

M series

Thin Area sensor

Applications

- Object Detection Sensor
- Object detection
- Auto working detection
- Part Pickup Inspection
- Packaging Line
- Assembly Line Direction Control

Introduce

M series area sensing light curtain, price concessions, stable quality, variety of types, to meet customer needs, is the most suitable for regional use in the detection, protection, inspection and other diversified sensing. Instruction LVD requirements, with CE marking.



Property

- Number of beams 25mm (Non-extendable), 10mm, 20mm, 40mm.
- Length Detection 100mm ~ 940mm, various type to meet customer needs.
- Possess NPN and PNP wiring method to meet customer needs.(MA)
- Light sync infinite frequency, MA1 possess FREQA and FREQB, MA2 / MA3 possess FREQA and B, C, D.
- The length of the reference distance can be determined by the switch or wiring to meet customer needs.
- Numerous clear indicator lights, with selectable constant or flashing display modes via a switch.
- Quality and stability, price concessions.
- Compact design, Aluminum extrusion structure.

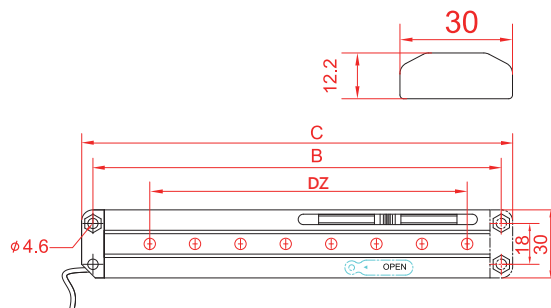
General Specifications

Basic information			
Optical Axis Pitch	25mm	20mm	40mm
Number of beam	5	8~48	4~24
Detection zone	100mm	140mm ~ 940mm	120mm ~ 920mm
Operating distance	0.3m to 3m (5m)		
Response Time	20msec (It does not include relay switch time)		
Classification	CE LVD ; No safety notified (do not use in dangerous equipment)		
Power supply	24VDC $\pm$ 20%		
Power consumption	Basic 40mA ; 8mA more for each axis, up to 400mA		
Output mode	One set can be set to NPN or PNP(24V 20mA ; 0V 40mA)		
Frequency	MA1 frequency FREQA and B ; MA2 / MA3 frequency FREQA, B, C, D		
Indicator light	Flashing or steady		
Appearance	Aluminum ; Silver anode treatment(standard) ; Aluminum ; Yellow anode treatment(select)		
Connector	Direct output(Single hole fixing) for C type ; M8 connector for T type		
Ambient temperature	0°C to +50°C		
Enclosure rating	IP62(Ingress Protection)Ratings		

MA1-5 Series Detection Capability 30mm

Optical Axis Pitch : 25mm Standard Operating distance : 0.5m~3m

Model	Beams	Detection Zone (DZ)(mm)	Overall Length (B)(mm)	Install Length (C)(mm)
MA1-5	5	100	130	140

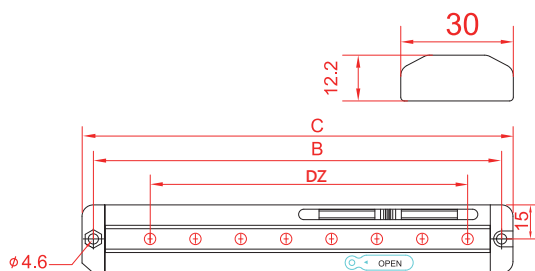


Standard type
Direct output ,Double screw hole fixing

MA2 Series Detection Capability 25mm

Optical Axis Pitch : 20mm Standard Operating distance : 0.5m ~ 3m

Model	Beams	Detection Zone (DZ)(mm)	Overall Length (B)(mm)	Install Length (C)(mm)
MA2-8	8	140	180	190
MA2-12	12	220	260	270
MA2-16	16	300	340	350
MA2-20	20	380	420	430
MA2-24	24	460	500	510
MA2-28	28	540	580	590
MA2-32	32	620	660	670
MA2-36	36	700	740	750
MA2-40	40	780	820	830
MA2-44	44	860	900	910
MA2-48	48	940	980	990

