













Thru-beam Mode (Plastic Housing)

Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number	
Infrared: 880nm	Cable (2m PVC) 	10-30V DC (1ms on/off)	Emitter	<u>D30P-T200MD-EX9G2L2-A</u>	
			NPN/PNP	<u>D30P-T200MD-CX9C4U2-A</u>	
		12-240V DC /24-240V AC (1ms on/off)	Emitter (2-wire)	<u>D30P-T200MC-EX9G2L2-A</u>	
			SPST Solid-state Light-ON (2-wire)	<u>D30P-T200MC-LX9C2U2-A</u>	
	Quick Disconnect (Mini Style) 	10-30V DC (1ms on/off)	Emitter	<u>D30P-T200MD-EX9Q3LN-A</u>	
			NPN/PNP	<u>D30P-T200MD-CX9Q4UN-A</u>	
		12-240V DC /24-240V AC (1ms on/off)	Emitter (2-wire)	<u>D30P-T200MC-EX9Q3LN-A</u>	
			SPST Solid-state Light-ON (2-wire)	<u>D30P-T200MC-LX9Q3UN-A</u>	
Thru-beam mode Sensing distance: 200m	Cable (2m PVC) 	10-30V DC (1.5ms on/off)	Emitter	<u>D30P-T200MD-EX9C2L2-B</u>	
			NPN/PNP	<u>D30P-T200MD-CX9C4U2-B</u>	
		12-240V DC /24-240V AC (1.5ms on/off)	Emitter (2-wire)	<u>D30P-T200MC-EX9G2L2-B</u>	
			SPST Solid-state Light-ON (2-wire)	<u>D30P-T200MC-LX9C2U2-B</u>	
	Quick Disconnect (Mini Style) 	10-30V DC (1.5ms on/off)	Emitter	<u>D30P-T200MD-EX9Q3LN-B</u>	
			NPN/PNP	<u>D30P-T200MD-CX9Q4UN-B</u>	
		12-240V DC /24-240V AC (1.5ms on/off)	Emitter (2-wire)	<u>D30P-T200MC-EX9Q3LN-B</u>	
			SPST Solid-state Light-ON (2-wire)	<u>D30P-T200MC-LX9Q3UN-B</u>	
	Thru-beam mode Sensing distance: 200m	Cable (2m PVC) 	10-30V DC (2.3ms on/off)	Emitter	<u>D30P-T200MD-EX9C2L2-C</u>
				NPN/PNP	<u>D30P-T200MD-CX9C4U2-C</u>
			12-240V DC /24-240V AC (2.3ms on/off)	Emitter (2-wire)	<u>D30P-T200MC-EX9G2L2-C</u>
				SPST Solid-state Light-ON (2-wire)	<u>D30P-T200MC-LX9C2U2-C</u>
Quick Disconnect (Mini Style) 		10-30V DC (2.3ms on/off)	Emitter	<u>D30P-T200MD-EX9Q3LN-C</u>	
			NPN/PNP	<u>D30P-T200MD-CX9Q4UN-C</u>	
		12-240V DC /24-240V AC (2.3ms on/off)	Emitter (2-wire)	<u>D30P-T200MC-EX9Q3LN-C</u>	
			SPST Solid-state Light-ON (2-wire)	<u>D30P-T200MC-LX9Q3UN-C</u>	
Quick Disconnect (Mini Style)	12-240V DC /24-240V AC (2.3ms on/off)	SPST Solid-state Dark-ON (2-wire)	<u>D30P-T200MC-DX9Q3UN-C</u>		

Note:
 Coming Soon : Part numbers with underline
 In Preparation: Part numbers with a line through the middle

Thru-beam Mode (Brass Housing)

Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number
Infrared: 880nm	Cable (2m PVC) 	10-30V DC (1ms on/off)	Emitter	<u>D30B-T200MD-EX9G2L2-A</u>
			NPN/PNP	<u>D30B-T200MD-CX9G4U2-A</u>
		12-240V DC /24-240V AC (1ms on/off)	Emitter (2-wire)	<u>D30B-T200MC-EX9C2L2-A</u>
			SPST Solid-state Light-ON (2-wire)	<u>D30B-T200MC-LX9G2U2-A</u>
	Quick Disconnect (Mini Style) 	10-30V DC (1ms on/off)	Emitter	<u>D30B-T200MD-EX9Q3LN-A</u>
			NPN/PNP	<u>D30B-T200MD-CX9Q4UN-A</u>
		12-240V DC /24-240V AC (1ms on/off)	Emitter (2-wire)	<u>D30B-T200MC-EX9Q3LN-A</u>
			SPST Solid-state Light-ON (2-wire)	<u>D30B-T200MC-LX9Q3UN-A</u>
Thru-beam mode Sensing distance: 200m	Cable (2m PVC) 	10-30V DC (1.5ms on/off)	Emitter	<u>D30B-T200MD-EX9G2L2-B</u>
			NPN/PNP	<u>D30B-T200MD-CX9G4U2-B</u>
		12-240V DC /24-240V AC (1.5ms on/off)	Emitter (2-wire)	<u>D30B-T200MC-EX9C2L2-B</u>
			SPST Solid-state Light-ON (2-wire)	<u>D30B-T200MC-LX9G2U2-B</u>
	Quick Disconnect (Mini Style) 	10-30V DC (1.5ms on/off)	Emitter	<u>D30B-T200MD-EX9Q3LN-B</u>
			NPN/PNP	<u>D30B-T200MD-CX9Q4UN-B</u>
		12-240V DC /24-240V AC (1.5ms on/off)	Emitter (2-wire)	<u>D30B-T200MC-EX9Q3LN-B</u>
			SPST Solid-state Light-ON (2-wire)	<u>D30B-T200MC-LX9Q3UN-B</u>
Thru-beam mode Sensing distance: 200m	Cable (2m PVC) 	10-30V DC (2.3ms on/off)	Emitter	<u>D30B-T200MD-EX9G2L2-C</u>
			NPN/PNP	<u>D30B-T200MD-CX9G4U2-C</u>
		12-240V DC /24-240V AC (2.3ms on/off)	Emitter (2-wire)	<u>D30B-T200MC-EX9C2L2-C</u>
			SPST Solid-state Light-ON (2-wire)	<u>D30B-T200MC-LX9G2U2-C</u>
	Quick Disconnect (Mini Style) 	10-30V DC (2.3ms on/off)	Emitter	<u>D30B-T200MD-EX9Q3LN-C</u>
			NPN/PNP	<u>D30B-T200MD-CX9Q4UN-C</u>
		12-240V DC /24-240V AC (2.3ms on/off)	Emitter (2-wire)	<u>D30B-T200MC-EX9Q3LN-C</u>
			SPST Solid-state Light-ON (2-wire)	<u>D30B-T200MC-LX9Q3UN-C</u>
12-240V DC /24-240V AC (2.3ms on/off)	SPST Solid-state Dark-ON (2-wire)	<u>D30B-T200MC-DX9G2U2-C</u>		
	SPST Solid-state Dark-ON (2-wire)	<u>D30B-T200MC-DX9Q3UN-C</u>		

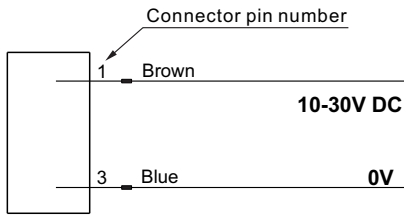
Note:
 Coming Soon : Part numbers with underline
 In Preparation: Part numbers with a line through the middle
 — J-02 —

Specifications

Supply Voltage and Current	Emitters: 12 to 240V AC (50/60 Hz) or 10 to 30V DC at 20 mA, 10 % maximum ripple DC Receivers: 10 to 30V DC at 10 mA maximum (exclusive of load); 10% maximum ripple AC/DC Receivers: 24 to 240V AC (50/60 Hz)
Supply Protection Circuitry	Protected against reverse polarity and transient voltages
Output Configuration	DC Receivers: PNP (sourcing) or NPN (sinking) output. Selection of sourcing or sinking configuration depends upon receiver's power supply hookup polarity. AC/DC Receivers: Solid-state switch
Output Rating	DC Receivers: 250 mA continuous Output saturation voltage (PNP &NPN configuration) less than 1 volt at 10mA and 2 volts at 250mA Off-state leakage current less than 10 microamps AC/DC Receivers: Maximum steady-state load capability is 500mA Inrush capability 10amps for 1 second (non-repeating) Off-state leakage current less than 1.7 mA rms On-state voltage drop less than 3.5 volts rms across a 500mA load; less than 5 volts rms across a 15 mA load
Output Protection Circuitry	Short circuit protected
Output Response Time	10 milliseconds on/off
Repeatability	" A " frequency units: 1 ms " B " frequency units: 1.5 ms " C " frequency units: 2.3 ms
Indicators	Internal red LED lights whenever the DC receiver sees its modulated light source, or whenever the AC receiver's output is conducting. Emitters have red "power on" indicator LED. All indicators are visible through the lens or from side of the sensor.
Construction	30 mm diameter tubular threaded brass and plastic housing, fully epoxy-encapsulated, positive sealing at both ends, quad-ring sealed acrylic.
Environmental Rating	Exceeds NEMA 6P and IEC IP67 standards
Connections	PVC-jacketed 2 m (6.5 ft) cables Mini-style quick disconnect (QD) fitting are available
Operating Temperature	Temperature:-40°C to +70°C Maximum relative humidity: 90% at 50°C (non-condensing)
EMC	IEC 60947-5-2, Parts 7.2.6.1. 2. 3 or RFI>3V/m (in 30-1000MHz), EFT>1KV, ESD>4KV (contact)
Voltage Withstand Ability	IEC 60947-5-2, Part 8.3.3.4 or 1500VAC for one min, between all supply terminals connected together and enclosure
Insulation Resistance	>20M Ω , with 1500V AC megger between all supply terminals connected together and enclosure
Vibration Resistance	IEC 60947-5-2, Part 7.4.2 or 10-55Hz, 1.0mm amplitude in x , y and z directions for 30 min
Shock Resistance	IEC 60947-5-2, Part 7.4.1 or 30g, 11ms in x , y and z directions for six time each

