Dimensions

SL12/SLA12

M4 / 4 deep
10
15
7.5
41.5
65
5.3
ø4.5
5.5
7
19.5
M12x1
49
2
21.3
31.8
4
3
Connector 90° adjustable position

1	Operating display green
2	Switch state yellow
3	Optical axis emitter/Optical axis receiver
4	Alignment indicator red

Connection options:

M12x1   Fixed cable

2
1

Model Number

SLA12/115

with fixed cable

Features

- Sensing range up to 10 m
- Self-monitoring (type 4 according to IEC/EN 61496-1)
- Red transmission light
- Integrated alignment aid
- Clearly visible LED functional display and pre-fault indicator on the receiver
- Sturdy housing
- Waterproof, degree of protection IP67
- Operation on control units of SB4 (SafeBox)

Accessories

SLA-1-M
Deviation mirror

OMH-06
Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

OMH-MLV12-HWG
Mounting bracket for series MLV12 sensors

OMH-MLV12-HWK
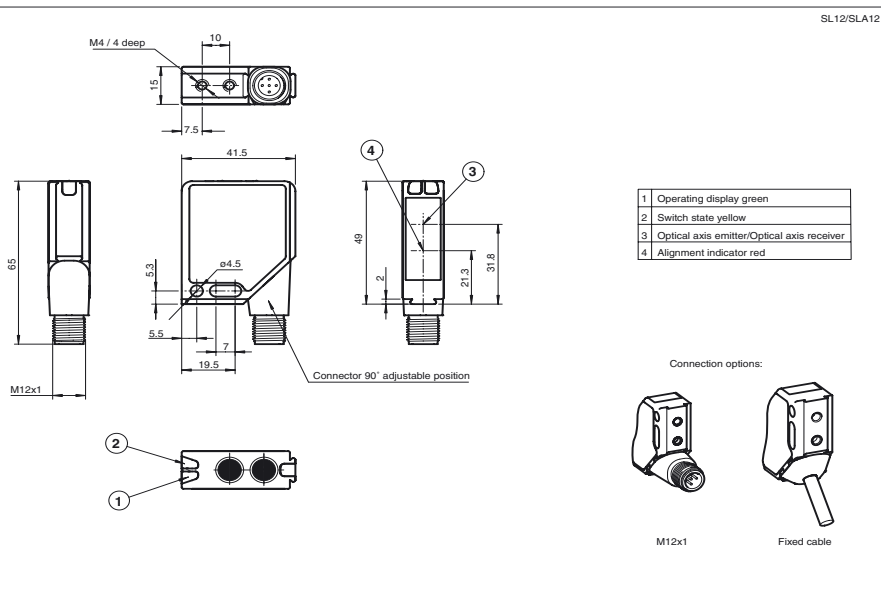Mounting bracket for series MLV12 sensors

OMH-K01
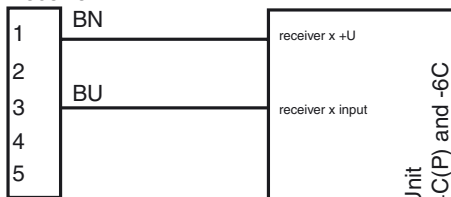dove tail mounting clamp

OMH-K02
dove tail mounting clamp

Additional accessories can be found in the Internet.

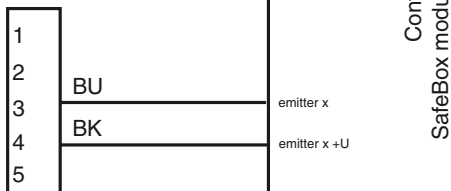## Electrical connection

Receiver:

1	BN
2	
3	BU
4	
5	

receiver x +U

receiver x input

Emitter:

1	
2	
3	BU
4	BK
5	

emitter x

emitter x +U

Control Unit
SafeBox module -4C(P) and -6C

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

Pepperl+Fuchs Group   USA: +1 330 486 0001   Germany: +49 621 776 1111   Singapore: +65 6779 9091
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Technical data

