

# WorldProx 3- or 4-Wire DC Proximity Sensors



Cost-Effective and Comprehensive Solutions for a Wide Range of Non-Contact Presence Sensing Applications

## Features and Benefits

- Cost-effective construction with durable plastic face
- Durable nickel-plated brass barrel
- Standard, extended and long range detection (limited offering of 3x long range sensing versions – consult publication number: 872C-PP002A-EN-P for further details).
- Standard length and short body models available for space-challenged applications
- Multiple connection options:
  - 2, 5 or 10 meter PVC or PUR cable
  - Micro (M12) and Pico (M8) quick-disconnect styles
  - 0.2 m, 0.5 m or 1 m Pigtail (short PVC cable with Micro QD)
- PNP or NPN, normally open (N.O.) and normally closed (N.C.) output types in shielded and unshielded models
- 8, 12, 18 and 30 mm IP67 (IEC 529) barrels with highly visible output indication
- False pulse, reverse polarity, overload, transient noise and short circuit protections
- -25 to 70 °C (-13 to 158 °F) operating temperature range
- cULus listed and CE marked



Rockwell Automation offers a full portfolio of inductive proximity sensors that provide economical solutions with complete application flexibility. The Allen-Bradley® WorldProx™ is recognized as the industry's "go-to" inductive proximity sensor for applications requiring a flexible, robust and economical solution. The latest enhancements to the ever-expanding WorldProx line bring additional features to the industry's broadest portfolio of general purpose sensing solutions.

With an enhanced and diverse range of barrel sizes, sensing distances, output types and connection options, WorldProx is our most complete – and fully configurable – line-up of proximity sensors.

The WorldProx 3-wire DC sensor family offers standard and short body lengths in a nickel-plated brass housing with standard and 2x extended sensing distance versions that help solve a wide range of OEM machine and automated sensing applications. There are PNP or NPN, N.O. and N.C. output types in shielded and unshielded models, along with multiple cable and quick disconnect options. They are easy to install and provide diagnostics for reliable operation and maintenance. WorldProx sensors meet IP67 enclosure standards and are UL recognized and CE marked for all applicable directives.

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## Product Selection

### 3-Wire DC Standard Barrel

Barrel Diameter	Nominal Sensing Distance [mm (in.)]	Shielded	Output Configuration	Switching Frequency [Hz]	Housing Length [mm (in.)]	Thread Length [mm (in.)]	Connection Type *	Cat. No.
6.5 mm, smooth	3 (0.12)	Yes	N.O./PNP	1000	66.0 (2.59)	-	Micro QD	872C-M3NP7-D4
8 mm	2 (0.08)	Yes		2500	58.7 (2.31)	27.7 (1.09)		872C-D2NP8-D4
	3 (0.12)	No			62.7 (2.47)			872C-D3NP8-D4
	3 (0.12)	Yes			58.7 (2.31)			872C-M3NP8-D4
	4 (0.16)	No			62.0 (2.44)			872C-N4NP8-D4
	6 (0.23)	No		500	66.0 (2.59)	40.0 (1.57)		872C-N6NP8-D4
12 mm	3 (0.12)	Yes		1300	64.3 (2.53)	38.1 (1.57)		872C-D3NP12-D4
	4 (0.16)	No			72.4 (2.85)			872C-D4NP12-D4
	4 (0.16)	Yes			64.3 (2.53)			872C-M4NP12-D4
	8 (0.31)	No			72.4 (2.85)			872C-N8NP12-D4
	6 (0.23)	Yes		800	60.0 (2.36)	40.0 (1.57)		872C-M6NP12-D4
	19 (0.39)	No		400	60.0 (2.36)	38.1 (1.50)		872C-N10NP12-D4
18 mm	5 (0.20)	Yes		1500	65.5 (2.58)			872C-D5NP18-D4
	8 (0.31)	No			75.5 (2.97)			872C-D8NP18-D4
	8 (0.31)	Yes			65.5 (2.58)			872C-M8NP18-D4
	12 (0.47)	No			75.5 (2.97)			872C-N12NP18-D4
	12 (0.47)	Yes		500	63.5 (2.5)	42.0 (1.65)		872C-M12NP18-D4
	20 (0.79)	No		200	63.5 (2.5)	32.0 (1.25)		872C-N20NP18-D4
30 mm	10 (0.39)	Yes		1000	64.3 (2.53)	48.3 (1.90)		872C-D10NP30-D4
	15 (0.59)	No			76.5 (3.01)	42.5 (1.67)		872C-D15NP30-D4
	15 (0.59)	Yes			64.3 (2.53)	48.3 (1.90)		872C-M15NP30-D4
	20 (0.79)	No			76.5 (3.01)	42.5 (1.67)		872C-N20NP30-D4
	22 (0.86)	Yes		200	73.5 (2.89)	52.0 (2.04)		872C-M22NP30-D4
	40 (1.57)	No		100	73.5 (2.89)	42.0 (1.65)		872C-N40NP30-D4

\* Other connection options available, refer to <http://ab.rockwellautomation.com/Sensors-Switches> for detailed ordering information.

## Required Cordsets and Accessories

Description	Cat. No.
DC micro (M12) QD cordset, straight, 4-pin, 2 m (6.5 ft)	889D-F4AC-2
Right angle mounting bracket	871A-BRN <sup>1</sup>
Snap clamp mounting bracket	871A-SCPB <sup>2</sup>

<sup>1</sup> Add 8, 12, 18, or 30 to the end of the catalog number for sensor barrel diameter in mm.

<sup>2</sup> Add 12 or 18 to the end of the catalog number for sensor barrel diameter in mm.

## Product Selection

### 3-Wire DC Short Barrel

Barrel Diameter	Nominal Sensing Distance [mm (in.)]	Shielded	Output Configuration	Switching Frequency [Hz]	Housing Length [mm (in.)]	Thread Length [mm (in.)]	Connection Type *	Cat. No.
8 mm	2 (0.08)	Yes	N.O./PNP	2500	45.2 (1.78)	20.1 (0.79)	Micro QD	872C-DH2NP8-D4
	3 (0.12)	No			49.3 (1.94)			872C-DH3NP8-D4
	3 (0.12)	Yes			45.2 (1.78)			872C-MH3NP8-D4
	4 (0.16)	No			49.3 (1.94)			872C-NH4NP8-D4
12 mm	3 (0.12)	Yes		1300	48.3 (1.90)	27.4 (1.08)		872C-DH3NP12-D4
	4 (0.16)	No			56.3 (2.22)			872C-DH4NP12-D4
	4 (0.16)	Yes			48.3 (1.90)			872C-MH4NP12-D4
	8 (0.32)	No			56.3 (2.22)			872C-NH8NP12-D4
18 mm	5 (0.20)	Yes		1500	49.5 (1.95)	26.4 (1.04)		872C-DH5NP18-D4
	8 (0.31)	No			59.5 (2.34)			872C-DH8NP18-D4
	8 (0.32)	Yes			49.5 (1.95)			872C-MH8NP18-D4
	12 (0.47)	No			61.7 (2.43)			872C-NH12NP18-D4
30 mm	15 (0.59)	No		1000	63.2 (2.49)	29.2 (1.15)		872C-DH15NP30-D4
	15 (0.59)	Yes			50.8 (2.00)	31.8 (1.25)		872C-MH15NP30-D4
	20 (0.79)	No			63.2 (2.49)	29.2 (1.15)		872C-NH20NP30-D4

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