



L41E-33MA2AL41

SAFETY SINGLE-BEAM SENSORS





Ordering information

Scanning range	Model	Housing material	System part	Туре	Part no.
84 m	M30 axial	Nickel-plat- ed brass	Receiver	L41E-33MA2A	6034862

Other models and accessories → www.sick.com/L41



Detailed technical data

Features

Scanning range	84 m
Number of beams	1
Detection capability	30 mm
Optical axis	Axial
Response time	0.2 ms
Response time	0.2 ms + Test device response time

Safety-related parameters

Туре	Type 4 (IEC 61496-1) 1)
Safety integrity level	SIL 3 (IEC 61508) ¹⁾
Category	Category 4 (EN ISO 13849) 1)
Performance level	PL e (EN ISO 13849) 1)
$\ensuremath{PFH_D}$ (mean probability of a dangerous failure per hour)	8.1 x 10 ⁻¹⁰ (EN ISO 13849) ¹⁾
T _M (mission time)	20 years (EN ISO 13849)

 $^{^{1)}\,\}mathrm{Only}$ in combination with an appropriate test device, e.g., Flexi Classic or Flexi Soft.

Interfaces

Connection type	Male connector M12, 4-pin, angled
Display elements	LED

Electrical data

Operating data

Protection class	III (IEC 61140)
Power consumption	30 mA

Switching output

8 1	
Current-carrying capacity per OSSD	≤ 70 mA

Mechanical data

Design Cylindrical	
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Dimensions (diameter x length)	M30 x 100 mm
Housing material	Nickel-plated brass
Lens material	Glass
Weight	212 g

Ambient data

Enclosure rating	IP67 (EN 60529)
Ambient operating temperature	-40 °C +55 °C
Storage temperature	-40 °C +75 °C
Air humidity	15 % 95 %, Non-condensing
Vibration resistance	5 g, 10 Hz 55 Hz (IEC 60068-2-6)
Shock resistance	10 g, 16 ms (IEC 60068-2-29)

Other information

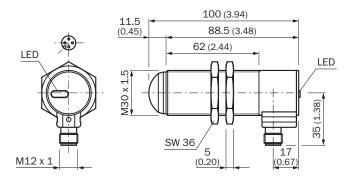
Aperture angle/receiving angle	± 2.5° / ± 2.5°
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Classifications

ECLASS 5.0	27272701
ECLASS 5.1.4	27272701
ECLASS 6.0	27272701
ECLASS 6.2	27272701
ECLASS 7.0	27272701
ECLASS 8.0	27272701
ECLASS 8.1	27272701
ECLASS 9.0	27272701
ECLASS 10.0	27272701
ECLASS 11.0	27272701
ECLASS 12.0	27272701
ETIM 5.0	EC001831
ETIM 6.0	EC001831
ETIM 7.0	EC001831
ETIM 8.0	EC001831
UNSPSC 16.0901	46171620

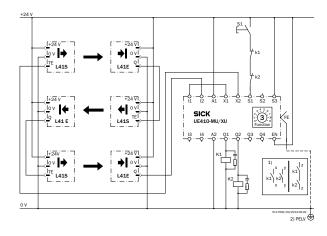
Dimensional drawing (Dimensions in mm (inch))

M30, axial, angled



Connection diagram

3 x L41 (cascaded) on Flexi Classic main unit and extension unit



Recommended accessories

Other models and accessories → www.sick.com/L41

	Brief description	Туре	Part no.		
Alignment aids					
	Adapter AR60 for M30 sensors (L4000 Systems, L41 and L21)	AR60 adapter, M30 sensors	5311529		
Deflector mirr	Deflector mirrors				
	Horizontal deflection, 75 mm x 80 mm reflector surface, Glass, Incl. mounting kit (2 x swivel mount)	PNS75-008	1026647		
	Horizontal deflection, 96 mm x 124 mm reflector surface, Glass	PSK1	1005229		

	Brief description	Туре	Part no.
	Deflector mirror for 90° deflection, mirror surface 97 mm x 80 mm, not suitable for column mounting, Glass, mounting hardware included	PSK45	5306053
Mounting brackets and plates			
40	Mounting bracket for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445
Plug connectors and cables			
	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14-050VB3XLEAX	2096235
3	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals	YG2A14-050VB3XLEAX	2095897
	Connection type head A: Female connector, M12, 4-pin, straight Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm 6 mm Head B: - Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm²	DOS-1204-G	6007302
	Connection type head A: Female connector, M12, 4-pin, angled Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm 6.5 mm Head B: - Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm²	DOS-1204-W	6007303

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

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