

# LE Series

## Laser Sensor




- The LE laser sensors are ready to measure right out of the box with easy adjustment, setup and use.
- Easy adjustment with a two-line, eight-character intuitive display
- Repeatability and accuracy for challenging targets, from metal to black rubber
- Visible class 2 laser for small spot size and simple alignment

### LE

Example Model Number: LE550IQ

Family	Range	Output	Laser Class	Connector
LE	550	I		Q
	550 =100-1000 mm 250 =100-400 mm	I = 4 to 20 mA analog and (1) NPN/PNP discrete U = 0 to 10 V analog and (1) NPN/PNP discrete D = (2) NPN/PNP discrete K = Dual Discrete with IO-Link	Blank = Class 2 C1 = Class1	Blank = 2 m Integral Cable Q = Rotatable M12 Euro QD QP = PVC M12 Euro Pigtail QD W/30 = 9 m Integral Cable

NOTE: Discrete NPN/PNP is user configurable

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

### M12/Euro-Style with Shield

Straight connector models listed; for right-angle, add **RA** to the end of the model number (example, **MQDEC2-506RA**)



5-Pin

**MQDEC2-506**  
2 m (6.5')  
**MQDEC2-515**  
5 m (15')  
**MQDEC2-530**  
9 m (30')



**SMBLEU**



**SMBLEL**

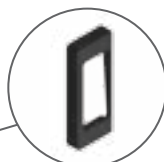


**SMBLEFA**

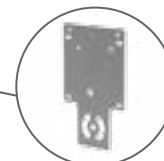
Additional bracket information is available  
See page 724



**SMBAMSLEIP**  
full assembly with plate and  
two protective windows



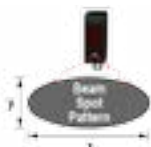
**RWAMSLE**  
replacement windows



**SMBAMSLTFP**  
mounting plate



## LE Specifications

Sensing Beam	Visible red Class 2 laser, 650 nm																																								
Supply Voltage and Current	12 to 30 V dc <b>Normal Run Mode:</b> 1.7 W, Current consumption less than 70 mA at 24 V dc																																								
Supply Protection Circuitry	Protected against reverse polarity and transient over voltages																																								
Spot Size	<div><div></div><div><table><tr><th colspan="4">LE550 Models</th></tr><tr><th></th><th colspan="3">Distance</th></tr><tr><th></th><th>100 mm</th><th>550 mm</th><th>1000 mm</th></tr><tr><td>X</td><td>8.4 mm</td><td>10.5 mm</td><td>12.1 mm</td></tr><tr><td>Y</td><td>3.5 mm</td><td>4.2 mm</td><td>4.9 mm</td></tr></table><table><tr><th colspan="4">LE250 Models</th></tr><tr><th></th><th colspan="3">Distance</th></tr><tr><th></th><th>100 mm</th><th>250 mm</th><th>400 mm</th></tr><tr><td>X</td><td>3.2 mm</td><td>2.1 mm</td><td>1.2 mm</td></tr><tr><td>Y</td><td>2.2 mm</td><td>1.5 mm</td><td>0.9 mm</td></tr></table></div></div>	LE550 Models					Distance				100 mm	550 mm	1000 mm	X	8.4 mm	10.5 mm	12.1 mm	Y	3.5 mm	4.2 mm	4.9 mm	LE250 Models					Distance				100 mm	250 mm	400 mm	X	3.2 mm	2.1 mm	1.2 mm	Y	2.2 mm	1.5 mm	0.9 mm
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Temperature Effect	<b>LE250:</b> ±0.03 to ±0.15 mm/°C <b>LE550:</b> ±0.25 to ±0.5 mm/°C																																								
Analog Linearity	<b>LE250:</b> ±0.375 to ±0.9 mm <b>LE550:</b> ±2 to ±4.5 mm																																								
Analog Resolution	<b>LE550:</b> Less than 0.5 mm (100 – 600 mm) Less than 1 mm (600 – 1000 mm) <b>LE250:</b> Less than 0.02 mm (100 – 250 mm) Less than 0.2 mm (250 – 400 mm)																																								
Construction	<b>Housing:</b> die-cast zinc <b>Lens:</b> polycarbonate																																								
Vibration/Mechanical Shock	IEC 60947-5-2																																								
Operating Conditions	<b>Temperature:</b> -20 to +55 °C <b>Humidity:</b> 90% at +55 °C																																								
Environmental Rating	IP67, NEMA 6																																								
Certifications	