

## IC180226

### Inductive sensors • Full-metal housing

sensor inductive, all-steel, M18x1 64long, Flush, Sn: 10, 10-30V DC, -25-85°C, PNP NC, Connector M12 4pin, IP69K, Stainless steel 1.4305, factor 1

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

|                                              |                              |
|----------------------------------------------|------------------------------|
| Display                                      | LED display                  |
| Type of switching function                   | Normally closed contact (NC) |
| Type of electrical connection                | Connector M12                |
| Type of switching output                     | PNP                          |
| Rated switching current                      | 200mA                        |
| Readiness delay                              | 15ms                         |
| Relative hysteresis                          | 15%                          |
| Correction factor (aluminum)                 | 1                            |
| Correction factor (copper)                   | 0.8                          |
| Correction factor (brass)                    | 1.2                          |
| Correction factor (St37)                     | 1                            |
| Correction factor (stainless steel V2A: 1mm) | 0.5                          |
| Correction factor (stainless steel V2A: 2mm) | 0.9                          |
| Short-circuit protection                     | Yes                          |
| No-load current                              | 10mA                         |
| Max. line length                             | 300m                         |
| Number of pins                               | 4                            |
| Relative repeat accuracy                     | 5%                           |
| Residual ripple                              | 20%                          |
| Switching distance                           | 10mm                         |
| Switching frequency                          | 200Hz                        |
| Voltage drop                                 | 2V                           |
| Reverse polarity protection                  | Yes                          |
| Operating voltage (DC)                       | 10 - 30V                     |

### Mechanical features

|                                          |                        |
|------------------------------------------|------------------------|
| Tightening torque                        | 50Nm                   |
| Alignment of cable entry                 | axial                  |
| Design                                   | Cylinder, screw-thread |
| Pressure resistance                      | 60bar                  |
| Thread length                            | 42mm                   |
| Thread pitch                             | 1mm                    |
| Cable infeed                             | axial                  |
| Length                                   | 63.5mm                 |
| Material thickness                       | 0.6mm                  |
| Mechanical mounting condition for sensor | flush                  |
| Degree of protection (IP)                | IP69K                  |
| Active area material of sensor           | Stainless steel 1.4305 |
| Housing material                         | Stainless steel 1.4305 |
| Material independent sensors (factor 1)  | Yes                    |
| Thread dimension                         | M18                    |
| Ambient temperature                      | -25 - 85°C             |

### Other features

|                                |                                          |
|--------------------------------|------------------------------------------|
| Harsh environmental conditions | Yes                                      |
| Feeding technology             | Yes                                      |
| Oil and cooling lubricants     | Yes                                      |
| Reference medium / object      | Standard measuring plate FE360 30x30x1mm |
| Ambient temperature            | -25 - 85°C                               |

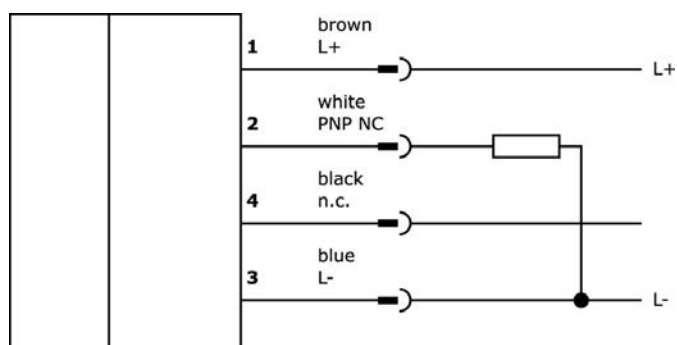
### Classification

|        |                                     |
|--------|-------------------------------------|
| ETIM 8 | EC002714 Inductive proximity switch |
|--------|-------------------------------------|

### More

|                       |                             |
|-----------------------|-----------------------------|
| IPF Product Group     | 205 inductive sensors (pro) |
| packaging dimensions  | 215 x 180 x 19 mm           |
| gross weight          | 80 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).