

Ultrasonic sensor UCC2500-50GK-B26-8MOL-Y

- Thread M50
- PTFE coated transducer
- Power save mode
- Physical LIN interface
- Serial Interfaces
- Temperature compensation
- 3 m connection cable

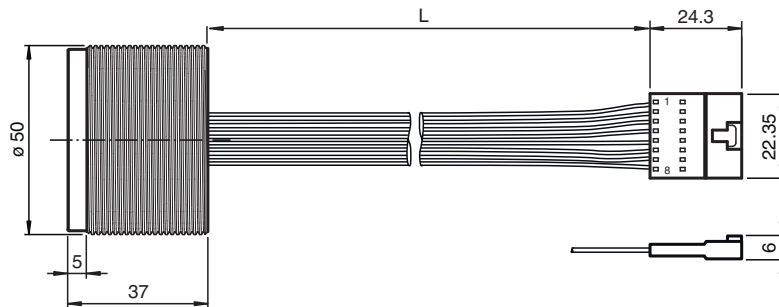
Single head system



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	$\leq 70 \text{ ms}$

Release date: 2024-01-17 Date of issue: 2024-01-17 Filename: 70143148_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

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) , deactivated
-------------	--------------------------------

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 3000 mm ± 50 mm
Mass	142 g
Dimensions	
Height	37 mm
Width	50 mm
Length	50 mm

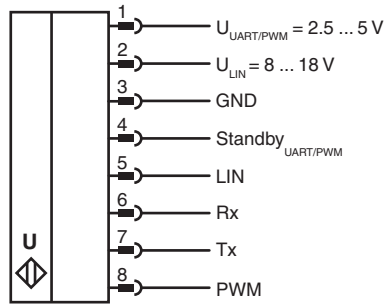
Factory settings

Default setting	Address setting 7 Temperature compensation active
Output	PWM output (PNP) , deactivated
Beam width	wide

General information

Scope of delivery	2 nuts plastic
-------------------	----------------

Connection



Characteristic Curve

Characteristic response curve

