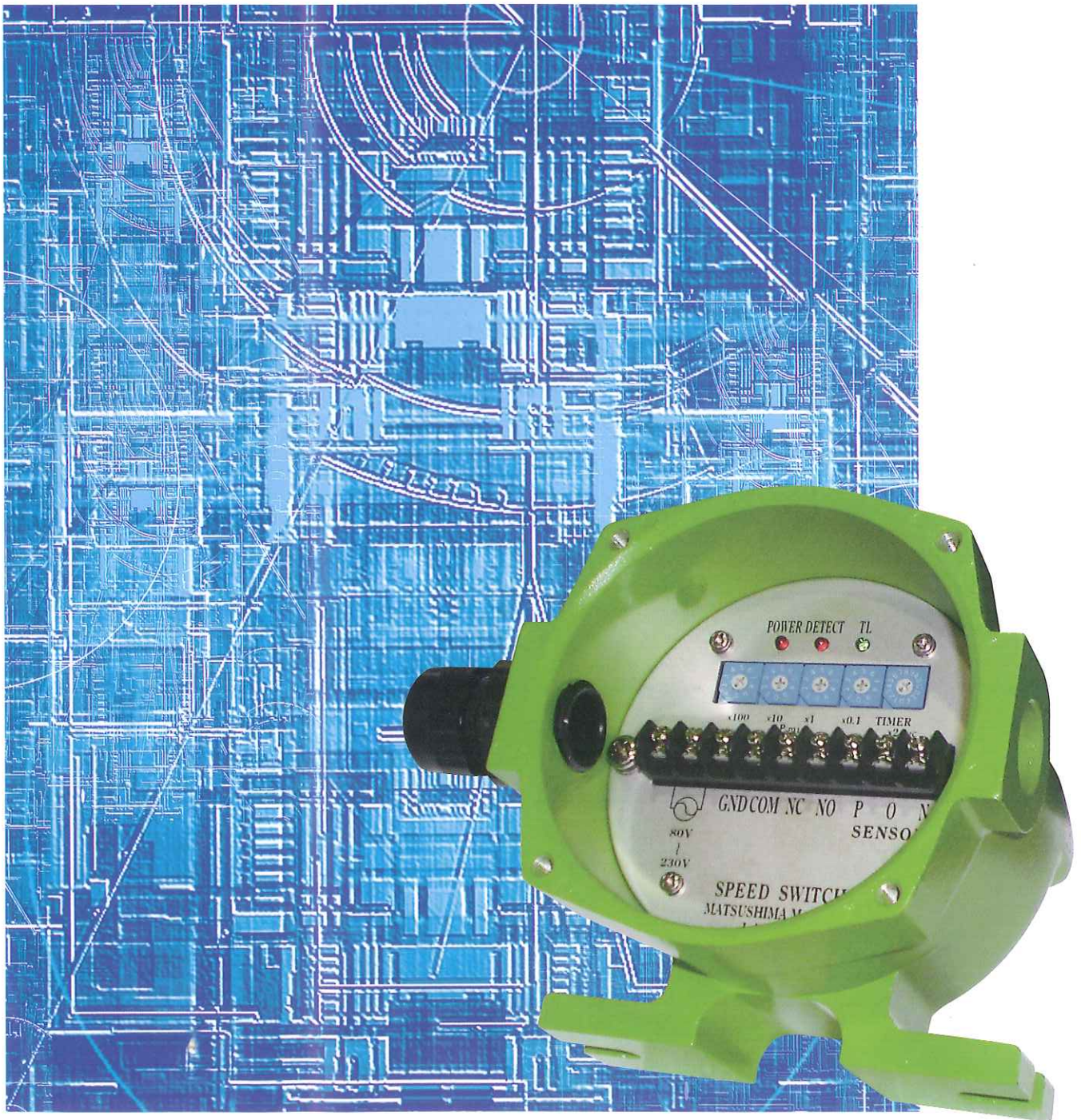
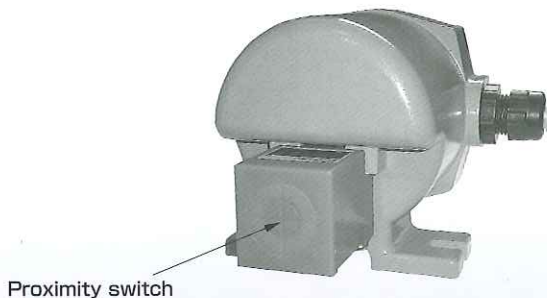


