

MP SERIES

MP Series

Image	Series Description	Modes	Ranges
	Universal Mount Photoelectric Sensor - Mounts on Standard or Flat Bracket - Long Range - Up to 30m - Several Detection Modes - Compact Size	Through Beam	30m
		Retroreflective	5m
		Diffuse	380mm
		Convergent	43mm
		Fiber Optic Mode - (range depends on fiber used)	

DC Models - Quick Connect

Mode	Through-beam (30m range)	Retroreflective	Diffuse	Convergent
Light Emission	Infrared LED, 880nm	Red LED, 650nm	Infrared LED, 880nm	Red LED, 650nm
Operating Range	30m (98.4 ft.)	5m (16.4 ft.)	380mm (14.96 in.)	43mm (1.69 in.)

Part Numbers

Emitter	MP-T030MD-EX9Q4LE			
NPN / PNP	MP-T030MD-CX9Q4UE	MP-L5000D-CX6Q4UE	MP-D0380D-CX9Q4UE	MP-C0043D-CX6Q4UE

Mode	Through-beam (3m range)	Retroreflective (Polarized)	Fiber Optic (Diffuse)	Fiber Optic (Through-beam)
Light Emission	Infrared LED, 880nm	Red LED, 650nm	Infrared LED, 880nm	
Operating Range	3m (9.84 ft.)	2m (6.56 ft.)	Depends on fiber used (see pages 18-21)	

Part Numbers

Emitter	MP-T3000D-EX9Q4LE			
NPN / PNP	MP-T3000D-CX9Q4UE	MP-L2000D-CX6Q4UE-PF	MP-DGFD-CX9Q4UE	MP-TGFD-CX9Q4UE

AC Models - Prewired

Mode	Through-beam (30m range)	Retroreflective	Diffuse	Convergent
Light Emission	Infrared LED, 880nm	Red LED, 650nm	Infrared LED, 880nm	Red LED, 650nm
Operating Range	30m (98.4 ft.)	5m (16.4 ft.)	380mm (14.96 in.)	43mm (1.69 in.)

Part Numbers

Emitter	MP-T030MA-EX9C2L2			
SPST, Solid State	MP-T030MA-CX9C3U2	MP-L5000A-CX6C3U2	MP-D0380A-CX9C3U2	MP-C0043A-CX6C3U2

Mode	Through-beam (3m range)	Retroreflective (Polarized)	Fiber Optic (Diffuse)	Fiber Optic (Through-beam)
Light Emission	Infrared LED, 880nm	Red LED, 650nm	Infrared LED, 880nm	
Operating Range	3m (9.84 ft.)	2m (6.56 ft.)	Depends on fiber used (see pages 18-21)	

Part Numbers

Emitter	MP-T3000A-EX9C2L2			
SPST, Solid State	MP-T3000A-CX9C3U2	MP-L2000A-CX6C3U2-PF	MP-TGFA-CX9C3U2	MP-DGFA-CX9C3U2

TECHNICAL DATA

	DC Models	AC Models
Power Supply	10...30 VDC	20 to 250 VAC
Current Consumption	25mA max.	25mA max. (1.7mA max. for emitter)
Output Configuration	Bipolar: One current sourcing (PNP) and one current sinking (NPN) open-collector transistor	SPST MOSFET solid-state relay with either N.O. or N.C. contact (light/dark operate selectable: 3-wire hook-up)
Voltage Drop	<2.0V @ 150mA	<10V @ 200mA
Current Load Max	150mA	200mA
Response Time	1ms	8ms (4ms for Retroreflective Models)
Adjustments	LIGHT/DARK Operate sensitivity adjustment switch	
Connection	M12 - Recommended Mating Cable: part # R-FS4TZ-V075 (straight), R-FA4TZ-V075 (right-angle)	2 meter cable
Electrical Protection	Short-circuit, Reverse Polarity and Overload Current Protection	-
Mechanical Protection	IP67 (IEC)	
Housing Material	Reinforced thermoplastic polyester housing, totally encapsulated o-ring sealing, acrylic lenses and stainless steel screws	
Environment	-20°C to +70°C (-4°F to 158°F) ; Max. 90% RH @ 50°C	
Reference Standard	IEC 60947-5-2	

DIAGRAMS

Dimensions	Connections	
	Emitter AC	Emitter DC
	AC Sensors	
	NPN/PNP	DC Connector (M12)