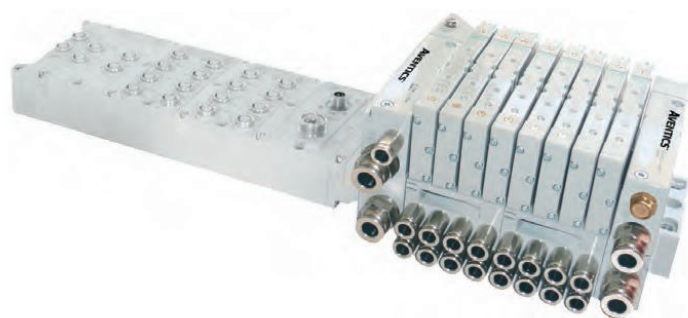


Series 502



AVENTICS™

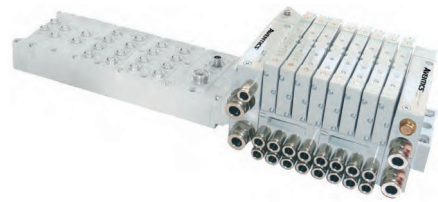
**AVENTICS Series 502 Directional
Control Valves**


EMERSON™

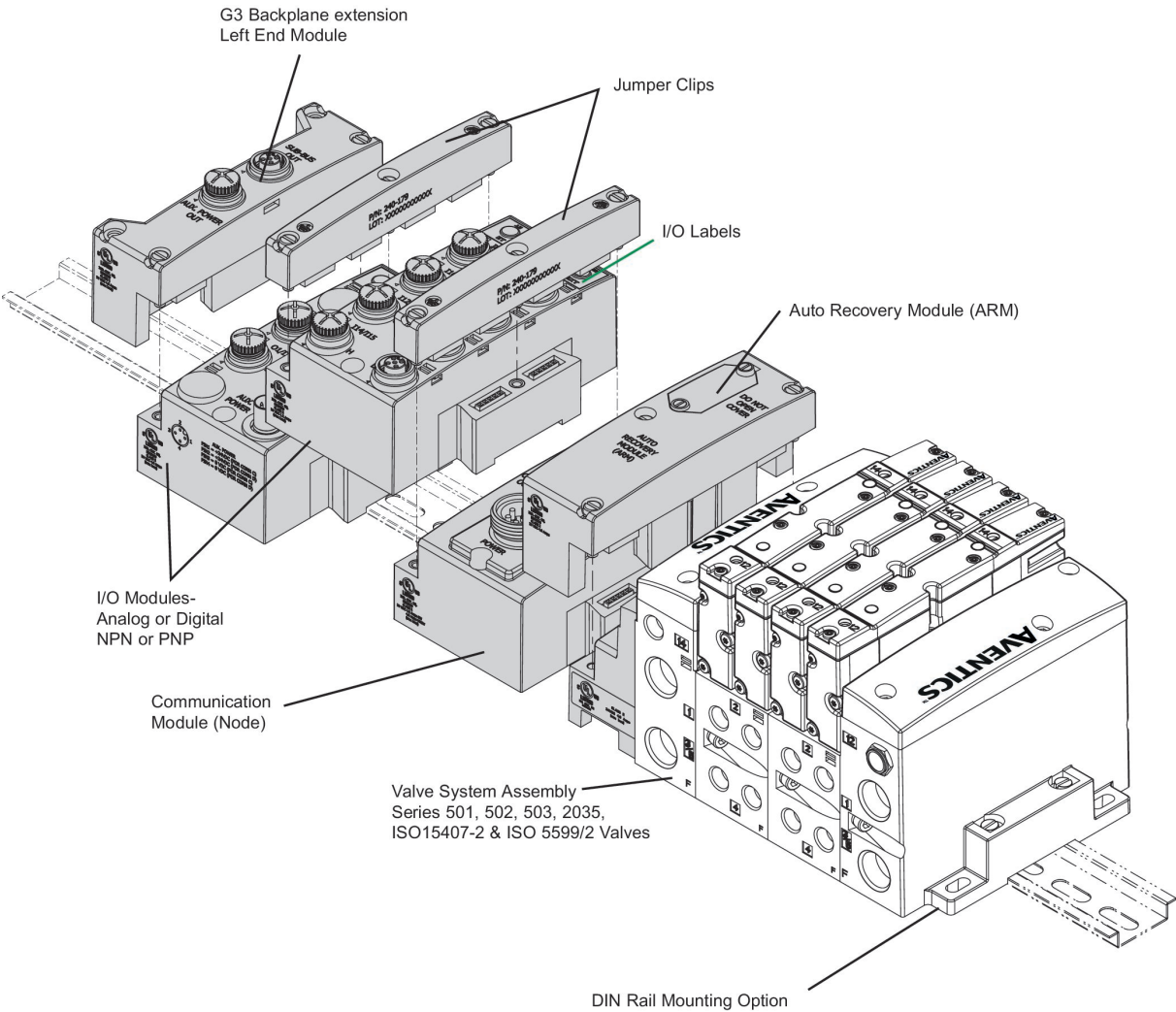
Series 502

The AVENTICS Series 502 is a line of general purpose automation valves designed for directional control and piloting applications requiring higher flow rates; less power consumption; and exceptionally easy on-site installation, configuration, and modification. The compact (18 mm), modular 502 Series is ideally suited for automotive and tire, food and beverage, pharmaceutical, and packaging machinery applications. The valve has the flexibility of meeting the ISO 15407-2 standard while maintaining its high-flow characteristics. In addition, no other valve in its class offers such a broad range of pressure regulator, pressure shut-off, and exhaust flow control accessories.

- Modular design permits easy configuration and modification
- Sub-base mounted valve is well suited for in-panel valve piloting applications
- High flow rate, compact size, and optional mounting plate enable efficient use of cabinet space
- Compatible with AVENTICS Series G3 and 580 electronic fieldbus platforms
- 580 CHARM node is compatible with DeltaV distributed control system with electronic marshalling



Accessories overview



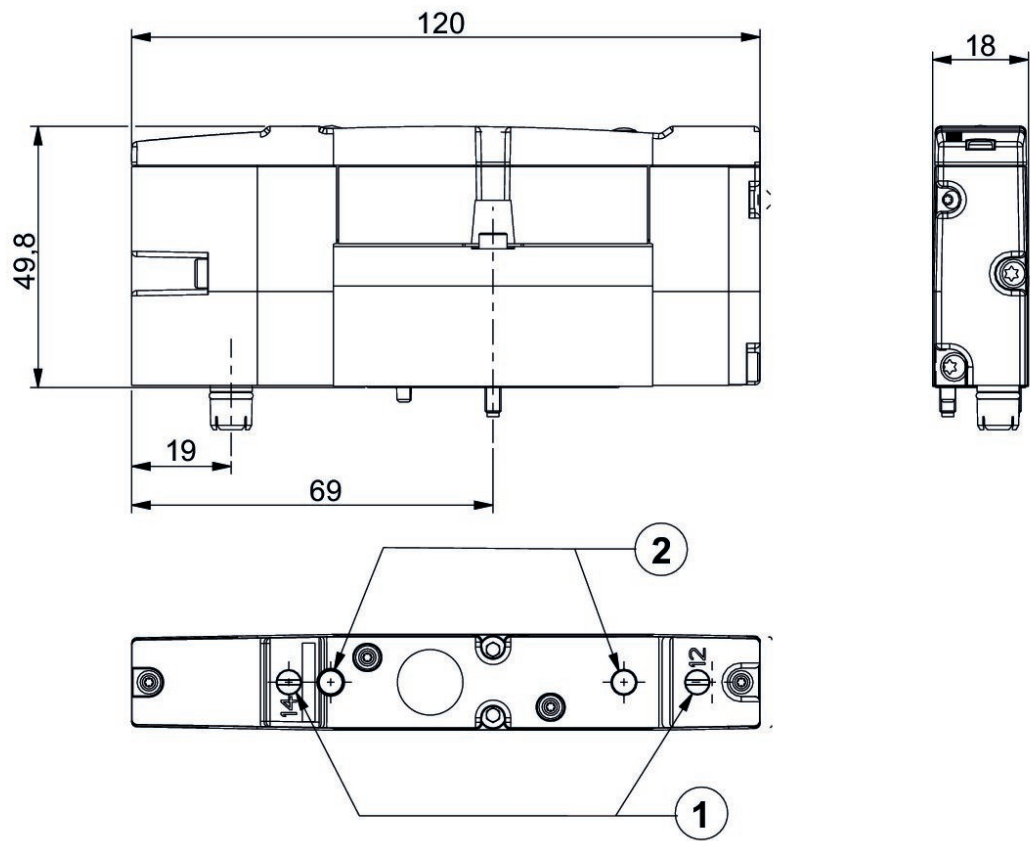
2x3/2-directional valve, Series 502

Double Solenoid
ISO 8573-1: class 7-4-4
Electrically



Manual override	Valve function	Operational voltage	Pilot	Voltage tolerance DC	Power consumption DC [W]	Part No.
without detent	NC/NC	24 V DC	External	-15% / +10%	1.1	R502A2B-D0MA00F1
with detent	NC/NC	24 V DC	External	-15% / +10%	1.1	R502A2B-D0M11BF1

Dimensions



- 1) Manual override
- 2) LED

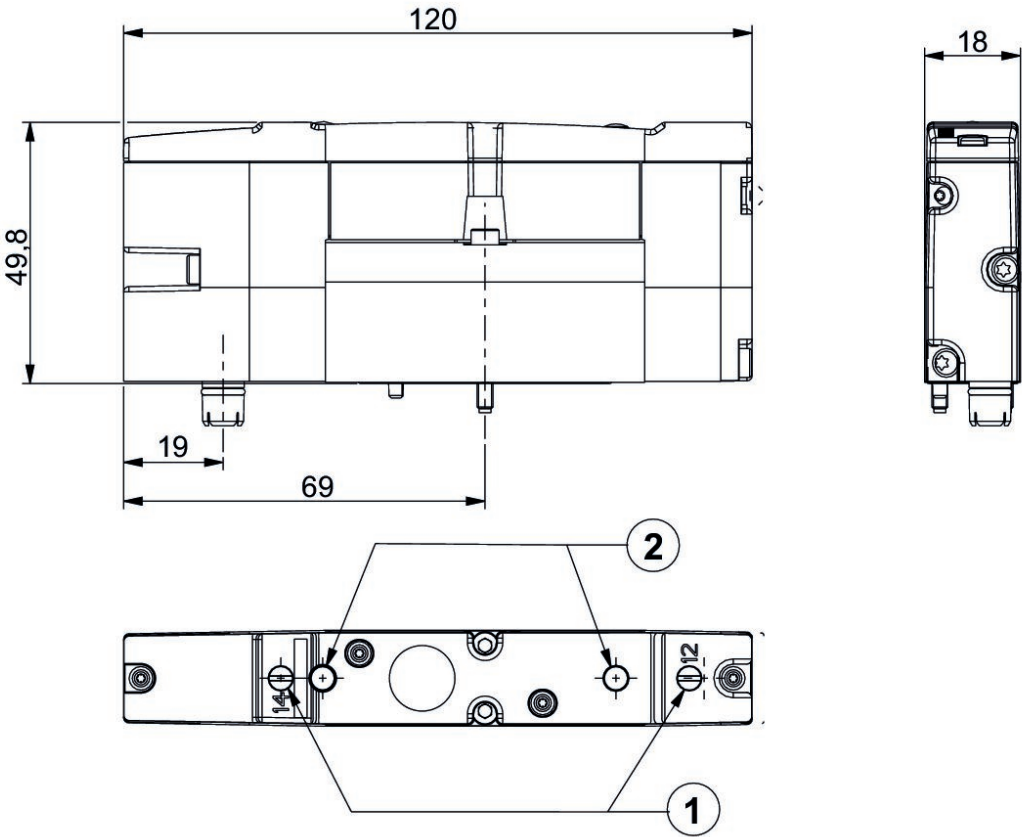
2x3/2-directional valve, Series 502

580 l/min
Double Solenoid
Electrically



Valve function	Operational voltage	Pilot	Voltage tolerance DC	Power consumption DC [W]	Part No.
NO/NO	24 V DC	External	-15% / +10%	1.1	R502A2BA0MA00F1
NO/NO	24 V DC	External	-15% / +10%	1.1	R502A2BA0M11BF1

Dimensions



1) Manual override
2) LED

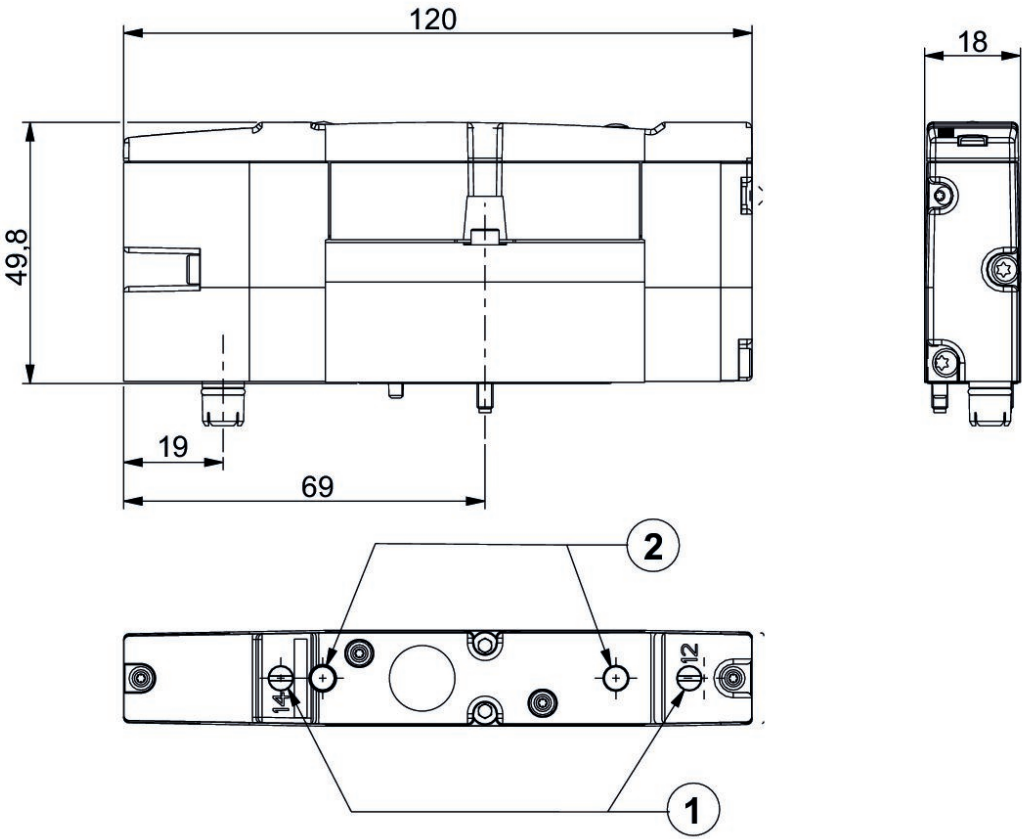
5/2-directional valve, Series 502

630 l/min
Double Solenoid
Electrically



Manual override	Operational voltage	Pilot	Voltage tolerance DC	Power consumption DC [W]	Part No.
without detent	24 V DC	External	-15% / +10%	1.1	R502A2B-N0MA00F1
without detent	24 V DC	External	-15% / +10%	1.1	R502A2B40MA00F1
with detent	24 V DC	External	-15% / +10%	1.1	R502A2B-N0M11BF1
with detent	24 V DC	External	-15% / +10%	1.1	R502A2B40M11BF1

