

Standard Inductive Proximity Sensor

Normal & Long Body

PQ



SALIENT FEATURES

- ◆ IP - 67, Brass Housing
- ◆ High Tightening Torque
- ◆ Short - Circuit protection
- ◆ Reverse Polarity Protection
- ◆ Shielded and Non - Shielded
- ◆ Prewired and Connector Type
- ◆ M8, M12, M18 and M30 Models

Model Number Legend



PQ - □ - □□ - □□□ - □
 1 2 3 4 5 6 7

1. Series

PQ

2. Body

S: Standard Length
 L: Long Body

3. Housing

M8: M8, Threaded
 M12: M12, Threaded
 M18: M18, Threaded
 M30: M30, Threaded

4. Shield

F: Flush/ Shielded
 N: Non-Flush/ Unshielded

5. Sensing Distance

1.5: 1.5 mm
 2: 2 mm
 4: 4 mm
 5: 5 mm
 8: 8 mm
 10: 10 mm
 15: 15 mm

6. Output

NO: NPN - NO
 PO: PNP - NO
 NC: NPN - NC
 PC: PNP - NC

7. Connection

2M: 2m Cable
 M8C: M8 Connector
 M12C: M12 Connector

#. Accessories included

Check Nut: 1 Pair

Example:

PQ-S-M18F-5PO-M12C

PQ Series - Standard Length, M18, Flush - 5mm Sensing Distance, PNP NO - M12 Connector

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).

Ratings and Specifications

Size			M8	M12	M18	M30
Model	Flush	NPN - NO	PQ_-M8F-1.5NO- _	PQ_-M12F-2NO- _	PQ_-M18F-5NO- _	PQ_-M30F-10NO- _
		NPN - NC	PQ_-M8F-1.5NC- _	PQ_-M12F-2NC- _	PQ_-M18F-5NC- _	PQ_-M30F-10NC- _
		PNP - NO	PQ_-M8F-1.5PO- _	PQ_-M12F-2PO- _	PQ_-M18F-5PO- _	PQ_-M30F-10PO- _
		PNP - NC	PQ_-M8F-1.5PC- _	PQ_-M12F-2PC- _	PQ_-M18F-5PC- _	PQ_-M30F-10PC- _
	Non-Flush	NPN - NO	PQ_-M8N-2NO- _	PQ_-M12N-4NO- _	PQ_-M18N-8NO- _	PQ_-M30N-15NO- _
		NPN - NC	PQ_-M8N-2NC- _	PQ_-M12N-4NC- _	PQ_-M18N-8NC- _	PQ_-M30N-15NC- _
		PNP - NO	PQ_-M8N-2PO- _	PQ_-M12N-4PO- _	PQ_-M18N-8PO- _	PQ_-M30N-15PO- _
		PNP - NC	PQ_-M8N-2PC- _	PQ_-M12N-4PC- _	PQ_-M18N-8PC- _	PQ_-M30N-15PC- _
Sensing Distance	Flush	1.5mm	2mm	5mm	10mm	
	Non-Flush	2mm	4mm	8mm	15mm	
Standard Sensing Target			Iron, Ø8x1mm	Iron, Ø12x1mm	Iron, Ø18x1mm	Iron, Ø30x1mm
Hysteresis			± 15%			
Response Frequency/ Time	Flush	2000 Hz/ 0.1ms	2000 Hz/ 0.1ms	1000 Hz/ 0.2ms	300 Hz/ 0.5ms	
	Non-Flush	2000 Hz/ 0.1ms	1000 Hz/ 0.2ms	500 Hz/ 0.5ms	150 Hz/ 1ms	
Supply Voltage			10-30VDC (ripple included)			
Current Consumption			< 10mA			
Connection			PQ_- - - - - 2M - 2 meter pre-wired; PQ_- - - - - M8C - M8 Connector; PQ_- - - - - M12C - M12 Connector			
Output	Type	NPN or PNP - NO/ NC depending on the model				
	Switching Capacity	200mA; Overload trip: 220mA				
	Leakage Current	< 0.01mA				
	Voltage Drop	< 1.5VDC				
Indication			Operation: Yellow LED (Cable type)/ 4 Yellow LED (Connector type)			
Protection Circuits			Reverse power supply polarity; reversed output polarity; Short circuit; Overload 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			± 10% 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			IP-67			
Weight	Standard Length	Prewired	approx. 40g	approx. 60g	approx. 130g	approx. 182g
		Connector	approx. 15g	approx. 25g	approx. 52g	approx. 120g
	Long Body	Prewired	approx. 53g	approx. 65g	approx. 150g	approx. 215g
		Connector	approx. 18g	approx. 30g	approx. 95g	approx. 185g
Cable			2M, 2.9Ø 3*0.15	2M, 4Ø 3*0.25	2M, 5Ø 3*0.34	2M, 5Ø 3*0.34
Material			Head: POM/ PBT; Tube: Nickel plated Brass (SS for M8); Nuts: Chrome plated Copper Alloy; Washer: Zinc-plated Iron			
Tightening Torque			10 Nm (max.)	15 Nm (max.)	40 Nm (max.)	

