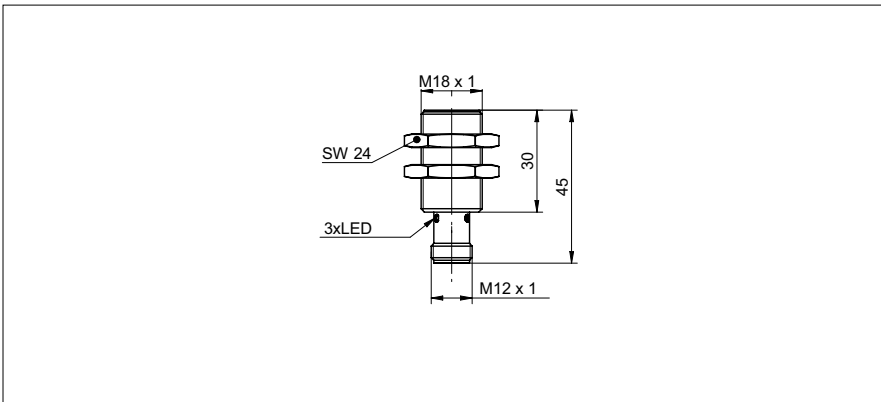


**Inductive proximity switch**

**IR18.P12S-11149169**

**dimension drawing**



**general data**

|                                |   |
|--------------------------------|---|
| mounting type                  | flush   |
| special type                   | enhanced distance (GammaProx)                         |
| nominal sensing distance $S_n$ | 12 mm   |
| temperature drift              | $\pm 10 \%$   |
| hysteresis                     | 3 ... 20 % of $S_r$                                   |
| output indicator               | 3 port LED red  |
| correction factor typ.         | mild steel 100 %, stainless steel 70 %, aluminum 40 % |

**electrical data**

|                                    |                         |
|------------------------------------|-------------------------|
| switching frequency                | < 400 Hz                |
| voltage supply range +Vs           | 6 ... 36 VDC            |
| current consumption max. (no load) | 10 mA                   |
| output circuit                     | PNP break function (NC) |
| voltage drop $V_d$                 | < 2 VDC                 |
| output current                     | < 100 mA                |
| short circuit protection           | yes                     |
| reverse polarity protection        | yes                     |

**mechanical data**

|                         |                      |
|-------------------------|----------------------|
| type                    | cylindrical threaded |
| material (sensing face) | PBT                  |
| housing material        | brass nickel plated  |
| dimension               | 18 mm                |
| housing length          | 45 mm                |
| connection types        | connector M12        |
| tightening torque max.  | 40 Nm                |

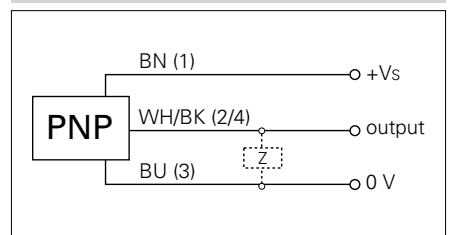
**ambient conditions**

|                       |                |
|-----------------------|----------------|
| operating temperature | -25 ... +75 °C |
| protection class      | IP 67          |

**photo**



**connection diagram**

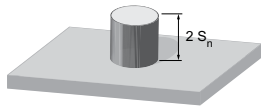


- increased sensing distance

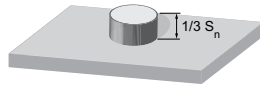
# Inductive proximity switch

# IR18.P12S-11149169

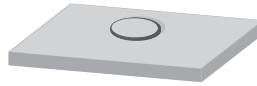
**correction factors for different mounting situations (approximate values)**



| Mounting material | Correction factor |
|-------------------|-------------------|
| Mild steel        | 100 %             |
| Stainless steel   | 100 %             |
| Aluminum          | 100 %             |



| Mounting material | Correction factor |
|-------------------|-------------------|
| Mild steel        | 105 %             |
| Stainless steel   | 95 %              |
| Aluminum          | 95 %              |



| Mounting material | Correction factor |
|-------------------|-------------------|
| Mild steel        | not possible      |
| Stainless steel   | 110 %             |
| Aluminum          | 65 %              |

**mounting instructions**

