

Laser Measuring Device LE-100 CANopen

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- **Robust**
- **Measurement of Linear Movement**
- **Non Contact Distance Measurement**
- **Measuring Distance Up To 100 m**
- **Interface : CANopen**
- **Programmable via CAN-Bus**

Electrical Data

Measurement Principle.....	Phase shift measurement
Range (LE100 to Reflector).....	0.2 to 100 m
Resolution	0.5 mm
Supply Voltage	18-27 V DC ± 5 %, 24 V DC ± 5 % (device with heating)
Power Dissipation (No Load).....	< 6 Watt, < 60 Watt (device with heating)
Light Source.....	Laser Diode (Red Light)
Wave Length λ	670 nm
Maximum Laser Power	$P \leq 1$ mW
Laser Protection Class.....	2 (IEC 825)
Lifetime (25°C / 77° F).....	50 000 h
Light Receiver	Photo Diode
Measurement Value Output.....	$\geq 0,001$ mm
Measurement Value Output / Cycle Time.....	800 values per second
Reproduction	± 2 mm
Programmable via CAN-Bus	CAN-Bus-Interface (ISO/DIS 11898)
Data Protocol	CAN 2.0 A, CANopen Device Profil for Encoder CIA DS-406 V2.0 / PCA 82 C250 / C251
Output Code	Binär
Baud Rate (adjustable by switch).....	20 kbaud, line length up to 2500 m / 125 kbaud, line length up to 500 m 500 kbaud, line length up to 100 m / 1 Mbaud, line length up to 25 m
Special features	Programming of following parameters via the CAN-Bus: - Direction of Counting - Clear Preset - Step-Length - Error value - Preset-Adjustment - Sending the position values cyclicly

Environmental Data

Electromagnetic compatibility	EN 61000-4-2 (IEC-801-2) / EN 61000-4-4 (IEC-801-4)
Operating Temperature	0° to 50°C (32° F to 122° F), -30° to +50°C (device with heating)
Thermal drift.....	1 ppm / °C
Storage temperature range.....	-20° to 75°C (- 4° F to 167° F)
Relative Humidity.....	98 % (non condensing)
* Protection Class.....	IP 65 (DIN 40 050)
* The protection class of the device can be effected by the type of cable and connector used.	

Mechanical Data

Vibration (50-2000 Hz Sinusoidal)	DIN IEC 68-2-6
Shock (11ms)	DIN IEC 68-2-27
Mechanical Special Types	Upon Request
Connection.....	Screw Terminals, 3 x PG 9

Dimension drawing

