

overview

- 6 mm
- NPN break function (NC)
- connector M12
- -40 ... 80 °C
- IP 68/69K & proTect+



Technical data

general data

|                                            |                                   |
|--------------------------------------------|-----------------------------------|
| mounting type                              | non-flush                         |
| special type                               | Outdoor design<br>Washdown design |
| nominal sensing distance<br>S <sub>n</sub> | 6 mm                              |
| hysteresis                                 | 2 ... 15 % of S <sub>r</sub>      |
| output indicator                           | LED red                           |
| approvals/certificates                     | Ecolab                            |

electrical data

|                                             |                         |
|---------------------------------------------|-------------------------|
| switching frequency                         | < 1 kHz                 |
| voltage supply range +V <sub>s</sub>        | 10 ... 30 VDC           |
| current consumption max.<br>(no load)       | 10 mA                   |
| output circuit                              | NPN break function (NC) |
| voltage drop V <sub>d</sub>                 | < 2 VDC                 |
| output current                              | < 200 mA                |
| output current (at cleaning<br>temperature) | < 100 mA                |

electrical data

|                             |     |
|-----------------------------|-----|
| 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               | 12 mm                             |
| housing length          | 60 mm                             |
| connection types        | connector M12                     |
| tightening torque max.  | 20 Nm (Front: 14 Nm)              |

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<br>per axis (100 g, 6 ms, EN 60068-2-27)    |

remarks

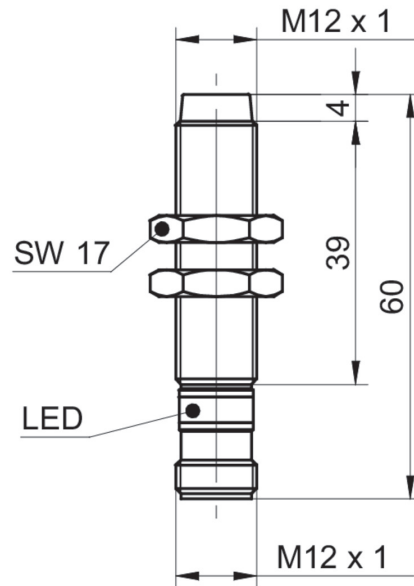
- Sensor FDA compliant and Ecolab approved
- LSR = Liquid Silicon Rubber

## IFRR 12N33T1/S14L-9

Inductive proximity switch - outdoor and washdown

Article number: 11016090

### dimension drawing



### connection diagram

