# ReeR Safegate Light Curtains – Body Detection

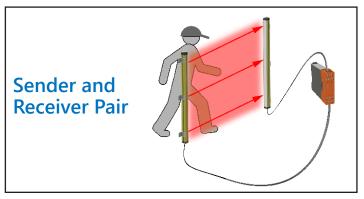
ReeR non-muting Safegate light curtains are a great choice for applications where a simple light curtain is needed. These light curtains feature built-in, selectable manual/automatic start/restart with an LED status display on the face of each device. Passive retro-reflective elements are also available. All mounting hardware is included to simplify installation.

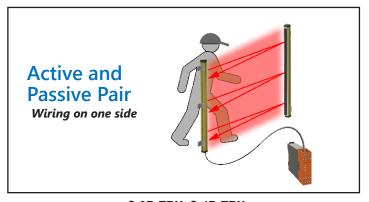
### **Non-Muting Light Curtain**





S-3B, S-4B, S-3B-TRX, S-4B-TRX





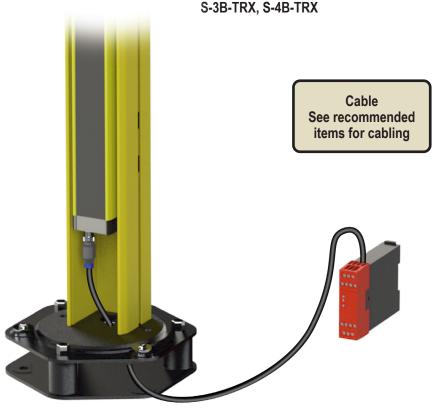
S-3B, S-4B

Light Curtains: S-3B S-4B S-3B-TRX S-4B-TRX

Protective Columns (optional) FMC-SGB3 (for S-3B or S-3B-TRX) FMC-SGB4 (for S-4B or S-4B-TRX)

Protective Column Base: (Required with Protective Column) FMC-CB (shown)

FMC-CBL (not shown)



## **ReeR Safegate Light Curtains – Body Detection**

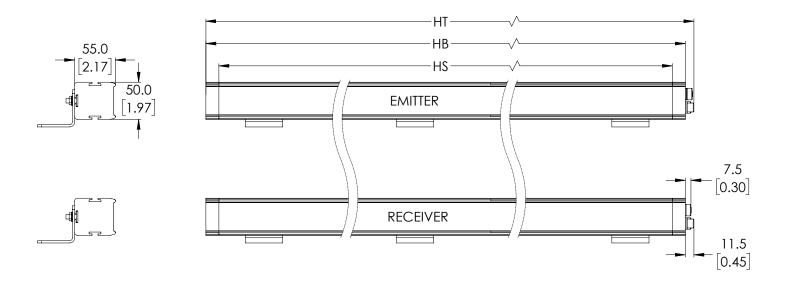


#### **Features**

- LED status display on face of device
- Built-in, selectable manual/automatic Start/Restart
- Dual safety PNP static outputs, auto-controlled
- M12 quick-disconnect (order cable separately)
- Type 4 and Category 4 PLe
- Instruction manual and mounting hardware included
- Passive retro-reflective elements available (TRX)

ReeR Safegate Light Curtains – Body Detection Without Muting Functions – Selection Chart										art		
Part Number	Price	Protective Height HS mm [in]	Housing Height HB mm [in]	Total Height HT mm [in]	Number of Beams	PFHd	Response Time [ms]	MTTF <sub>d</sub> [years]	DC <sub>avg</sub>	Weight kg [lb]	Resolution mm [in]	Dimensional Drawing
	Sender and Receiver Pair											
S-3B		810 [31.89]	974 [38.33]	984 [38.74]	3	9.63E-09	5.5	262.4	98.5%	4.16 [9.15]	400 [15.75]	PDF
S-4B		910 [35.83]	1074 [42.26]	1084 [42.68]	4	1.03E-08	5.5	253.3	98.4%	4.60 [10.15]	300 [11.81]	PDF
Active and Passive Pair												
S-3B-TRX		810 [31.89]	935 [36.79]	945 [37.20]	3	7.58E-09	5.5	401.0	98.2%	4.22 [9.30]	400 [15.75]	PDF
S-4B-TRX		910 [35.83]	1035 [40.73]	1045 [41.14]	4	7.68E-09	5.5	399.4	99.2%	4.62 [10.20]	300 [11.81]	PDF

