

Inductive Proximity Sensors

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The MyProx is a field programmable and adaptable inductive proximity sensor with advanced sensing technology. This technology utilizes an exclusive, embedded micro-processor, allowing the MyProx to perform unique sensing functions at extended sensing ranges.

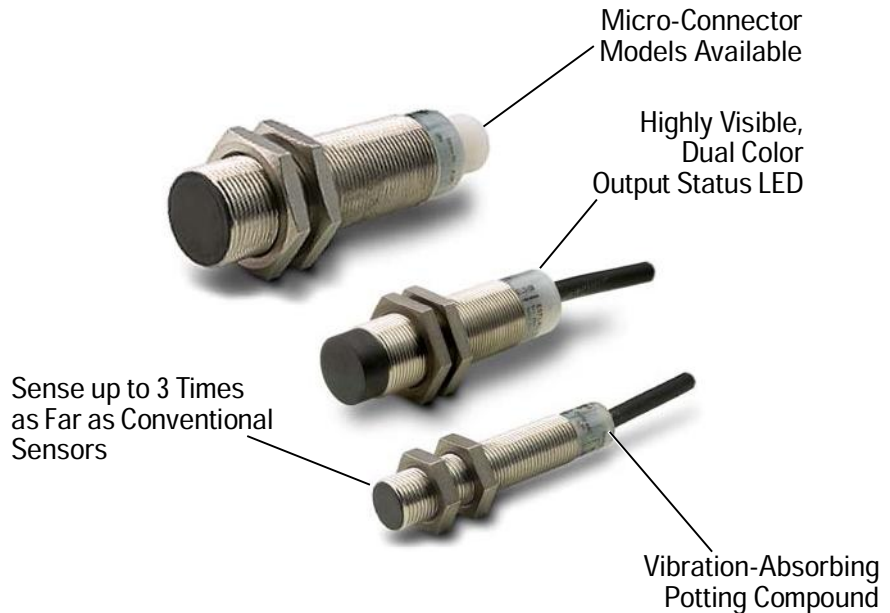
These capabilities include programmable attributes such as sensing range (adjustable to the nearest tenth of a millimeter), output types (autoconfiguration, NPN or PNP), contact types (normally open or normally closed), response time and noise immunity (from 10 to 20 volts per meter). No other inductive sensor on the market offers such extensive programmability.

Furthermore, additional programmable features include: band sensing, which allows the sensor to detect only within a specified distance or band; position sensing, enabling target detection along multiple axes; and background metal rejection, which tells the sensor to ignore side-ground, foreground or background metal objects.

With the addition of the new programming tools including the Remote Programmer, Tray Programmer, Remote Programming Device and the new and improved MyProx Programming Software for Microsoft Windows® and Windows® Mobile devices customizing your MyProx Standard sensor has never been easier.

The MyProx offers the most flexibility in both design and manufacturing. This means you may order the MyProx Standard pre-configured at the factory to your unique specification. Or program it to adapt it to your environment at your site, reducing inventory and costly downtime.

