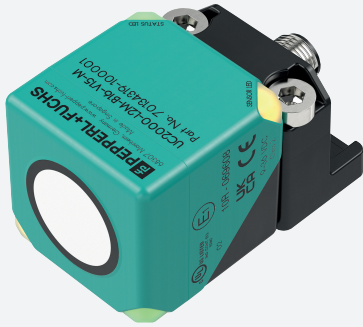


# Ultrasonic sensor

## UC2000-L2M-B16-V15-M

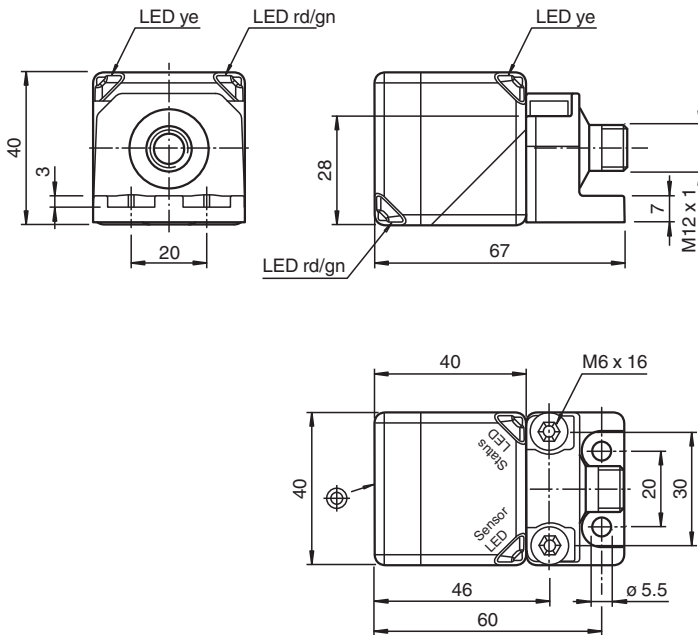


- CANopen interface
- E1-Type approval
- High EMC resistance
- Sensor head bidirectional and rotatable
- Rugged metal base
- Function indicators visible from all directions
- Degree of protection IP68

Single head system



### Dimensions



### Technical Data

#### General specifications

Sensing range	80 ... 2000 mm
Adjustment range	120 ... 2000 mm
Dead band	0 ... 80 mm
Standard target plate	100 mm x 100 mm
Transducer frequency	approx. 175 kHz

#### Nominal ratings

Linearity error	< 20 mm
Temperature drift	< +/- 20 mm
Time delay before availability	$t_v$ ≤ 700 ms

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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## Technical Data

Functional safety related parameters	
MTTF <sub>d</sub>	421 a
Mission Time (T <sub>M</sub> )	20 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 <sub>B</sub> 9 ... 30 V
No-load supply current	I <sub>0</sub> ≤ 50 mA
Power consumption	P <sub>0</sub> 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	50331650 (0x03000002)
Transfer rate	250 kBit/s , programmable 125 ... 1000 kBit/s
Termination	external
Cycle time	28.5 ms preset , programmable
Min. cycle time	28.5 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	175 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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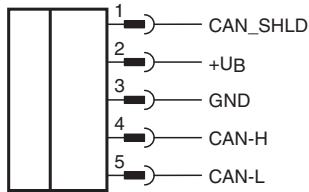
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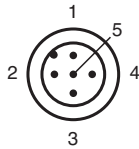
## Technical Data

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

## Connection

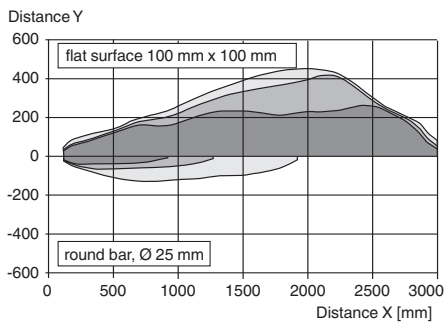


## Connection Assignment



## Characteristic Curve

### Characteristic response curve



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