

NSR22-PR Series

TPR22-PR Series

NSR66-PR Series

NSR66-PR3 Series

PULL CORD EMERGENCY SWITCHES INSTALLATION AND OPERATING MANUAL

INFORMATIONS

Pull Cord Emergency Switches are designed to stop conveyor systems during emergency or maintenance and repair works. Designed to withstand heavy conditions, it makes it suitable for most industrial applications that are reliable in the long term. This type of emergency stop switches working with steel rope are provided with the possibility of tying a rope at the end.

The rope length should not exceed 50 meters, it is suitable to use NSR / TPR Series switch between 2 ropes. Pull Cord Emergency Switches can be mounted on the walkway or anywhere on the conveyor route that the staff can access. The switch is operated manually by pulling the rope.

In case of the rope breaks or is pulled, the switch operates automatically. There is no need to use a separate tension spring built into the rope.

The switch locks when operated and can be returned to normal manually by lifting the reset handle.

SAFETY WARNING

Ensure that the conveyor is electrically isolated and stationary before carrying out any work on 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- First of all, the BA-11 coded mounting plate should be fixed to the point where the switch will be mounted or the mounting holes suitable for the switch should be prepared on the point to be mounted.

2- For easy installation, remove the cover of the cable gland, then fix the switch to the mounting point with 2 suitable screws from its 2 fork legs. You can remount the cable gland after the fixing.

3- If the switch in your hand is a TPR series product, the eye of GK-10 coded Turnbuckle must be passed through the pin on the lever of the switch. For this, first of all, you need to remove the pin on the lever with the help of pliers or needle nose, take the shaft out and insert the shaft and pin back so that the eye part of the tensioner is locked into the shaft. You need to use one turnbuckle for one direction and two turnbuckle for two directions in this way. You can see the eye parts of the 2 tensioning apparatus mounted on the arm in the connection diagram. If the switch in your hand is NSR series, you should connect the turnbuckle with the KK-88 coded carabiner lock as shown in the diagram below.

4- Adjust the length of the safety rope.

5- The end of the safety rope must be terminated with 1 piece of RB-050 coded Rope Eye and at least 2 pieces of ZB-216 coded Rope Clamps as seen in the adjacent figure.

6- Rope Eye must be combined directly to the turnbuckle as shown in the connection diagram below, if you wish, you can do the interconnection with 1 KK-88 coded carabiner lock.

7- A piece of KN-015 coded Pig Tail Eye Bolt must be placed for every 5 meters between the switch and the conveyor end fixing point. Mount 1 KN-015 coded Pig Tail Eye Bolt is needed to be placed on the first second meter after the switch.

8- Eye Bolt coded KN-013 must be combined to the fixing point at the end of conveyor. Then the stainless steel spring code NB-055SS must be combined to this Eye Bolt.

9- The safety pull rope brought to the end of the conveyor is terminated as described in 5.brief. Subsequently, this rope eye must be combined to the NB-055SS coded stainless steel spring. The steel spring should be able to perform the pulling action with a tension of 35% after this first assembly.

10- At the end of all these operations, make sure that one end of the rope to be fixed to the conveyor is fixed to a fixed point at the end of the conveyor, and the other end is fixed to the switch arm with the help of accessories, as seen in the connection diagram below. Perform the necessary stretching operations on the turnbuckle coded GK-10 due to the requirement that the lever be fixed and upright.

11- Check whether the switch is activated as a result of pulling the rope, make the necessary tension adjustments and final checks until functionality is provided. As soon as the system works perfectly mechanically, you can proceed to the electrical assembly phase.

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SUMMARY

Fix the switch to a flat and solid console with 2 suitable screws on the 2 fork legs, the safety rope must not exceed 5m or more. It must be suspended in one line for a short distance. One end of the rope to be fixed on the conveyor to a fixed point, Fix the other end to lever of the switch by assistance of suitable accessories (turnbuckle), then lift the lever and release.

In order for the installation to be correct, the lever must be stable and upright.

CONTROL

It is observed that the rope is pulled and the switch is activated. It must be checked whether the switch is operationalized or not.

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.

