

721-6300



923AB2XM-A7T-L

923 series 12 mm cylindrical unshielded 2-wire ac inductive proximity sensor with N.O.output, cable termination

FEATURES

- Sensitive to all metals
- Wide temperature range
- Overload protection
- LED output indicator
- Double insulation for plastic housing versions

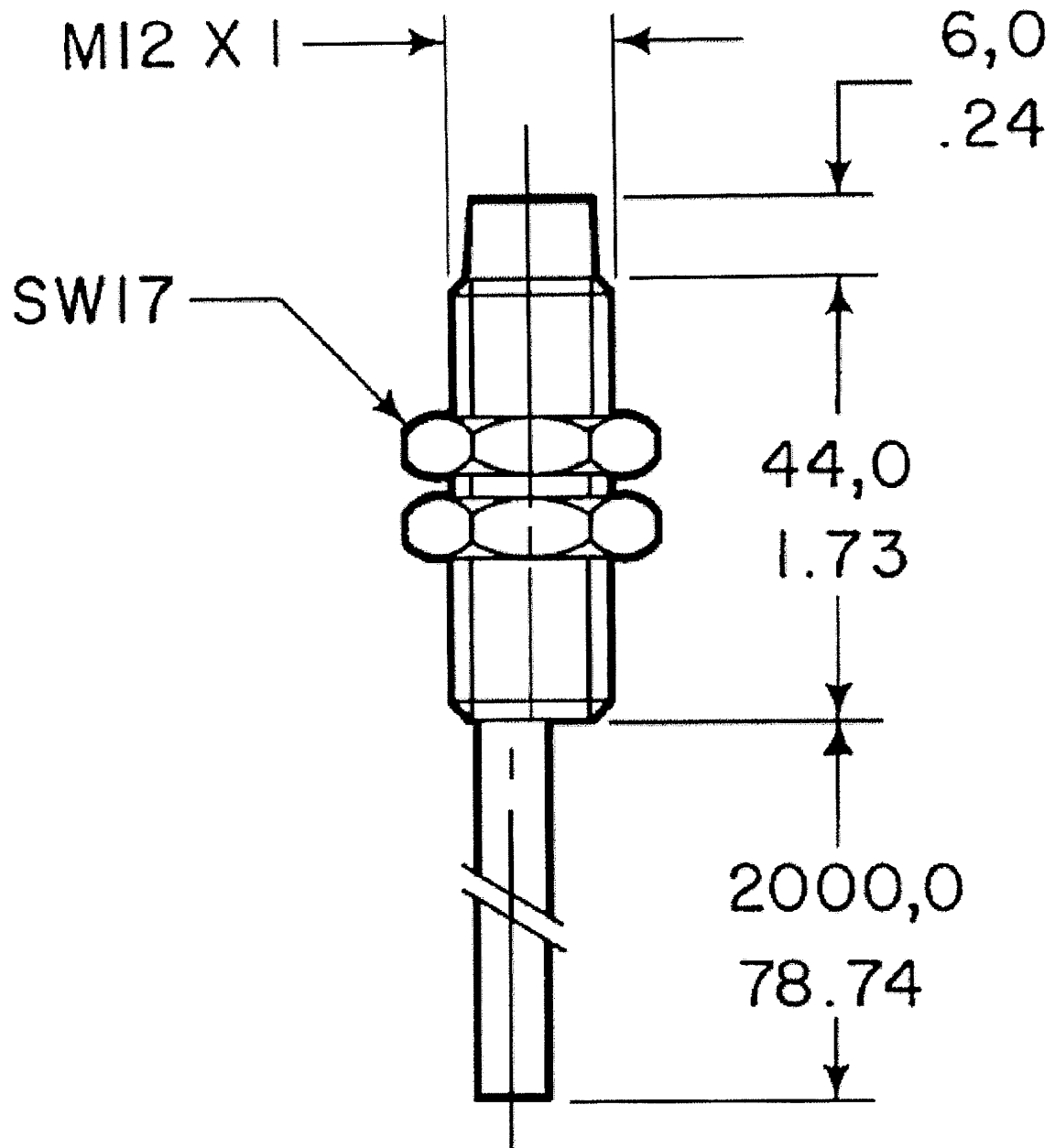
Representative photograph, actual product appearance may vary.

