



SG4 Fieldbus

957901880

SG4-14-180-OP-B

**TYPE 4 SAFETY LIGHT CURTAIN WITH INTEGRATED
OPENSafety/POWERLINK FIELDBUS**

OVERVIEW

- Fast and easy installation, configuration and maintenance
- Complete diagnostic and monitoring available over the communication bus
- Basic models: classic functions available
- Advanced models: each beam status safe information available
- Two M12 connectors on receiver side for POWERLINK connection
- M8 connectors on emitter and receiver for power supply
- Up to 19m operating range and 1800m protected height
- Finger, hand and body protection
- Compact dimensions (35 x 42 mm section)
- POWERLINK node address configurable with selector switches
- Functions available in combination with B&R safety controller SL and SLX: auto/manual restart, EDM, Muting, Override
- Functions available for advanced models in combination with B&R safety controller SL:
 - fixed blanking, floating blanking, partial and dynamic muting, warning areas, measurement

TECHNICAL FEATURES

Detection properties

Nominal sensing distance	0,2 ... 6 m
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Resolution	14mm
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controlled height	1800 mm
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number of rays	192
Sensitivity adjustment	GUI
Effective Aperture Angle	$\leq \pm 2,5^\circ$

Application

Function Principle	Emitter + Receiver
Available functions	OpenSAFETY/POWERLINK Basic Functions
Description	Compact - OpenSAFETY/POWERLINK Basic functions
Functions	Finger prot. res. 14 mm openSAFETY

Safety parameters

Type	Type 4 safety light curtain (A/M)
SIL	3
SILCL	3
PL	e
PFHd	1,02E-08
Dcavg	98,80%
MTTFd	118 years

Outputs

Output type	POWERLINK
Response time	54 ms

Electrical data

Operating Voltage	24 Vdc $\pm$ 20%
Load current	$\leq$ 500mA each output
Emission	Infrared LED (940 nm wavelength)
Interference to external light	According to IEC 61496-2
Power Consumption - Receiver	$\leq$ 5W (no load)
Power Consumption - Emitter	$\leq$ 3W
Cabel Length (Power Supply/Output)	$\leq$ 50m

Mechanical data

Dimensions	35x42x1880
Connections	M8-4 poles (emitter) M8-4 poles + 2x M12-4 poles D-Coded (receiver)
Storage temperature	-25...+ 70°C
Material	Painted aluminum / PMMA / PBT Valox 508
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: 6 pcs kit

Generical Data

Network Interface

openSAFETY/POWERLINK

Dimensions

35x41,9x1880,3 mm

Operating Temperature

0...+50°C

Humidity

15 ... 95 % (no condensation)

Mechanical Protection

IP65

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