

Proximity Sensor Lineup

Proximity sensors allow non-contact detection of objects. They are used in many industries, including manufacturing, robotics, semiconductor, etc. Inductive sensors detect metallic objects while capacitive sensors detect all other materials. Ultrasonic sensors detect all materials by using sound wave reflections to determine presence.

Lifetime Warranty



12, 18, 30 mm
IP69K FDA-approved materials

PFM, PFK, PFT, VF & MAF SERIES

New! An assortment of AC and DC IP69K rated Q/D proximity sensors.

Suitable for harsh environments

- 12 mm, from \$35.50
- 18 mm, from \$35.50
- 30 mm, from \$45.50

Starting from
\$35.50



12 mm
round

AM and PBM SERIES

Two- and three-wire DC, embedded cable or M12 quick-disconnect

Sensing distance:

- Standard, from \$13.50
- Extended, from \$25.50
- Triple, from \$65.00

Starting from
\$13.50



5 mm x 5 mm
rectangular

CR5 SERIES

Three-wire DC, IP67 rating, embedded cable or M8 quick-disconnect

Sensing distance:

- Standard, from \$36.00
- Extended, from \$53.00

Starting from
\$36.00



12 mm x 27 mm
rectangular

APS4 SERIES

Three-wire DC with embedded cable, IP67 rating

Sensing distance: **Standard**, from \$16.75

Starting from
\$17.50



Stainless steel
round standard

PKW, PMW and PTW SERIES

Three and four-wire DC with M12 quick-disconnect, IP67 rating

Sensing distance: **Standard**

- 12 mm prox, from \$38.50
- 18 mm prox, from \$41.50
- 30 mm prox, from \$49.00

Starting from
\$31.00



8 mm
round

AE and PEW SERIES

Three-wire DC with embedded cable, M8 or M12 quick-disconnect

Sensing distance:

- Standard, from \$21.00
- Extended, from \$26.50
- Triple, from \$61.00
- Stainless Steel, from \$45.00

Starting from
\$21.00



30 mm
round

AT and PBT SERIES

Two- and three-wire DC, IP67 rating, embedded cable or M12 quick-disconnect

Sensing distance:

- Standard, from \$16.50
- Extended, from \$32.50

Starting from
\$16.50



10 mm x 16 mm
rectangular

DR10 SERIES

Three-wire DC with embedded cable or M12 quick-disconnect, IP67 rating

Sensing distance:

- Standard, from \$26.00
- Extended, from \$26.00

Starting from
\$26.00

STAINLESS STEEL

Miniature
(3, 4, 5 mm)

PY & PD SERIES

Three-wire DC
3 mm prox, from \$79.00
4 mm prox, from \$79.00
5 mm prox, from \$43.50 (quick-disconnect)

Sensing distance:

- Standard

Starting from
\$43.50



18 mm
round

AK and PBK SERIES

Two- and three-wire DC, embedded cable or M12 quick-disconnect

Sensing distance:

- Standard, from \$14.00
- Extended, from \$26.50

Starting from
\$14.00



8 mm x 8 mm
rectangular

CR8 SERIES

Three-wire DC with embedded cable or M8 quick-disconnect

Sensing distance:

- Standard, from \$25.00
- Extended, from \$34.50
- Triple, from \$77.00

Starting from
\$25.00



Stainless steel
triple sensing range

PKW, PTW and PMW SERIES

Three-wire DC, one-piece body, virtually same sensing distance of all metals, Q/D version is IP67 rated, cable version is IP68 to 290 psi

Sensing distance: **Triple**

- 12 mm prox, from \$103.00
- 18 mm prox, from \$114.00
- 30 mm prox, from \$49.00

Starting from
\$103.00

STAINLESS STEEL



Starting from
\$38.50

Our Proximity Sensors at a glance



40 mm x 40 mm rectangular
LF SERIES
 Three-wire and four-wire DC, IP67 rating, M12 quick-disconnect

