IP68 Protection Class
- ▶ CE, EAC Certificates



# KBT

## NSR22 SERIES

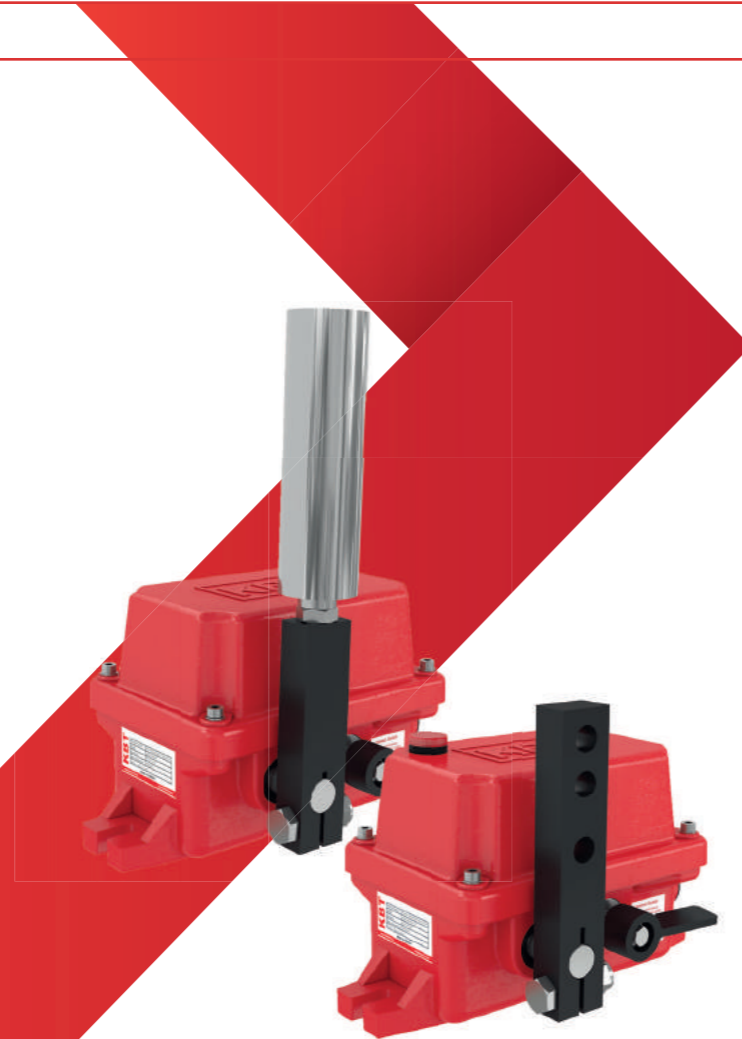
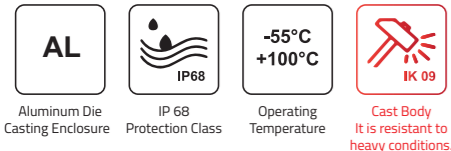
NSR22 Series has a **cast enclosure** structure. NSR22 series is resistant to all heavy conditions and impacts. The internal mechanical parts of this product are made of aluminum casting and stainless steel. It has **IP68** protection class. Full performance operation has been provided for environments with conveyor belts carrying stones and hard materials.

### Important Usage Areas;

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

### PRO Series

All products with the Pro series are products of maximum quality in our product group. The products in the Pro series have a long-term tested mechanical working structure with maximum impact resistance. The products in the entire series are in IP68 protection class and are considered to be our highest quality product.



## NSR22 Series

### Product Types and Features

PRO Series

## 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
- ▶ Optional Reset Cancellation
- ▶ IP68 Protection Class
- ▶ CE, EAC Certificates

## 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. Optional signal lamp and alarm warning can be added.

- ▶ 2x50 m Right Left Rope Connection Distance
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ **Optional Signal Lamp and Alarm**
- ▶ Easy Installation
- ▶ IP68 Protection Class
- ▶ CE, EAC Certificates

## 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 Snap Action Contact Structure
- ▶ Optional Arm Length and Diameter
- ▶ Optional Reset Cancellation
- ▶ IP68 Protection Class
- ▶ CE, EAC Certificates

# KBT

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## NSR22-EX Series Product Types and Features



### NSR22-EX SERIES

This product, which has all the features of the NSR22 Series, is specially produced for explosive dust and gaseous environments.