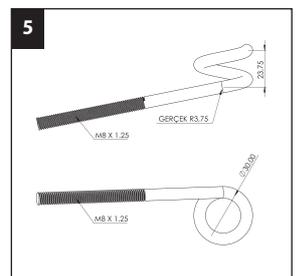
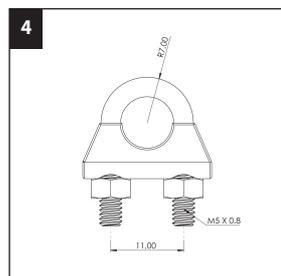
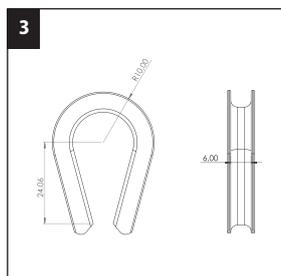
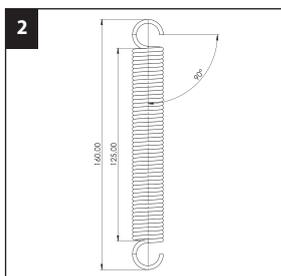
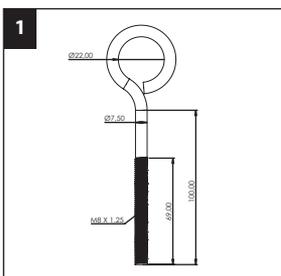
Maintenance: There is no need of any maintenance works for KBT conveyor belt safety switches due to proven construction and high material quality.

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. Montage accessories "Pig Tail Eye Bolt" and "Eye Bolt" They can be used interchangeably according to user preference.

- Before any work is started, it must be checked whether the circuits are switched off and the general safety instructions are followed. Only a qualified electrician should perform the electrical installation, repairs or maintenance.

NO	Product Name	Code	Material	Code	Material
1	Eye Bolt (M8) Eye Bolt (M10)	KN-013 KN-023	Galvanic Galvanic	KN-013SS KN-023SS	Stainless Steel Stainless Steel
2	Spring	-	-	NB-055SS	Stainless Steel
3	Rope Eye (5mm) Rope Eye (7mm)	RB-050 RB-070	Galvanic Galvanic	RB-050SS RB-070SS	Stainless Steel Stainless Steel
4	Rope Clamp (5mm) Rope Clamp (7mm)	ZB-216 ZB-722	Galvanic Galvanic	ZB-216SS ZB-722SS	Stainless Steel Stainless Steel
5	Pig Tail Eye Bolt (M8) Pig Tail Eye Bolt (M10)	KN-015 KN-025	Galvanic Galvanic	KN-015SS KN-025SS	Stainless Steel Stainless Steel
6	Pull Rope 3/5 %50UV + %50PVC Coating Pull Rope 5/7 %50UV + %50PVC Coating Pull Rope 3/5 %100UV Coating	SR-050-03 SR-070-05 SR-050-03UV	Steel Steel Steel	- - -	- - -
7	Turnbuckle Eye-Hook Turnbuckle Eye-Eye	GK-10 GG-10	Galvanic M10 Galvanic M10	GK-08SS GG-08SS	Stainless Steel M8 Stainless Steel M8
8	Mounting Bracket - Static Black Color	BA-11	Metal	-	-
9	Carabiner M5 5mm Carabiner M8 8mm	KK-55 KK-88	Galvanic Galvanic	KK-55SS KK-88SS	Stainless Steel Stainless Steel
10	Rope Tensioner	TG-40	Galvanic	TG-40SS	Stainless Steel



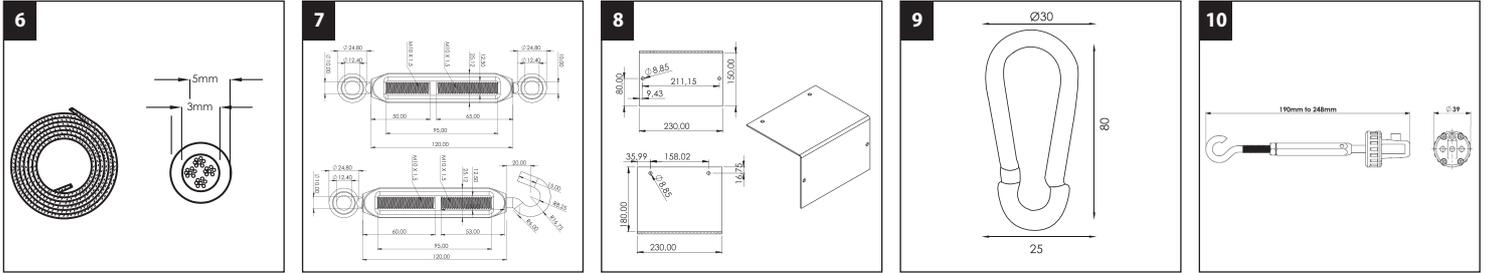
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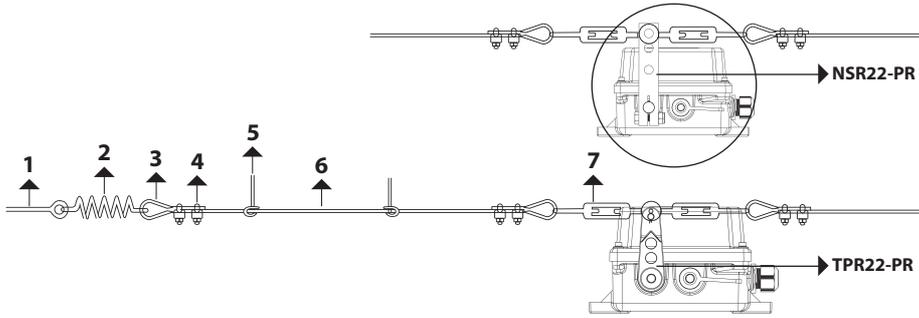
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NSR22-PR / TPR22-PR Mechanical Assembly Structure



