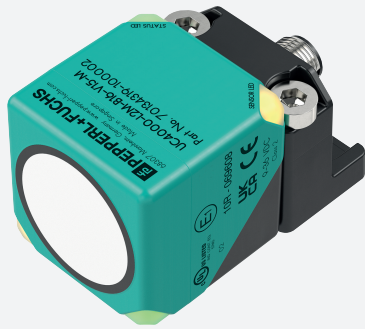




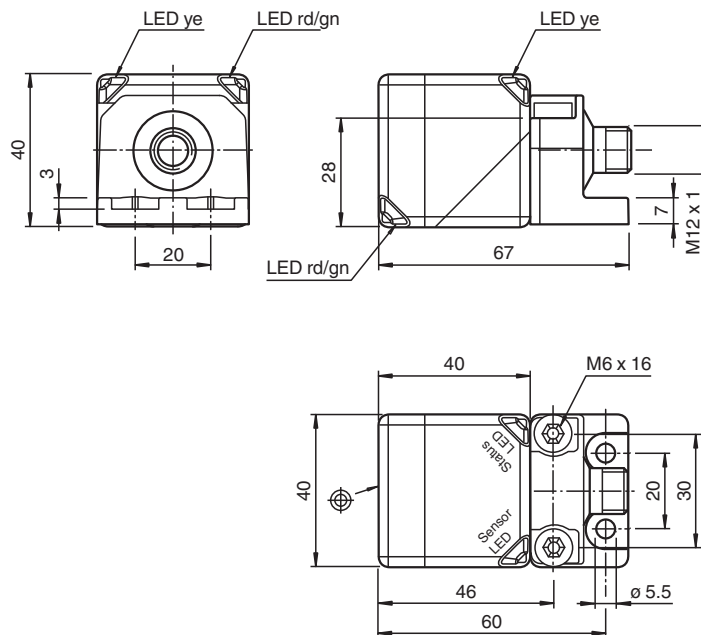
Ultrasonic sensor UC4000-L2M-B16-V15-M

- CANopen interface
- E1-Type approval
- High EMC resistance
- Sensor head bidirectional and rotatable
- Rugged metal base
- Function indicators visible from all directions
- Degree of protection IP68

Single head system



Dimensions



Technical Data

General specifications

Sensing range	200 ... 4000 mm
Adjustment range	240 ... 4000 mm
Dead band	0 ... 200 mm
Standard target plate	100 mm x 100 mm
Transducer frequency	approx. 85 kHz

Nominal ratings

Linearity error	< 40 mm
Temperature drift	< +/- 100 mm
Time delay before availability	t_v ≤ 700 ms

Technical Data

Functional safety related parameters

MTTF _d	431 a
Mission Time (T _M)	10 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

LED yellow	object in evaluation range
LED red/green	CANopen status display

Electrical specifications

Operating voltage	U _B	9 ... 30 V
No-load supply current	I ₀	≤ 50 mA
Power consumption	P ₀	typ. 0.6 W

Interface

Interface type	CAN
Communication protocol	CANopen
Process data	Input: 48 Bit - measured value (distance value) 16 Bit - signal quality 8 Bit - counter-1 16 Bit or counter-2 8 Bit - status register 8 Bit
Node ID	programmable
Vendor ID	173 (0xAD)
Product code	50331651 (0x03000003)
Transfer rate	250 kBit/s , programmable 125 ... 1000 kBit/s
Termination	external
Cycle time	53.5 ms preset , programmable
Min. cycle time	53.5 ms

Compliance with standards and directives

Standard conformity	
Standards	EN IEC 60947-5-2:2020 IEC 60947-5-2:2019
Communication interface	CiA 310, Ver. 4.2.0

Approvals and certificates

UL approval	cULus Listed, Class 2 Power Source
CCC approval	CCC approval / marking not required for products rated ≤36 V
UN/ECE Regulation No. 10 (E1)	Type-approval number: 10R-069608

Ambient conditions

Ambient temperature	-40 ... 85 °C (-40 ... 185 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

Mechanical specifications

Connection type	Connector plug
Degree of protection	IP68
Material	
Housing	PA-GF35
Connector	
Threading	M12
Number of pins	5
Mass	180 g
Dimensions	
Height	40 mm
Width	40 mm
Length	67 mm

Factory settings

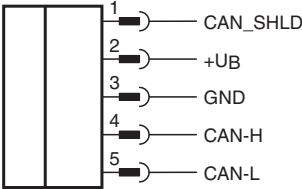
Default setting	measured value "distance", signal quality, counter-2 (object 0x2000)
Beam width	wide (object 0x4000)

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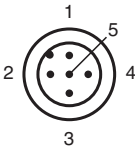
Technical Data

Synchronization	deactivated (object 0x2020)	
Node ID		16
Transfer rate	250 kBit/s	

Connection

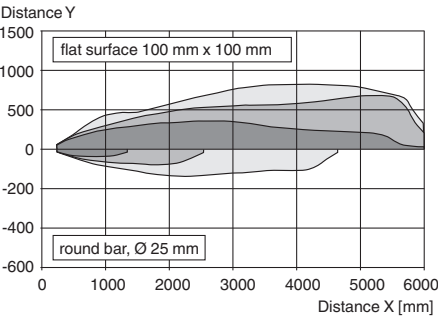


Connection Assignment



Characteristic Curve

Characteristic response curve



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