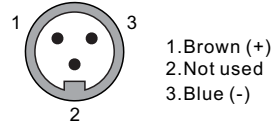
Connection Diagrams

Emitter (DC)

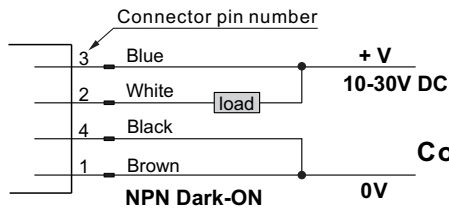
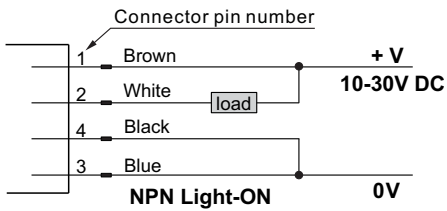


Connector pin position

Mini-style

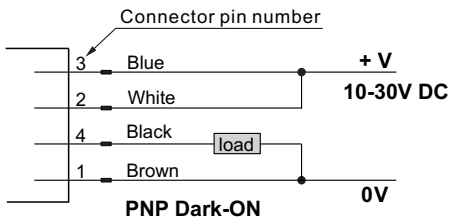
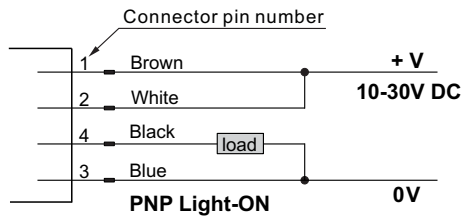
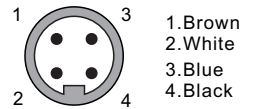


NPN/PNP output

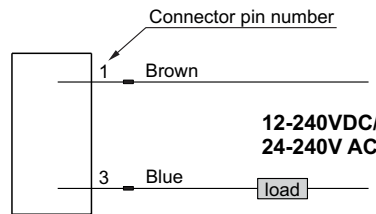
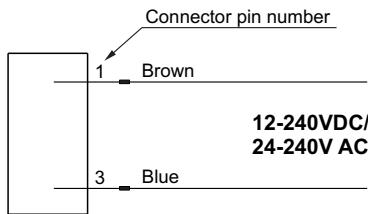


Connector pin position

Mini-style

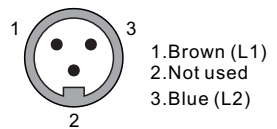


Emitter (AC/DC) Receiver (AC/DC)

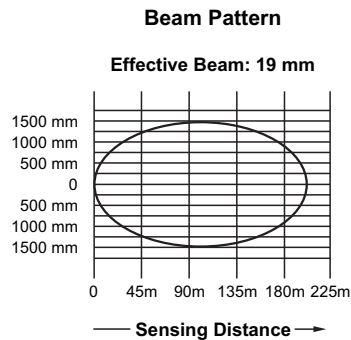
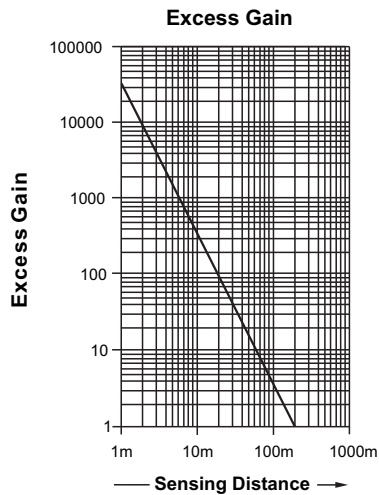