Adaptable Inductive Proximity Sensor to Solve Your Unsolvability Applications



Product Features

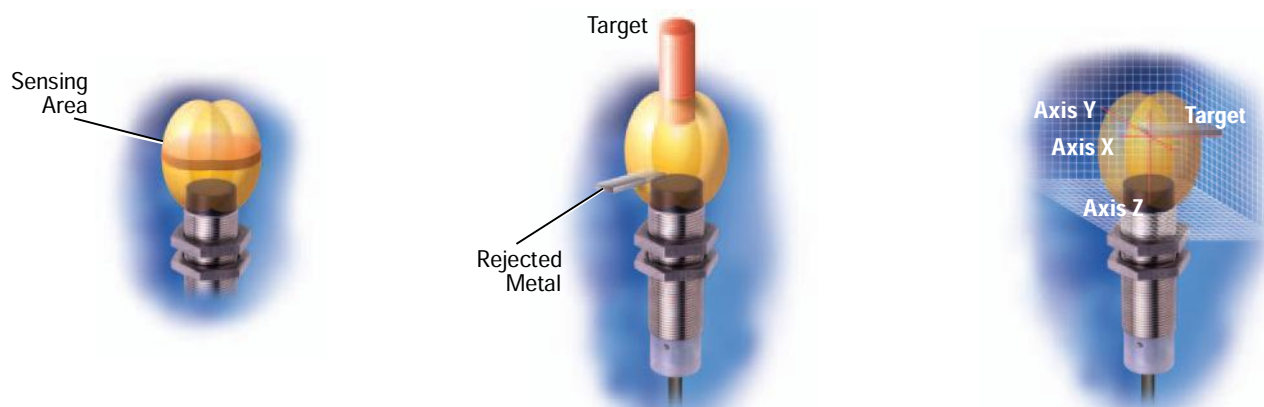
- ┐ New sensing and embedded micro-processor technology performs band sensing, position sensing, background rejection and allows for an adjustable sensing range
- ┐ Easy-to-use programming devices and new and improved software makes programming simple
- ┐ Auto-configure output allows for automatic NPN or PNP
- ┐ Reliably senses metal targets at up to three times the range of conventional shielded or unshielded inductive proximity sensors
- ┐ Field programmability reduces inventory and costly downtime
- ┐ Robust stainless steel tubes, shock-resistant front caps, polycarbonate end bells, and impact-absorbing potting compound are resistant to physical and environmental abuse in high temperature, high pressure washdown and high shock and vibration applications
- ┐ Noise immunity of 10 – 20 volts per meter eliminates problems associated with electrical noise

Typical Applications

- ┐ Automotive
- ┐ Machine Tool
- ┐ Material Handling



Unless otherwise noted, the products contained in this document are not designed or intended for use in human safety applications.



Band Sensing

The MyProx Standard senses within the band you determine.

Background Rejection

The MyProx Standard ignores metal objects in the side, fore- and back-ground.

Position Sensing

The MyProx Standard detects position changes in multiple axes.

Model Selection — MyProx Standard

		Operating Voltage	Sensing Range	Shielding	Output Type	Connection Type 	Catalog Number
2-Wire Sensors							
12 mm Diameter  Standard Range  Extended Range	20 – 132V AC	4 mm	Shielded	N.O. Default Setting	3-pin Micro AC Connector	E59-F12A105A01-A1 	
				N.C. Default Setting		E59-F12A105A01-A2 	
				N.O. Default Setting	3-pin Micro AC Pigtail	E59-F12A105A01P-A1 	
				N.C. Default Setting		E59-F12A105A01P-A2 	
				N.O. Default Setting	3-pin Mini AC Pigtail	E59-F12A105A01PB-A1 	
				N.C. Default Setting		E59-F12A105A01PB-A2 	
				N.O. Default Setting	2-meter Cable	E59-F12A105C02-A1	
				N.C. Default Setting		E59-F12A105C02-A2	
		10 mm	Unshielded	N.O. Default Setting	3-pin Micro AC Connector	E59-F12C110A01-A1 	
				N.C. Default Setting		E59-F12C110A01-A2 	
				N.O. Default Setting	3-pin Micro AC Pigtail	E59-F12C110A01P-A1 	
				N.C. Default Setting		E59-F12C110A01P-A2 	
				N.O. Default Setting	3-pin Mini AC Pigtail	E59-F12C110A01PB-A1 	
				N.C. Default Setting		E59-F12C110A01PB-A2 	
				N.O. Default Setting	2-meter Cable	E59-F12C110C02-A1	
				N.C. Default Setting		E59-F12C110C02-A2	
18 mm Diameter  Standard Range  Extended Range		8 mm	Shielded	N.O. Default Setting	3-pin Micro AC Connector	E59-F18A109A01-A1 	
				N.C. Default Setting		E59-F18A109A01-A2 	
				N.O. Default Setting	3-pin Micro AC Pigtail	E59-F18A109A01P-A1 	
				N.C. Default Setting		E59-F18A109A01P-A2 	
				N.O. Default Setting	3-pin Mini AC Pigtail	E59-F18A109A01PB-A1 	
				N.C. Default Setting		E59-F18A109A01PB-A2 	
				N.O. Default Setting	2-meter Cable	E59-F18A109C02-A1	
				N.C. Default Setting		E59-F18A109C02-A2	
		18 mm	Unshielded	N.O. Default Setting	3-pin Micro AC Connector	E59-F18C118A01-A1 	
				N.C. Default Setting		E59-F18C118A01-A2 	
				N.O. Default Setting	3-pin Micro AC Pigtail	E59-F18C118A01P-A1 	
				N.C. Default Setting		E59-F18C118A01P-A2 	
				N.O. Default Setting	3-pin Mini AC Pigtail	E59-F18C118A01PB-A1 	
				N.C. Default Setting		E59-F18C118A01PB-A2 	
				N.O. Default Setting	2-meter Cable	E59-F18C118C02-A1	
				N.C. Default Setting		E59-F18C118C02-A2	

For cable lengths longer than 2 meters, add an **S** followed by the length in meters, e.g. E59-F18A108C02-D1S5 (5 meters).

