

872C WorldProx™ Extended Sensing 3-Wire DC

Plastic Face/Threaded Nickel-Plated Brass Barrel



872C DC Cable Style
12, 18, 30mm



872C DC
Quick-Disconnect Micro Style
12, 18, 30mm



Features

- 3-wire operation
- 3-conductor, 4-pin connection
- 10–30V DC
- Normally open or normally closed
- Reverse polarity, short circuit, overload, false pulse, and transient noise protection
- UL and c-UL recognized and CE marked for all applicable directives

Specifications

	12mm	18 & 30mm
Load Current	≤200mA	≤400mA
Leakage Current	≤50μA	
Operating Voltage	10–30V DC	
Voltage Drop	≤1.2V	
Repeatability	≤5%	
Hysteresis	10% typical	
Reverse Polarity Protection	Incorporated	
Transient Noise Protection	Incorporated	
Short Circuit Protection	Incorporated	
Overload Protection	Incorporated	
False Pulse Protection	Incorporated	
Approvals	UL and c-UL recognized and CE marked for all applicable directives	
Enclosure	NEMA 1, 2, 3, 4, 6P, 12, 13, IP67 (IEC529) Nickel-plated brass barrel, plastic face (PBT)	
Connections	Cable: 2m (6.5ft) length, 4.4mm (0.175in) diameter 3-conductor #26AWG PVC Quick-Disconnect: 4-pin micro style	
LED	Yellow: Output energized, 360° visibility	
Operating Temperature	–25°C to +70°C (–13°F to +158°F)	
Shock	30g, 11ms	
Vibration	55Hz, 1mm amplitude, 3 planes	

Correction Factors

Target Material	Correction Factors
Steel	1.0
Stainless Steel	0.7–0.8
Brass	0.5–0.6
Aluminum	0.5–0.6
Copper	0.4–0.5

AB Spares

Inductive Proximity Sensors

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Product Selection

Barrel Dia.	Nominal Sensing Distance mm (in)	Shielded	Output Configuration		Switching Frequency (Hz)	Catalog Number	
						Cable Style	Micro QD Style
12mm	4 (0.16)	Y	N.O.	NPN	900	872C-M4NN12-A2	872C-M4NN12-D4
				PNP		872C-M4NP12-A2	872C-M4NP12-D4
			N.C.	NPN		872C-M4CN12-A2	872C-M4CN12-D4
				PNP		872C-M4CP12-A2	872C-M4CP12-D4
	8 (0.31)	N	N.O.	NPN		872C-N8NN12-A2	872C-N8NN12-D4
				PNP		872C-N8NP12-A2	872C-N8NP12-D4
			N.C.	NPN		872C-N8CN12-A2	872C-N8CN12-D4
				PNP		872C-N8CP12-A2	872C-N8CP12-D4
18mm	8 (0.31)	Y	N.O.	NPN	300	872C-M8NN18-A2	872C-M8NN18-D4
				PNP		872C-M8NP18-A2	872C-M8NP18-D4
			N.C.	NPN		872C-M8CN18-A2	872C-M8CN18-D4
				PNP		872C-M8CP18-A2	872C-M8CP18-D4
	12 (0.47)	N	N.O.	NPN		872C-N12NN18-A2	872C-N12NN18-D4
				PNP		872C-N12NP18-A2	872C-N12NP18-D4
			N.C.	NPN		872C-N12CN18-A2	872C-N12CN18-D4
				PNP		872C-N12CP18-A2	872C-N12CP18-D4
30mm	15 (0.59)	Y	N.O.	NPN	150	872C-M15NN30-A2	872C-M15NN30-D4
				PNP		872C-M15NP30-A2	872C-M15NP30-D4
			N.C.	NPN		872C-M15CN30-A2	872C-M15CN30-D4
				PNP		872C-M15CP30-A2	872C-M15CP30-D4
	20 (0.79)	N	N.O.	NPN		872C-N20NN30-A2	872C-N20NN30-D4
				PNP		872C-N20NP30-A2	872C-N20NP30-D4
			N.C.	NPN		872C-N20CN30-A2	872C-N20CN30-D4
				PNP		872C-N20CP30-A2	872C-N20CP30-D4
Recommended Standard QD Cordset (-2 = 2m (6.5ft))						889D-F4AC-2	

