

Inductive Proximity Sensor

PI

Proximity Sensors

Photoelectric Sensors

Measurement Sensors

Vision & Safety Sensors



SALIENT FEATURES

- ◆ IP67, Brass Housing
- ◆ LED - Status Indication
- ◆ Short - Circuit protection
- ◆ Reverse Polarity Protection
- ◆ Shielded and Non - Shielded
- ◆ Prewired, Jn. Connector Types
- ◆ M5, M8, M12, M18, M30 Models

Model Number Legend

PI - □ □ - □ □ - □

1 2 3 4 5 6

1. Series

PI

2. Housing

M5: M5, Threaded

M8: M8, Threaded

M12: M12, Threaded

M18: M18, Threaded

M30: M30, Threaded

3. Shield

F: Flush/ Shielded

N: Non-Flush/ Unshielded

4. Sensing Distance

1: 1 mm

1.5: 1.5 mm

2: 2 mm

5: 5 mm

10: 10 mm

18: 18 mm

5. Output

NO: NPN - NO

PO: PNP - NO

NC: NPN - NC

PC: PNP - NC

6. Connection

2M: 2m Cable

M12J3: M12 Junction Connector with 0.3m extension

#. Accessories included

Check Nut: 1 Pair

Example:

PI-M30N-18NO-2M

PI Series - M30, Non-Flush - 18mm Sensing Distance, NPN NO - 2 meter Cable

NOTE: Contact us for models not shown in catalogue.
Connector cables are sold separately; look in CC series catalogue for the same (www.inno.sg/cc).

Control

Weighing

Automation

Components

Ratings and Specifications

Size			M5	M8	M12	M18	M30
Model	Flush	NPN - NO	PI-M5F-1NO- __	PI-M8F-1.5NO- __	PI-M12F-2NO- __	PI-M18F-5NO- __	PI-M30F-10NO- __
		NPN - NC	-	-	PI-M12F-2NC- __	PI-M18F-5NC- __	PI-M30F-10NC- __
		PNP - NO	PI-M5F-1PO- __	PI-M8F-1.5PO- __	PI-M12F-2PO- __	PI-M18F-5PO- __	PI-M30F-10PO- __
		PNP - NC	-	-	PI-M12F-2PC- __	PI-M18F-5PC- __	PI-M30F-10PC- __
	Non-Flush	NPN - NO	-	PI-M8N-2NO- __	PI-M12N-5NO- __	PI-M18N-10NO- __	PI-M30N-18NO- __
		NPN - NC	-	-	PI-M12N-5NC- __	PI-M18N-10NC- __	PI-M30N-18NC- __
		PNP - NO	-	PI-M8N-2PO- __	PI-M12N-5PO- __	PI-M18N-10PO- __	PI-M30N-18PO- __
		PNP - NC	-	-	PI-M12N-5PC- __	PI-M18N-10PC- __	PI-M30N-18PC- __
Sensing Distance	Flush	1mm	1.5mm	2mm	5mm	10mm	
	Non-Flush	-	2mm	5mm	10mm	18mm	
Standard Sensing Target			Iron, 5x5x1mm	Iron, 12x12x1mm	Iron, 15x15x1mm	Iron, 30x30x1mm	Iron, 54x54x1mm
Hysteresis			± 20%	± 10%			
Response Frequency	Flush	2000 Hz	2000 Hz	1500 Hz	600 Hz	400 Hz	
	Non-Flush	-	800 Hz	400 Hz	200 Hz	100 Hz	
Supply Voltage			6 - 36 VDC				
Current Consumption			max. 17mA	max. 20mA			
Connection			PI-__-__-2M - 2meter pre wired; PI-__-__- M12J3 - M12 junction connector with 0.3m cable extension				
Output	Type	NPN or PNP - NO /NC depending on the model					
	Switching Capacity	100mA				200mA	
	Residual Voltage	max. 3 V					
Indication			Operation: Red LED				
Protection Circuits			Reverse power supply polarity protection, reversed output polarity protection				
Dielectric Strength			1000 VAC, 50/60 Hz for 1 minute between current carry parts and case				
Voltage Influence			± 5% max. of sensing distance (ref. sensing distance taken at 24VDC)				
Temperature Influence			± 20% max. of sensing distance (ref. sensing distance taken at 25°C)				
Vibration Resistance			10 - 55Hz, 1mm for 2 hours in X, Y, Z directions (destruction)				
Shock Resistance			50 G (10 times) in X, Y, Z direction for 3 times (destruction)				
Ambient Temperature			Operation: -25° ~ 70° C; Storage: -30° ~ 80° C (non-freezing; non-condensing)				
Ambient Humidity			Operation: 40 ~ 85% RH; Storage: 35 ~ 95% RH (non- condensing)				
Protection Class			Pre- Wired Type: IP67; Junction Connector Type: IP65				
Weight	Prewired	approx. 30g	approx. 42g	approx. 70g	approx. 150g	approx. 200g	
	Jn. Connector	approx. 15g	approx. 35g	approx. 45g	approx. 70g	approx. 120g	
Material			Head: PBT; Tube: Nickel plated Brass; Nuts: Chrome plated Copper Alloy; Washer: Zinc-plated Iron				
Tightening Torque			10 Nm (max.)				

