Laser Measuring Device LE 200 - EIP

TR-VLE-TI-GB-0137
06/12 Revision 01
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+ EtherNet/IP interface
+ Robust
+ Measurement of linear movement
+ Non contact distance measurement
+ Measuring distance up to 125m, 170m, 195m other distances on request
+ Parametrizable
+ Further interfaces available
+ Customized adaptations upon request

Characteristics

Supply voltage	
- Standard	18…27 V DC, ± 5 %
- With heating	24 V DC, ± 5 %
Current consumption, without load	
- Standard	< 350 mA
- With heating	< 2.5 A
Measurement principle	Phase shift measurement
Measuring length, against reflector foil	0.2…125 m standard, 170m, 195m (special devices)
Resolution selectable [1)]	physical resolution 0.1 mm
Linearization	
- up to 12 m, standard	absolute linearity error ± 3 mm
- complete measuring length	absolute linearity error ± 5 mm
Reproducibility	± 2 mm
Laser diode, red light	Laser Protection Class 2 according to DIN EN 60 825-1: 2003-10
- Wave length λ	670 nm
- Laser power	$P_{max} \leq 1$ mW
- Lifetime, 25 °C	50 000 h
Measurand output / refresh rate	1000 values / s
Integration time	1 ms
Programmable via RS485	WINDOWS® compatible (TRWinProg) / EtherNet/IP
EtherNet/IP	IEC 61784-1:2003 CP 2/2 Type 2, IEC 61158:2003 Type 2
- Physical Layer	EtherNet/IP 100Base-TX, Fast Ethernet, ISO/IEC 8802-3
- Output code	Binary
- Device profile	Encoder Device Profile 0x22, ODVA specification
- Transmission rate	100 MBit/s
- Transmission	CAT-5e cable, shielded (STP), ISO/IEC 11801
- Parameter [1)]	Count direction, Resolution, Preset value, speed, among others
Switching input / Switching output [1)]	
- Levels switching input	1-level > +8 V, 0-level < +2 V, up to ±35V, 5 kOhm
- Levels switching output	1-level > US-2 V, 0-level < 1 V, up to 100 mA

[1)] programmable parameter

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Environmental conditions

Vibration, DIN EN 60068-2-6: 1996 ..... ≤ 50 m/s², sine 50-2000 Hz
Shock, DIN EN 60068-2-27: 1995..... ≤ 300 m/s², half-sine 11ms
EMC
- Immunity to disturbance, DIN EN 61000-6-2: 2006
- Transient emissions, DIN EN 61000-6-3: 2007

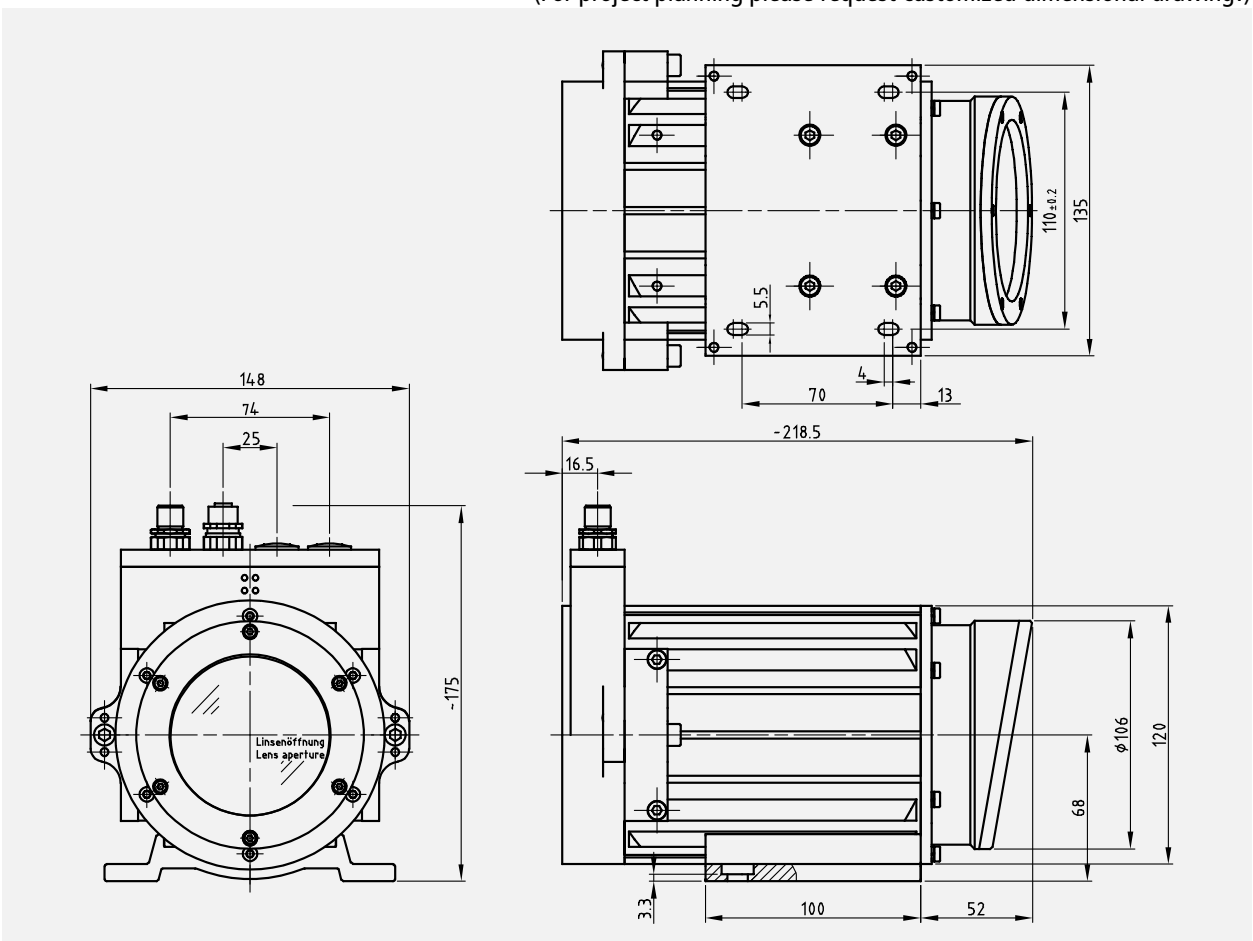
Working temperature
- Standard ..... 0…50 °C
- With heating ..... -30 °C…+50 °C

Storage temperature ..... -20 °C…+75 °C, dry
Thermal drift, related to the max. measuring length..... 1 ppm / °C at 125 m, 170 m or 195 m
Relative humidity, DIN EN 60068-3-4: 2002 ..... 98 %, non condensing
Protection class, DIN EN 60529: 1991 [2] ..... IP 65

[2] valid with screwed on mating connector and / or screwed together cable gland

Dimension drawing

(For project planning please request customized dimensional drawing!)



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