Dimensions



- 1) Manual override
- 2) LED

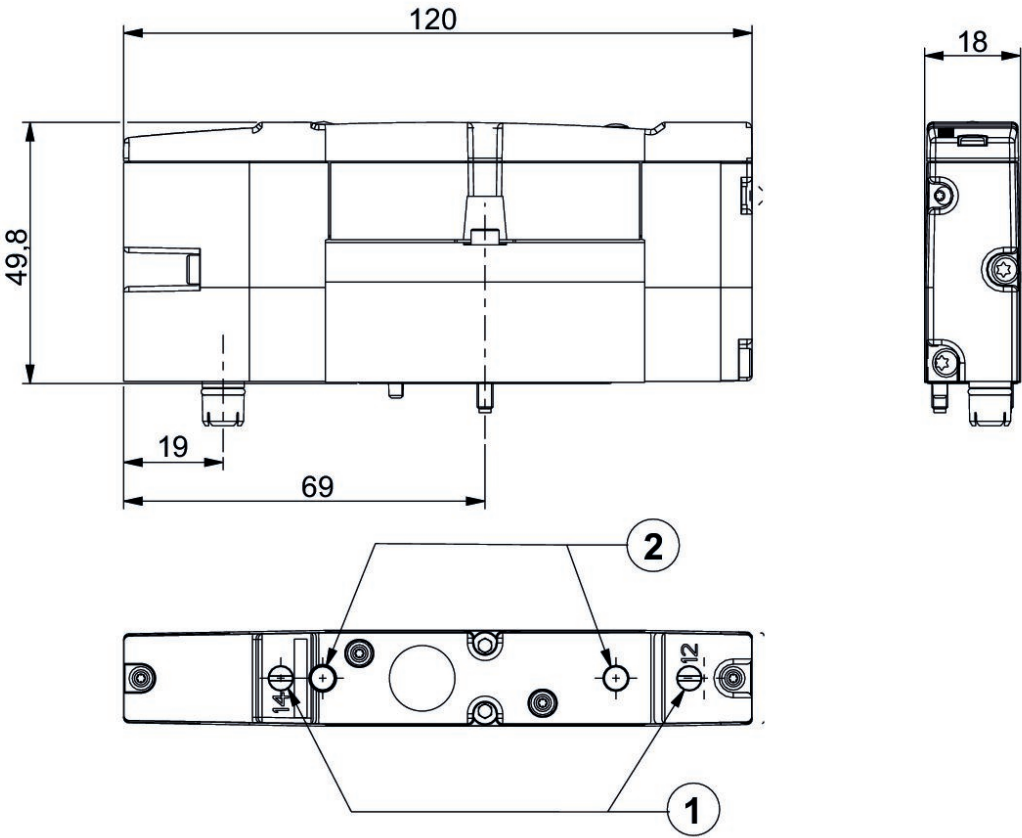
5/2-directional valve, Series 502

Single Solenoid
Electrically



Operational voltage	Pilot	Voltage tolerance DC	Power consumption DC [W]	Part No.
24 V DC	External	-15% / +10%	1.1	R502A1B10MA00F1
24 V DC	External	-15% / +10%	1.1	R502A1B10M11BF1

Dimensions



- 1) Manual override
- 2) LED

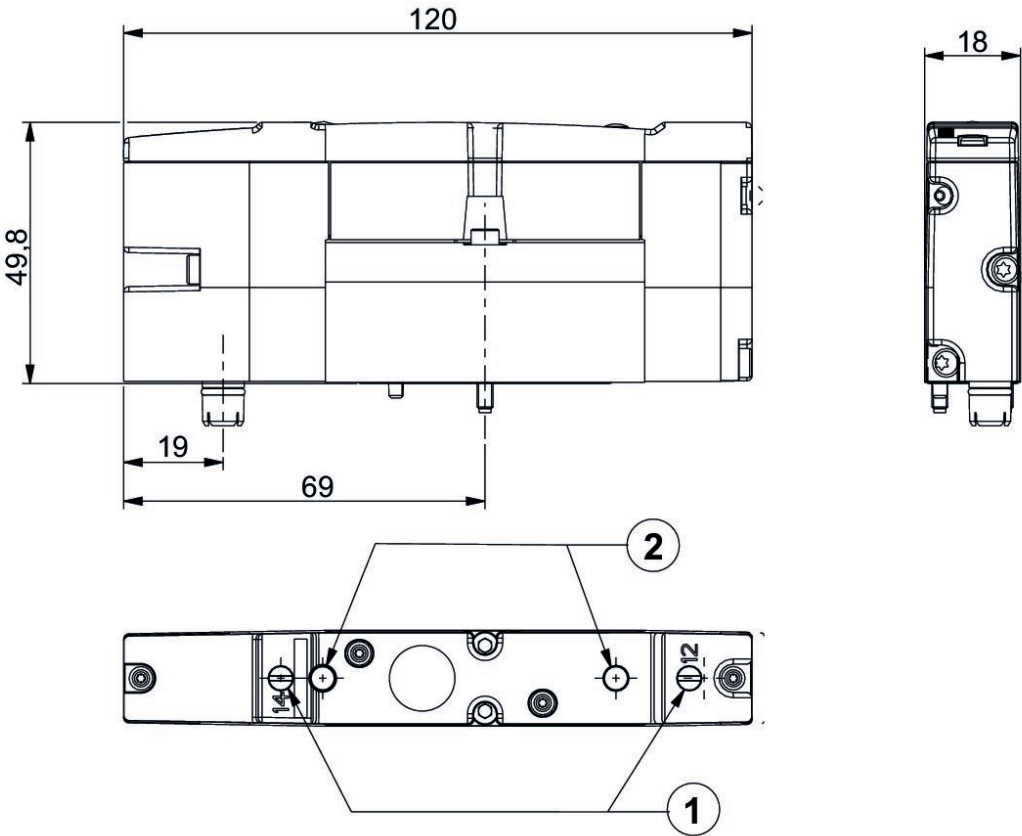
5/2-directional valve, Series 502

Double Solenoid
Electrically



Operational voltage	Pilot	Voltage tolerance DC	Power consumption DC [W]	Part No.
24 V DC	External	-15% / +10%	1.1	R502A1B-N0MA00F1
24 V DC	External	-15% / +10%	1.1	R502A1B40MA00F1
24 V DC	External	-15% / +10%	1.1	R502A1B-N0M11BF1
24 V DC	External	-15% / +10%	1.1	R502A1B40M11BF1

Dimensions



- 1) Manual override
- 2) LED

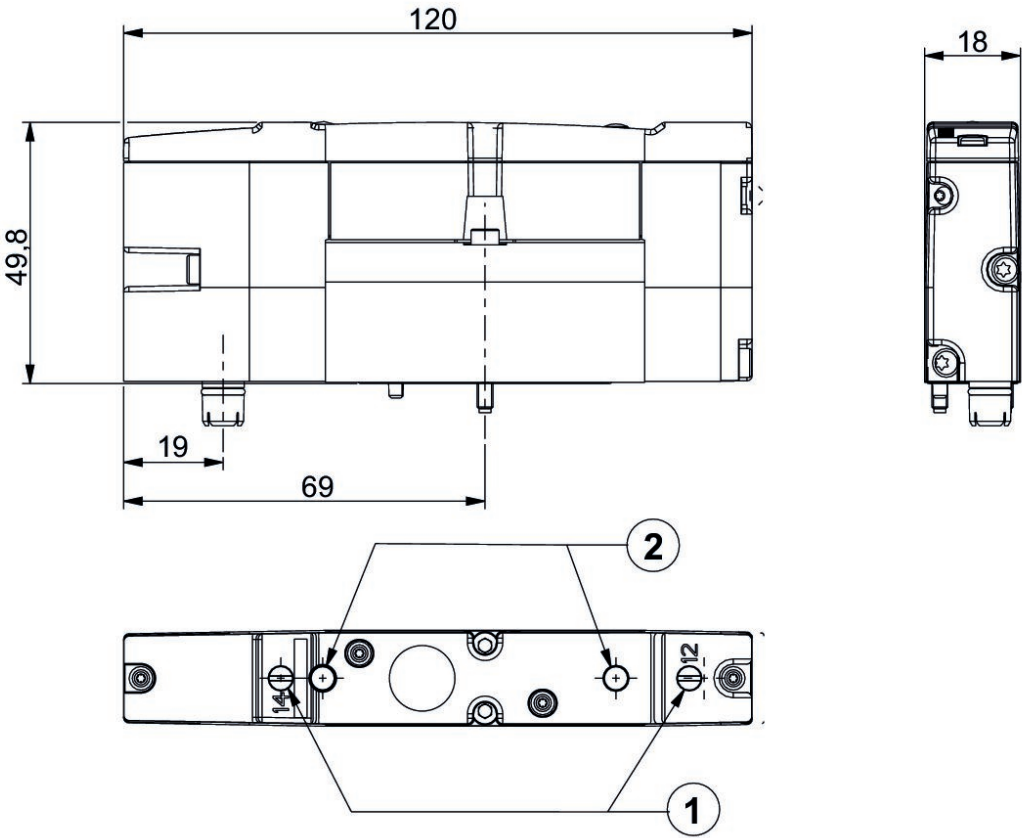
5/2-directional valve, Series 502

Double Solenoid
Electrically



Operational voltage	Pilot	Voltage tolerance DC	Power consumption DC [W]	Part No.
24 V DC	External	-15% / +10%	1.1	R502A2B10MA00F1
24 V DC	External	-15% / +10%	1.1	R502A2B10M11BF1

Dimensions



- 1) Manual override
- 2) LED

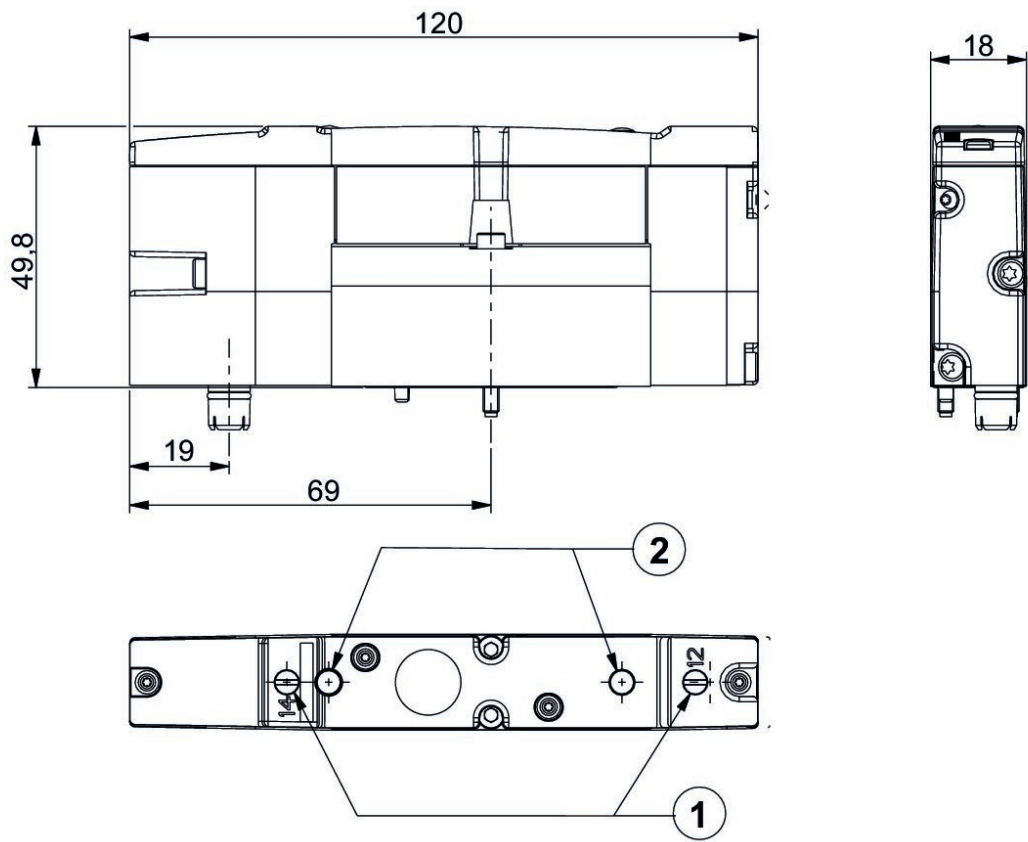
5/3-directional valve, Series 502

Double Solenoid
Electrically



Manual override	Valve function	Operational voltage	Pilot	Voltage tolerance DC	Power consumption DC [W]	Part No.
without detent	Exhausted Center	24 V DC	External	-15% / +10%	1.1	R502A1B50MA00F1
without detent	Closed Center	24 V DC	External	-15% / +10%	1.1	R502A1B60MA00F1
without detent	Pressurized Center	24 V DC	External	-15% / +10%	1.1	R502A1B70MA00F1
with detent	Exhausted Center	24 V DC	External	-15% / +10%	1.1	R502A1B50M11BF1
with detent	Closed Center	24 V DC	External	-15% / +10%	1.1	R502A1B60M11BF1
with detent	Pressurized Center	24 V DC	External	-15% / +10%	1.1	R502A1B70M11BF1