Non-contact type speed monitoring sensor

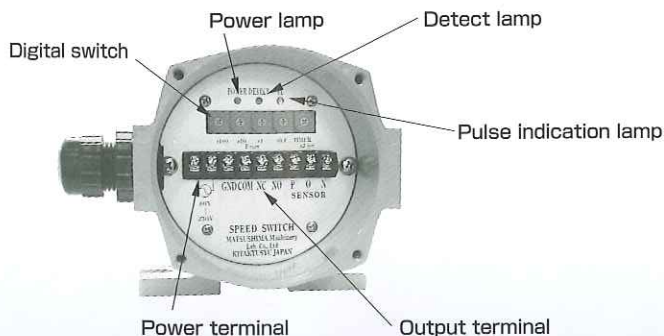
Speed Switch



Speed Switch outdoor type



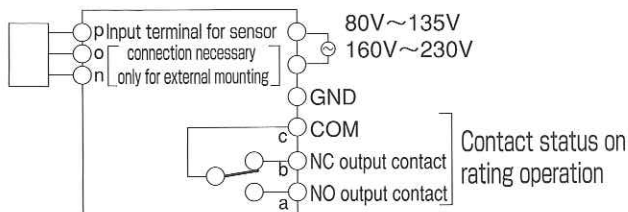
Proximity switch



Speed Switch makes a detection by operating the integrated output relay when the shaft speed of machine reduces at or below the adjustable setting speed. Speed Switch is a non-contact type motion sensor which can be used even in severe outdoor environment without any problems and can detect the speed without connecting it to the machine with a coupling, etc..

Features

- With the built-in digital switch, the actuating speed is adjustable at site.
- Not affected by vibration of machines, since the distance between the sensor and the sensing piece is allowed up to 18mm.
- Simple control circuit, as the starting compensation timer is built in.
- Free power source does not cause a mistake in connection to 100V or 200V.
- Compact, light weight and high performance series.
- IP67 protection allows the use in bad environment.
- Aluminum housing and strong against corrosion.

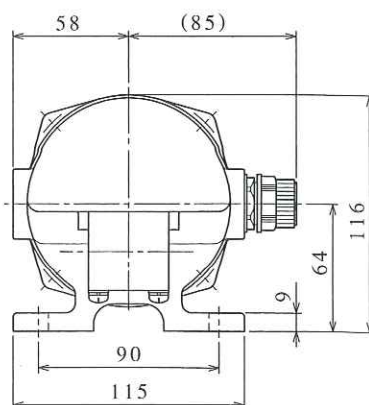
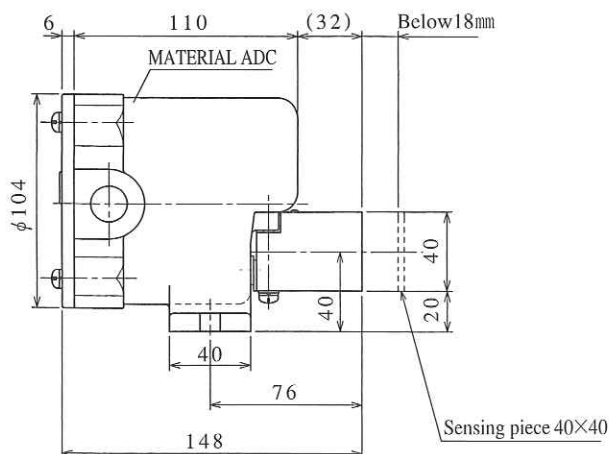


