C4IT-04214ABA01KA0

TWINOX4

SAFETY LIGHT CURTAINS

SICK
Sensor Intelligence.

C4IT-04214ABA01KA0 | TWINOX4

SAFETY LIGHT CURTAINS

Illustration may differ

CE · c(UL)us · UKCA

Ordering information

Resolution	Protective field height	Type	Part no.
14 mm	420 mm	C4IT-04214ABA01KA0	1094834

This article includes 1 twin stick. Please order 2 for a functioning TWINOX4 system.

Other models and accessories ➜ www.sick.com/TWINOX4

Detailed technical data

Features

System part	1 Twin-Stick
Resolution	14 mm
Protective field height	420 mm
Scanning range	4.5 m
Response time	14 ms
Items supplied	1 twin stick with pre-mounted connecting cable, 10 m Test rod with diameter corresponding to the resolution of the safety light curtain Safety instruction Mounting instructions Operating instructions for download

Safety-related parameters

Type	Type 4 (IEC 61496-1)
Safety integrity level	SIL 3 (IEC 61508)
Category	Category 4 (ISO 13849-1)
Performance level	PL e (ISO 13849-1)
PFH_D (mean probability of a dangerous failure per hour)	4.3×10^{-9}
T_M (mission time)	20 years (ISO 13849-1)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

Functions

	Functions	Delivery status
Protective operation	✓	
Restart interlock	✓	Deactivated
External device monitoring (EDM)	✓	Deactivated
Beam coding	✓	Code 1

Interfaces

System connection	
Connection type	Connecting cable (10 m) with flying leads, 5-wire
Permitted cable length	≤ 20 m [1]
Permitted cross-section	≥ 0.34 mm²
Display elements	LEDs

[1] The 10 m connecting cable attached to the twin stick can either be shortened as required or extended to a maximum of 20 m. the permissible wire cross-section must be observed.

Electrical data

Protection class	III (IEC 61140)
Supply voltage V_S	24 V DC (19.2 V … 28.8 V)
Residual ripple	≤ 10 % [1]
Power consumption	Approx. 193 mA
Power consumption typical	3.7 W (DC)
Output signal switching devices (OSSDs)	
Type of output	PNP semiconductors, short-circuit protected, cross-circuit monitored [2]
ON state, switching voltage HIGH	24 V DC (V_S – 2.25 V DC … V_S)
OFF state, switching voltage LOW	≤ 2 V DC
Current-carrying capacity per OSSD	≤ 300 mA

[1] Within the limits of V_S.

[2] Applies to the voltage range between –30 V and +30 V.

Mechanical data

Housing cross-section	40.5 mm x 20 mm
Housing material	Stainless steel V4A (1.4404, 316L)
Average roughness R_a	≤ 0.8 µm
Front screen material	Chemically prestressed float glass
Material of the end caps	Stainless steel V4A (1.4404, 316L)
Seal material	EPDM
PCB material	Glass fiber reinforced epoxy resin with flame retardant TBBPA
External material of the connecting cable	TPU (PUR)

Ambient data

Enclosure rating	IP65 (IEC 60529) IP67 (IEC 60529)
Ambient operating temperature	–20 °C … +55 °C
Storage temperature	–25 °C … +70 °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 (EN 60068-2-27)

Other information

Wave length	850 nm
Type of light	Near-infrared (NIR), invisible

Classifications

eCl@ss 5.0	27272704
eCl@ss 5.1.4	27272704
eCl@ss 6.0	27272704
eCl@ss 6.2	27272704
eCl@ss 7.0	27272704
eCl@ss 8.0	27272704
eCl@ss 8.1	27272704
eCl@ss 9.0	27272704
eCl@ss 10.0	27272704
eCl@ss 11.0	27272704
eCl@ss 12.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
UNSPSC 16.0901	46171620

