

IB12E051

Inductive sensors • Increased switching distance

sensor inductive, M12x1 45long, Flush, Sn: 4, 10-30V DC, -25-85°C, PNP NO, Connector M12 4pin, IP69K, V4A



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

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|-------------------------------|----------------------------|
| Response/decay time | 0.25ms |
| Display | LED display |
| Type of switching function | Normally open contact (NO) |
| Type of electrical connection | Connector M12 |
| Type of switching output | PNP |
| Rated switching current | 200mA |
| Short-circuit protection | Yes |
| No-load current | 10mA |
| Number of pins | 4 |
| Residual ripple | 15% |
| Switching distance | 4mm |
| Switching frequency | 2000Hz |
| Voltage drop | 2V |
| Reverse polarity protection | Yes |
| Decay time | 0.25ms |
| Operating voltage (DC) | 10 - 30V |

Mechanical features

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| Alignment of cable entry | axial |
| Design | Cylinder, screw-thread |
| Thread length | 30mm |
| Thread pitch | 1mm |
| Cable infeed | axial |
| Length | 45mm |
| Maximum tightening torque | 20Nm |
| Mechanical mounting condition for sensor | flush |
| Degree of protection (IP) | IP69K |
| Active area material of sensor | Plastic (LCP) |
| Housing material | Stainless steel 1.4404 |
| Thread dimension | M12 |
| Ambient temperature | -25 - 85°C |

Other features

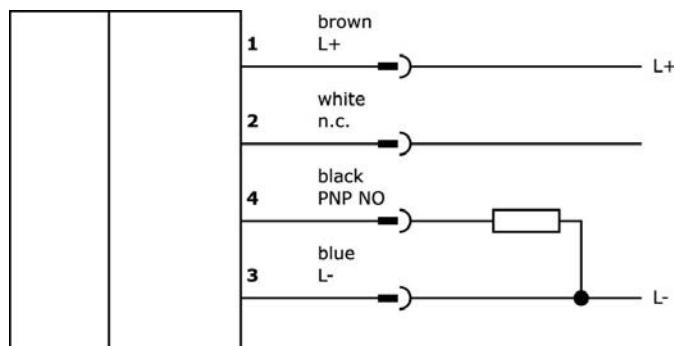
| | |
|---------------------------|--|
| Reference medium / object | Standard measuring plate FE360 12x12x1mm |
| Ambient temperature | -25 - 85°C |

Classification

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| ETIM 8 | EC002714 Inductive proximity switch |
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More

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|-----------------------|--|
| IPF Product Group | 202 inductive sensors (high temperature) |
| packaging dimensions | 120 x 100 x 15 mm |
| gross weight | 21 g |
| Customs tariff number | 85365019 |
| WEEE number | 40951076 |
| OzDS-compliant | Yes |
| POP-compliant | Yes |
| 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.