See listing of compatible connector cables on **Page 4**.

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Model Selection — MyProx Standard (Continued)

	Operating Voltage	Sensing Range	Shielding	Output Type	Connection Type 	Catalog Number
2-Wire Sensors (Continued)						
30 mm Diameter  Standard Range  Extended Range	20 – 132V AC	15 mm	Shielded	N.O. Default Setting	3-pin Micro AC Connector	E59-F30A115A01-A1 
				N.C. Default Setting		E59-F30A115A01-A2 
				N.O. Default Setting	3-pin Micro AC Pigtail	E59-F30A115A01P-A1 
				N.C. Default Setting		E59-F30A115A01P-A2 
				N.O. Default Setting	3-pin Mini AC Pigtail	E59-F30A115A01PB-A1 
				N.C. Default Setting		E59-F30A115A01PB-A2 
				N.O. Default Setting	2-meter Cable	E59-F30A115C02-A1
				N.C. Default Setting		E59-F30A115C02-A2
		29 mm	Unshielded	N.O. Default Setting	3-pin Micro AC Connector	E59-F30C129A01-A1 
				N.C. Default Setting		E59-F30C129A01-A2 
				N.O. Default Setting	3-pin Micro AC Pigtail	E59-F30C129A01P-A1 
				N.C. Default Setting		E59-F30C129A01P-A2 
				N.O. Default Setting	3-pin Mini AC Pigtail	E59-F30C129A01PB-A1 
				N.C. Default Setting		E59-F30C129A01PB-A2 
				N.O. Default Setting	2-meter Cable	E59-F30C129C02-A1
				N.C. Default Setting		E59-F30C129C02-A2
3-Wire Sensors 12 mm Diameter  Standard Range  Extended Range 18 mm Diameter  Standard Range  Extended Range 30 mm Diameter  Standard Range  Extended Range	6 – 48V DC	4 mm	Shielded	N.O. Default Setting	4-pin Micro DC Connector	E59-F12A105D01-D1 
				N.C. Default Setting		E59-F12A105D01-D2 
				N.O. Default Setting	4-pin Micro DC Pigtail	E59-F12A105D01P-D1 
				N.C. Default Setting		E59-F12A105D01P-D2 
				N.O. Default Setting	2-meter Cable	E59-F12A105C02-D1
				N.C. Default Setting		E59-F12A105C02-D2
		10 mm	Unshielded	N.O. Default Setting	4-pin Micro DC Connector	E59-F12C110D01-D1 
				N.C. Default Setting		E59-F12C110D01-D2 
				N.O. Default Setting	4-pin Micro DC Pigtail	E59-F12C110D01P-D1 
				N.C. Default Setting		E59-F12C110D01P-D2 
				N.O. Default Setting	2-meter Cable	E59-F12C110C02-D1
				N.C. Default Setting		E59-F12C110C02-D2
		8 mm	Shielded	N.O. Default Setting	4-pin Micro DC Connector	E59-F18A108D01-D1 
				N.C. Default Setting		E59-F18A108D01-D2 
				N.O. Default Setting	4-pin Micro DC Pigtail	E59-F18A108D01P-D1 
				N.C. Default Setting		E59-F18A108D01P-D2 
				N.O. Default Setting	2-meter Cable	E59-F18A108C02-D1
				N.C. Default Setting		E59-F18A108C02-D2
		16 mm	Unshielded	N.O. Default Setting	4-pin Micro DC Connector	E59-F18C116D01-D1 
				N.C. Default Setting		E59-F18C116D01-D2 
				N.O. Default Setting	4-pin Micro DC Pigtail	E59-F18C116D01P-D1 
				N.C. Default Setting		E59-F18C116D01P-D2 
				N.O. Default Setting	2-meter Cable	E59-F18C116C02-D1
				N.C. Default Setting		E59-F18C116C02-D2
		15 mm	Shielded	N.O. Default Setting	4-pin Micro DC Connector	E59-F30A115D01-D1 
				N.C. Default Setting		E59-F30A115D01-D2 
				N.O. Default Setting	4-pin Micro DC Pigtail	E59-F30A115D01P-D1 
				N.C. Default Setting		E59-F30A115D01P-D2 
				N.O. Default Setting	2-meter Cable	E59-F30A115C02-D1
				N.C. Default Setting		E59-F30A115C02-D2
		25 mm	Unshielded	N.O. Default Setting	4-pin Micro DC Connector	E59-F30C129D01-D1 
				N.C. Default Setting		E59-F30C129D01-D2 
				N.O. Default Setting	4-pin Micro DC Pigtail	E59-F30C129D01P-D1 
				N.C. Default Setting		E59-F30C129D01P-D2 
				N.O. Default Setting	2-meter Cable	E59-F30C129C02-D1
				N.C. Default Setting		E59-F30C129C02-D2