**Ex II 2D Ex tb IIIC Db IP68/6X T80°C**

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



All products with the Pro series are products of maximum quality in our product group. The products in the Pro series have a long-term tested mechanical working structure with maximum impact resistance. The products in the entire series are in IP68 protection class and are considered to be our highest quality product.

AL  
Aluminum Die Casting Enclosure

IP 66 / IP 68  
Protection Class

-55°C  
+100°C  
Operating Temperature

IK 09  
Cast Body It is resistant to heavy conditions.



### NSR22-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
- ▶ Optional Reset Cancellation
- ▶ IP66 / IP68 Protection Class
- ▶ CE, EAC Certificates

### NSR22-PR-EX SERIES



NSR22-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. Optional signal lamp and alarm warning can be added.

- ▶ 2x50 m Right Left Rope Connection Distance
- ▶ 3NO / 3NC Snap Action Contact Structure
- ▶ **Optional Signal Lamp and Alarm**
- ▶ Easy Installation
- ▶ IP66 / IP68 Protection Class
- ▶ CE, EAC Certificates

### NSR22-PS-EX SERIES



NSR22-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 Snap Action Contact Structure
- ▶ Optional Arm Length and Diameter
- ▶ Optional Reset Cancellation
- ▶ IP66 / IP68 Protection Class
- ▶ CE, EAC Certificates



# KBT

## NSR66 SERIES

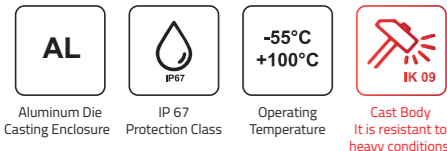
NSR66 Series has a **cast enclosure** structure. NSR66 series is resistant to all heavy conditions and impacts. The internal mechanical parts of this product are made of aluminum casting and stainless steel. It has **IP67** protection class. Full performance operation has been provided for environments with conveyor belts carrying stones and hard materials. NSR66 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
- ▶ Mining Industry
- ▶ Colliery
- ▶ Port Operator
- ▶ Iron and Steel Plants
- ▶ Concrete Plant

### Custom Solutions Series

Custom Solution Series products are products that can provide one-to-one compatibility with the products that are used extensively in the field, in line with the demands of our customers. These products, whose quality and working principle are kept at the maximum level, are the ideal solution for those who do not want to change their mounting holes and conventional products.



## NSR66 Series

### Product Types and Features



## NSR66-BM SERIES



NSR66-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
- ▶ Optional Reset Cancellation
- ▶ IP67 Protection Class
- ▶ CE, EAC Certificates

## NSR66-PR SERIES



NSR66-PR 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
- ▶ **Optional Signal Lamp and Alarm**
- ▶ Easy Installation
- ▶ IP67 Protection Class
- ▶ CE, EAC Certificates

## 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
- ▶ Optional Arm Length and Diameter
- ▶ Optional Reset Cancellation
- ▶ IP67 Protection Class
- ▶ CE, EAC Certificates

# KBT

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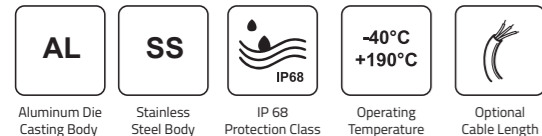
# KBT

## 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



## Tilt Switch Series

### Product Types and Features

#### SS-43 SERIES



The tilt switch probe with a stainless steel body is preferred for places with dust and corrosion. It has **3 meters** cable standardly. In case of request it could be manufactured longer or shorter.

- ▶ 1NO / 1NC Contact Structure
- ▶ Option High Temperature Resistant Cable
- ▶ Optional Cable Protection Options
- ▶ IP68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation

#### 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 protection. It has **8 meters** cable standardly. In case of request it could be manufactured longer or shorter.

- ▶ 1NO / 1NC Contact Structure
- ▶ Option High Temperature Resistant Cable
- ▶ Optional Cable Protection Options
- ▶ IP68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation

#### 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. It has **3 meters** cable standardly. In case of request it could be manufactured longer or shorter.

