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Proximity Sensor SME-8-S-LED-24

With reed contact and light-emitting diode, without mounting kit.

Festo's proximity sensors are position sensors specially adapted and optimised for use with Festo drives. These sensors are mounted on cylinders either directly or by means of mounting kits. The proximity sensor only functions after a permanent magnet has been attached to the drive piston.

Proximity sensors are adjusted mechanically on the cylinder in question and locked into the desired position. As soon as the cylinder piston returns to this position, the switching signal status changes.

Proximity sensors for 8 mm slot

Variants

- Proximity sensors with electrical contacts (SME, SMEO)
- Inductive proximity sensors (SMT, SMT0), PNP or NPN
- Pneumatic proximity sensor (SMPO)
- Weld-field immune proximity sensors (SMTSO)

- Heat resistant proximity sensor (-S6)
- With cable in various lengths or plug
- NO and NC contacts
- 24 V DC or 230 V AC
- In-line or right angle electrical connection

Switching status is indicated by means of an LED.

Festo offers an comprehensive, wide ranging spectrum of position sensors:

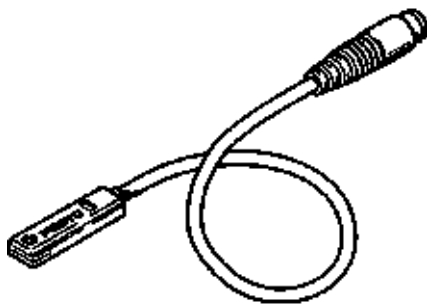
Features

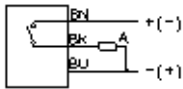
The slot is integrated into the drive or the mounting kit.

- Compact design
- Simple installation and commissioning
- Sensors do not protrude from the slot
- Direct mounting or attachment by means of mounting component
- Replacement without adjustment (-8E)
- Welding field resistant design (SMTSO)
- Pneumatic proximity sensor (SMPO)

Function SME, SMEO (contact type)

Contact-type cylinder sensors SME consist of a reed switch





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whose contacts close when a magnetic field approaches, thus generating a switching signal.

SME proximity sensors are used mainly in applications where it is necessary to switch high load currents (e.g. for the direct control of electrical consuming devices). In applications involving large capacitive loads or long cable lengths (> 7.5 m), a protective circuit must be provided.

Inductive cylinder sensors SMT consist of an oscillator circuit. Current flowing through this circuit changes when a magnetic field approaches. This change generates a switching signal. SMT proximity sensors are used mainly in applications where they are connected to a controller by means of which their switching signals are processed.

SMTSO (weld-field immune)

Welding-field immune proximity sensors work in the same way as SMT inductive sensors, but with the additional feature that the switching signal is "frozen" as soon as the proximity sensor detects an alternating magnetic field.

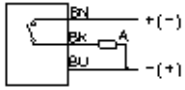
This prevents incorrect switching during welding operations. SMTSO proximity sensors are used on welding machines where welding operations generate high-level alternating magnetic fields.

SMPO (pneumatic)

Pneumatic proximity sensors consist of a 3/2-way valve which is actuated when a magnetic field approaches. A pneumatic output signal can be activated when the pneumatic proximity sensor is switched. SMPO proximity sensors are used in installations which are capable of directly processing pneumatic output signals.

Sensor tester SM-TEST-1

The sensor tester is used to test and adjust sensors and proximity switches. The sensor tester facilitates commissioning and servicing work.



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- Voltage supply for testing proximity switches for correct operation
- Adjustment of proximity switches while attached to cylinders
- Identification of switching outputs of proximity switches and sensors with PNP, NPN, NC and NO functions by means of the appropriate LED.

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Feature	Data/description
EU conformity (CE)	CE
Note on EU conformity	Electromagnetic compatibility
Signal processing/type of contact	reed contact
Function on actuation	N/O contact
Switching accuracy (+/-)	0,1 mm
Ambient temperature min. standard	-20 °C
Ambient temperature max. standard	70 °C
Correlation ambient temperature /hours	Fixed cable installation
Ambient temperature max. screwed-in	-5 °C
Ambient temperature class, screwed in	Flexible cable installation
Air connection type elec.	Cable with plug
Number of cores	3
Core cross section	0,14 mm²
Length of cable	300 mm
Number of pins, plug connection	3
Operating status display	Yellow LED
Type of mounting	slot
Material of housing	PET-reinforced
Material, cable sheath	PVC-polymer
CT criterion	Free of copper and teflon
Product weight	0,01 kg
Voltage type	AC/DC
Nominal operating voltage [DC]	24 V
Operating voltage min. (DC)	12 V
Operating voltage max. (DC)	30 V
Nominal operating voltage [AC]	24 V
Operating voltage min. (AC)	12 V
Operating voltage max. (AC)	30 V
Contact rating max. (DC)	10 W
Contact rating max. (AC)	10 VA
Maximum switching frequency	500 Hz

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Feature	Data/description
Degree of protection	IP67