- 3-wire, from \$39.00
- 4-wire, from \$42.00

Starting from
\$39.00



30 mm capacitive
CT SERIES
 Three-wire DC with embedded cable

Sensing distance: **Standard**

\$71.00



Ultrasonic
SU & TU SERIES
 DC with discrete or analog output, embedded cable or quick-disconnect, IP67 rating

Sensing distance: **up to 2,500 mm**

- 18 mm, from \$280.25
- 30 mm, from \$299.75

Starting from
\$280.25

Starting from
\$159.00



UHZ SERIES
 DC, discrete output, through-beam pair, embedded cable

Sensing distance: **up to 300 mm**

- Rectangular, from \$159.00



Short body round
AE & AM SERIES
 3-wire DC, embedded cable or quick-disconnect, IP67 rating

Sensing distance: **Extended**

- 8 mm, from \$31.00
- 12 mm, from \$31.00

Starting from
\$31.00



Proximity with analog output
AE, AM, AK & AT ANALOG SERIES
 DC with analog output (voltage/current), embedded cable or quick-disconnect, IP67 rating

Sensing distance: **Triple**

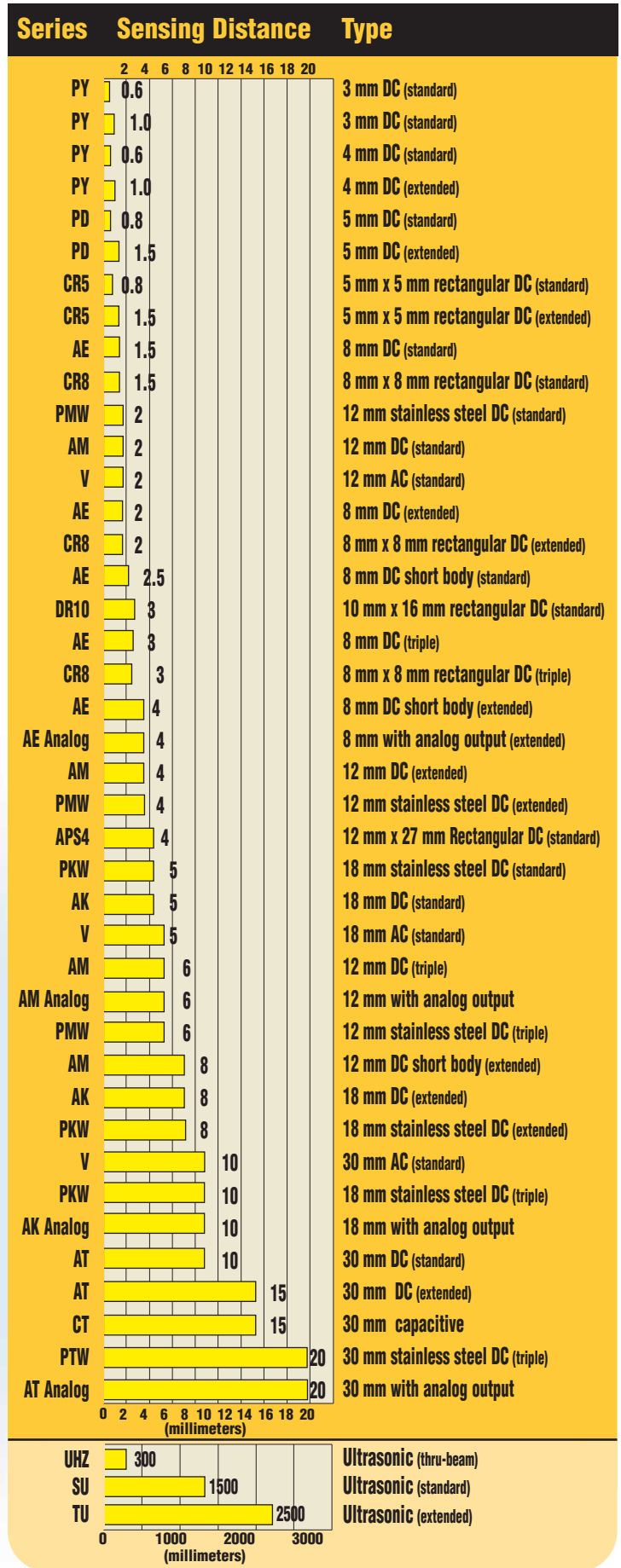
- 8 mm, from \$168.00
- 12 mm, from \$102.50
- 18 mm, from \$107.00
- 30 mm, from \$131.25