Contact status on rating operation

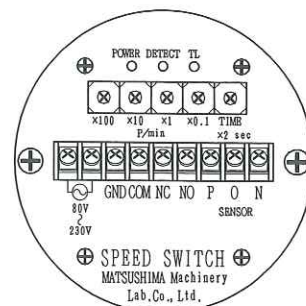
Specification

- Model ESPB-030
- Rating 2000P/min
- Detection 2~999P/min
- Detecting accuracy $\pm 1\%$
- Sensing piece Magnetic substance $t \times 40 \times 40$ mm or over
- Timer 0~30sec.
- Detecting distance 18mm or below
- Output contact 1C contact
- Contact capacity 250V AC 2A
- Allowable temperature -10~+50°C
- Power source 80~135V, 160~230V 50/60Hz
- Protection IP67

SPEED SWITCH ESPB-030

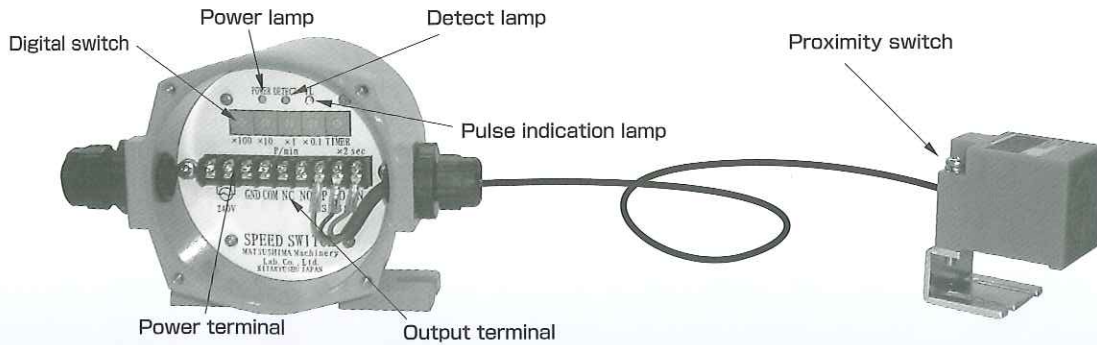


Detail of panel



Speed Switch

Separated proximity switch type



It is possible to install the proximity switch portion and the main body separately when it is hard to install the main body as the mounting space is narrow. This product can be installed at such the place as the main body can not be installed since the place where detection conducted is relatively high temperature (up to +70°C) or the place where accessibility is limited due to the elevated mounting place. Therefore, this is a motion sensor which can set the revolution number at the site apart from the place where detection is conducted.

Features

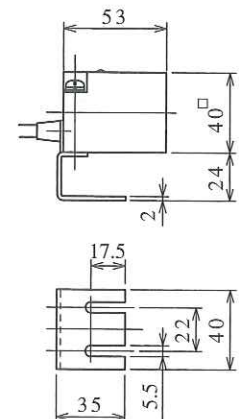
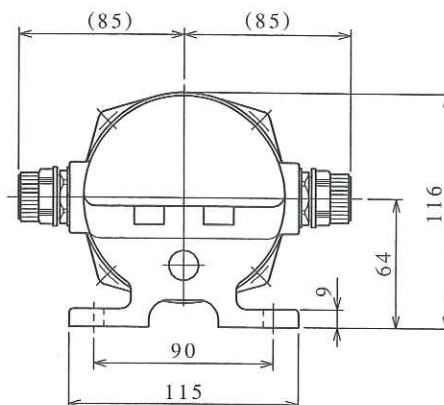
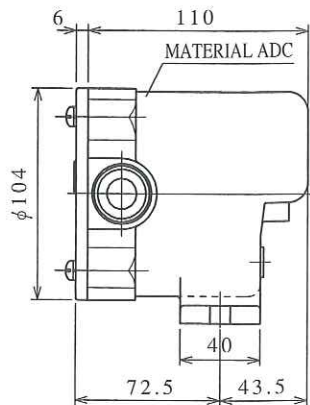
- It has the same function as that of an outdoor type speed switch.
- Space saving installation. Required space for installation at site is for the proximity switch with 40mm×40mm×53mm.
- The distance up to the sensing piece is allowed to 18mm at maximum.
- The proximity switch is connected to the main body with a 2m cable.
- Wiring is possible to be extended up to 1 km by using 1.25mm² three-wire shielded cable.
- Detection LED is equipped with the proximity switch, therefore, it is possible to check the pulse transmission at site.

