



## Q4XTILAF100-Q8

### ► Q4X SERIES RUGGED LASER DISTANCE SENSOR



Q4X Series: Laser Adjustable Field

Range: 100 mm; Input 12-30 V dc

Output: Analog: 4-20 mA

Connection: Euro M12 5-Pin Integral Connector

Part Number: 94885

#### CERTIFICATIONS



#### SPECIFICATIONS

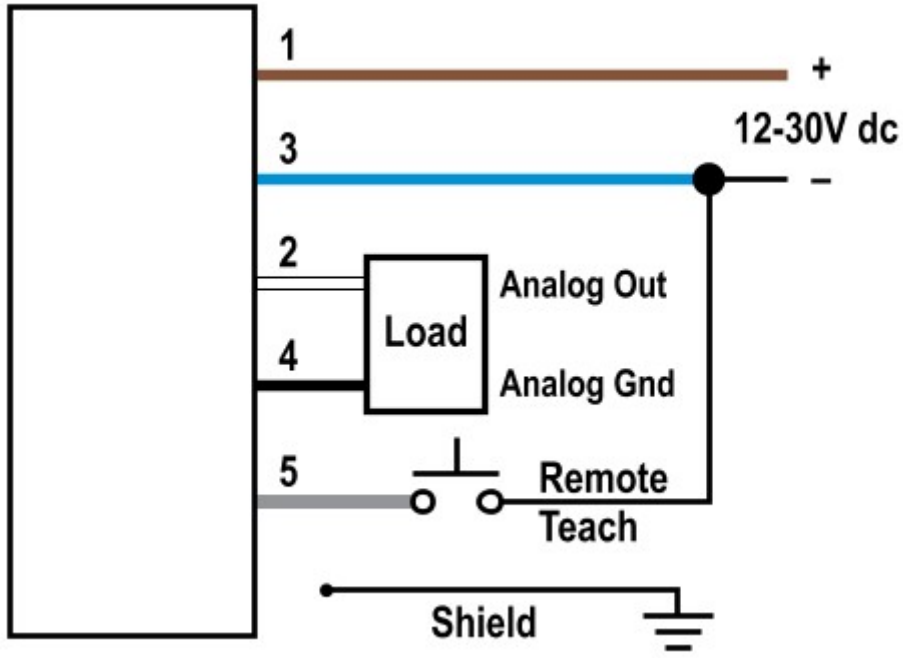
<b>Sensing Mode (General)</b>	Proximity
<b>Sensing Mode (Detailed)</b>	Background/Foreground Suppression
<b>Housing Style</b>	Rectangular w/M18 Mount
<b>Primary Housing Material</b>	Stainless Steel
<b>Laser Classification</b>	Class 1
<b>Input/Output</b>	Analog
<b>Indicator</b>	Display; LED(s)
<b>Analog Output Configuration</b>	4-20 mA
<b>Analog Resolution/Discrete Repeatability</b>	0.15 mm

<b>Max Sensing Distance (mm)</b>	100
<b>Minimum Sensing Distance (mm)</b>	25
<b>Sensing Beam</b>	Visible Red Laser
<b>Power Supply</b>	12-30 V dc
<b>Delay at Power-up (ms)</b>	750
<b>Sensing Beam Wavelength (nm)</b>	655
<b>Adjustments</b>	Push Button; Remote Teach
<b>Temperature Effect (mm/°C)</b>	+/- 0.05 mm/°C
<b>Connection</b>	Integral QD
<b>QD Type/Cable Length</b>	M12 (Euro) requires mating cordset
<b>Number of Pins</b>	5
<b>Vibration</b>	MIL-STD-202G req. Method 201A (vibration:10 to 60Hz max., double amplitude 0.06", max acc. 10G).
<b>Mechanical Shock</b>	MIL-STD-202G, Meth. 213B, Cond. I (100G 6x along X, Y & Z axes, 18 total shocks) w/ sensor operating
<b>Analog Current Output Rating</b>	1 kΩ max @24 V dc, max load resistance = $[(V_{cc}-4.5 V)/0.02 A] \Omega$
<b>Output Protection</b>	Protected against continuous overload and short circuit
<b>IP Rating</b>	IP67; IP68; IP69K
<b>Storage Temperature (°C)</b>	-25 to 75
<b>Max Operating Temperature (°C)</b>	50
<b>Min Operating Temperature (°C)</b>	-10
<b>Max Op. Relative Humidity Non-Condensing (%)</b>	95 at 55°C
<b>Window Material</b>	Acrylic
<b>Warm-up Time (minutes)</b>	10
<b>Minimum Response Time (ms)</b>	0.5
<b>Spot Size (@ Reference Distance)</b>	1.8 mm x 0.7 mm @ 100 mm
<b>Analog Linearity (mm)</b>	+/- 0.25 mm from 25 to 45 mm, 1.0 mm at 100 mm