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

Sensor Dimension Drawing

PQ

Proximity Sensors

Photoelectric Sensors

Measurement Sensors

Vision & Safety Sensors

Control

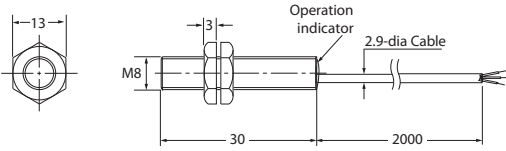
Weighing

Automation

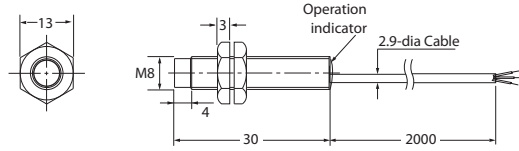
Components

All dimensions are in mm

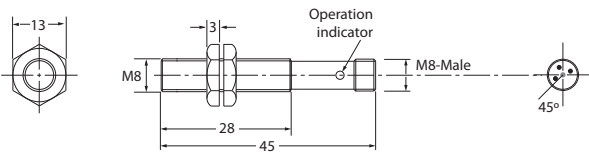
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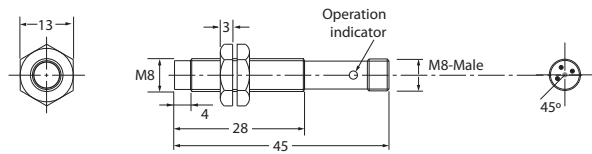
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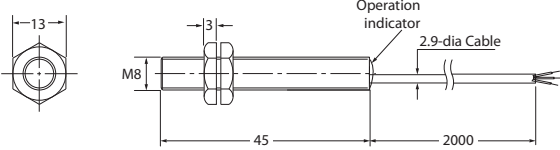
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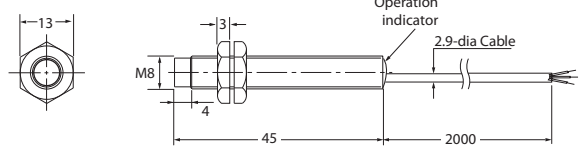
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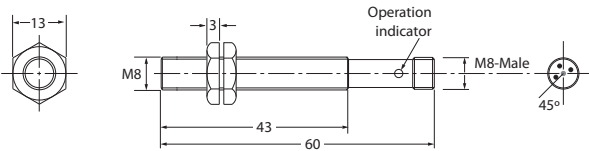
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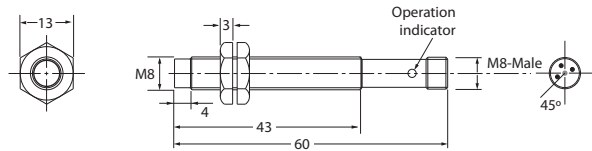
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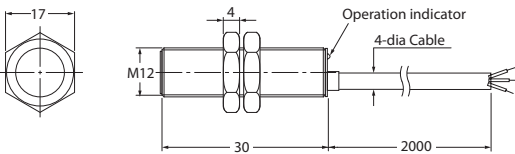
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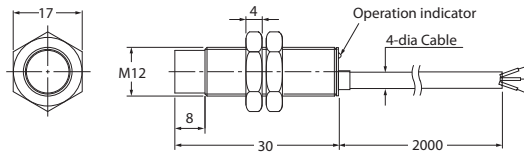
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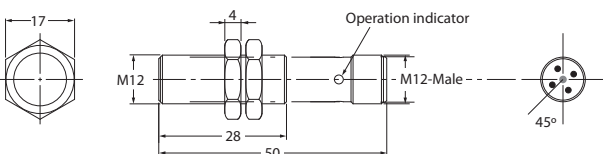
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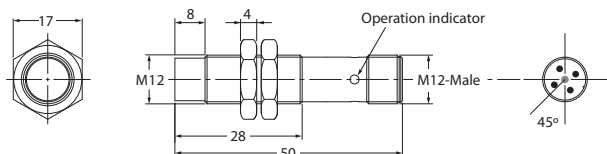
PQ-S-M12N-4_-2M



