



MP Series Modular Photoelectric Sensors

- Harsh Duty
- Modular design
 - Exchangeable rotatable heads
 - Limit switch and mini style plug-in bases
 - Screw terminal, preleaded, and connector version receptacles
- Withstands 1200 psi washdown, IP69K
- 6 Amp SPDT and 5 Amp DPDT relay models
- Multifunction timer/logic cards available
- DC, AC, AC/DC models

MP Series modular sensors enable users to customize a sensing solution for almost any application. For this reason, the components of this series are sold separately. Refer to pages 496-497 for instruction on how to assemble an MP Series sensor.



Convergent Beam Mode

Features:

- Adjustable focal range
- Background and foreground suppression

Sensing Range: 38mm, 100mm

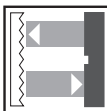
Outputs: Dependent on base selected



Diffused Mode

Sensing Ranges: 0.3m, 0.45m, 0.76m, 0.9m, 1.3m, 1.8m, 3m

Outputs: Dependent on base selected



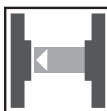
Retro-Reflective Mode

Features:

- Polarization filter to detect shiny objects

Sensing Ranges: 1.8m, 4.5m, 6m, 9m

Outputs: Dependent on base selected



Thru-Beam Mode

Sensing Range: 30m, 36m, 60m

Outputs: Dependent on base selected



Fiber Optic Mode

Sensing Ranges: Dependent on fibers selected

Outputs: Dependent on base selected

See page 513-524 for MP Series sensing characteristics, wiring, dimensions and accessories.

BUILD AN MP SENSOR

1. SELECT A HEAD



SPDT Relay Base



Mini Style Base



STANDARD HEADS (pages 498-500)		Models
	Convergent Beam: 38mm focal point, 1ms response, plastic lens, infrared	MPC26HD
	Convergent Beam: 100mm focal point, 1ms response, plastic lens, infrared	MPC6HD
	Diffuse: 0.45m range, 1ms response, plastic lens, infrared	MPD6HD
	Diffuse: 3m range, 10ms response, glass lens, infrared	MPD1HD
	Diffuse: 3m range, 10ms response, plastic lens, infrared	MPD2HD
	Diffuse: 0.9m range, 10ms response, plastic lens, infrared	MPD4HD
	Diffuse: 1.3m range, 10ms response, plastic lens, infrared	MPD8HD
	Polarized Retro-Reflective: 4.5m range, 1ms response, glass lens, visible red	MPP6HD
	Polarized Retro-Reflective: 6m range, 10ms response, glass lens, visible red	MPP1HD
	Retro-Reflective: 9m range, 1ms response, glass lens, infrared	MPL16HD
	Retro-Reflective: 9m range, 1ms response, plastic lens, infrared	MPL6HD
	Retro-Reflective: 9m range, 10ms response, glass lens, infrared	MPL1HD
	Retro-Reflective: 9m range, 10ms response, plastic lens, infrared	MPL2HD
	Retro-Reflective: 1.8m range, 1ms response, plastic lens, infrared	MPK2HD
	Thru-Beam: 30m range, transmitter, plastic lens, infrared	MPE8HD
	Thru-Beam: 30m range, receiver, 10ms response, plastic lens, infrared	MPR8HD
	Thru-Beam: 60m range, transmitter, glass lens, infrared	MPE1HD
	Thru-Beam: 60m range, transmitter, plastic lens, infrared	MPE2HD
	Thru-Beam: 60m range, receiver, 1ms response, glass lens, infrared	MPR16HD
Thru-Beam: 60m range, receiver, 1ms response, plastic lens, infrared	MPR6HD	
	Thru-Beam: 60m range, receiver, 10ms response, glass lens, infrared	MPR1HD
	MPF Fiber Optic: 1ms response, infrared	MPF6HD
	MPF Fiber Optic: 10ms response, infrared	MPF1HD
	MPF Fiber Optic: 5ms response, visible red	MPF2HD
	MPG Fiber Optic: 1ms response, infrared	MPG6HD
	MPG Fiber Optic: 5ms response, visible red	MPG2HD
	Inductive Sensor Head: side sensing, 13mm range (page 203)	NBB13SIDE
	Inductive Sensor Head: top sensing, 13mm range (page 203)	NBB13TOP

ANALOG HEADS (page 500)		Models
	Diffuse: 50mm to 500mm range, plastic lens, infrared	MPD5HD
	MPF Fiber Optic: infrared	MPF5HD

2-WIRE AC HEADS (pages 501-502)		Models
	Convergent Beam: 38mm range, plastic lens, infrared	MP2C2HD
	Convergent Beam: 100mm range, plastic lens, infrared	MP2C4HD
	Diffuse: 300mm range, plastic lens, infrared	MP2D7HD
	Diffuse: 760mm range, plastic lens, infrared	MP2D4HD
	Diffuse: 1.8m range, glass lens, infrared	MP2D1HD
	Diffuse: 1.8m range, plastic lens, infrared	MP2D2HD
	Polarized Retroreflective: 4.5m range, glass lens, visible red	MP2P1HD
	Retroreflective: 9m range, glass lens, infrared	MP2L1HD
	Retroreflective: 9m range, plastic lens, infrared	MP2L2HD
	Thru-Beam: 36m range, transmitter, glass lens, infrared	MPE3HD
	Thru-Beam: 36m range, transmitter, plastic lens, infrared	MPE4HD
	Thru-Beam: 36m range, receiver, plastic lens, infrared	MP2R2HD
	MPF Fiber Optic: infrared	MP2F1HD
	MPF Fiber Optic: visible red	MP2F2HD

