

# Proximity switch, inductive, 1N/O, Sn=8mm, 4L, 6-48VDC, NPN, PNP, M18, metal



Part no. E59-M18A108C02-D1

Article no. 136213

Catalog No. E59-M18A108C02-D1

## **Delivery program**

| Basic function            |                |    | Inductive Sensors    |
|---------------------------|----------------|----|----------------------|
| Product range             |                |    | iProx Series         |
| Connection                |                |    | 3-wire               |
| Design (outer dimensions) |                | mm | M18 x 1              |
| Rated operational voltage | U <sub>e</sub> |    | 6 - 48 V DC          |
| Rated switching distance  | $S_n$          | mm | 8                    |
| Type of mounting          |                |    | Flush                |
| Switching type            |                |    | NPN<br>PNP           |
| For connection of:        |                |    | 2 m connection cable |
| Contacts                  |                |    |                      |
| N/O = Normally open       |                |    | 1 N/O                |
| Material                  |                |    | Stainless steel      |
| Degree of Protection      |                |    | IP67, IP69K          |

#### **Technical data**

#### General

| Standards   |                |     | IEC/EN 60947-5-2  |
|---|----------------|-----|---|
| Ambient temperature   |                |     | -40 - +70   |
| Mechanical shock resistance   |                | g   | 30<br>Shock duration 11 ms  |
| Degree of Protection  |                |     | IP67, IP69K   |
| Characteristics   |                |     |   |
| Rated switching distance  |                |     |   |
| Rated switching distance  | $S_n$          | mm  | 8   |
| Repetition accuracy of $S_n$  |                | %   | 1   |
| Temperature drift of S <sub>n</sub>   |                | %   | 10  |
| Switching hysteresis of $S_n$   |                | %   | 15  |
| Rated operational voltage   | U <sub>e</sub> |     | 6 - 48 V DC   |
| Maximum load current  | I <sub>e</sub> | mA  | < 300   |
| Operating current in the switched state at 24 V DC                                | I <sub>b</sub> | mA  | 15  |
| Voltage drop at I <sub>e</sub>  | $U_{d}$        | V   | 2.5   |
| Switching Frequency   |                | Hz  | 390   |
| Min. load current   | l <sub>e</sub> | mA  | 1   |
| Residual current through the load in the blocked state at 230 V AC and 24 V DC $$ | I <sub>r</sub> | mA  | 0.15  |
| Switching state display   |                | LED | Red   |
| Operating voltage display   |                | LED | Green   |
| Protective functions  |                |     | Short-circuit protective device<br>Protection against polarity reversal<br>Protection against wire breakage |
| Connection  |                |     | 3-wire  |
| Contacts  |                |     |   |
| N/O = Normally open   |                |     | 1 N/0   |
| Style   |                |     |   |
| Design (outer dimensions)   |                | mm  | M18 x 1   |
| For connection of:  |                |     | 2 m connection cable  |
| Material  |                |     | Stainless steel   |

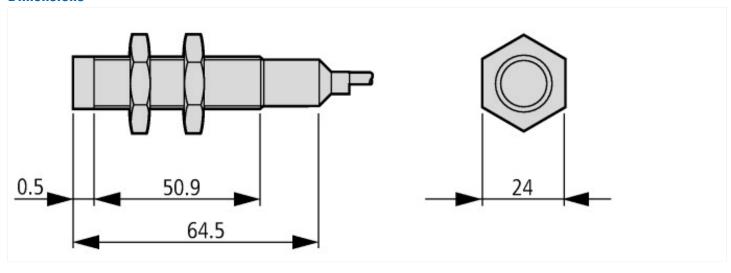
## Design verification as per IEC/EN 61439

| Technical data for design verification |    |     |
|--|----|-----|
| Operating ambient temperature min.     | °C | -40 |
| Operating ambient temperature max.     | °C | 70  |

## **Approvals**

| Product Standards           | UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking  |
|-----------------------------|---|
| UL File No.                 | E166051   |
| UL Category Control No.     | NRKH, NRKH7   |
| CSA File No.                | UL report applies to both Canada and US             |
| CSA Class No.               | -   |
| North America Certification | UL listed, certified by UL for use in Canada        |
| Max. Voltage Rating         | 48 V DC   |
| Degree of Protection        | IEC: IP67, IP69K; UL/CSA Type: 4, 4x, 6, 6P, 12, 13 |

#### **Dimensions**



#### **Additional product information (links)**

IL05301004Z iProx Series Inductive Sensors

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ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL05301004Z2016\_07.pdf