Starting from
\$102.50



Q/D extension cables
CDP SERIES
 Axial or right-angle connectors, M8 or M12 connector sizes, 1 m or 3 m lengths, IP67 rating

Starting from
\$10.50



Company Information

Systems Overview

Programmable Controllers

Field I/O

Software

C-more & other HMI

Drives

Soft Starters

Motors & Gearbox

Steppers/ Servos

Motor Controls

Proximity Sensors

Photo Sensors

Limit Switches

Encoders

Current Sensors

Pressure Sensors

Temperature Sensors

Pushbuttons/ Lights

Process

Relays/ Timers

Comm.

Terminal Blocks & Wiring

Power

Circuit Protection

Enclosures

Tools

Pneumatics

Safety

Appendix

Product Index

Part # Index

How do I Choose the Right Proximity Sensor?

All applications have certain specific needs, but, in general, the following steps will help you choose the correct sensor for your application:

Step 1:

What is the sensing distance required?

The sensing distance is the distance between the tip of the sensor and the object to be sensed. The selection guide and the specifications table for each sensor family lists the sensing distances.

Some things to keep in mind are:

A. In many applications, it is beneficial to place the sensor as far as possible from the sensing object due to temperature concerns. If a sensor is placed too close to a hot temperature source, the sensor will fail quicker and require more maintenance.

Greater distance may be achieved with extended and triple range sensors. In many applications, a sensor may not be mountable close to the sensed object. In this case, longer sensing distances are needed. Extended sensing distance sensors are offered in 8mm to 30mm dimeters, and triple sensing distance sensors in 8mm and 12mm formats.



Round sensors

In many cases, using an extended distance sensor to get the sensor farther away from the detected object can be beneficial to the life of the sensor. For example, without an extended distance sensor you may not be able to place the sensor close enough to the detectable object, or you may need to buy more expensive high temperature sensors.



Rectangular sensors

Another example would be a mechanical overshoot situation, where mounting the sensor farther from the detection object may eliminate unneeded contact with the sensor, thereby extending the life of the sensor.

These are just a few examples, but the benefits of using extended distance sensors are obvious in many applications. Think of how extended distance sensors could save you time and money in your application.

B. The material being sensed (i.e. brass, copper, aluminum, steel, etc.) makes a difference in the type of sensor needed.

Note: If you are sensing a non-metallic object, you must use a capacitive sensor.

The sensing distances specified in this catalog were calculated using FE360 material. Many materials are more difficult to sense and require a shorter distance from the sensor tip to the object sensed.

If sensing a material that is difficult to sense, you may consider using our unique stainless steel sensing technology. This will measure virtually all materials at the specified sensing distances.

Step 2:

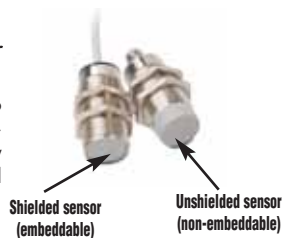
How much space is available for mounting the sensor?

Have you ever tried using a round sensor or short body version, and not been able to make it fit? Our rectangular sensors can meet your needs. The same technology used in a standard round proximity sensor is enclosed in a rectangular housing. This technology includes sensing distances, electrical protection and switching frequencies similar to round sensors.

