L41E-33MA2A

L41

SICK
Sensor Intelligence.

L41E-33MA2A | L41
SINGLE-BEAM PHOTOELECTRIC SAFETY SWITCHES

Ordering information

Type	Part no.
L41E-33MA2A	6034862

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

Detailed technical data

Features

Scanning range	0 m ... 60 m
Number of beams	1
Optical axis	Axial

Safety-related parameters

Type	Type 4 (IEC 61496-1) [1]
Safety integrity level	SIL3 (IEC 61508) [1] SILCL3 (EN 62061) [1]
Category	Category 4 (EN ISO 13849) [1]
Performance level	PL e (EN ISO 13849) [1]
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] Only in combination with an appropriate test device, e.g., Flexi Classic or Flexi Soft.

Interfaces

Connection type	Male connector M12, 4-pin, angled
Diagnostic display	LED

Electrical data

Operating data

Protection class	III (IEC 61140)
Power consumption	30 mA

Switching output

Current-carrying capacity per OSSD	≤ 70 mA

Mechanical data

Design	Cylindrical
Dimensions (diameter x length)	M30 x 100 mm
Housing material	Nickel-plated brass

Lens material	Glass
Weight	212 g

Ambient data

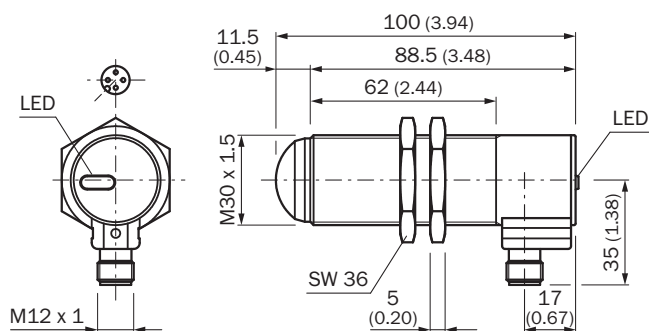| Enclosure rating	IP67 (EN 60529)
Ambient operating temperature	–40 °C ... +55 °C
Storage temperature	–40 °C ... +75 °C
Air humidity	15 % ... 95 %, Non-condensing
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 60068-2-6)
Shock resistance	10 g, 16 ms (IEC 60068-2-29)

Other information

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

Classifications

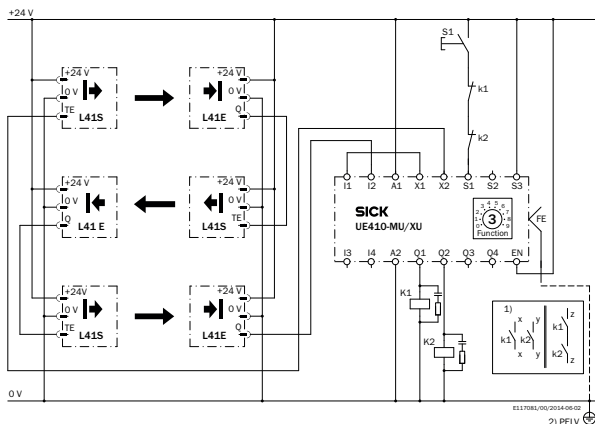| ECl@ss 5.0	27272701
ECl@ss 5.1.4	27272701
ECl@ss 6.0	27272701
ECl@ss 6.2	27272701
ECl@ss 7.0	27272701
ECl@ss 8.0	27272701
ECl@ss 8.1	27272701
ECl@ss 9.0	27272701
ETIM 5.0	EC001831
ETIM 6.0	EC001831
UNSPSC 16.0901	46171620

Dimensional drawing (Dimensions in mm (inch))

M30 axial

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Connection diagram

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

Recommended accessories

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| Brief description	Type	Part no.
Mounting brackets and plates		
Mounting bracket for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445
Plug connectors and cables		
Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A14-050VB3XLEAX	2096235
Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG2A14-050VB3XLEAX	2095897
Head A: female connector, M12, 4-pin, straight Head B: - Cable: unshielded	DOS-1204-G	6007302
Head A: female connector, M12, 4-pin, angled Head B: - Cable: unshielded	DOS-1204-W	6007303
Alignment aids		
Laser alignment aid for various sensors, laser class 2 (IEC 60825). Do not look into the beam!	AR60	1015741
Adapter AR60 for M30 sensors (L4000 Systems, L41 and L21)	AR60 adapter, M30 sensors	5311529

Brief description	Type	Part no.
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
Deflector mirror for 90° deflection, mirror surface 97 mm x 80 mm, not suitable for column mounting, Glass, mounting hardware included	PSK45	5306053

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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