

## IC301126

### INDUCTIVE SENSORS • FULL-METAL HOUSING

Inductive proximity switches are contact-free sensors. They detect all conductive metals, regardless of whether they move or not. The achievable sensing range of the devices depends on the object material and its dimensions. The vibration-resistant sensors can be approached laterally or frontally. Inductive proximity switches are used for presence detection (e.g. goods carriers), positioning (e.g. dampers), counting (e.g. nuts /bolts), speed detection (e.g. for cog wheels), on conveyor systems (e.g. hose feedings) or distance measurements (e.g. press-in checking) of metallic objects.



#### MECHANICAL DATA

|  |                        |
|--|------------------------|
| Active area material of sensor           | Stainless steel 1.4305 |
| Ambient temperature                      | -25 °C ... 85 °C       |
| Degree of protection (IP)                | IP67                   |
| Housing design                           | Cylinder, screw-thread |
| Housing material                         | Stainless steel 1.4305 |
| Material independent sensors (factor 1)  | Yes                    |
| Material thickness                       | 1 mm                   |
| Mechanical mounting condition for sensor | Flush                  |
| Pressure resistance                      | 40 bar                 |
| Pressure-proof                           | Yes                    |
| Sensor length                            | 63.5 mm                |
| Thread length                            | 42 mm                  |
| Thread pitch                             | 1.5 mm                 |
| Thread size, metric                      | 30                     |

#### ELECTRICAL DATA

|  |         |
|--|---------|
| Cascadable                                   | No      |
| Correction factor (aluminum)                 | 1       |
| Correction factor (brass)                    | 1.3     |
| Correction factor (copper)                   | 0.9     |
| Correction factor (St37)                     | 1       |
| Correction factor (stainless steel V2A: 1mm) | 0.4     |
| Correction factor (stainless steel V2A: 2mm) | 0.75    |
| Hysteresis                                   | 15 %    |
| IO-Link compatible                           | No      |
| Max. line length                             | 300 m   |
| Max. output current                          | 200 mA  |
| No-load current                              | 10 mA   |
| Norm measuring plate                         | 60x60x1 |
| Number of pins                               | 4       |
| Readiness delay                              | 20 ms   |

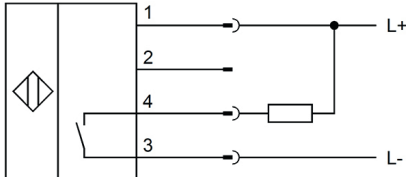
## ELECTRICAL DATA

|  |                       |
|--|-----------------------|
| Relative repeat accuracy                       | 5 %                   |
| Residual ripple                                | 20 %                  |
| Reverse polarity protection                    | Yes                   |
| Short-circuit-proof                            | Yes                   |
| Suitable for safety functions                  | No                    |
| Supply voltage                                 | 10 V ... 30 V         |
| Switching distance                             | 20 mm                 |
| Switching frequency                            | 125 Hz                |
| Type of electrical connection                  | Connector M12         |
| Type of switching function                     | Normally open contact |
| Type of switching output                       | NPN                   |
| Voltage drop                                   | 2 V                   |
| Voltage type                                   | DC                    |
| With LED display                               | Yes                   |
| With LED display (functional reserve)          | Yes                   |
| With monitoring function of downstream devices | No                    |

## OTHER DATA

|                                |     |
|--------------------------------|-----|
| Feeding technology             | Yes |
| Harsh environmental conditions | Yes |
| Hygienic and wet area          | Yes |
| Metallic sensor surface        | Yes |
| Oil and cooling lubricants     | Yes |

## CONNECTION



**Colors:** 1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black)

**Functions:** 1 = L+, 2 = n. c., 3 = L-, 4 = NPN NO

## DIMENSIONAL DRAWING

### INSTALLATION



Mounting / Installation may only be carried out by a qualified electrician!

### DISPOSAL



## SAFETY WARNINGS

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!

