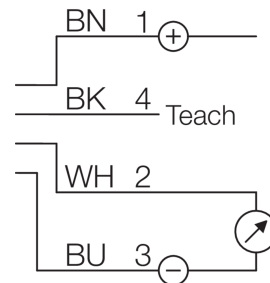
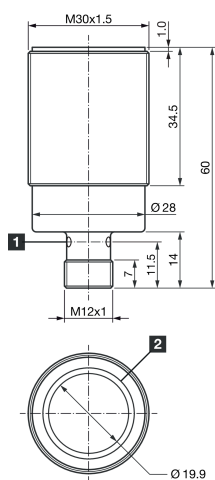




**210594**  
**US 30 M 3000 IU-B4**  
**Ultrasonic sensor**

- IO-Link
- Configurable as an ultrasonic sensor or barrier
- Analog current output
- 3 different teach modes
- Resistant to dirt
- Metal casing
- Plug connector M12
- Protection class IP 67



1) LED 2 x 2                      2) Sound outlet ultrasonic transducer                      BK: black                      BN: brown                      BU: blue                      WH: white

**Function**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

| Technical data (typ.)                | +20°C, 24 V DC                           |
|--------------------------------------|--|
| Service voltage                      | 18 ... 30 V DC                           |
| No-load current (max.)               | 45 mA (24 V DC)                          |
| Inverse polarity protection          | yes, except for the analog output PIN2   |
| Short-circuit protection             | Yes                                      |
| Insulation voltage endurance         | 500 V                                    |
| Housing dimensions                   | M30 x 60 mm                              |
| Thread                               | M30 x 1.5                                |
| Housing length                       | 60 mm                                    |
| Transmission exit                    | axial                                    |
| Assembly distance (sensor to sensor) | 500 mm                                   |
| Transmission angle of the object     | 10°                                      |
| Housing material                     | Brass (CuZn, nickel-plated)              |
| Material                             | Epoxy resin, PUR (Transducer surface)    |
| Weight                               | 70 g                                     |
| Protection class                     | III, operation on protective low voltage |
| Approvals                            | UL                                       |
| Operating principle                  | Ultrasonic sensor, Ultrasonic barrier    |
| Evaluation                           | digital, analog (With IO-Link)           |
| Design                               | Thread                                   |
| Characteristics                      | IO-Link                                  |



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**Ultrasonic sensor**

| Technical data (typ.)                 | +20°C, 24 V DC  |
|---------------------------------------|---|
| Parallel operation possible           | Yes   |
| Operation modes                       | STANDARD, Master / slave function (synchronization or multiplex operation)  |
| Scope of delivery                     | Sensor, 2 x M30 nuts  |
| Functions                             | Analog 0...10V / 4...20mA / 0... 20mA, Teach, switching output push-pull, PNP, NPN (Pin 2), Teach , push-pull, PNP, NPN, synchronization, multiplex (PIN 4) |
| Switching output                      | Push-pull, 100 mA, NO/NC, switchable  |
| Max. switch current                   | 100 mA  |
| Voltage drop (max.)                   | 2 V   |
| Analog output                         | 0 ... 10 V, 4 ... 20 mA (0 ... 20 mA IO-Link)   |
| Interface                             | IO-Link (V1.1, COM2 38.4 kBd, Smart Sensor Profile)   |
| Load resistance                       | > 10 KΩ (0 ... 10 V) / < 400 Ω (4 ... 20 mA / 0 ... 20 mA)  |
| Nominal switching distance (Sn)       | 3000 mm   |
| Range                                 | 300 ... 3000 mm   |
| Adjustment range                      | 300 ... 3000 mm (Teach in)  |
| Resolution                            | 1.0 mm (Adjusted measuring range/4095 (analog output))  |
| Standardized measuring plate          | 200 x 200 mm  |
| Switching hysteresis (max.)           | 5 ... 50 mm (adjustable via IO-Link / 15 mm factory setting)  |
| Reproducibility                       | 2.0 mm  |
| Linearity error                       | ± 0.2 %   |
| Sensitivity adjustment                | Remote teach  |
| Display                               | LED 1x Green - Status, 1x yellow - Switching output   |
| Measuring frequency                   | 33 Hz   |
| Ultrasonic frequency                  | 125 kHz   |
| Switching frequency                   | 3 Hz  |
| Readiness delay (max.)                | 300 ms  |
| Shock/vibration load                  | 30 g, 11 ms / 10 ... 55 Hz, 1.0 mm  |
| Ambient temperature during operation  | -25 ... +70 °C  |
| Temperature drift                     | 0.2 %/K (uncompensated)   |
| Temperature drift                     | < 1.5 %/Sn (compensated)  |
| Protection type                       | IP 67   |
| Connection                            | Connector, M12, 4-pin   |
| Connection cable                      | VKHM ... /4   |
| <b>More information / accessories</b> | <b><a href="https://www.di-soric.com/210594">https://www.di-soric.com/210594</a></b>  |