- ▶ 1NO / 1NC Contact Structure
- ▶ Option High Temperature Resistant Cable
- ▶ Optional Cable Protection Options
- ▶ IP68 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation

**KBT**

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## 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 and 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
- ▶ KT20-P (2) SPDT—10 Amp@115/230 VAC,  
**7 Amp@30 VDC non-inductive**
- ▶ 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

### High Temperature Resistant Heavy Industry Limit Switch

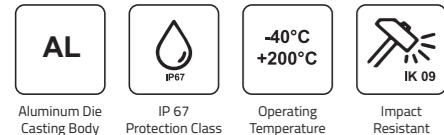
Model NSR51 Heavy duty type industrial limit switches are used for control and security purposes in machinery and industrial equipment. It is suitable for use in environments with high temperatures. It is mostly preferred in furnaces and high temperature regions in iron and steel factories. VDE approved 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

#### Custom Solutions Series

Custom Solution Series products are products that can provide one-to-one compatibility with the products that are used extensively in the field, in line with the demands of our customers. These products, whose quality and working principle are kept at the maximum level, are the ideal solution for those who do not want to change their mounting holes and conventional products.



## 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.

- ▶ Right and Left Side Movement or One Side Movement
- ▶ Alarm and Stop Different Angle Option
- ▶ Single Roller Arm
- ▶ 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.

- ▶ Right and Left Side Movement or One Side Movement
- ▶ Alarm and Stop Different Angle Option
- ▶ Double Roller Arm
- ▶ 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.

- ▶ Right and Left Side Movement or One Side Movement
- ▶ Alarm and Stop Different Angle Option
- ▶ Heavy Duty Roller Arm
- ▶ 2NO/2NC Snap Action Contact Structure
- ▶ IP67 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation

## NSR55-BM, TPR55-BM 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

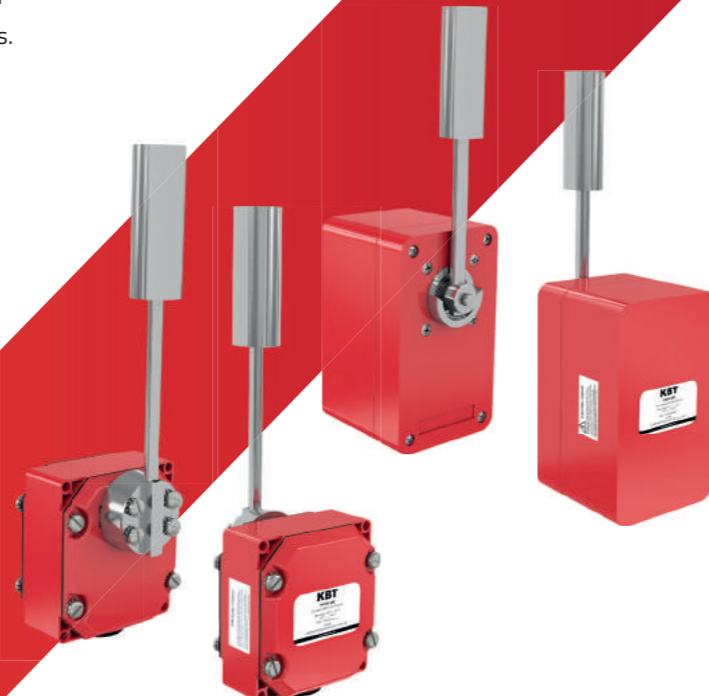
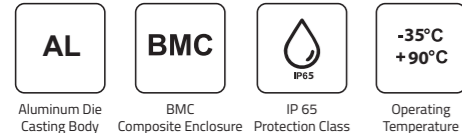
TPR 55-BM is suitable for use in conveyor belt systems with its roller arm structure. With its TPR55-BM **bmc composite** body, it is suitable for outdoor environments and heavy conditions. The product is used in smaller and indoor belts. It can give control at different angles. TPR55-BM series products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

### Important Usage Areas;

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

### Compact Series

Compact Series products are products that can provide one-to-one compatibility with the products that are used extensively in the field, in line with the demands of our customers. Due to its smaller size and compact structure compared to other product groups, it is more preferred in narrow spaces. These products, whose quality and working principle are kept at the maximum level, are the ideal solution for those who do not want to change their mounting holes and conventional products.



## NSR55-BM, TPR55-BM Series Product Types and Features



### 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.

- ▶ Metal Body
- ▶ Movement in Right and Left Direction
- ▶ Alarm and Stop Different Angle Option
- ▶ Movement Angle : 15° and 18°
- ▶ 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.