Step 3:

Is a shielded or unshielded sensor needed?

Shielded and unshielded sensors are also referred to as embeddable and non-embeddable. Unshielded sensors allow longer sensing distances but shielded sensors allow flush mounting.



Shielded sensor (embeddable)

Unshielded sensor (non-embeddable)

Step 4:

Consider environmental placement concerns. Will the sensor be placed underwater, in a high-temperature environment, continually splashed with oil, etc.? This will determine the type of sensor you may use. In the selection table and in the specification tables for each sensor family, we list the environmental protection degree ratings. Most of our sensors are rated IEC-IP67 and

others are rated IP65 or IP68.

These ratings are defined as:

IP65: Protection from live or moving parts, dust, and protection from water jets from any direction.

IP67: Protection from live or moving parts, dust, and protection from immersion in water.

IP68: Protection from live or moving parts, dust, and protection from submersion in water under pressure.

P69K: Protection against high-pressure/steam-jet cleaning.

Step 5:

What is the sensor output connected to?

Note: If using AC sensors, please skip this step.

The type of output required must be determined (i.e., NPN, PNP or analog). Most PLC products will accept either output. If connecting to a solid state relay, a PNP output is needed.

Step 6a:

Do I need 2, 3, or 4-wire discrete outputs?

This is somewhat determined by what the sensor will be connected to. Some simple guidelines to use are:

Type	Guidelines
2-wire	<ul style="list-style-type: none"> Will work with sinking or sourcing . . . devices. Only 2 wires to terminate. Higher leakage current.
3-wire	<ul style="list-style-type: none"> Most popular output. Familiar to most users. (Must select between NPN and PNP outputs.)
4-wire	<ul style="list-style-type: none"> Allows configurability in one device. . . May have both NPN/PNP selection or NO/NC selection. Allows user to stock one part for numerous applications.

Step 6b:

Do I need analog outputs?

This is determined by the sensor application and what the sensor will be connected to. Sensors with analog outputs produce an output signal approximately proportional to the target distance.

Type	Guidelines
1-5mA	available on AM9, AK9 and AT9 series analog inductive sensors
4-20mA	available on AM9, AK9 and AT9 series analog inductive sensors
0-5VDC	available on AM9, AK9 and AT9 series analog inductive sensors
0-10VDC	available on AE9, AM9, AK9 and AT9 series analog inductive sensors and SU and TU ultrasonic sensors

Step 7:

Determine output connection type.

Do you want an axial cable factory attached to the sensor (pigtail) or a quick-disconnect cable?

There are many advantages to using a quick-disconnect cable, such as easier maintenance and replacement. All proximity sensors will fail in time and using a Q/D (quick-disconnect) cable allows for simple replacement.

Factory attached axial cables come in a 2 meter length. CD08/CD12 Q/D cables come in 2 meter, 5 meter, and 7 meter lengths. Extension cables are available in 1 meter and 3 meter lengths to extend the length of the standard Q/D cables.

Q/D cables are offered in PVC and PUR jackets for meeting the requirements of all applications. Axial cables typically come with a PVC jacket. PVC is a general purpose insulation while PUR provides excellent oxidation, oil and ozone resistance. PUR is beneficial if the cable is exposed to oils or placed in direct sunlight.

There are also advantages to a factory attached axial cable:

Cost: The cable is integrated into the sensor and included in the price. Q/D cables must be purchased separately.

Environmental impact: Since the cable is sealed into the sensor, there is less chance of oil, water or dust penetration into the sensor, which could cause failure.

