SGSXP4-300Q88
Safety Technology – Multi-Beam Safety Light Curtain Emitter/Receiver

Technical data

Type	SGSXP4-300Q88
ID no.	3803223
Optical data	
Function	Light screen
Light type	IR
Wavelength	950 nm
Optical resolution	300 mm
Range	6…60
Scan field	900 mm
Number of beams	4
With muting function	no
Scan Code	Adjustable
Electrical data	
Operating voltage	19.2…28.8 VDC
DC rated operational current	≤ 500 mA
Max. current safe output	0.5 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	2 × OSSD, NO contacts, PNP
Protection class	III
Response time typical	< 14 ms
Mechanical data	
Design	Rectangular, SGS Safety Grid System
Dimensions	56.9 x 52 x 1006.35 mm
Housing material	Metal, AL, Yellow polyester
Pollution degree	2
Lens	plastic, PMMA
Electrical connection	Connectors, M12 × 1
Number of cores	8 Receiver, 8 Emitter
Ambient temperature	0…+55 °C
Storage temperature	-25…+70 °C
Relative humidity	15…95 %
Protection class	IP65
Power-on indication	LED, Green
Tests/approvals	
Vibration resistance	10-55 Hz bei 0,35 mm

Features

- Emitter/receiver pair
- Light beams: 4
- Resolution: 300 mm
- Receiver: M12 male connector, 8-pin
- Emitter: M12 male connector, 8-pin
- Scan codes, automatic/manual — start/restart, EDM
- Range: 60 m
- Operating voltage 24 VDC ±20 %
- Scan field: 900 mm
- SIL 3 (IEC 61508)
- PL e (ISO 13849-1)

Functional principle

The SGS multi-beam safety light barrier is a two-part system consisting of a transmitter and receiver unit.
The models are available in 2-beam (500 mm resolution), 3-beam (400 mm resolution) or 4-beam (300 mm and 400 mm resolution) versions.
The detection range extends from 0.5 m to 30 m (long-range models up to 60 m) and is reduced when using deflection mirrors.
The SGS system can be configured for trip output (automatic start/restart) or latch output (manual start/restart).
If the light beams are interrupted, two redundant safety outputs (OSSDs) switch off.
Both the transmitter and receiver have 7-segment diagnostic indicators and individual LEDs for continuous indication of the operating status, configuration and error conditions.

Technical data

Shock test	10 g bei 16 ms (6000 Zyklen)
PL acc. to DIN EN 13849-1:2008	e
Category acc. to DIN EN 13849-1:2008	4
SIL according IEC 61508	3
Useful Lifetime	20 years