QD Cordsets and Accessories

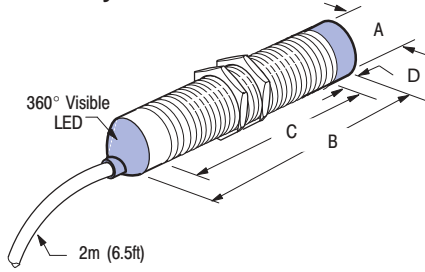
Description	Page Number
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Mounting Brackets	2-186 - 2-190
End Caps	2-196
Mounting Nuts	2-197 - 2-198

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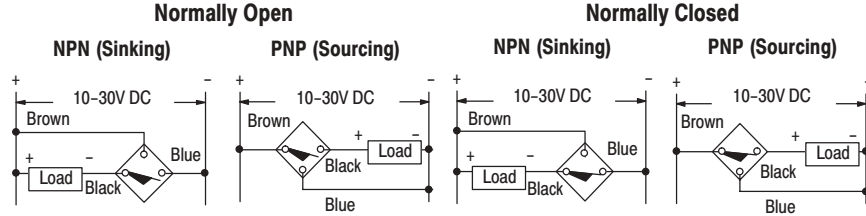
Plastic Face/Threaded Nickel-Plated Brass Barrel

Dimensions—mm (inches)

Cable Style

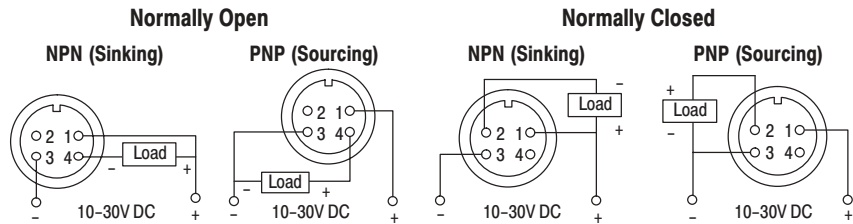
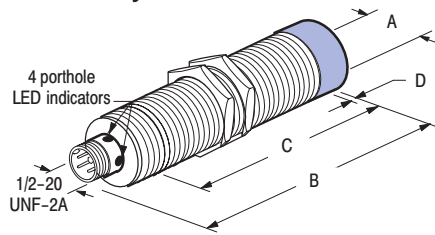


Wiring Diagrams



Thread Size	Shielded	mm (inches)			
		A	B (max)	C (min)	D (max)
M12 X 1	Y	12.0 (0.47)	54.0 (2.12)	45.0 (1.77)	0.5 (0.02)
	N			40.0 (1.57)	5.0 (0.19)
M18 X 1	Y	18.0 (0.71)	50.0 (1.96)	40.0 (1.57)	0.5 (0.02)
	N			35.0 (1.37)	8.0 (0.31)
M30 X 1.5	Y	30.0 (1.18)	60.0 (2.36)	50.0 (1.96)	0.5 (0.02)
	N			38.0 (1.49)	12.2 (0.48)

Micro QD Style



Thread Size	Shielded	mm (inches)			
		A	B (max)	C (min)	D (max)
M12 X 1	Y	12.0 (0.47)	70.0 (2.75)	43.0 (1.70)	0.5 (0.02)
	N			38.0 (1.49)	5.0 (0.19)
M18 X 1	Y	18.0 (0.71)	64.0 (2.52)	48.0 (1.89)	0.5 (0.02)
	N			40.0 (1.57)	8.0 (0.31)
M30 X 1.5	Y	30.0 (1.18)	76.0 (2.99)	50.0 (1.96)	0.5 (0.02)
	N			38.0 (1.49)	12.2 (0.48)

AB Spares