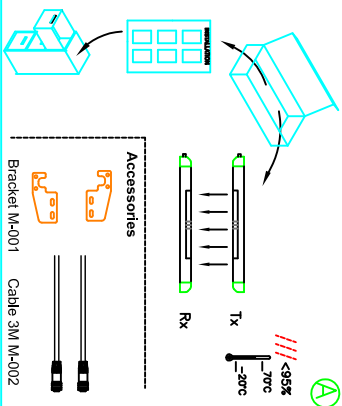


INSTALLATION

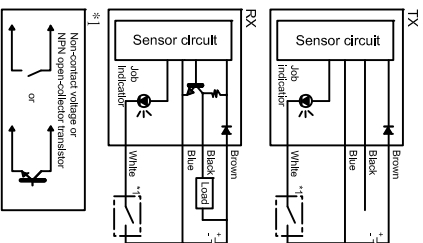
Slim Type Light Curtain MA2



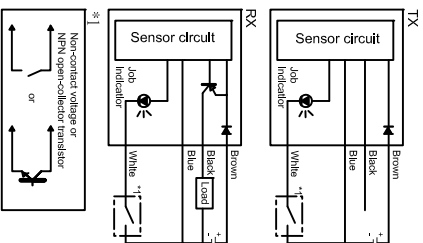
SPECIFICATION

Number of beams	8-48
Object detection	25mm
Detection zone	140-940mm
Range	short 0.2m-1.5m long 0.5m-3m
Light type	Infra-Red 880nm
Response time	20ms
Operating temperature	0°C to +70°C
Light curtain enclosure	IP62
Status indicators TX	Yellow=Power
Status indicators RX	Red=Blocked Green=Clear
Power supply requirement	22-28V/DC Ripple<10%
Current consumption	40mA per 8 beams
Light curtain connection	M8 4core or 3M cable connected to both TX&RX units
Classification	CE mark
Warranty	1 Year
Outputs (NPN or PNP)	24V 20mA , 0V -40mA

NPN output

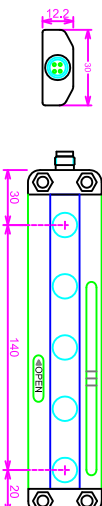


PNP output

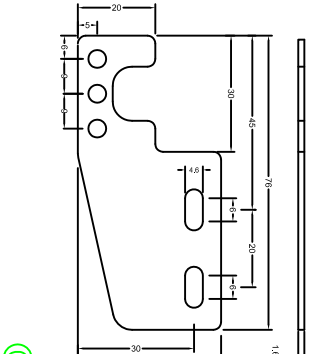


This device may not be suitable for use in safety related applications

Model Number	Number of Beams	Detection Zone (mm)	Object Detection	Length (mm)
MA2-8	8	140	25	190
MA2-12	12	220	25	270
MA2-16	16	300	25	350

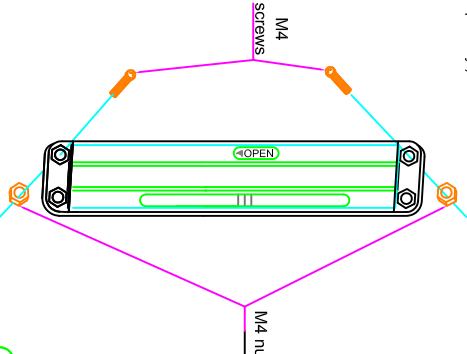


BRACKET



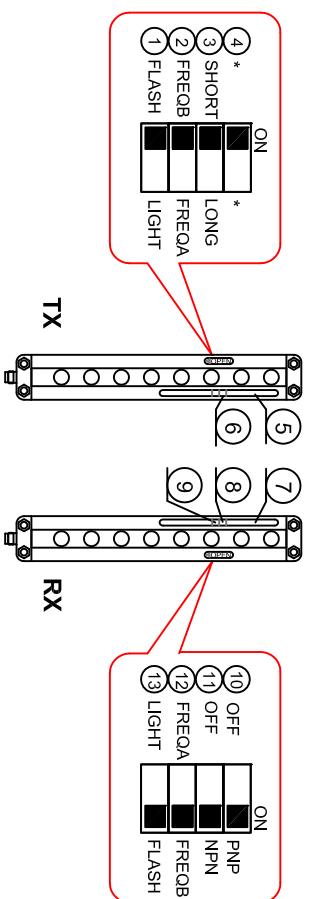
MOUNTING

Use M4 screws and M4 nuts. The tightening torque should be 0.5N.m or less.
During mounting, do not apply any bending or twisting force to the sensor. (Please arrange the screws and nuts separately.)



Rev: JUN.09.2009

Operation mode by switch	Description
① Job indicator operation selection	<input type="checkbox"/> FLASH <input type="checkbox"/> LIGHT
② Emission frequency selection	<input type="checkbox"/> FREOB <input type="checkbox"/> FREOA
③ Range selection	<input type="checkbox"/> SHORT <input type="checkbox"/> LONG short range 0.2-1.5M long range 0.5-3M
④ *	*
⑤ Job indicator (Orange)	Light up, flash is selected by the operation mode switch on the emitter.
⑥ Tx power-on indicator (Yellow)	Light up when the power is on.
⑦ Job indicator (Orange)	Light up, flash is selected by the operation mode switch on the receive.
⑧ Stable incident beam indicator (Green)	Light up when all beam channels are stably received.
⑨ Operation indicator (Red)	Light up when one or more beam channels are interrupted.
⑩ PNP output	<input type="checkbox"/> OFF <input type="checkbox"/> PNP
⑪ NPN output	<input type="checkbox"/> OFF <input type="checkbox"/> NPN
⑫ Receiver frequency selection	The frequency switch must be setting the same on the emission
⑬ Job indicator operation selection	<input type="checkbox"/> LIGHT <input type="checkbox"/> FLASH



Note: All the 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.

CAUTIONS

- Make sure that the power supply is off while wiring.
- Take care that wrong wiring may damage the sensor.
- Verify that the supply voltage variation is within the rating.
- If power is supplied from a commercial switching regulator, ensure that the frame ground (F.G.)terminal of the power supply is connected to an actual ground.
- In case noise generating equipment (switching regulator, inverter motor, etc.) is used in the vicinity of this product, connect the frame ground (F.G.)terminal of the equipment to an actual ground.
- Do not run the wires together with high-voltage lines or power lines or put them in the same raceway. This can cause malfunction due to induction.
- Extension up to total 25m is possible, for both emitter and receiver, with 0.2mm, or more, cable. However, in order to reduce noise, make the wiring as short as possible.
- Do not use during the initial transient time (500ms) after the power supply is switched on.
- Avoid dust, dirt, and steam.
- Take care that the sensor does not come in direct contact with water, oil, grease, or organic solvents, such as, thinner, etc.
- Do not use in an environment containing inflammable or explosive gas.
- Make sure to use an isolation transformer for the DC power supply. If an auto-transformer (single winding transformer) is used, this product or the power supply may get damaged.
- In case a surge is generated in the used power supply, connect a surge absorber to the supply and absorb the surge.
- Take care that the sensor is not directly exposed to fluorescent light from a rapid-starter lamp or a high frequency lighting device, as it may affect the sensing performance.
- The emitter and the receiver must face each other with their cable ends on the same side. If they are set upside down, the sensor will not work correctly.
- This sensor is suitable for indoor use only.