

## F3SG-4SRB1680-25

Safety Light Curtain, F3SG-SRB Standard, Type 4, 25 mm resolution, range 0.3 to 20.0 m, height 1680 mm, PNP/NPN

# Specifications

<b>Sensing method</b>	Safety light curtain
<b>Type of protection</b>	Hand protection
<b>Number of beams</b>	84
<b>Detection capability</b>	25 mm
<b>Safety field height</b>	1680 mm
<b>Type of safety according to IEC 61496-1</b>	4
<b>Beam spacing</b>	20 mm
<b>Maximum safety range</b>	20 m
<b>Minimum operating distance</b>	0.3 m
<b>Key features</b>	Auxiliary output, Blanking, Designated beam output, External Device Monitoring (EDM), External test, Interlock, Muting, Mutual interference prevention, Operating range selection, PNP/NPN selection, Pre-reset, Response time adjustment, Warning zone
<b>Degree of protection (IP)</b>	IP65/IP67/IP67G
<b>Cascadable</b>	✓
<b>Number of protected semiconductor outputs</b>	2
<b>Number of semiconductor outputs with signalling function</b>	1
<b>Type of switching output of the OSSD</b>	PNP/NPN
<b>Response time</b>	13 ms
<b>With muting function</b>	✓
<b>With beam coding</b>	✓
<b>Communication option(s)</b>	Bluetooth, IO-Link, USB
<b>Suitable for safety functions</b>	✓
<b>Scope of delivery</b>	Transmitter and receiver

Wavelength of the sensor	870 nm
Connection method	Root connector (order separately)
Supply voltage DC	19.2-28.8 V
Max. output current at protected output	300 mA
Ambient temperature	-30-55 °C
Overall length of sensor	1680 mm
Height of sensor	1680 mm
Width of sensor	32 mm
Number of fixed side-mount brackets	3
Number of adjustable side-mount brackets	3
Number of intermediate brackets	1

## Accessories



**E39-R1S**

Accessory photoelectric sensor, reflector, 40 x 60 x 7.5 mm, ABS & Acrylic



**E3AS-F1000IPT-M1TJ 0.3M**

Photoelectric sensor, rectangular housing, plastic body, infrared laser class 1, time-of-flight, 1000 mm, PNP, Light-ON/Dark-ON, IO-Link COM3, M12 pigtail Smartclick connector, 0.3 m



**E3AS-F1500IPT-M1TJ 0.3M**

Photoelectric sensor, rectangular housing, plastic body, infrared laser class 1, time-of-flight, 1500 mm, PNP, Light-ON/Dark-ON, IO-Link COM3, M12 pigtail Smartclick connector, 0.3 m



**E3Z-R81 2M**

Photoelectric sensor, rectangular housing, red LED, retro-reflective, 4 m, PNP, Light-ON/Dark-ON, 2 m cable

















**E3Z-R81 5M**















Photoelectric sensor, rectangular housing, red LED, retro-reflective, 4 m, PNP, Light-ON/Dark-ON, 5 m cable







**E3Z-T81 2M**

Photoelectric sensor, rectangular housing, infrared LED, through-beam, 15 m, PNP, Light-ON/Dark-ON, 2 m cable

	<b>E3Z-T81 5M</b>	Photoelectric sensor, rectangular housing, infrared LED, through-beam, 15 m, PNP, Light-ON/Dark-ON, 5 m cable
	<b>F39-FMA150R</b>	Muting sensor arm mounter for retroreflective sensor; length 150 mm (2 mounters per set)
	<b>F39-FMA150T</b>	Muting sensor arm mounter for through-beam sensor; length 150 mm (2 mounters per set)
	<b>F39-FMA400R</b>	Muting sensor arm mounter for retroreflective sensor; length 400 mm (2 mounters per set)
	<b>F39-FMA400T</b>	Muting sensor arm mounter for through-beam sensor; length 400 mm (2 mounters per set)
	<b>F39-GCN5</b>	Muting Sensor Connection Box for F3SG-SR/PG series
	<b>F39-GCNY2</b>	Safety sensor accessory, F3SG-R_SR, M12 Y-joint connector, 0.5 m
	<b>F39-GCNY3</b>	Safety sensor accessory, F3SG-R_SR, Reset Switch M12 Y-joint connector, 0.5 m
	<b>F39-JG10A-D</b>	Safety sensor accessory, F3SG-R Advanced, receiver cable M12 8-pin, female, 10 m
	<b>F39-JG10A-L</b>	Safety sensor accessory, F3SG-R Advanced, emitter cable M12 5-pin, female, 10 m
	<b>F39-JG10B-D</b>	Safety sensor accessory, F3SG-R Advanced, receiver extension cable M12 8-pin, male/female, 10 m
	<b>F39-JG10B-L</b>	Safety sensor accessory, F3SG-R Advanced, emitter extension cable M12 5-pin, male/female, 10 m
	<b>F39-JG10C-D</b>	Root-straight cable 10 m for F3SG-SR (cable for receiver with dedicated connector - Black)
	<b>F39-JG10C-L</b>	Root-straight cable 10 m for F3SG-SR (cable for emitter with dedicated connector - Gray)

