

LH Series

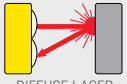
High-Precision Laser Measurement



- Highly precise laser technology of a 1024 pixel CMOS linear imager provides reliable and accurate measurement on most materials, including machined metal, wood, ceramic, paper and painted targets.
- Automatic laser power and measurement rate control for reliable measurement under changing or challenging conditions such as moving processes, hot parts, machined parts and a variety of colors and textures
- Robust, self-contained laser displacement sensor

Class 2 Laser LH



Sensing Mode	Measurement				Connection	Output	Spot Size at Reference Distance	Models
	Span	Start of Range	End of Range	Reference Distance				
 DIFFUSE LASER	10 mm	25 mm	35 mm	30 mm	8-pin Euro Pigtail QD	Analog 4-20 mA & RS-485	50 micron	LH30IX485QP
 DIFFUSE LASER	40 mm	60 mm	100 mm	80 mm	8-pin Euro Pigtail QD	Analog 4-20 mA & RS-485	125 micron	LH80IX485QP
 DIFFUSE LASER	100 mm	100 mm	200 mm	150 mm	8-pin Euro Pigtail QD	Analog 4-20 mA & RS-485	225 micron	LH150IX485QP

 Connection options: A model with a QD requires a mating cordset.




M12/Euro-Style with Shield
Straight connector models listed

8-Pin

- MQLH-806-F**
2 m (6.5')
- MQLH-815-F**
5 m (15')
- MQLH-830-F**
9 m (30')

Additional cordset information is available
See page 758



8-Pin

Straight Male to Straight Female

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MQLH-806-MF
2.0 m (6')

MQLH-815-MF
5 m (15')


MQLH-830-MF
9 m (30')

Straight Male to Straight Male

MQLH-801-MM
0.3 m (1')

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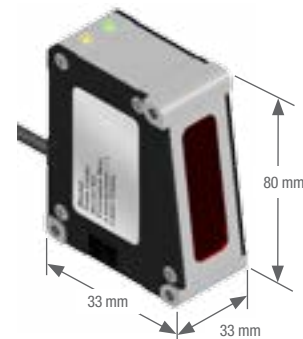
Euro QD—Splitter with Shield

8-Pin

- CSB-M1280M1280-LH**
Branches 2 x 0 m
- CSB-M1281M1282-LH**
Branches 2 x 0.6 m (2')
- Trunk 0.3 m (1')
- CSB3-M1281M1282-LH**
Branches 3 x 0.6 m (2')
- Trunk 0.3 m (1')



Additional bracket information is available
See page 724



LH Specifications

Sensing Beam	670 nm (1mW) visible red IEC and CDRH Class 2 laser
Supply Voltage and Current	18 to 30 V dc (10% max. ripple); 250 mA max. @ 24 V dc (exclusive of load)
Supply Protection Circuitry	Protected against reverse polarity and transient over voltages
Delay at Power-up	1.25 seconds
Temperature Effect	0.01% of measurement range/ °C
Linearity	0.1% of measurement range
Resolution	LH30: 1 µm LH80: 4 µm LH150: 10 µm Resolution obtained with an average of 64 readings on a white ceramic target
Ambient Light	≤ 3000 Lux
Measurement Frequency	Dynamically adjusted from 300 to 4000 Hz depending on target conditions, or locked via LH Series configurator software
Indicators	Green: Power ON; Flashing = target at reference distance Orange: Target inside measurement range
Construction	Housing: Aluminum Cover: Aluminum Lens: Glass Cable: PVC and nickel-plated brass
Environmental Rating	IP67
Output Configuration	Analog current output: 4 to 20 mA (current sourcing) Analog output rating: 1 kΩ max. @ 24 V dc, max. load resistance = [(Vcc-4.5)/0.02]Ω
Operating Conditions	Operating Temperature: -10 to +45 °C Storage Temperature: -10 to +80 °C Maximum relative humidity: 85% at +45 °C, non-condensing
Vibration and Mechanical Shock	Vibration: 60 Hz, 30 minutes, 3 axes Shock: 30G for 11 milliseconds, half sine wave, 3 axes
Application Notes	Allow 30-minute warm-up for specified performance
Factory Default Settings	Mode: Displacement Mode Sensor Address: Unset (address 0) Baud Rate: 115200 Analog Output: 4-20 mA, positive slope, full range

Certifications 