 For cable lengths longer than 2 meters, add an **S** followed by the length in meters, e.g. E59-F18A108C02-D1S5 (5 meters).

 See listing of compatible connector cables on **Page 4**.

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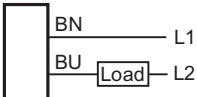
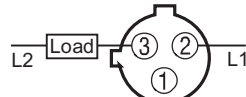
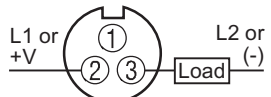
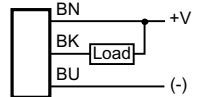
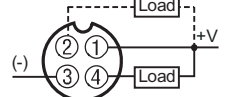
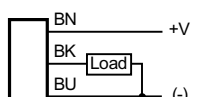
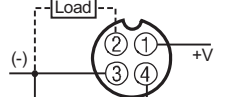
Model Selection — Compatible Connector Cables

	Voltage Style	Number of Pins	Gauge	Length	Catalog Number			Pin Configuration/Wire Colors (Face View Female Shown)
					PVC Jacket	PUR Jacket	IRR PUR Jacket	
Standard Cables — Micro Style								
 Micro Style Straight Female	AC	3-pin 3-wire	22 AWG	2 m (6 feet)	CSAS3F3CY2202	CSAS3F3RY2202	—	 1-Green 2-Red/Black 3-Red/White
	DC	4-pin 4-wire	22 AWG	2m (6 feet)	CSDS4A4CY2202	CSDS4A4RY2202	CSDS4A4IO2202	 1-Brown 2-White 3-Blue 4-Black
	Voltage Style	Number of Pins	Gauge	Length	Catalog Number		Pin Configuration/Wire Colors (Face View Female Shown)	

Model Selection — Accessories

	Description	Catalog Number
	Remote Programmer used to program MyProx sensors one-at-a-time. Provides a connection between the computer and the sensor. Requires serial port on computer.	E59RP1
	Step-by-step programming software required for programming MyProx. Compatible with Microsoft Windows® and Windows® Mobile devices.	E59SW1

Wiring Diagrams (Pin numbers are for reference, rely on pin location when wiring)

Operating Voltage	Output	Cable Models	Connector Models (Face View Male Shown)	
			Micro	Mini
2-Wire Sensors				
20 – 132V AC	N.O. and N.C.			
3-Wire Sensors				
6 – 48V DC	N.O. and N.C. (NPN)			—
	N.O. and N.C. (PNP)			—

Ⓜ Note: Pin numbers 2 and 4 are internally jumpered together. Either pin may be used.

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Specifications — MyProx Standard

Description	2-Wire Sensors	3-Wire Sensors
Input Voltage	20 – 132V AC	6 – 48V DC
Load Current	5 – 500 mA, 5 – 250 mA above 50°C	≤500 mA @ 6 – 30V DC; ≤300 mA @ 32 – 48V DC
Leakage Current	1.7 mA maximum, 1.4 mA nominal	≤150 µA
Voltage Drop	<10V AC	≤2.5V DC
Burden Current	—	≤15 mA
Protection	None	Auto Reset
Switching Hysteresis	< 15% Rated Sensing Distance	
Repeat Accuracy	Shielded models: < 1% Sensing Distance; Unshielded models: < 3% Sensing Distance	
Surge Capacity	3A/30 ms	—
Temperature Range	-25° to 70°C (-13 to 158 F)	
Material of Construction	303 Stainless steel; End bells: Polycarbonate; Face caps: Ryton®; Cable: AWM Style 20387 (PVC) [2]	
Vibration and Shock	Vibration: 10 to 55 Hz, 1 mm Amplitude, IEC 60068-2-6; Shock: 30g, 11 ms per IEC 68-2-27	
Indicator LED	360° viewable LED	
Enclosure Ratings	IP67 (NEMA 4, 4X, 6, 6P, 12 and 13 (IP67)) [4]	