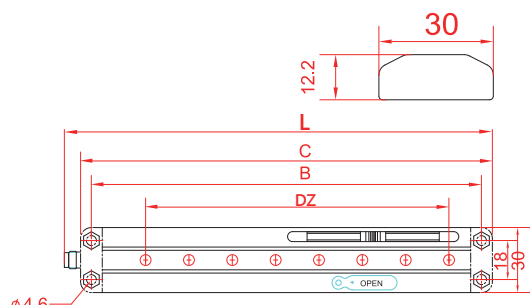


C type
Direct output ,Single screw hole fixing

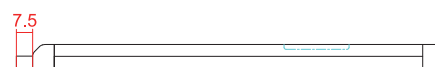
MA3 Series Detection Capability 45mm

Optical Axis Pitch : 40mm Standard Operating distance : 0.5m ~ 3m

Model	Beams	Detection Zone (DZ)(mm)	Overall Length (B)(mm)	Install Length (C)(mm)
MA3-4	4	120	180	190
MA3-6	6	200	260	270
MA3-8	8	280	340	350
MA3-10	10	360	420	430
MA3-12	12	440	500	510
MA3-14	14	520	580	590
MA3-16	16	600	660	670
MA3-18	18	680	740	750
MA3-20	20	760	820	830
MA3-22	22	840	900	910
MA3-24	24	920	980	990