Note:

* - Sensing Distance is calculated on the basis of the maximum sensing capacity when tested with a standard test object.

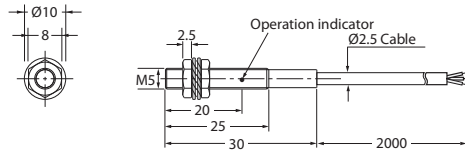
The Specifications for the □-M12J3 models stand good only if used along with CC-M12□ type connector

Sensor Dimension Drawing

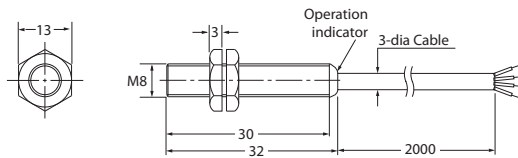
PI

All dimensions are in mm

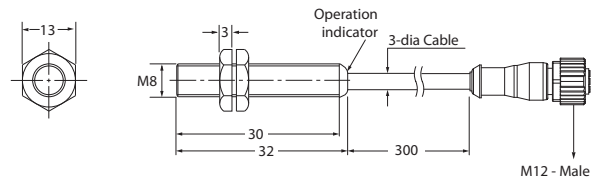
PI-M5F-1__-2M



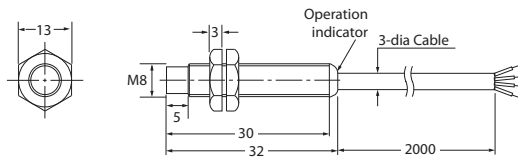
PI-M8F-1__-2M



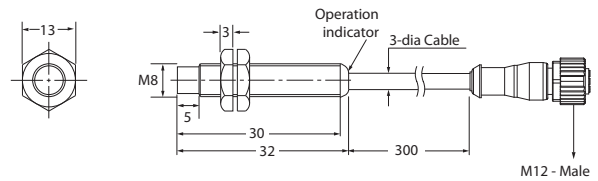
PI-M8F-1__-M12J3



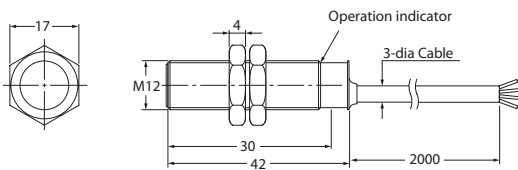
PI-M8N-2__-2M



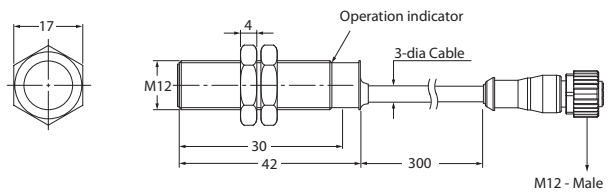
PI-M8N-2__-M12J3



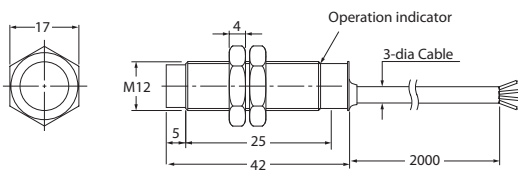
PI-M12F-2__-2M



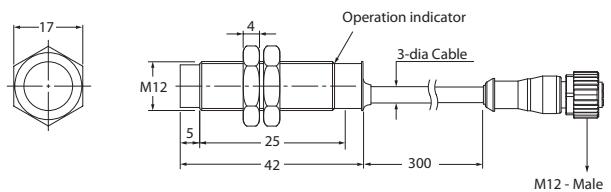
PI-M12F-2__-M12J3



PI-M12N-5__-2M



