

Safety Light Curtain Selection Operation Guide

Follow the instructions on the screen to select the product application and the required functions, optional accessories, etc. The latest product that is a match for the application will be selected based on the information that you selected. You can check all the information about the selected product on the final screen.

Usage flow of the website

Select the series

Protection at machine openings
Safety Light Curtain

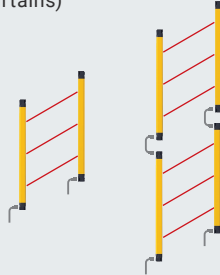


Protection around perimeters of equipment
Safety Multi-Light Beam



Series >

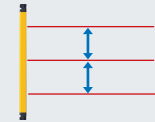
Select the product configuration (one light curtain or cascading of multiple light curtains)



* If other than F3SG-4SRA or F3SG-4SRB was selected in "Series" selection, this step is skipped.

Configuration >

Determine the sensor model by selecting the detection capability and protective height



Detection capability

Select this based on the size of the object you want to detect.



Finger



Hand



Arm/Leg



Body



Protective height

Select this based on the height of the part you want to protect.

Sensor model >

Select the functions

- Interlock
- External Device Monitoring (EDM)
- Muting
- Override etc.

* If the environment resistant type was selected in "Series" selection, this step is skipped.

Function >

Select the mounting brackets

Brackets that allow beam adjustment after the light curtain is installed

Adjustable top/bottom bracket
Adjustable side-mount bracket

Brackets used when beam adjustment is not required after the light curtain is installed

Side-mount bracket

* Use the dedicated brackets for the environment resistant type.

Mounting bracket >

Select the optional accessories

Optional accessory 1 >

Lamp, Spatter protection cover, Laser alignment pointer, etc.



Optional accessory 2 >

Optional accessories for intelligent tap



* This step is skipped depending on the selections in "Function."

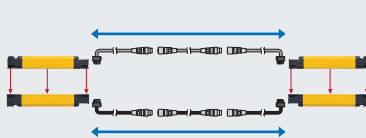
Select the optional accessories for the muting function



* This step is skipped depending on the selections in "Function."

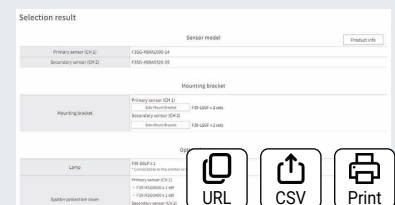
Muting >

Select each cable length



Cable length >

Check the selection result



The selection result can be shared by URL, exported as a CSV file, and printed.

Check basic screen display and common operations

Page 2

Start product selection

Page 3

Basic screen display and common operations

The selected information is displayed.

When the information is selected for an item, the item name is displayed in a blue frame.

The language can be selected.

Safety LightCurtain Selection

English ▼

This page provides information on the latest models, required quantities, and specifications that suit your application.

Series > Configuration > Sensor model > Function > **Mounting bracket** > Optional accessory 1 > Optional accessory 2 > Muting > Cable length > Selection result

< Series	Standard use (With ABI) F3SG-4SRA	< Configuration	Cascading of three light curtains (not side by side)	< Sensor model	F3SG-4SRA0840-14-F F3SG-4SRA0840-14-F F3SG-4SRA0840-14-F
< Function	Selected	Mounting bracket		Optional accessory 1	
Optional accessory 2		Muting		Cable length	

Click a selected item name to return to the selection screen for that item.

! Please note that the selection information of all items after it will be reset when the selection screen is redisplayed.

Mounting bracket

Reset all of the selections.

Displays a hint in case you are not sure what item to select.

Select the mounting bracket(s) required for the safety light curtain or safety multi-light beam.

If you don't know which mounting bracket you need, select 'Adjustable top/bottom bracket'.

