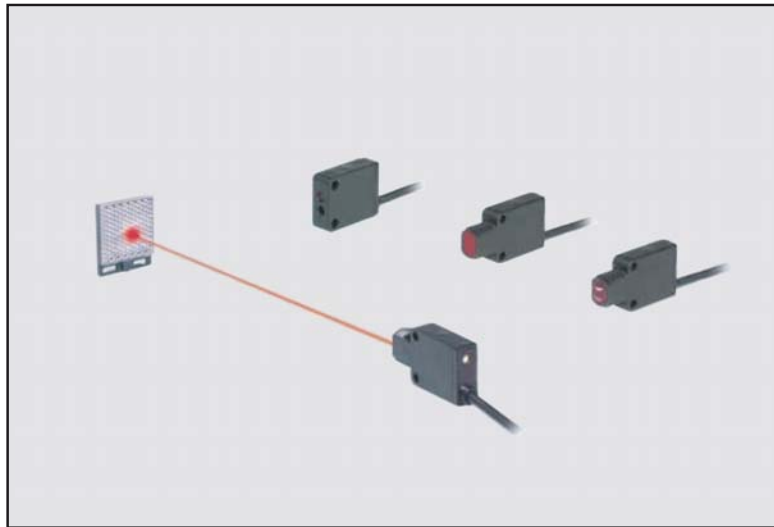


MINIATURE SENSOR

# MX2 Series

## Low Cost Photoelectric Sensor Available in Thru-beam, Convergent, Diffuse and Retro-reflective Models



### Four sensing modes

The MX2 series is offered in thru-beam, retroreflective, convergent beam and diffuse models.

### NPN or PNP outputs

The sensors are offered with either a NPN or a PNP output.

### Potentiometer adjustment

A potentiometer is built-in to make adjustments to the sensitivity.

### Cable or Quick connect

There is a choice of either a cabled or an inline connector model

### Low cost

The MX2 series is extremely cost effective.

### Miniature size

At only 35x20x8 mm the sensors can easily be mounted in areas where mounting space is at a premium.

### M12 threaded barrel

The sensor has a 12 mm threaded barrel. It also has two mounting holes in the body, making very flexible when mounting.

### Complementary outputs

There are two complementary outputs both Light On and Dark ON.

### CE approval

Conforms to Europe's EMC Directive.



## Specifications

Type			Thru-Beam		Retro-Reflective	
			Emitter	Receiver	Standard	Polarized
Model Number	2 meter cable	NPN	MX2-TE4M	MX2-TR4M-N	MX2-R2M-N	MX2-PR1M-N
		PNP		MX2-TR4M-P	MX2-R2M-P	MX2-PR1M-P
	M8 QD cable	NPN	MX2-TE4M-Q84	MX2-TR4M-NQ84	MX2-R2M-NQ84	MX2-PR1M-NQ84
		PNP		MX2-TR4M-PQ84	MX2-R2M-PQ84	MX2-PR1M-PQ84
Sensing Range			4 Meter	2 Meter	1 Meter	
Supply Voltage			10 ~ 30 VDC			
Current Consumption			< 25 mA			
Sensing Output			Open Collector Transistor either NPN or PNP			
Output Rating			150 mA max.			
Output Operation			Complementary Light-On and Dark-On outputs			
Short Circuit Protection			Incorporated			
Response Time			8 msec. On, 4 msec. Off	1.5 msec.		
Operation Indicator			Power (Green) and Output (Amber)			
Sensitivity Adjuster			Single turn sensitivity potentiometer			
Environmental Protection			IP67 and NEMA 6			
Ambient Temperature			-20° to +55° C			
Emitting Element			Visible red LED - 660 nm			
Connections			2 meter 4-wire PVC or 4 pin pico style 150 mm pigtail QD			
Housing			Black polycarbonate/ABS composite housing			
Ratings			CE			
Accessories			Mounting bracket and adjustment screwdriver			

