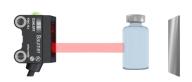
# **Photoelectric miniature sensors 0200**

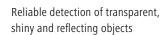
# A new definition of reliability





### Outstanding reliability in every application







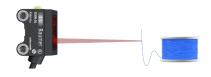
Extreme ambient light immunity for maximum detection reliability in any lighting situation

# Plug & play integration



Simple design-in, installation and setup due to integrated 3D CAD beam path and aligned light beam

## **Excellent precision**



Detection of smallest objects up to 0.05 mm and very precise object positioning up to 0.05 mm accuracy

## O200 portfolio at a glance

|                         | Diffuse sensors with background suppression                |  | Diffuse sensors with intensity difference | SmartReflect<br>sensors | Retro-reflective sensors        | Through-beam sensors      |
|-------------------------|--|--|---|-------------------------|---------------------------------|---------------------------|
| Sensing range           | 3 132 mm   | 3 192 mm                                   | 20 200 mm                                 | 25 180 mm               | ≤ 4 m¹                          | ≤ 6 m                     |
| Light beam              | Line Point   |  |   |                         |                                 |                           |
| Light source            | PinPoint LED,<br>Laser                                     | Red LED,<br>PinPoint LED,<br>IR LED, Laser | Red LED                                   | PinPoint LED, Laser     | Red LED, PinPoint<br>LED, Laser | Red LED,<br>IR LED, Laser |
| Output circuit          | NPN, PNP or push-pull                                      |  |   |                         |                                 |                           |
| Response / Release time | ≤ 0,25 ms  | ≤ 0,25 ms                                  | ≤ 0,25 ms                                 | ≤ 0,25 ms               | ≤ 0,05 ms <sup>2</sup>          | ≤ 0,1 ms <sup>2</sup>     |
| Switching frequency     | 2 kHz  | 2 kHz                                      | 2 kHz                                     | 2 kHz                   | 10 kHz                          | 5 kHz                     |
| Interface               | Red LED, PinPoint LED, Laser                               |  |   |                         |                                 |                           |
| Connection              | 2 m cable or flylead connector M8; all versions with 4-pin |  |   |                         |                                 |                           |
| Mounting                | Smooth sleeves or threaded sleeves M3                      |  |   |                         |                                 |                           |
| Operating temperature   | -25 +50 °C³  |  |   |                         |                                 |                           |
| Protection class        | IP67   |  |   |                         |                                 |                           |

<sup>&</sup>lt;sup>1</sup> Reduced sensing range for retro-reflective sensors for transparent detection and / or with laser light source

<sup>&</sup>lt;sup>3</sup> For laser variants -20 ... +50 °C





<sup>&</sup>lt;sup>2</sup> This range may vary depending on the light source