Select	Clear	Selection result
Primary sensor (CH 1) ×		Primary sensor (CH 1) Adjustable Top/Bottom Bracket F39-LSGTB-SJ x 2 sets
<input checked="" type="radio"/> Adjustable top/bottom bracket ? <input type="radio"/> Adjustable side-mount bracket ? <input type="radio"/> Side-mount bracket (angle adjustment unavailable) ?		Secondary sensor (CH 2) Adjustable Top/Bottom Bracket F39-LSGTB-SJ x 2 sets
Secondary sensor (CH 2) ×		Secondary sensor (CH 3) Adjustable Top/Bottom Bracket F39-LSGTB-SJ x 2 sets
<input checked="" type="radio"/> Adjustable top/bottom bracket ? <input type="radio"/> Adjustable side-mount bracket ? <input type="radio"/> Side-mount bracket (angle adjustment unavailable) ?		
Secondary sensor (CH 3) ×		
<input checked="" type="radio"/> Adjustable top/bottom bracket ? <input type="radio"/> Adjustable side-mount bracket ? <input type="radio"/> Side-mount bracket (angle adjustment unavailable) ?		

* Read the User's Manual (Cat. No. Z405) for mounting dimensions including brackets.

< Back OK >

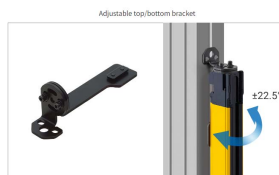
Return to the previous item.

Confirm the selection and proceed to the next item.

Reset the selection of each item.

Select an item from the menu.

Click this button to check the details of the corresponding item in an illustration.



The product models, required quantities, and precautions corresponding to the information selected in the menus on the left are displayed.

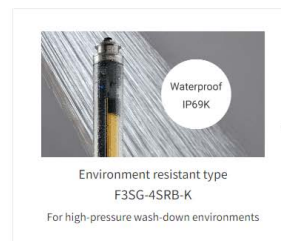
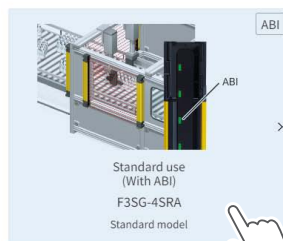
* The screen shows an example. There are items and menus that are not displayed depending on the selections.

Select the series

Series

- Click the image of the product series that matches the application.

Safety Light Curtain
Ideal for protection at machine openings



Safety Multi-Light Beam
Ideal for protection around perimeters of equipment

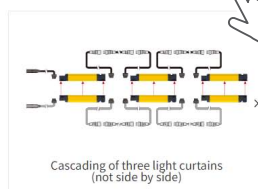
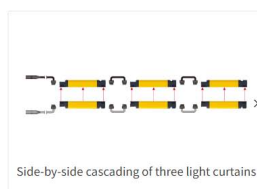
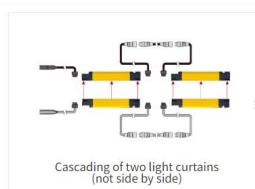
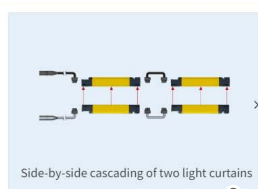
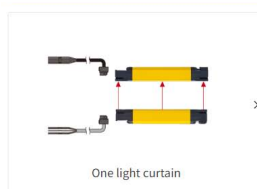


Select the product configuration (one light curtain or cascading of multiple light curtains)

Configuration

- When you will use a product alone, click the image of [One light curtain].
When you will use multiple products cascaded, check the product quantity and cascading method and then click the corresponding image.

i If F3SG-4SRA or F3SG-4SRB was selected in "Series" selection, you can select a configuration cascading multiple products in this step.
If F3SG-4SRB-K or Safety Multi-Light Beam was selected, this step is skipped because the product can be used alone only.



① Select the detection capability (beam gap in the case of Safety Multi-Light Beam) from the list.

② Select the protective height (product length in the case of Safety Multi-Light Beam) from the list.

i The maximum number of beams is 255. When you will use multiple products cascaded, take care that the total number of beams of all products does not exceed 255 when setting the detection capability and protective length.

