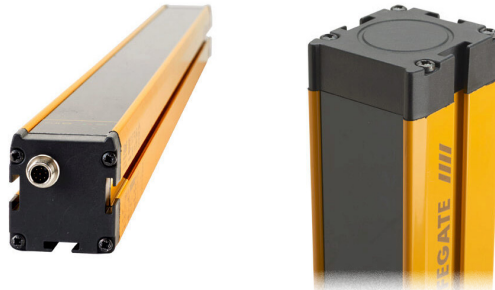


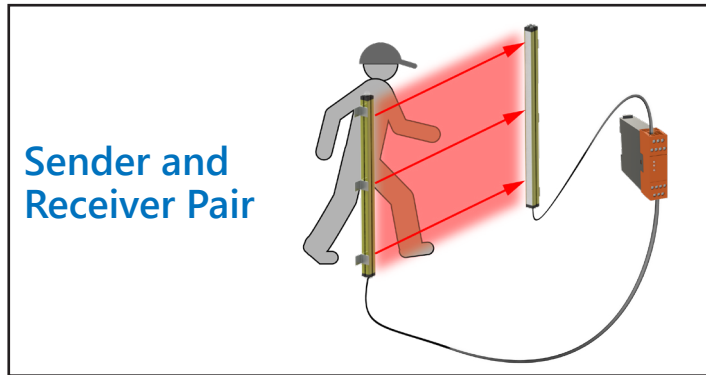
# ReeR Safegate Light Curtains – Body Protection

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.

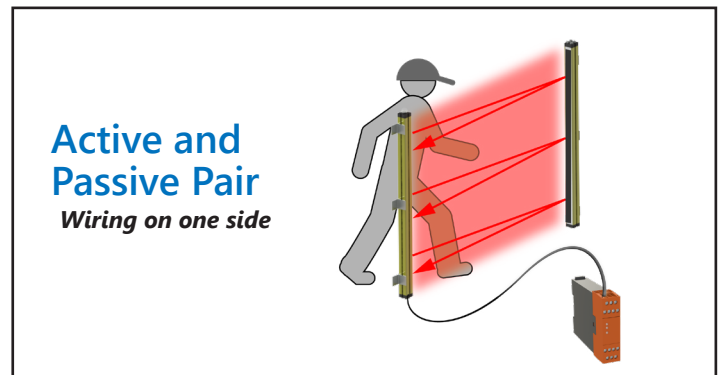
## Non-Muting Light Curtain



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



S-3B, S-4B

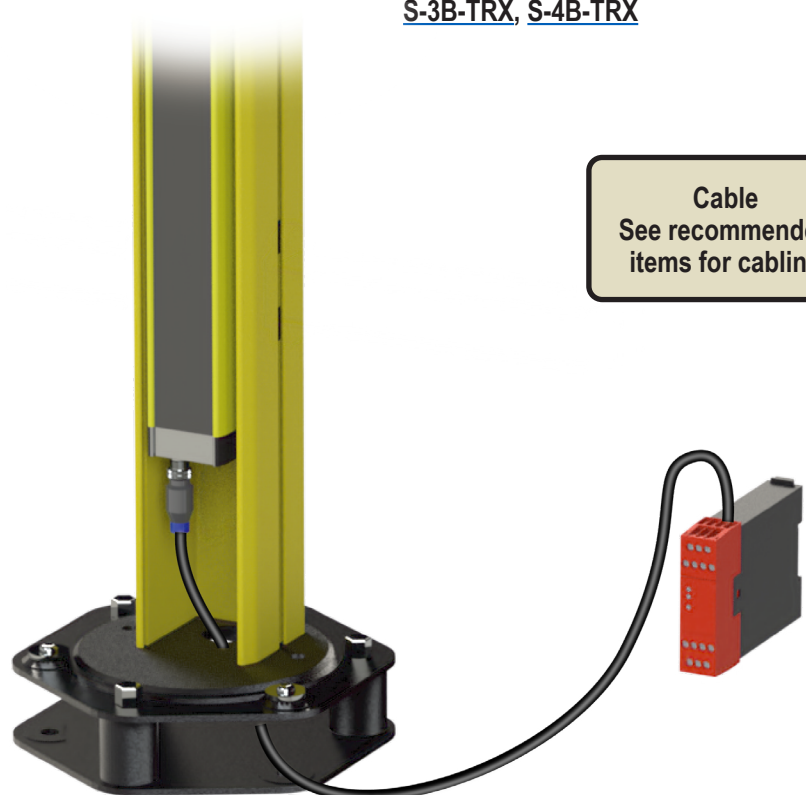


S-3B-TRX, S-4B-TRX

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)  
 or  
FMC-CBL (not shown)