Mounting Accessories

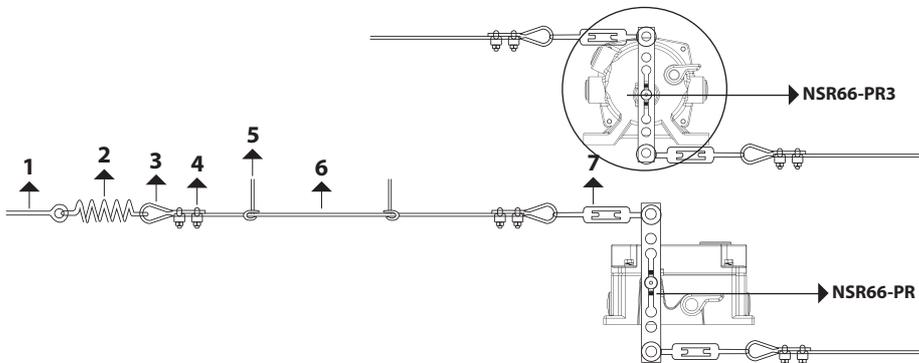
- 1- Eye Bolt (M8)
- 2- Spring
- 3- Rope Eye (5mm)
- 4- Rope Clamp (5mm)
- 5- Pig Tail Eye Bolt (M8)
- 6- Pull Rope 3/5 %50UV + %50PVC Coating
- 7- Turnbuckle Eye-Hook

TECHNICAL INFORMATION

Conforming to Standards EN 60947/ EN60204/ EN60529

Max. Pull Rope Length (at one side)	50 Meters	Contact Status	All contact can work at same time.
Rope Tension	50N	Contact Values	400 VAC 6A / 230 VAC 8A / 24 VDC 10A / 80VDC 3A
Cable Input	2X M25	Operation Temperature : NSR22	-40°C - +85°C / TPR22 -55C .. +100°C
Protection Class : NSR22 IP67 / TPR22 IP68			

NSR66-PR / NSR66-PR3 Mechanical Assembly Structure



Mounting Accessories

- 1- Eye Bolt (M8)
- 2- Spring
- 3- Rope Eye (5mm)
- 4- Rope Clamp (5mm)
- 5- Pig Tail Eye Bolt (M8)
- 6- Pull Rope 3/5 %50UV + %50PVC Coating
- 7- Turnbuckle Eye-Hook

TECHNICAL INFORMATION

Conforming to Standards EN 60947/ EN60204/ EN60529

Max. Pull Rope Length (at one side)	50 Meters	Contact Status	All contact can work at same time.
Rope Tension	50N	Contact Values	15A @ 115-230 VAC, 30 VDC
Cable Input	2X M25	Operation Temperature	-42°C - 80°C
Protection Class : IP67			