### Dimensions (see table above)

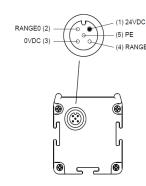


### **ReeR Safegate Light Curtains – Body Detection**

ReeR Safegate Light Curtains – Body Detection Without Muting Functions Specifications for S-3B and S-4B							
Supply Voltage		24VDC ±20%					
Safety Output	s (OSSDs)	2 PNP – 400mA @ 24VDC					
Operating Ter	nperature	-30°C to 55°C [-22°F to 131°F]					
	Type 4	EN 61496-1:2013 IEC 61496-2:2013					
Safety	SIL3	IEC 61508-1: (ed.2) IEC 61508-2: (ed.2) IEC 61508-3: (ed.2) IEC 61508-4: (ed.2)					
Category	PLe	EN ISO 13849-1:2015					
	CAT4	EN ISO 13849-1:2015					
CCF		80%					
Degree of Pro	tection	IP65 and IP67					
Working Range		0-4 m [0-13.12 ft] low 0-12 m [0-39.37 ft] high (See Range/Test Selection Chart on next page)					
Power Consu	mption	Transmitter: 1W; Receiver: 2W					
Connections		Power on TX: M12 5-pin male Power on RX: M12 8-pin male					
EDM Input		Available on RX, selectable					
Restart Auto/Manual		Available on RX, selectable					
Test Input		Available on TX, selectable					
Conductor requirements		20AWG if length is less than 50m [164.04 ft] 17AWG if length is between 50m [164.04 ft] and 100m [328.1 ft]					
Max Connection Length		100m [328.1 ft]					

#### Pin outs for S-3B and S-4B

#### **Emitter Connections**

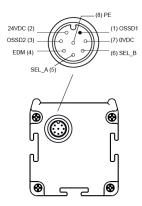


EMITTER M12 5 PIN MALE Connector									
Pin	Pin Color Signal In/Out Description								
1	Brown	24VDC	-	24VDC power supply					
2	White	RANGE0	Input	Range/Test selection (see table at right)					
3	Blue	0VDC	1	0VDC power supply					
4	Black	RANGE1	Input	Range/Test selection (see table at right)					
5	Gray	PE	ı	Ground connection					

RANGE / TEST SELECTION						
Pin 2	Pin 4	Function				
24DC	0VDC	LOW range				
0VDC	24DC	HIGH range				
0VDC	0VDC	SAFEGATE in TEST mode				
24VDC	24DC	Not allowed				

OPERATING MODE CONFIGURATION							
Function	Pin 4	Pin 5	Pin 6				
Auto no EDM	0VDC	OSSD1 (1)	OSSD2 (3)				
Auto with EDM	EDM signal	OSSD2 (3)	OSSD1 (1)				
Manual no EDM	0VDC	24VDC	Reset PB				
Manual with EDM	EDM signal	Reset PB	24VDC				

