IB180121

inductive sensors



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

Devices for hose mounting Feeding technology Harsh environmental conditions Hygienic and wet area Metallic sensor surface Oil and cooling lubricants	NO NO NO
Harsh environmental conditions Hygienic and wet area Metallic sensor surface	NO
Hygienic and wet area Metallic sensor surface	
Metallic sensor surface	NO
Oil and cooling lubricants	NO
	NO
Ring-shaped sensors	NO
Welding-proof sensors	NO
Active area material of sensor	PA 6.6 (synthetic)
Ambient temperature (min/max)	-25 °C / 70 °C
Ambient temperatures < -25°C	NO
Atmospheric-change resistant (temperature cycle)	NO
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
Mechanical mounting condition for sensor	Concise
Pressure-proof	NO
Sensor length	71.5 mm
Teflon housing	NO
Thread length	45 mm
Thread pitch	1 mm
Thread size, metric	18
2x increased switching distance	NO
3x increased switching distance	NO
4x increased switching distance	NO
Cascadable	NO
Connection to amplifier	NO

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TECHNICAL DATA

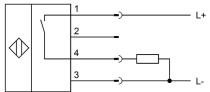
Correction factor (aluminum)	0.3
Correction factor (brass)	0.4
Correction factor (copper)	0.2
Correction factor (stainless steel)	0.7
Correction factor (steel)	1
Distance measuring sensors	NO
Hysteresis	15 %
Increased switching distance	NO
Max. output current	200 mA
No-load current	15 mA
Norm measuring plate	18x18x1
Number of pins	3
Rated control supply voltage Us at DC (min/max)	10 V / 30 V
Relative repeat accuracy	10 %
Reverse polarity protection	YES
Short-circuit-proof	YES
Suitable for safety functions	NO
Supply voltage (min/max)	10 V / 30 V
Switching distance	5 mm
Switching frequency	500 Hz
Type of electrical connection	Connector M12
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
Areas inquiry	NO
End position sensing, hydraulic cylinder	NO
Welding area	NO





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CONNECTION



Colors: 1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black) **Functions:** 1 = L+, 2 = n. c., 3 = L-, 4 = PNP NO

DIMENSIONAL DRAWING

