

# IBQ50176

## Inductive sensors • Increased switching distance

Sensor inductive, 25x5x5mm, flush, Sn: 1.5, 10-30V DC, PNP NO, IO-Link, M8 cable connector 3-pin 0.2m PUR (polyurethane), IP67, chrome-plated brass

including Screw

- / Flush mounting
- / High switching frequency



### robust metal housing Compact design

Inductive proximity switches are contactless sensors. They detect all conductive metals, regardless of whether they are moving or not. The switching distance that the devices can achieve depends on the object material and its dimensions. The vibration-resistant sensors can be approached laterally or from the front. Inductive proximity switches are used for presence detection (e.g. goods carriers), positioning (e.g. oven flaps), counting (e.g. nuts / screws), speed detection (e.g. on gear wheels), on conveyor systems (e.g. hose feeds) or distance measurement (e.g. press-fit inspection) of metallic objects.

#### Electrical features

Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Cable connector M8
Type of switching output	PNP
Rated switching current	200 mA
Readiness delay	10 ms
Relative hysteresis	10 %
Correction factor (aluminum)	0.6
Correction factor (copper)	0.6
Correction factor (brass)	0.7
Correction factor (St37)	1
Correction factor (stainl. steel)	0.85
No-load current	10 mA
Number of pins	3
Switching distance	1,5 mm
Switching frequency	3000 Hz
Voltage drop	2 V
Supported communication interface	IO-Link
Operating voltage (DC)	10 - 30 V
ardSOCA_ElektrischerAnschluss	
ardSOCA_Betriebsspannung	
ardTEEL_Schutzfunktionen	Reverse polarity protection   Short circuit protection

**Mechanical features**

Number of cores	3
Conductor cross-section	0.055 mm <sup>2</sup>
Alignment of cable entry	axial
Design	Cuboid
Width	5 mm
Height	25 mm
Cable length	0.2 m
Cable infeed	axial
Length	5 mm
Maximum tightening torque	0.2 Nm
Mechanical mounting condition for sensor	flush
Surface	Chrome-plated
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PCB)
Housing material	Brass
Material of cable sheath	Kunststoff (PUR)
Ambient temperature	-25 - 70 °C
ardSOCA_Abmessungen	
Line diameter	2.6 mm

**Other features**

IO-Link version	V1.0.1
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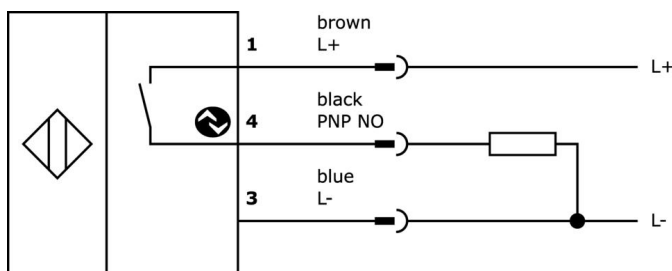
**Classification**

