

1) Ultrasonic transducer, 2) Process connection, 3) Display and control panel



Basic features

Application	Distance measurement Object detection
Approval/Conformity	cULus CE WEEE UKCA
Operating mode	Reflectionlight scanner (switching point) Analog measurement (output curve) Refl.light scanner (window) Retro-reflector
Series	M30E2

Display/Operation

Adjuster	Key (2x)
Display	Distance value - segment display Output function- LED yellow Object not in range - LED red Object in range - LED green Sensor settings - segment display
Setting	Teach-in mode display/button Analog output U/I/Auto/manual Operating mode Switching distance, 2 values Normally open/Normally closed Key disable on/off Factory setting (Reset) Hysteresis Measured value filter Sensitivity under pressure Synchronization on/off Synchronous/Multiplex mode Output curve window Segment display mode Output curve rising/falling Temperature comp. on/off Sensor calibration Multiplex sensor address Foreground suppression range Response delay 0 to 20 s Filter strength (10 levels) Segment displ. bright/dark/off

Ultrasonic Sensors
BUS M30E2-PPC-20/130-S92K-G1
Order Code: BUS005W

BALLUFF

Electrical connection

Connection	M12x1-Male, 5-pin
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Current draw max.	80 mA
Hysteresis H max.	20 mm
Input function	Synchronization signal
Load resistance RL max. (Analog I)	500 Ohm at UB > 20 V 100 Ohm at UB < 20 V
Load resistance RL min. (Analog V)	100 kOhm at UB > 15 V
Operating voltage Ub	9...30 VDC
Output current max.	200 mA
Rated operating voltage Ue DC	24 V
Switching frequency	5 Hz
Synchronization	internal, max. 10 sensors
Ultrasonic Frequency	180 kHz

Environmental conditions

Ambient temperature	-25...70 °C
IP rating	IP67
Storage temperature	-40...85 °C

Remarks

Order accessories separately.
Do not press key using a pointed tool.
Reference object for Sn: tube ø27mm. Max. range refers to the aligned plate.
The sensor is functional again after the overload has been eliminated.
For additional information, refer to user's guide.
Sensor suitable for pressure up to 6 bar
Sensor is chemically resistant

Interface

Analog output	Analog, voltage/Analog, current 0...10 V/4...20 mA
Output characteristic	linear rising/falling
Switching output	PNP normally open/normally closed (NO/NC)

Material

Housing material	1.4571 stainless steel PBT, TPU
Material sensing surface	PTFE

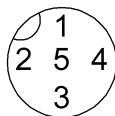
Mechanical data

Dimension	Ø 47 x 114.5 mm
Pressure rating max.	6 bar
Process connection	G 1"

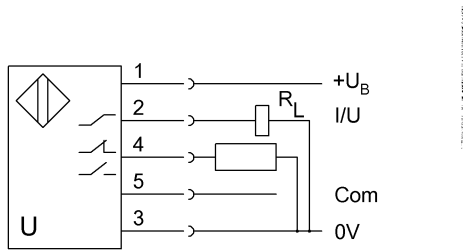
Range/Distance

Measuring range	200...5000 mm
Rated operating distance Sn	1300 mm
Repeat accuracy	± 0.15 %FS
Resolution	≤ 0.180 mm

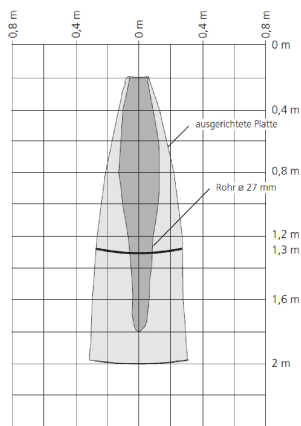
Connector Drawings



Wiring Diagrams (Schematic)



Technical Drawings



Help Views