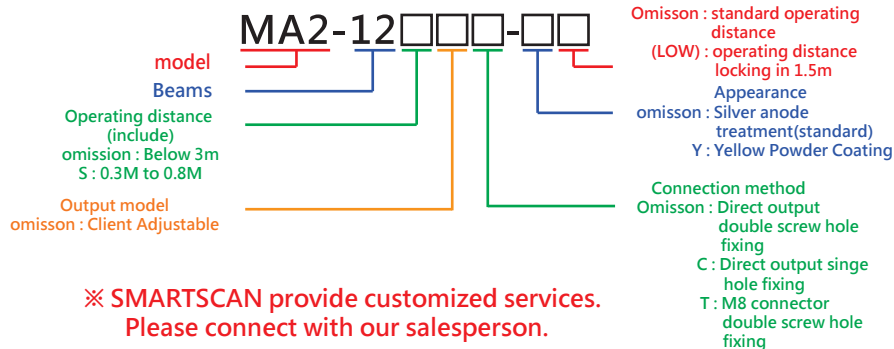


T type
M8 connector ,Double screw hole fixing

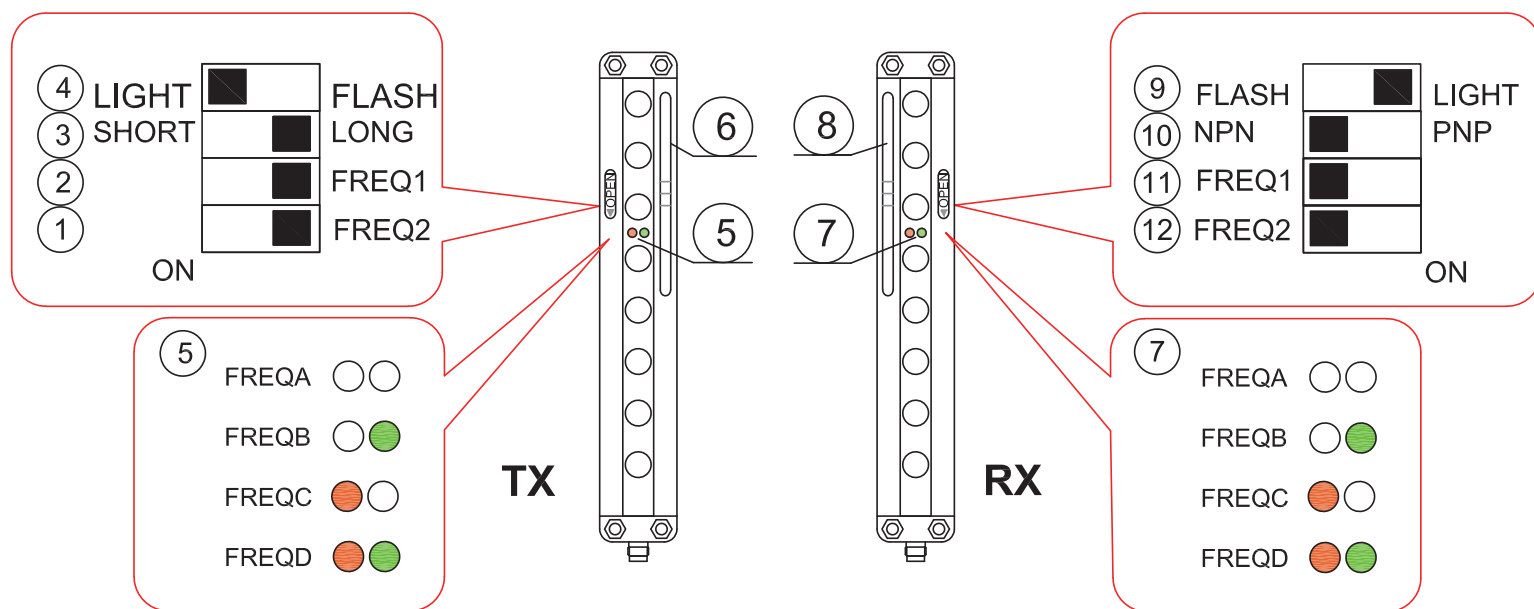


※ The assembly length of the T type is 7.5mm more than the C type.

MA Series Customized Service Describe



MA2 / MA3 Series Set up



Note: All switches must be set with the power supply off .
The operation mode does not change if the switch setting is changed with the power supplied.

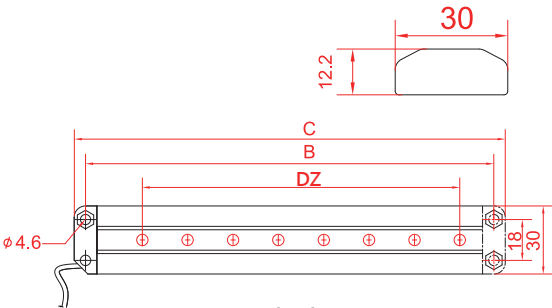
			Description			
TX	1	Emission frequency selection	FREQA  FREQ1	FREQB  FREQ1	FREQC  FREQ1	FREQD  FREQ1
	2		 FREQ2 ON	 FREQ2 ON	 FREQ2 ON	 FREQ2 ON
	3	Range selection	short range 0.5-1.5m		long range 1-3m	
	4	Job indicator operation selection	LIGHT large Work Light always on		Flash Large Work Light blinking	
	5	Frequency LED	Refer to the illustration.			
	6	Job indicator (Orange)	Light up, flash is select by the operation mode switch on the emitter.			
RX	7	Frequency LED	Refer to the illustration.			
	8	Job indicator (Orange)	Light up, flash is select by the operation mode switch on the receiver.			
	9	Job indicator operation selection	Flash Large Work Light blinking		LIGHT large Work Light always on	
	10	Output selection	NPN Output		PNP Output	
	11	Receive frequency selection	FREQ1  FREQA	FREQ1  FREQB	FREQ1  FREQC	FREQ1  FREQD
	12		 FREQ2 ON	 FREQ2 ON	 FREQ2 ON	 FREQ2 ON

MB1-5 Series Detection Capability 30mm

Optical Axis Pitch : 25mm Standard Operating distance : 0.5m ~ 3m

Model	Beams	Detection Zone (DZ)(mm)	Overall Length (B)(mm)	Install Length (C)(mm)
MB1-5	5	100	130	140

(NO settings and Large work indicator light)



