

inductive sensors (preferential)

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

| TECHNICAL DAIA | |
|--|------------------------|
| Devices for hose mounting | 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-proof sensors | NO |
| Active area material of sensor | PBT |
| 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 |
| Housing material | Metal |
| Increased ambient temperatures > 80°C | NO |
| Material independent sensors (factor 1) | NO |
| Mechanical mounting condition for sensor | Concise |
| Pressure-proof | NO |
| Sensor length | 60 mm |
| Teflon housing | NO |
| Thread length | 40 mm |
| Thread pitch | 1 mm |
| Thread size, metric | 12 |
| 2x increased switching distance | NO |
| 3x increased switching distance | NO |
| 4x increased switching distance | NO |
| Cascadable | NO |
| | |

IA120120

inductive sensors (preferential)



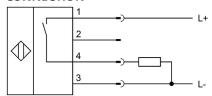
TECHNICAL DATA

| TECHNICAE DAIA | |
|---|-----------------------|
| Connection to amplifier | NO |
| 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 | 12x12x1 |
| 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 | 2 mm |
| Switching frequency | 800 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 |



inductive sensors (preferential)

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

