

Proximity Sensors

973SPT Series

18 mm Diameter Stainless Steel Impact Sensors 3-Wire DC, 2-Wire AC Type



FEATURES

- Spring loaded sleeve absorbs shock on impact
- E-ring grooves allow adjustable switch travel from 0.25 to 1.00 inch
- Stainless steel housing and sensing face
- Designed to meet NEMA 4X, 6P, 13
- **Detects ferrous metals only**
- Quick-connect termination
- 93-132 VAC and 10-30 VDC supply voltages
- Short circuit protection on DC sensors
- 18 mm diameter threaded sleeve for mounting flexibility

ORDER GUIDE

Sensor Package Style	Sensing Range mm (in.)*	Sensor Type	LED	Sw. Freq.	Standard Target* mm (in.)	Output Type	Catalog Listing
 136g (4.8 oz)	1,65 (.065) Shielded	3-wire DC	NO	20 Hz	18 (.71)	PNP, N.O.	972SPT-A3P
	1,65 (.065) Shielded	2-wire AC	NO	20 Hz	18 (.71)	N.O.	973SPT-A5T

*Ferrous metals only.

SPECIFICATIONS

	AC	DC
Supply Voltage	93-132 VAC	10-30 VDC
Voltage Drop	7.5 V @ 100 mA	1.0 V
Load Current	5-100 mA cont. 500 mA inrush	200 mA max.
Leakage Current	1.7 mA max.	10 μ A max.
Repeatability	$\pm$ 1%	$\pm$ 1%
Operating Frequency, max.	20 Hz	20 Hz
Hysteresis	2 to 20% of sensing distance	
Operating Temperature	0 to 70 °C (32 to 162 °F)	
LED	None	None
Protection	NEMA 4, 4X, 6P, 13	
Spring Actuation Force		
Initial impact	1/4 pound	
Full spring travel	1/2 pound	

ACCESSORIES

Catalog Listing*	Description
925SST18	Jam nut accessory
A803000A09M020	4-pin DC Micro standard key, straight, 2m cable
803000A09M050	4-pin DC Micro standard key, straight, 5m cable
803001A09M020	4-pin DC Micro standard key, right angle, 2m cable
803001A09M050	4-pin DC Micro standard key, right angle, 5m cable
8030P1A09M020	4-pin DC Micro standard key, right angle w/LED, 2m cable
8030P1A09M050	4-pin DC Micro standard key, right angle w/LED, 5m cable
703000D02F060	3-pin AC Micro dual slot, straight, 2m cable
703000D02F120	3-pin AC Micro dual slot, straight, 4m cable
703001D02F060	3-pin AC Micro dual slot, right angle, 2m cable
703001D02F120	3-pin AC Micro dual slot, right angle, 4m cable

*High temperature/thermal cycle washdowns may cause loosening of cables to sensor, due to material incompatibility. Stainless steel or plastic cable nuts are suggested in these applications.

JAM NUT

In some applications, there can be a great deal of impact force between target and sensor. Thus, it may be necessary to protect the threaded sleeve from damage. Sleeve damage could cause the sensor to bind within the sleeve, affecting sensor performance. A specially designed jam nut which screws onto the end of the 18 mm sleeve provides the required protection.

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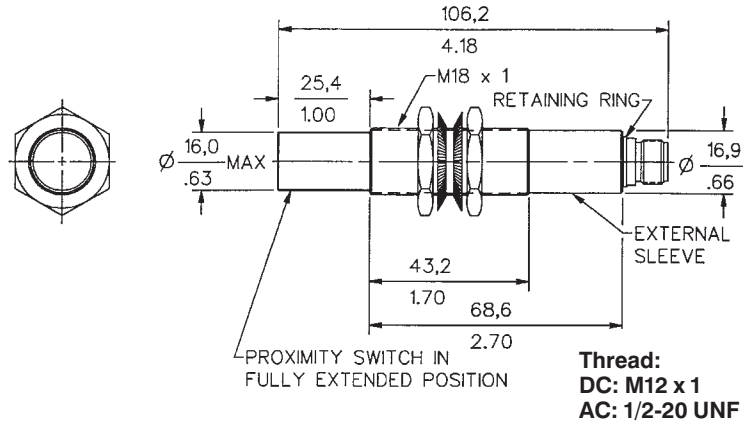
18 mm Diameter Stainless Steel Impact Sensors

3-Wire DC, 2-Wire AC Type

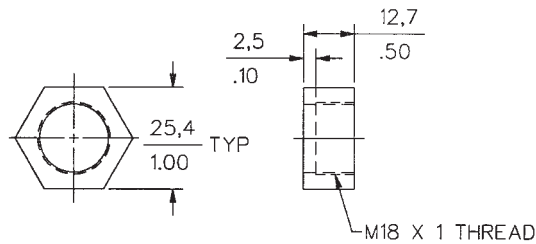
MOUNTING DIMENSIONS

(For reference only)

Impact Sensor



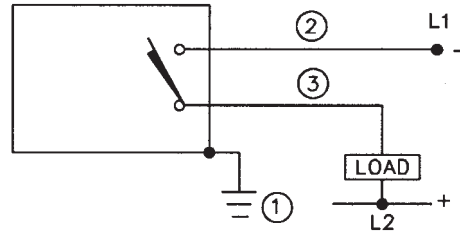
Jam Nut



WIRING DIAGRAMS

2-wire AC

Connecting cables may be run in conduit with other control wiring without affecting operation. However, they should not be placed in conduit with power wiring. Class 1 wiring is required.

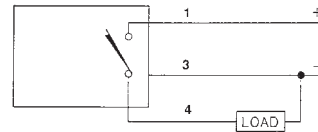


NOTICE

A load must be used when power is applied to AC sensors. Wiring without a load will cause permanent damage.

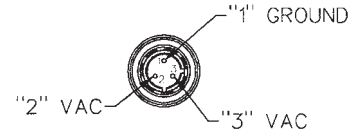
3-wire DC PNP (Sourcing) N.O.

Do not place leadwires of DC sensors in conduit with AC control wiring. Place in separate conduit or with wiring to other low voltage DC devices.



Proximity

AC Pinout



DC Pinout