- ▣ Dimensions
- ▣ Installation Instructions
- ▣ Wiring Diagram(s) and Output Curves
- ▣ Specifications
- ▣ Engineering Drawings On-Line

Series 923 inductive ac proximity sensors are available in a 2 wire version. Any metal object moving past the sensing face within the sensing range sends a signal to the amplifier. The amplifier drives a thyristor which switches the load on or off.

Product Specifications	
Severe Environment	No
Sensor Type	2-wire ac
Range Type	Unshielded
Housing Type	Threaded Cylindrical
Housing Diameter	12 mm
Housing Material	Brass
Nominal Sensing Distance mm [in]	5,0 [0.20]
Supply Voltage	20 Vac to 250 Vac
Output Type	Normally Open (N.O.)
Voltage Drop	8.6 Vac
Circuit Protection	Without
Operating Temperature Range	-25 °C to 70 °C [-13 °F to 158 °F]
Termination Type	Cable
Termination Details	3 conductor 0,50 mm [0.0197 in] - PVC
Standard Target Size mm [in]	15 mm x 15 mm [0.59 in x 0.59 in]
Output Current	10 mA to 200 mA
Operating Frequency (f)	20 Hz
Hysteresis (H)	3 - 15% Sr
Leakage Current (µA max.)	1.5 mA
Inrush Current	1.2 A/20ms
Repeatability	± 3%
Tightening Torque	20 Nm
Power Loss for Change in Temp. (Tu=50 °C to 85 °C)	0
Sensor Face Color	Blue
Availability	Global

Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.



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923 Series Digital Proximity Sensors (ac)

WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

DESCRIPTION

Series 923 inductive ac proximity switches are available in a 2-wire version. Any metal object moving past the active sensor face within the sensing distance causes a signal to be input to the amplifier. The amplifier drives a thyristor which switches the load "on" or "off".

PROTECTION AGAINST MAINS VOLTAGE VARIATIONS

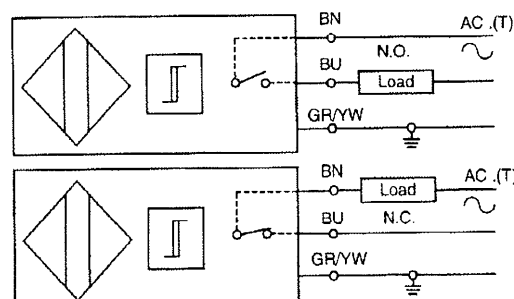
This series is protected against false pulses that may be caused by "load peaks" in the mains supply by a 2,5 joule varistor operating at a constant potential of 380 Vdc.

INSULATION VOLTAGE

All series 923 devices provide complete insulation between terminals and housing to max.1500 Vac / 50 Hz for one minute.

WIRING DIAGRAM

Series 923 – 2-wire Digital ac



The load can be connected to either wire.

BN = Brown
BU = Blue
GR = Green
YW = Yellow

923 Series Digital Proximity Sensors (ac)

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is **in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.**

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

For application assistance, current specifications, or the name of the nearest Authorized Distributor, contact a nearby sales office. Or call:

1-800-537-6945 USA

1-800-737-3360 Canada

1-815-235-6847 International

FAX

1-815-235-6545 USA

INTERNET

www.honeywell.com/sensing

info@micro.honeywell.com

Honeywell

MICRO SWITCH
Sensing and Control
Honeywell Inc.
11 West Spring Street
Freeport, Illinois 61032



www.honeywell.com/sensing

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Installation Instructions for the 923 Series 2-Wire AC Proximity Sensors

ISSUE 1
PK 80573

SPECIFICATIONS

Supply Voltage	20 to 260 VAC, 45 to 65 Hz
Load Current	12 mm dia.: 5 - 200 mA 18 and 30 mm dia.: 500 mA max. continuous, derated -10 mA/°C, at 50 to 85°C
Leakage Current, max.	1.5 mA at 120 VAC
Inrush Current	1.2 A/20 ms
Voltage Drop, max.	8.5 V
Repeatability, max.*	± 3%
Temperature Range	-25 to +85°C (-13 to +185°F)
Protection Class**	IP67

* Repeatability is the ability of the sensor to trigger at the same point, plus or minus a given factor, for every operation over the entire range of the sensor's specifications.

