Safeguard Detector
WTB4F

SYS/SGD-W4154020101FX3

Safeguard Detector

SAFETY SYSTEMS FOR AUTOMATING MATERIAL FLOWS

SICK
Sensor Intelligence.

SYS/SGD-W4154020101FX3 | Safeguard Detector
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Ordering information

Type	Part no.
SYS/SGD-W4154020101FX3	1129654

Included in delivery: FX3-MPL000001 (1), FX3-CPU000000 (1), FX3-XTIO84002 (1), SOW/SGD-W400402010 (1), WTB4F-P-213111A0ZZZ (2)

With purchase, you accept the product description available under Downloads > Documentation in connection with the General Terms and Conditions for the Supply of Software Products (AVB Software SICK).

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

Detailed technical data

Features

Reference object	Object with 90% remission factor (complies with standard white according to DIN 5033)
Minimum distance between set sensing range and background (black 6% / white 90%)	30 mm, at a distance of 100 mm
System requirements	The project file requires a Flexi Soft FX3-CPUx main module (version: 4.0 or higher), Flexi Soft FX3-XTIO I/O modules (version: 3.0 or higher) as well as Flexi Soft Designer (version: 1.9.6 or higher).

Safety-related parameters of the safety system

Category	Category 3 (EN ISO 13849-1)
Performance level	PL d (EN ISO 13849-1)
Performance class SRS/SRSS	D (IEC TS 62998-1)
PFH$_D$ (mean probability of a dangerous failure per hour)	1.0×10^{-7}

Flexi Soft safety controller

Note	The Flexi Soft station has a modular design and can be customized based on the operator's requirements. At least one main module, the right system plug, and at least one I/O module must be used.
Flexi Soft station construction	Modular 1 main module 1 system plug 0 ... 2 gateways 1 ... 12 expansion modules
Module interconnection	Internal bus (FLEXBUS+)
Configuration method	Via software
Configuration software	Flexi Soft Designer
Example program	You can find an example application with the Safeguard Detector function block in the download area.
Number of connectable sensor pairs	Approx. 12 (depending on logic/number of logic modules used)
Connection type	Spring terminals
Pulse rate of the sensors	10 Hz
Max. safety controller cycle time	
Pulse rate 10 Hz	≤ 28 ms

Pulse rate 2 Hz	≤ 148 ms
Supply voltage V$_S$	24 V DC (16.8 V … 30 V)
Protection class	III (EN 50178)
Enclosure rating	IP20 (EN 60529)
Ambient operating temperature	−25 °C … 55 °C
Fieldbus, industrial network	CANopen, EtherCAT$^®$, EtherNet/IP™, Modbus TCP, PROFIBUS DP, PROFINET, DeviceNet™
Type of fieldbus integration	Via gateway

Classifications

|	
eCl@ss 5.0	27279090
eCl@ss 5.1.4	27279090
eCl@ss 6.0	27279090
eCl@ss 6.2	27279090
eCl@ss 7.0	27279090
eCl@ss 8.0	27279090
eCl@ss 8.1	27279090
eCl@ss 9.0	27279090
eCl@ss 10.0	27279090
eCl@ss 11.0	27279090
eCl@ss 12.0	27279090
ETIM 5.0	EC001449
ETIM 6.0	EC001449
ETIM 7.0	EC001449
ETIM 8.0	EC001449
UNSPSC 16.0901	32151705

Dimensional drawing (Dimensions in mm (inch))

FX3-XTIO, FX3-XTDI
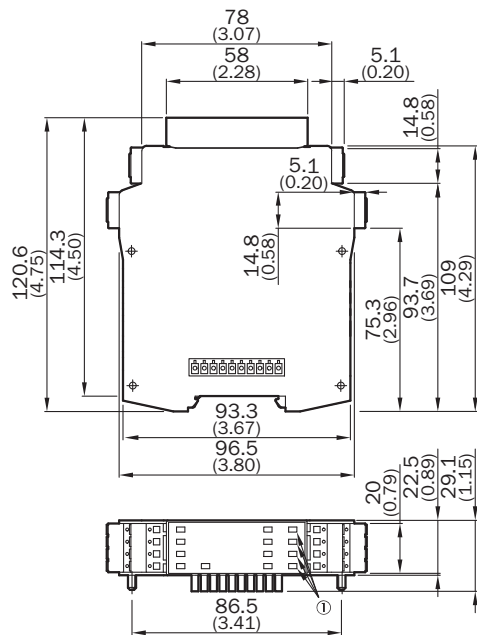
① Only valid for FX3-XTIO

FX3-CPU0
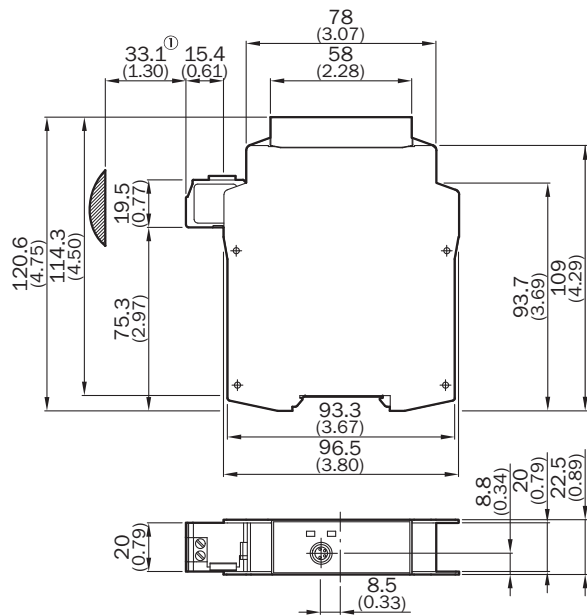
① Approximate connector range

12
(0.47)

16 (0.63)

39.5 (1.56)

28.5 (1.12)

5.5 (0.22)

12.1 (0.48)

11 (0.43)

② ①

⑥ ⑤

9 (0.35)

③④
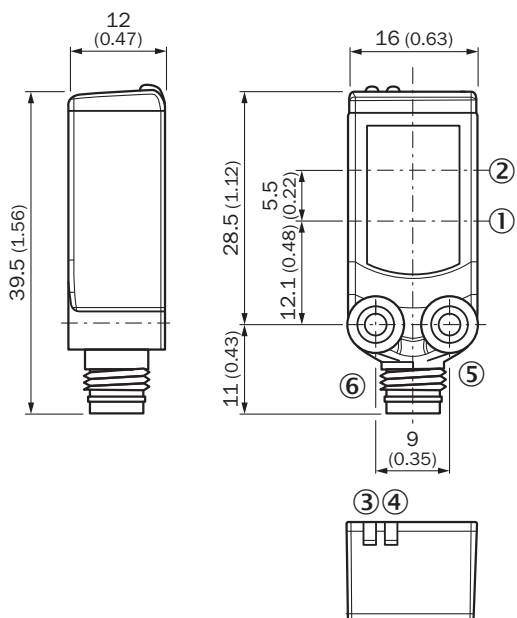
SICK AT A GLANCE

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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