► <https://www.ia.omron.com/products/family/3736/lineup.html>

You can also check the number of beams on the specifications confirmation screen in step ③.

Detection capability/Beam gap		Protective height/Product length	
Primary sensor (CH 1)	Selected: 14 mm dia.	Selected: 1000 mm	
Secondary sensor (CH 2)	Selected: 25 mm dia.	Selected: 320 mm	

When you will use multiple products cascaded, select the detection capability and protective length of the second and third products.

Selected: 14 mm dia.

Selected: Select

Select


14 mm dia.

25 mm dia.

45 mm dia.

85 mm dia.

1



Selected: 1000 mm

Selected: 880 mm

920 mm

960 mm

1000 mm

1040 mm

1120 mm

1200 mm

1280 mm

1360 mm

1400 mm

1440 mm

2

③ The product models that meet the conditions are selected automatically based on the selections of steps ① and ②, so click [OK].

The table below shows the model(s) selected according to your specified detection capability or beam gap and protective height or product length.
You can view the details by clicking 'Detail'.

	Model	Detail
Primary sensor (CH 1)	F3SG-4SRA1000-14	Detail
Secondary sensor (CH 2)	F3SG-4SRA0320-25	Detail

[Back](#)

OK

3

Click this button to check the specifications of the selected product.

[illegible]

Select the functions

Function

If the environment resistant type (F3SG-4SRB-K) was selected in "Series" selection, this step is skipped.

1

Select the functions you want to use from the menu.

If there is no particular function that you want to use, select [Not use any function].

2

Click [OK].

Select

☐ Undecided

☒ Interlock (when Start/Restart Interlock is enabled)/Pre-Reset

☒ External Device Monitoring (EDM)

☒ Muting/Override

☐ Fixed Blanking/ Floating Blanking/ Reduced Resolution

☐ PSDI

☐ Area Beam Indicator (ABI)

☐ Auxiliary Output

☐ Warning Zone

☐ Operating Range Selection

☐ Response Time Adjustment

☐ Designated Beam Output

☐ Instantaneous Block Detection

☐ Light Level Monitoring/Operating Status Monitoring/ Maintenance Information

☐ Backup/Restoration

☐ IO-Link (outside panel)

☐ IO-Link (inside panel)

☐ Not use any function

Selection result

Interlock (when Start/Restart Interlock is enabled)/Pre-Reset	Default setting of Interlock: Start/Restart Interlock disabled (Auto Reset mode) Default setting of Pre-Reset: Disabled
External Device Monitoring (EDM)	Default setting: Disabled
Muting/Override	Default setting of Muting: Enabled (Standard Muting mode) Default setting of Override: Enabled

The optional F39-SGIT-IL3 Intelligent Tap is required to change settings and monitor F3SG-SR and F3SG-PG.

Back

OK

If [Undecided] was selected, all of the functions except for [Muting/Override], [IO-Link (outside panel)], and [IO-Link (inside panel)] are selected.

Select the mounting brackets

Mounting bracket

If the environment resistant type (F3SG-4SRB-K) was selected in "Series" selection, the dedicated brackets are selected.

1

Select the mounting brackets that match the mounting conditions of the product from the menu.

2

Click [OK].

Select

Primary sensor (CH 1)

☐ Adjustable side-mount bracket

☒ Side-mount bracket (angle adjustment unavailable)

Secondary sensor (CH 2)

☐ Adjustable side-mount bracket

☒ Side-mount bracket (angle adjustment unavailable)

Selection result

Primary sensor (CH 1)	Side-Mount Bracket	F39-LSGF x 2 sets
Secondary sensor (CH 2)	Side-Mount Bracket	F39-LSGF x 2 sets

Back

OK

* Read the User's Manual (Cat. No. Z405) for mounting dimensions including brackets.

