

871P VersaCube Inductive Proximity Sensors



General Purpose, Automotive and Welding Applications

Features

- 10...30V DC operating voltage
- 4-Wire complementary N.O. and N.C. outputs (PNP or NPN)
- Long sensing ranges, shielded 20 mm and unshielded 40 mm configurations, flush and non-flush mounting
- Unique and high-visibility status and signal strength indication
- Equal/Factor-1 sensing for all metals
- Weld field immune (WFI) electronics
- Optional heavy duty metal base or ToughCoat Finish™ for welding applications
- 2-Piece design with flexible mounting capabilities
- Reverse polarity, short circuit, false pulse, noise and overload protections

Benefits

- Cost-effective for a wide range of general purpose, welding and hygienic applications
- Enhanced feature set with increased performance
- Added mounting features and options for new and drop-in retrofit applications
- Easy viewing with large indicators for status and diagnostics
- Quick installation with variable position-sensing face and mounting options
- Detect different materials – iron, stainless steel, brass, aluminum, copper at the same rated sensing distance without a correction factor
- ToughCoat Finish on sensor face resists weld slag splatter



Long-Range Sensing, Versatility and Durability

Rockwell Automation is pleased to introduce the new Allen-Bradley® 871P VersaCube® inductive proximity sensor. These new 4-Wire DC sensors integrate both standard and specialty features into a redesigned 40 mm rectangular housing suited for an even wider range of general purpose and welding applications.

The new 871P WFI VersaCube models provide a level of performance far beyond that of similar products. The VersaCube offers extended range, complementary (N.O. + N.C.) outputs and equal sensing distance for all metals. The VersaCube features a new high-visibility status indicator that can be seen from a long distance at 360°. When coupled with the unique mounting flexibility of the VersaCube, installation, alignment and troubleshooting are greatly simplified.

For the most demanding applications, the 871P VersaCube can be ordered with a heavy-duty metal base, which provides enhanced strength and durability, or with ToughCoat Finish, our patented weld-slag resistant coating applied to the sensing face. ToughCoat Finish prevents the adhesion and accumulation of weld splatter, as well as the associated problems – including physical damage or “burn-through” to the internal components. The result is a sensor that lasts considerably longer than its standard weld field immune counterparts.

LISTEN.
THINK.
SOLVE.™

VersaCube with Standard Zinc Bracket and Plastic Base



VersaCube with Optional Stainless Steel L-Bracket



VersaCube with Standard Zinc Bracket and Heavy Duty Metal Base



* Models shown with optional Quick Disconnect Cordset (not included)

Product Selection

Inductive Proximity Sensors: General Purpose / Heavy Duty / Weld-Field Immune / ToughCoat Finish

Head Size	Weld-Field Immune	Nominal Sensing Distance [mm (in.)]	Shielded	Output	Cat. No.		
					Micro QD Style		
					With Standard Zinc Mounting Bracket and Plastic Base	Mounting Bracket Not Included	With Standard Zinc Mounting Bracket and Heavy Duty Metal Base
40 mm	Yes	20 (0.79)	Yes	PNP	871P-D20BP40-D4	871P-D20BP40X-D4	871P-DP20BP40-D4
				NPN	871P-D20BN40-D4	871P-D20BN40X-D4	–
		40 (1.57)	No	PNP	871P-D40BP40-D4	871P-D40BP40X-D4	871P-DP40BP40-D4
				NPN	871P-D40BN40-D4	871P-D40BN40X-D4	–
	Yes w/ToughCoat Weld Slag Finish ¹	20 (0.79)	Yes	PNP	871P-DV20BP40-D4	871P-DV20BP40X-D4	871P-DPV20BP40-D4
				PNP	871P-DV40BP40-D4	871P-DV40BP40X-D4	871P-DPV40BP40-D4

Note: Recommended Standard QD Cordset (-2 = 2 m (6.5 ft) / Standard PVC: 889D-F4AC-2 / ToughWeld™ CPE: 889D-F4WE-2

1. 871P is available with ToughCoat Finish on the sensor face. This is a proprietary material which resists the adhesion and accumulation of weld-slag particles thereby extending sensor performance and life.

Mounting Accessories

Description	Cat. No.
Standard zinc mounting bracket	871A-PBR
Stainless steel mounting L-bracket and 22 mm plastic mounting nut	871A-BRS59
Plastic mounting nut, 22 mm	871T-N9

Learn more about 871P VersaCube Inductive Proximity Sensors at ab.com.

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