

# 873P Ultrasonic Sensors

An Enhanced Line of Sensing Solutions with IO-Link Technology

## Features and Benefits

- Pushbutton teach process and multiple LED indicators simplify programming of sensor outputs and set points
- Sensing up to 6 m (19.7 ft)
- Synchronization on select models prevents crosstalk
- Four output modes:
  - Single PNP
  - Dual PNP
  - Analog Current or Voltage
  - Dual PNP with Analog Current or Voltage
- IP67-rated 18 mm and 30 mm PBT plastic threaded barrels for use in tough industrial applications
- Easy sound beam modification and filter function for measuring non-static targets
- Lockout feature prevents tampering or inadvertent re-programming
- Compatible with both standard I/O and IO-link modes

### What is IO-Link?

IO-Link is a worldwide open-standard peer-to-peer serial communication protocol (IEC 61131-9) that allows sensors to easily integrate into The Connected Enterprise.

Benefits of IO-Link technology include:

- Reduced inventory and operating costs
- Increased uptime/productivity
- Simplified design, installation, setup and maintenance
- Enhanced flexibility and scalability



 **IO-Link**

## Versatile Solution Incorporating a Harsh-duty Design with a Simple Setup

The Allen-Bradley® 873P ultrasonic sensors, now available as a smart solution, address the challenges of a wide range of industries and applications. The 873P is also a smart sensing solution thanks to embedded IO-Link functionality. IO-Link allows sensors to easily integrate into The Connected Enterprise, delivering data from the sensor directly into a control system to help minimize downtime and increase productivity.

With a simplified push-button setup, or Studio 5000® Add-on-Profile (AOP), these enhanced 873P sensors are easier to use and are suitable for an even broader range of applications. Setpoints and output function (window or single setpoint operation) are selected via the pushbutton and are protected by a lockout feature that prevents tampering or inadvertent re-programming. Multiple status LEDs also assist in setup and troubleshooting. Select models also feature synchronization to prevent crosstalk in multiple sensor installations.

Consisting of IP67-rated 18 mm and 30 mm diameter models with analog, digital and combination analog/digital output configurations, the Allen-Bradley 873P family offers sensing ranges from 400 mm to 6 meters for optimal application flexibility.

And when connected to an IO-Link master the 873P can take advantage of advanced functionality including real-time diagnostics, Automatic Device Configuration (ADC) and multiple job-specific profiles. Not only do these features make the 873P sensor ideal for a broad range of challenging applications, but they help simplify product selection and reduce stocking costs.





## Product Selection

Sensing Range [mm (in.)]	Output Type	Catalog Number
50 - 400 mm (1.97...15.75 in.)	(1) PNP	873P-D18P1-400-D4
	(2) PNP	873P-D18P2-400-D5
	Analog Current	873P-D18AI-400-D4
	Analog Voltage	873P-D18AV-400-D4
100 - 900 mm (3.94...35.43 in.)	(1) PNP	873P-D18P1-900-D4
	(2) PNP	873P-D18P2-900-D5
	Analog Current	873P-D18AI-900-D4
	Analog Voltage	873P-D18AV-900-D4
	Analog Current with (2) PNP, IO-Link	873P-D18AIP-900-D5
200 - 2500 mm (7.87...98.42 in.)	(1) PNP	873P-D30P1-2500-D4
	(2) PNP	873P-D30P2-2500-D5
	Analog Current	873P-D30AI-2500-D4
	Analog Voltage	873P-D30AV-2500-D4
	Analog Current with (2) PNP, IO-Link	873P-D30AIP-2500-D5
	Analog Voltage with (2) PNP	873P-D30AVP-2500-D5
250 - 3500 mm (9.84...137.80 in.)	(1) PNP	873P-D30P1-3500-D4
	(2) PNP	873P-D30P2-3500-D5
	Analog Current	873P-D30AI-3500-D4
	Analog Voltage	873P-D30AV-3500-D4
	Analog Current with (2) PNP, IO-Link	873P-D30AIP-3500-D5
	Analog Voltage with (2) PNP	873P-D30AVP-3500-D5
350 - 6000 mm (13.78...236.22 in.)	(1) PNP	873P-D30P1-6000-D4
	(2) PNP	873P-D30P2-6000-D5
	Analog Current	873P-D30AI-6000-D4
	Analog Voltage	873P-D30AV-6000-D4
	Analog Current with (2) PNP, IO-Link	873P-D30AIP-6000-D5
	Analog Voltage with (2) PNP	873P-D30AVP-6000-D5

## Accessories

Refer to catalog page for full product selection.

	Description	Catalog Number		Description	Catalog Number
Mounting Brackets	Zinc-Plated Right Angle (M18)	871A-BRN18	Connectivity	Zinc 4-pin DC micro, 2 m (6.5 ft) Cordset	889D-F4AC-2
	Zinc-Plated Right Angle (M30)	871A-BRN30		IO-Link Master Module for POINT I/O	1734-4IOL
	Swivel/Tilt Style (M18)	60-2649		ArmorBlock IO-Link Master	1732E-8IOLM12R
	Swivel/Tilt Style (M30)	60-2639			

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