

Ultrasonic sensor

UC7000-50GK-B26-0,15M-Y

- Thread M50
- PTFE coated transducer
- Physical LIN interface
- Temperature compensation
- Resolution 16 Bit

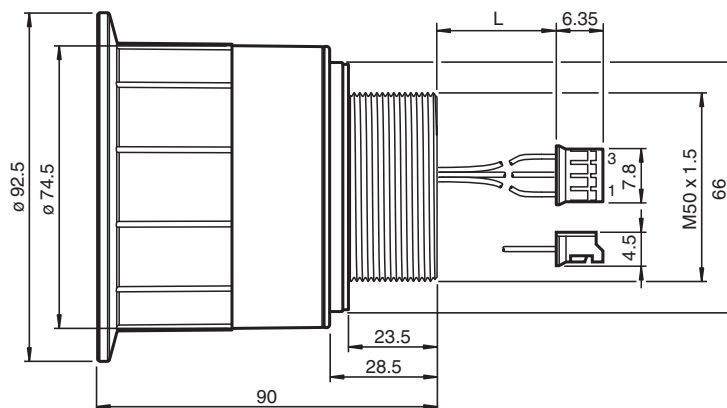
Single head system



Function

The distance measurement is carried out over the runtime of the ultrasonic impulse. A measuring cycle is triggered by sending a start telegram. Once the measurement has been taken, the result is returned in 16-bit form.

Dimensions



Technical Data

General specifications

Sensing range	500 ... 7000 mm
Dead band	0 ... 500 mm
Standard target plate	100 mm x 100 mm
Transducer frequency	approx. 50 kHz

Electrical specifications

Operating voltage	U_B	8 ... 18 V DC , ripple 10 % _{SS}
No-load supply current	I_0	≤ 20 mA at 12 V DC
Power consumption	P_0	≤ 250 mW in the measurement operating mode
Time delay before availability	t_v	≤ 165 ms

Interface

Interface type	Physical LIN interface
Transfer rate	19.2 kBit/s (8N1)

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

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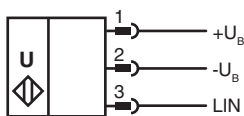
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Technical Data

Cycle time	150 ms
Output	
Resolution	4 mm
Repeat accuracy	≤ 0.1 % of full-scale value
Temperature influence	3 % of full-scale value over the entire temperature range
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN IEC 60947-5-2:2020 : chapter 8.2.6.2.2, 8.2.6.2.3, 8.2.6.3 The sensor is designed to be supplied by a battery. The sensor signals are further processed in a control unit, which is also responsible for EMC protection.
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications	
Connection type	fixed cable with plug
Degree of protection	IP66 / IP67 (connector excluded)
Material	
Housing	Polyester (GRP)
Enclosure cover	PBT
Transducer	epoxy resin/hollow glass sphere mixture
Connector	
Type	JST connector: PHR-3
Number of pins	3
Connection assembly	
Cable	
Cable diameter	3 x 0.25 mm ²
Material	PVC
Length	L 150 mm
Mass	380 g
Factory settings	
Output	Temperature compensation Address setting 7

Connection



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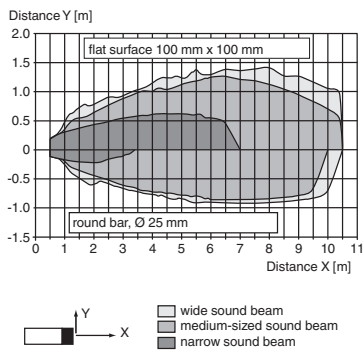
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Characteristic Curve

Characteristic response curve



barra redonda, Ø 25 mm

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