

Ultrasonic sensor UCC2500-50GK-B26-8MOL

- Thread M50
- PTFE coated transducer
- Power save mode
- PWM output
- Physical LIN interface
- Serial Interfaces
- Temperature compensation

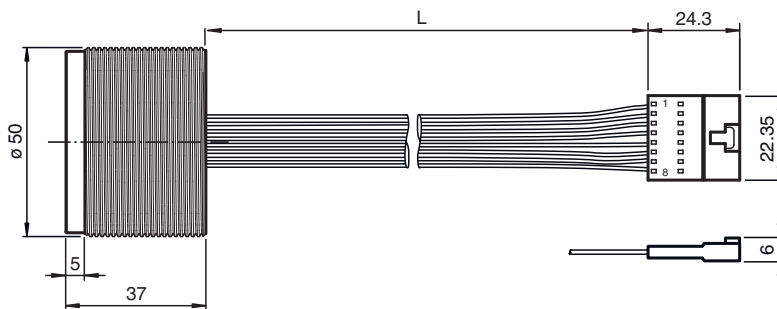
Single head system



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 8-bit form.

Dimensions



Technical Data

General specifications		
Sensing range		150 ... 2500 mm
Dead band		0 ... 150 mm
Standard target plate		100 mm x 100 mm
Transducer frequency		approx. 120 kHz
Electrical specifications		
Operating voltage	U_B	for UART and PWM operation: $U_{UART/PWM} = 2.5 \dots 5 \text{ V DC}$, typical 3.3 V for LIN operation: $U_{LIN} = 8 \dots 18 \text{ V DC}$, typical 12 V
No-load supply current	I_0	$\leq 60 \text{ mA}$ at 3.3 V DC $\leq 20 \text{ mA}$ at 12 V DC
Quiescent current indication		$< 3 \text{ }\mu\text{A}$ during standby mode at UART- and PWM operation
Power consumption	P_0	$\leq 250 \text{ mW}$ in the measurement operating mode
Time delay before availability	t_v	$\leq 70 \text{ ms}$

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

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Technical Data

Interface 1	
Interface type	Physical LIN interface
Transfer rate	19.2 kBit/s (8N1)
Cycle time	55 ms
Resolution	10 mm (corresponding to 1 LSB)
Interface 2	
Interface type	UART 3.3V
Transfer rate	19.2 kBit/s (8N1)
Cycle time	55 ms
Resolution	10 mm (corresponding to 1 LSB)
Input	
Input type	Standby active
Signal level	low: 0 ... 0.8 V
Output	
Output type	PWM output (PNP) , not short-circuit protected
Resolution	pulse length 10 μ s /cm
Output rated operating current	max. 10 mA
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	PBT
Transducer	epoxy resin/hollow glass bead mixture; Polyurethane foam, PTFE coated
Connector	Molex connector 70107-0007
Number of pins	8
Cable	
Length	L 276 mm \pm 20 mm
Mass	100 g
Factory settings	
Output	PWM output (PNP) Temperature compensation Address setting 7
Beam width	wide
General information	
Scope of delivery	2 nuts plastic

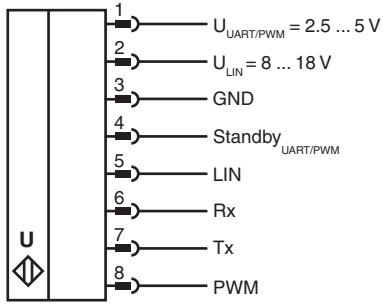
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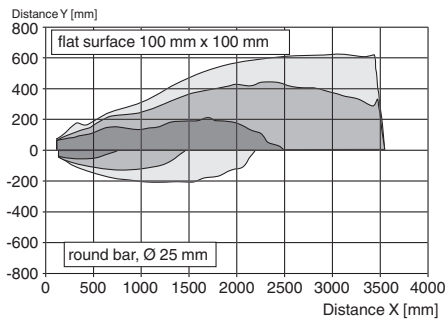
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Connection



Characteristic Curve

Characteristic response curve



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