- ▶ BMC Composite Body
- ▶ Movement in Right and Left Direction
- ▶ Alarm and Stop Different Angle Option
- ▶ Movement Angle : 15° and 18°
- ▶ 2NO / 2NC Snap Action Contact Structure
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation

# KBT

## NSR75-PR, NSR90-PR SERIES

### NSR75-PR (Single-Sided)

Specially designed for machine and conveyor applications. This product can work with 75 meters or 125 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.

### NSR90-PR Series (Double-Sided – Single-Sided)

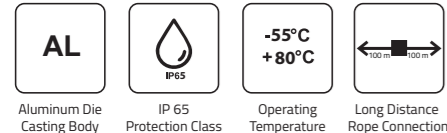
The NSR90 Series is designed to withstand the toughest conditions and is suitable for environments exposed to harsh impacts with its metal body and thin casing. Specially designed for conveyor applications, this product can work with rope connection for 100 meters in one direction and 2x100 meters in double directions. It has a simple assembly structure with the connection accessories used together. Signal lamp and keyed reset can be added upon request.

### Important Usage Areas;

- ▶ Iron and Steel Plants
- ▶ Crane Application
- ▶ Machinery Safety
- ▶ Mining Industry
- ▶ Conveyor Belt Systems

### Compact Series

Compact Series products are products that can provide one-to-one compatibility with the products that are used extensively in the field, in line with the demands of our customers. Due to its smaller size and compact structure compared to other product groups, it is more preferred in narrow spaces. These products, whose quality and working principle are kept at the maximum level, are the ideal solution for those who do not want to change their mounting holes and conventional products.



## NSR75-PR, NSR90-PR Series Product Types and Features



### NSR75-PR SERIES (Single-Sided)



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
- ▶ Metal Casting Body
- ▶ IP67 Protection Class
- ▶ Tension Indicator
- ▶ Emergency Stop Button
- ▶ 1NC+1NO or 2NC+2NO Contact Structure

### NSR90-PR SERIES (Single-Sided)



With its compact and durable body structure, it is used for emergency stop and safety purposes for the conveyor system.

- ▶ 100 meters of rope option on one side
- ▶ Metal Casting Body
- ▶ IP67 Protection Class
- ▶ Emergency Stop Button
- ▶ 2NC+2NO Contact Structure

### NSR90-PR SERIES (Double-Sided)



With its compact and durable body structure, it is used for emergency stop and safety purposes for the conveyor system.

- ▶ 2x100 meters rope option in both directions
- ▶ Metal Casting Body
- ▶ IP67 Protection Double-sided Class
- ▶ Emergency Stop Button
- ▶ 2NC+2NO Contact Structure





## Compact Series EX Products Product Types and Features



### Compact Series EX Products

The product, which has the same features as Compact standard products, is specially produced for explosive dust and gaseous environments.

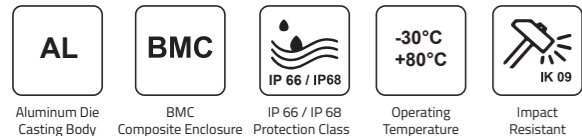
**II 2D Ex tb IIIC Db IP68/6X T80°C**

The product is manufactured under II 2D Ex tb IIIC Db IP68/6X T80°C standards, and it is possible to make changes on the product upon request. Cable gland with EX feature is available.

- ▶ Exproof Limit Switch
- ▶ Exproof Pull-Cord Switch
- ▶ Exproof Belt Misalignment Switch
- ▶ Exproof Position Limit Switch
- ▶ Exproof Pull-Rope Switch

**Compact Series**

Compact Series products are products that can provide one-to-one compatibility with the products that are used extensively in the field, in line with the demands of our customers. Due to its smaller size and compact structure compared to other product groups, it is more preferred in narrow spaces. These products, whose quality and working principle are kept at the maximum level, are the ideal solution for those who do not want to change their mounting holes and conventional products.



### NSR55-BM-EX SERIES



NSR55-BM Series products with ex-proof standard are suitable for all belt conveyors. It monitors for possible drifting on belt conveying systems, designed to check and shut down.