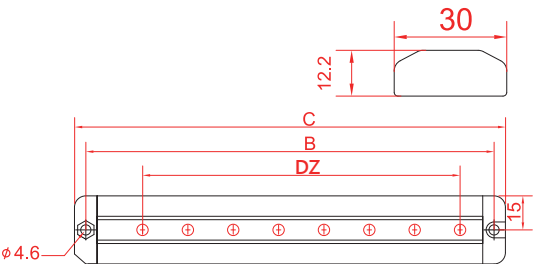
Standard type
Dirct output ,Double screw hole fixing
(NO settings and Large work indicator light)

MB2 Series Detection Capability 25mm

Optical Axis Pitch : 20mm Standard Operating distance : 0.5m ~ 3m

Model	Beams	Detection Zone (DZ)(mm)	Overall Length (B)(mm)	Install Length (C)(mm)
MB2-8	8	140	180	190
MB2-12	12	220	260	270
MB2-16	16	300	340	350
MB2-20	20	380	420	430
MB2-24	24	460	500	510
MB2-28	28	540	580	590
MB2-32	32	620	660	670
MB2-36	36	700	740	750
MB2-40	40	780	820	830
MB2-44	44	860	900	910
MB2-48	48	940	980	990

(NO settings and Large work indicator light)



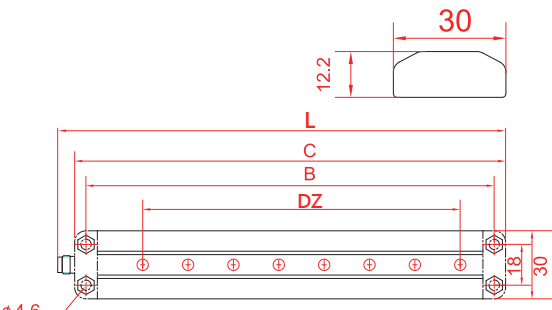
C type
Dirct output ,single screw hole fixing
(NO settings and Large work indicator light)

MB3 Series Detection Capability 45mm

Optical Axis Pitch : 40mm Standard Operating distance : 0.5m ~ 3m

Model	Beams	Detection Zone (DZ)(mm)	Overall Length (B)(mm)	Install Length (C)(mm)
MB3-4	4	120	180	190
MB3-6	6	200	260	270
MB3-8	8	280	340	350
MB3-10	10	360	420	430
MB3-12	12	440	500	510
MB3-14	14	520	580	590
MB3-16	16	600	660	670
MB3-18	18	680	740	750
MB3-20	20	760	820	830
MB3-22	22	840	900	910
MB3-24	24	920	980	990

(NO settings and Large work indicator light)

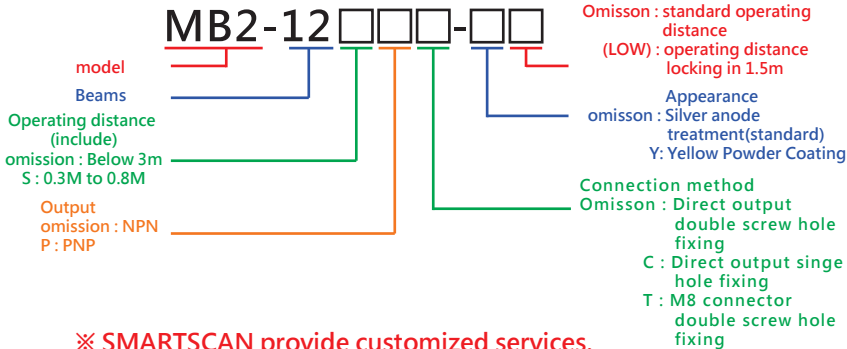


T type
M8 connector ,Double screw hole fixing



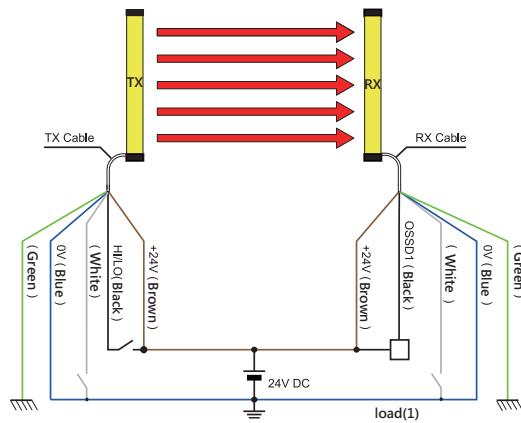
MB Series Customized Service Describe

(NO settings and Large work indicator light)