Specification

- **Model** ESPB-041
(separated proximity switch TL-N20ME1)
- **Rating** 2000P/min
- **Detection** 2~999P/min
- **Detecting accuracy** ±1%
- **Sensing piece** Magnetic substance t1x40x40mm or over
- **Timer** 0~30sec.
- **Detecting distance** 18mm or below
- **Connection cable** a 2m cable is included.
- **Output contact** 1C contact
- **Contact capacity** 250V AC 2A
- **Allowable temperature** Proximity switch -25~+70°C
Main body -10~+50°C
- **Power source** 80~135V, 160~230V 50/60Hz
- **Protection** IP67

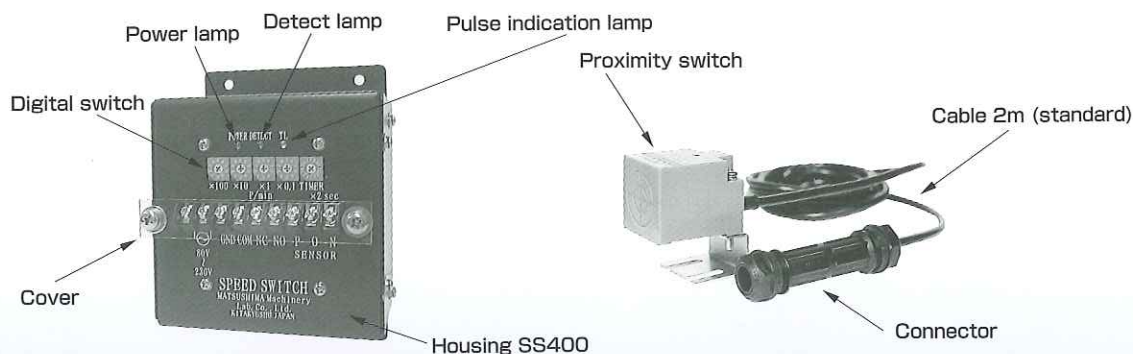
SPEED SWITCH ESPB-041

PROXIMITY SWITCH TL-N20ME1



Speed Switch

Transducer in-panel mounting type



This is a space-saving type motion sensor which consists of a transducer to be mounted in the panel and a separated proximity switch to be mounted at the place where detection is conducted. That is to say, it is possible to conduct speed control in the control room apart from the place where detection is conducted and to conduct collectively integrated control by mounting side by side transducers from each place where detection is conducted.

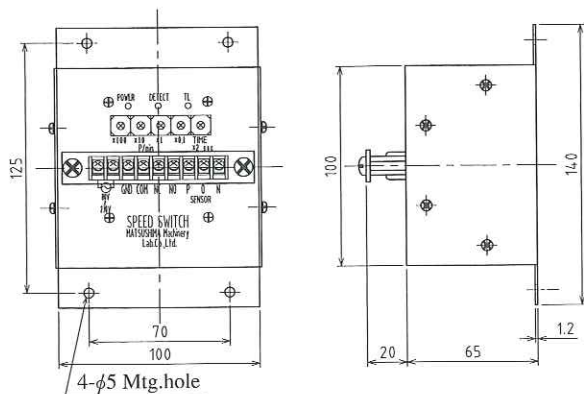
Features

- It has the same function as that of an outdoor type speed switch.
- Space saving installation. Required space for installation at site is for the proximity switch with 40mm×40mm×53mm.
- Wiring is possible to be extended up to 1 km by using 1.25mm² three-wire shielded cable.
- The distance up to the sensing piece is allowed to 18mm at maximum.
- Easy extension of wiring by shielded cable with the attached water-proof type junction Connector.