Response Time [2]	2-Wire Sensors	3-Wire Sensors					
	All 2-Wire Models	Shielded			Unshielded		
		12 mm	18 mm	30 mm	12 mm	18 mm	30 mm
Factory Default Mode (20 V/m)	Shipped in "Side by Side Mode" by default	580 Hz	390 Hz	240 Hz	300 Hz	150 Hz	90 Hz
Side by Side [2]	30 Hz (10 V/m)	50 Hz (20 V/m)					
High Noise Immunity Mode	10 Hz (>20 V/m)	10 Hz (>20 V/m)					

[1] MyProx Standard may be programmed to perform in Side by Side or High Noise immunity applications using the MyProx Remote Programmer (E59RP1) & Programming Software (E59SW1).

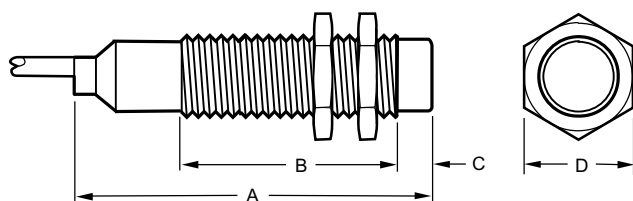
[2] Use the Side by Side response time parameter when mounting MyProx Standard closer than 7x its maximum sensing range. Refer to the Software Installation & Usage Guide (P50228) for specific mounting details.

[3] Ryton® is a registered trademark of Phillips Chemical (division of Phillips Petroleum).

[4] Our products conform to NEMA tests as indicated, however, some severe washdown applications can exceed these NEMA test specifications.

Approximate Dimensions — MyProx Standard in Inches (mm)

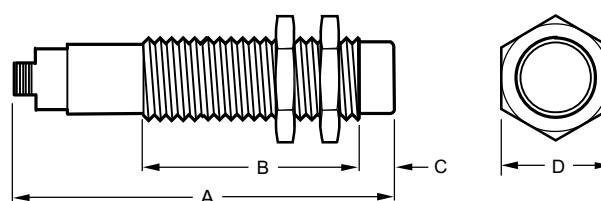
Cable Models



Cable Models

Size	Shielding	A	B	C	D
12 mm	Shielded	2.46 (62.4)	1.98 (50.3)	0.02 (0.5)	0.67 (17)
	Unshielded	2.46 (62.4)	1.64 (41.6)	0.36 (9)	0.67 (17)
18 mm	Shielded	2.54 (64.5)	2.00 (50.9)	0.02 (0.5)	0.94 (24)
	Unshielded	2.54 (64.5)	1.47 (37.4)	0.55 (14)	0.94 (24)
30 mm	Shielded	2.74 (69.6)	2.13 (54.1)	0.03 (0.75)	1.41 (36)
	Unshielded	2.74 (69.6)	1.41 (35.8)	0.75 (19)	1.41 (36)

Micro-Connector Models



Micro-Connector Models

Size	Shielding	A	B	C	D
12 mm	Shielded	2.71 (68.7)	1.98 (50.3)	0.02 (0.5)	0.67 (17)
	Unshielded	2.71 (68.7)	1.64 (41.6)	0.36 (9)	0.67 (17)
18 mm	Shielded	2.73 (69.3)	2.00 (50.9)	0.02 (0.5)	0.94 (24)
	Unshielded	2.73 (69.3)	1.47 (37.4)	0.55 (14)	0.94 (24)
30 mm	Shielded	2.92 (74.1)	2.13 (54.1)	0.03 (0.75)	1.41 (36)
	Unshielded	2.92 (74.1)	1.41 (35.8)	0.75 (19)	1.41 (36)