Dimensions



- 1) Manual override
- 2) LED

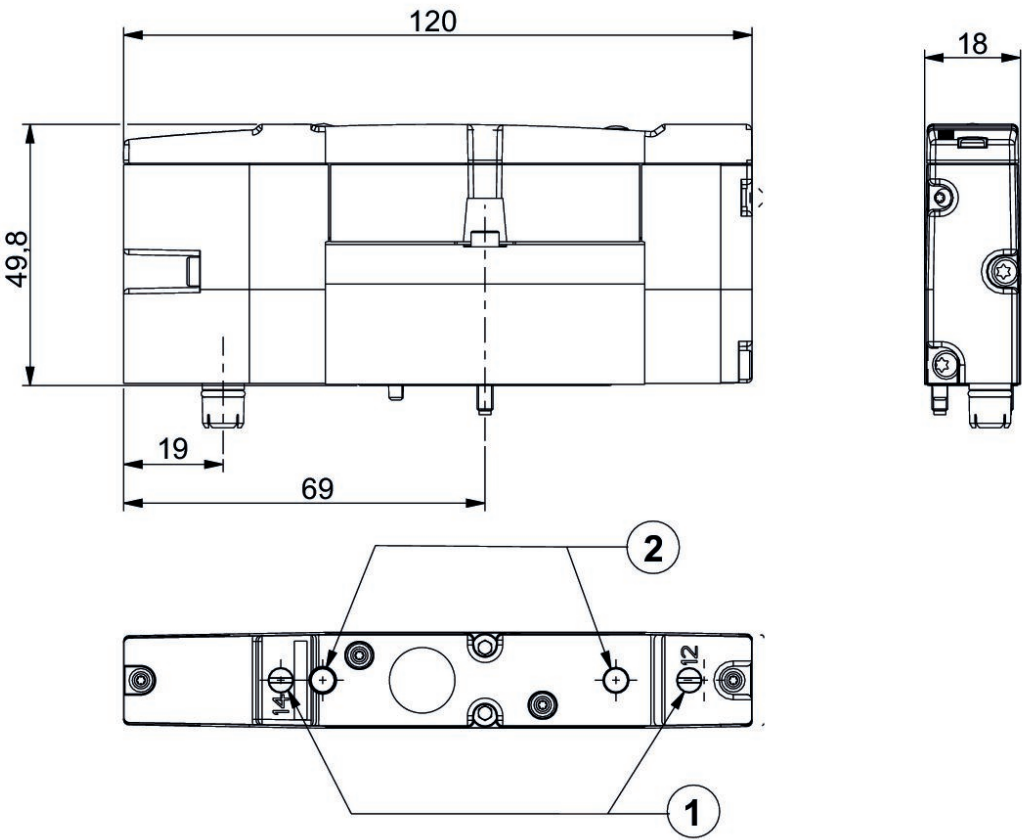
5/3-directional valve, Series 502

Double Solenoid
Electrically



Manual override	Valve function	Operational voltage	Pilot	Voltage tol-erance DC	Power con-sumption DC [W]	Part No.
without detent	Exhausted Center	24 V DC	External	-15% / +10%	1.1	R502A2B50MA00F1
without detent	Closed Center	24 V DC	External	-15% / +10%	1.1	R502A2B60MA00F1
without detent	Pressurized Center	24 V DC	External	-15% / +10%	1.1	R502A2B70MA00F1
with detent	Exhausted Center	24 V DC	External	-15% / +10%	1.1	R502A2B50M11BF1
with detent	Closed Center	24 V DC	External	-15% / +10%	1.1	R502A2B60M11BF1
with detent	Pressurized Center	24 V DC	External	-15% / +10%	1.1	R502A2B70M11BF1

Dimensions



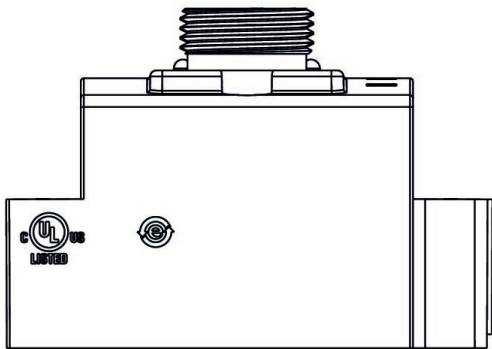
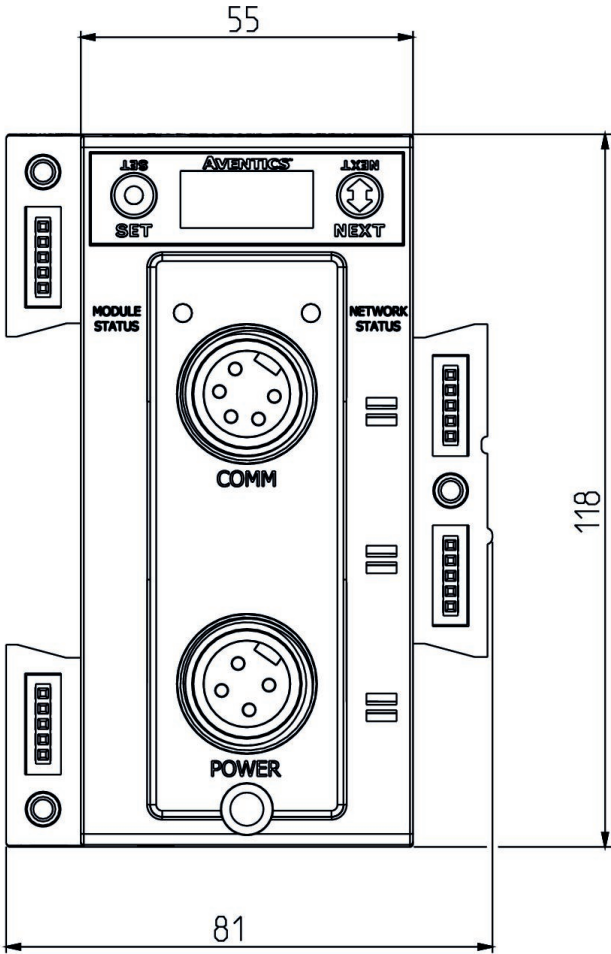
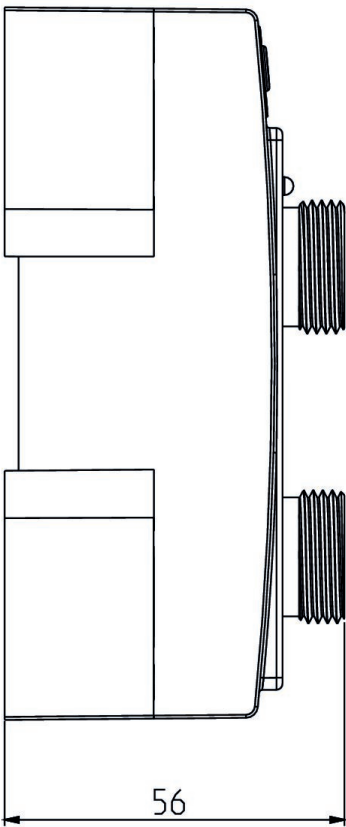
- 1) Manual override
- 2) LED

Bus coupler, Series G3

Plug
7/8"



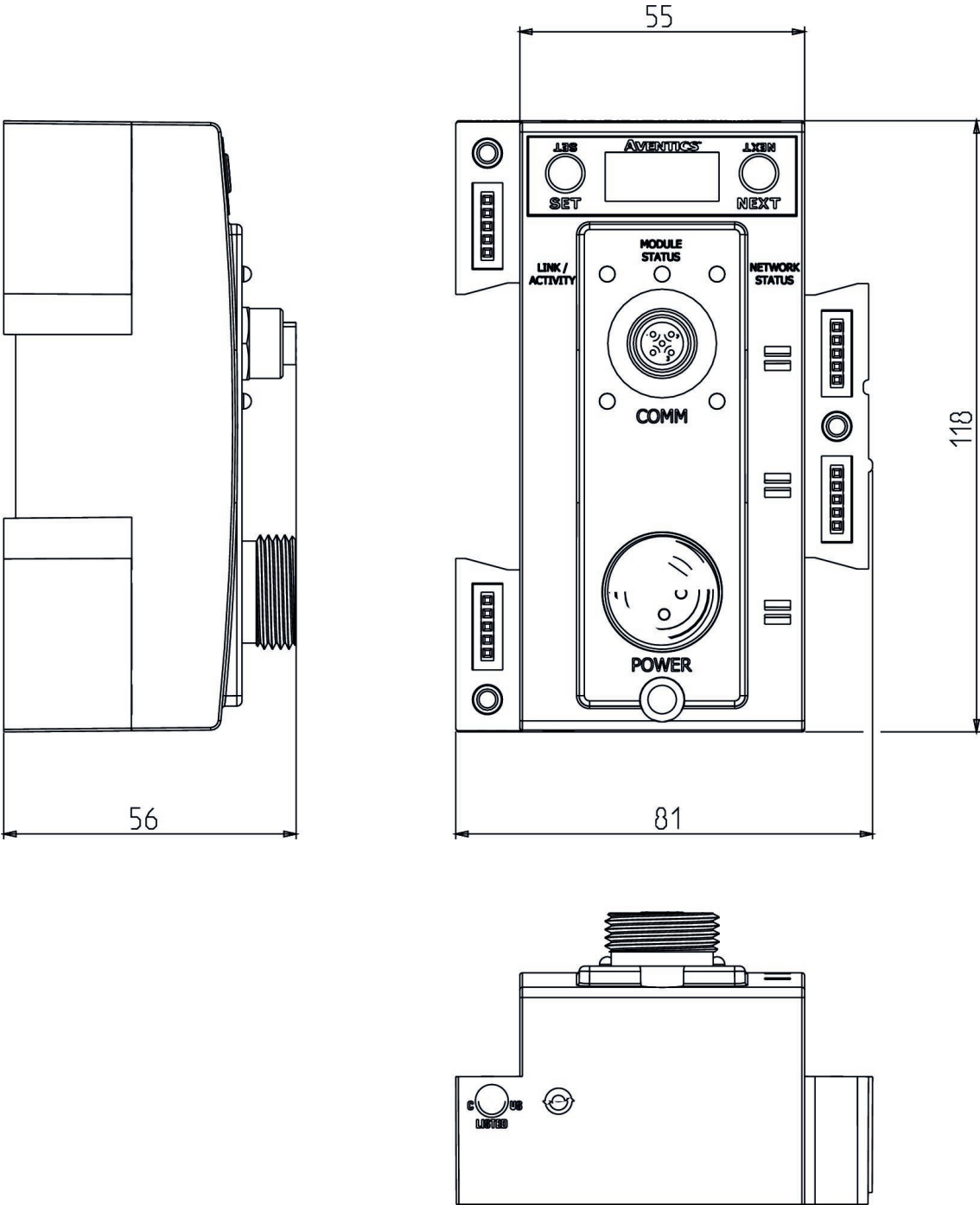
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
DeviceNet	4-pin	24 V DC	-10% / +10%	240-180



Series G3



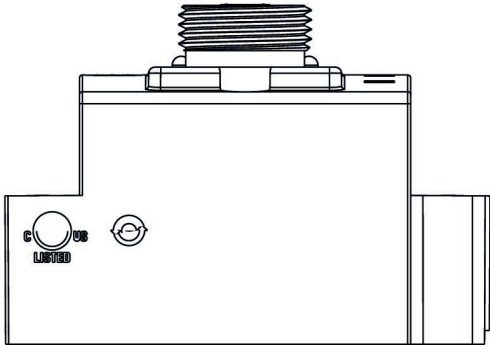
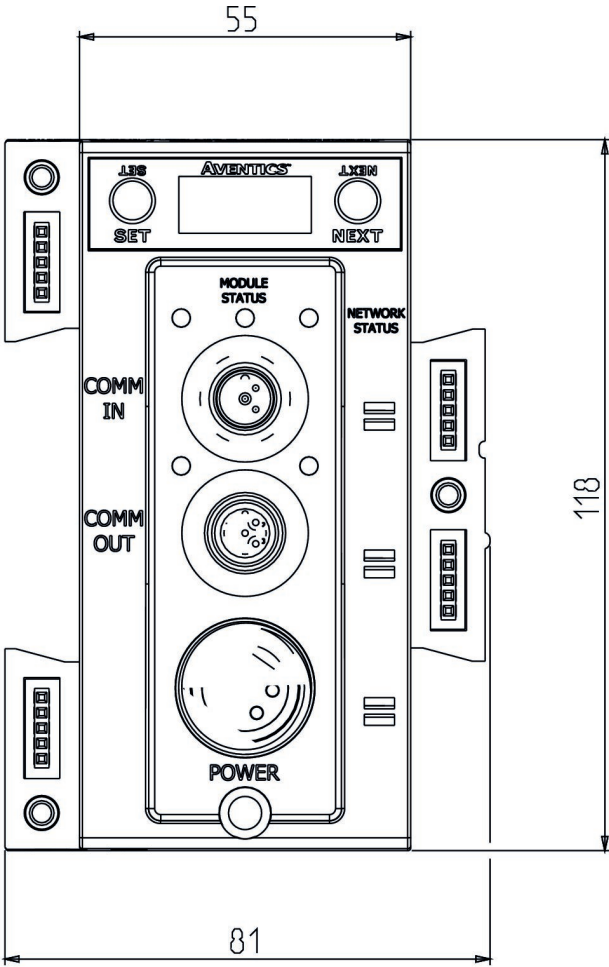
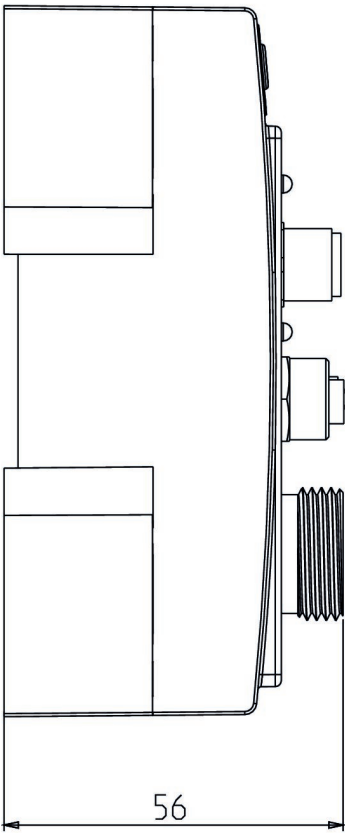
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
MODBUS TCP	4-pin	24 V DC	-10% / +10%	240-292



