

ReeR Safegate Light Curtains – Body Protection

Safegate Type 4 access control barriers provide the ideal solution for protection in a wide range of high-risk industrial applications, in particular those requiring a high level of integration of the muting functions. Safegate greatly simplifies seamless integration of muting sensors with light curtain access control barriers

**Hardware configuration
with integrated status and muting lamp**

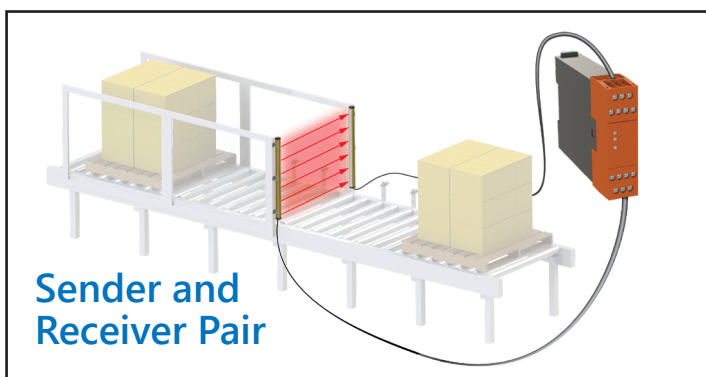


SMO-3B, SMO-4B, SMO-3B-TRX, SMO-4B-TRX

**Hardware or software configuration with
integrated status and muting lamp**

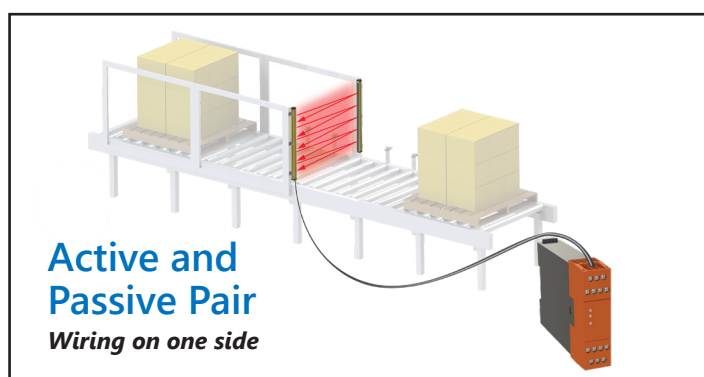


SMPO-3B, SMPO-4B, SMPO-3B-TRX, SMPO-4B-TRX



**Sender and
Receiver Pair**

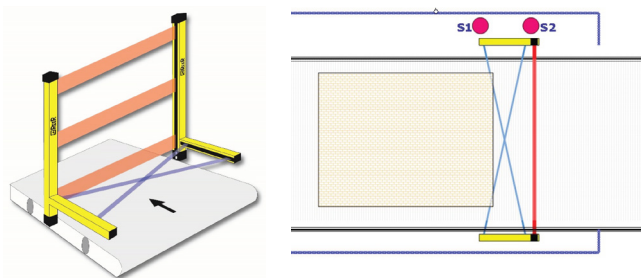
SMO-3B, SMO-4B, SMPO-3B, SMPO-4B



**Active and
Passive Pair**
Wiring on one side

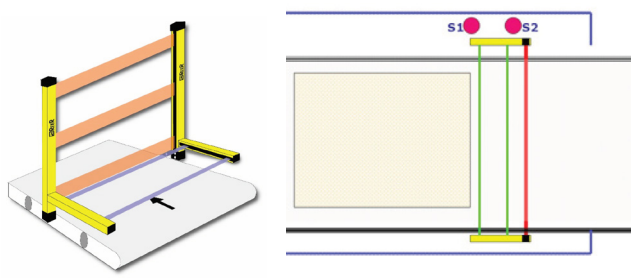
SMO-3B-TRX, SMO-4B-TRX, SMPO-3B-TRX, SMPO-4B-TRX