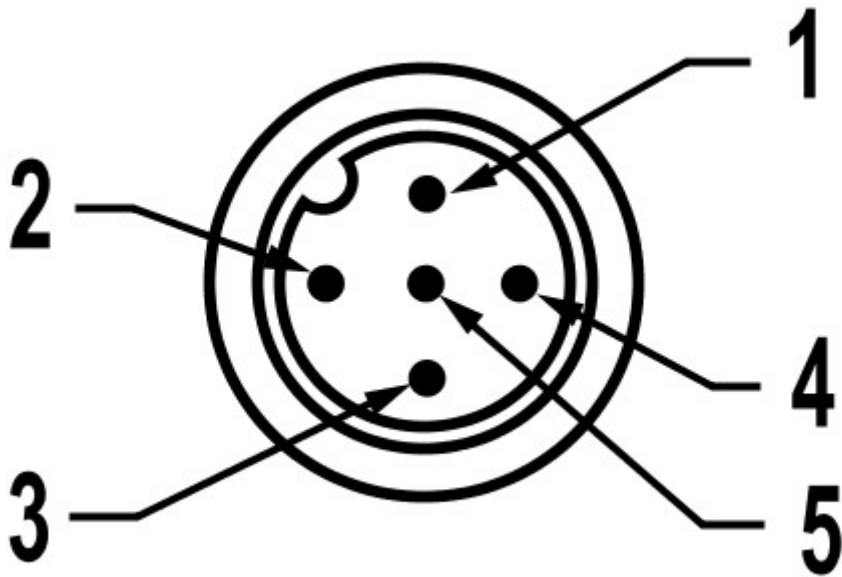
<b>Barrel Diameter (mm)</b>	18
<b>Minimum Window Size (mm)</b>	2
<b>Laser Control</b>	Yes
<b>Alarm Output (mA)</b>	100
<b>Max Ambient Light (Lux)</b>	5000
<b>Power/Current Consumption (exclusive of load)</b>	< 675 mW
<b>Supply Protection Circuitry</b>	Protected against reverse polarity and transient overvoltages
<b>Feature: Remote Teach</b>	Yes
<b>Feature: Washdown Rated</b>	Yes
<b>Feature: Timing (Hold/Delay)</b>	No
<b>Feature: Ecolab Certified</b>	Yes
<b>Feature: Chemical Resistant</b>	Yes
<b>IO Link</b>	No
<b>Wireless</b>	No