Note: Cables are not included with the QD sensor, please order separately

Type			Diffuse		
			General	Wide Angle - Flat Front	
Model Number	2 meter cable	NPN	MX2-D200-N	MX2-DF200-N	MX2-DW50-N
		PNP	MX2-D200-P	MX2-DF200-P	MX2-DW50-P
	M8 QD cable	NPN	MX2-D200-NQ84	MX2-DF200-NQ84	MX2-DW50-NQ84
		PNP	MX2-D200-PQ84	MX2-DF200-PQ84	MX2-DW50-PQ84
Sensing Range			200 mm	200 mm	50 mm
Supply Voltage			10 ~ 30 VDC		
Current Consumption			< 25 mA		
Sensing Output			Open Collector Transistor either NPN or PNP		
Output Rating			150 mA max.		
Output Operation			Complementary Light-On and Dark-On outputs		
Short Circuit Protection			Incorporated		
Response Time			1.5 msec.		
Operation Indicator			Power (Green) and Output (Amber)		
Sensitivity Adjuster			Single turn sensitivity potentiometer		
Environmental Protection			IP67 and NEMA 6		
Ambient Temperature			-20° to +55° C		
Emitting Element			Visible red LED - 680 nm		
Connections			2 meter 4-wire PVC or 4 pin pico style 150 mm pigtail QD		
Housing			Black polycarbonate/ABS composite housing		
Ratings			CE		
Accessories			Mounting bracket and adjustment screwdriver		

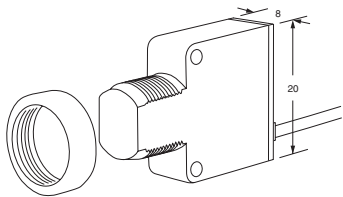
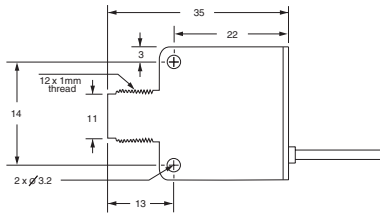
Note: Cables are not included with the QD sensor, please order separately

Type	Cable Part Number	Length
Q8	M8-FS4-PUR-2M	2 Meter
	M8-FS4-PUR-5M	5 Meter

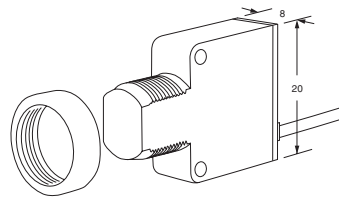
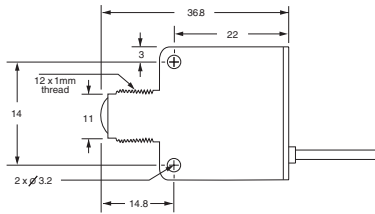
## DIMENSIONS (Unit: mm)

### MX2

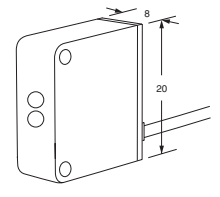
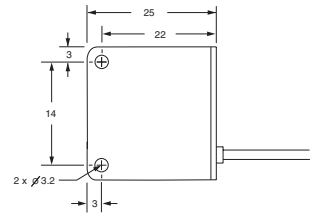
Retro-Reflective and Diffuse Sensors  
MX2-R2M, MX2-PR1M, MX2-D200



Thru-Beam and Convergent Sensors  
MX2-TE4M, MX2-TR4M, MX2-C10,  
MX2-C20



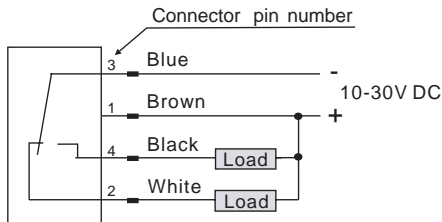
Diffuse and Divergent Sensors  
MX2-DF200, MX2-DW50



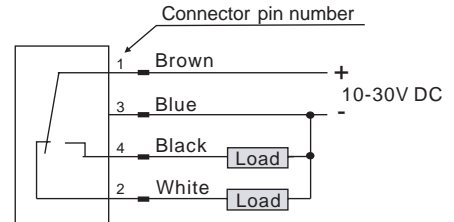
## Wiring Connection Diagrams

Retro-Reflective, Diffuse, Convergent and Thru-beam Receivers

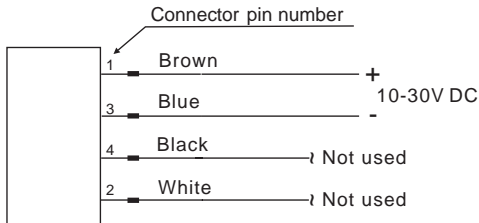
NPN output sensors



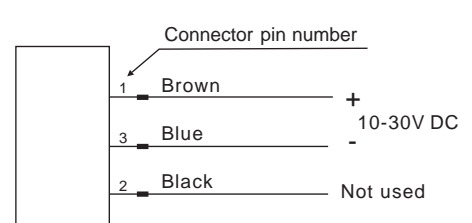
PNP output sensors



Thru-beam emitter (4 pin Pico style) only



Thru-beam emitter only



4 pin Pico connector

