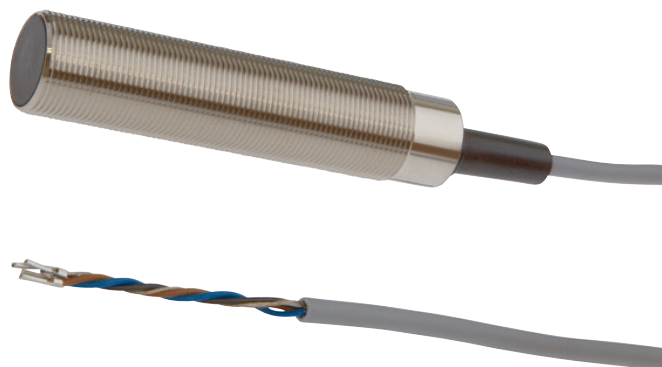


## IB180080

### INDUCTIVE SENSORS • DISTANCE MEASUREMENT

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

Ambient temperature (MAX)	70 °C
Ambient temperature (MIN)	-10 °C
Degree of protection (IP)	IP67
Housing coating	Nickel-plated
Housing design	Cylinder, screw-thread
Housing material	Brass
Mechanical mounting condition for sensor	Flush
Sensor length	80 mm
Thread pitch	1 mm
Thread size, metric	18

#### ELECTRICAL DATA

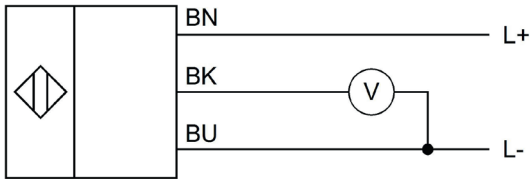
Absolute repeat accuracy	0.01 mm
Decay time	2 ms
Distance measuring sensors	Yes
Load resistance (current output)	0.3 kOhm
Load resistance (voltage output)	1 kOhm
Measuring range length (MAX)	4 mm
Measuring range length (MIN)	1 mm
Number of pins	4
Operating voltage (MAX)	30 V
Operating voltage (MIN)	18 V
Response time	2 ms
Reverse polarity protection	Yes
Short-circuit-proof	Yes
Supply voltage (MAX)	30 V
Supply voltage (MIN)	18 V
Type of analog output	1 ... 9V
Type of electrical connection	Connector M8
Voltage drop	7.2 V
Voltage type	DC

## OPTICAL DATA

Resolution

5  $\mu\text{m}$

## CONNECTION



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

**Functions:** BN = L+, BU = L-, BK = 1-9V

## 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.