Proximity Sensor Selection Guide



Specifications	PY Stainless Steel DC	PD Stainless Steel DC	AE Series DC	AM Series DC	AK Series DC
Description	Miniature inductive proximity sensors, 3 mm and 4 mm, DC, stainless steel	Miniature inductive proximity sensors, 5 mm, DC, stainless steel	Inductive proximity sensors, 8 mm, DC, metal, standard and short body lengths	Inductive proximity sensors, 12 mm, DC, metal, standard and short body lengths	Inductive proximity sensors, 18 mm, DC, metal
Sensing Distances	Standard distance: 0.6 mm Extended distance: 1mm	Standard distance: 0.8 mm Extended distance: 1.5 mm	Standard distance: 0 to 1.5 mm, 0 to 2.5 mm Extended distance: 0 to 2 mm, 0 to 4 mm Triple distance: 0 to 3 mm	Standard distance shielded: 0 to 2 mm unshielded: 0 to 4 mm Extended distance: shielded: 0 to 4 mm unshielded: 0 to 8 mm Triple distance: shielded: 6 mm	Standard distance: shielded 5 mm, unshielded 8 mm Extended distance: shielded 8 mm, unshielded 12 mm
Output State	N.O.	N.O.	N.O.	N.O.	N.O.
Logic Output	NPN / PNP	NPN / PNP	NPN / PNP	NPN / PNP / Sink / Source	NPN / PNP / Sink / Source
Connection Type	Axial cable	Axial cable / M8 connector	Axial cable / M8 / M12 connector	Axial cable / M12 connector	Axial cable / M12 connector
Supply Voltage	10 to 30 VDC	10 to 30 VDC	10 to 30 VDC	10-to-30 VDC	10 to 30 VDC
Switching Frequency	Standard distance: 5kHz Extended distance: 3kHz	Standard distance: 5kHz Extended distance: 3kHz	Standard distance: shielded: 3kHz unshielded: 2.5kHz Extended distance: shielded/unshielded: 3kHz Triple distance: shielded: 1kHz	Standard distance shielded/unshielded: 3 wire 2 kHz, 2-wire: 1.5kHz Extended distance shielded/unshielded: 1kHz Triple distance shielded: 800Hz	Standard distance shielded: 600Hz, Standard distance unshielded Extended distance shielded/unshielded: 300Hz
Protection Degree	IEC-IP67	IEC-IP67	IEC-IP67	IEC-IP67	IEC-IP67



Specifications	AT Series DC	PB Series DC	PEW Stainless Steel DC	PMW Stainless Steel DC	PKW Stainless Steel DC
Description	Inductive proximity sensors, 30 mm, DC, metal,	Inductive proximity sensors, 12 mm, 18 mm, 30 mm DC, metal,	Inductive proximity sensors, 8 mm, DC, stainless steel	Inductive proximity sensors, 12 mm, DC, stainless steel	Inductive proximity sensors, 18 mm, DC, stainless steel
Sensing Distances	Standard distance: shielded: 10 mm, unshielded: 15 mm Extended distance: shielded: 15 mm unshielded: 20 mm	M12: shielded: 2 mm unshielded: 4 mm M18: shielded: 5 mm unshielded: 8 mm M30: shielded: 10 mm unshielded: 15 mm	Standard distance: 2 mm	Standard distance: 2 mm Extended distance: 3 mm, 4 mm Triple distance: 6 mm	Standard distance: 5 mm Extended distance: 8 mm Triple distance: 10 mm
Output State	N.O.	N.O.	N.O.	N.O.; N.O. / N.C.	N. O.; N.O. / N.C.
Logic Output	NPN / PNP / Sink / Source	NPN / PNP	PNP	NPN / PNP	NPN / PNP
Connection Type	Axial cable / M12 connector	M12 connector	M8 / M12 connector	Axial Cable / M12 connector	Axial cable / M12 connector
Supply Voltage	10 to 30 VDC	15 to 30 VDC	10 to 36 VDC	10 to 30 VDC PMW-AP-1H: 10 to 36 VDC	10 to 30 VDC; PKW-AP-1H: 10 to 36 VDC
Switching Frequency	Standard distance shielded/unshielded: 2-wire: 150Hz, 3-wire: 200Hz. Extended distance shielded /unshielded: 2-wire and 3-wire: 150Hz	M12 shielded/unshielded, 3 wire: 800Hz M18 shielded: 3-wire: 400Hz unshielded: 3-wire: 300Hz M30 shielded/unshielded: 3 wire: 200Hz	Standard distance, shielded: 100Hz	Standard/extended distance: 2kHz Triple distance: 400Hz	Standard/extended distance: 1kHz Triple distance: 200Hz
Protection Degree	IEC-IP67	IEC-IP67	PEW-AP-1F: IEC-IP67 PEW-AP-1H: IEC-IP67 and IP68	Standard/extended distance: IEC-IP67/68 Triple distance: IEC-IP67 connector / IP68 (cable)	Standard/extended distance: IEC-IP67/68 Triple distance: IEC-IP67 connector / IP68 (cable)