PQ-S-M12F-2_-M12C



PQ-S-M12N-4_-M12C



Sensor Dimension Drawing

Proximity Sensors

Photoelectric Sensors

Measurement Sensors

Vision & Safety Sensors

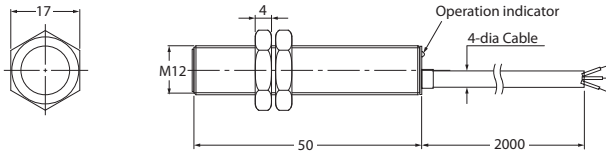
Control

Weighing

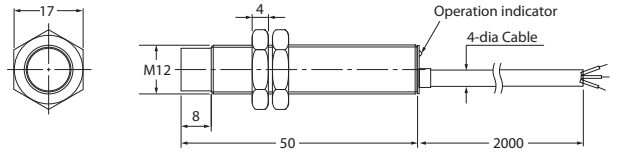
Automation

Components

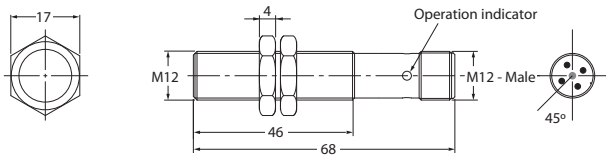
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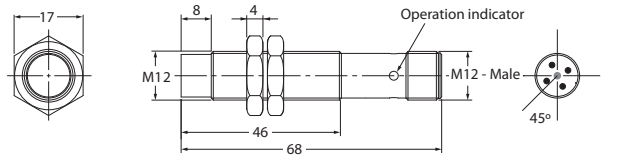
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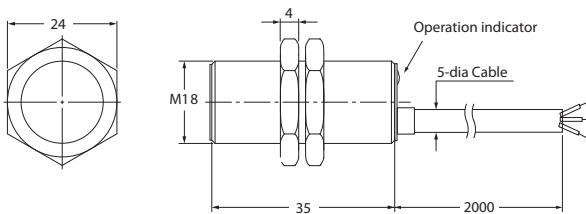
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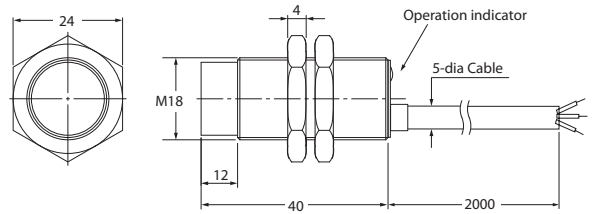
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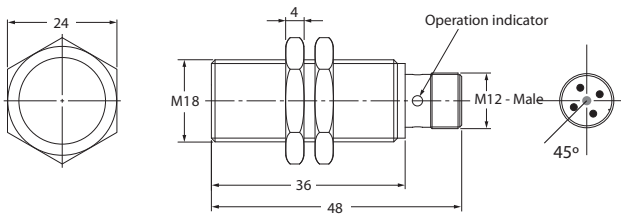
