

O200.GL-PV1T.72CV/F040

Diffuse sensors with background suppression - miniature

Article number: 11230759

Overview

- Outstanding reliability and unrivalled immunity against ambient light
- Focused laser beam for small objects or gaps
- qTeach - tamper-proof, simple teach-in with ferromagnetic tool
- Robust housing with stainless steel spacer sleeves



Picture similar



Technical data

General data

| | |
|-------------------------------------|---------------------------|
| Type | Background suppression |
| Light source | Pulsed red laser diode |
| Sensing distance Tw | 20 ... 120 mm |
| Sensing range Tb | 3 ... 132 mm |
| Smallest object recognizable typ. | 0,05 mm at 40 mm |
| Alignment / soiled lens indicator | Flashing output indicator |
| Power on indication | LED green |
| Output indicator | LED yellow |
| Sensing distance adjustment | qTeach |
| Laser class | 1 |
| Distance to focus | 40 mm |
| Wave length | 680 nm |
| Suppression of reciprocal influence | Yes |
| Beam type | Point |
| Alignment optical axis | < 1,5° |

Electrical data

| | |
|------------------------------|-----------|
| Response time / release time | ≤ 0,5 ms |
| Jitter | ≤ 0,12 ms |

Electrical data

| | |
|------------------------------------|----------------------|
| Voltage supply range +Vs | 10 ... 30 VDC |
| Current consumption max. (no load) | 20 mA (@ 10 VDC) |
| Current consumption typ. | 10 mA (@ 24 VDC) |
| Voltage drop Vd | < 2 VDC |
| Output function | Light / dark operate |
| Output circuit | PNP complementary |
| Output current | < 50 mA |
| Short circuit protection | Yes |
| Reverse polarity protection | Yes |

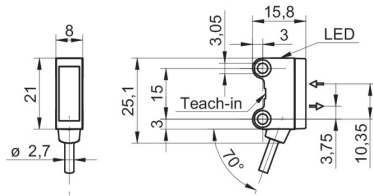
Mechanical data

| | |
|-----------------------|------------------------------------|
| Width / diameter | 8 mm |
| Height / length | 25,1 mm |
| Depth | 15,8 mm |
| Type | Rectangular |
| Mechanical mounting | Sleeve smooth (stainless steel) |
| Housing material | Plastic (ASA, PMMA) |
| Front (optics) | PMMA |
| Connection types | Cable 4 pin, 2 m |
| Cable characteristics | PVC / PVC 4 x 0,08 mm ² |

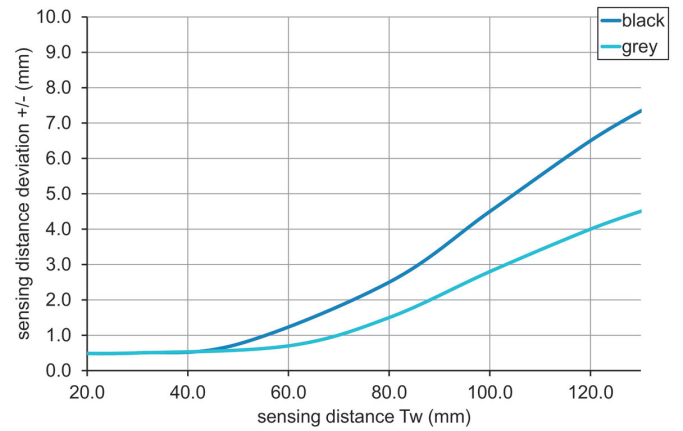
Ambient conditions

| | |
|-----------------------|----------------|
| Protection class | IP 67 |
| Operating temperature | -20 ... +50 °C |

Dimension drawing



Sensing distance diagram



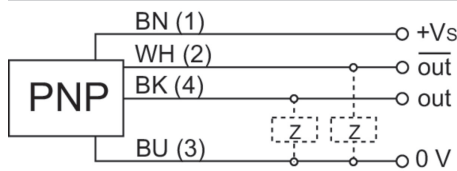
Laser warning

**CLASS 1 LASER
PRODUCT**

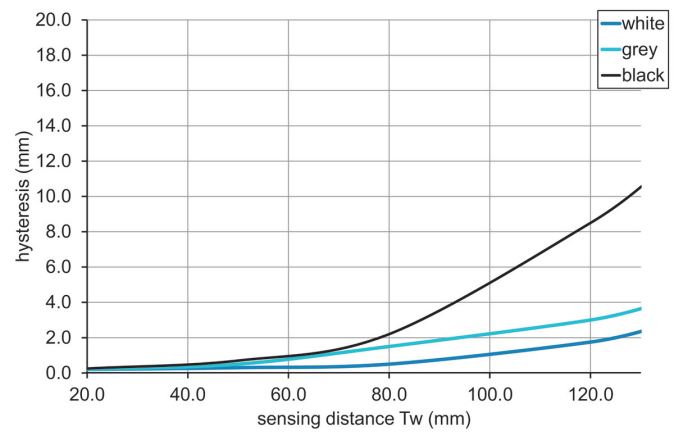
IEC 60825-1/2014

Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019

Connection diagram



Hysteresis curve



Beam characteristic (typically)