	<b>F39-JG20B-D</b>	Safety sensor accessory, F3SG-R Advanced, receiver extension cable M12 8-pin, male/female, 20 m
	<b>F39-JG20B-L</b>	Safety sensor accessory, F3SG-R Advanced, emitter extension cable M12 5-pin, male/female, 20 m
	<b>F39-JG3A-D</b>	Safety sensor accessory, F3SG-R Advanced, receiver cable M12 8-pin, female, 3 m
	<b>F39-JG3A-L</b>	Safety sensor accessory, F3SG-R Advanced, emitter cable M12 5-pin, female, 3 m
	<b>F39-JG3B-D</b>	Safety sensor accessory, F3SG-R Advanced, receiver extension cable M12 8-pin, male/female, 3 m
	<b>F39-JG3B-L</b>	Safety sensor accessory, F3SG-R Advanced, emitter extension cable M12 5-pin, male/female, 3 m
	<b>F39-JG3C-D</b>	Root-straight cable 3 m for F3SG-SR (cable for receiver with dedicated connector - Black)
	<b>F39-JG3C-L</b>	Root-straight cable 3 m for F3SG-SR (cable for emitter with dedicated connector - Gray)
	<b>F39-JG7C-D</b>	Root-straight cable 7 m for F3SG-SR (cable for receiver with dedicated connector - Black)
	<b>F39-JG7C-L</b>	Root-straight cable 7 m for F3SG-SR (cable for emitter with dedicated connector - Gray)
	<b>F39-JGR12L</b>	Side-by-side Cascading Cable set 0.12 m for F3SG-4SR (2 cables per set, for emitter and receiver)
	<b>F39-JGR3K-D</b>	Root-Plug cable for extended set 0.3 m for F3SG-4SR (cable for receiver - black) M12,5 pin
	<b>F39-JGR3K-L</b>	Root-Plug cable for extended set 0.3 m for F3SG-4SR (cable for emitter - gray)
	<b>F39-JGR3W</b>	Cascading cable for extended set 0.3 m for F3SG-4SR (2 cables per set, for emitter and receiver)

	<b>F39-LITF1</b>	Intelligent Tap Bracket For DIN in Panel
	<b>F39-LMAF1</b>	Bracket for muting sensor arm mounter (2 units per set)
	<b>F39-LSGA</b>	Adjustable Side-Mount Bracket (2 brackets per set),Material: Zinc alloy
	<b>F39-LSGF</b>	Fixed Side-Mount Bracket (2 brackets per set)
	<b>F39-LSGTB-RE</b>	Adjustable top/bottom bracket set (2 pcs.) for F3SG-RA/ RE series
	<b>F39-LSGTB-SJ</b>	Adjustable top/bottom bracket set (2 pcs.) for F3SJ/ SN series
	<b>F39-PTS</b>	Laser-alignment kit for F3SG-SR/PG Series, Mountable from the front. This can be easily mounted and removed to/from the main unit, even as a set with the F39-ST.
	<b>F39-SGBT</b>	Bluetooth Communication Unit for F39-SGIT-IL3
	<b>F39-SGIT-IL3</b>	Intelligent Tap unit for F3SG-SR/PG
	<b>F39-SGLP</b>	The lamp can be connected to emitter, receiver, or emitter/receiver and turned ON based on the operation of F3SG-SR/PG. The lamp can indicate red, orange, and green colors, to which three different states can be assigned. IP67 * rated when mated.
	<b>F39-SML1950</b>	Mirror column 1950 mm for Safety Light Curtain F3SG-SR/PG up to 1840 mm
	<b>F39-ST1950</b>	Floor mount column of 1950 mm for F3SG-SR/PG, protective height up to 1840 mm
	<b>F39-STB</b>	Mount-column adjustable base for F3SG-SR/PG Mounted to the floor mount column or mirror column. The angle and height of the column can be adjusted.
	<b>F39-TRD25</b>	Safety light curtain accessory, test rod, 25 mm for initial and daily checks and regular inspections. (Not included in the Safety Light Curtain delivery)

