



# Q4XTKLAF100-Q8

## ► Q4X SERIES RUGGED LASER DISTANCE SENSOR



Q4X Series: Laser Adjustable Field  
Range: 100 mm; Input 10-30 V dc  
Output: 1 PNP/NPN with IO-Link Communication; 1 PNP  
Connection: Euro M12 4-Pin Integral Connector  
Part Number: 97071

### CERTIFICATIONS



### SPECIFICATIONS




Sensing Mode (General)	Proximity
Sensing Mode (Detailed)	Background/Foreground Suppression
Housing Style	Rectangular w/M18 Mount
Primary Housing Material	Stainless Steel
Laser Classification	Class 1
Input/Output	Discrete
Indicator	Display; LED(s)
Analog Resolution/Discrete Repeatability	+/- 0.2 mm
Max Sensing Distance (mm)	100

<b>Minimum Sensing Distance (mm)</b>	25
<b>Sensing Beam</b>	Visible Red Laser
<b>Power Supply</b>	10-30 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>	4
<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>Output Saturation Voltage PNP Outputs</b>	<2 V
<b>Max Discrete (Switched) Output (mA)</b>	100
<b>Discrete (Switched) Outputs</b>	1 NPN/PNP Configurable; 1 PNP
<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>	1.5
<b>Spot Size (@ Reference Distance)</b>	1.8 mm x 0.7 mm @ 100 mm
<b>Barrel Diameter (mm)</b>	18

<b>Minimum Window Size (mm)</b>	0.2
<b>Discrete Output Hysteresis (mm)</b>	Automatically adjusted
<b>Laser Control</b>	Yes
<b>Alarm Output (mA)</b>	100
<b>Max Ambient Light (Lux)</b>	5000
<b>Max Off-state Leakage Current (µA)</b>	PNP: <50 @ 30 V dc; Push/Pull: N/A
<b>Power/Current Consumption (exclusive of load)</b>	< 700 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: Clear Object Detection</b>	Yes
<b>Feature: Timing (Hold/Delay)</b>	Yes
<b>Feature: Ecolab Certified</b>	Yes
<b>Feature: Chemical Resistant</b>	Yes
<b>IO Link</b>	Yes
<b>Wireless</b>	No


## RECOMMENDED PRODUCTS






### DOUBLE ENDED CORDSETS

	<b>MQDEC-406SS</b>  Euro-style Quick Disconnect Cable; 4-pin Straight Connector; 2 m (6.5 ft) Length; Double Ended With 1 Female & 1 Male Connector
	<b>MQDEC-412SS</b>  Euro-style Quick Disconnect Cable; Double-ended 4-pin Male Connector Straight; 4-pin Female Connector Straight 3.7 m Length; Chrome plated brass coupling nut
	<b>MQDEC-430SS</b>  Euro-style Quick Disconnect Cable; Double-ended 4-pin Male Connector Straight; 4-pin Female Connector Straight 9.1 m Length; Chrome plated brass coupling nut

	<b>MQDEC-406SS-PUR</b>  Euro-style Quick Disconnect Cable; Double-ended 4-pin Male Connector Straight; 4-pin Female Connector Straight 2 m Length; Chrome plated brass coupling nut
	<b>MQDEC-415SS-PUR</b>  Euro-style Quick Disconnect Cable; Double-ended 4-pin Male Connector Straight; 4-pin Female Connector Straight 5 m Length; Chrome plated brass coupling nut
	<b>MQDEC-430SS-PUR</b>  Euro-style Quick Disconnect Cable; Double-ended 4-pin Male Connector Straight; 4-pin Female Connector Straight 10 m Length; Chrome plated brass coupling nut
	<b>MQDEC-WDSS-406SS</b>  Euro-style Quick Disconnect Cable; 4-pin Straight Connector for F&B Applications; 1.83 m (6 ft) Length IP69K PVC Cable; Double Ended With 1 Female & 1 Male Connector
	<b>MQDEC-WDSS-412SS</b>  Euro-style Quick Disconnect Cable; 4-pin Straight Connector for F&B Applications; 3.66 m (12 ft) Length IP69K PVC Cable; Double Ended With 1 Female & 1 Male Connector



## SINGLE ENDED CORDSETS

	<b>MQDC-406</b>  Euro-style Quick Disconnect Cable; 4-Pin Straight Connector; 2 m (6.5 ft) in Length; Nickel-plated Brass Coupling Nut
	<b>MQDC-415</b>  Euro-style Quick Disconnect Cable; 4-Pin Straight Connector; 5 m (15 ft) in Length; Nickel-plated Brass Coupling Nut.
	<b>MQDC-430</b>  Euro-style Quick Disconnect Cable; 4-Pin Straight Connector; 9 m (30 ft) in Length; Nickel-plated Brass Coupling Nut
	<b>MQDC-450</b>  Euro-Style Quick Disconnect Cable; 4-Pin Straight Connector; 15 m (50 ft) in Length; Nickel-plated Brass Coupling Nut
	<b>MQDC-406RA</b>  Euro-Style Quick Disconnect Cable; 4-Pin Right-Angle Connector; 2 m (6.5 ft) in Length; Nickel-plated brass coupling nut
	<b>MQDC-415RA</b>  Euro-Style Quick Disconnect Cable; 4-Pin Right-Angle Connector; 5 m (15 ft) in Length; Nickel-plated brass coupling nut



	<b>MQDC-430RA</b>  Euro-Style Quick Disconnect Cable; 4-Pin Right-Angle Connector; 9 m (30 ft) in Length; Nickel-plated brass coupling nut
	<b>MQDC-450RA</b>  Euro-Style Quick Disconnect Cable; 4-Pin Right-Angle Connector; 15 m (50 ft) in Length; Nickel-plated brass coupling nut
	<b>MQDC-WDSS-0406</b>  Euro-style Quick Disconnect Cable; 4-Pin Straight Connector for F&B Applications; 2 m (6.5 ft) in Length abrasion resistant PVC cable; Stainless Steel hex coupling nut and EPDM O-ring; Environmental Rating: IP69K
	<b>MQDC-WDSS-0415</b>  Euro-style Quick Disconnect Cable; 4-Pin Straight Connector for F&B Applications; 5 m (15 ft) in Length abrasion resistant PVC cable; Stainless Steel hex coupling nut and EPDM o-ring; Environmental Rating: IP69K
	<b>MQDC-WDSS-0430</b>  Euro-style Quick Disconnect Cable; 4-Pin Straight Connector for F&B Applications; 9 m (30 ft) in Length abrasion resistant PVC cable; Stainless Steel hex coupling nut and EPDM o-ring; Environmental Rating: IP69K

## 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

REFERENCE TARGET

	<b>BRT-Q4X-60X18</b>  Reflector; Q4X Clear Object Detection; Rectangular 60 mm X 18 mm
	<b>BRT-Q4X-60X50</b>  Reflector; Q4X Clear Object Detection; Rectangular 60 mm X 50 mm

ACCESSORIES

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



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