ETIM 8	
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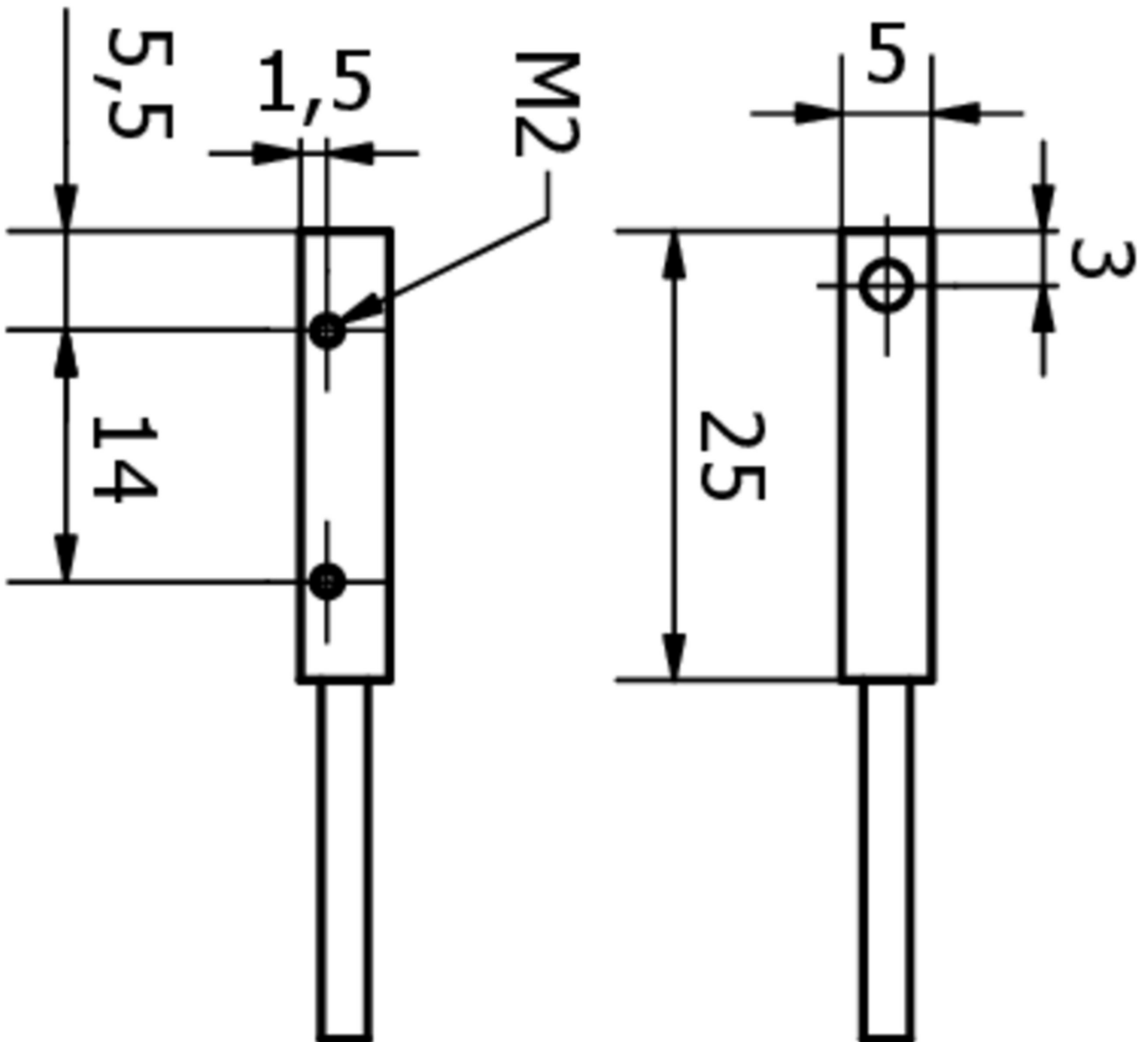
**More**

IPF Product Group	201 inductive sensors (plus / super plus)
packaging dimensions	123 x 77 mm
gross weight	
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**



Dimensional drawing



**Extract accessories program**

**NG400501**



DC power supply, 1-phase, 125x114x40mm, 24-28V, 5A, 90-264V AC 50Hz, 90-264V AC 60Hz, 127-370V DC, screw connection, IP20, aluminum, stabilized, pulsed output voltage

**AY000141**



Plastic sheath, Ø17mm, Inner diameter 10mm, -40-250°C, Glass fiber with silicone rubber, Short-term resistance to weld spatter 1200°C, Tensile strength 400N, Flexible, Flame retardant, yard good

**VY000005**



IO-Link master, 41x24x67mm, IO-Link, M12, With USB interface

**VY000004**



DC power supply, sensor tester, 120x26x72mm, 18V, 0.04A, Spring clamp connection 4pin, IP20, Plastic

**AY000079**



accessories sensor, Metal screw, M1.6x0.35 10long, Screw slot, Cylinder head, Brass Untreated

**VY850001**



Inverter/signal-inversion/turn-off delay, 85x65x18mm, 0.01-10s, 12-30V DC, 1x NC/NO, Clamp 8pin, IP40, Plastic, Plug-in jumpers

**VY850002**



Inverter/signal-inversion/turn-off delay, 85x65x18mm, 0.01-10s, 12-30V DC, 1x NC/NO, Clamp 8pin, IP40, Plastic, Plug-in jumpers

**NG530002**



DC power supply, single-phase, 99x114x22mm, 24V, 0.1A, Number of relay outputs 2, 100-264V AC 50Hz, 100-264V AC 60Hz, Screw connection, IP20, Plastic, Stabilized, Output voltage, pulsed

**VK200071**



Connection cable, 2m, M8 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, 60V, -40-90°C, IP67, TPU, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

You can find further accessories on our homepage



**Installation**

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



**Disposal**

WEEE number according to § 6 para. 3 ElektroG: 40951076

**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.

/ 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)