

## IB120157

### 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.



#### MECHANICAL DATA

Active area material of sensor	Vectra®
Ambient temperature (MAX)	130 °C
Cable length	10 m
Degree of protection (IP)	IP65
Housing design	Cylinder, screw-thread
Housing material	Stainless steel 1.4305
Increased ambient temperatures > 80°C	Yes
Material of cable sheath	Silicone
Max. tightening torque	20 Nm
Mechanical mounting condition for sensor	Flush
Number of wires	3
Pressure-proof	No
Sensor length	56 mm
Thread length	48 mm
Thread pitch	1 mm
Thread size, metric	12
Wire cross section	0.14 mm <sup>2</sup>

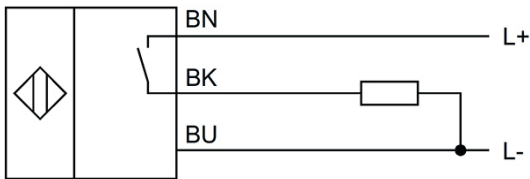
#### ELECTRICAL DATA

Cascadable	No
Correction factor (aluminum)	0.3
Correction factor (brass)	0.4
Correction factor (copper)	0.2
Correction factor (St37)	1
Correction factor (stainl. steel)	0.7
Hysteresis	15 %
Max. output current	120 mA
No-load current	15 mA
Norm measuring plate	12x12x1
Readiness delay	80 ms
Relative repeat accuracy	3 %

## ELECTRICAL DATA

Residual ripple	10 %
Response time	1 ms
Reverse polarity protection	Yes
Short-circuit-proof	Yes
Suitable for safety functions	No
Supply voltage (MAX)	35 V
Supply voltage (MIN)	10 V
Switching distance	3 mm
Switching frequency	500 Hz
Type of electrical connection	Cable
Type of switching function	Normally open contact
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
With LED display	Yes
With monitoring function of downstream devices	No

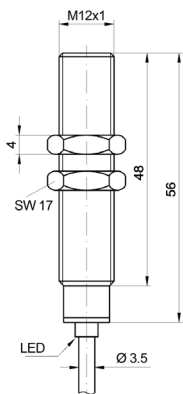
## CONNECTION



**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.