PI-M12N-5__-M12J3



Sensor Dimension Drawing

Proximity
Sensors

Photoelectric
Sensors

Measurement
Sensors

Vision & Safety
Sensors

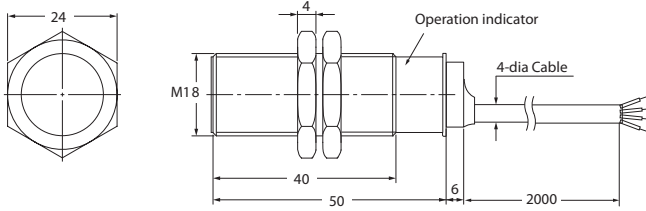
Control

Weighing

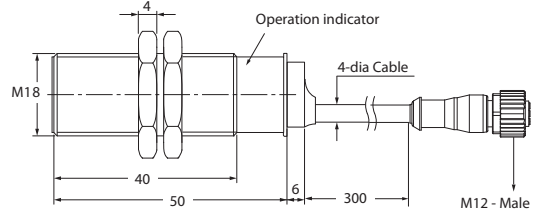
Automation

Components

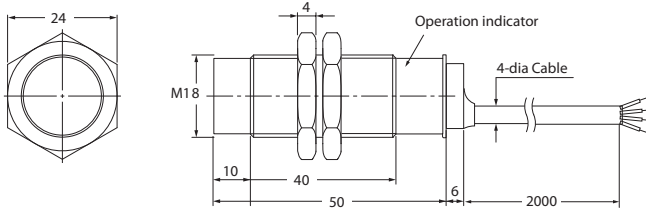
PI-M18F-___-2M



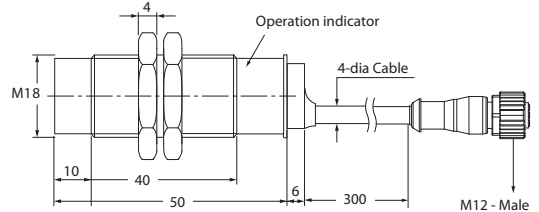
PI-M18F-___-M12J3



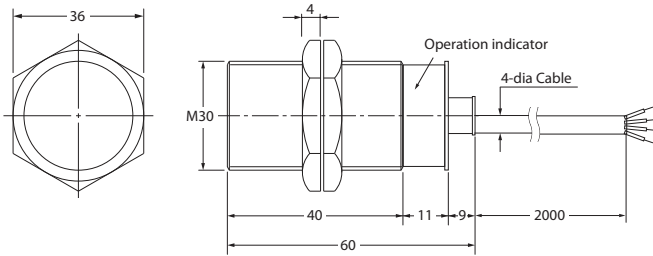
PI-M18N-___-2M



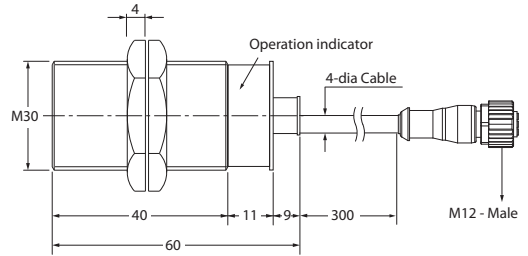
PI-M18N-___-M12J3



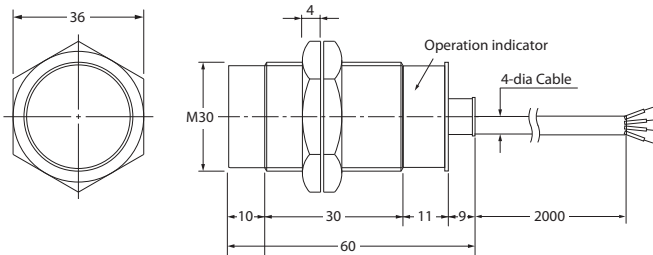
PI-M30F-___-2M



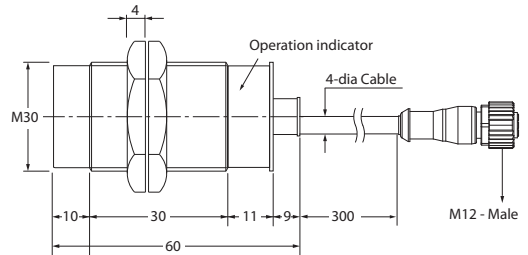
PI-M30F-___-M12J3



PI-M30N-___-2M



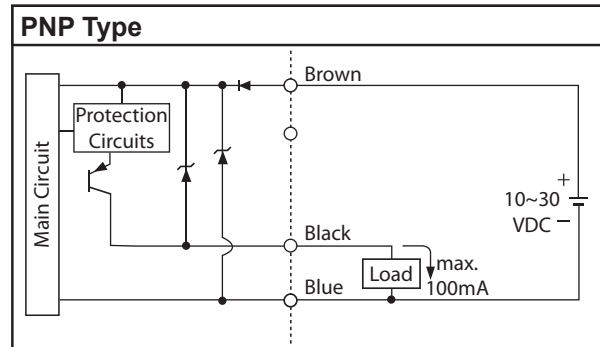
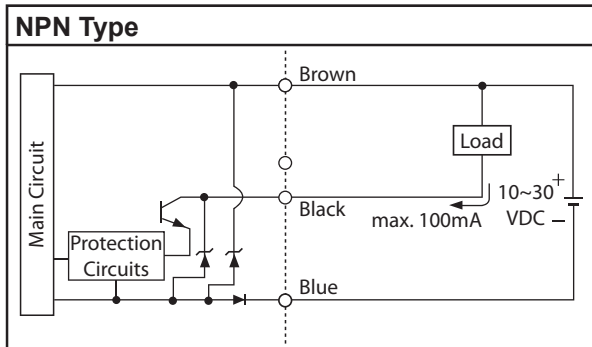
PI-M30N-___-M12J3



All dimensions are in mm

Control Output Diagram