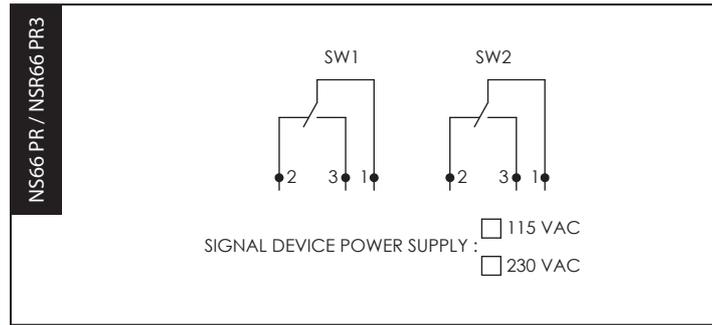
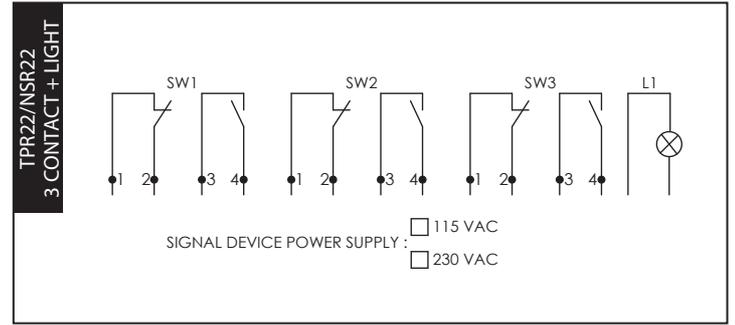
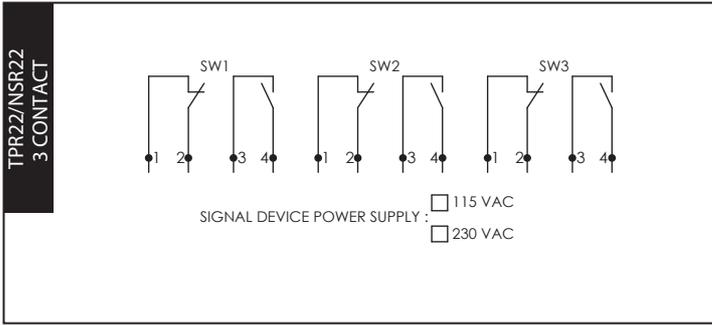
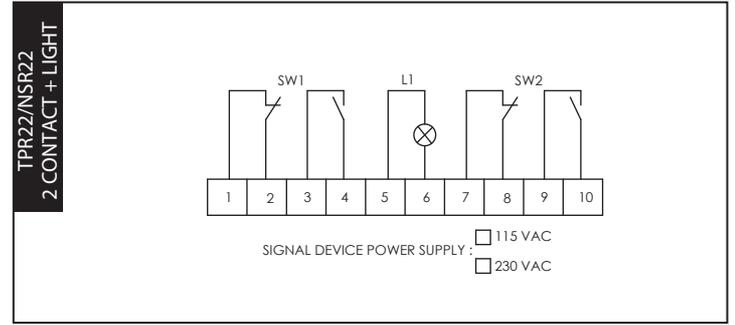
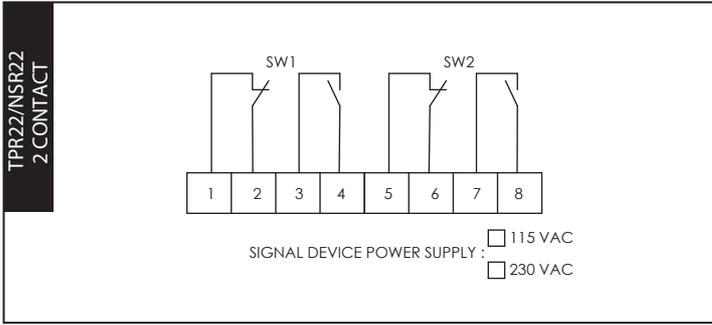
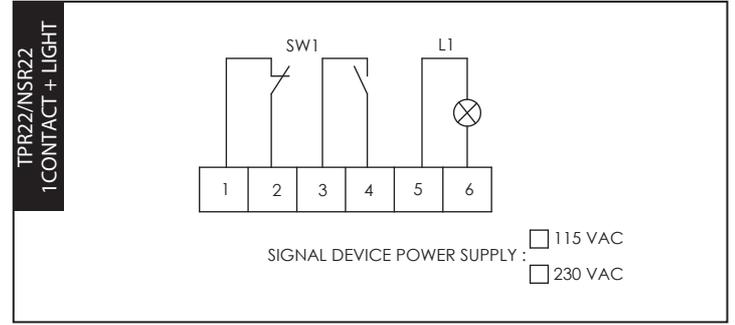
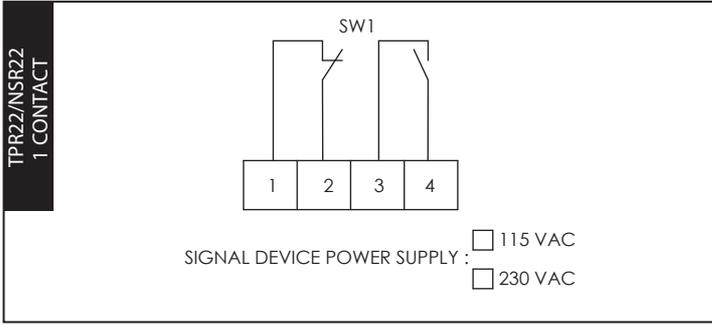
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KBT

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