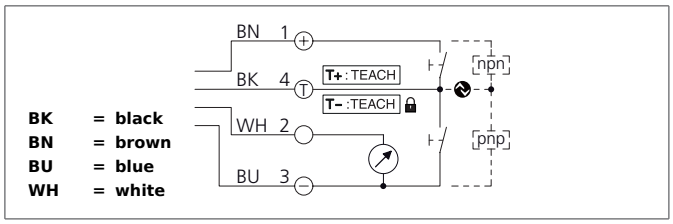
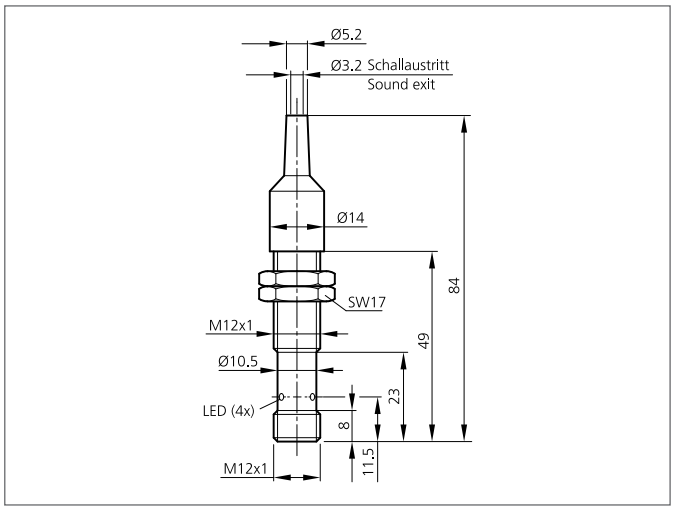
US 12 M 150 FB IU-B4
Ultrasonic Sensor

- IO-Link
- Can be configured as ultrasonic diffuser, ultrasonic barrier or for the analog distance measurement
- 3 different teach modes
- Scanning range adjustable
- Analog output
- Narrow detection beam / no blind zone due to focus nozzle
- Switching functions: NO/NC, frame function teachable
- Insensitive to dirt
- Small design
- Robust metal casing
- Protection class IP 67



Safety instructions

The Instruments are not to be used for safety applications, in particular applications in which safety of persons depends on proper operation of the instruments.
These instruments shall exclusively be used by qualified personnel.



TECHNICAL INFORMATION (typ.)	+20°C, 24V DC
Operating principle	Ultrasonic sensor, Ultrasonic barrier, configurable via IO-Link
Evaluation	analog, digital (via IO-Link)
Operating modes	Default, Master/Slave function (synchronization or multiplex mode)
Size	M12 x 1 (thread)
Design	screw
Sending axis	axial
Characteristics	Focus nozzle
Nominal switching distance (Sn)	150 mm
Standardized measuring plate	20 x 20 mm
Service voltage	18 ... 30 V DC
No-load current	< 40 mA, (24 V DC)
Adjustment range	0 ... 150 mm, adjustable
Resolution	Ø 1,0 mm, Set measuring range / 4095 (analogue output)
Sensitivity adjustment	Remote teach
Mounting distance	> 60 mm (Sensor to sensor)
Switching output	Push pull, 150 mA
Max. power operating	150 mA
Switching hysteresis	2 mm, via IO-Link adjustable up to 20 mm
Analog output	0 ... 10 V, 4 ... 20 mA
Sound frequency	400 kHz
Interface	IO-Link, V1.1, COM2 (38,4kBd), Smart Sensor Profile
Inverse polarity protection	Yes

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Display	2 x LED yellow (Display output), 2 x LED green (status)
Voltage drop	< 2,0 V
Switching frequency	20 Hz
Short-circuit protection	yes
Reproducibility	< 0,5 mm
Linearity error	< 0,4 % / Sn max.
Readiness delay	< 300 ms
Ambient temperature, operation	-25 ... +70 °C
Temperature drift	0.2 %/K (uncompensated), < 1 %/Sn (compensated)
Load resistance	> 10 KΩ (0 ... 10 V) / < 400 Ω (4 ... 20 mA)
Insulation voltage endurance	500 V
Protection class	IP 67
Protection degree	III, operation on protective low voltage
Casing material	brass nickel plated
Material	epoxy resin, PUR (Transducer surface)
Connection	Connector, M12, 4-poled