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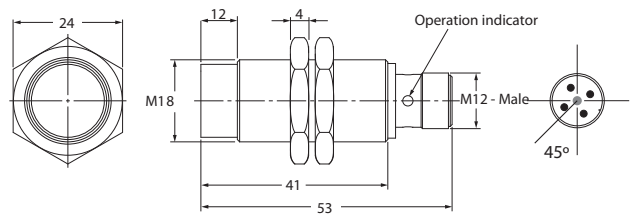
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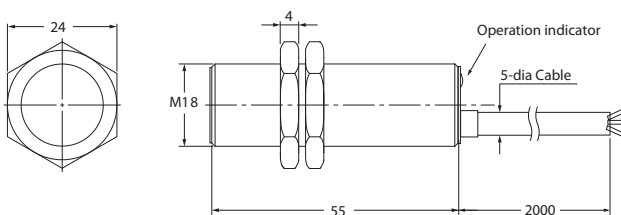
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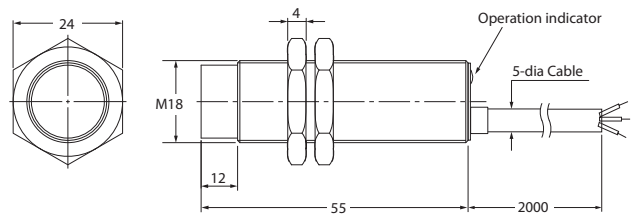
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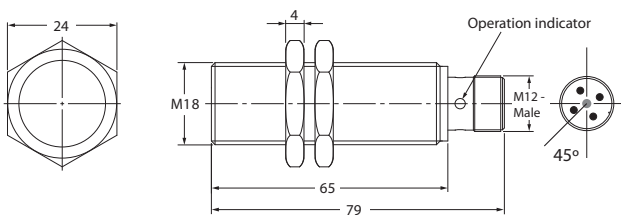
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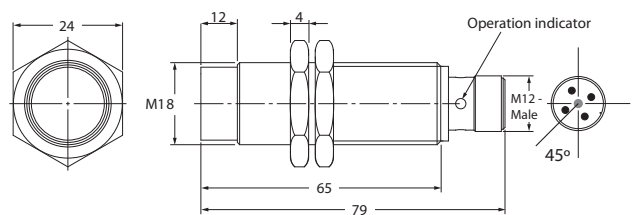
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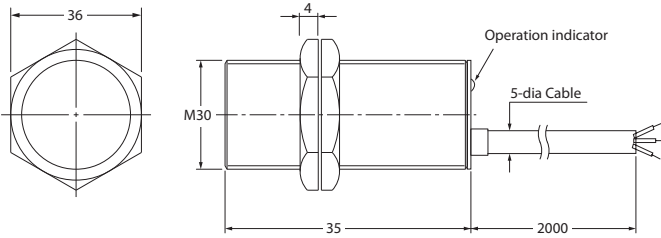
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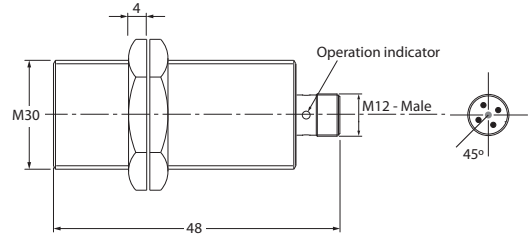
Sensor Dimension Drawing