Proximity Sensor Selection Guide



Specifications	PTW Stainless Steel DC	V Series AC	CR5 Rectangular DC	CR8 Rectangular DC	LF40 Rectangular DC
Description	30 mm inductive proximity sensors, DC, stainless steel	12 mm/18 mm/30 mm inductive proximity sensor, AC, metal	5 x 5 rectangular inductive proximity sensors, DC, metal	8 x 8 rectangular inductive proximity sensors, DC, metal	40 x 40 x 66 rectangular inductive proximity sensors, DC, plastic
Sensing Distances	PTW-A*-5: 20 mm PTW-AP-1: 10 mm	M12 models shielded: 2 mm Unshielded: 4 mm M18 models shielded: 5 mm Unshielded: 8 mm M30 models shielded: 10 mm unshielded: 15 mm	Standard: 0.8 mm Extended distance: 1.5 mm	Standard distance: shielded: 0 to 1.5mm Extended distance: shielded: 0 to 2mm Triple distance: shielded: 3mm	Shielded: 20mm Unshielded: 35mm
Output State	N.O.	N.O.	N.O.	N.O.	N.O.; N.O. / N.C. Complementary
Logic Output	PTW-A*-5: NPN / PNP PTW-AP-1: PNP	-	NPN / PNP	NPN / PNP	PNP
Connection Type	PTW-A*-5: Axial Cable / M12 connector PTW-AP-1: M12 connector	Axial cable / M12 connector	Axial cable / M8 connector	Axial cable / M8 connector	M12 connector
Supply Voltage	PTW-A*-5: 10 to 30 VDC; PTW-AP-1: 10 to 36 VDC	20 to 253 VAC, 50/60Hz	10 to 30 VDC	10 to 30 VDC	10 to 36 VDC
Switching Frequency	PTW-A*-5: 100Hz; PTW-AP-1: 50Hz	25Hz	Standard distance: 5kHz Extended distance: 3kHz	1kHz	Shielded: 100Hz Unshielded: 80Hz
Protection Degree	PTW-A*-5: IEC-IP67 (connector/ IP68 cable) PTW-AP-1: IEC-IP67, IP68	IEC-IP67	IEC-IP67	IEC-IP67	IEC-IP67



Specifications	DR10 Rectangular DC	APS4 Rectangular DC	CT Capacitive DC
Description	10 x 16 rectangular inductive prox sensor, DC, plastic	12 x 27 compact rectangular inductive prox, DC, plastic	30 mm capacitive proximity sensors, DC, metal
Sensing Distances	Shielded: 3 mm Unshielded: 6 mm	4 mm	Shielded: 2 to 15 mm Unshielded: 2 to 20 mm
Output State	N.O.	N.O.	N.C.
Logic Output	NPN/ PNP	NPN / PNP	NPN/ PNP
Connection Type	Axial cable/M8 connector	Axial cable	Axial cable
Supply Voltage	10 to 30 VDC	10 to 30 VDC	10 to 30 VDC
Switching Frequency	3kHz	200Hz	100Hz
Protection Degree	IEC-IP67	IEC-IP67	IEC-IP65

