

Technical drawing of the SPS 1000 receiver, showing front, side, and top views with dimensions and labels.

Front View Dimensions:

- Top width: 65.5
- Top right offset: 26
- Top center hole diameter: $\varnothing 5.2-0.2$
- Right side height: 6
- Right side width: 62
- Bottom right offset: 11
- Bottom width: 60.5
- Bottom center hole diameter: 63
- Left side height: 88

Side View Dimensions:

- Top width: 25.8
- Top right offset: 16
- Right side height: 24
- Right side width: 25
- Bottom right offset: 2
- Bottom width: 9.8

Top View Dimensions:

- Left side width: 60.5
- Bottom width: 63

Labels and Features:

- Print Type code
- SW8
- Center of optical axis
- Display LED red Adjustment aid (in receiver only)
- Dovetail mount
- LED yellow Switching state
- LED green Operation indicator
- Terminal compartment
- cable cross section $\varnothing 6...8$ mm

System components		
Emitter		SLA29-T/35/116 R=65M
Receiver		SLA29-R/35/116 R=65M
General specifications		
Effective detection range		6 ... 65 m
Threshold detection range		85 m

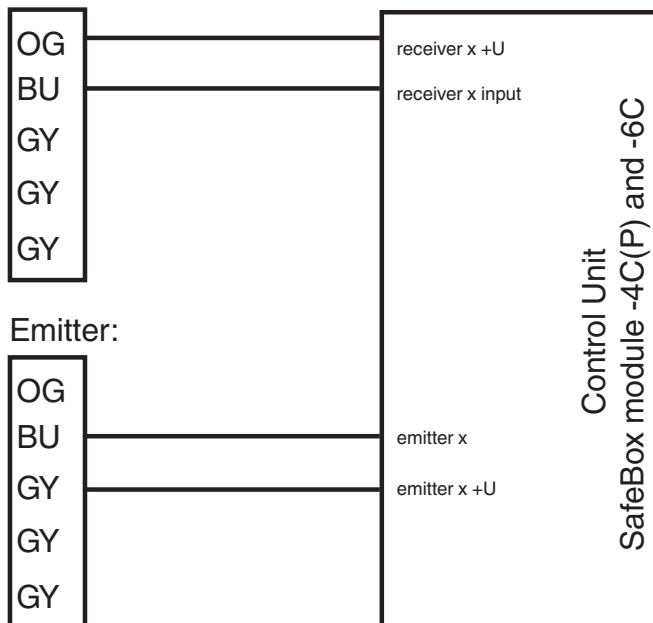
Technical Data

Light source		LED
Light type		modulated visible red light
Target size		static: 30 mm dynamic: 40 mm (at v = 1.6 m/s of the obstacle)
Alignment aid		LED red in receiver
Opening angle		< 5 °
Functional safety related parameters		
Safety Integrity Level (SIL)		SIL 3
Performance level (PL)		PL e
Category		Cat. 4
Mission Time (T _M)		20 a
PFH _d		4.4 E-10
Type		4
Indicators/operating means		
Operation indicator		LED green
Function indicator		LED yellow: 1. LED lit constantly: signal > 2 x switching point (operating reserve) 2. LED flashes: signal between 1 x switching point and 2 x switching point 3. LED off: signal < switching point
Electrical specifications		
Operating voltage	U _B	Power supply via control unit
Protection class		III , IEC 61140
Conformity		
Functional safety		ISO 13849-1
Product standard		EN 61496-1 ; IEC 61496-2
Approvals and certificates		
CE conformity		CE
UKCA conformity		UKCA
UL approval		cULus Listed
TÜV approval		TÜV SÜD
Ambient conditions		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-20 ... 70 °C (-4 ... 158 °F)
Relative humidity		max. 95 %, not condensing
Shock resistance		10 g , 16 ms ; stationary applications only
Vibration resistance		1 mm , 10 ... 55 Hz ; stationary applications only
Mechanical specifications		
Degree of protection		IP67 according to EN 60529
Connection		terminal compartment
Material		
Housing		Plastic ABS/PC , yellow
Optical face		Plastic pane
Mass		per device 70 g
Dimensions		
Height		88 mm
Width		25.8 mm
Depth		65.5 mm