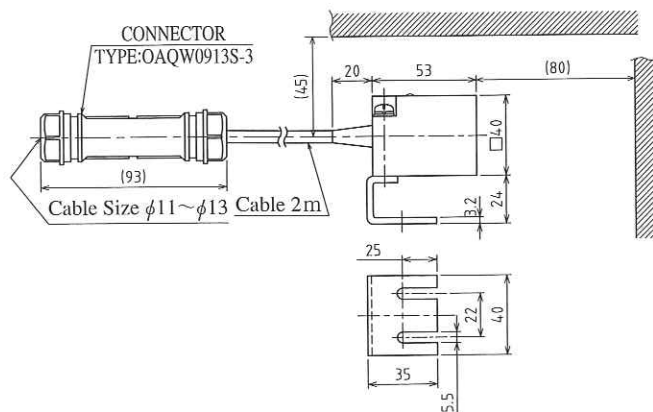
Specification

- **Model**
Proximity switch TL-N20ME1
Transducer ··· ASTC-041
- **Rating** ······ 2000P/min
- **Detection** ···· 2~999P/min
- **Detecting accuracy** ±1%
- **Sensing piece** Magnetic substance t1x40x40mm or over
- **Detecting distance** 18mm or below
- **Timer** ········ 0~30sec.
- **Output contact** 1C contact
- **Contact capacity** 250V AC 2A
- **Allowable temperature** Proximity switch -25~+70°C
Transducer -10~+50°C
- **Power source** 80~135V, 160~230V 50/60Hz
- **Protection** ···· Proximity switch IP67
Transducer IP40

SPEED SWITCH TRANSDUCER ASTC-041

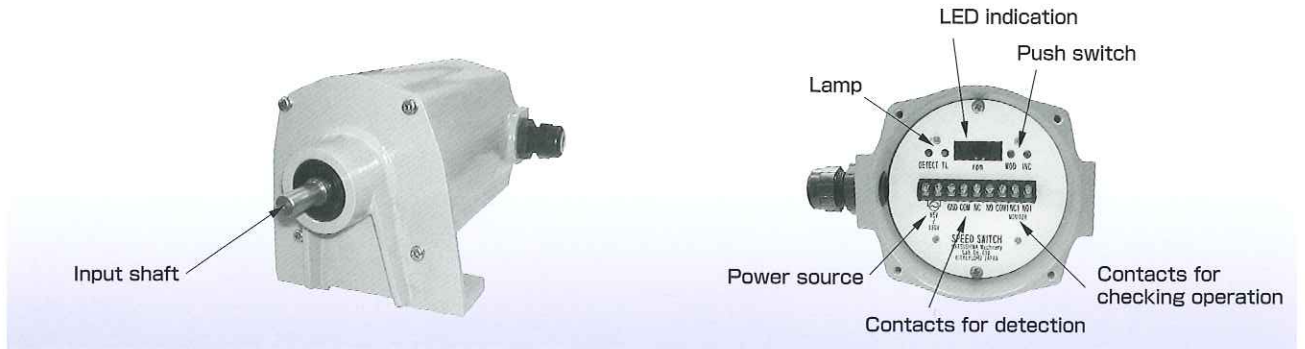


PROXIMITY SWITCH TL-N20ME1



▨ The surrounding metal should be ()mm distance from Proximity Switch.