One way (2 sensor) crossed



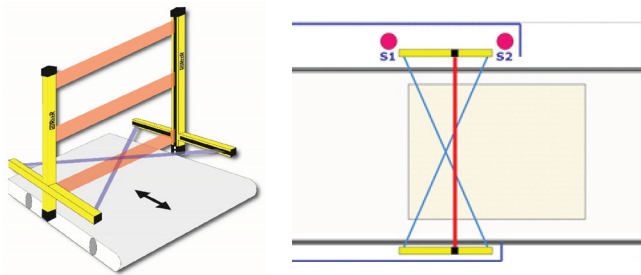
MA-L2X, MZ-L2XP, MZ-L2XP-TRX

One way (2 sensor) parallel



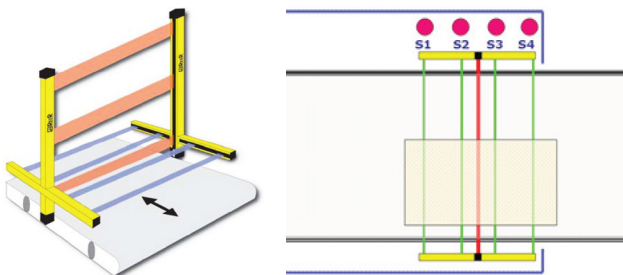
MA-L2P-TRX, MZ-L2XP, MZ-L2XP-TRX

Two way (2 sensor) crossed



MA-T2X, MZ-T2X, MZ-T2X-TRX

Two way (4 sensor) parallel



MA-T4P-TRX, MZ-T4P, MZ-T4P-TRX

ReeR Safegate Light Curtains – Body Protection

With Muting Arm/Brackets

Muting Arms:

MA-L2X
MA-T2X
MA-L2P-TRX
MA-T4P-TRX

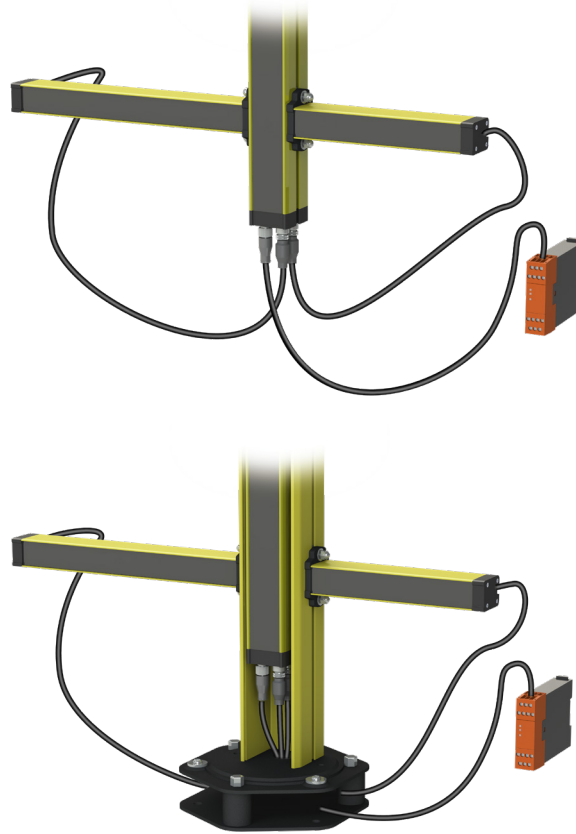
or

Muting Brackets:

MZ-L2XP
MZ-T2X
MZ-T4P
MZ-L2XP-TRX
MZ-T2X-TRX
MZ-T4P-TRX

Cable

M12 12-pin cable
 (See recommended
 items for cabling)



Light Curtains:

SMO-3B
SMO-4B
SMPO-3B
SMPO-4B
SMO-3B-TRX
SMO-4B-TRX
SMPO-3B-TRX
SMPO-4B-TRX

If a TRX light curtain is selected, then the muting arms/brackets part number should end in TRX as well.

Protective Columns (optional)

FMC-SGB3 (for SMxO-3B
 or SMxO-3B-TRX)
FMC-SGB4 (for SMxO-4B
 or SMxO-4B-TRX)

Protective Column Base:

(Required with Protective Column)

FMC-CB (shown)

or

FMC-CBL (not shown)

