

## IB120006

### Inductive sensors • Distance measurement

sensor inductive, analog, M12x1 50long, Quasi-flat, Sn: 0-6, 15-30V DC, 0-10V/4-20mA, Cable 4pin 2m, IP67, Brass Chrome-plated, resolution 1µm

including 2x Nut, 2x Toothed washer



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.

#### Electrical features

|                                   |                    |
|-----------------------------------|--------------------|
| Resolution                        | 0.001mm            |
| Type of analog output             | 0 - 10V   4 - 20mA |
| Type of electrical connection     | Cable              |
| Readiness delay                   | 50ms               |
| Correction factor (aluminum)      | 0.28               |
| Correction factor (copper)        | 0.2                |
| Correction factor (brass)         | 0.35               |
| Correction factor (St37)          | 1                  |
| Correction factor (stainl. steel) | 0.47               |
| Short-circuit protection          | Yes                |
| No-load current                   | 12mA               |
| Line diameter                     | 5mm                |
| Number of pins                    | 4                  |
| Reverse polarity protection       | Yes                |
| Absolute repeat accuracy          | 0.3mm              |
| Operating voltage (DC)            | 15 - 30V           |
| Measuring range                   | 0 - 6mm            |

**Mechanical features**

|  |                        |
|--|------------------------|
| Design                                   | Cylinder, screw-thread |
| Thread pitch                             | 1mm                    |
| Cable length                             | 2m                     |
| Cable infeed                             | axial                  |
| Length                                   | 50mm                   |
| Mechanical mounting condition for sensor | semi-flush             |
| Surface                                  | Chrome-plated          |
| Degree of protection (IP)                | IP67                   |
| Active area material of sensor           | Plastic (PBTP)         |
| Housing material                         | Brass                  |
| Thread dimension                         | M12                    |
| Ambient temperature                      | -25 - 70°C             |

**Other features**

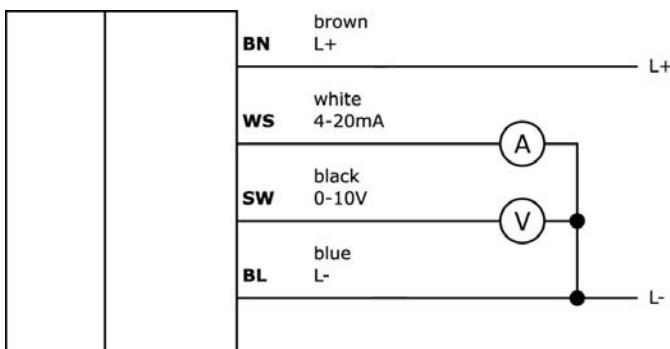
|                     |            |
|---------------------|------------|
| Ambient temperature | -25 - 70°C |
|---------------------|------------|

**Classification**

|        |                                    |
|--------|------------------------------------|
| ETIM 8 | EC001818 Inductive distance sensor |
|--------|------------------------------------|

**More**

|                       |                                |
|-----------------------|--------------------------------|
| IPF Product Group     | 209 inductive sensors (analog) |
| packaging dimensions  | 215 x 185 x 25 mm              |
| gross weight          | 93 g                           |
| Customs tariff number | 85365019                       |
| WEEE number           | 40951076                       |
| Reach-compliant       | Yes                            |
| RoHS-compliant        | Yes                            |

**Connection****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.

Never use these devices in applications where the safety of a person depends on their functionality.

For suitable connection and mounting accessories, please refer to our website [www.ipf-electronic.com](http://www.ipf-electronic.com).

**Dimensional drawing**