PQ

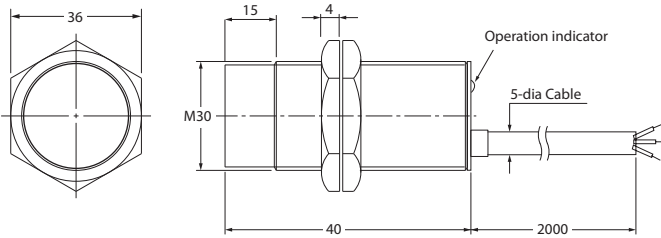
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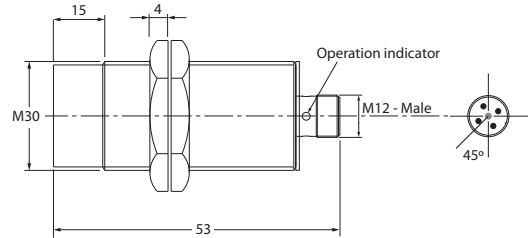
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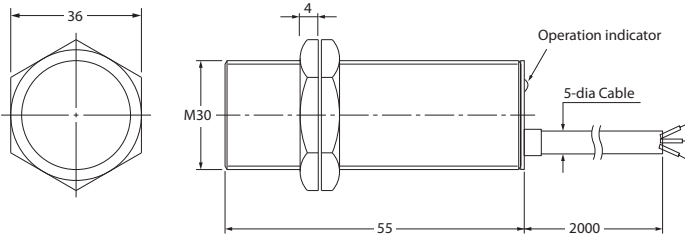
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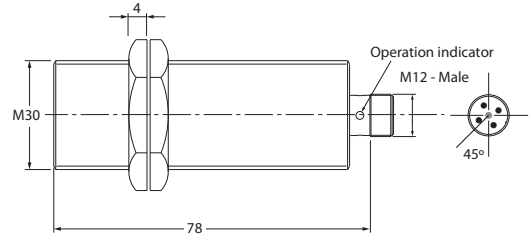
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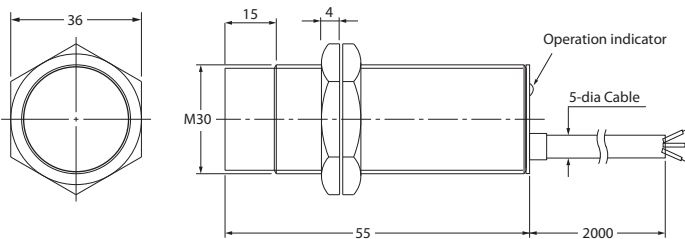
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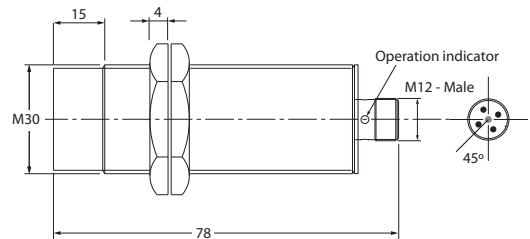
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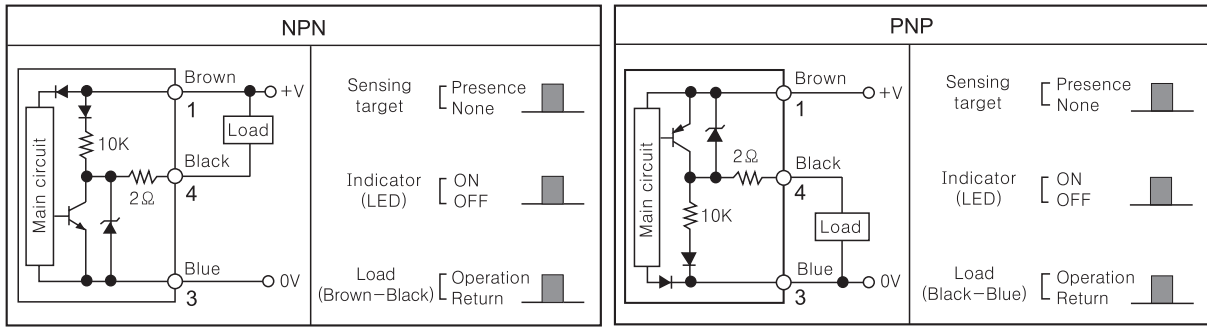


PQ-L-M30N-15_-M12C



All dimensions are in mm

Control Output Diagram

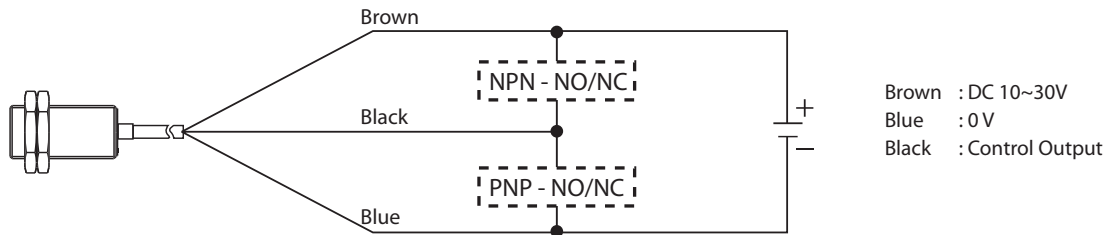


Brown : DC 10~30V
 Blue : 0V
 Black : Control Output

Note: 1, 3, 4 are the Pin numbers for the M12 Connector Models;
 (1), (2), (3) are the Pin numbers for the M8 Connector Models.

