



Thru-beam sensor (receiver)

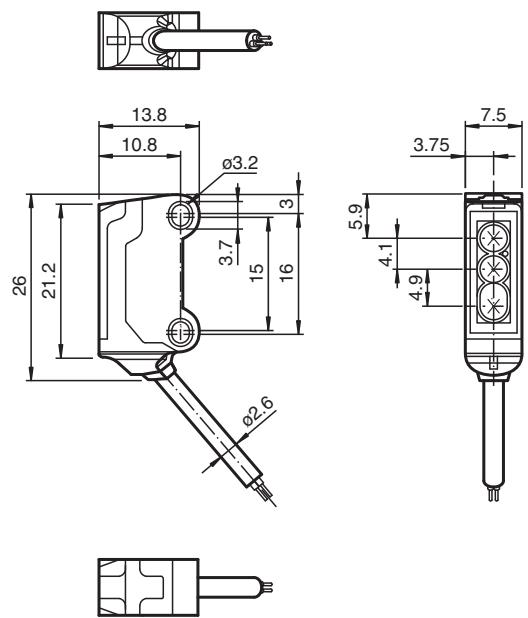
OBE2000-R3-E1-Y302636

- Ultra-small housing design
- Improvement in machine availability with abrasion-resistant, antistatic glass front
- 45° cable outlet for maximum mounting freedom under extremely tight space constraints

Thru-beam sensor (receiver)

The nano sensor has been developed for a broad range of applications. It offers excellent durability and is exceptionally easy to install. The housing is compact and, with its 45° cable outlet, can be installed in the smallest spaces. New functional principles and functionality open up a range of new options.

Dimensions



Technical Data

Release date: 2022-06-03 Date of issue: 2022-06-03 Filename: 302636_eng.pdf

System components

| | |
|----------|-----------------------|
| Receiver | OBE2000-R3-E1-Y302636 |
|----------|-----------------------|

General specifications

| | |
|---------------------------|-----------|
| Effective detection range | 0 ... 2 m |
|---------------------------|-----------|

| | |
|---------------------------|-------|
| Threshold detection range | 2.5 m |
|---------------------------|-------|

| | |
|-----------------|-------------|
| Angle deviation | approx. 2 ° |
|-----------------|-------------|

| | |
|--------------|---------|
| Optical face | frontal |
|--------------|---------|

| | |
|---------------------|--------------------------|
| Ambient light limit | EN 60947-5-2 : 30000 Lux |
|---------------------|--------------------------|

| | |
|----------|-------------|
| Teach-In | deactivated |
|----------|-------------|

Functional safety related parameters

| | |
|-------------------|-------|
| MTTF _d | 806 a |
|-------------------|-------|

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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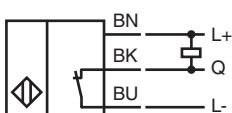
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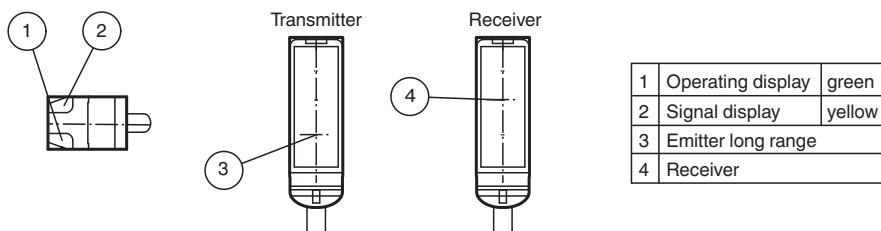
Technical Data

| | | |
|-----------------------------------|---|--------------------------|
| Mission Time (T_M) | 20 a | |
| Diagnostic Coverage (DC) | 0 % | |
| Indicators/operating means | | |
| Function indicator | Receiver: LED yellow, lights up when light beam is free, flashes when falling short of the stability control ; OFF when light beam is interrupted | |
| Electrical specifications | | |
| Operating voltage | U_B | 10 ... 30 V DC , class 2 |
| No-load supply current | I_0 | Receiver: ≤ 8 mA |
| Output | | |
| Switching type | NC contact | |
| Signal output | 1 NPN output, short-circuit protected, reverse polarity protected, open collector | |
| Switching voltage | max. 30 V DC | |
| Switching current | max. 50 mA , resistive load | |
| Voltage drop | U_d | ≤ 1.5 V DC |
| Switching frequency | f | approx. 100 Hz |
| Response time | 5 ms | |
| Conformity | | |
| Product standard | EN 60947-5-2 | |
| Approvals and certificates | | |
| EAC conformity | TR CU 020/2011 | |
| UL approval | cULus Recognized, Class 2 Power Source | |
| CCC approval | CCC approval / marking not required for products rated ≤ 36 V | |
| Ambient conditions | | |
| Ambient temperature | -25 ... 60 °C (-13 ... 140 °F) | |
| Storage temperature | -30 ... 70 °C (-22 ... 158 °F) | |
| Mechanical specifications | | |
| Housing width | 7.5 mm | |
| Housing height | 26 mm | |
| Housing depth | 13.8 mm | |
| Degree of protection | IP67 | |
| Connection | 2 m fixed cable | |
| Material | | |
| Housing | PC/ABS and TPU | |
| Optical face | Polycarbonate | |
| Cable | PUR | |
| Mass | approx. 20 g per sensor | |
| Cable length | 2 m | |
| Factory settings | | |
| Default setting | High gain , preset | |

Connection



Assembly



Characteristic Curve

