

IY150325

INDUCTIVE SENSORS • RING 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.



MECHANICAL DATA

| | |
|------------------------------------------|-------------|
| Active area material of sensor | POM |
| Ambient temperature (MAX) | 70 °C |
| Ambient temperature (MIN) | -25 °C |
| Degree of protection (IP) | IP67 |
| Housing design | Ring-shaped |
| Housing material | Polyamid |
| Mechanical mounting condition for sensor | Non-flush |
| Pressure-proof | No |
| Ring diameter | 15.1 mm |
| Sensor height | 20 mm |
| Sensor length | 71 mm |
| Sensor width | 35 mm |

ELECTRICAL DATA

| | |
|----------------------------------|-------------------|
| Cascadable | No |
| Decay time | 0.1 ms |
| Max. output current | 200 mA |
| Max. parts speed | 35 m/s |
| No-load current | 20 mA |
| Number of pins | 3 |
| Pulse stretching | 150 ms |
| Pulse stretching | 0.1 ms |
| Response time | 0.1 ms |
| Setting procedure | Manual adjustment |
| Suitable for safety functions | No |
| Supply voltage (MAX) | 35 V |
| Supply voltage (MIN) | 10 V |
| Switching behavior of the output | Dynamic |
| Switching distance | 15 mm |
| Type of electrical connection | Connector M12 |

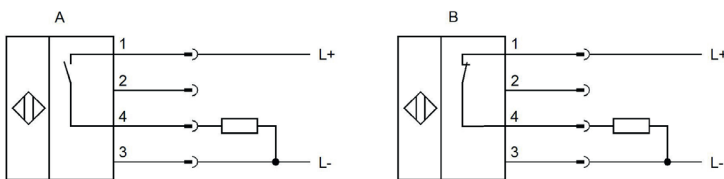
ELECTRICAL DATA

| | |
|------------------------------------------------|-----------------------------------------------|
| Type of switching function | Normally closed contact/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

| | |
|---------------------|-----|
| Feeding technology | Yes |
| Ring-shaped sensors | Yes |

CONNECTION

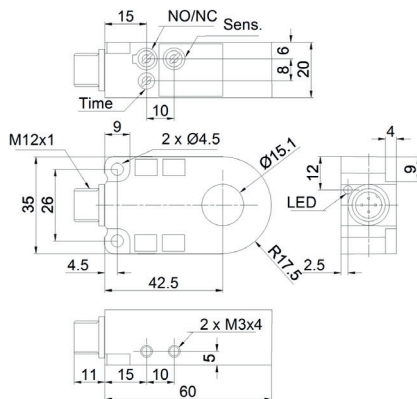


Colors: A: 1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black)

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

B: 1 = L+, 2 = n. c., 3 = L-, 4 = PNP NC

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.