Cable  
 See recommended  
 items for cabling



# ReeR Safegate Light Curtains – Body Protection

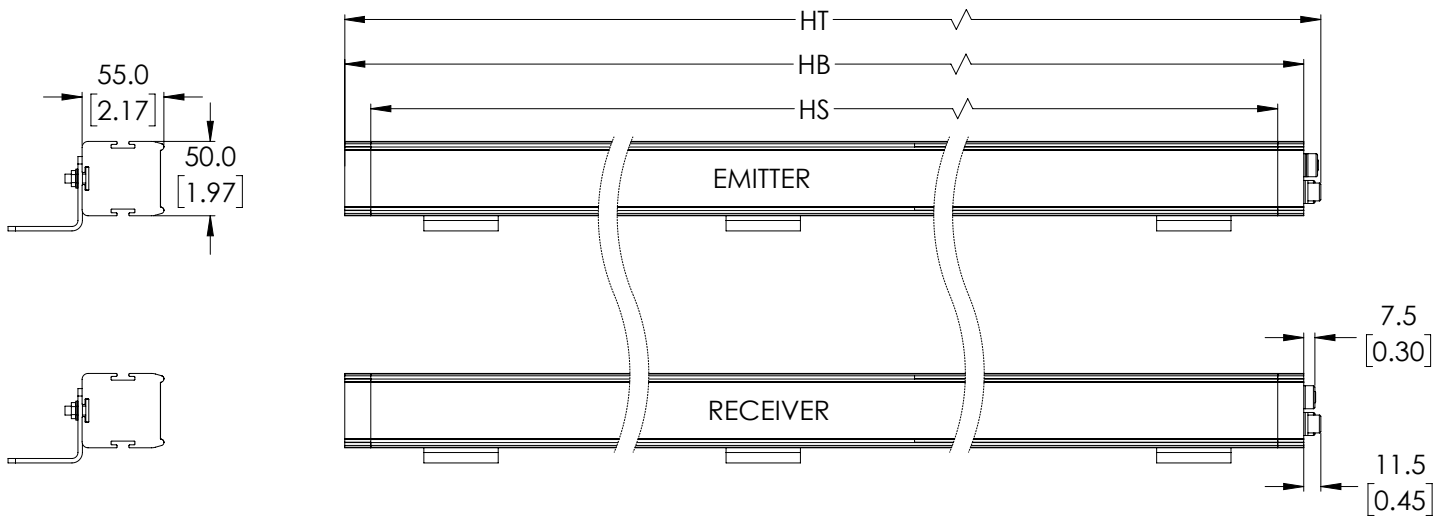


## Features

- 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 Protection Without Muting Functions – Selection Chart |            |                              |                           |                         |                 |          |                    |                           |                   |                |                    |                     |
|---|------------|------------------------------|---------------------------|-------------------------|-----------------|----------|--------------------|---------------------------|-------------------|----------------|--------------------|---------------------|
| 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 |
| <b>Sender and Receiver Pair</b>   |            |                              |                           |                         |                 |          |                    |                           |                   |                |                    |                     |
| <b>S-3B</b>   | \$980.00   | 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]        | <a href="#">PDF</a> |
| <b>S-4B</b>   | \$1,105.00 | 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]        | <a href="#">PDF</a> |
| <b>Active and Passive Pair</b>  |            |                              |                           |                         |                 |          |                    |                           |                   |                |                    |                     |
| <b>S-3B-TRX</b>   | \$945.00   | 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]        | <a href="#">PDF</a> |
| <b>S-4B-TRX</b>   | \$1,010.00 | 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]        | <a href="#">PDF</a> |

