

Through Beam Sensors

LASER

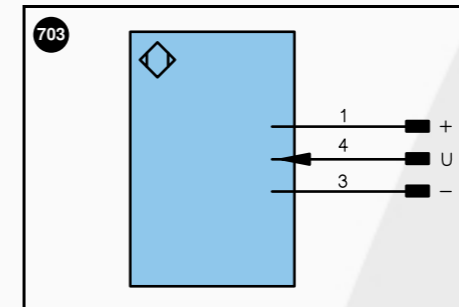
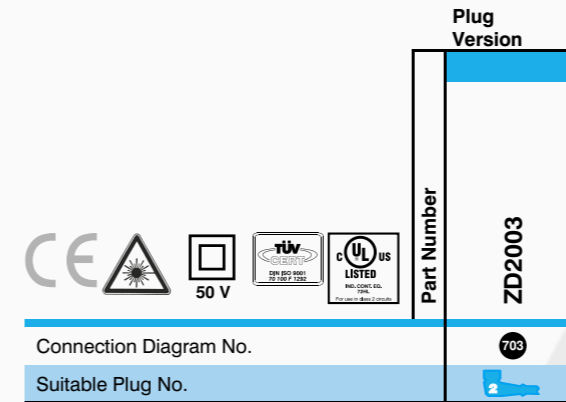
ZD2003

Part Number



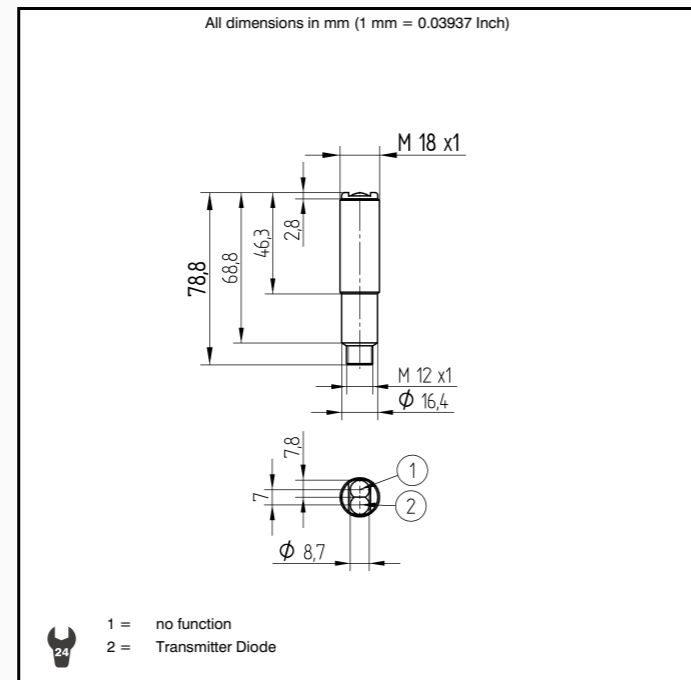
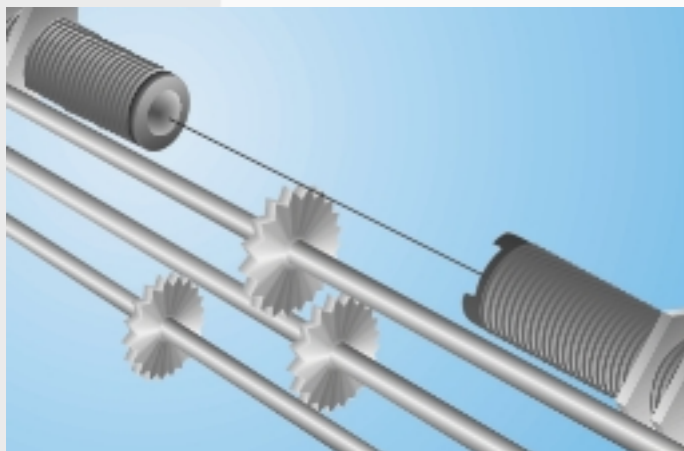
Technical Data

| Optical Data | |
|--|-----------------|
| Range | 20000 mm |
| Light Source | Laser (red) |
| Wave Length | 655 nm |
| Service Life (T = +25°C) | 100000 h |
| Laser Protection Class (EN 60825-1) | 2 |
| Beam Divergence | 10 mrad |
| Electrical Data | |
| Sensor Type | Emitter |
| Supply Voltage | 10...30 V DC |
| Current Consumption (U _b = 24V) | < 15 mA |
| Temperature Drift | < 10 % |
| Temperature Range | -25...60 °C |
| Short Circuit Protection | yes |
| Reverse Polarity Protection | yes |
| Mechanical Data | |
| Housing | Stainless Steel |
| Full Encapsulation | yes |
| Protection Mode | IP 67 |
| Connection | M 12x1 |
| Protective Insulation, Rated Voltage | 50 V |



| Legend | | | Wire colors according to DIN IEC 757 | | |
|--------|-----------------------------------|----|--------------------------------------|------|--------------|
| + | Power supply "+" | U | Test input | BK | black |
| - | Power supply "0V" | W | Trigger input | BN | brown |
| - | Power supply (AC Voltage) | O | Analog output (1,2,3,...) | RD | red |
| A | Switching output (1,2,3...)/ NO | O- | Ground for the analog output | OG | orange |
| A | Switching output (1,2,3...)/ NC | BZ | Block discharge | YE | yellow |
| V | Contamination / Error output (NO) | Aw | Valve output | GN | green |
| V | Contamination / Error output (NC) | a | Valve control output "+" | BU | blue |
| E | Input (analog or digital) | b | Valve control output "0V" | VT | violet |
| T | Teach input | SY | Synchronization | GY | grey |
| Z | Time delay (activation) | E+ | Receiver-Line | WH | white |
| S | Shielding | S+ | Emitter-Line | PK | pink |
| RxD | RS-232 receive path | ⊕ | Grounding | GNYE | green yellow |
| TxD | RS-232 send path | | | | |

These through beam sensors are well suited for use in aggressive industrial environments. The sensor can be checked for correct functioning via the test input. Thanks to their large working range, the devices demonstrate excellent functional reliability in highly contaminated environments.



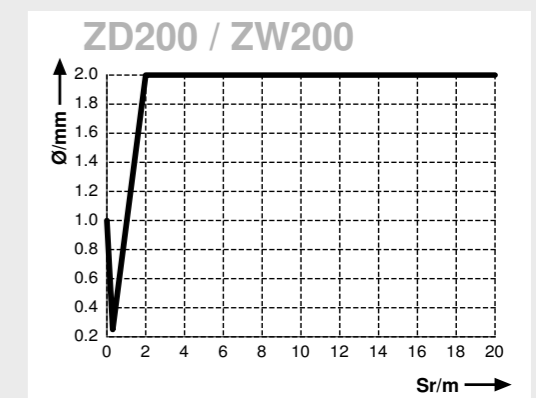
Specifications are subject to change without notice
41/03

Accessories

Mounting Bracket W18 / W18L

Smallest Recognizable Part

Based on the Distance between Emitter and Receiver



Ø = Diameter, Smallest Recognizable Part
Sr = Switching Distance