#### **Receiver Connections**



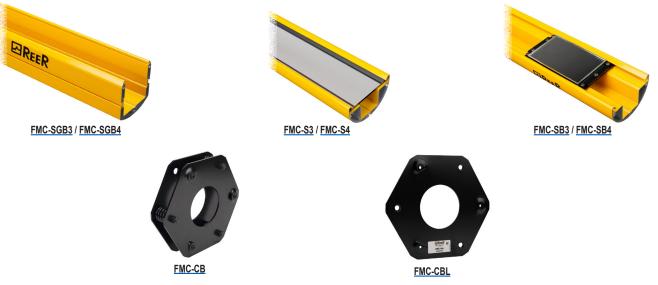
	RECEIVER M12 8-PIN MALE CONNECTOR								
Pin	Reer Cable	292 Cable	295 Cable	Signal	In/Out	Description			
1	White	White	Brown	OSSD1	Output	Static Safety Outputs			
2	Brown	Brown	White	24VDC	_	Power Supply 24VDC			
3	Green	Green	Blue	OSSD2	Output	Static Safety Outputs			
4	Yellow	Yellow	Black	EDM	Input	K1/K2 Feedback			
5	Gray	Gray	Gray	SEL_A	Input	Operating Mode Configuration			
6	Pink	Pink	Pink	SEL_B	Input	Operating Mode Configuration			
7	Blue	Blue	Violet	0VDC	_	Power Supply 0VDC			
8	Red	Red	Orange	PE	_	Ground Connection			

AutomationDirect sells M12 8-pole cables with two different color patterns (7000-170x1-292xxxx and 7000-170x1-295xxxx). We recommend the "292" series on our website, which matches the ReeR cable's color code. However, to help avoid confusion, please refer to the table above comparing the color codes.

# **ReeR Safegate Light Curtain Accessories**

Safegate Light Curtains Accessories Overview							
Part Number	Price	Description	Use With	Dimensional Drawing			
		Protective Columns*					
FMC-SGB3		ReeR protective column, 1200mm housing.	SMO-3B SMPO-3B SMO-3B-TRX SMPO-3B-TRX S-3B S-3B-TRX	PDF			
FMC-SGB4		ReeR protective column, 1330mm housing.	SMO-4B SMPO-4B SMO-4B-TRX SMPO-4B-TRX S-4B S-4B-TRX	PDF			
		Mirror Columns*					
FMC-S3		ReeR single mirror column, 1200mm housing, 1198mm mirror(s).	SMO-3B SMPO-3B SMO-3B-TRX SMPO-3B-TRX S-3B S-3B-TRX	PDF			
FMC-S4		ReeR single mirror column, 1330mm housing, 1328mm mirror(s).	SMO-4B SMPO-4B SMO-4B-TRX SMPO-4B-TRX S-4B S-4B-TRX	PDF			
FMC-SB3		ReeR three mirror column, 1200mm housing, (3) 150mm mirror(s).	SMO-3B SMPO-3B SMO-3B-TRX SMPO-3B-TRX S-3B S-3B-TRX	<u>PDF</u>			
FMC-SB4		ReeR four mirror column, 1330mm housing, (4) 150mm mirror(s).	SMO-4B SMPO-4B SMO-4B-TRX SMPO-4B-TRX S-4B S-4B-TRX	PDF			
		Column Base					
FMC-CB		ReeR column base, 202 x 224 x 55 mm housing. Mounting hardware included.	FMC-Sx	<u>PDF</u>			
FMC-CBL		ReeR column base, 202 x 224 x 37 mm housing. Mounting hardware included.	FMC-Sx	<u>PDF</u>			

<sup>\*</sup> Column base must be purchased separately



### **Safety Products**



Warning: Safety products sold by AutomationDirect are Safety components only. The purchaser/installer is solely responsible for the application of these components and ensuring all necessary steps have been taken to assure each application and use meets all performance and applicable safety requirements and/or local, national and/or international safety codes as required by the application. AutomationDirect cannot certify that our products, used solely or in conjunction with other AutomationDirect or other vendors' products, will assure safety for any application. Any person using or applying any products sold by AutomationDirect is responsible for learning the safety requirements for their individual application and applying them, and therefore assumes all risks, and accepts full and complete responsibility, for the selection and suitability of the product for their respective application.

AutomationDirect does not provide design or consulting services, and cannot advise whether any specific application or use of our products would ensure compliance with the safety requirements for any application.