



875CP DC Micro
Quick-Disconnect Style
Smooth Barrel 34mm
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875CP DC Pico
Quick-Disconnect Style
Threaded Barrel 18mm
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Specifications

Load Current	≤ 300mA
Leakage Current	0.01mA
Operating Voltage	10-48V DC
Voltage Drop	<2V
Current Consumption	≤ 10mA
Repeatability	≤ 10%
Hysteresis	≤ 20%
Transient Noise Protection	Incorporated
Reverse Polarity Protection	Incorporated
Short Circuit Protection	Incorporated
Overload Protection	Incorporated
Approval	CE marked for all applicable directives
Enclosure	NEMA 12, IP67 (IEC 529) Plastic barrel
Connections	Cable: 2-meter length 3-conductor PVC Quick-Disconnect: 4-pin micro 3-pin pico
LEDs	Green: Power Yellow: Output
Operating Temperature	-25°C to +70°C (-13°F to +158°F)



Features

- Metal, nonmetal solid and liquid sensing capability
- Adjustable sensing distance
- 3-wire operation
- 3-conductor, 3-pin or 4-pin connection
- 10-48V DC
- Normally open or normally closed output
- Short circuit, overload, reverse polarity and transient noise protection
- CE marked for all applicable directives

Correction Factors

Target Material	Correction Factor
Acetone	0.75
Acrylic Resin	0.10 - 0.25
Air	0.0
Alcohol	0.85
Ammonia	0.70 - 0.85
Aniline	0.40
Aqueous Solutions	0.98 - 1.0
Bakelite	0.20
Benzene	0.10
Carbon Dioxide	0.0
Carbon Tetrachloride	0.10
Celluloid	0.15
Cement Powder	0.25
Cereal	0.15 - 0.30
Chlorine Liquid	0.10
Ebonite	0.15
Epoxy Resin	0.15 - 0.35
Ethanol	0.85
Ethylene Glycol	0.93
Fired Ash	0.05
Flour	0.05
Freon R22 & 502 (liquid)	0.35
Gasoline	0.10
Glass	0.20 - 0.55
Glycerine	0.98
Marble	0.50
Melamine Resin	0.25 - 0.55
Mica	0.35
Nitrobenzine	0.93
Nylon	0.20 - 0.30
Oil Saturated Paper	0.25
Paraffin	0.10
Paper	0.10

Correction Factors

Target Material	Correction Factor
Perspex	0.15
Petroleum	0.05
Phenol Resin	0.20 - 0.60
Polyacetal	0.20
Polyamide	0.30
Polyester Resin	0.15 - 0.50
Polyethylene	0.10
Polypropylene	0.10
Polystyrene	0.15
Polyvinyl Chloride Resin	0.15
Porcelain	0.25 - 0.40
Powdered Milk	0.20
Press Board	0.10 - 0.30
Quartz Glass	0.20
Rubber	0.15 - 0.90
Salt	0.35
Sand	0.15 - 0.30
Shellac	0.15 - 0.25
Shell Lime	<0.05
Silicon Varnish	0.15
Soybean Oil	0.15
Styrene Resin	0.15
Sugar	0.15
Sulphur	0.15
PTFE	0.10
Toluene	0.10
Transformer Oil	0.10
Turpentine Oil	0.10
Urea Resin	0.30 - 0.45
Vaseline	0.10
Water	1.0
Wood, Dry	0.10 - 0.40
Wood, Wet	0.60 - 0.85

