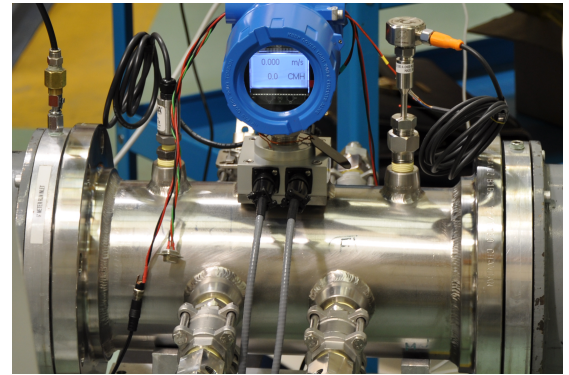


DL-RL00 Laser Displacement & Vibration Sensor

Description

Laser displacement sensors, series DL-RL00, are designed for remote distance measurement on three coordinates with resolution better than 10 micron. Their response time is less than 10 μ s which provides the capability of vibration measurement from 0.1 Hz to 100 kHz.



Features

- Small footprint
- Visible light
- Class 1 or Class 2 laser
- Maximum distance 2m
- Lateral resolution less than 10 μ m



DL-RL00

Laser Displacement & Vibration Sensor



Specifications

Operating Principle

Light Source

Model DL-RL01

Model DL-RL02

Laser triangulation

Red laser, 650 nm

Class 1, power 0.3mW

Class 2, power 1.0mW

Performance Characteristics

Maximum Distance

Model DL-RL01

Model DL-RL02

600 mm (25")

2000 mm (80")

Lateral resolution

Axial:

20 μ m

Lateral

10 μ m

Operating Conditions

Temperature

-10°C to +75°C (14°F to +170°F)

Humidity

20% to 95%

Mechanical Characteristics

Dimensions

Laser sensor head: 35mm (H) x 14mm(W) x 25mm (D)

Controller: 30mm (H) x 12mm (W) x 60mm (D)

Electrical Characteristics

Supply Voltage

24VDC (20-32 VDC)

Power Consumptions

0.25W (max)

Output

ModBus RS245