

**IC120106**
**INDUCTIVE SENSORS • FULL-METAL HOUSING**

sensor inductive, all-steel, M12x1 50long, Flush, Sn: 6, 10-30V DC, 85°C, PNP NO, IO-Link, Cable 2m PUR (Polyurethane), IP68, Stainless steel 1.4305, factor 1


**MECHANICAL FEATURES**

|  |                        |
|--|------------------------|
| Active area material of sensor           | Stainless steel 1.4305 |
| Alignment of cable entry                 | Axial                  |
| Ambient temperature                      | -25 °C ... 85 °C       |
| Cable infeed                             | Axial                  |
| Cable length                             | 2 m                    |
| Degree of protection (IP)                | IP68                   |
| Design                                   | Cylinder, screw-thread |
| Housing material                         | Stainless steel 1.4305 |
| Material independent sensors (factor 1)  | +                      |
| Material of cable sheath                 | PUR (Polyurethane)     |
| Material thickness                       | 0.4 mm                 |
| Max. tightening torque                   | 20 Nm                  |
| Mechanical mounting condition for sensor | Flush                  |
| Number of cores                          | 3                      |
| Pressure resistance                      | 80 bar                 |
| Pressure-proof                           | +                      |
| Sensor length                            | 50 mm                  |
| Thread length                            | 50 mm                  |
| Thread pitch                             | 1 mm                   |
| Thread size, metric                      | 12                     |
| Wire cross section                       | 0.34 mm <sup>2</sup>   |

**ELECTRICAL FEATURES**

|  |       |
|--|-------|
| Cascadable                                   | -     |
| Correction factor (aluminum)                 | 1     |
| Correction factor (brass)                    | 1.3   |
| Correction factor (copper)                   | 0.85  |
| Correction factor (St37)                     | 1     |
| Correction factor (stainless steel V2A: 1mm) | 0.4   |
| Correction factor (stainless steel V2A: 2mm) | 0.8   |
| Hysteresis                                   | 15 %  |
| IO-Link compatible                           | +     |
| Max. line length                             | 300 m |

## ELECTRICAL FEATURES

|  |                       |
|--|-----------------------|
| No-load current                                | 10 mA                 |
| Norm measuring plate                           | 18x18x1               |
| Rated switching current                        | 200 mA                |
| Readiness delay                                | 10 ms                 |
| Relative repeat accuracy                       | 5 %                   |
| Residual ripple                                | 20 %                  |
| Reverse polarity protection                    | +                     |
| Short-circuit protection                       | +                     |
| Suitable for safety functions                  | -                     |
| Supply voltage                                 | 10 V ... 30 V         |
| Switching distance                             | 6 mm                  |
| Switching frequency                            | 600 Hz                |
| Type of electrical connection                  | Cable                 |
| Type of switching function                     | Normally open contact |
| Type of switching output                       | PNP                   |
| Voltage drop                                   | 2 V                   |
| Voltage type                                   | DC                    |
| With LED display                               | +                     |
| With LED display (functional reserve)          | +                     |
| With monitoring function of downstream devices | -                     |

## OTHER FEATURES

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

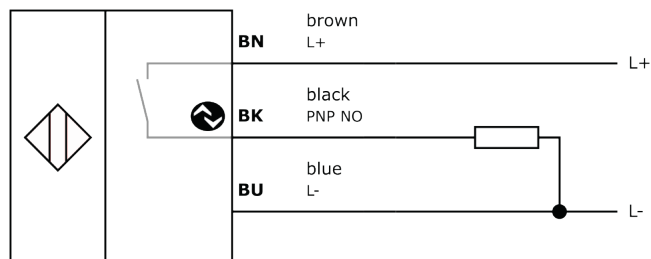
## Other

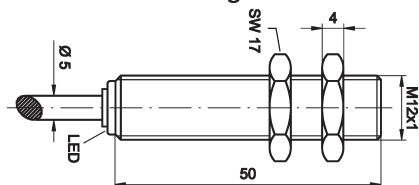
|                      |                       |
|----------------------|-----------------------|
| Packaging dimensions | 70mm x 40mm x 125.0mm |
| Shipping weight      | 0.11kg                |
| Tariff code          | 85365019              |

## Classification

|                   |          |
|-------------------|----------|
| ipf product group | 205      |
| eClass 8.0        | 27270101 |
| eClass 9.0        | 27270101 |
| eClass 9.1        | 27270101 |
| ETIM-5.0          | EC002714 |
| ETIM-6.0          | EC002714 |
| ETIM-7.0          | EC002714 |

## Connection



**Dimensional drawing****Installation**

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

**Disposal****Software**

Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: [www.ipf-electronic.com](http://www.ipf-electronic.com)

**Safety warnings**

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information. Never use these devices in applications where the safety of a person depends on their functionality.

LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.