With Muting Photocells

Photo Cells

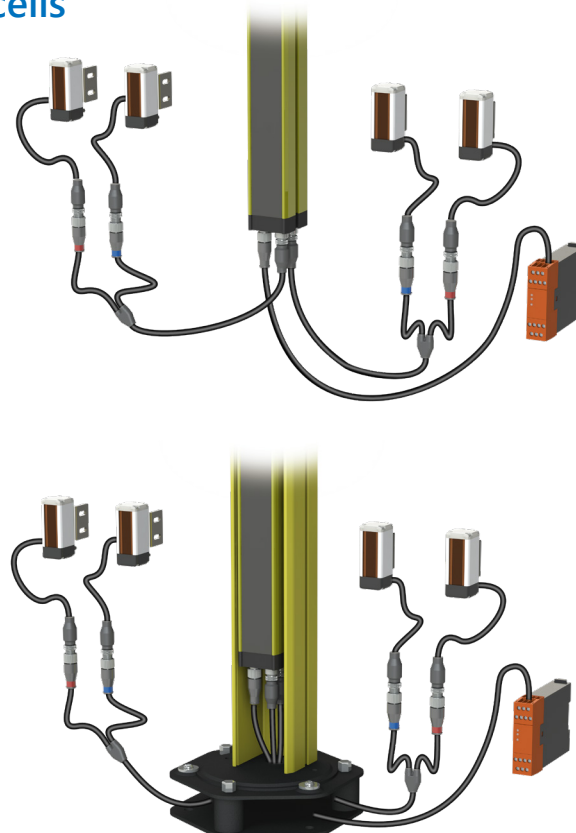
M5-A
M5-B
M-TRX-A
M-TRX-B

Y-Splitters

CSY12TX
CSY12RX

Cable

M12 12-pin cable
 (See recommended
 items for cabling)



Light Curtain:

SMO-3B
SMO-4B
SMPO-3B
SMPO-4B
SMO-3B-TRX
SMO-4B-TRX
SMPO-3B-TRX
SMPO-4B-TRX

If a TRX light curtain is selected, then the muting arms/brackets part number should end in TRX as well.

Protective Columns (optional)

FMC-SGB3 (for SMxO-3B
 or SMxO-3B-TRX)
FMC-SGB4 (for SMxO-4B
 or SMxO-4B-TRX)

Protective Column Base:

(Required with Protective Column)

FMC-CB (shown)

or

FMC-CBL (not shown)

ReeR Muting and Automation Photocells

ReeR Muting and Automation Photocells – Selection Chart

Part Number	Price	Number of Beams	Sensing Range	Coding	Dimensional Drawing
Emitter/Receiver Versions					
M5-A	\$165.00	5	0 to 3.5 m [0 to 11.48 ft]	A	PDF
M5-B	\$162.00	5	0 to 3.5 m [0 to 11.48 ft]	B	PDF
Reflector Versions					
M-TRX-A	\$120.00	1	0 to 5 m [0 to 16.40 ft]*	A	PDF
M-TRX-B	\$122.00	1	0 to 5 m [0 to 16.40 ft]*	B	PDF

* Dependent on type of reflector used (see specifications below)

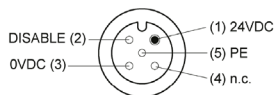


M5-A / M5-B

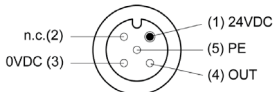
ReeR Muting and Automation Photocells – Specifications

Model	Micron M5 Emitter	Micron M5 Receiver	M-TRX-A / M-TRX-B
Power Supply	24VDC ± 20%		
Power Consumption at 24VDC	1W		0.2 W
Number of Beams	5		1
Working Range	0-3.5 m [0 to 11.48 ft]		0 to 2.5 m [0 to 8.20 ft] with C3F10 reflector 0 to 3.5 m [0 to 11.48 ft] with C3F8 reflector 0 to 3 m [0 to 9.84 ft] with CD8 reflector
Beams Pitch	10mm [0.39 in]		NA
Immunity to Ambient Light	>10,000 lx (solar)		NA
Emission Angle	±5°	±5°	±5°
Emission Wavelength	940nm (modulated infrared)	–	660nm (modulated red)
Response Time	<10ms	<10ms	65ms
Output	–	PNP 100mA max / dark-on	PNP 100mA max / dark-on
Connections	Pigtail 90cm [2.95 ft] with M12 5 pin connector	Pigtail 90cm [2.95 ft] with M12 5 pin connector	Pigtail 90cm [2.95 ft] with M12 5 pin connector
MTTF_d	414.02 years	414.02 years	1759.31 years
Operating Temperature	-30 to +55°C [-22 to 131°F] (with no condensation)	-30 to +55°C [-22 to 131°F] (with no condensation)	-30 to +55°C [-22 to 131°F] (with no condensation)
Protection Degree	IP65		
Dimensions	Width	28mm [1.10 in]	28mm [1.10 in]
	Depth	30mm [1.18 in]	30mm [1.18 in]
	Height	70mm [2.76 in]	70mm [2.76 in]