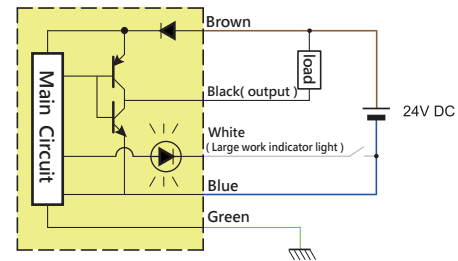


※ SMARTSCAN provide customized services.
Please connect with our salesperson.

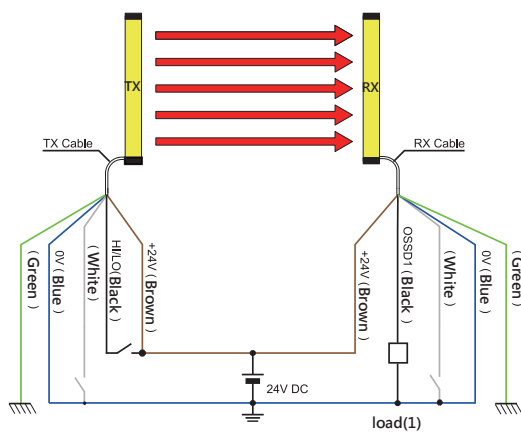
Electric Connection



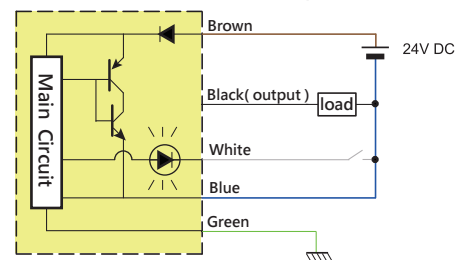
Standard type Receiver (NPN Output)



TX Black wire connect + 24V emissive is SHORT Distance
TX RX White wire connect 0V the Large work indicator light up



Select Model Receiver (PNP Output)

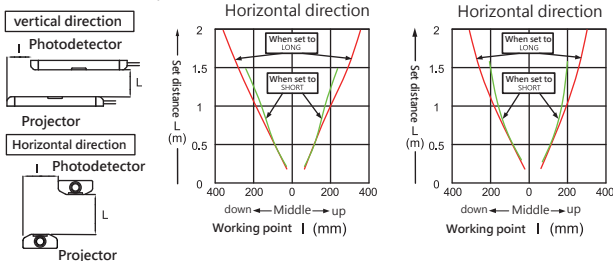


TX Black wire connect + 24V emissive is SHORT Distance
TX RX White wire connect 0V the Large work indicator light up

Detection Characteristics Diagram

MA1 Series

parallel transport property

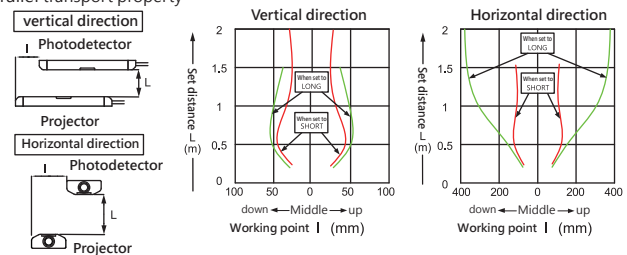


Angular response
Photodetector
Projector
Angular response



MA2 Series

parallel transport property



Angular response
Photodetector
Projector
Angular response