5

Safety Light Curtain Selection Operation Guide

Select the optional accessories

Optional accessory 1

- 1 Select the optional accessories you want to use from the menu.
If optional accessories are not required, proceed to step 2 without selecting anything.

- 2 Click [OK].

Select

Clear

Lamp

×

Yes

?

Spatter protection cover

×

Yes

?

Laser alignment pointer (without spatter protection cover)

×

Yes

?

Laser alignment pointer (with spatter protection cover)

×

Yes

?

Floor mount column

×

Yes

?

Mirror column

×

Yes (for F3SG-SR/F3SG-PG)

?

Mount-column adjustable base

×

Yes

?

Test rod

×

Yes

?

Y-joint plug/socket connector

×

Yes

?

Reset switch connector

×

Yes

?

Selection result

Lamp	F39-SGLP x 1 * Connectable to the emitter or receiver
Spatter protection cover	Primary sensor (CH 1) • F39-HSG0600 x 1 set Secondary sensor (CH 2) • F39-HSG0400 x 1 set F39-HSG0320 x 1 set * The operating range of F3SG-SR or F3SG-PG with the spatter protection cover is about 10% shorter than the rating.

Back

OK

The types of optional accessories that can be selected vary depending on the selections made up until this step.

Optional accessory 2

This step is skipped depending on the selections in "Function."

- 1 Select the optional accessories for the intelligent tap from the menu.
If optional accessories are not required, proceed to step 2 without selecting anything.

- 2 Click [OK].

Select

Clear

Intelligent tap

×

Yes

?

Intelligent tap bracket (to mount intelligent tap on DIN track)

×

Yes

?

Communication with intelligent tap (wireless)

×

Bluetooth communication unit

?

Communication with intelligent tap (wired)

×

USB Type-C cable (for data transfer)

?

Selection result

Intelligent tap	F39-SGIT-IL3 x 1
Intelligent tap bracket (to mount intelligent tap on DIN track)	F39-LITF1 x 1 set
Communication with intelligent tap (wireless)	F39-SGBT x 1 * Download setting software (SD Manager 3) from our website.

Back

OK

If a function that requires an intelligent tap for the setting was selected in "Function," [Yes] will already be selected for this item.

Select the optional accessories for the muting function

Muting

i This step is skipped depending on the selections in "Function."

① Select the optional accessories you want to use from the menu.

② Click [OK].

Select

Clear

Muting sensor arm mounter

×

Muting sensor: Through-beam

?

☒ Through-beam muting sensor arm mounter (150 mm)

?

☐ Through-beam muting sensor arm mounter (400 mm)

?

Muting sensor: Retro-reflective

?

☐ Retro-reflective muting sensor arm mounter (150 mm)

?

☐ Retro-reflective muting sensor arm mounter (400 mm)

?

Muting sensor connection box

×

☒ With muting sensor connection box

?

Selection result

Muting sensor arm mounter	Through-beam muting sensor arm mounter F39-FMA150T x 1 set
Muting sensor arm mounter bracket for SLC	F39-LMAF-1 x 1 set
Muting sensor connection box	F39-GCIN5 x 1

< Back

OK >

Select each cable length

Cable length

① Select the required cable length for each cable from the lists.

② Click [OK].

Select

(I1) Cable length from power supply to Intelligent Tap

Selected: 20 m

(I2) Cable length from Intelligent Tap to sensor (CH 1)

Selected: 50 m

(C2) Cable length between sensors (CH 1 - CH 2)

Selected: 0.12 m (fixed)

(I1) Cable length from power supply to Intelligent Tap

Selected: 20 m

Select

3 m

7 m

10 m

15 m

20 m

30 m

40 m

50 m

60 m

Back

OK >

The types of cables required for connection of the products are displayed in the figure based on the selections made up until this step.

Selection is now finished.

Check the selection result

The selection results and information on the products and optional accessories selected based on the selections are displayed.

The information on this page can be output and shared in various ways to help you consider the products to purchase.