Proximity Sensor Selection Guide



Specifications	AE Analog Prox	AM Analog Prox	AK Analog Prox	AT Analog Prox
Description	Analog inductive proximity sensors, 8 mm, metal	Analog inductive proximity sensors, 12 mm, metal	Analog inductive proximity sensors, 18 mm, metal	Analog inductive proximity sensors, 30 mm, metal
Sensing Distance	4 mm	6 mm	10 mm	20 mm
Output	0 to 10VDC	0 to 5 VDC, 1-5mA / 0 to 10 VDC, 4 to 20mA	0 to 5 VDC, 1-5mA / 0 to 10 VDC, 4 to 20mA	0 to 5 VDC, 1-5mA / 0 to 10 VDC, 4 to 20mA
Supply Voltage	15 to 30 VDC	10 to 30 VDC / 15 to 30 VDC	10 to 30 VDC / 15 to 30 VDC	10 to 30 VDC / 15 to 30 VDC
Connection Type	Axial cable / M8 connector	Axial cable / M12 connector	Axial cable / M12 connector	Axial cable / M12 connector
Protection Degree	IEC-IP67	IEC-IP67	IEC-IP67	IEC-IP67



Specifications	SU Ultrasonic Sensor	TU Ultrasonic Sensor	UHZ Ultrasonic Sensor
Description	Ultrasonic Sensor, 18mm, plastic, DC and analog output models	Ultrasonic Sensor, 30mm, plastic DC and analog output models	Ultrasonic Sensor, 30 mm x 20 mm, plastic, thru-beam models
Sensing Distances	100 to 600mm 200 to 1500mm	300 to 2500mm	300 mm
Output	DC models: PNP N.O. Analog models: 0-10VDC	DC models: PNP N.O. Analog models: 0-10VDC	PNP/NPN, N.O./N.C.
Supply Voltage	DC models: 15-30VDC Analog models: 18-30VDC	19-30VDC	18-30VDC
Connection Type	Axial cable/M12 connector	M12 connector	2 meter Axial cable
Protection Degree	IEC-IP67	IEC-IP67	IEC-IP67

Proximity Sensors Selection Guide



Specifications	PFM Series DC	PFK Series DC	PFT Series DC	VF Series AC
Description	Food and Beverage Inductive Proximity Sensors 12 mm stainless steel, DC	Food and Beverage Inductive Proximity Sensors 18 mm stainless steel, DC	IP69K-rated Inductive Proximity Sensors 30 mm stainless steel, DC	IP69K-rated Inductive Proximity Sensors 18 mm/30 mm stainless steel, AC
Sensing Distances	Standard Shielded: 2 mm Unshielded: 4 mm Extended Shielded: 4 mm Unshielded: 7 - 8 mm	Standard Shielded: 5mm Unshielded: 8 mm Extended Shielded: 8 mm Unshielded: 12 mm	Shielded: 14 - 15 mm Unshielded: 22 mm	18 mm models: Shielded: 5 mm Unshielded: 12 mm 30 mm models: Shielded: 14 mm Unshielded: 22 mm
Output State	N.O./N.C. selectable; N. O.		N. O.	N. O.
Logic Output	NPN/PNP	NPN/PNP	PNP	-
Connection Type	M12 connector			1/2" micro AC
Supply Voltage	N.O. only: 10 to 36 VDC; N.O./N.C.: 10 to 30 VDC		10 to 36 VDC	20 to 140 AC/DC, 47 to 63 Hz AC
Switching Frequency	N.O. only - 800Hz N.O./N.C. - 2000Hz	N.O. only - Shielded: 600Hz Unshielded: 300Hz N.O./N.C. - 1500 Hz	N.O. only - Shielded: 50Hz Unshielded: 100Hz	AC - 25Hz DC 18 mm - 300Hz DC 30 mm - 100Hz
Protection Degree	IEC IP68, IP69K			



Specifications	MAF Series DC
Description	IP69K-rated Magnetic Proximity Sensors 12 mm or 18 mm stainless steel, DC
Sensing Distances	12 mm housing - 60 mm (with AW-MAG) 18 mm housing - 70 mm (with AW-MAG)
Output State	N.O.
Logic Output	PNP
Connection Type	M12 connector
Supply Voltage	10 to 30 VDC
Switching Frequency	5kHz
Protection Degree	IEC IP68, IP69K



We sell good proximity sensors at great prices – and we back them up!

