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Laser Measuring Device LE-200 CANopen

VIA BUS/ TRWinProg

- **Robust**
- **Measurement of Linear Movement**
- **Non Contact Distance Measurement**
- **Measuring Distance Up To 125m, 170m, 195m other distances on request**
- **Interface: CANopen**
- **Parameterizable via CAN-Bus**

Electrical Data

Measurement Principle	Phase shift measurement
Range (LE200 to Reflector)	0.2 – 125 m standard, 170m, 195m (special devices)
Resolution	selectable, physical resolution 0.1 mm
Linearisation	
up to 12m (standard)	absolute linearity error ±3 mm
complete measuring length	absolute linearity error ±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) / Laser Protection Class 2 acc. to DIN EN 60 825-1: 2001-11
Wave Length λ	670 nm
Maximum Laser Power	P ≤ 1 mW
Lifetime (25°C / 77° F)	50 000 h
Measurement Value Output / Cycle Time	1000 values per second
Integration Time	1 ms
Reproduction	± 2 mm
Programmable via RS485	PC IBM compatible TRWinProg software / CANopen
CANopen Interface	CAN Bus Interface according to ISO/DIS 11898
Data protocol	CAN 2.0 A, CANopen Device Profile for Encoder CiA DS-406 V2.0
Output code	Binary
Baud rate (adjustable)	- 20 kbps, line length up to 2500 m - 125 kbps, line length up to 500 m - 500 kbps, line length up to 100 m - 1000 kbps, line length up to 25 m
Special features	Configuration of the following parameters via the CAN-Bus: - Preset value, - Clear Preset, - Output value in case of an error, - Function ext. input, - Automatic error acknowledgement, - Function error output, - Switching functions, - Operating parameters, - Position value, - Measuring step, - Cyclic transmitting of the position values
Switching input / Switching output	
Levels switching input	1-level > +8V, 0-level < +2V, up to ±35V, 5 kOhm
Levels switching output	1-level > US-2V, 0-level < 1 V, up to 100mA

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, related to the max. measuring length of 125 m, 170 m or 195 m
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 is valid for the device with screwed-together cable glands.

Changes reserved

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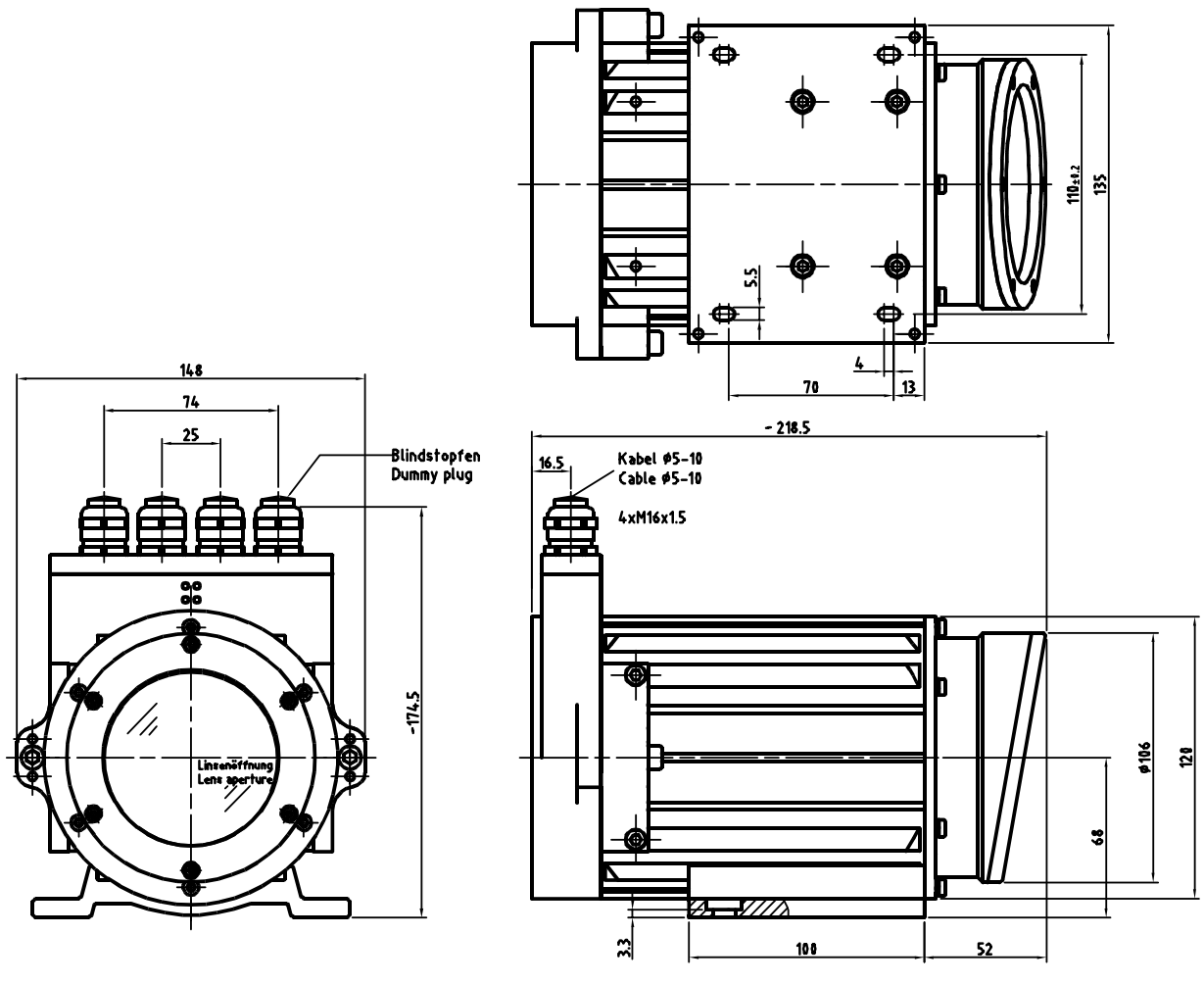
Mechanical Data

Vibration (50-2000 Hz Sinusoidal DIN IEC 68-2-6	≤ 50 m/s² (5g)
Shock (11ms) DIN IEC 68-2-27	≤ 300 m/s² (30g)
Mechanical Special Types	Upon Request
Connection	Screw Terminals, Cable Screw Gland 4 x M16 x 1.5

Dimension drawing



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