2. SELECT A BASE

3. SELECT A RECEPTACLE

PLUG-IN BASES (pages 504-505)		Models
AC/DC	10.8-140VDC/18-140VAC 4-wire FET w/output indicator	MPS18HD
DC	10-30VDC emitter base only, 3-wire DC	MPS30HD
	10-30VDC NPN and PNP, 4-wire DC	MPS33HD
	10-30VDC NPN N.O./N.C., 3-wire DC	MPS31HD
	10-30VDC PNP, 3-wire DC	MPS32HD
AC	198-264VAC 4-wire solid state AC relay 1A max.	MPS12HD
	198-264VAC emitter base only	MPS13HD
	92-132VAC 4-wire bilateral FET (AC/DC) 100mA max.	MPS17HD
	92-132VAC 4-wire solid state AC relay 1A max.	MPS11HD
	92-132VAC emitter base only	MPS10HD

AC DPDT RELAY BASE (page 505)		Model
RELAY	DPDT, 92-132VAC, 5A, output indicator	MPSD11HD

SPDT RELAY BASES (page 506)		Models
DC	SPDT, 10-30VDC, 6A	MPV31HD
SPDT RELAY AC	SPDT, 103-132VAC, 6A	MPV11HD
	SPDT, 192-264VAC, 6A	MPV12HD
	SPDT, 20-260VAC/VDC, 6A	MPV14HD
	SPDT, 22-26VAC, 6A	MPV13HD

MINI STYLE BASES (pages 507-509)		Models
AC/DC	22-26VAC/VDC, 4-wire bilateral FET, 100mA max., 2m preleaded cable	MPT16HD
	10.8-140VDC/18-140VAC, 4-wire FET w/output ind., 2m preleaded cable	MPT18HD
3-WIRE DC	10-30VDC, 2m preleaded cable, emitter base only	MPT30HD
	10-30VDC, NPN N.O., 2m preleaded cable	MPT31HD
	10-30VDC, PNP N.O., 2m preleaded cable	MPT32HD
	10-30VDC, NPN and PNP, N.O., 2m preleaded cable	MPT33HD
	22-26VAC, 2m preleaded cable, emitter base only	MPT14HD
4-WIRE AC	92-132VAC, 2m preleaded cable, emitter base only	MPT10HD
	92-132VAC, 4-wire bilateral FET (AC/DC), 100mA max., 2m preleaded cable	MPT17HD
	92-132VAC, 4-wire solid state AC relay, 0.5A max., 2m preleaded cable	MPT11HD
	10-30VDC, NPN N.O., 4-pin micro connector	MPT41HD-CM
MICRO CONNEX. DC	10-30VDC, PNP N.O., 4-pin micro connector	MPT42HD-CM
	10-30VDC, 4-pin micro connector, emitter base only	MPT40HD-CM
	10-30VDC, NPN and PNP, 4-pin mini connector	MPT43HD
MINI CONNEX. DC	10-30VDC, NPN N.O., 4-pin mini connector	MPT41HD
	10-30VDC, PNP N.O., 4-pin mini connector	MPT42HD
	10-30VDC, 4-pin mini connector, emitter base only	MPT40HD
	92-132VAC, 3-pin mini connector, emitter base only	MPT20HD
MINI CONNEX. AC	92-132VAC, 4-wire solid state AC relay, 0.5A max., 5-pin mini connector	MPT21HD
	92-132VAC, 4-wire bilateral FET (AC/DC), 100mA max., 5-pin mini connector	MPT27HD
	92-132VAC, 6A, SPDT relay, 2m preleaded cable	MPW11HD
MINI RELAY AC	92-132VAC, 6A, SPDT relay, 5-pin mini connector	MPW21HD

ANALOG PLUG-IN BASE (page 510)		Model
ANALOG	12-24 VDC analog output (0-5 VDC or 4-20mA)	MPS35HD

2-WIRE PLUG-IN BASES (page 511)		Models
DC	10-30 VDC emitter base only	MPS30HD
2-WIRE AC	92-132 VAC emitter base only	MPS10HD
	198-264 VAC emitter base only	MPS13HD
	22-26 VAC/VDC emitter base only	MPS14HD
	22-260 VAC plug-in base	MP2S11HD

2-WIRE AC MINI STYLE BASES (page 512)		Models
2-WIRE AC	92-132 VAC mini base, 2m preleaded cable	MP2T11HD
	92-132 VAC mini base, 3-pin connector	MP2T21HD

RECEPTACLE		Models
Standard 4-terminal, 1/2" NPT conduit thread	■	MPB20
Standard 4-terminal, pg13.5 conduit thread	■	MPB30
1.8m, 5-conductor cable	▲	MPB21
3.6m, 5-conductor cable	▲	MPB25
3.6m, 5-conductor preleaded Super-trex cable	▲	MPB26
5-pin mini connector	●	MPB22
4-pin micro connector	○	MPB27

DPDT RECEPTACLE		Models
8-terminal, 1/2" NPT conduit hole	■	MPB23
8-terminal, 3/4" NPT conduit hole	■	MPB24

NO RECEPTACLE NEEDED

ELECTRICAL CONNECTION KEY

- Terminal connectors
- Mini connectors
- Micro connectors
- ▲ Preleaded cable

NO RECEPTACLE NEEDED

RECEPTACLE		Models
Standard 4-terminal, 1/2" NPT conduit thread	■	MPB20
1.8m, 5-conductor cable	▲	MPB21
5-pin mini connector	●	MPB22

NO RECEPTACLE NEEDED