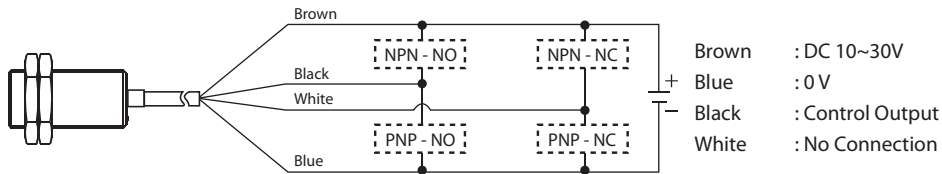
PI



- Brown : DC 10~30V
- Blue : 0V
- Black : Control Output
- White : No Connection

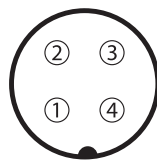
Connection

◆ Cable Type



◆ Junction Connector Type

Note: Connector Cable is not supplied along with unit



- 1 : DC 10~30V
- 2 : No Connection
- 3 : 0V
- 4 : Control Output

Exclusively Represented by:

Intech Systems Chennai Pvt Ltd
 S-2, Guindy Industrial Estate
 Chennai - 600 032. Ph: 4353 8888
 Email: info@intechchennai.com

INNOTM
www.inno.sg

© INNO, Rights Reserved
 In the interest of continuous product improvement
 specifications are subject to change without notice

Cat. No. PI-714

Proximity Sensors

Photoelectric Sensors

Measurement Sensors

Vision & Safety Sensors

Control

Weighing

Automation

Components