- ▶ It has the same features as all standard products.
- ▶ II 2D Ex tb IIIC Db IP68/6X T80°C
- ▶ Movement to Right and Left Direction
- ▶ Alarm and Different Stop Angle Options
- ▶ Movement Angle: 15° and 18°
- ▶ 2NO/2NC Snap Action Contact Structure
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation Opportunity

### TPR5-BM-EX SERIES



TPR5-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
- ▶ II 2D Ex tb IIIC Db IP68/6X T80°C
- ▶ Alarm and Stop Different Angle Option
- ▶ Movement Angle : 15° and 18°
- ▶ 2NO / 2NC Snap Action Contact Structure
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Installation

### NSR75-PR-EX SERIES



NSR75-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
- ▶ II 2D Ex tb IIIC Db IP68/6X T80°C
- ▶ Metal Casting Body
- ▶ IP67 Protection Class
- ▶ Tension Indicator
- ▶ Emergency Stop Button
- ▶ 1NC+1NO or 3NC+3NO Contact Structure

### NSR90-PR-EX SERIES



With its compact and durable body structure, it is used for emergency stop and safety purposes for the conveyor system.

- ▶ 2x100 meters rope option in both directions
- ▶ II 2D Ex tb IIIC Db IP68/6X T80°C
- ▶ Metal Casting Body
- ▶ IP67 Protection Class
- ▶ Emergency Stop Button
- ▶ 2NC+2NO Contact Structure

# KBT

## NSR11, NSR12 SERIES

### ECO Series

It is the product that the KBT Brand has launched as the ECO series and is offered to customers in two different case structures. The body structure is **aluminum casting** and all other parts are made of "cuzn39pb3" **brass plated** material.

This product, whose body structure is covered with static paint, provides durability against heavy conditions. Products in IP65 Protection class attract attention with their low cost. Products in 2 different sizes are preferred for assembly in narrow spaces. The Pull-Rope model offers two different options as 2x25 meters and 2x50 meters.

### Important Usage Areas;

- ▶ Cement Plants
- ▶ Mining Industry
- ▶ Fertilizer Plants
- ▶ Iron and Steel Plants

**ECO Series**

As the name of the Eco series products can not be understood, they are the products with the most economical cost in the product group. We would like to point out that it is the most ideal solution for businesses that can compromise a little from affordable cost and quality.

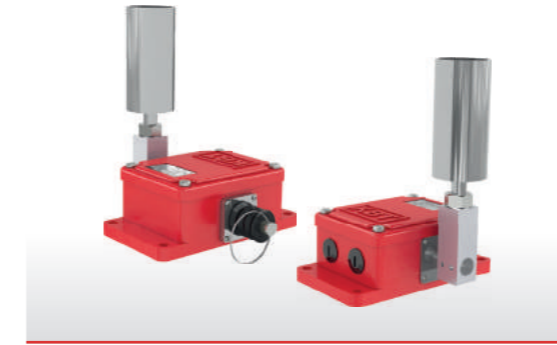
<b>AL</b> Aluminum Die Casting Body	<b>IP65</b> IP 65 Protection Class	<b>-30°C +80°C</b> Operating Temperature	<b>IK 08</b> Impact Resistant	<b>BEST PRICE</b>
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## NSR11 Series (Mini Series) Product Types and Features

ECO Series

### NSR11-BM SERIES



The NSR11-BM Series is defined as the Mini Case of the ECO series of the KBT brand. It is used as a safety switch in conveyor belt applications. It prevents conveyor belts from being damaged or destroyed as a result of belt derailment.

- ▶ Alarm and Stop Different Angle Option
- ▶ 2NO/2NC Snap Action Contact Structure
- ▶ Bearing Roller Arm
- ▶ Optional Reset Latch Cancel
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates

### NSR11-PR SERIES



The NSR11-PR Series is defined as the Mini Case belonging to the ECO series of the KBT brand. This product, which is used as a Rope Emergency Stop Switch, can provide 2x25m control in both directions. It is known to add a Signal Lamp upon request.

- ▶ 2x25m Right Left Rope Connection Distance
- ▶ 2NO/2NC Snap Action Contact Structure
- ▶ **Optional Signal Lamp and Alarm Warning**
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates

### NSR11-PS SERIES



The NSR11-PS Series is defined as the Mini Case of the ECO series of the KBT brand. It is used as a position in conveyor belt applications. It prevents the damages that may occur on the conveyor to determine the position.