Series G3



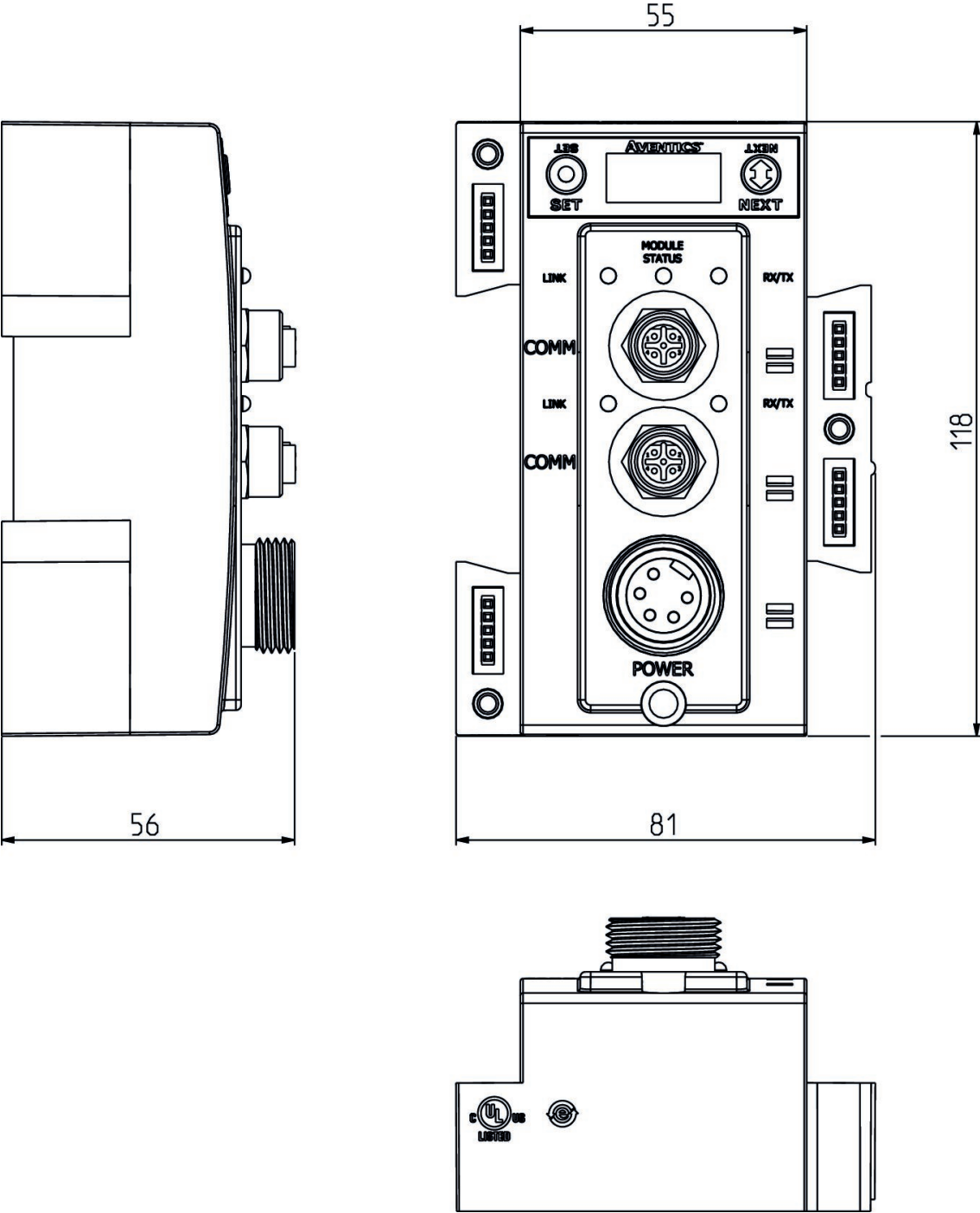
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
PROFIBUS DP	5-pin	24 V DC	-10% / +10%	240-239



Series G3



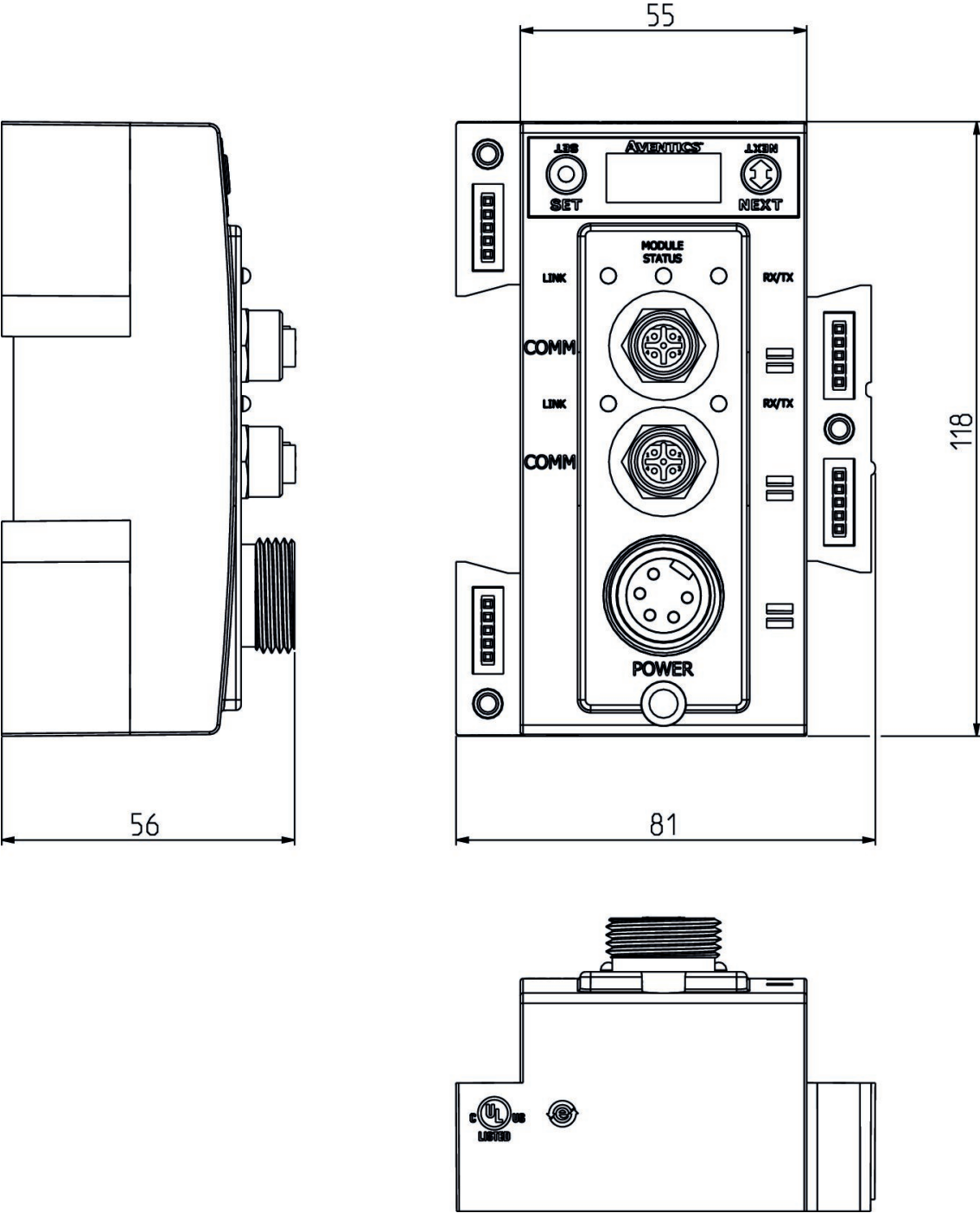
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
Profinet	5-pin	24 V DC	-10% / +10%	240-240



Series G3



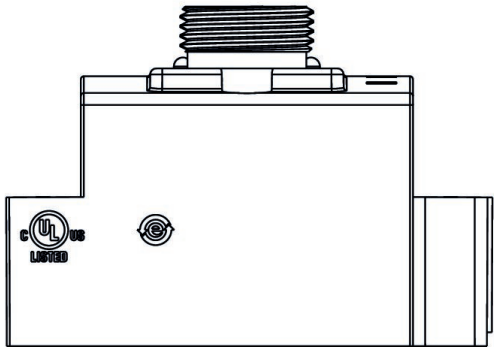
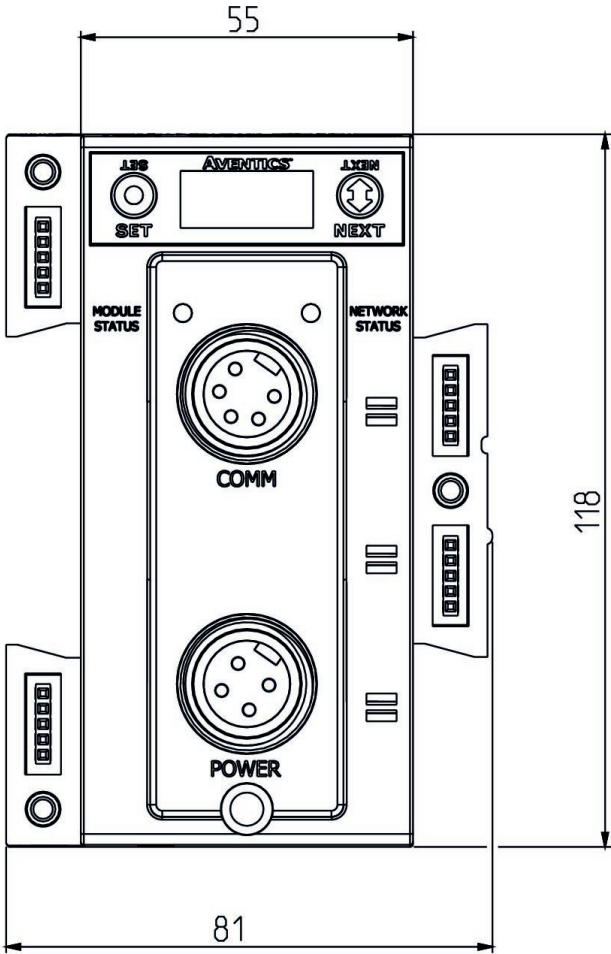
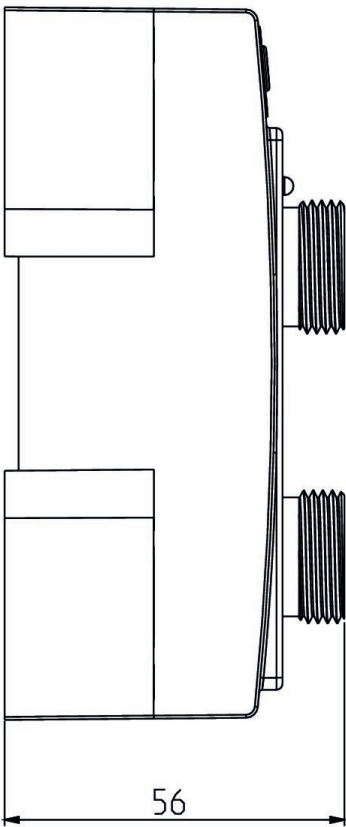
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
POWERLINK	5-pin	24 V DC	-10% / +10%	240-309



Series G3



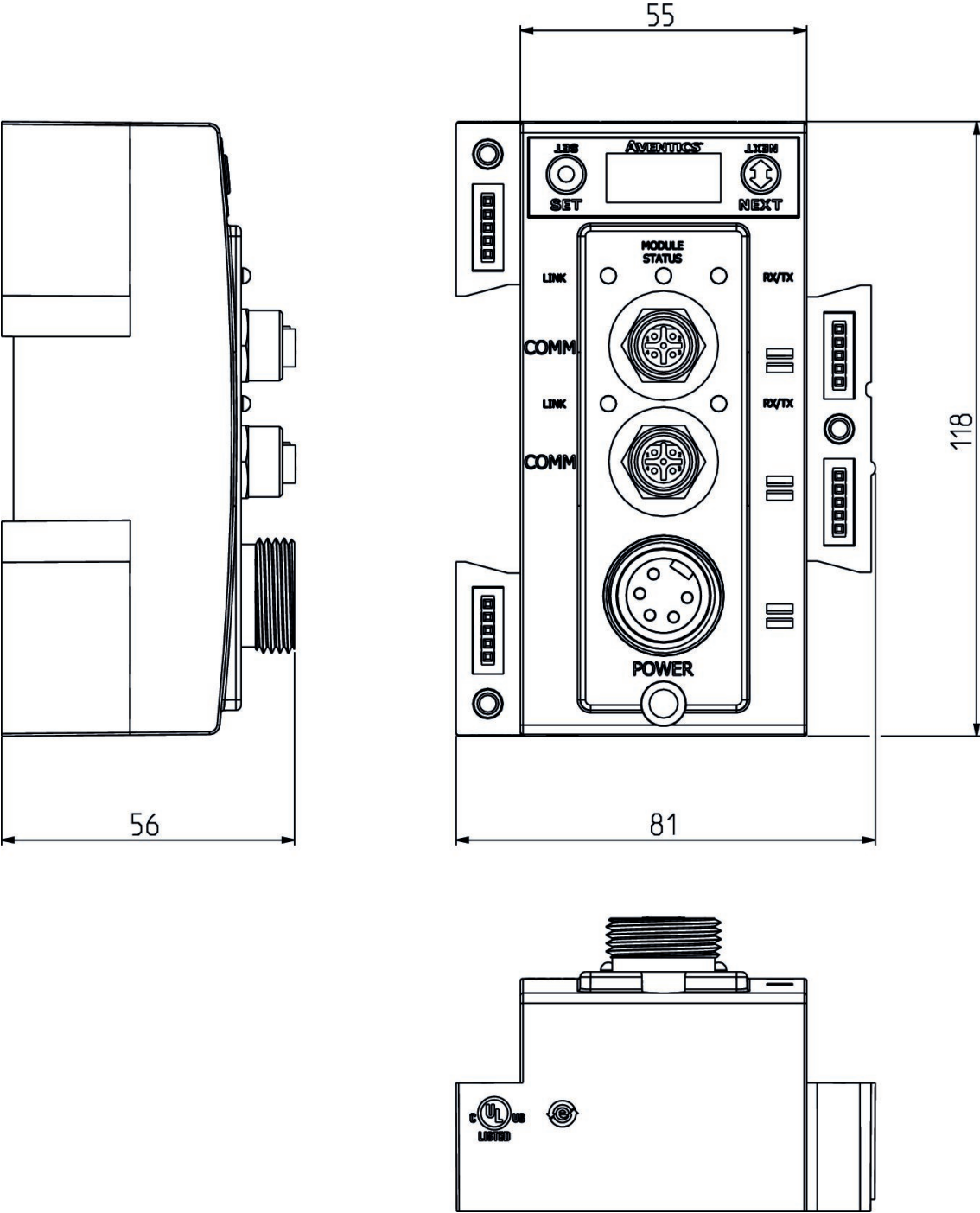
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
CANopen	4-pin	24 V DC	-10% / +10%	240-291