Connector pin position

Mini-style



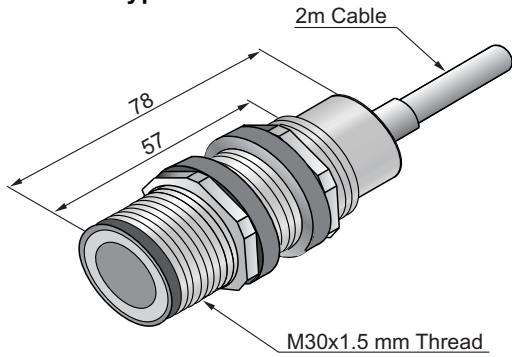
Sensing Fields (Typical)



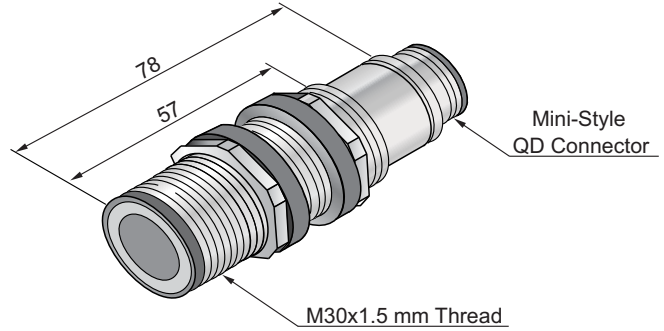
Dimensions (Unit: mm)

Sensor Type

Cable Type

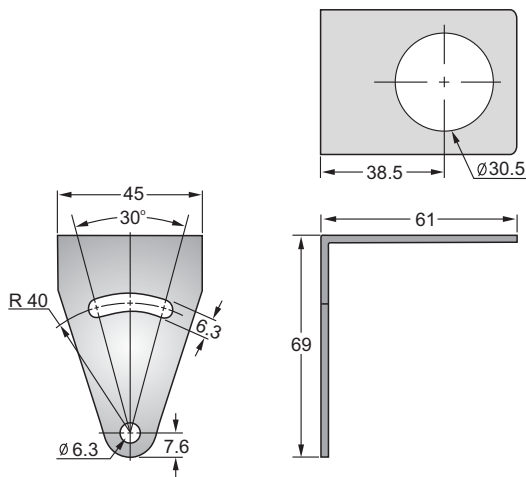


Mini-style connector Type

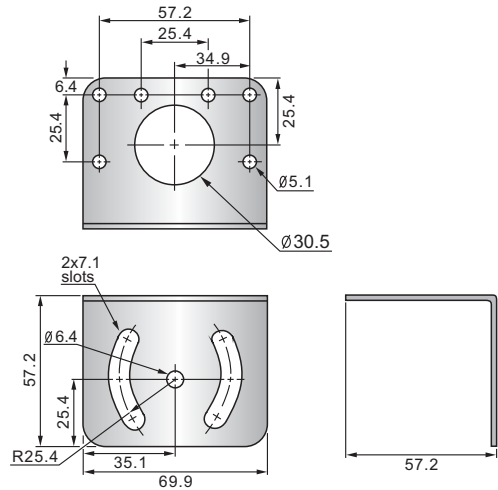


Mounting Bracket's * Dimensions

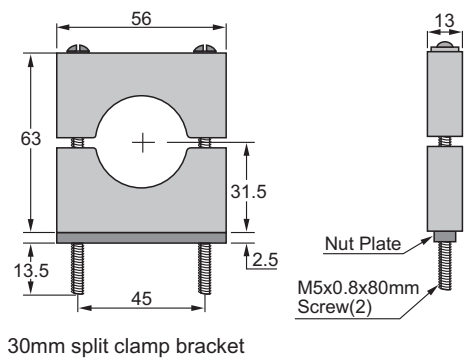
MB-6961 (optional)



MB-7057 (optional)

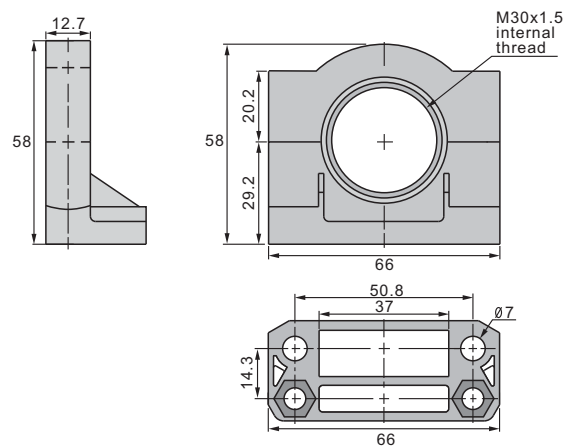


MB-6356 (optional)



30mm split clamp bracket

MB-6658 (optional)



Mounting Bracket to Provide 360° Rotation

*: Please see **Accessories** (Universal Mounting Brackets Series).