- ▶ Alarm and Stop Different Angle Option
- ▶ 2NO/2NC Snap Action Contact Structure
- ▶ Cylinder Roller Arm
- ▶ Optional Reset Latch Cancel
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates

**KBT**

www.kbtelektrik.com / info@kbtelektrik.com



## NSR11, NSR12 SERIES

### ECO Series

It is the product that the KBT Brand has launched as the ECO series and is offered to customers in two different case structures. The body structure is **aluminum casting** and all other parts are made of "cuzn39pb3" **brass plated** material.

This product, whose body structure is covered with static paint, provides durability against heavy conditions. Products in IP65 Protection class attract attention with their low cost. Products in 2 different sizes are preferred for assembly in narrow spaces. The Pull-Rope model offers two different options as 2x25 meters and 2x50 meters.

### Important Usage Areas;

- ▶ Cement Plants
- ▶ Mining Industry
- ▶ Fertilizer Plants
- ▶ Iron and Steel Plants

**ECO Series**

As the name of the Eco series products can not be understood, they are the products with the most economical cost in the product group. We would like to point out that it is the most ideal solution for businesses that can compromise a little from affordable cost and quality.

AL

IP65

-30°C  
+80°C

IK 08

BEST PRICE

Aluminum Die Casting Body    IP 65 Protection Class    Operating Temperature    Impact Resistant



## NSR12 Series (Big Series) Product Types and Features

ECO Series

### NSR12-BM SERIES



The NSR12-BM Series is defined as the Big Case of the ECO series of the KBT brand. It is used as a safety switch in conveyor belt applications. It prevents conveyor belts from being damaged or destroyed as a result of belt derailment.

- ▶ Alarm and Stop Different Angle Option
- ▶ 2NO/2NC Snap Action Contact Structure
- ▶ Bearing Roller Arm
- ▶ Optional Reset Latch Cancel
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates

### NSR12-PR SERIES



The NSR12-PR Series is defined as the Big Case belonging to the ECO series of the KBT brand. This product, which is used as a Rope Emergency Stop Switch, can provide 2x50m control in both directions. It is known to add a Signal Lamp upon request.

- ▶ 2x50m Right Left Rope Connection Distance
- ▶ 2NO/2NC Snap Action Contact Structure
- ▶ **Optional Signal Lamp and Alarm Warning**
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates

### NSR12-PS SERIES



The NSR12-PS Series is defined as the Big Case of the ECO series of the KBT brand. It is used as a position in conveyor belt applications. It prevents the damages that may occur on the conveyor to determine the position.

- ▶ Alarm and Stop Different Angle Option
- ▶ 2NO/2NC Snap Action Contact Structure
- ▶ Cylinder Roller Arm
- ▶ Optional Reset Latch Cancel
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates

## 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



## Connection Accessories Product Types and Features

### 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

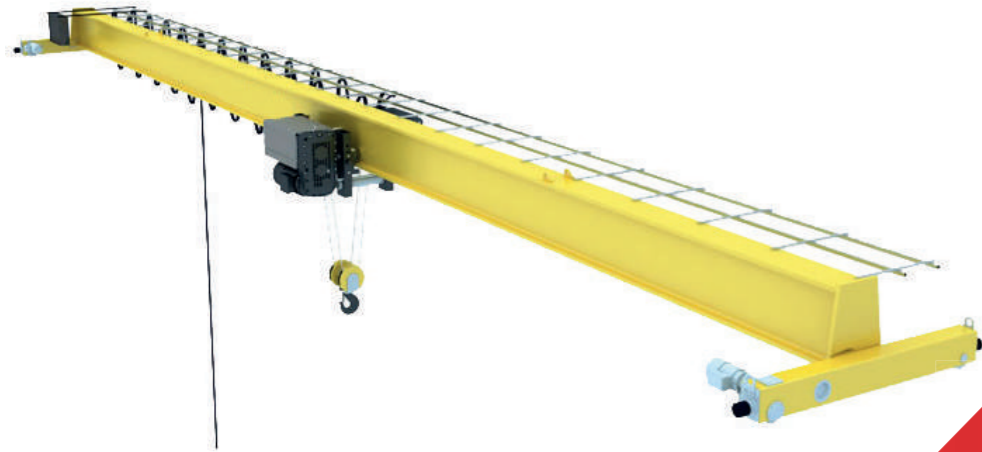


- ▶ TPR 22-NSR 22 / PR Series Mounting Plate
- ▶ TPR 22-NSR 22 / BM Series Mounting Plate
- ▶ TPR22-NSR22-PR-BM / Four Hole Mounting Brackets