Series G3



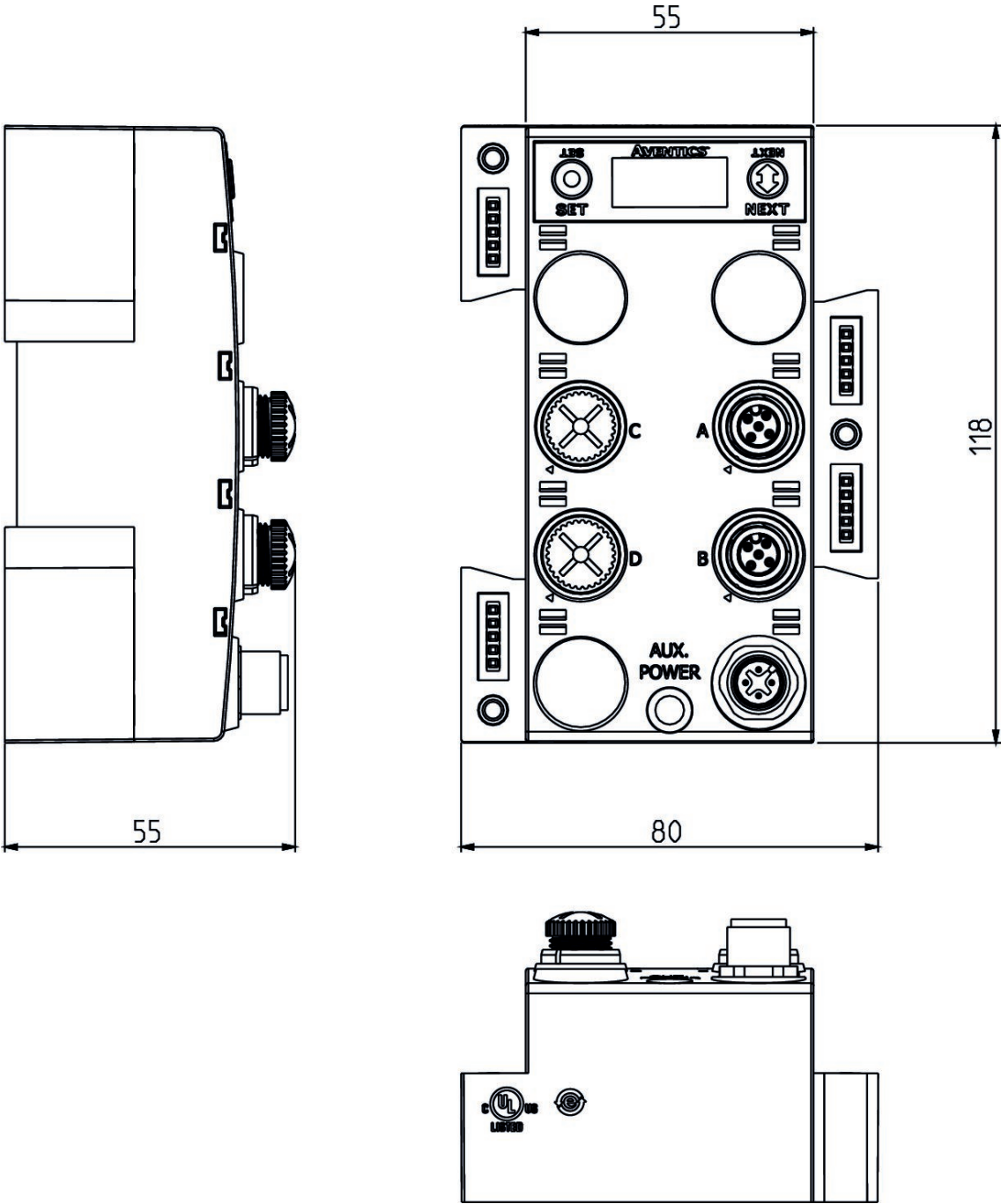
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
EtherNet/IP	4-pin	24 V DC	-10% / +10%	240-325



Series G3

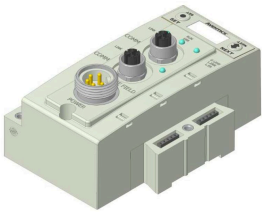


Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
EtherCAT	4-pin	24 V DC	-10% / +10%	240-310

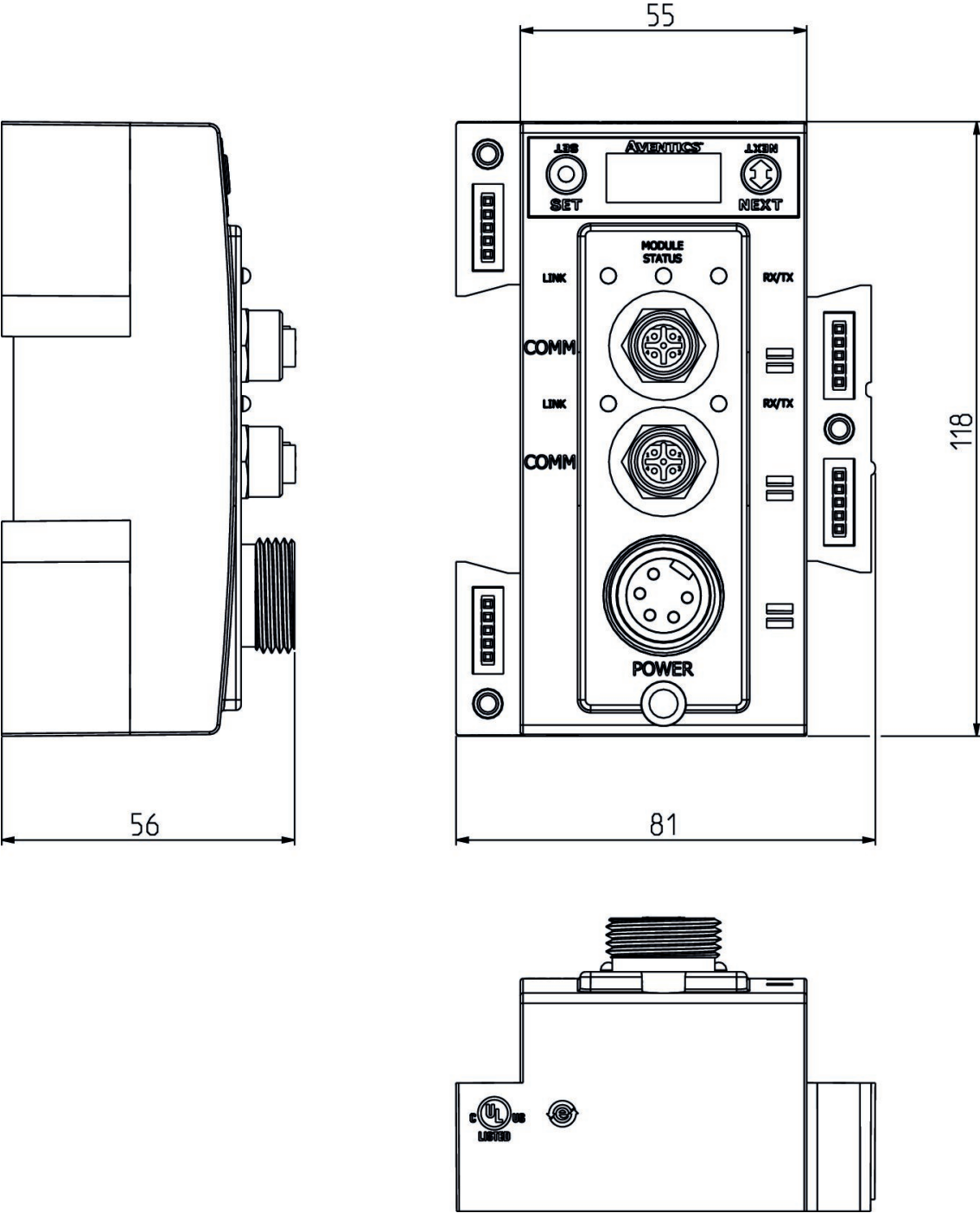


Series G3

Plug
7/8"



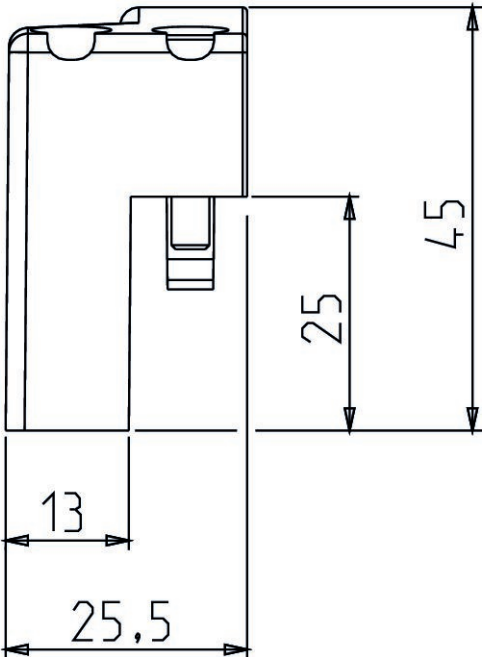
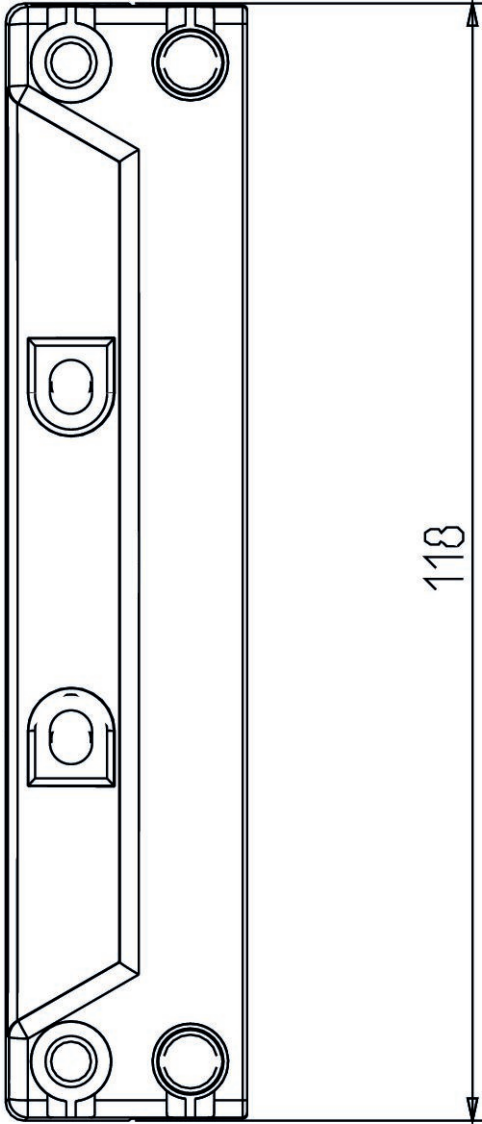
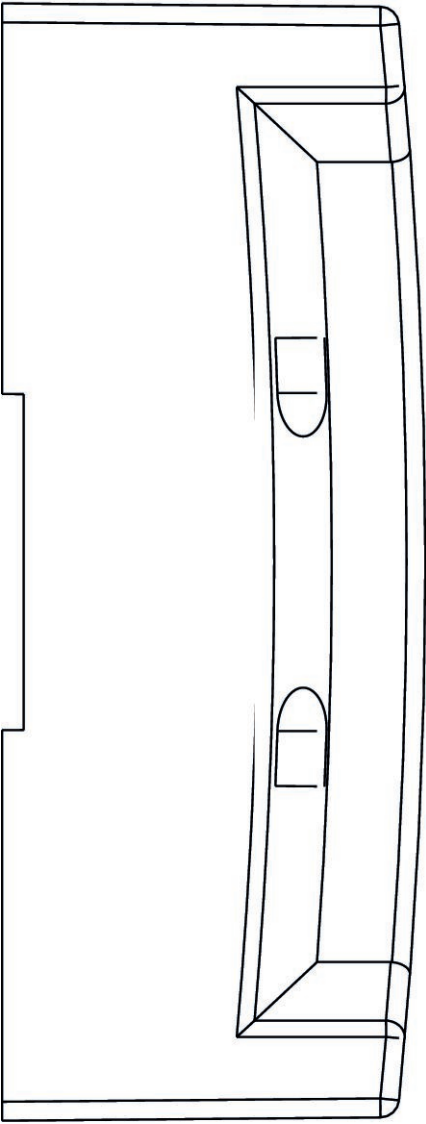
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
EtherCAT	4-pin	24 V DC	-10% / +10%	240-362



End plate left



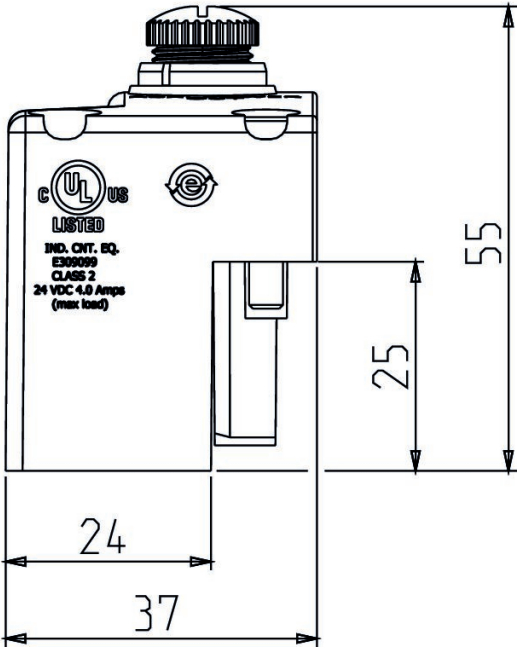
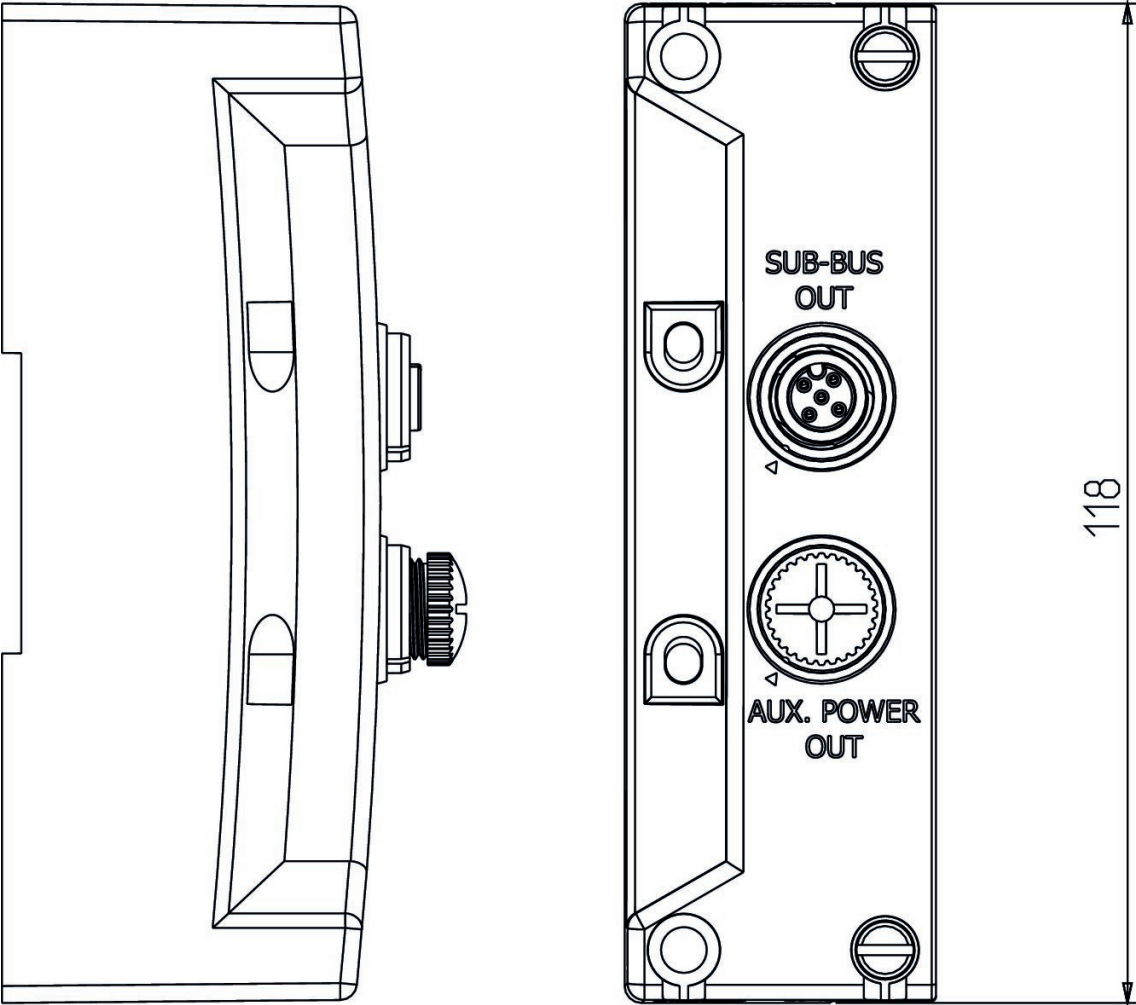
Operational voltage electronics	Operational voltage electronics	Part No.
24 V DC	-10% / +10%	240-184



