

IY501325

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	51 mm
Sensor height	20 mm
Sensor length	121 mm
Sensor width	80 mm

ELECTRICAL DATA

Cascadable	No
Decay time	0.1 ms
Max. output current	200 mA
Max. parts speed	25 m/s
Min. object size (steel ball)	2.5 mm
No-load current	20 mA
Number of pins	3
Pulse stretching	150 ms
Pulse stretching	0.1 ms
Response time	0.1 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	Dynamic
Switching distance	51 mm

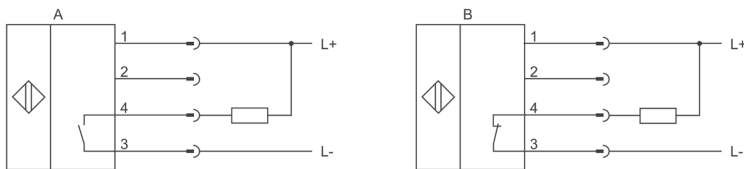
ELECTRICAL DATA

Type of electrical connection	Connector M12
Type of switching function	Normally closed contact/normally open contact
Type of switching output	NPN
Voltage drop	2 V
Voltage type	DC
With LED display	Yes
With monitoring function of downstream devices	No

OTHER DATA

Areas inquiry	Yes
Feeding technology	Yes
Ring-shaped sensors	Yes

CONNECTION

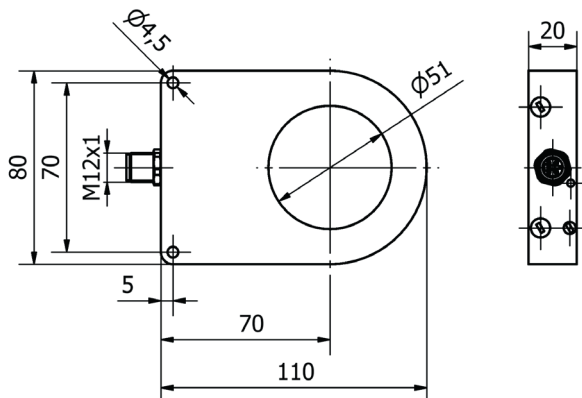


Colors: A: 1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black)

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

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