FC1A-DZ2A1AZZZS03

FlexChain

SWITCHING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.

FC1A-DZ2A1AZZZS03 | FlexChain

SWITCHING AUTOMATION LIGHT GRIDS

Illustration may differ

Ordering information

Type	Part no.
FC1A-DZ2A1AZZZS03	1121081

Included in delivery: M8 4-PIN BUS CONNECTION MALE CONNECTOR (2)

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

Detailed technical data

Features

Special feature	Special device
Device version	FlexChain Host
Sensor principle	Sender/receiver Photoelectric retro-reflective sensor Photoelectric proximity sensor Light grid system
Configuration	USB connection for easy configuration of the FlexChain with SOPAS ET, the engineering tool from SICK
Parameterization	Sensor parameterization Zone definition Measurement functions Logic function Interface parameterization Diagnostics functions
Included with delivery	1 × FlexChain Host 1 × Quick Start Guide 2 x FlexChain terminators (2119481)

Mechanics/electronics

Supply voltage V_s	24 V [1] [2]
Current consumption I_max. (at maximum number of guests)	600 mA @ 24 V
Output current I_max.	≤ 100 mA
Output load, capacitive	100 µF
Output load, Inductive	1 H
Initialization time	< 1 s
Dimensions (W x H x D)	109.4 mm x 25 mm x 35 mm
Connection type	Cable with plug M12, 5-pin [3] [4]

[1] ± 20 %.

[2] Reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

[3] PLC communication control.

[4] 2x cables.

Housing material	Plastic (ABS)
Synchronization	Cable
Enclosure rating	IP65, IP67
Circuit protection	U_V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Protection class	III
Weight	Approx. 170 g

[1] ± 20 %.

[2] Reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

[3] PLC communication control.

[4] 2x cables.

Performance

Response time	≤ 35 ms [1]

[1] Depending on system configuration.

Communication interface

IO-Link	✓, IO-Link V1.1
Data transmission rate	230,4 kbit/s (COM3)
Cycle time	≥ 2.3 ms
Process data length	32 Byte
CANopen	✓
Data transmission rate	50 kbit/s …1 Mbit/s
Inputs/outputs	CANopen + 1 x I/O + 1 x Q (IO-Link)
Digital output	Q_1, Q_2
Number	2
Digital input	In_1
Number	1

Ambient data

| Shock resistance	Single shocks 30 g, 11 ms 6 per axle, continuous shocks 25 g, 6 ms, 1,000 per axis
Vibration resistance	Sinusoidal oscillation 20-2,000 Hz 10 g, 3 h per axle
EMC	EN 61000-6-2, EN 61000-6-3
Ambient operating temperature	–25 °C … +50 °C
Ambient temperature, storage	–25 °C … +70 °C

Smart Task

Smart Task name	Base logics

Classifications

ECLASS 5.0	27242608
ECLASS 5.1.4	27242608
ECLASS 6.0	27242608
ECLASS 6.2	27242608
ECLASS 7.0	27242608
ECLASS 8.0	27242608

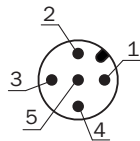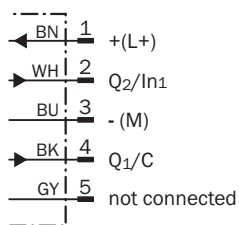|	
ECLASS 8.1	27242608
ECLASS 9.0	27242608
ECLASS 10.0	27242608
ECLASS 11.0	27242608
ECLASS 12.0	27242608
ETIM 5.0	EC001604
ETIM 6.0	EC001604
ETIM 7.0	EC001604
ETIM 8.0	EC001604
UNSPSC 16.0901	39121528

