

IB180100

INDUCTIVE SENSORS • NORM SWITCHING DISTANCE

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	PA 6.6 (synthetic)
Ambient temperature	-25 °C ... 70 °C
Ambient temperatures < -25°C	No
Atmospheric-change resistant (temperature cycle)	No
Cable length	2 m
Degree of protection (IP)	IP67
High-pressure-proof sensors	No
Housing coating	Nickel-plated
Housing design	Cylinder, screw-thread
Housing material	Brass
Increased ambient temperatures > 80°C	No
Material independent sensors (factor 1)	No
Material of cable sheath	PVC
Mechanical mounting condition for sensor	Flush
Number of wires	3
Pressure-proof	No
Sensor length	62 mm
Teflon housing	No
Thread length	50 mm
Thread pitch	1 mm
Thread size, metric	18

ELECTRICAL DATA

Cascadable	No
Connection to amplifier	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
Distance measuring sensors	No

ELECTRICAL DATA

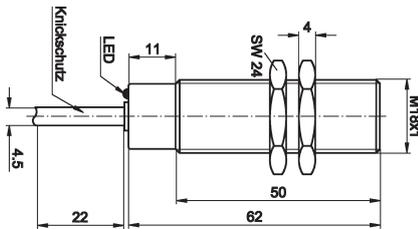
Hysteresis	15 %
Max. output current	200 mA
No-load current	15 mA
Norm measuring plate	18x18x1
Rated control supply voltage U_s at DC	10 V ... 30 V
Relative repeat accuracy	10 %
Reverse polarity protection	Yes
Short-circuit protection	Yes
Suitable for safety functions	No
Supply voltage	10 V ... 30 V
Switching distance	5 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

OTHER DATA

Areas inquiry	No
Devices for hose mounting	No
End position sensing, hydraulic cylinder	No
Feeding technology	No
Harsh environmental conditions	No
Hygienic and wet area	No
Metallic sensor surface	No
Oil and cooling lubricants	No
Ring-shaped sensors	No
Welding area	No
Welding-proof sensors	No



Colors: BN (brown), BU (blue), BK (black)
Functions: BN = L+, BU = L-, BK = PNP NO



INSTALLATION



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

DISPOSAL



SAFETY WARNINGS