## Dimensions (see table above)

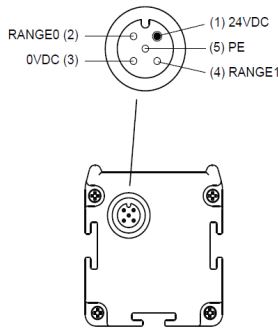


# ReeR Safegate Light Curtains – Body Protection

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

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

### Emitter Connections

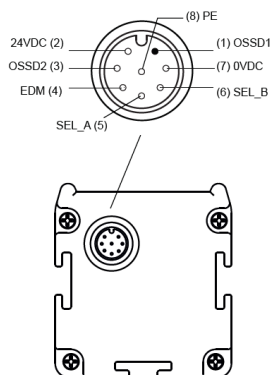


| EMITTER M12 5 PIN MALE CONNECTOR |       |        |        |   |
|----------------------------------|-------|--------|--------|---|
| Pin                              | Color | Signal | In/Out | Description                               |
| 1                                | Brown | 24VDC  | -      | 24VDC power supply                        |
| 2                                | White | RANGE0 | Input  | Range/Test selection (see table at right) |
| 3                                | Blue  | 0VDC   | -      | 0VDC power supply                         |
| 4                                | Black | RANGE1 | Input  | Range/Test selection (see table at right) |
| 5                                | Gray  | PE     | -      | 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     |
| <b>Auto no EDM</b>           | 0VDC       | OSSD1 (1) | OSSD2 (3) |
| <b>Auto with EDM</b>         | EDM signal | OSSD2 (3) | OSSD1 (1) |
| <b>Manual no EDM</b>         | 0VDC       | 24VDC     | Reset PB  |
| <b>Manual with EDM</b>       | 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.

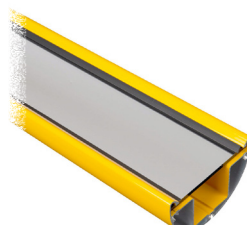
# ReeR Safegate Light Curtain Accessories

| Safegate Light Curtains Accessories Overview |          |  |  |                     |
|--|----------|--|--|---------------------|
| Part Number                                  | Price    | Description  | Use With   | Dimensional Drawing |
| <b>Protective Columns*</b>                   |          |  |  |                     |
| <a href="#"><u>FMC-SGB3</u></a>              | \$191.00 | ReeR protective column, 1200mm housing.                                  | SMO-3B<br>SMPO-3B<br>SMO-3B-TRX<br>SMPO-3B-TRX<br>S-3B<br>S-3B-TRX | <a href="#">PDF</a> |
| <a href="#"><u>FMC-SGB4</u></a>              | \$203.00 | ReeR protective column, 1330mm housing.                                  | SMO-4B<br>SMPO-4B<br>SMO-4B-TRX<br>SMPO-4B-TRX<br>S-4B<br>S-4B-TRX | <a href="#">PDF</a> |
| <b>Mirror Columns*</b>                       |          |  |  |                     |
| <a href="#"><u>FMC-S3</u></a>                | \$226.00 | ReeR single mirror column, 1200mm housing, 1198mm mirror(s).             | SMO-3B<br>SMPO-3B<br>SMO-3B-TRX<br>SMPO-3B-TRX<br>S-3B<br>S-3B-TRX | <a href="#">PDF</a> |
| <a href="#"><u>FMC-S4</u></a>                | \$245.00 | ReeR single mirror column, 1330mm housing, 1328mm mirror(s).             | SMO-4B<br>SMPO-4B<br>SMO-4B-TRX<br>SMPO-4B-TRX<br>S-4B<br>S-4B-TRX | <a href="#">PDF</a> |
| <a href="#"><u>FMC-SB3</u></a>               | \$456.00 | ReeR three mirror column, 1200mm housing, (3) 150mm mirror(s).           | SMO-3B<br>SMPO-3B<br>SMO-3B-TRX<br>SMPO-3B-TRX<br>S-3B<br>S-3B-TRX | <a href="#">PDF</a> |
| <a href="#"><u>FMC-SB4</u></a>               | \$525.00 | ReeR four mirror column, 1330mm housing, (4) 150mm mirror(s).            | SMO-4B<br>SMPO-4B<br>SMO-4B-TRX<br>SMPO-4B-TRX<br>S-4B<br>S-4B-TRX | <a href="#">PDF</a> |
| <b>Column Base</b>                           |          |  |  |                     |
| <a href="#"><u>FMC-CB</u></a>                | \$141.00 | ReeR column base, 202 x 224 x 55 mm housing. Mounting hardware included. | FMC-Sx   | <a href="#">PDF</a> |
| <a href="#"><u>FMC-CBL</u></a>               | \$57.00  | ReeR column base, 202 x 224 x 37 mm housing. Mounting hardware included. | FMC-Sx   | <a href="#">PDF</a> |

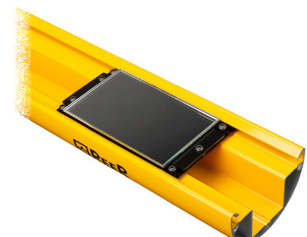
\* Column base must be purchased separately



**FMC-SGB3 / FMC-SGB4**



**FMC-S3 / FMC-S4**



**FMC-SB3 / FMC-SB4**



**FMC-CB**



**FMC-CBL**

# 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.*