

AXL F SSDI8/4 1F - Safety module



2702263

<https://www.phoenixcontact.com/us/products/2702263>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Axioline F, Digital input module, Functional safety, SafetyBridge technology, Digital inputs: 4 (for 2-channel assignment), 8 (for 1-channel assignment), 24 V DC, connection technology: 2-, 3-, 4-conductor, degree of protection: IP20

Product description

The safety module is an input module from the Axioline F product range for use in a SafetyBridge technology V3 system. The safety module can be used as part of an Axioline F station at any point within an EtherCAT®, EtherNet/IP™, Sercos, Modbus, PROFINET or PROFIBUS system. The module has four safe digital inputs for two-channel assignment or eight safe digital inputs for single-channel assignment. Depending on the installation and parameterization, in the SafetyBridge technology V3 system the safety module can achieve the following safety integrity:

- Up to SIL 3 according to standard EN 61508
- Up to SIL 3 according to standard EN IEC 62061
- Up to Cat. 4/PL e according to standard EN ISO 13849-1

Your advantages

- Cost-effective system configuration, as no safety PLC or safe fieldbus system is required
- Flexible use, thanks to compatibility with all bus couplers from the Axioline F range
- Reduced installation time, thanks to fast wiring and easy handling
- Easy configuration using the free SAFECONF software
- Up to Cat. 4/PL e in accordance with EN ISO 13849-1, SIL 3 in accordance with EN IEC 62061, SIL 3 in accordance with IEC 61508

Commercial data

Item number	2702263
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DN03
Product key	DNA521
GTIN	4055626066813
Weight per piece (including packing)	347.6 g
Weight per piece (excluding packing)	347.6 g
Customs tariff number	85389091
Country of origin	DE

AXL F SSDI8/4 1F - Safety module

2702263

<https://www.phoenixcontact.com/us/products/2702263>



Technical data

Dimensions

Dimensional drawing	
	53.6
	54
Width	53.6 mm
Height	126.1 mm
Depth	54 mm
Note on dimensions	Housing dimensions

Notes

Note on application

Note on application Only for industrial use

Interfaces

Axioline F local bus

No. of channels	1
Connection method	Bus base module

System properties

Module

Input address area	8 Byte
Output address area	8 Byte
Required parameter data	1 Byte
Required configuration data	7 Byte

Input data

Digital:

Input name	Digital inputs
Description of the input	IEC 61131-2 type 3
Number of inputs	4 (for 2-channel assignment) 8 (for 1-channel assignment)
Cable length	max. 1000 m (200 m from the clock output to the safe input (total based on forward and return path))
Connection method	Push-in connection
Connection technology	2-, 3-, 4-conductor
Input voltage	24 V DC (via clock outputs T1 and T2 or external supply)

AXL F SSDI8/4 1F - Safety module

2702263

<https://www.phoenixcontact.com/us/products/2702263>



Input voltage range	-3 V DC ... 30.2 V DC
Nominal input voltage U_{IN}	24 V DC
Nominal input current at U_{IN}	typ. 4.2 mA
Typical input current per channel	4.2 mA
Input filter time	1.5 ms
	3 ms (Default)
	5 ms
	15 ms

Product properties

Product type	I/O component
Product family	Axioline F
Application	Functional safety
	SafetyBridge technology
Type	modular

Electrical properties

Transmission medium	Copper
Potentials	
Protective circuit	Protection against polarity reversal, EMC protective circuit, undervoltage detection

Potentials: Axioline F local bus supply (U_{Bus})

Supply voltage	5 V DC (via bus base module)
Current draw	max. 310 mA

typ. 280 mA (all inputs set; supply by U_I of 19.2 V DC ... 30 V DC)

Potentials: Supply for digital input modules (U_I)

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30.2 V DC (including all tolerances, including ripple)
Current draw	typ. 9 mA (all inputs set; supply from U_I with 30 V DC; without supply to the sensors via clock supplies T1 and T2)

Connection data

Connection technology	
Connection name	Axioline F connector

Conductor connection

Connection method	Push-in connection
Conductor cross-section rigid	0.2 mm ² ... 1.5 mm ²
Conductor cross-section flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross-section AWG	24 ... 16
Stripping length	8 mm

Axioline F connector

AXL F SSDI8/4 1F - Safety module



2702263

<https://www.phoenixcontact.com/us/products/2702263>

Connection method	Push-in connection
Conductor cross-section, rigid	0.2 mm ² ... 1.5 mm ²
Conductor cross-section, flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross-section AWG	24 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-35 °C ... 60 °C (Mounting position: any)
Degree of protection	IP20
Air pressure (operation)	70 kPa ... 108 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (up to 3500 m above sea level)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 75 % (on average, 85% infrequently, non-condensing)
Permissible humidity (storage/transport)	10 % ... 75 % (non-condensing)