Left end plate for Subbus G3



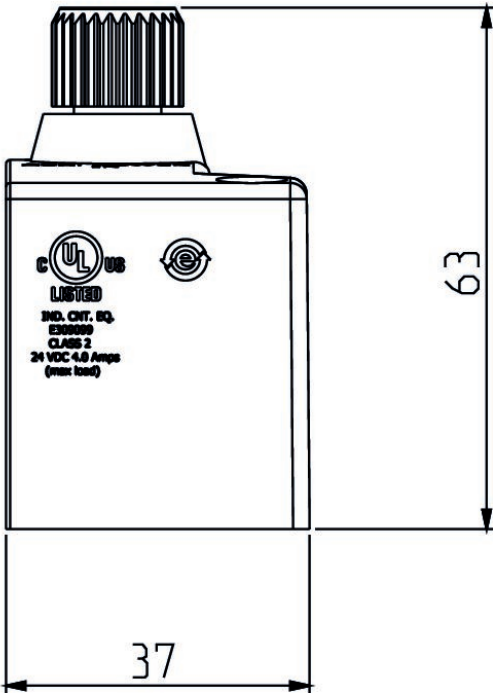
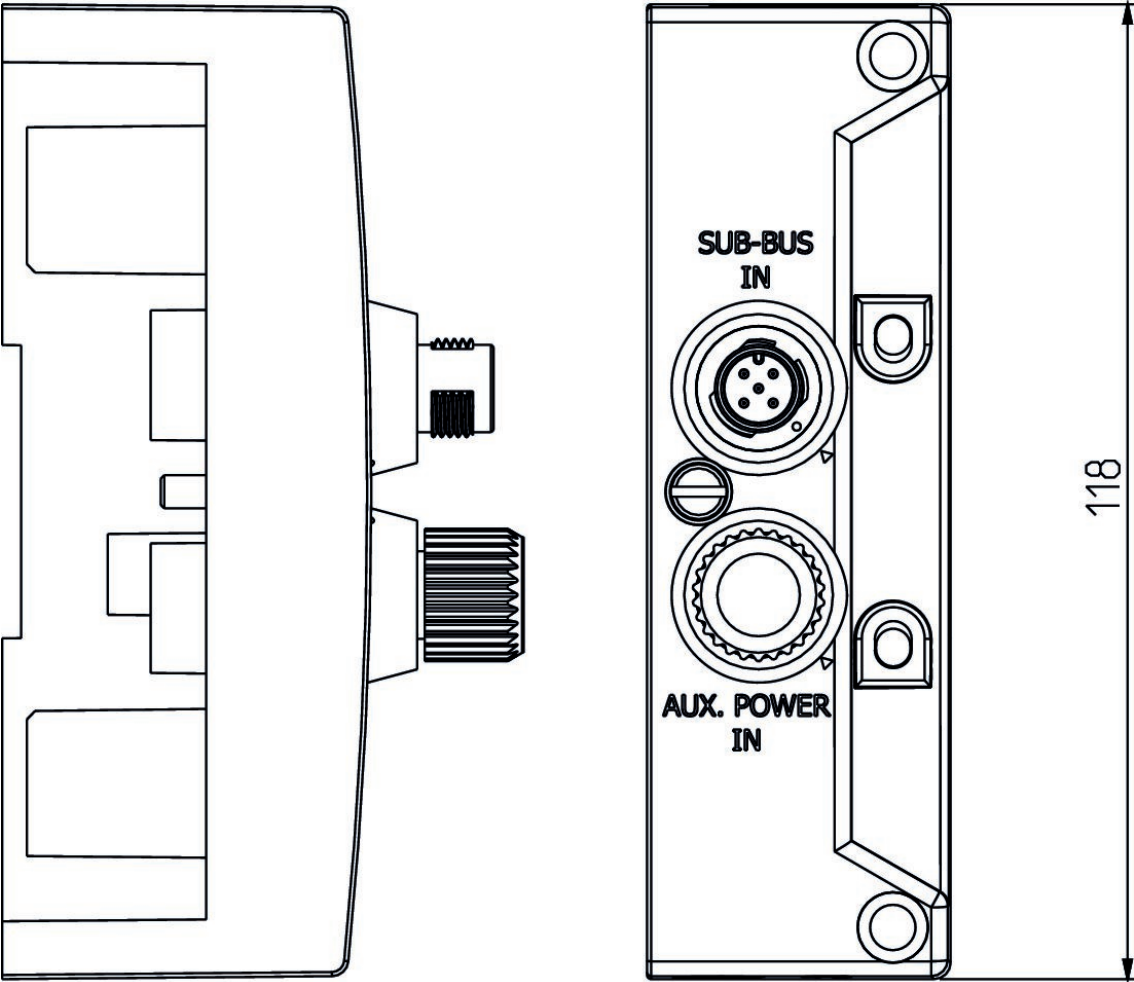
Operational voltage electronics	Operational voltage electronics	Part No.
24 V DC	-10% / +10%	240-183



Right end plate for Subbus G3



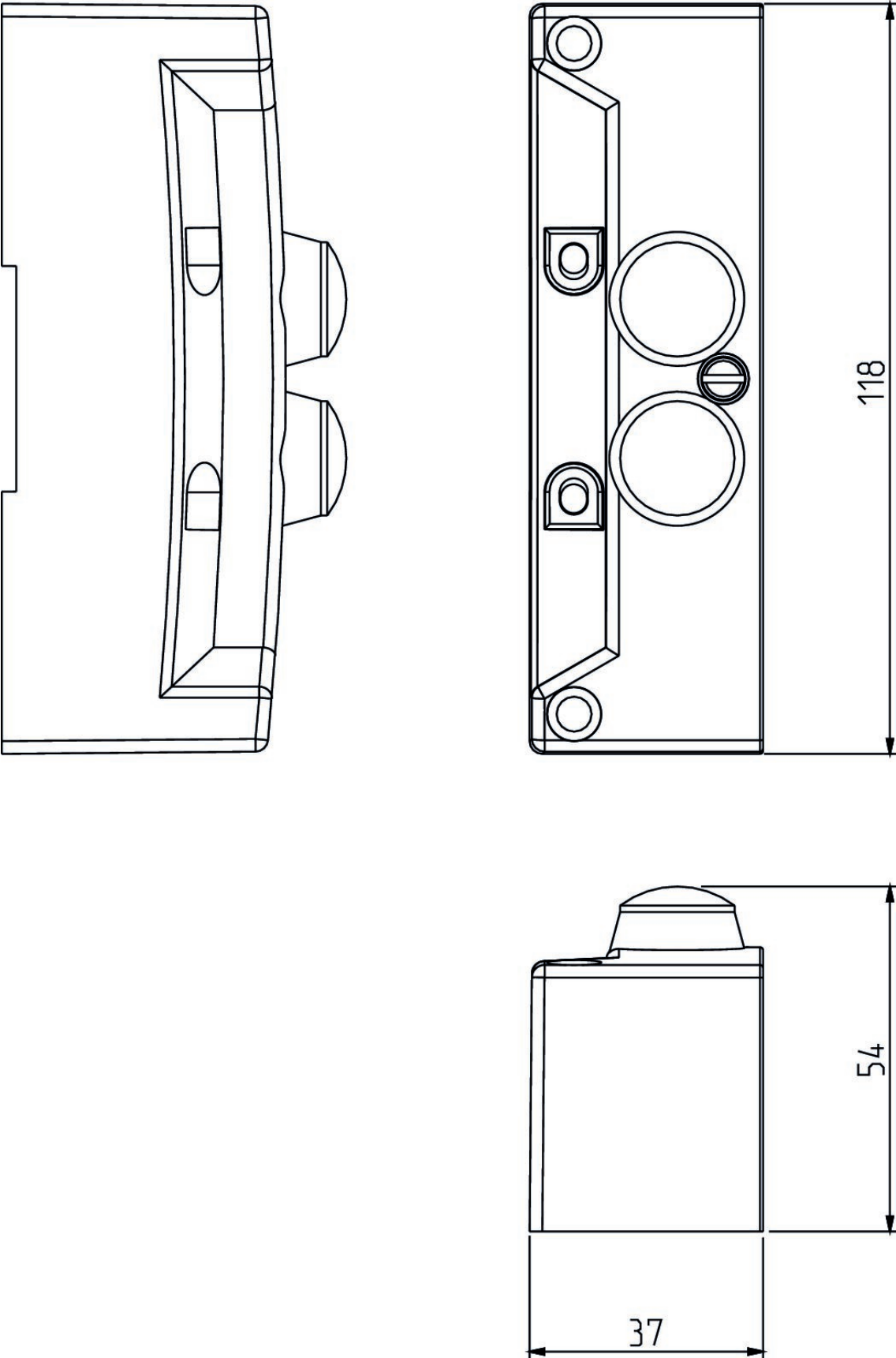
Operational voltage electronics	Operational voltage electronics	Part No.
24 V DC	-10% / +10%	240-185



Right end plate for G3 Standalone



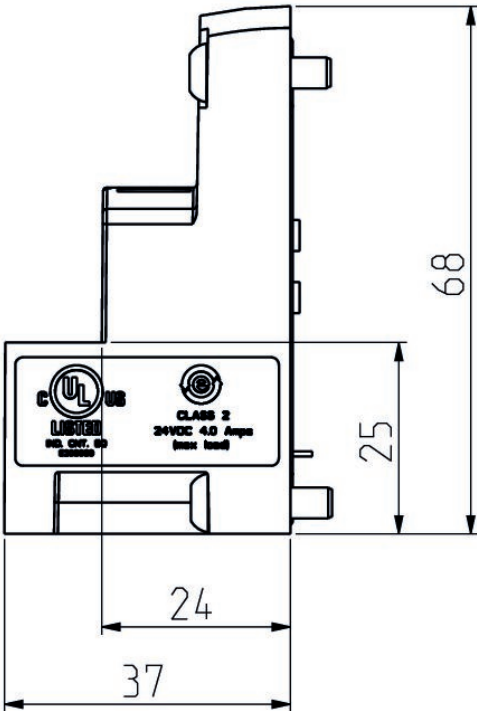
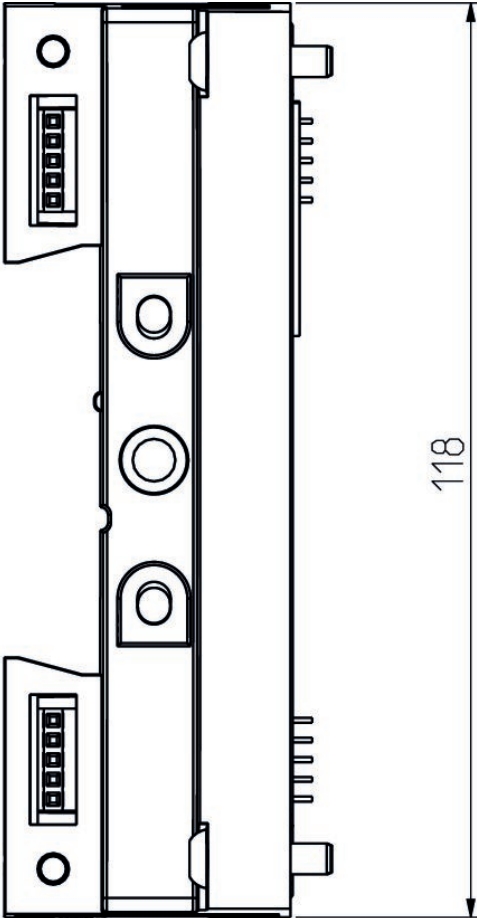
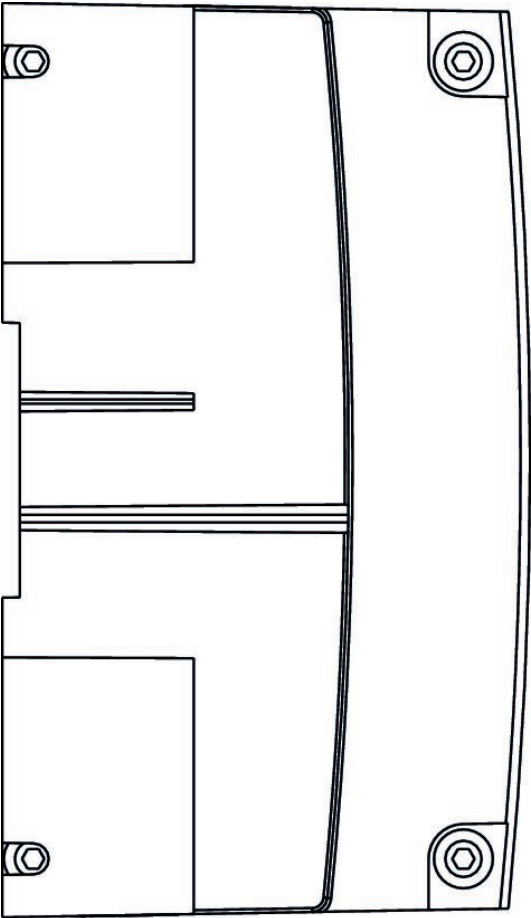
Operational voltage electronics	Operational voltage electronics	Part No.
24 V DC	-10% / +10%	240-255



Distributor



Operational voltage electronics	Operational voltage electronics	Part No.
24 V DC	-10% / +10%	P599AE508827001

