

## **Creating Safe Work Solutions During COVID-19**

# Q5XKLAF2000-Q8-JAM

### ▶ Q5X SERIES HIGH POWER, MID RANGE PHOTOELECTRIC SENSOR



Q5X Series: Laser Adjustable Field

Range: 95 to 2000 mm; Input 10-30 V dc

Output: 1 PNP/NPN with IO-Link; 1 PNP/NPN Multi-

Function I/O

Connection: Euro M12 4-pin Rotatable Connector

Part Number: 809462

#### **CERTIFICATIONS**











#### **SPECIFICATIONS**

Jam Detection	Yes
Sensing Mode (General)	Proximity
Sensing Mode (Detailed)	Background/Foreground Suppression
Housing Style	Rectangular
Primary Housing Material	ABS
Laser Classification	Class 2
Input/Output	Discrete
Indicator	Display; LED(s)
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Analog Resolution/Discrete Repeatability	95mm to 300mm: +/-0.5; 300mm to 1m: +/- 0.25% of range;1m to 2m: +/- 0.5% of range
Max Sensing Distance (mm)	2000
Minimum Sensing Distance (mm)	95
Sensing Beam	Visible Red Laser
Power Supply	10-30 V dc
Delay at Power-up (ms)	2500
Sensing Beam Wavelength (nm)	650
Adjustments	Push Button; Remote Teach
Temperature Effect (mm/°C)	< +/- 0.5 mm/°C < 500 mm,< +/- 1.0 mm/°C at < 1000 mm, < +/- 2.0 mm/°C at < 2000 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 NPN Outputs	< 2.5 V @ 50 mA
Output Saturation Voltage PNP Outputs	< 2.5 V @ 50 mA
Max Discrete (Switched) Output (mA)	50
Discrete (Switched) Outputs	2 NPN/PNP Configurable
Output Protection	Protected against continuous overload and short circuit
IP Rating	IP67
Storage Temperature (°C)	-25 to 70
Max Operating Temperature (°C)	50
Min Operating Temperature (°C)	-10

Max Op. Relative Humidity Non-Condensing (%)	95 at 50°C
Window Material	PMMA
Warm-up Time (minutes)	10
Minimum Response Time (ms)	3
Spot Size (@ Reference Distance)	6.0 mm x 3.6 mm @ 2000 mm
Minimum Window Size (mm)	1
Discrete Output Hysteresis (mm)	Automatically adjusted
Laser Control	Yes
Max Ambient Light (Lux)	up to 5000 lux at 1000 mm and up to 2000 lux at 2000 mm
Power/Current Consumption (exclusive of load)	< 1 W
Supply Protection Circuitry	Protected against reverse polarity and transient overvoltages
Feature: Remote Teach	Yes
Feature: Clear Object Detection	Yes
Feature: Timing (Hold/Delay)	Yes
Feature: Chemical Resistant	No
Feature: Pump-in/ Pump-out	No
IO Link	Yes
RS-232	No
RS-422	No
RS-485	No
SSI	No
Wireless	No
1-wire Serial Interface	No
Profibus	No



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