	<b>XS2G-D5S1</b>	Field assembly connector, M12 straight plug (male), 5-poles, A coded, screw connection, for cable diameters 5-6 mm
	<b>XS3W-M421-401-R</b>	Cable with connectors on both cable ends, M8 straight socket (female), M8 straight plug (male), 4-poles, PVC robot cable, IP67, 1 m
	<b>XS3W-M421-402-R</b>	Cable with connectors on both cable ends, M8 straight socket (female), M8 straight plug (male), 4-poles, PVC robot cable, IP67, 2 m
	<b>XS3W-M421-405-R</b>	Cable with connectors on both cable ends, M8 straight socket (female), M8 straight plug (male), 4-poles, PVC robot cable, IP67, 5 m
	<b>XS3W-M421-410-R</b>	Cable with connectors on both cable ends, M8 straight socket (female), M8 straight plug (male), 4-poles, PVC robot cable, IP67, 10 m
	<b>XS3W-M424-402-R</b>	Cable with connectors on both cable ends, M8 right-angle socket (female), M8 straight plug (male), 4-poles, PVC robot cable, IP67, 2 m
	<b>XS3W-M424-405-R</b>	Cable with connectors on both cable ends, M8 right-angle socket (female), M8 straight plug (male), 4-poles, PVC robot cable, IP67, 5 m
	<b>XS3W-M42C-4C2-A</b>	Cable with connectors on both cable ends, M8 straight socket (female), Smartclick M12 straight plug (male), 4-poles, PVC standard cable, IP67, 0.2 m
	<b>XS5F-D421-C80-F</b>	Sensor cable, Smartclick M12 straight socket (female), 4-poles, A coded, PVC fire-retardant robot cable, IP67, 1 m
	<b>XS5F-D421-D80-F</b>	Sensor cable, Smartclick M12 straight socket (female), 4-poles, A coded, PVC fire-retardant robot cable, IP67, 2 m
	<b>XS5F-D421-E80-F</b>	Sensor cable, Smartclick M12 straight socket (female), 4-poles, A coded, PVC fire-retardant robot cable, IP67, 3 m
	<b>XS5F-D421-G80-F</b>	Sensor cable, Smartclick M12 straight socket (female), 4-poles, A coded, PVC fire-retardant robot cable, IP67, 5 m
	<b>XS5F-D421-J80-F</b>	Sensor cable, Smartclick M12 straight socket (female), 4-poles, A coded, PVC fire-retardant robot cable, IP67, 10 m
	<b>XS5F-D421-L80-F</b>	Sensor cable, Smartclick M12 straight socket (female), 4-poles, A coded, PVC fire-retardant robot cable, IP67, 20 m



XS5F-D521-DJ0-IL

IO-Link cable, Smartclick M12 straight socket (female), 5-poles, A coded, PVC, IP67, 2 m

## Downloads

CAD Library



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

Datasheet

EN PDF 19 MB



### F3SG-SR/PG Series

Users Manual

EN PDF 68.5 MB



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

Brochure

EN PDF 41 MB



### IO-Link Series

Brochure

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### SD Manager 3 MobileApp V1.10

Software

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### SDManager3\_Setup\_Version1.31

Software

EN EXE 80.3 MB



### Safety Component Selection Guide EU

Brochure

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### Safety Solution Advanced Guide

Guide

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### Safety Solution Basic Guide

Guide

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