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Product data sheet



FLN-OSSD1000105

Flexi Loop

SAFE SERIES CONNECTION / SAFETY CONTROLLERS

SICK
Sensor Intelligence.

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FLN-OSSD1000105 | Flexi Loop

SAFE SERIES CONNECTION / SAFETY CONTROLLERS



Ordering information

Type	Part no.
FLN-OSSD1000105	1061709

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

Detailed technical data

Safety-related parameters

Safety integrity level	SIL3 (IEC 61508) SILCL3 (EN 62061)
Category	Category 4 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
PFH_D (mean probability of a dangerous failure per hour)	0.76×10^{-9} (EN ISO 13849)
T_M (mission time)	20 years (EN ISO 13849)

Functions

Diagnostic and monitoring functions	
Cross-circuit	Monitoring via OSSD device
Short-circuit	Monitoring via OSSD device
Discrepancy errors	Monitoring via Flexi Loop node
Sequence errors	Monitoring via Flexi Loop node

Interfaces

Connection usage	
Safety device connection	For safety sensor with dual-channel OSSD outputs, With standard input
Flexi Loop input	To connect to a Flexi Loop predecessor node or to connect the Flexi Loop line to the Flexi Soft safety controller.
Flexi Loop output	To connect to a Flexi Loop successor node or to terminate the Flexi Loop line with the Flexi Loop terminator.
Connection type	
Safety device connection	Female connector M12, 5-pin
Flexi Loop input	Male connector M12, 5-pin
Flexi Loop output	Female connector M12, 5-pin
Number of non-safe inputs	1
Number of non-safe outputs	0
Power supply output for external devices	✓

Electrical data

Operating data

Protection class	III (EN 61140)

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Type of supply voltage	PELV or SELV
Supply voltage V_s	24 V DC (16.8 V DC ... 30 V DC)
Power consumption	45 mA

OSSD inputs

Input voltage	
HIGH	13 V DC ... 30 V DC
LOW	–5 V DC ... 5 V DC
Input current	
HIGH	3.5 mA ... 6.2 mA
LOW	–2.5 mA ... 2.5 mA

Non-safe inputs

Switching voltage	
HIGH	13 V DC ... 30 V DC
LOW	0 V DC ... 5 V DC
Input current	≤ 6.2 mA

Power supply output for external devices

Supply voltage	24 V DC (16.8 V DC ... 30 V DC)
Output current	≤ 3.9 A

Mechanical data

Dimensions (W x H x D)	68.15 mm x 48 mm x 18 mm
Weight	28 g (± 5 %)

Ambient data

Enclosure rating	IP65 (EN 60529) IP67 (EN 60529)
Ambient operating temperature	–25 °C ... +55 °C
Storage temperature	–25 °C ... +70 °C

Classifications

ECl@ss 5.0	27371990
ECl@ss 5.1.4	27371990
ECl@ss 6.0	27371819
ECl@ss 6.2	27371819
ECl@ss 7.0	27371819
ECl@ss 8.0	27371819
ECl@ss 8.1	27371819
ECl@ss 9.0	27371819
ECl@ss 10.0	27371819
ECl@ss 11.0	27371819
ETIM 5.0	EC001449
ETIM 6.0	EC001449
ETIM 7.0	EC001449
UNSPSC 16.0901	41113704

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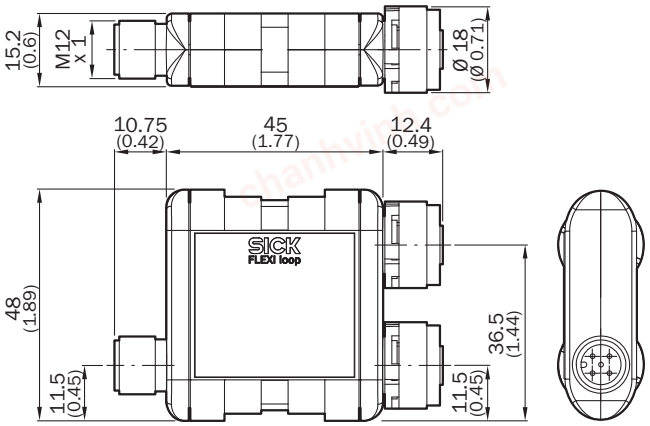
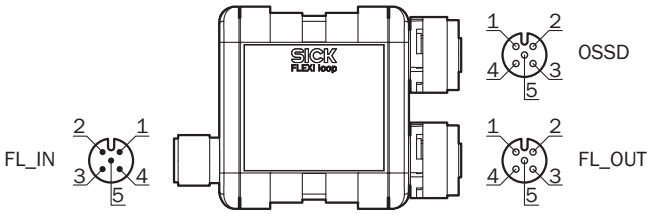
Dimensional drawing (Dimensions in mm (inch))

OSSD, EMSS



PIN assignment



The FL_IN pin assignment is only relevant for the first loop node in a safe series connection when connected to Flexi Soft. Additional Flexi Loop nodes are connected to FL_OUT using standardized cables with M12 plug connectors.

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	1 piece, Flexi Loop fixing clip	C-Fix bracket	2068830

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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:

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