AB PLCs

875CP 3-Wire DC

Plastic Face/Threaded or Smooth Plastic Barrel

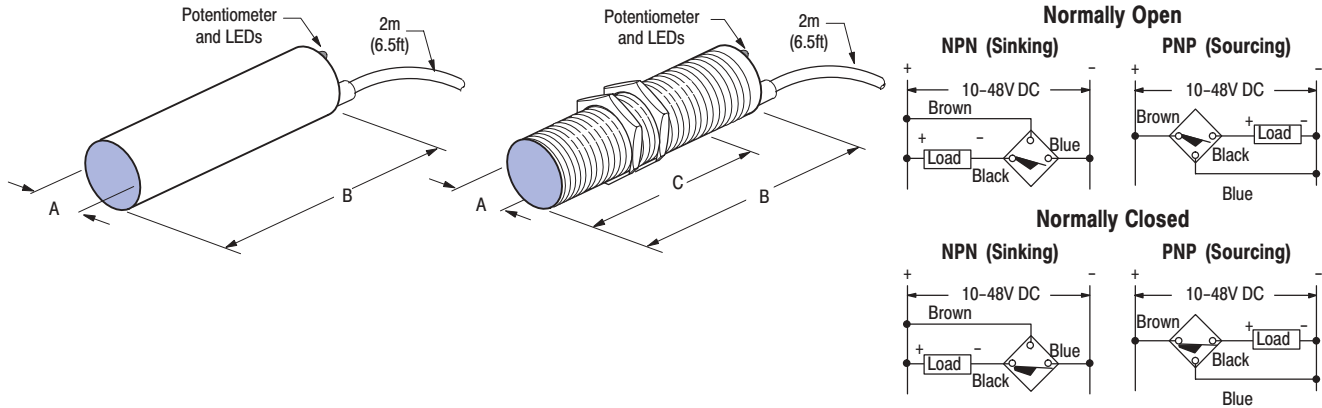
Product Selection

Barrel Dia. & Type	Nominal Sensing Distance—mm (in)	Shielded	Output Configuration		Switching Frequency (Hz)	Catalog Number		
						Cable Style	Micro QD Style	Pico QD Style
18mm Threaded	2 (0.08) to 8 (0.31)	N	N.O.	PNP	100	875CP-N8NP18-A2	—	875CP-N8NP18-P3
				NPN		875CP-N8NN18-A2	—	875CP-N8NN18-P3
			N.C.	PNP		875CP-N8CP18-A2	—	875CP-N8CP18-P3
				NPN		875CP-N8CN18-A2	—	875CP-N8CN18-P3
30mm Threaded	5 (0.20) to 20 (0.79)		N.O.	PNP		875CP-N20NP30-A2	875CP-N20NP30-D4	—
				NPN		875CP-N20NN30-A2	875CP-N20NN30-D4	—
			N.C.	PNP		875CP-N20CP30-A2	875CP-N20CP30-D4	—
				NPN		875CP-N20CN30-A2	875CP-N20CN30-D4	—
34mm Smooth	7 (0.28) to 30 (1.18)	N.O.	PNP	875CP-NM30NP34-A2	875CP-NM30NP34-D4	—		
			NPN	875CP-NM30NN34-A2	875CP-NM30NN34-D4	—		
		N.C.	PNP	875CP-NM30CP34-A2	875CP-NM30CP34-D4	—		
			NPN	875CP-NM30CN34-A2	875CP-NM30CN34-D4	—		
Recommended Standard QD Cordset (-2 = 2m (6.5ft))						889D-F4AC-2	889P-F3AB-2	

QD Cordsets and Accessories

Description	Page Number
Mounting Brackets	2-186 - 2-190
Mounting Nuts	2-197 - 2-198
Sensor Wells	4-22
Terminal Chambers	7-63
Other Cordsets Available	7-35, 7-88

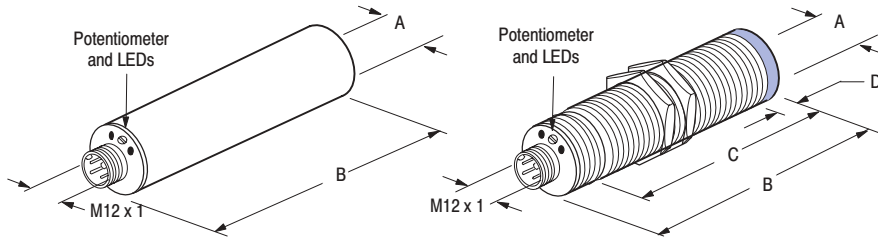
Cable Style



Diameter or Thread Size	mm (inches)		
	A	B	C
M18 x 1	18.0 (0.71)	52.0 (2.04)	52.0 (2.04)
M30 x 1.5	30.0 (1.18)		46.1 (1.81)
Ø34	34.0 (1.34)		N/A

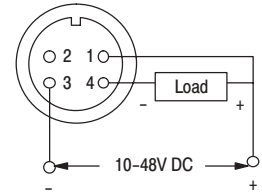
Dimensions—mm (inches)

Micro QD Style

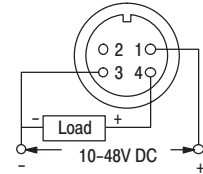


Wiring Diagram

**Normally Open or Normally Closed
NPN (Sinking)**

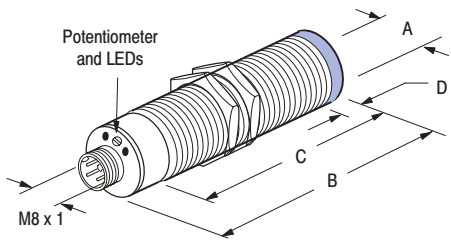


PNP (Sourcing)



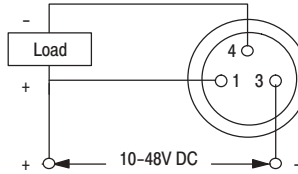
Diameter or Thread Size	mm (inches)			
	A	B	C	D
M30 x 1.5	30.0 (1.18)	65.0 (2.56)	52.0 (2.04)	1.0 (0.04)
∅34	34.0 (1.34)	65.0 (2.56)	N/A	N/A

Pico QD Style

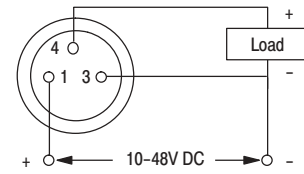


Normally Open or Normally Closed

NPN (Sinking)



PNP (Sourcing)



Diameter or Thread Size	mm (inches)			
	A	B	C	D
M18 x 1	18.0 (0.71)	61.5 (2.42)	52.0 (2.04)	1.0 (0.04)