Dimensional drawing (Dimensions in mm (inch))
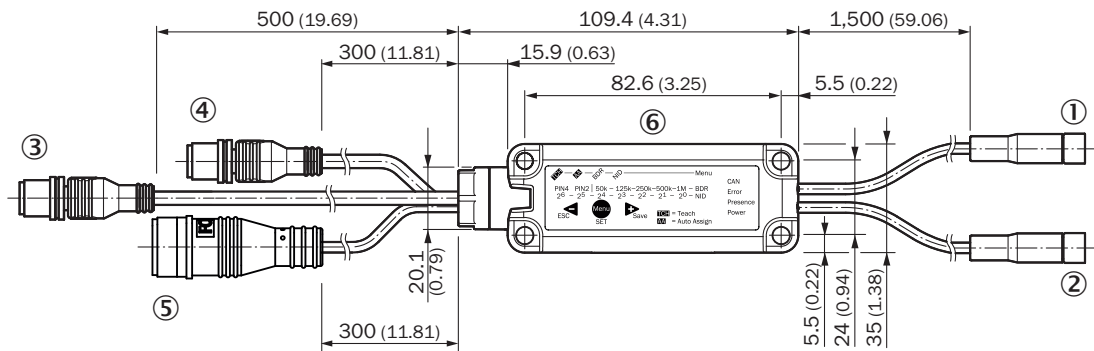
① Port A, cable with female connector, M8, 4-pin
② Port B, cable with female connector, M8, 4-pin
③ PLC, cable with male connector, M12, 5-pin
④ CANopen, cable with male connector, M12, 5-pin
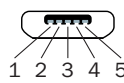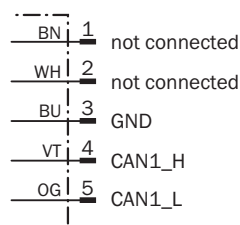⑤ USB Micro-B, cable with female connector, M16, 5-pin
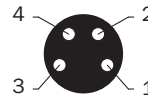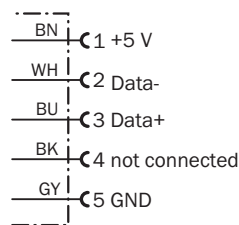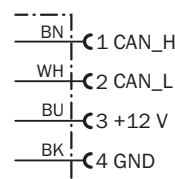⑥ Control panel

Connection type and diagram

PLC
IO-Link (Q)
1 x I/O

BN	1	+(L+)
WH	2	Q_2/In$_1$
BU	3	- (M)
BK	4	Q_1/C
GY	5	not connected

CANopen

BN	1	not connected
WH	2	not connected
BU	3	GND
VT	4	CAN1_H
OG	5	CAN1_L
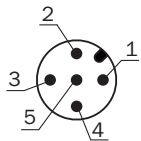
USB Micro-B
(Female connector)

BN	1	+5 V
WH	2	Data-
BU	3	Data+
BK	4	not connected
GY	5	GND

Port A/B
(Female connector)

BN	1	CAN_H
WH	2	CAN_L
BU	3	+12 V
BK	4	GND

Recommended accessories

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

	Brief description	Type	Part no.
Connection modules			
	FlexChain Adapter	FCA-A1Z2A1AZ	6073035
	FlexChain Booster	FCA-BZZ2A1A1	6073036
	• **Connection type head A:** Male connector, USB-A • **Connection type head B:** Male connector, Micro-B • **Signal type:** USB 2.0 • **Cable:** 2 m • **Description:** USB 2.0, unshielded	USB cable	6036106
Sensor Integration Gateway			
	• **Further functions:** Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions • **Connection CONFIG:** 1 x M8, 4-pin female connector, USB 2.0 (USB-A) • **Logic editor:** yes • **Communication interface:** IO-Link, USB, Ethernet, PROFINET, REST API • **Product category:** IO-Link Master	SIG200-0A0412200	1089794
	• **Further functions:** Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions • **Connection CONFIG:** 1 x M8, 4-pin female connector, USB 2.0 (USB-A) • **Logic editor:** yes • **Communication interface:** IO-Link, USB, Ethernet, REST API • **Product category:** IO-Link Master	SIG200-0A0G12200	1102605

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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