

# Model NSR22-PR-EX Pull Rope Switch (Ex)

## Description

NSR22-PR-EX Pull Rope Switches are designed for shutting down a conveyor belt or machinery and assuring system safety in hazardous environments where explosions could occur. They are also referred as "Pull Rope Switches". They are mounted alongside the conveyor belt, with tensioned steel cords attached to the switch arm from either side or both sides. When the cord is pulled, switch arm will turn until the locking angle and system shuts down. The switch can be reset manually with resetting lever.

The product is suitable for reliable long term usage in most industrial applications, thanks to its heavy-duty design. Its aluminium cast enclosure is resistant to corrosion and oxidation. Shaft mechanism is made of stainless steel and all internal parts are metal cast. NSR22-PR-EX series products do not require any maintenance.

In standard applications, cord length is 50-65 m to both sides. This distance can be lengthened upon request. All models can be equipped with an alarm switch and signal light so alarming switch can be spotted from distance. Standard product's contact structure is 1NO+1NC. If requested, 2NO+2NC and 3NO+3NC are available.

NSR22-PR-EX is Ex-Proof (ATEX certified). With its protection against dust ingress, it is reliable in explosive athmosphere. All models conform to CE (European Union) and EAC (Eurasian Customs Union) standards. Microswitches used in these products are VDE approved.

We recommend tested and approved KBT Connection Equipment for installation.

For BMC (durable composite) enclosure option, please see our product TPR22-PR-EX.

## **Technical Specifications**

- Enclosure: Aluminium Casting
- Micro Switch Rating: 400 VAC 6A / 230 VAC 8A / 24 VDC 10A
- Output Signal: (1) SPDT stop, alarm can be added upon request.
- Cable Gland: 2 x M25
- Temperature Rating: -30°C to +85°C
- Contact Angle: 25°
- Rope Length: 2 x 50-65 Metres
- Contact Type: Snap-action
- Protection Class: IP6X / IP68
- Enclosure Color: Black (RAL 9005)
- Weight: 2.1 kg
- Mounting Orientation: It is suitable for double-sided and single- sided use.
- Impact Rating: IK09 (EN 62262)
- Warranty Period: 36 Months

Options	
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- Without Reset Lever
- Bus Security Interface
- Custom Contact Angles
- Mounting Bracket
- Custom Arm Dimensions
- Signal Light and Alarm

## Safety Standards

Electrical Safety EN 60947 Mechanical Safety EN 60204 Outdoor Safety EN 60529 Impact Resistance EN 62262

Certificates

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Micro switches are **VDE** approved.

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## **Model Specifications**

Model	Contact Structure		Optional	
	NC	NO	Signal	Alarm+Signal
NSR22-PR-EX	1	1	(LGT)	(ALGT)
NSR22-PR-22-EX	2	2	(LGT)	(ALGT)
NSR22-PR-33-EX	3	3	(LGT)	(ALGT)

## Spare Parts

Model	Features
KB-826-EX	1NO+1NC 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	Mounting Bracket (Can be made in custom dimensions)
KB-NGV-01-EX	Enclosure
TSR-42-PR-EX	Aluminium Rope Connection Arm
KB-PM-EX	Reset Lever

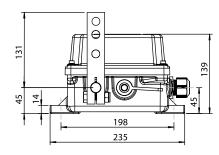
Please refer to the manual for instructions. See our KBT Accessories catalog for installation equipment.

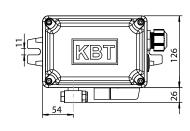
# **EX Definition**

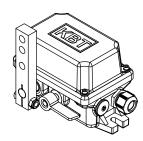
⟨Ex⟩ II 2D Ex tb IIIC Db T85°C

IP66/68

## **Technical Drawing**







Dimensions are in mm.