



SG4 Extended

957901250

SG4-14-045-OO-P

TYPE 4 SAFETY LIGHT CURTAIN WITH ADVANCED
FUNCTIONALITY

OVERVIEW

- No dead zone
- Pigtail cable with M12 connector
- Cascade connection of up to 3 units
- Up to 20m operating range and 1800m protected height
- Compact dimensions (35 x 41 mm section)
- Anti-interference coding
- Integrated Muting function
- Floating Blanking, Fixed Blanking and Reduced Resolution
- Configurable with:
 - Pushbuttons for common configuration
 - Graphic User Interface for complete parametrisation
 - Ethernet Interface for programming, monitoring and error logging

TECHNICAL FEATURES

Detection properties

Nominal sensing distance	0,2 ... 7 m
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Resolution	14mm
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controlled height	450 mm
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number of rays	48
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Sensitivity adjustment	Teach-in/GUI
Effective Aperture Angle	$\leq \pm 2,5^\circ$

Application

Function Principle	Emitter + Receiver
Available functions	Programmable Muting & Blanking
Description	Compact no-dead-zone programmable
Functions	Finger prot. res. 14 mm programmable

Safety parameters

Type	Type 4 safety light curtain (A/M)
SIL	3
SILCL	3
PL	e
MTTFd	131 years
Dcavg	98,80%

Outputs

Output type	2 x PNP-NO (OSSD safety output) with EDM
Response time	15 ms
Response Time (Master + Slave)	Tcascade [ms] = Tmaster + Tslave1 + 7,5

Response Time (Master + 2 Slave)	$T_{\text{cascade}} [\text{ms}] = T_{\text{master}} + T_{\text{slave1}} + T_{\text{slave2}} + 7,5$
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Electrical data

Operating Voltage	24 Vdc ± 20%
Load current	≤ 500mA each output
Emission	Infrared LED (950 nm wavelength)
Interference to external light	According to IEC 61496-2
Power Consumption - Receiver	≤ 5W (no load)
Power Consumption - Emitter	≤ 3W
Cabel Length (Power Supply/Output)	≤ 50m
Cable Length for Master Slave Interconnections	≤ 1m (Master-Slave Cable)

Mechanical data

Dimensions	35x41x456
Material	Painted aluminum / PMMA / PBT Valox 508 / PC LEXAN
Connections	M12-5 poles pig-tail (emitter) M12-12 poles + M12-5poles / M12-12 poles pig-tails (receiver)
Storage temperature	-25...+ 70°C
Vibrations	Width 0.35 mm, frequency 10 ... 55Hz; 20 sweep per axis, 1octave/min (EN 60068-2-6)
Shocks	16 ms (10 G) 1,000 shocks per axis (EN 60068-2-29)

Test/Approvals

EMC compatibility	According to 2014/30/EU Directive
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Accessories

Supplied Accessories	Standard "L" Mounting Brackets: 4 pcs kit
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Generical Data

Network Interface	Ethernet TCP/IP
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Dimensions	35x40,75x456,3 mm
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Operating Temperature	0...+50°C
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Humidity	15 ... 95 % (no condensation)
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Mechanical Protection	IP65
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UNASSIGNED

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**date of
printing**
10/08/2026
08:30:18