Connection

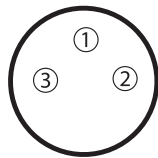
◆ Cable Type



Brown : DC 10~30V
 Blue : 0V
 Black : Control Output

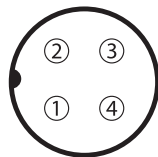
◆ Connector Type

◆ M8 Connector



1 : DC 10~30V
 2 : 0V
 3 : Control Output

◆ M12 Connector

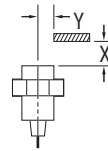
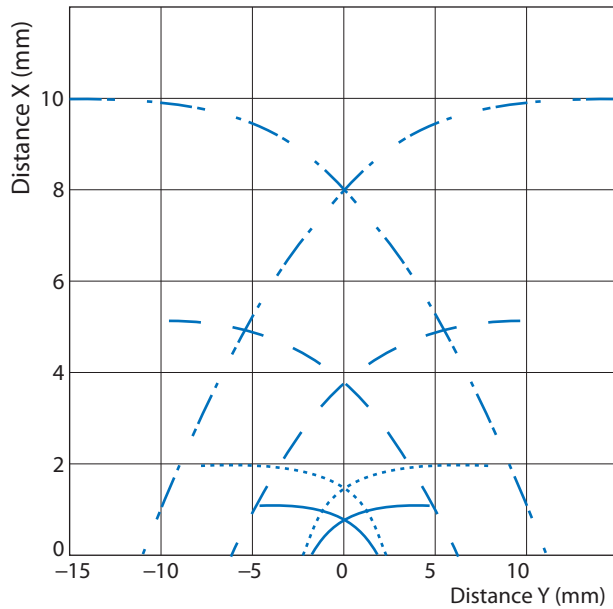


1 : DC 10~30V
 2 : Control Output NC
 3 : 0V
 4 : Control Output NO

Operational Range

PQ

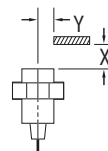
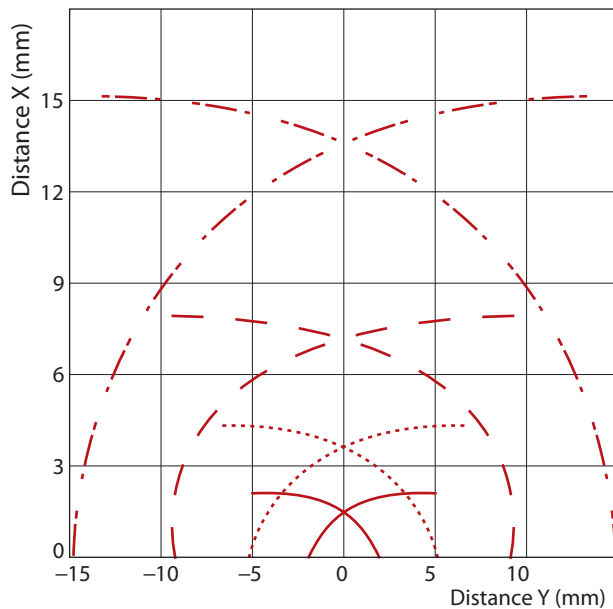
• Flush Type



Note: Operational Range testing carried out at room temperature using standard Test Object.

- PQ_-M8F-1.5_- → [Solid blue line]
- PQ_-M12F-2_- → [Dotted blue line]
- PQ_-M18F-5_- → [Dashed blue line]
- PQ_-M30F-10_- → [Dash-dot blue line]

• Non-Flush Type



- PQ_-M8N-2_- → [Solid red line]
- PQ_-M12N-4_- → [Dotted red line]
- PQ_-M18N-8_- → [Dashed red line]
- PQ_-M30N-15_- → [Dash-dot red line]

Exclusively Represented by:

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 specifications are subject to change without notice

Cat. No. PQ-C14

Proximity Sensors

Photoelectric Sensors

Measurement Sensors

Vision & Safety Sensors

Control

Weighing

Automation

Components