Dimensional drawing (Dimensions in mm (inch))
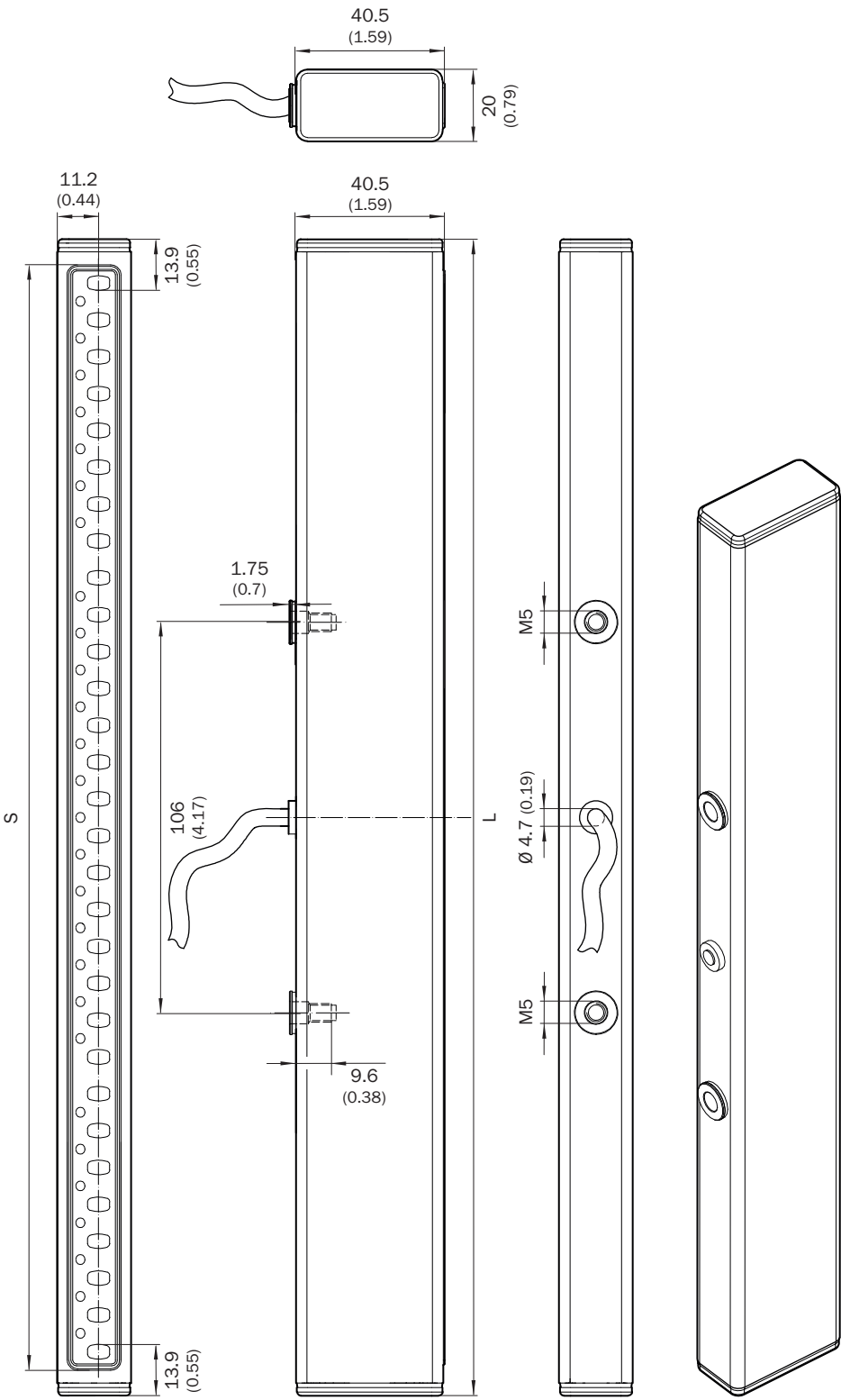
Protective field height	Housing length
300	314
420	434

Protective field height	Housing length
600	614

Recommended accessories

Other models and accessories ➜ www.sick.com/TWINOX4

	Brief description	Type	Part no.
Terminal and alignment brackets			
	1 piece, TWINOX4 bracket, stainless steel, for 1 twin stick, ± 2° adjustment, Bracket material: stainless steel V4A (1.4404, 316L), Seal material: EPDM	BEF-4SHAHMES1	2101024

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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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