

Safety Light Curtain/Safety Multi-Light Beam F3SG-SR/PG

The most advanced light curtain

- Conforms to major international standards
- Environmental resistance and rugged structure for use in any environment (IP67, IP67G *1)
- Industry's broadest line-up *2, from finger protection to body protection
- Flexible height model for easy integration into machines and lines
- For diverse applications, from simple protection to data utilization

*1. IEC 60529/JIS C 0920 Annex 1

*2. Based on Omron investigation in June 2018.



For the most recent information on models that have been certified for safety standards, refer to your local OMRON website.

Table of Contents

Model Number Legend	page 2
Ordering Information	page 3
Ratings and Specifications	page 18
List of Models/Response Time/Current Consumption/Weight	page 24
Legislation and Standards	page 31
Indicator	page 32
Connections (Basic Wiring Diagram).....	page 35
Connectable Safety Control Units	page 44
Input/Output Circuit	page 45
Dimensions	page 47
Troubleshooting.....	page 64
Related Manuals.....	page 73

All items on this datasheet that states "Available soon" will be available in early 2020

Model Number Legend

Safety Light Curtain F3SG-SR

F3SG-4SR □ □□□□ - □□ - □ - □
 (1) (2) (3) (4) (5) (6)

No.	Classification	Code	Meaning	Remarks
(1)	Type of ESPE	4	Type 4	
(2)	Function	A	Advanced	
		B	Standard	
(3)	Protective height	0160 - 2000	Protective height for finger protection (mm)	
		0160 - 2480	Protective height for hand protection (mm)	
		0240 - 1520	Protective height for arm/leg protection (mm)	
		0280 - 0920	Protective height for body protection (mm)	
(4)	Detection capability	14	Finger protection (Detection capability: 14-mm dia.)	
		25	Hand protection (Detection capability: 25-mm dia.)	
		45	Arm/leg protection (Detection capability: 45-mm dia.)	
		85	Body protection (Detection capability: 85-mm dia.)	
(5)	Option 1	Blank	Set of emitter and receiver	
		L	Emitter	
		D	Receiver	
(6)	Option 2	Blank		
		F	Flexible height model	Finger protection and hand protection: Protective heights are available in increments of 40 mm up to 1 m

- Note:** 1. The purpose of this model number legend is to provide understanding of the meaning of specifications from the model number. Models are not available for all combinations of code numbers. See *Ordering Information* on page 3 for details.
2. The side-mount brackets (intermediate brackets) are included with the safety light curtain.
3. Connection cables are not included with the safety light curtain. Order cables sold separately.

Safety Multi-Light Beam F3SG-PG Available soon

F3SG-4PG A □□□□ - □□ - □ - □
 (1) (2) (3) (4) (5) (6) (7)

No.	Classification	Code	Meaning	Remarks
(1)	Type of ESPE	4	Type 4	
(2)	Function	A	Advanced	
(3)	Protective height	0580	Protective height (mm)	
		0880		
		0980		
		1280		
(4)	Number of beams/ beam gap	2	2 beams/500 mm	Protective height: 580 mm
		3	3 beams/400 mm	Protective height: 880 mm
		4	4 beams/300 or 400 mm	Protective height: 980 or 1,280 mm
(5)	Application	A	Perimeter access guarding	
		L	Perimeter guarding long range	
		C	Perimeter guarding deflect mirror	
(6)	Option 1	Blank	Set of emitter and receiver or set of emitter/receiver and passive mirror	
		L	Emitter	
		D	Receiver	
		LD	Emitter/receiver	Perimeter guarding deflect mirror only
		M	Passive mirror	Perimeter guarding deflect mirror only
(7)	Option 2	Blank		

- Note:** 1. The purpose of this model number legend is to provide understanding of the meaning of specifications from the model number. Models are not available for all combinations of code numbers. See *Ordering Information* on page 5 for details.
2. The side-mount brackets (intermediate brackets) are included with the safety multi-light beam.
3. Connection cables are not included with the safety multi-light beam. Order cables sold separately.