

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
- Quick mounting by means of M3 threaded bushes made of stainless steel



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 |

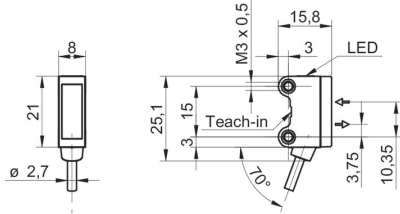
mechanical data

| | |
|-----------------------|---------------------------------------|
| width / diameter | 8 mm |
| height / length | 25,1 mm |
| depth | 15,8 mm |
| type | rectangular |
| mechanical mounting | threaded sleeves M3 (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 mm² |

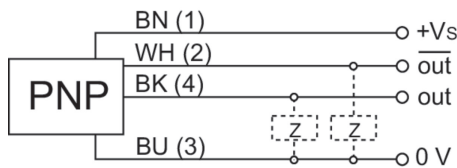
ambient conditions

| | |
|-----------------------|----------------|
| operating temperature | -20 ... +50 °C |
| protection class | IP 67 |

dimension drawing



connection diagram



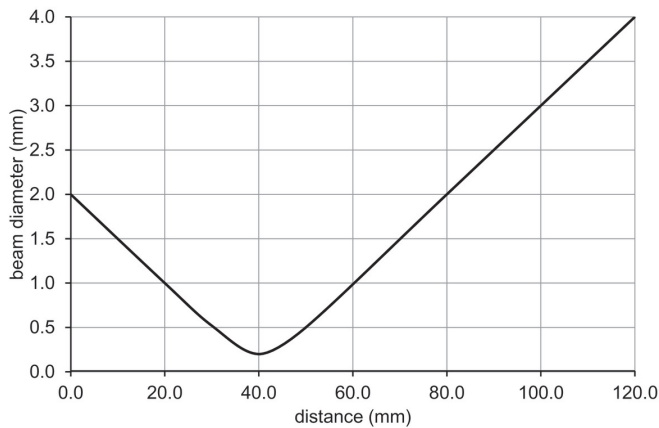
laser warning

**CLASS 1 LASER
PRODUCT**

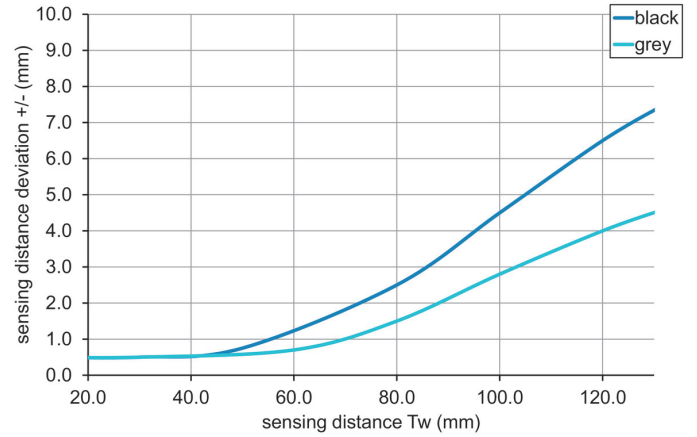
IEC 60825-1/2014

Complies with 21 CFR 1040.10 and 1040.11
except for deviations pursuant to laser
notice No. 50, dated June 24, 2007

beam characteristic (typically)



sensing distance diagram



hysteresis curve