# KBT

## Special For Crane And Machine Safety Applications

▶ **ROTARY LIMIT SWITCHES**    ▶ **POSITION LIMIT SWITCHES**



# KBT

## NSR55-PS, NSR1520, TPR1520 and ROTARY LIMIT SWITCH

### Compact Series

NSR55-PS position limit switches are suitable for use in crane and machinery systems and is suitable for outdoor and heavy conditions with its **metal body**. Working with the help of micro-switch, this product has 2X(1NC+NO) contact structure.

### Eco Series

NSR1520 and TPR1520 position limit switches have **Aluminum Cast** and **Plastic ABS** body and are preferred for crane and machine control systems. This product, which is preferred with its economical price, makes switching with the help of a cam switch in it.

### Rotary Limit Switch

KBT Position Limit Switches are used to control the movements of industrial machines. Position Limit Switch, also known as rotary cam switch, is used in many limit determination applications and has been the choice of crane and elevator manufacturers.

### Important Usage Areas;

▶ Machine Safety                      ▶ Crane Applications



## NSR55-PS, ROTARY LIMIT SWITCH Series

### Product Types and Features

#### NSR55-PS SERIES

#### ROTARY LIMIT SWITCHES



NSR55 position limit switch makes 2 step control with crane plus arm structure and 2 steps control with 2 direction arm structure.

KSA Series Tour Switch features are; It is suitable to use from 2 switches to 4 switches, with the ratio of 1:6 to 1:100 turns.

- ▶ Metal Body
- ▶ Right and Left Movement
- ▶ Movement Angle : +90° -90°
- ▶ 2X(1NC+NO) Snap Action
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Assembly Possibility

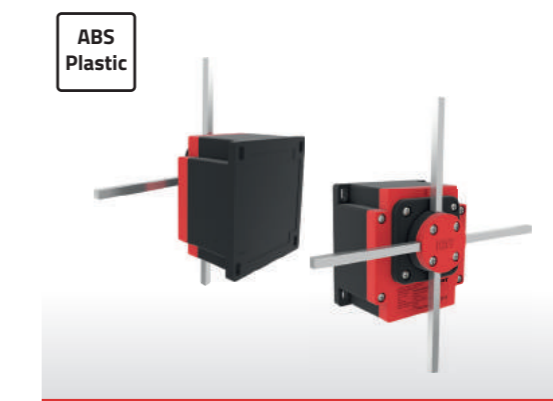
- ▶ 2, 3 and 4 Contact Options at Different Angles
- ▶ Snap Action Contact Structure
- ▶ -20 °C + 80 °C Operating Temperature
- ▶ IP67 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Assembly Possibility

## NSR1520, TPR1520 Series

### Product Types and Features

#### NSR1520 SERIES

#### TPR1520 SERIES



NSR1520 position limit switch is in crane plus arm structure and offers 200mm or 300mm arm length options. It provides 4-step control with 2-way arm structure. It is resistant to difficult conditions due to its aluminum casting body.

TPR1520 position limit switches are in crane plus arm structure and offer 200mm or 300mm arm length options. It performs 4-step control with its 2-way arm structure. It is resistant to harsh conditions due to its thermoplastic ABS body.

- ▶ Metal Body
- ▶ Right and Left Movement
- ▶ Movement Angle: +180° -180°
- ▶ Paco Switching
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Assembly Possibility

- ▶ ABS Thermoplastic Body
- ▶ Right and Left Movement
- ▶ Movement Angle: +180° -180°
- ▶ Paco Switching
- ▶ IP65 Protection Class
- ▶ CE, EAC Certificates
- ▶ Easy Assembly Possibility



## 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



# KBT®

## **KBT ELEKTRİK MALZEMELERİ SAN. VE TİC. A.Ş.**

Address: Tekstilkent Ticaret Merkezi G2 - 256 Esenler 34235 Istanbul Turkey  
Phone +90 212 438 38 14 Fax: +90 212 438 38 15 Email: info@kbtelektrik.com

Please visit our website for detailed information.  
[www.kbtelektrik.com](http://www.kbtelektrik.com)