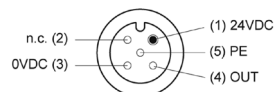
Emitter



Receiver



TRX



M5 Emitter

Pin	Color	Signal	Description
1	Brown	24VDC	24VDC power supply
2	White	DISABLE	0VDC=ENABLE 24VDC=DISABLE
3	Blue	0VDC	0VDC power supply
4	Black	NA	Not connected
5	Gray	PE	Ground connection

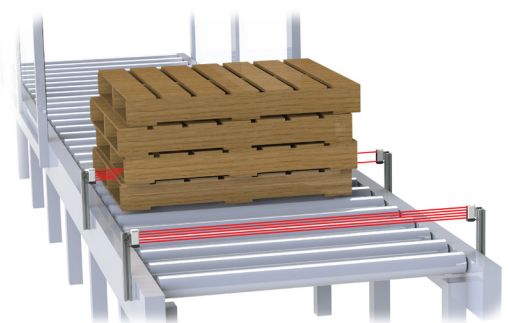
M5 Receiver

Pin	Color	Signal	Description
1	Brown	24VDC	24VDC power supply
2	White	NA	Not connected
3	Blue	0VDC	0VDC power supply
4	Black	OUT	0VDC=Area Free 24VDC=Area Obstructed
5	Gray	PE	Ground connection

M TRX

Pin	Color	Signal	Description
1	Brown	24VDC	24VDC power supply
2	White	NA	Not connected
3	Blue	0VDC	0VDC power supply
4	Black	OUT	0VDC=Area Free 24VDC=Area Obstructed
5	Gray	PE	Ground connection

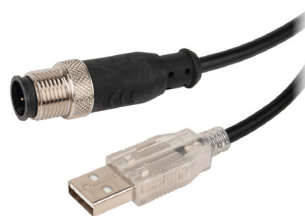
Emitter/Receiver Application



M5 photocells have five beams that are sent out by the emitter. If any one of the five beams is blocked, then the receiver's status signal will change to signify that there is an object in front of the photocell. This is particularly useful when there is a need to detect irregularly shaped items.

ReeR Safegate Light Curtain Accessories

Safegate Light Curtains Accessories Overview				
Part Number	Price	Description	Use With	Dimensional Drawing
Reflectors				
<u>C3F10</u>	\$15.00	ReeR reflector, rectangular, 30 x 116 mm [1.18 x 4.57 in].	<u>M-TRX-A</u> or <u>M-TRX-B</u>	<u>PDF</u>
<u>C3F8</u>	\$26.50	ReeR reflector, rectangular, 30 x 78 mm, [1.18 x 3.07 in] with bracket.	<u>M-TRX-A</u> or <u>M-TRX-B</u>	<u>PDF</u>
<u>CD8</u>	\$14.50	ReeR reflector, round, 84mm [3.31 in].	<u>M-TRX-A</u> or <u>M-TRX-B</u>	<u>PDF</u>
Mounting Brackets				
<u>SFB-4SG</u>	\$57.00	ReeR mounting bracket, replacement, standard, zinc plated steel. Package of 4. Mounting hardware included.	ReeR Safegate Light Curtains	<u>PDF</u>
<u>SFB-6SG</u>	\$85.00	ReeR mounting bracket, replacement, standard, zinc plated steel. Package of 6. Mounting hardware included.	ReeR Safegate Light Curtains	<u>PDF</u>
Cables				
<u>CS12USB</u>	\$45.00	ReeR programming cable, USB Type A male to 5-pin M12 quick-disconnect, 5-pole, PVC jacket, black, 6.5 ft [2m] cable length.	SMPO models	NA
<u>CSY12RX</u>	\$53.00	ReeR muting receiver cable, 5-pin M12 quick-disconnect to (2) 5-pin M12 quick-disconnects, 5-pole, 24 VDC, PVC jacket, black, 1.3 ft [400mm] cable length, IP67.	ReeR Safegate Light Curtains	NA
<u>CSY12TX</u>	\$53.00	ReeR muting emitter cable, 5-pin M12 quick-disconnect to (2) 5-pin M12 quick-disconnects, 5-pole, 24 VDC, PVC jacket, black, 1.3ft [400mm] cable length, IP67.	ReeR Safegate Light Curtains	NA

**C3F10****SFB-4SG / SFB-6SG****C3F8****CD8****CS12USB****CSY12TX / CSY12RX**

When four M5 muting sensors are installed with a ReeR Safegate light curtain, **CSY12TX** and **CSY12RX** Y-splitters will be required.

Pinouts