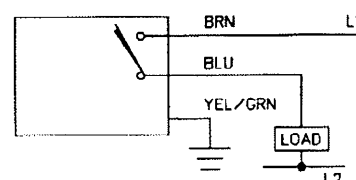
** IP67: dusttight, temporary immersion

SENSOR DESCRIPTION

Sensor Size, mm (in.)	Sensing Range, mm (in.)	Switching Frequency.	Standard Target* mm (in.)
12 (.47) Shielded	2,0 (.08)	20 Hz	12 (.47)
12 (.47) Unshielded	5,0 (.20)	20 Hz	15 (.59)
18 (.71) Shielded	5,0 (.20)	20 Hz	18 (.71)
18 (.71) Unshielded	8,0 (.31)	20 Hz	24 (.94)
30 (1.18) Shielded	10,0 (.39)	20 Hz	30 (1.18)
30 (1.18) Unshielded	16,0 (.63)	20 Hz	48 (1.89)

* Standard target: square plate, 1 mm (.04 in.) thick, of SAE 1018 mild steel.

WIRING DIAGRAM



Leadwires may be run in conduit with other control wiring without affecting operation. However, they should not be placed in conduit with power wiring. Leadwires are suitable for temperature up to +150°C, and may be any length as long as supply voltage at the sensor is within specified limits and load voltage is high enough for application.

NOTICE

A load must be used when power is applied to the sensor. Wiring without a load will cause sensor failure.

The sensor has third wire case ground. This wire should be attached to an earth ground. Sensor will operate properly if wire is clipped or unattached. **This is not recommended.**

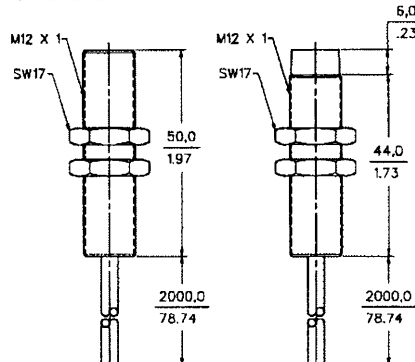
Usually one power supply lead is grounded. The sensor will operate properly with the load in series with either lead.

923 Series

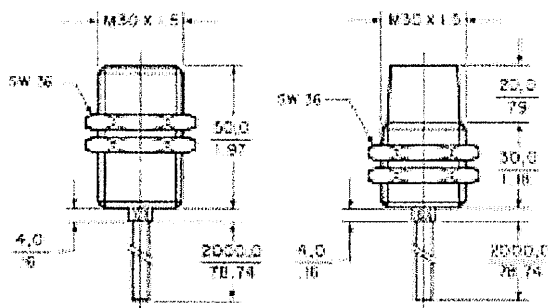
PK 80573

MOUNTING DIMENSIONS (for reference only)

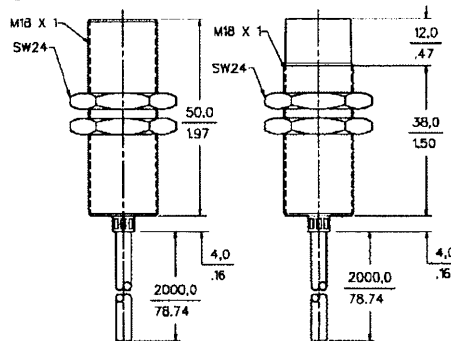
12 mm Diameter Shielded



30 mm Diameter Shielded



18 mm Diameter Shielded



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1-800-537-6945 USA

1-416-293-8111 Canada

1-815-235-6847 International

<http://www.honeywell.sensing.com>

info@micro.honeywell.com

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Honeywell

Helping You Control Your World

MICRO SWITCH

Honeywell Inc.

11 West Spring Street

Freeport, Illinois 61032



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