Speed Switch Superlow speed type



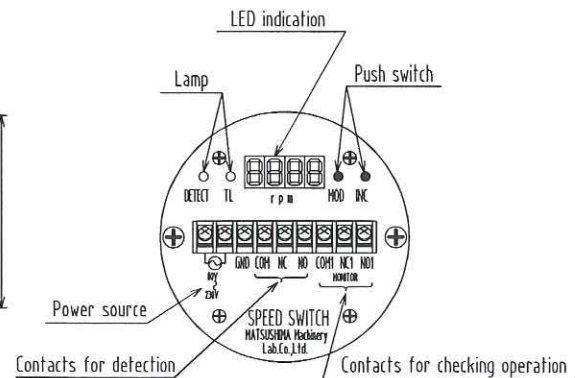
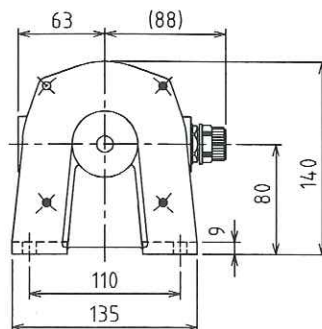
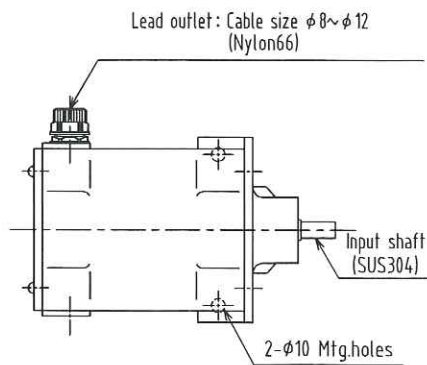
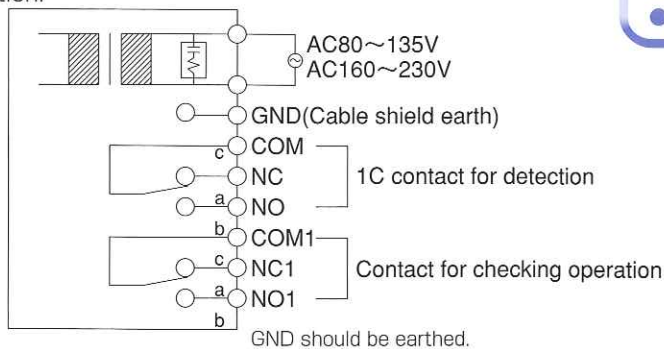
Slip Detector Zero is a rotary motion sensor possible to detect very low shaft speed from 0.1rpm up to 99.9rpm and is possible to use to check whether very low speed shaft as typified by sending roller of heating furnace, low speed agitator, thickener, etc. is rotated in normal speed. Coupling for connection to shaft is available as option.

Features

- Speed drop of low speed shaft due to breakage of chain or shearing pin is directly detected.
- With its digital control system, it allows less setting error and high accuracy detection.
- Quick response speed, time lag of output signal is below 3sec. even when it detects the speed of 0.1rpm.
- High accuracy as encoder is adopted in detecting portion.

Specification

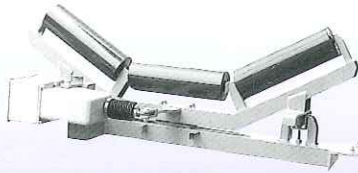
- Model ESKB-610M
- Rating 179rpm
- Detection 0.1~99.9rpm
- Accuracy ±1%
- Timer 0~99sec.
- Output contact 1C contact
- Contact capacity 250V AC 2A
- Allowable temperature -10~+50°C
- Power source 100V or 200V 50/60Hz
- Protection IP67



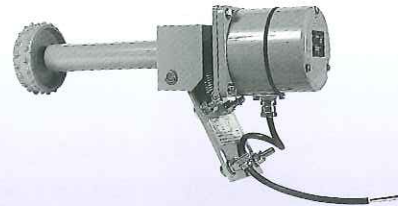


Non-contact type speed monitoring sensor
Speed Switch

MATSUSHIMA'S BELT CONVEYOR RELATED DEVICES



MOTOR-OPERATED ADJUSTING CARRIER
(FOR CARRIER SIDE)



MAGNET-TYPE SPEED RELAY
(ESRW-102)



BELT SWAY SWITCH
(ELAP-20)



PULL CORD SWITCH
(ELAW-31)



CHUTE SWITCH
(ELPP-22D)



BELT TEAR DETECTOR
(SCPT-075-30~SCPT-180-30)

We have a wide range of Belt Conveyor Related Devices; Motor-operated Adjusting Carrier, Magnet-type Speed Relay, Belt Sway Switch, Pull Cord Switch, Chute Switch, Belt Teat Detector etc. as shown in the photos. Please feel free to contact us.

Specifications are subject to change without notice.
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CAUTION

- For proper and safety use of the product, read thoroughly the instruction manual before using.
- Consult with our representatives where there is a possibility to apply the product to such system that requires safety directly relating to human body.

Distributor

MATSUSHIMA MACHINERY LABORATORY CO., LTD.



HEAD SALES OFFICE / FACTORY

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