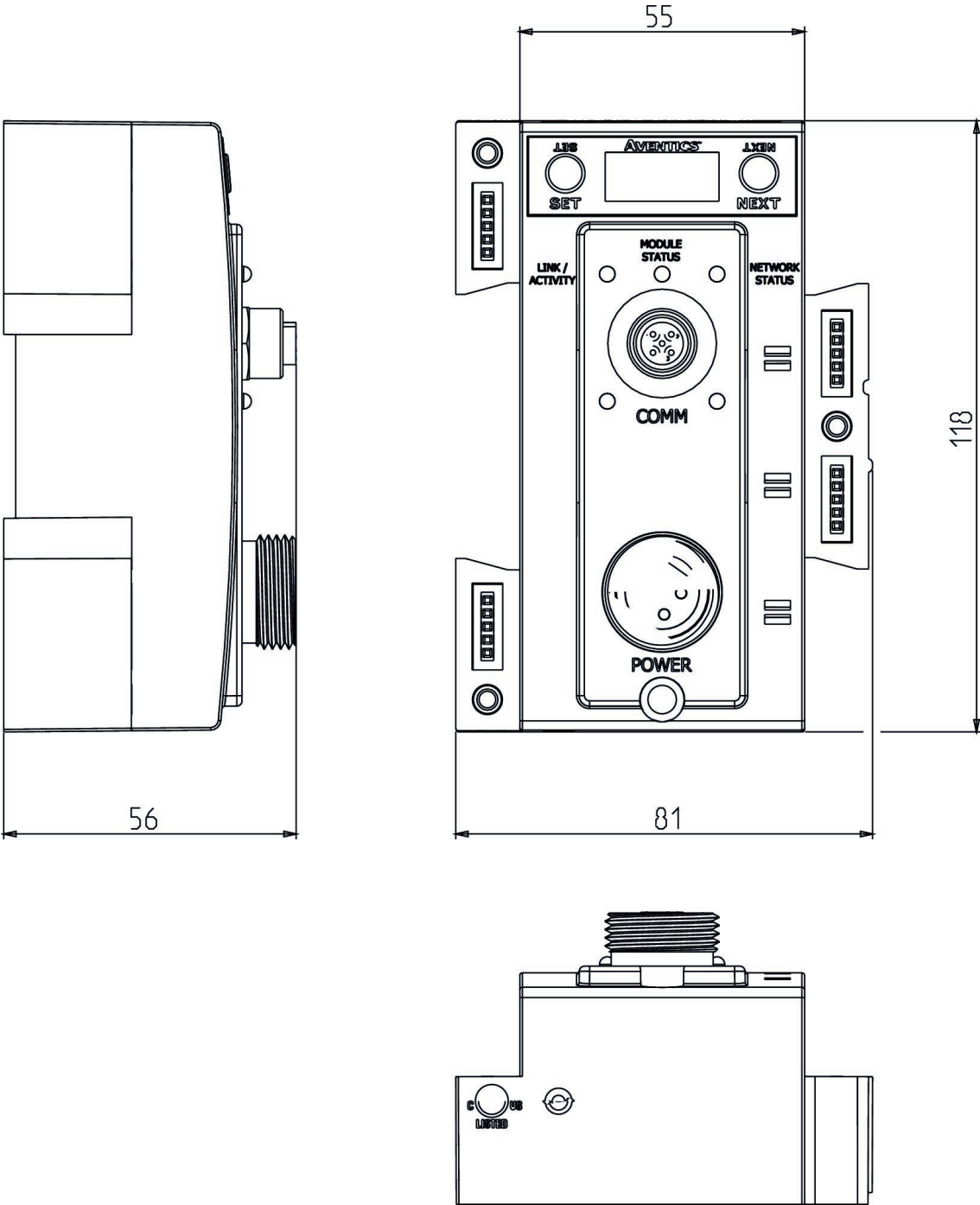


G3 Subbus module

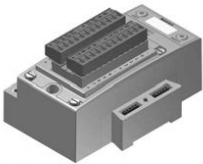
Plug
7/8"



Number of poles	Operational voltage electronics	Operational voltage electronics	Part No.
4-pin	24 V DC	-10% / +10%	240-241

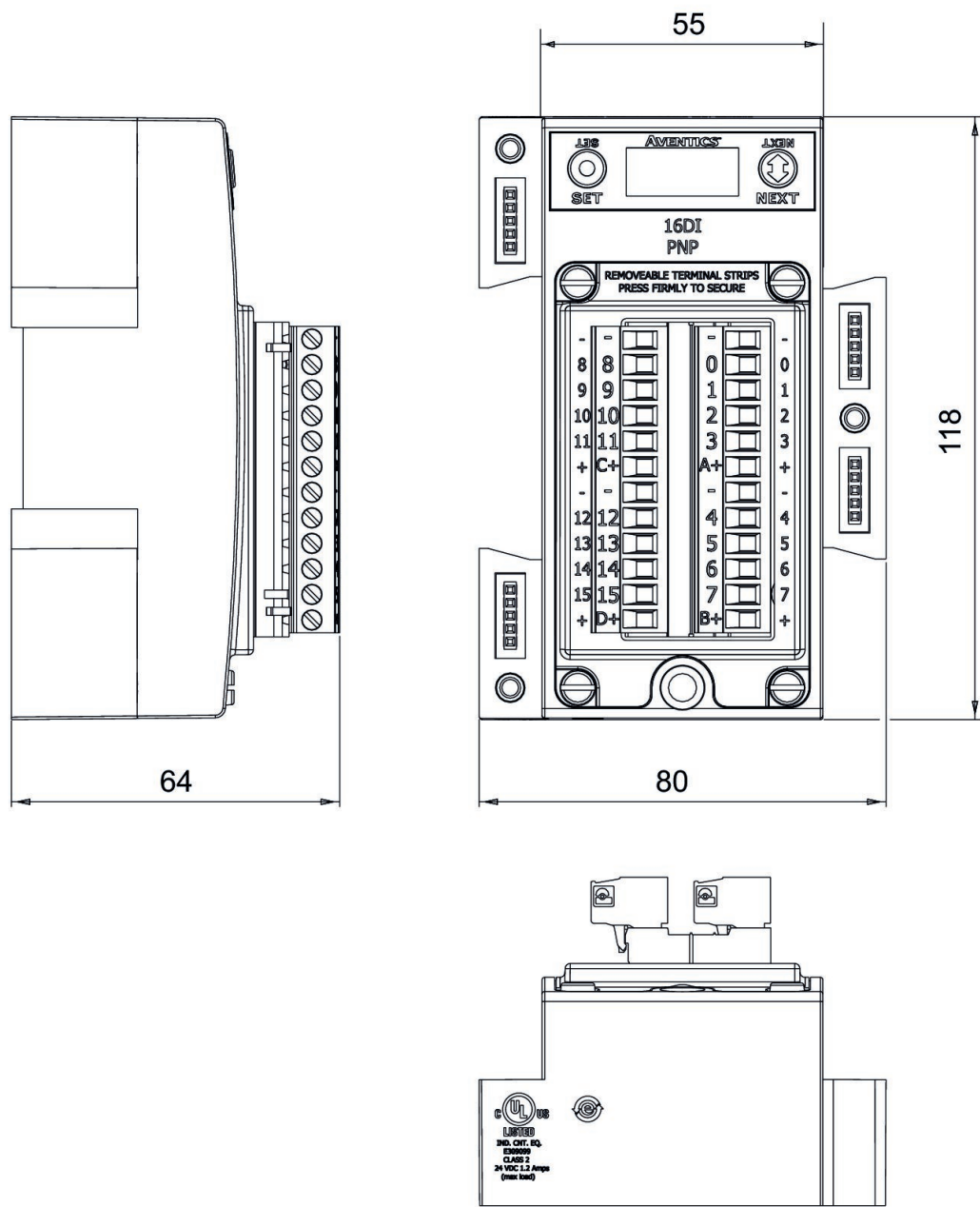


I/O modules, Series G3

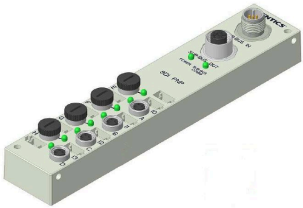


Number of inputs	Number of outputs	I/O module version	Operational volt- age electronics	Operational volt- age electronics	Part No.
16		digital inputs PNP	24 V DC	-10% / +10%	240-203
16		digital inputs NPN	24 V DC	-10% / +10%	240-204
8		digital inputs PNP	24 V DC	-10% / +10%	240-316
	16	digital inputs NPN	24 V DC	-10% / +10%	240-330

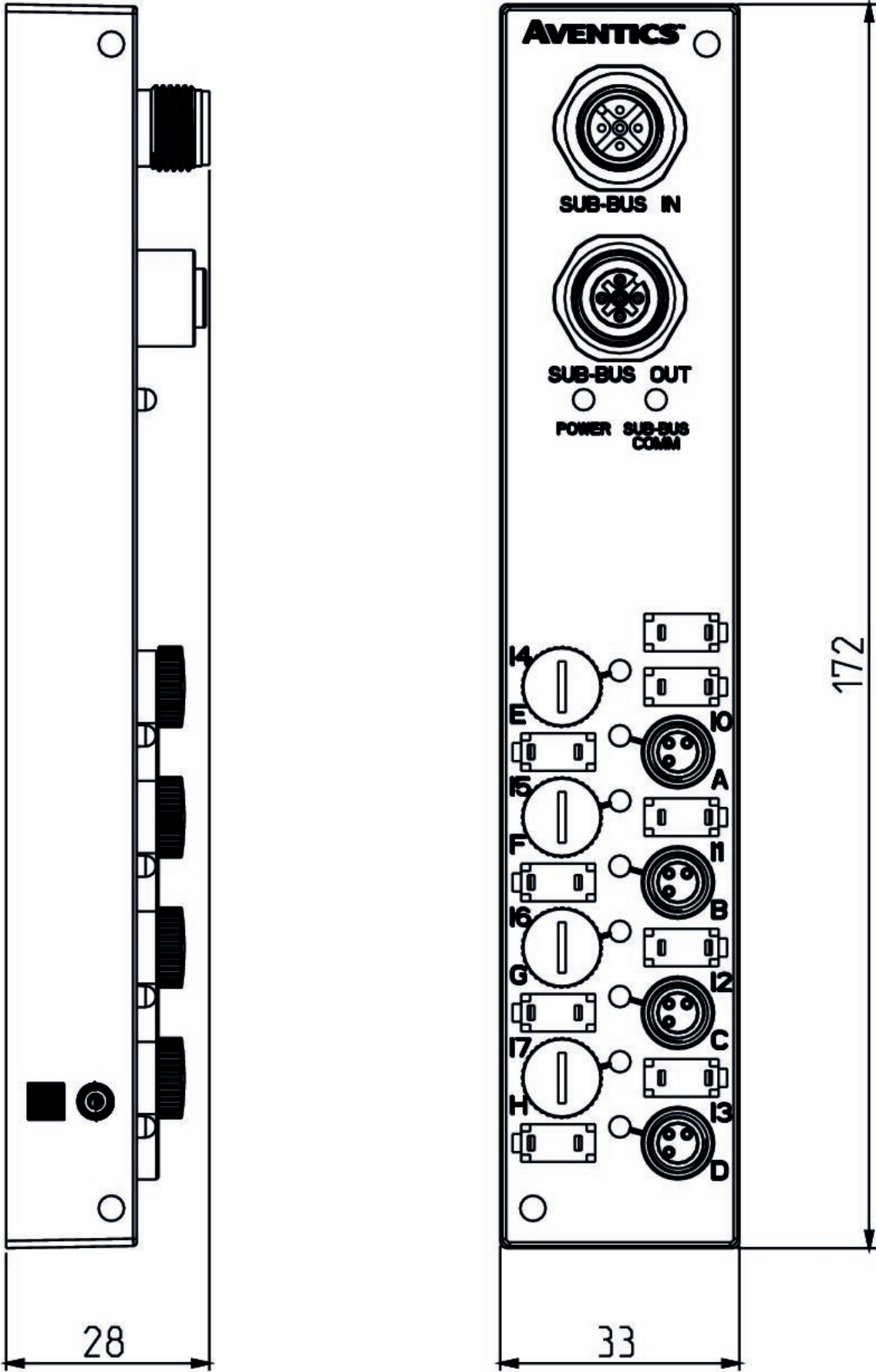
Dimensions



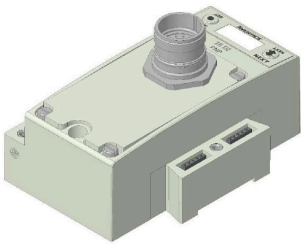
I/O modules, Series G3



Number of inputs	I/O module version	Operational volt- age electronics	Operational volt- age electronics	Part No.
8	digital inputs PNP	24 V DC	-10% / +10%	240-379