AutomationDirect Lifetime Warranty

Registration required

For inductive proximity sensors sold to the Original User for the lifetime of the original application.

The following terms apply to the LIFETIME WARRANTY in addition to the General Terms:

1. This warranty is available only to AUTOMATIONDIRECT's authorized Value Added Resellers and to the Original User. In the event the ownership of the product is transferred to a person, firm, or corporation other than the Original User, this WARRANTY shall terminate.
2. This WARRANTY is applicable only to the original installation of the product. In the event the machinery, equipment, or production line to which the product is connected, or on which it is installed, is substituted, changed, moved or replaced, the WARRANTY shall terminate.
3. This WARRANTY shall be valid only if the product was purchased by the Original User from AUTOMATIONDIRECT, or from an authorized AUTOMATIONDIRECT Value Added Reseller, or was an integral part of a piece of machinery and equipment obtained by the Original User from an original equipment manufacturer, where the part was purchased by the original equipment manufacturer directly from AUTOMATIONDIRECT or from an authorized AUTOMATIONDIRECT Value Added Reseller.

Purchaser's remedies

This remedy shall apply to all WARRANTIES. If an AUTOMATIONDIRECT Value Added Reseller desires to make a WARRANTY claim, the Value Added Reseller shall, if requested by AUTOMATIONDIRECT, ship the product to AUTOMATIONDIRECT's facility in Cumming, GA postage or freight prepaid. If the Original User desires to make a WARRANTY Claim, they shall notify the authorized Value Added Reseller from whom it was purchased or, if purchased directly from AUTOMATIONDIRECT, shall notify AUTOMATIONDIRECT and, if requested by AUTOMATIONDIRECT, ship the Product to AUTOMATIONDIRECT's facility in Cumming, GA postage or freight prepaid. AUTOMATIONDIRECT shall, at its option, take any of the following two courses of action for any products which AUTOMATIONDIRECT determines are defective in materials or workmanship.

1. Repair or replace the product and ship the product to the Original User or to the authorized AUTOMATIONDIRECT Value Added Reseller, postage or freight prepaid; or
2. Repay to the Original User that price paid by the Original User; provided that if the claim is made under the lifetime warranty, and such product is not then being supplied by AUTOMATIONDIRECT, then the amount to be repaid by AUTOMATIONDIRECT to the Original User shall be reduced according to the following schedule:

Number of Years Since Date of Purchase by Original User	Percent of Original Purchase Price To Be Paid by AutomationDirect
10	50 percent
15	25 percent
20	10 percent
More than 20	5 percent

REMEDIES OF PURCHASER'S AND VALUE ADDED RESELLERS SHALL BE LIMITED EXCLUSIVELY TO THE RIGHT OF REPLACEMENT, REPAIR OR REPAYMENT AS PROVIDED ABOVE AND DOES NOT INCLUDE ANY LABOR COST OR REPLACEMENT AT ORIGINAL USER'S SITE. AUTOMATIONDIRECT.COM SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF ANY WARRANTY, EXPRESSED OR IMPLIED, APPLICABLE TO THE PRODUCT, INCLUDING WITHOUT LIMITATION, ANY DAMAGES RESULTING FROM PROPERTY DAMAGE, PERSONAL INJURY OR BUSINESS INTERRUPTION, EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

Inductive proximity sensors warranty form may be obtained online at:

<http://www.automationdirect.com/static/specs/proxwarranty.pdf>