

IB1804K1

INDUCTIVE SENSORS • ATMOSPHERIC-CHANGE RESISTANT

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	PTFE
Ambient temperature (MAX)	120 °C
Ambient temperature (MIN)	-25 °C
Atmospheric-change resistant (temperature cycle)	Yes
Cable length	5 m
Degree of protection (IP)	IP69K
Housing design	Cylinder, screw-thread
Housing material	Stainless steel 1.4571
Increased ambient temperatures > 80°C	Yes
Material of cable sheath	FEP
Mechanical mounting condition for sensor	Flush
Number of wires	4
Pressure resistance	10 bar
Pressure-proof	No
Sensor length	95 mm
Thread length	60 mm
Thread pitch	1 mm
Thread size, metric	18
Wire cross section	0.25 mm ²

ELECTRICAL DATA

Cascadable	No
Hysteresis	10 %
Max. output current	200 mA
No-load current	4 mA
Norm measuring plate	18x18x1
Relative repeat accuracy	3 %
Reverse polarity protection	Yes
Short-circuit-proof	Yes
Suitable for safety functions	No
Supply voltage (MAX)	30 V

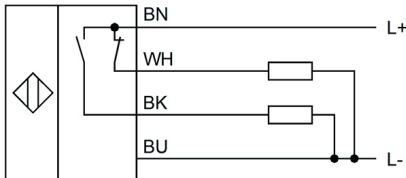
ELECTRICAL DATA

Supply voltage (MIN)	10 V
Switching distance	5 mm
Switching frequency	1000 Hz
Type of electrical connection	Cable
Type of switching function	Anticoincidence
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
With LED display	Yes
With monitoring function of downstream devices	No

OTHER DATA

Hygienic and wet area	Yes
Oil and cooling lubricants	Yes

CONNECTION



Colors: BN (brown), WH (white), BU (blue), BK (black)

Functions: BN = L+, WH = PNP NC, 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.