Connection

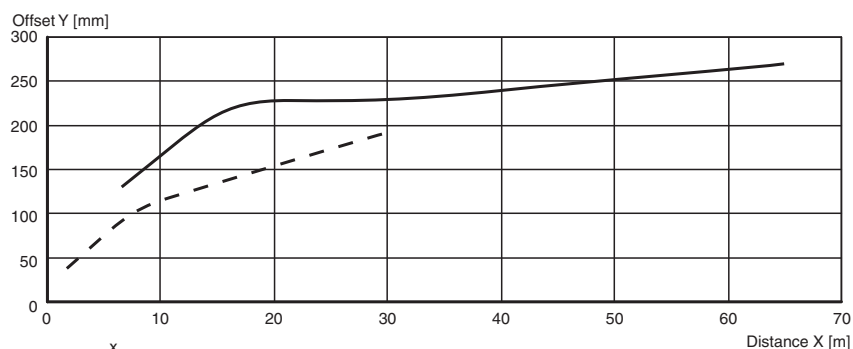
Design with terminal compartment

Receiver:

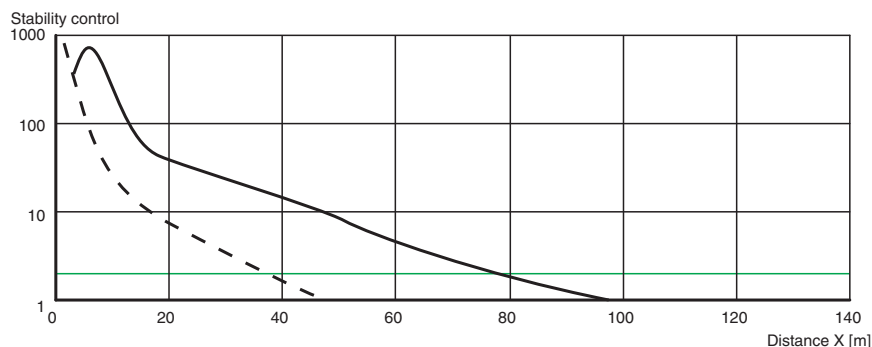


Characteristic Curve

Characteristic response curve



Relative received light strength



Release date: 2025-03-13 Date of issue: 2025-03-13 Filename: 118442_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

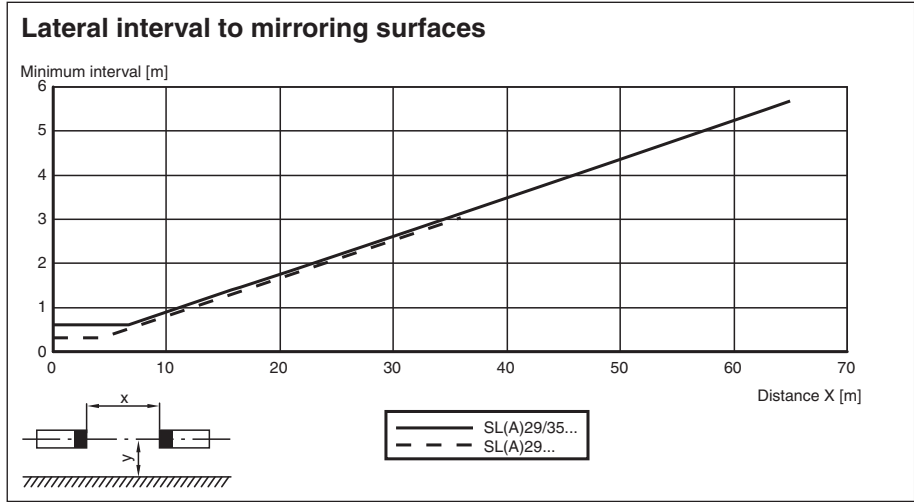
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PEPPERL+FUCHS

Characteristic Curve



Indication

Additional information

For much easier alignment even for long distance applications, an additional red LED is located in the receiver's optics:

- LED constantly illuminated:
signal strength < switching level
- LED flashes:
signal strength is between 1-fold switching level and 2-fold switching level
- LED off:
signal strength < 2-fold switching level (function reserve)

System accessories

Control units

SC4-2

SB4 (SafeBox)

Cable sockets

Option /73c:

straight: V1-G-2M-PVC

V1-G-5M-PVC

V1-G-10M-PVC

angled: V1-W-2M-PVC

V1-W-5M-PVC

V1-W-10M-PVC

Option /105:

straight: V15-G-2M-PVC

V15-G-5M-PVC

V15-G-10M-PVC

angled: V15-W-2M-PVC

V15-W-5M-PVC

V15-W-10M-PVC

Option /116: no

Mounting aids

OMH-21

OMH-22

OMH-05

OMH-MLV11-K

Further accessories

Laser alignment aid

BA SLA28

Muting Set

MS SLP/SLA28

Redirection mirror

SLA-1-M