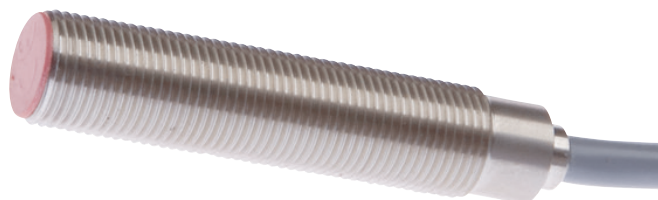


**IB120150**

**INDUCTIVE SENSORS • ENLARGED AMBIENT TEMPERATURE**

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.



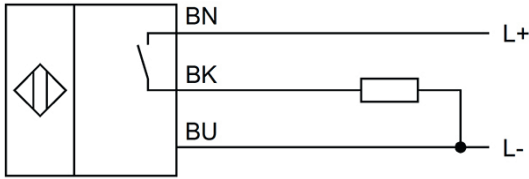
**TECHNICAL DATA**

2x increased switching distance	No
3x increased switching distance	No
4x increased switching distance	No
Active area material of sensor	Vectra®
Ambient temperature	0 °C ... 150 °C
Ambient temperatures < -25°C	No
Areas inquiry	No
Atmospheric-change resistant (temperature cycle)	No
Cable length	2 m
Cascadable	No
Connection to amplifier	No
Correction factor (aluminum)	0.3
Correction factor (brass)	0.4
Correction factor (copper)	0.2
Correction factor (stainless steel)	0.7
Correction factor (steel)	1
Degree of protection (IP)	IP50
Devices for hose mounting	No
Distance measuring sensors	No
End position sensing, hydraulic cylinder	No
Feeding technology	No
Harsh environmental conditions	No
High-pressure-proof sensors	No
Housing design	Cylinder, screw-thread
Housing material	Metal
Housing material	Stainless steel 1.4305
Hygienic and wet area	No
Hysteresis	15 %
Increased ambient temperatures > 80°C	Yes
Increased switching distance	No

**TECHNICAL DATA**

Material independent sensors (factor 1)	No
Material of cable sheath	Silicone
Max. output current	120 mA
Mechanical mounting condition for sensor	Concise
Metallic sensor surface	No
No-load current	15 mA
Norm measuring plate	12x12x1
Number of wires	3
Oil and cooling lubricants	No
Pressure-proof	No
Rated control supply voltage $U_s$ at DC	10 V ... 35 V
Readiness delay	80 ms
Relative repeat accuracy	3 %
Residual ripple	10 %
Response time	1 ms
Reverse polarity protection	Yes
Ring-shaped sensors	No
Sensor length	56 mm
Short-circuit-proof	Yes
Suitable for safety functions	No
Supply voltage	10 V ... 35 V
Switching distance	3 mm
Switching frequency	500 Hz
Teflon housing	No
Thread length	48 mm
Thread pitch	1 mm
Thread size, metric	12
Type of electrical connection	Cable
Type of switching function	Normally open contact
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
Welding area	No
Welding-proof sensors	No
Wire cross section	0.25 mm <sup>2</sup>
With LED display	No
With monitoring function of downstream devices	No

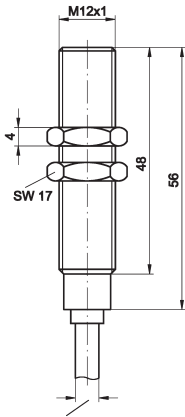
## CONNECTION



**Colors:** BN (brown), BU (blue), BK (black)

**Functions:** BN = L+, BU = L-, BK = PNP NO

## DIMENSIONAL DRAWING



## 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.