Selection result

Sensor model

Product info

Sensor model

The product models are displayed in accordance with the selection conditions. The models for the number of cascade segments are each displayed in accordance with the conditions for "Configuration" selection.

Click this button to display the product information page.

Mounting bracket/Optional accessory/Muting/Cable

The product models and required purchase quantities are displayed in accordance with the selection conditions.

Mounting bracket

Primary sensor (CH 1)

Side Mount Bracket

F39-LSGF x 2 sets

Secondary sensor (CH 2)

Side Mount Bracket

F39-LSGF x 2 sets

Optional accessory

Lamp

F39-SGLP x 1

* Connectable to the emitter or receiver

Spatter protection cover

Primary sensor (CH 1)

F39-HSG0600 x 1 set

F39-HSG0400 x 1 set

Secondary sensor (CH 2)

F39-HSG0320 x 1 set

* The operating range of F39-SR or F39-PG with the spatter protection cover is about 10% shorter than the rating.

Intelligent tap

F39-SGIT-IL3 x 1

Intelligent tap bracket (to mount intelligent tap on DIN track)

F39-LTF1 x 1 set

Communication with intelligent tap (wireless)

F39-SGBT x 1

* Download setting software (SD Manager 3) from our website.

Muting

Muting sensor arm mounter

Through-beam muting sensor arm mounter

F39-FMA150T x 1 set

* Order another set of F39-FMA150T Muting Sensor Arm Mounters when muting sensors are X-shape connected (two muting sensors cross) or T-shape connected (four muting sensors are used).

Muting sensor arm mounter bracket for SLC

F39-LMAF-1 x 1 set

Muting sensor connection box

F39-GCNS x 1

Cable

Cable length from power supply to intelligent Tap

20m

F39-JG20A-D x 1 set

* When the Intelligent Tap is used only to change settings and is not installed, order F39-JG[L] x L of the same length as F39-JG[L] x 0 for the cable between the power supply and Intelligent Tap.

Cable length from intelligent Tap to sensor (CH 1)

50m

F39-JGR3K-L/-D x 1 set each + F39-JG20B-L/-D x 2 sets each + F39-JG+10B-L/-D x 1 set each

Cable length between sensors (CH 1 - CH 2)

0.12 m (fixed)

F39-JGR12L x 1 set

Ratings and specifications

Model

Primary sensor (CH 1)

F39G-4SRA1000-14

Secondary sensor (CH 2)

F39G-4SRA0320-25

Detection capability (mm)

14

25

Beam gap (mm)

10

20

Number of beams

99

16

Lens size (mm)

4.4 x 3.4 (W x H)

6.7 x 4.5 (W x H)

Protective height/Product length (mm)

1000

320

Operating range (m)

Long mode

0.3 to 10

0.3 to 20

Short mode

0.3 to 3.0

0.3 to 7.0

Note

When operating at an ambient temperature of -10 to -30°C, use the sensor with the operating range of 0.3 to 5.0 m in Long mode and 0.3 to 1.5 m in Short mode.

-

Response time (ms): ON to OFF

Optical synchronization

13

8

Wired synchronization

17

10

Note

Response time varies depending on the synchronization method (with or without intelligent tap, wiring).

Response time (ms): OFF to ON

Optical synchronization

65

40

Wired synchronization

85

50

Note

Response time varies depending on the synchronization method (with or without intelligent tap, wiring).

Effective aperture angle (EAA)

±2.5° max. (Emitter and receiver at operating range of 3 m or greater)

Light source (wavelength)

Infrared LED (wavelength: 850 nm)

Copy to URL

You can copy the URL of the webpage you are viewing. Sending the URL to a person with which you wish to share the results allows sharing the same information as you see immediately.

Export to CSV

You can save the product models, required purchase quantities, specifications, and other information as a CSV file. This helps prevent ordering mistakes.

Print

You can print the information on this page.

Copy URL

Export to CSV

Print

8

Safety Light Curtain Selection Operation Guide