

SHIELDED INDUCTIVE PROXIMITY SENSORS

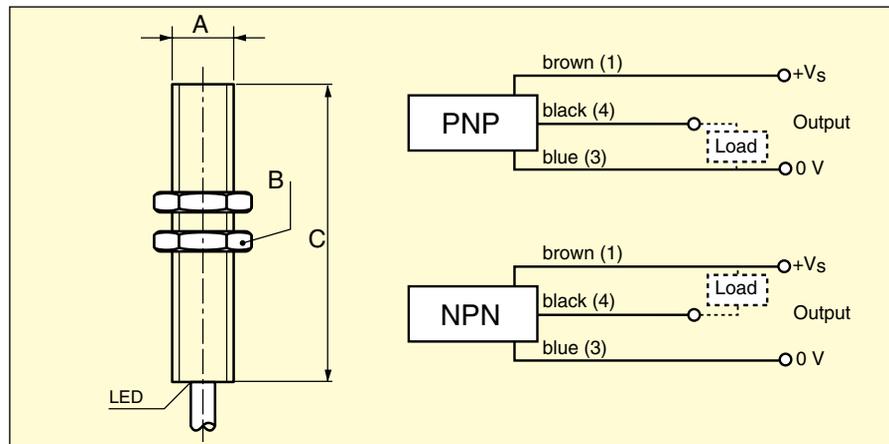
8, 12, AND 18 mm BODIES



PRX102 Series



- ✓ Normally Open Industrial Proximity Sensors—3-Wire Configuration
- ✓ Rugged Construction for Dirty, Humid, Oily, and Dusty Applications
- ✓ Color-Coded Sensing Faces: Red-NPN and Green-PNP for Easy Identification
- ✓ IP67 Protection Rating



Reliability and ease of use make the PRX102 Series inductive proximity sensors the number one choice for numerous automation and robotics applications. These switches can detect any metal, and they are highly insensitive to contaminants such as dirt, dust, humidity, and oil. An LED indicator alerts the user to whether the sensor is working. The open collector can be either NPN or PNP.

SPECIFICATIONS

Switch: Open collector, 3-wire, normally open, reverse polarity protected

Operating Temperature: -25 to 75°C (-13 to 167°F)

Electrical Connection: 1.8 m (6'), 3-conductor, 22 AWG, PVC insulated, pigtail leads; 26 AWG for 8 mm

Target: Metals (areas < sensing area decrease sensing distance)

Case Material: 8 mm (0.3") 303 SS; 12 mm (0.5") and 18 mm (0.7") nickel-plated brass; rolled threads



PRX102-8N, proximity sensor, shown with MBL-8/12, mounting bracket, and DPF75, rate and total meter.

Dimensions: mm (inch)

PRX102	THREAD A	NUT B	C
8N/8P	M8 x 1	SW13	45 (1.77)
12N/12P	M12 x 1	SW17	40 (1.57)
18N/18P	M18 x 1	SW24	40 (1.57)

- ✓ Short Circuit Protected
- ✓ Reverse Polarity Protected
- ✓ Red LED Switching Indication

Correction factor for sensing distance of alternative materials.

	Factor approximately
Mild steel	1.0
Fe 360	1.0
Aluminum foil	0.95
Stainless steel	0.7
Brass	0.55
Aluminum	0.5
Copper	0.45

Example: Copper
Effective sensing distance $a = S_n \times 0.45$

To Order

NPN OUTPUT MODEL NO.	PRX102-8N	PRX102-12N	PRX102-18N
PNP OUTPUT MODEL NO.	PRX102-8P	PRX102-12P	—
SENSING DISTANCE mm (inch)	2 (0.08)	4 (0.16)	8 (0.31)
OUTER DIAMETER mm (inch)	8 (0.31)	12 (0.47)	18 (0.71)
SUPPLY VOLTAGE	10 to 30 Vdc	10 to 30 Vdc	10 to 30 Vdc
MAX SWITCHING	200 mA	250 mA	200 mA
VOLTAGE DROP	<2 Vdc	<2 Vdc	<2 Vdc
CURRENT DRAW	<12 mA	<10 mA	<10 mA
MAX SWITCH FREQUENCY	5 kHz	2 kHz	0.5 kHz
WEIGHT g (oz)	43 (1.5)	85 (3.0)	113 (4.0)

Note: Models shown are normally open. For normally closed models add suffix “-NC” to model number, no extra charge.

ACCESSORIES

MODEL NO.	DESCRIPTION
MBL-8/12	L-shaped mounting bracket
DPF75	Compatible rate, batch, total meter
DPF402	Compatible rate, batch, total meter
DPF76	Compatible rate, batch, total meter
DPF701	Compatible batch, total meter
DPC10-TL*	Compatible total meter
DPF78	Compatible rate meter
DPC10-RM	Compatible rate meter

Comes with complete operator's manual.

* Requires external DC power supply, such as PSS-D12A.

Ordering Example: PRX102-12N, 12 mm dia. proximity sensor with NPN output and 4 mm (0.16") sensing distance, PRX102-18P, 18 mm proximity sensor with PNP output and 18 mm (0.31 sensing distance plus)