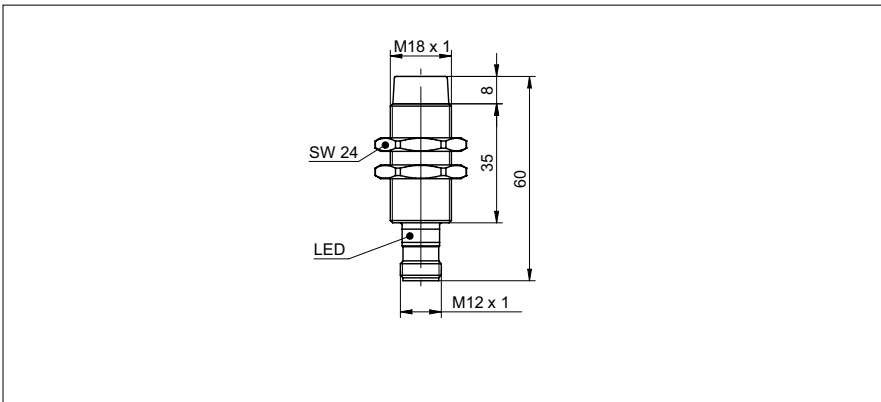


# Inductive proximity switch

# IFRR 18P33T1/S14L-9

**dimension drawing**



**general data**

|                                |                                   |
|--------------------------------|-----------------------------------|
| mounting type                  | non-flush                         |
| special type                   | Outdoor design<br>Washdown design |
| nominal sensing distance $S_n$ | 12 mm                             |
| hysteresis                     | 2 ... 15 % of $S_r$               |
| output indicator               | LED red                           |
| approvals/certificates         | Ecolab                            |

**electrical data**

|  |                         |
|--|-------------------------|
| switching frequency                      | < 500 Hz                |
| voltage supply range +Vs                 | 10 ... 30 VDC           |
| current consumption max. (no load)       | 10 mA                   |
| output circuit                           | PNP break function (NC) |
| voltage drop $V_d$                       | < 2 VDC                 |
| output current                           | < 200 mA                |
| output current (at cleaning temperature) | < 100 mA                |
| short circuit protection                 | yes                     |
| reverse polarity protection              | yes                     |

**mechanical data**

|                         |                                   |
|-------------------------|-----------------------------------|
| type                    | cylindrical threaded              |
| material (sensing face) | LCP                               |
| housing material        | stainless steel 1.4404 (V4A); LSR |
| dimension               | 18 mm                             |
| housing length          | 60 mm                             |
| connection types        | connector M12                     |

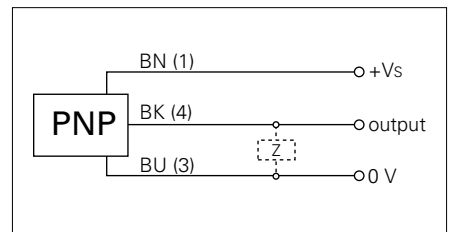
**ambient conditions**

|                       |   |
|-----------------------|---|
| operating temperature | -40 ... +80 °C  |
| cleaning temperature  | 80 ... +100 °C (30 min/day)   |
| protection class      | IP 68/69K & proTect+  |
| vibration resistance  | EN 61373: 2010 (category 3), 5h per axis<br>(14.4 gRMS, 10-500 Hz, EN 60068-2-64) |
| shock resistance      | EN 61373: 2010 (category 3), 10 bumps per axis<br>(100 g, 6 ms, EN 60068-2-27)    |

**photo**



**connection diagram**



- Sensor FDA compliant and Ecolab approved
- LSR = Liquid Silicon Rubber