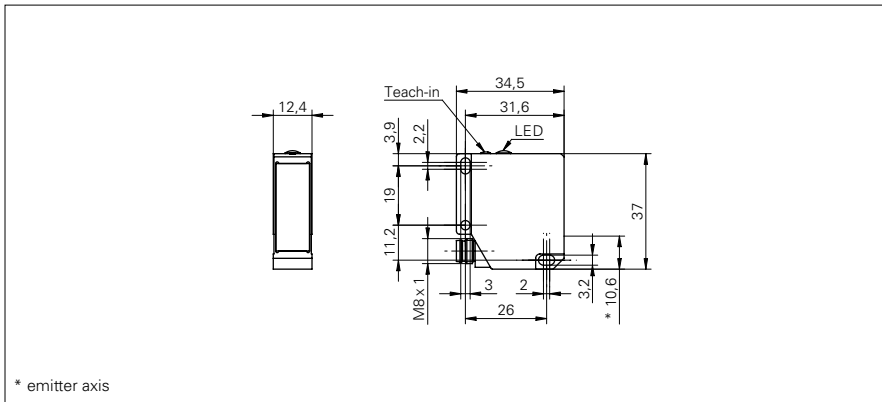


Difference sensors

OBDM 12N6940/S35A

dimension drawing



\* emitter axis

general data

|                        |                        |
|------------------------|------------------------|
| type                   | window analysis        |
| sensing distance $T_w$ | 16 ... 120 mm          |
| Teach-in range min.    | > 0,4 mm               |
| adjustment             | Teach-in               |
| power on indication    | LED green              |
| output indicator       | LED red                |
| light source           | pulsed red laser diode |
| laser class            | 2                      |
| wave length            | 650 nm                 |
| beam diameter          | 0,5 ... 0,2 mm         |

electrical data

|                                    |                |
|------------------------------------|----------------|
| response time                      | < 1 ms         |
| voltage supply range +Vs           | 12 ... 28 VDC  |
| current consumption max. (no load) | 80 mA          |
| current consumption typ.           | 40 mA          |
| output circuit                     | NPN            |
| output current                     | < 100 mA       |
| voltage drop $V_d$                 | < 2,8 VDC      |
| reverse polarity protection        | yes, Vs to GND |
| short circuit protection           | yes            |

mechanical data

|                  |                    |
|------------------|--------------------|
| width / diameter | 12,4 mm            |
| height / length  | 37 mm              |
| depth            | 34,5 mm            |
| type             | rectangular        |
| front (optics)   | glass              |
| housing material | die-cast zinc      |
| connection types | connector M8 4 pin |

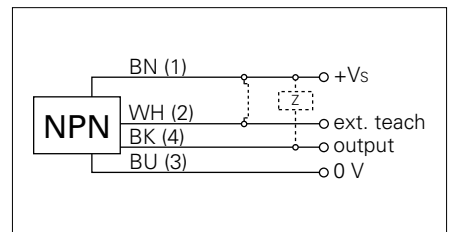
ambient conditions

|                       |              |
|-----------------------|--------------|
| operating temperature | 0 ... +50 °C |
| protection class      | IP 67        |

photo



connection diagram



laser warning

**LASER RADIATION**  
DO NOT STARE INTO BEAM  
Wavelength: 620...680nm  
Max. av. Output: < 1mW  
IEC 60825-1, Ed. 2, 2007  
**CLASS 2 LASER PRODUCT**

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