

IY250320

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	25.1 mm
Sensor height	20 mm
Sensor length	71 mm
Sensor width	35 mm

ELECTRICAL DATA

Cascadable	No
Decay time	10 ms
Max. output current	200 mA
Max. parts speed	35 m/s
Min. object size (steel ball)	3 mm
No-load current	11 mA
Number of pins	3
Pulse stretching	150 ms
Pulse stretching	10 ms
Response time	0.5 ms
Reverse polarity protection	Yes
Setting procedure	Manual adjustment
Suitable for safety functions	No
Supply voltage (MAX)	35 V
Supply voltage (MIN)	10 V
Switching behavior of the output	Static
Switching distance	25 mm

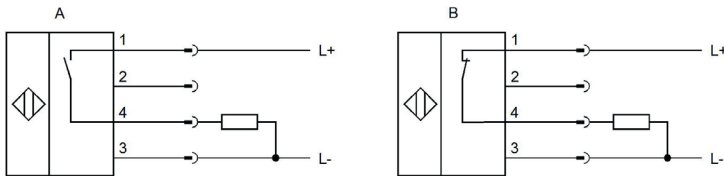
ELECTRICAL DATA

Type of electrical connection	Connector M12
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

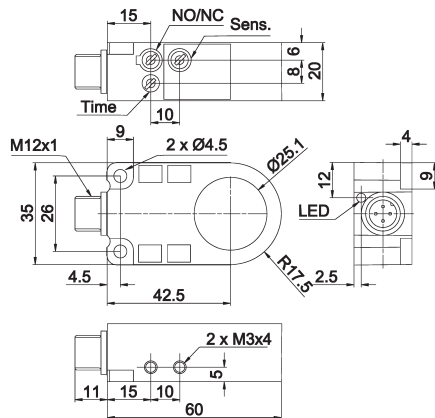


Colors: A: 1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black)

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.