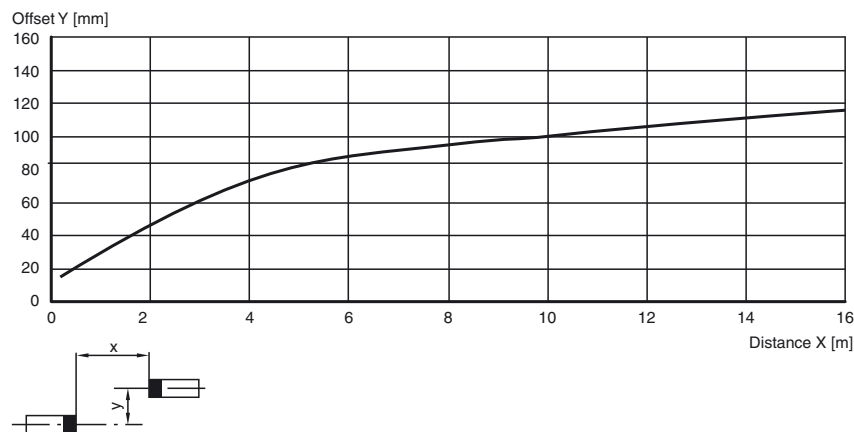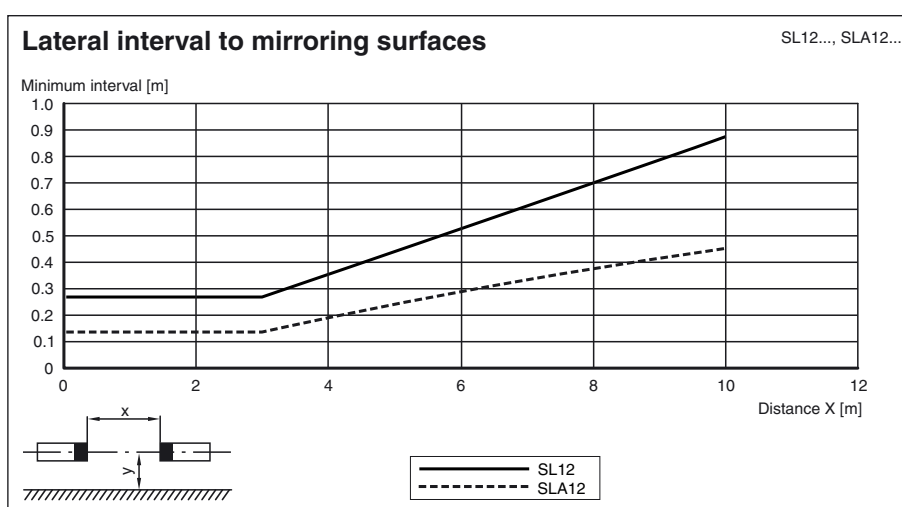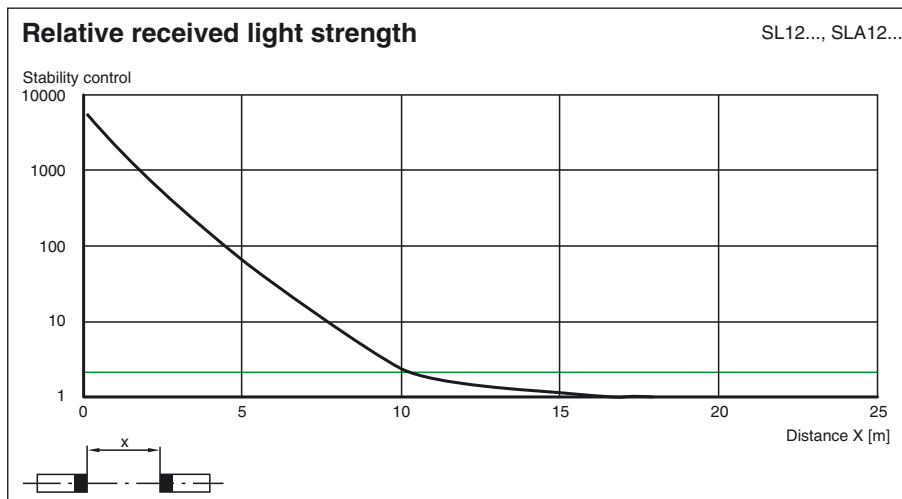| System components	
Emitter	SLA12-T/115
Receiver	SLA12-R/115
General specifications	
Effective detection range	0.2 ... 10 m
Threshold detection range	16 m
Light source	LED, 660 nm
Light type	modulated visible red light
Target size	static: 10 mm dynamic: 30 mm (at v = 1.6 m/s of the obstacle)
Alignment aid	LED red
Angle of divergence	< 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 (function 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
Conformity	
Functional safety	ISO 13849-1
Product standard	EN 61496-1 ; IEC 61496-2
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-20 ... 70 °C (-4 ... 158 °F)
Relative humidity	max. 95 %, not condensing
Mechanical specifications	
Degree of protection	IP67 according to EN 60529
Connection	2.5 m, 5-wire, fixed cable, Euronorm
Material	
Housing	Frame: nickel plated, die cast zinc, Laterals: glass-fiber reinforced plastic PC RAL 1021 (yellow)
Optical face	Plastic pane
Mass	per device 60 g
Approvals and certificates	
CE conformity	CE
CCC approval	CCC approval / marking not required for products rated ≤36 V
Approvals	TÜV

Curves/Diagrams

Characteristic response curve   SL12..., SLA12...

Offset Y [mm] vs Distance X [m]

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

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Relative received light strength

SL12..., SLA12...

Stability control

Lateral interval to mirroring surfaces

SL12..., SLA12...

Minimum interval [m]

	SL12
	SLA12

Additional information

For much easier alignment even for lond distance applications, an additional red LED is located in the receivers 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 (not for option /115)

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

Mounting aids

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

OMH-06
OMH-MLV12-HWG
OMH-MLV12-HWK
OMH-K01
OMH-K02

Further accessories

Redirection mirror
SLA-1-M

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

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