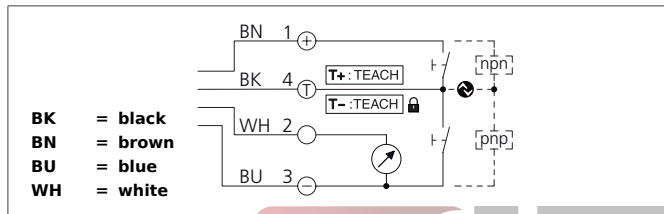
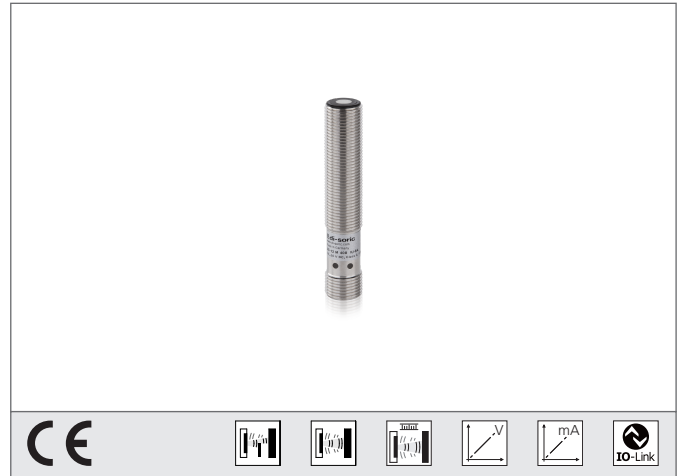


# US 12 M 400 IU-B4

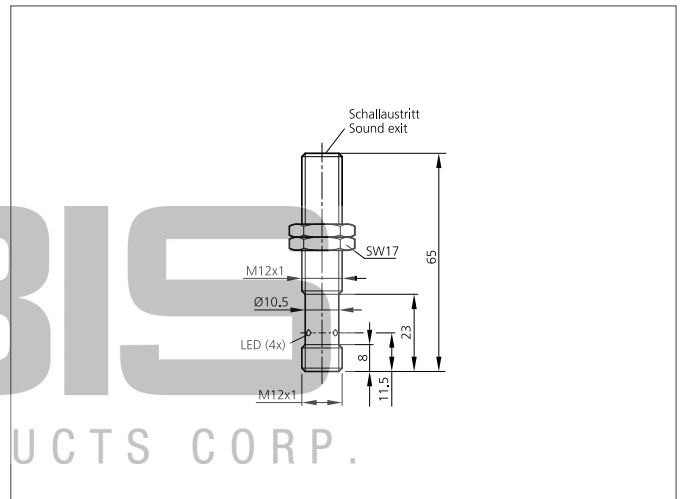
## Ultrasonic Sensor

- 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 / small blind zone
- 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
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
Nominal switching distance (Sn)		400 mm
Standardized measuring plate		100 x 100 mm
Service voltage		18 ... 30 V DC
No-load current		< 40 mA, (24 V DC)
Adjustment range		40 ... 400 mm, Teach in, 40 ... 400 mm, adjustable
Resolution		1,0 mm
Sensitivity adjustment		Remote teach
Mounting distance		> 250 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
Display		2 x LED yellow (Display output), 2 x LED green (status)

## US 12 M 400 IU-B4 Ultrasonic Sensor



TECHNICAL INFORMATION (typ.)	+20°C, 24V DC
Voltage drop	< 2,0 V
Switching frequency	10 Hz
Short-circuit protection	yes
Reproducibility	1,5 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

