



SG2 Extended

957801660

SG2-90-165-OO-E-C
TYPE 2 SAFETY LIGHT CURTAIN WITH STANDARD
FUNCTIONALITY

OVERVIEW

- High reliability
- Easy installation and alignment
- Cost effective Finger, hand, arm detection with standard functions
- 90 mm version for presence detection
- Up to 19 m operating distance
- Compact dimensions (32.3 x 36.9 mm section)
- Anti-interference coding
- IP65 Protection; IP69K with optional tube
- Unshielded cables
- Rotating and anti-vibration brackets

TECHNICAL FEATURES

Detection properties

Nominal sensing distance	0,2 ... 19 m
Resolution	90mm
controlled height	1650 mm
number of rays	23
Sensitivity adjustment	n/a

Effective Aperture Angle	$\leq \pm 5^\circ$
--------------------------	--------------------

Application

Function Principle	Emitter + Receiver
Available functions	Manual/Automatic Restart, EDM, Range Reduction (on TX)
Description	Compact standard
Functions	Presence protection res. 90 mm

Safety parameters

Type	Type 2 safety light curtain (A/M)
SIL	1
SILCL	1
PL	c
MTTFd	273 years
Dcavg	97,50%
SFF	98,40%

Outputs

Output type	2 x PNP-NO (OSSD safety output) with EDM
Response time	22,5 ms

Electrical data

||
||
||

Operating Voltage	24 Vdc ± 20%
Load current	≤ 500mA each output
Emission	Infrared LED (850 nm wavelength)
Interference to external light	According to IEC 61496-2
Power Consumption - Receiver	≤ 3W (no load)
Power Consumption - Emitter	≤ 2W
Capacitive Load	≥ 2,2μF
Cabel Length (Power Supply/Output)	≤ 50m

Mechanical data

Dimensions	33x37x1733
Material	Painted aluminum / PMMA / PC MAKROLON
Connections	M12-4 poles (emitter) M12-8 poles (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

Approvals	CE, cULus, TÜV
EMC compatibility	According to 2014/30/EU Directive

Accessories

Supplied Accessories	Rotating Brackets: 4 pcs kit
----------------------	------------------------------

Generical Data

Dimensions	32,3x36,9x1733,2 mm
------------	---------------------

Operating Temperature	-10...+55°C
-----------------------	-------------

Humidity	15 ... 95 % (no condensation)
----------	-------------------------------

Mechanical Protection	IP65
-----------------------	------

UNASSIGNED

Disegno 2D PDF	1,04E-08
----------------	----------

Datasensing S.r.l.

Strada S.Caterina, 235
41122 Modena (MO)
Tel. 059 420411
Fax 059 253973
E-mail
info@datasensing.com

**date of
printing**
10/08/2026
01:19:40