



Q4XTKLAF300-Q8

► Q4X SERIES RUGGED LASER DISTANCE SENSOR



Q4X Series: Laser Adjustable Field
Range: 300 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: 95301

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	25 mm to 50 mm: +/-0.5 mm; 50 mm to 300 mm: +/- 1% of range


Max Sensing Distance (mm)	300
Minimum Sensing Distance (mm)	25
Sensing Beam	Visible Red Laser
Power Supply	10-30 V dc
Delay at Power-up (ms)	750
Sensing Beam Wavelength (nm)	655
Adjustments	Push Button; Remote Teach
Temperature Effect (mm/°C)	+/- 0.05 mm/°C from 25 to 125 mm, +/- 0.35 mm/°C at 300 mm
Connection	Integral QD
QD Type/Cable Length	M12 (Euro) requires mating cordset
Number of Pins	4
Vibration	MIL-STD-202G req. Method 201A (vibration:10 to 60Hz max., double amplitude 0.06", max acc. 10G).
Mechanical Shock	MIL-STD-202G, Meth. 213B, Cond. I (100G 6x along X, Y & Z axes, 18 total shocks) w/ sensor operating
Output Saturation Voltage PNP Outputs	<2 V
Max Discrete (Switched) Output (mA)	100
Discrete (Switched) Outputs	1 NPN/PNP Configurable; 1 PNP
Output Protection	Protected against continuous overload and short circuit
IP Rating	IP67; IP68; IP69K
Storage Temperature (°C)	-25 to 75
Max Operating Temperature (°C)	50
Min Operating Temperature (°C)	-10
Max Op. Relative Humidity Non-Condensing (%)	95 at 55°C
Window Material	Acrylic
Warm-up Time (minutes)	10
Minimum Response Time (ms)	1.5

Spot Size (@ Reference Distance)	2.0 mm x 0.8 mm @ 300 mm
Barrel Diameter (mm)	18
Minimum Window Size (mm)	0.4
Discrete Output Hysteresis (mm)	Automatically adjusted
Laser Control	Yes
Alarm Output (mA)	100
Max Ambient Light (Lux)	5000
Max Off-state Leakage Current (µA)	PNP: <50 @ 30 V dc; Push/Pull: N/A
Power/Current Consumption (exclusive of load)	< 700 mW
Supply Protection Circuitry	Protected against reverse polarity and transient overvoltages
Feature: Remote Teach	Yes
Feature: Washdown Rated	Yes
Feature: Clear Object Detection	Yes
Feature: Timing (Hold/Delay)	Yes
Feature: Ecolab Certified	Yes
Feature: Chemical Resistant	Yes
IO Link	Yes
Wireless	No





RECOMMENDED PRODUCTS







DOUBLE ENDED CORDSETS

	MQDEC-406SS Euro-style Quick Disconnect Cable; 4-pin Straight Connector; 2 m (6.5 ft) Length; Double Ended With 1 Female & 1 Male Connector
	MQDEC-412SS 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

	MQDEC-430SS 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
	MQDEC-406SS-PUR 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
	MQDEC-415SS-PUR 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
	MQDEC-430SS-PUR 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
	MQDEC-WDSS-406SS 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
	MQDEC-WDSS-412SS 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

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



	MQDC-415RA Euro-Style Quick Disconnect Cable; 4-Pin Right-Angle Connector; 5 m (15 ft) in Length; Nickel-plated brass coupling nut
	MQDC-430RA Euro-Style Quick Disconnect Cable; 4-Pin Right-Angle Connector; 9 m (30 ft) in Length; Nickel-plated brass coupling nut
	MQDC-450RA Euro-Style Quick Disconnect Cable; 4-Pin Right-Angle Connector; 15 m (50 ft) in Length; Nickel-plated brass coupling nut
	MQDC-WDSS-0406 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
	MQDC-WDSS-0415 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
	MQDC-WDSS-0430 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

	SMBQ4XFA 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)
	SMBQ4XFAM10 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)
	SMB18A Bracket: 18 mm Right Angle-mount; Material: 11 Gauge Stainless Steel; Curved mounting slot for versatility/orientation ; Clearance for M4 #8 hardware
	SMB18FA 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)

	SMB18FAM10 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)
	SMB18FAM12 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
	SMBQ4XFAM12 Bracket: Kit for 12 mm (1/2 in) Rod Bracket Systems; for: Q4X, QS18, QS30; No Socket Head Cap Screw (SHCS) included

REFERENCE TARGET

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

ACCESSORIES

	APC-18 APC-18 AIR PURGE COLLAR
	APC-18P APC-18P AIR PURGE COLLAR DELRIN



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