## DIAGRAMS

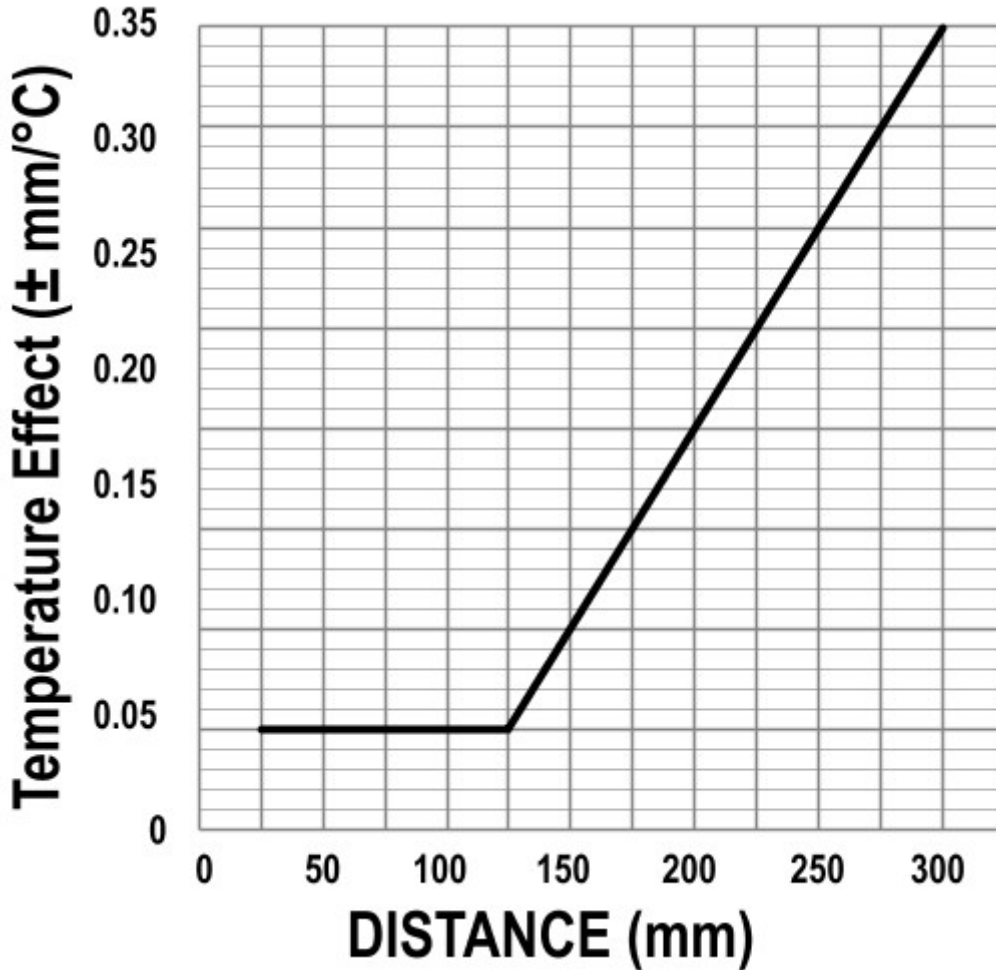
### WIRING DIAGRAM



PIN OUT



TECH DIAGRAMS





TECH DIAGRAMS








RECOMMENDED PRODUCTS

SINGLE ENDED CORDSETS


	<p><b>MQDEC2-506RA</b></p>
	<p>Euro-Style Quick Disconnect Cable with Shield; 5-Pin Right-Angle Connector; 2 m (6.5 ft) in Length; Chrome-plated brass coupling nut</p>
	<p><b>MQDEC2-515</b></p>
	<p>Euro-Style Quick Disconnect Cable with Shield; 5-Pin Straight Connector; 5 m (15 ft) in Length; Chrome-plated brass coupling nut</p>
	<p><b>MQDEC2-515RA</b></p>
	<p>Euro-Style Quick Disconnect Cable with Shield; 5-Pin Right-Angle Connector; 5 m (15 ft) in Length; Chrome-plated brass coupling nut</p>
	<p><b>MQDEC2-530</b></p>
	<p>Euro-Style Quick Disconnect Cable with Shield; 5-Pin Straight Connector.C; 9 m (30 ft) in Length; Chrome-plated brass coupling nut</p>

	<b>MQDEC2-530RA</b>
	Euro-Style Quick Disconnect Cable with Shield; 5-Pin Right-Angle Connector; 9 m (30 ft) in Length; Chrome-plated brass coupling nut
	<b>MQDEC2-506</b>
	Euro-Style Quick Disconnect Cable with Shield; 5-Pin Straight Connector; 2 m (6.5 ft) in Length; Chrome-plated brass coupling nut

## ADAPTERS, BRACKETS, CLAMPS AND MOUNTING ACCESSORIES

	<b>SMBQ4XFA</b>
	Bracket: Kit for 12 mm (1/2 in) Rod Bracket Systems; for: Q4X, QS18, QS30; Includes 3/8-16 X 2 in. Socket Head Cap Screw (SHCS)
	<b>SMBQ4XFAM10</b>
	Bracket: Kit for 10 mm (3/8 in) Rod Bracket Systems; for: Q4X, QS18, QS30; Includes M10-1.5 X 50 mm; Socket Head Cap Screw (SHCS)
	<b>SMB18A</b>
	Bracket: 18 mm Right Angle-mount; Material: 11 Gauge Stainless Steel; Curved mounting slot for versatility/orientation ; Clearance for M4 #8 hardware
	<b>SMB18FA</b>
	Bracket: Kit for 12 mm (1/2 in.) Rod Bracket Systems for; most 18 mm barrel mount sensors; lights; and brackets; Includes 3/8-16 X 2 in. Socket Head Cap Screw (SHCS)
	<b>SMB18FAM10</b>
	Bracket: Kit for 10 mm (3/8 in) Rod Bracket Systems for; most 18 mm barrel mount sensors; lights; and brackets; Includes M10-1.5 X 50 mm Socket Head Cap Screw (SHCS)
	<b>SMB18FAM12</b>
	Bracket: Kit for 12 mm (1/2 in) Rod Bracket Systems for; most 18 mm threaded barrel sensors; lights; and brackets; No Socket Head Cap Screw (SHCS) included
	<b>SMBQ4XFAM12</b>
	Bracket: Kit for 12 mm (1/2 in) Rod Bracket Systems; for: Q4X, QS18, QS30; No Socket Head Cap Screw (SHCS) included

## ACCESSORIES

	<b>APC-18</b>
	APC-18 AIR PURGE COLLAR



**APC-18P**

APC-18P AIR PURGE COLLAR DELRIN



Banner Engineering Corp. | 9714 Tenth Avenue North | Minneapolis, MN 55441 | United States of America