



Inductive proximity sensors

IH 06 series, sensing range 2 / 4 mm

DC 3-wire, metal housing

Dimensions in mm

Advanced series

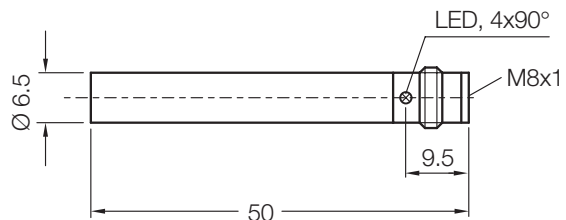
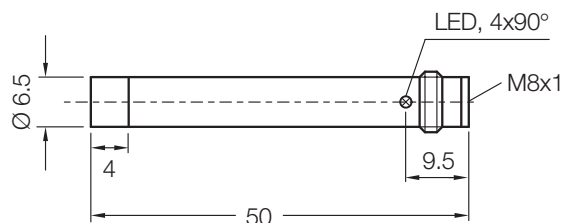
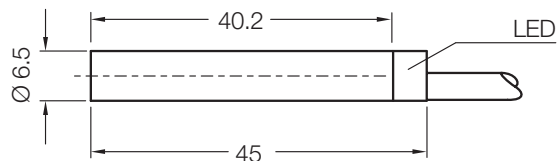
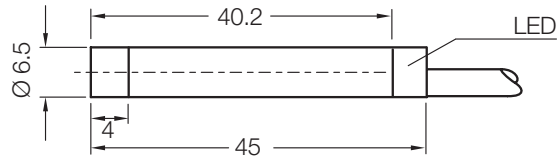
Features



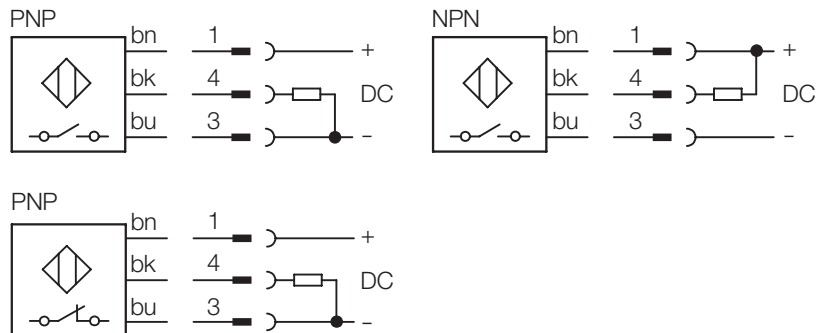
- ▶ Enhanced sensing range
- ▶ Can be installed flush or non-flush in metal
- ▶ PNP or NPN output
- ▶ Normally closed or normally open function
- ▶ High switching frequency
- ▶ Short-circuit protection (pulsed)
- ▶ Solid stainless steel housing
- ▶ Cable or connector
- ▶ Enclosure rating IP 67
- ▶ LED status indicator
- ▶

Accessories

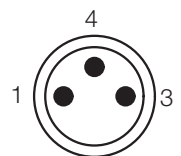
Round connectors



Connection diagram



| Wire colour | Contact | Assignment |
|-------------|---------|------------|
| bn brown | 1 | + V DC |
| bk black | 4 | NO/NC |
| bu blue | 3 | - V DC |



Electrical and mechanical data

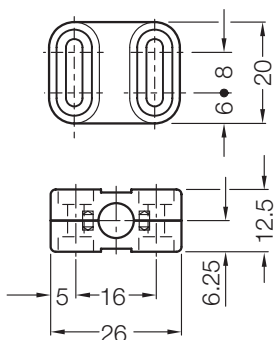
| | | | |
|---|----------------------|--|----------------------------------|
| Operating voltage U_b | 10 ... 30 V DC | Short-circuit protection (pulsed) | yes |
| Ripple U_{pp} | $\leq 10\%$ of U_b | Reverse polarity protection | yes |
| Voltage drop U_d (at I_a max.) | ≤ 1.2 V | Power-up pulse suppression | yes |
| Power consumption (without load) | ≤ 20 mA | Enclosure rating to EN 60529 | IP 67 |
| Continuous current I_a | ≤ 200 mA | Shock and vibration stress | 30 g, 11 ms 10 to 55 Hz, 1 mm |
| Time delay before availability t_v | ≤ 100 ms | Ambient temperature T_a | - 25 ... + 70 °C |
| Hysteresis H | 2% - 15% of s_r | Housing material | Stainless steel, plastic |
| Repeatability R (U_b and T_a constant) | $\leq 5\%$ of s_r | Connection cable | PVC, 3 x 0.14 mm ² |
| Temperature drift | $\pm 10\%$ of s_r | | |
| EMC | to EN 60 947-5-2 | | |

Selection table

| Sensing range s_n mm | Installation in metal | Switching output | Output function | Switching frequency f in Hz | Connection | Type | Order number |
|---------------------------|--------------------------|---------------------|--------------------|-----------------------------------|---------------------|----------------|--------------|
| 2 | | PNP | | 3000 | Cable 2 m | IH06-02BPS-VW1 | 7900177 |
| 2 | | NPN | | 3000 | Cable 2 m | IH06-02BNS-VW1 | 7900178 |
| 2 | | PNP | | 3000 | Connector M8 x 1 mm | IH06-02BPS-VT1 | 7900179 |
| 2 | | NPN | | 3000 | Connector M8 x 1 mm | IH06-02BNS-VT1 | 7900180 |
| 2 | | PNP | | 3000 | Connector M8 x 1 mm | IH06-02BPO-VT1 | 1016857 |
| 4 | | PNP | | 3000 | Cable 2 m | IH06-04NPS-VW1 | 7900181 |
| 4 | | NPN | | 3000 | Cable 2 m | IH06-04NNS-VW1 | 7900182 |
| 4 | | PNP | | 3000 | Connector M8 x 1 mm | IH06-04NPS-VT1 | 7900183 |

* see installation notes

Accessories



Mounting clamp for H06 type
Plastic with 2 screws

Type BEF-S-H06
Order No. 7901771