OMRON Industrial Automation



F3SG-4RA0590-30

Safety Sensor, F3SG-R Advanced, Type 4, 30 mm resolution, range 0.3 to 20.0 m, height 590 mm, PNP/NPN

Specifications

Type of safety according to IEC 61496-1	4
Type of protection	Hand protection
Detection capability	30 mm
Safety field height	590 mm
Beam gap	20 mm
Number of beams	28
Number of protected semiconductor outputs	2
Number of semiconductor outputs with signalling function	1
Maximum safety range	20 m
Minimum operating distance	0.3 m
Response time	8 ms
Cascadable	✔
With muting function	✔
With beam coding	✔
Type of switching output of the OSSD	PNP/NPN
Communication port(s)	USB
Suitable for safety functions	✔
Scope of delivery	Transmitter and receiver
Wavelength of the sensor	870 nm
Connection method	M12 pigtail Smartclick connector
Supply voltage DC	19.2-28.8 V
Voltage type	DC
Max. output current at protected output	300 mA

Degree of protection (IP)	IP67
Ambient temperature	-10-55 °C
Overall length of sensor	608 mm
Height of sensor	35 mm
Width of sensor	35 mm

Accessories

	**F39-JG3A-L**	Single-ended cable,F3SG-SR/PG and F3SG-R Advanced, extension cable,emitter cable M12, 5-pin, female, 3 m
	**F39-JG7A-D**	Single-ended cable,for F3SG-SR/PG and F3SG-R Advanced, receiver cable M12, 8-pin, female, 7 m

Downloads

CAD file



F3SG-R

Brochure

EN PDF 11.3 MB



F3SG-R Series Safety Light Curtain

Datasheet

EN PDF 28 MB



F3SG-RA_RE safety light curtains

Discontinuation Notice

EN PDF 2.31 MB



F3SG-_RA series Safety Light Curtain

Installation Manual

EN PDF 2.76 MB



F3SG-_R_Safety_Precautions

Instruction Sheet

EN PDF 486 KB



Machine Safety

Catalogue

EN PDF 9.91 MB



Machine Safety Solution

Brochure

EN PDF 2.86 MB



Safety Component Selection Guide EU

Brochure

EN PDF 5.26 MB



Safety Solution Advanced Guide

Guide

EN PDF 2.57 MB



Safety Solution Basic Guide

Guide

EN PDF 14.4 MB

TERMS OF WEBSITE USE

This PDF document was created from the European OMRON Industrial Automation website on 4 November, 2026. Click here for terms of use.

INDUSTRIAL AUTOMATION | INDUSTRIAL.OMRON.EU