Standards and regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
------------------	---------------------------------------

Mounting

Mounting type	DIN rail mounting
---------------	-------------------

AXL F SSDI8/4 1F - Safety module

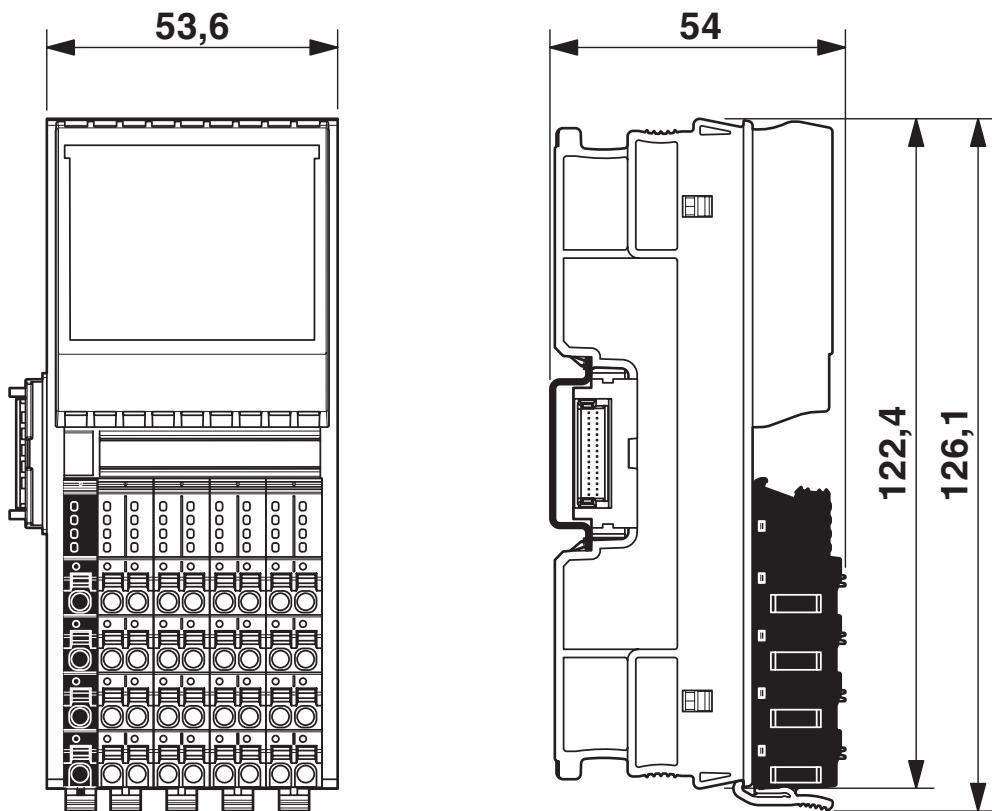


2702263

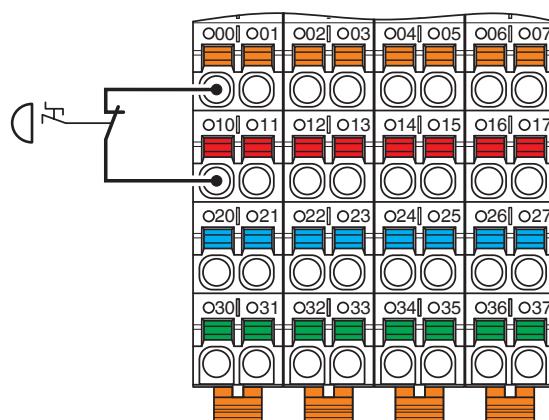
<https://www.phoenixcontact.com/us/products/2702263>

Drawings

Dimensional drawing



Connection diagram



Connection example for an emergency stop circuit

AXL F SSDI8/4 1F - Safety module

2702263

<https://www.phoenixcontact.com/us/products/2702263>



Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2702263>



DNV GL

Approval ID: TAA00000DF

BSH

Approval ID: 840



cULus Listed

Approval ID: E238705



Functional Safety

Approval ID: 968/FSP 2449.00/22

AXL F SSDI8/4 1F - Safety module

2702263

<https://www.phoenixcontact.com/us/products/2702263>



Classifications

ECLASS

ECLASS-13.0	27242604
ECLASS-15.0	27242604
ECLASS-15.0 ASSET	27250101

ETIM

ETIM 9.0	EC001599
----------	----------

UNSPSC

UNSPSC 21.0	32151600
-------------	----------

AXL F SSDI8/4 1F - Safety module

2702263

<https://www.phoenixcontact.com/us/products/2702263>



Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.	

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	20a4eb60-996c-41cb-a815-4850582f85d7

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA

586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com