

Inductive Proximity Sensor M12 / M18 Series

- ▶ Nickel coated brass
- ▶ Standard sensors for detecting ferrous metals
- ▶ IP67 and CE certification
- ▶ Electrical circuit protection

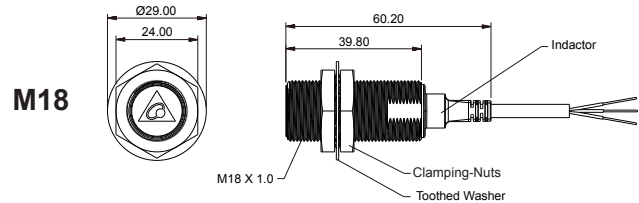
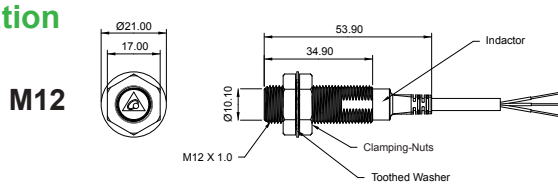


Appearance	Sensing Distance	NPN		PNP	
		NO	NC	NO	NC
M12 Isolation	2mm	IS-E1202-BNOB2	IS-E1202-BNCB2	IS-E1202-BPOB2	IS-E1202-BPCB2
	4mm	IS-E1204-BNOB2	IS-E1204-BNCB2	IS-E1204-BPOB2	IS-E1204-BPCB2
M12 Non-isolation	4mm	IS-N1204-BNOB2	IS-N1204-BNCB2	IS-N1204-BPOB2	IS-N1204-BPCB2
	8mm	IS-N1208-BNOB2	IS-N1208-BNCB2	IS-N1208-BPOB2	IS-N1208-BPCB2
M18 Isolation	5mm	IS-E1805-BNOB2	IS-E1805-BNCB2	IS-E1805-BPOB2	IS-E1805-BPCB2
	8mm	IS-E1808-BNOB2	IS-E1808-BNCB2	IS-E1808-BPOB2	IS-E1808-BPCB2
M18 Non-isolation	8mm	IS-N1808-BNOB2	IS-N1808-BNCB2	IS-N1808-BPOB2	IS-N1808-BPCB2
	12mm	IS-N1812-BNOB2	IS-N1812-BNCB2	IS-N1812-BPOB2	IS-N1812-BPCB2

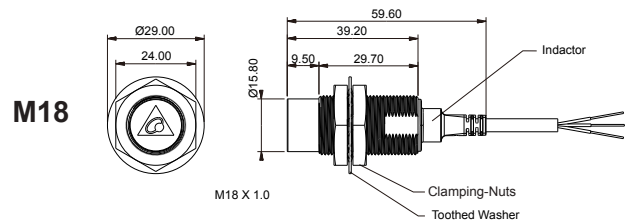
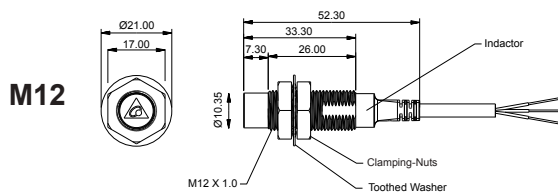
Dimensions

Unit : mm

• Isolation



• Non-Isolation



Specifications

Inductive Proximity Sensor		M12				M18			
Voltage Range		12 ~ 24 V _{DC} ± 10%							
Shielded		Isolation		Non-Isolation		Isolation		Non-Isolation	
Model		IS-E1202	IS-E1204	IS-N1204	IS-N1208	IS-E1805	IS-E1808	IS-N1808	IS-N1812
Sensing Distance		2 mm ± 10%	4 mm ± 10%	4 mm ± 10%	8 mm ± 10%	5 mm ± 10%	8 mm ± 10%	8 mm ± 10%	12 mm ± 10%
Different Travel		10% max. of sensing distance							
Detectable Object		Ferrous metal (the sensing distance decreases with no-ferrous metal)							
Standard Target		Iron, 12 × 12 × 1 mm		Iron, 24 × 24 × 1 mm		Iron, 18 × 18 × 1 mm		Iron, 24 × 24 × 1 mm	
Response Frequency		1.0kHz	1.0kHz	1.0kHz	1.0kHz	1.0kHz	1.0kHz	1.0kHz	1.0kHz
Current Consumption		15mA max.							
Control Output	Load Current	200 mA max.							
	Residual Voltage	2 V max. (load current: 200 mA, cable length: 2m)							
Indicators		Operation indicator (red)							
Operation Mode		NPN: NO / NC; PNP: NO / NC							
Protection Circuits		Protection against reverse power connection, output overcurrent, power supply surge, output surge							
Ambient Temperature		Operating: -25 ~ +70 °C / Storage: -40 ~ +80 °C (with no icing or condensation)							
Ambient Humidity		≤ 50% RH (at 70 °C)							
Temperature Influences		±10% max. of sensing distance at + 23°C in the temperature range of -25 ~ +70°C							
Enclosure Rating		IP67							
Vibration Resistance		10~55 Hz, 1.5mm, 3 axes for 2 hours							
Shock Resistance		Max. 1000 m/s ² , 3 axes, 6 directions and 3 times in each							
Insulating Resistance		50 MΩ or more (500VDC) between current-carrying parts and case							
Withstand Voltage		1000 V _{AC} 50 / 60Hz 1 min							
Cables		3 Wires 2M PVC cable M12 connector with 200mm cable							
Weight		65 g				85 g			
Materials	Case	Nickel coated brass							
	Sensing Surface	PBT							
	Clamping Nuts	Nickel coated brass							
	Toothed Washer	Zinc-plated iron							
Certifications		CE							