



L41S-21MA1A, L41E-21MA1A

L41

SAFETY SINGLE-BEAM SENSORS

SICK
Sensor Intelligence.



Ordering information

System part	Type	part no.
receiver	L41E-21MA1A	6034867
sender	L41S-21MA1A	6034866

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

Detailed technical data

Features

Scanning range	16 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

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)	8.1×10^{-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	30 mA / 20 mA

Electronics - Switching output

Current-carrying capacity per OSSD	≤ 70 mA
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Mechanics

Design	Cylindrical
Dimensions (diameter x length)	M18 x 97.7 mm
Housing material	Nickel-plated brass

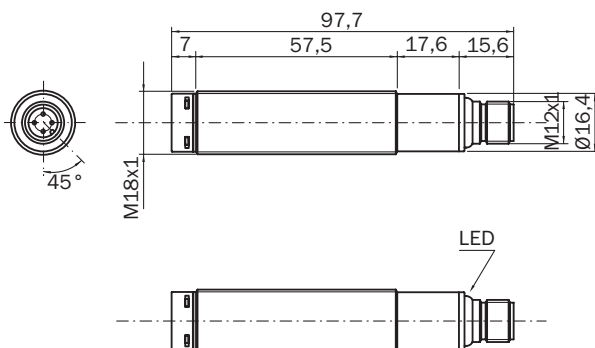
Ambient data

Other information

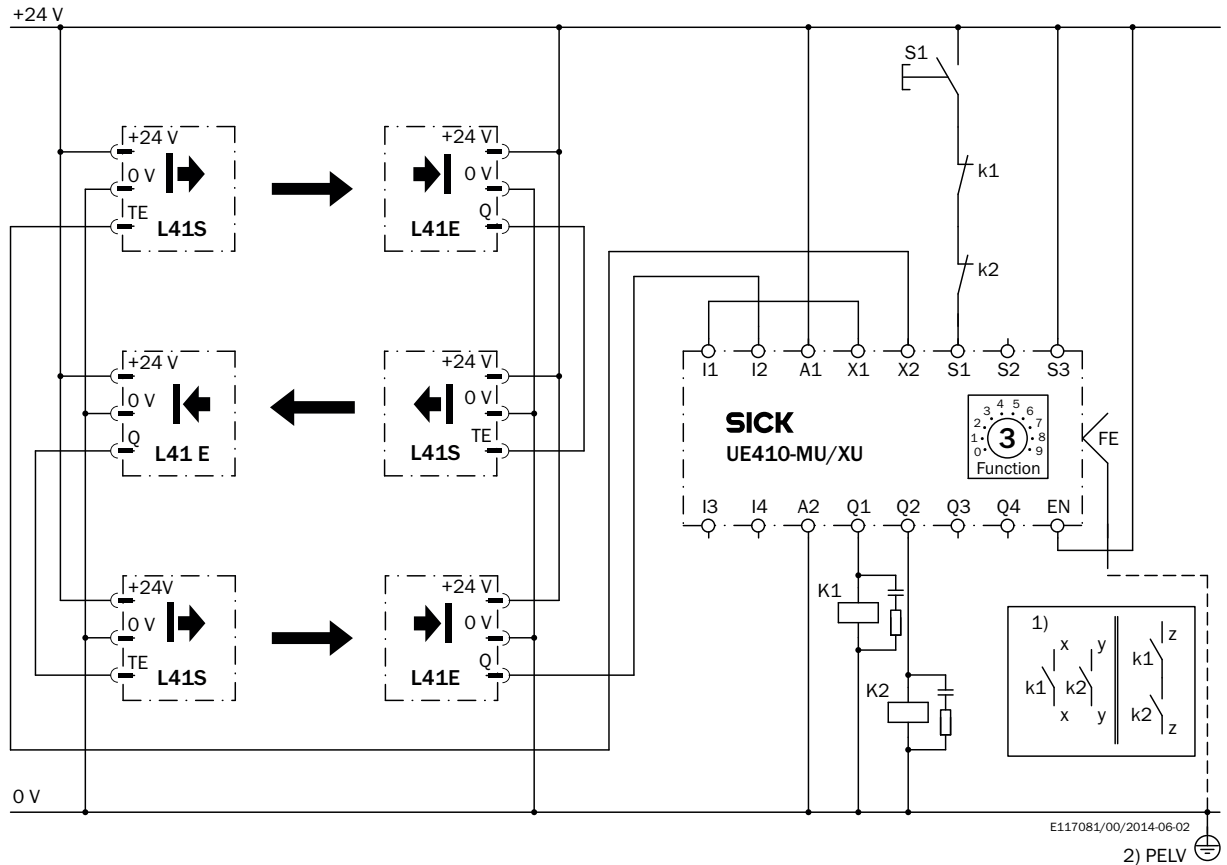
Classifications

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 M18, axial, straight










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



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

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	Brief description	Type	part no.
reflectors and optics			
		PNS75-008	1026647
		PSK1	1005229
		PSK45	5306053
connectors and cables			
	<ul style="list-style-type: none"> • 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
	<ul style="list-style-type: none"> • 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
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: $\leq 0.75 \text{ mm}^2$ 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: $\leq 0.75 \text{ mm}^2$ 	DOS-1204-W	6007303

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com