L41S-11MA1A

L41

SICK
Sensor Intelligence.

SAFETY SINGLE-BEAM SENSORS

Ordering information

Scanning range	Model	Housing material	System part	Type	Part no.
7 m	M18 radial	Nickel-plated brass	Sender	L41S-11MA1A	6034868

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

Detailed technical data

Features

Light source	LED
Type of light	Visible red light
Scanning range	7 m
Number of beams	1
Detection capability	30 mm
Optical axis	Radial
Response time	0.2 ms
Response time	0.2 ms + Test device response time

Safety-related parameters

Type	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]
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, straight
Display elements	LED

Electronics

Operating data

Protection class	III (IEC 61140)
Power consumption	20 mA

Mechanics

Design	Cylindrical
Dimensions (diameter x length)	M18 x 107.7 mm
Housing material	Nickel-plated brass
Lens material	Glass
Weight	67 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 60068-2-27)

Other information

Light source	LED
Type of light	Visible red light
Wave length	660 nm
Aperture angle/receiving angle	± 2.5° / ± 2.5°

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))

M18, radial, straight
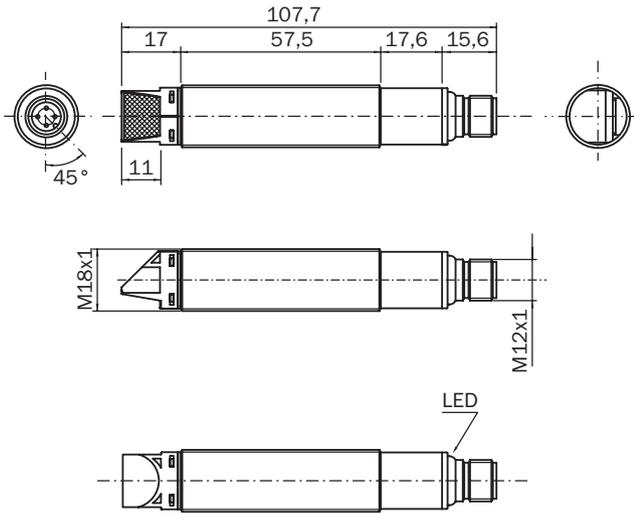
Connection diagram

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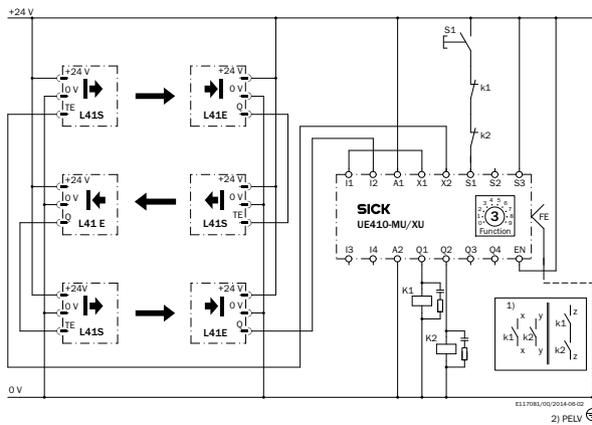
Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	• **Description:** Mounting bracket for M18 sensors • **Material:** Steel • **Details:** Steel, zinc coated • **Items supplied:** Without mounting hardware • **Suitable for:** GR18, V180-2, V18, W15, Z1, Z2	BEF-WN-M18	5308446

	Brief description	Type	Part no.
Others			
	• **Connection type head A:** Female connector, M12, 4-pin, straight, A-coded • **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, A-coded • **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
	• **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, Uncontaminated zones	YF2A14-050VB3XLEAX	2096235
	• **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, Uncontaminated zones	YG2A14-050VB3XLEAX	2095897

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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