I/O modules, Series G3

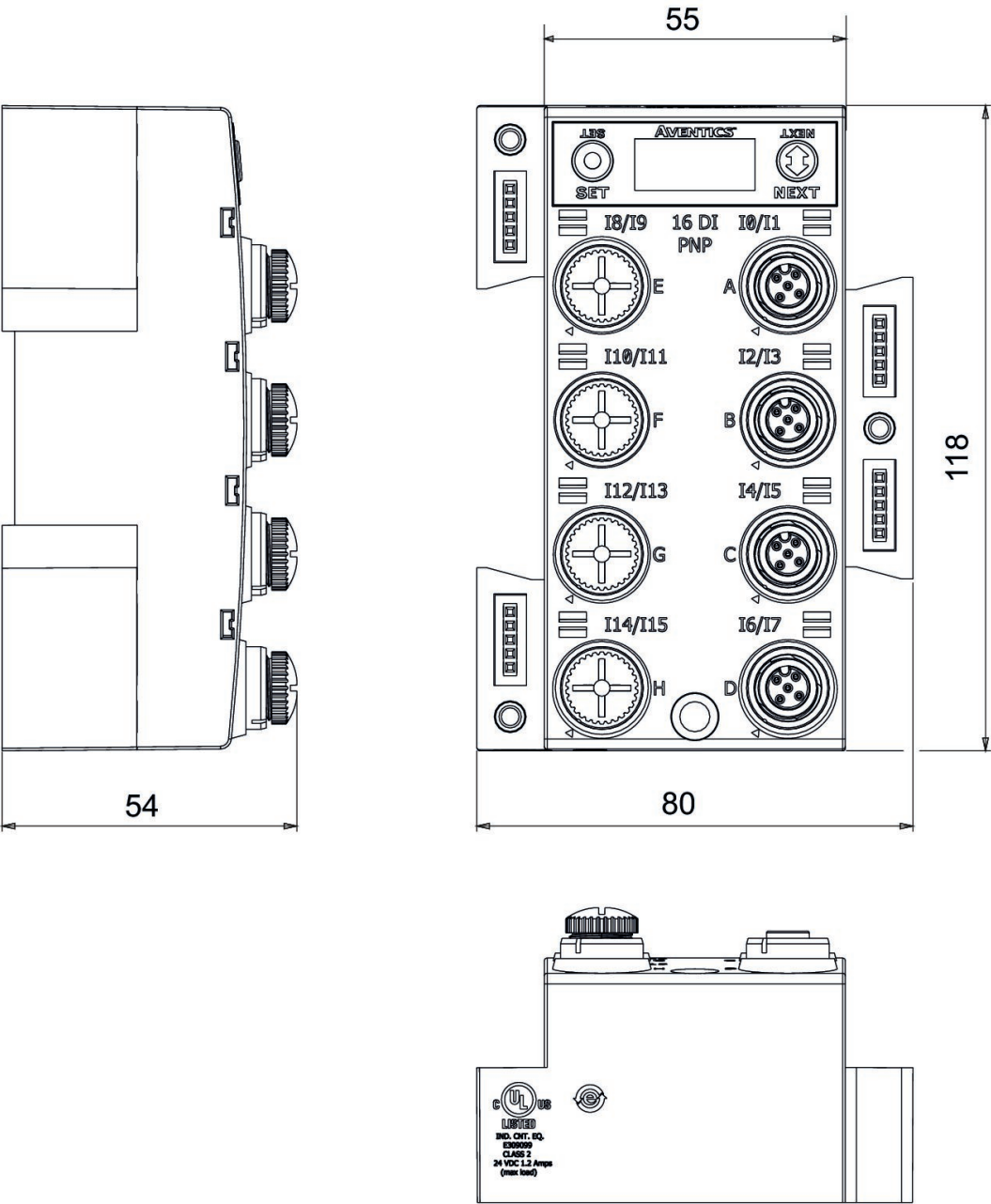


Number of inputs	I/O module version	Part No.
16	digital inputs PNP	240-323

I/O modules, Series G3



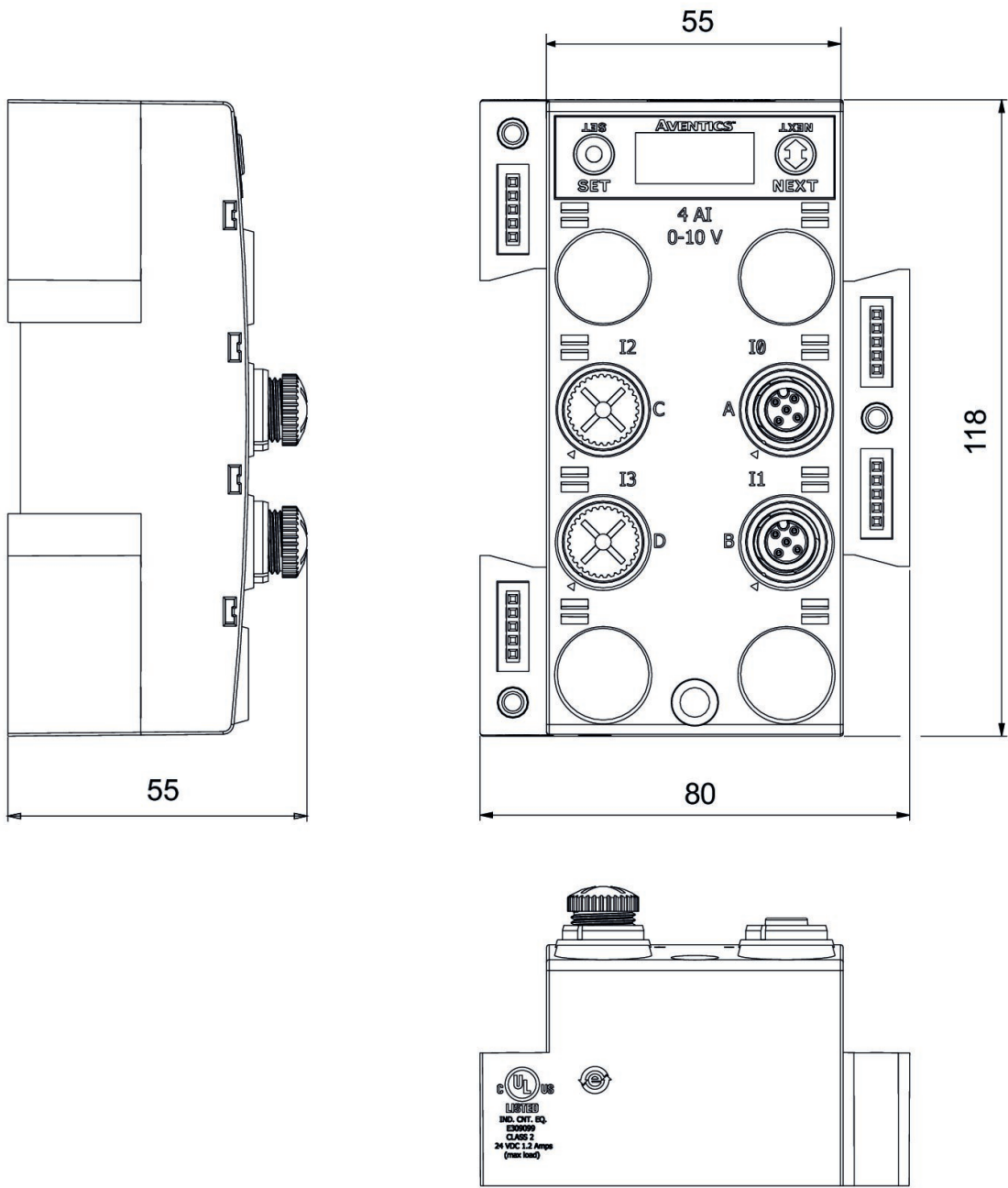
Type	Number of inputs	Number of outputs	I/O module version	Operational voltage electronics	Operational voltage electronics	Part No.
16DI8M12, digital inputs PNP	16		digital inputs PNP	24 V DC	-10% / +10%	240-205
8DI8M8, digital inputs PNP	8		digital inputs PNP	24 V DC	-10% / +10%	240-206
16DO8M12, digital outputs PNP		16	Digital outputs	24 V DC	-10% / +10%	240-207
8DO8M12, digital outputs PNP		8	digital outputs PNP	24 V DC	-10% / +10%	240-208
16DI8M12, digital inputs NPN	16		digital inputs NPN	24 V DC	-10% / +10%	240-209
8DI8M12, digital inputs NPN	8		digital inputs NPN	24 V DC	-10% / +10%	240-210
8DO8M12, digital inputs/outputs PNP	8	8	digital inputs/outputs PNP	24 V DC	-10% / +10%	240-211
8DO8M12		8	Digital outputs	24 V DC	-10% / +10%	240-300



I/O modules, Series G3



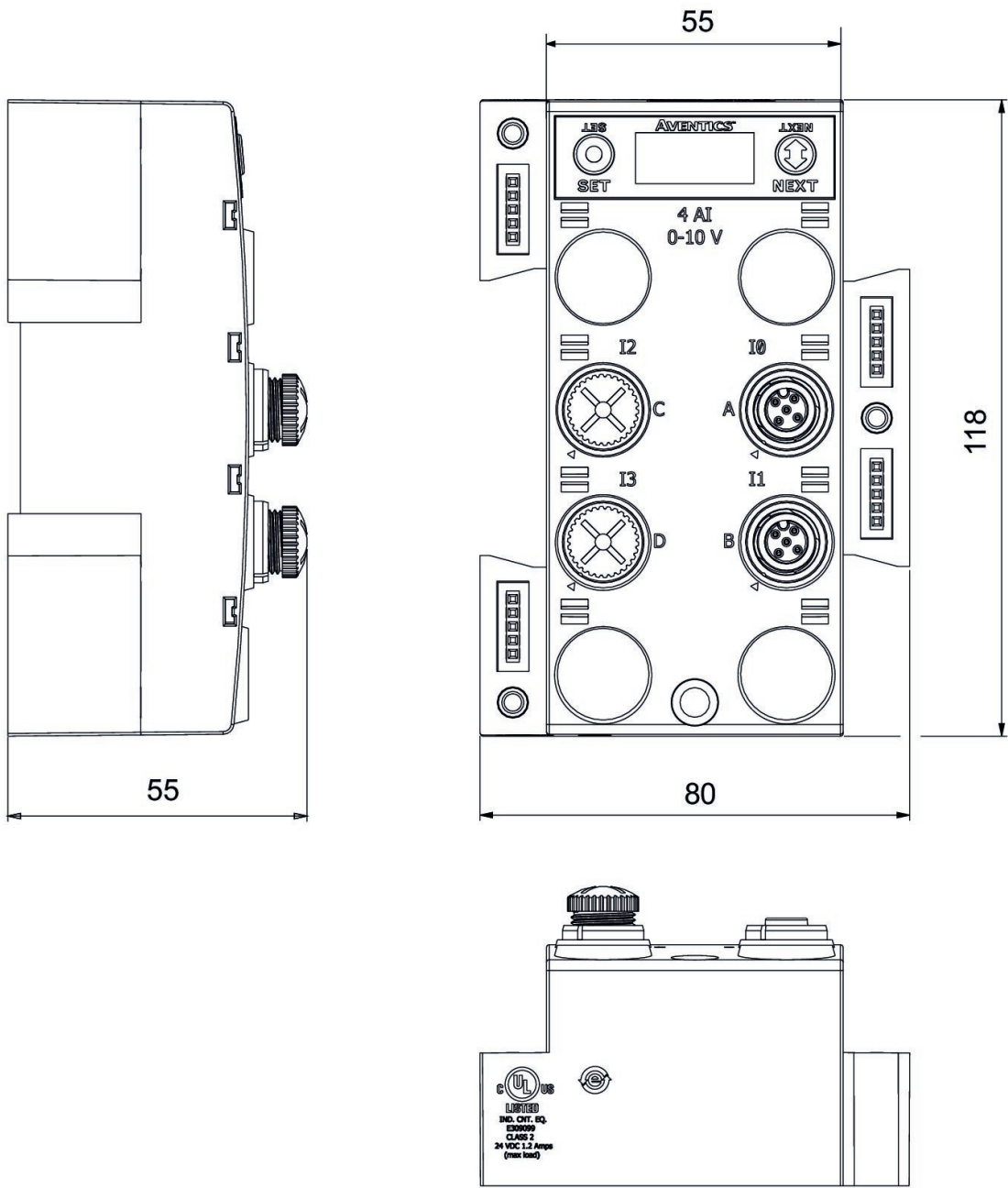
Type	Number of inputs	Number of outputs	I/O module version	Operational voltage electronics	Operational voltage electronics	Part No.
4AI4M12-E	4		Analog inputs	24 V DC	-10% / +10%	240-212
2AIAO8M12	2	2	analog inputs/outputs	24 V DC	-10% / +10%	240-213
4AI4M12-E	4		Analog inputs	24 V DC	-10% / +10%	240-214
2AIAO4M12	2	2	analog inputs/outputs	24 V DC	-10% / +10%	240-215
2AIAO8M12	2	2	analog inputs/outputs	24 V DC	-10% / +10%	240-307
	4	4	analog inputs/outputs	24 V DC	-10% / +10%	240-363



Series G3



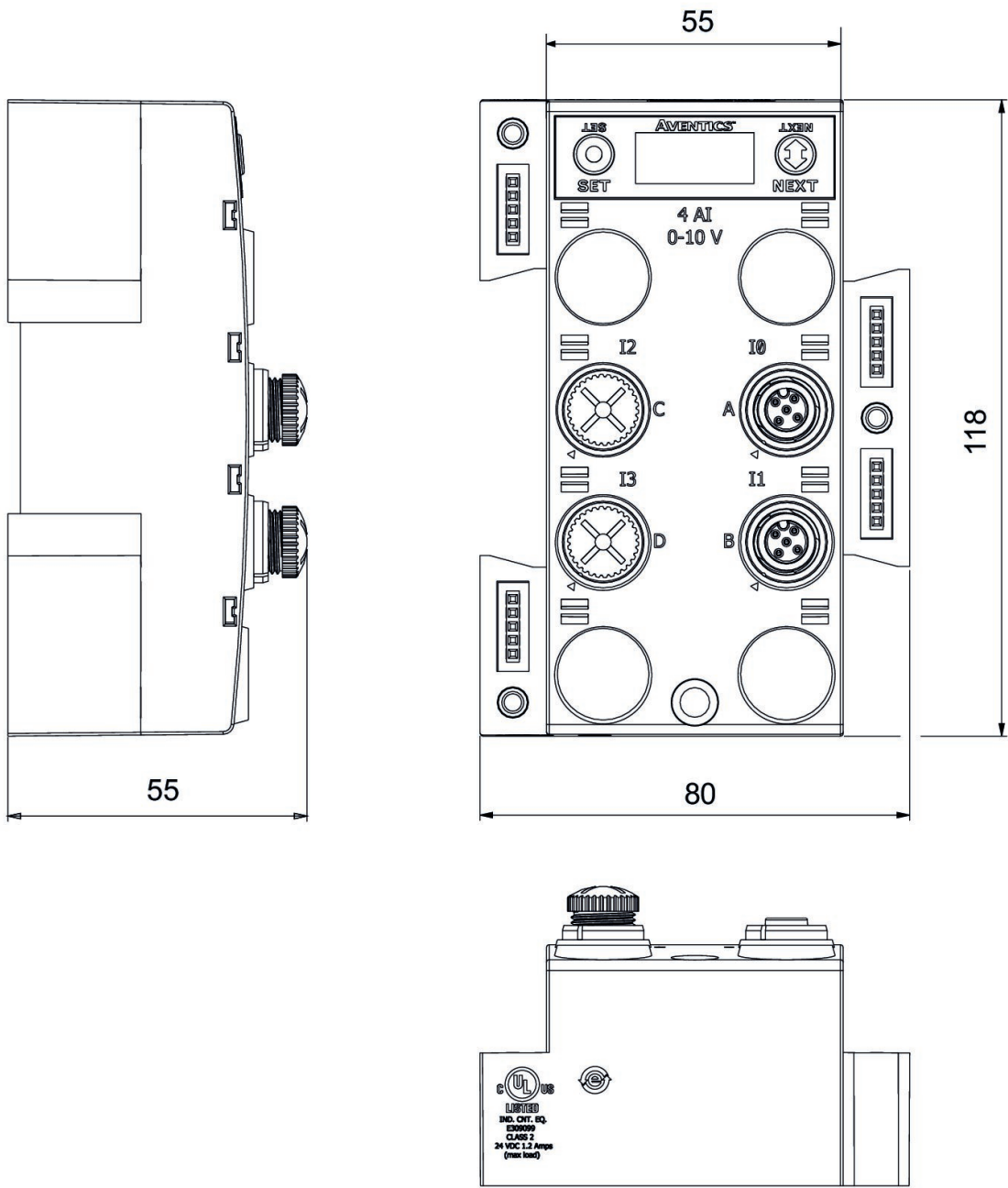
Type	I/O module version	Operational volt- age electronics	Operational volt- age electronics	Part No.
Socket, M12x1	Analog inputs	24 V DC	-10% / +10%	240-311



I/O modules, Series G3



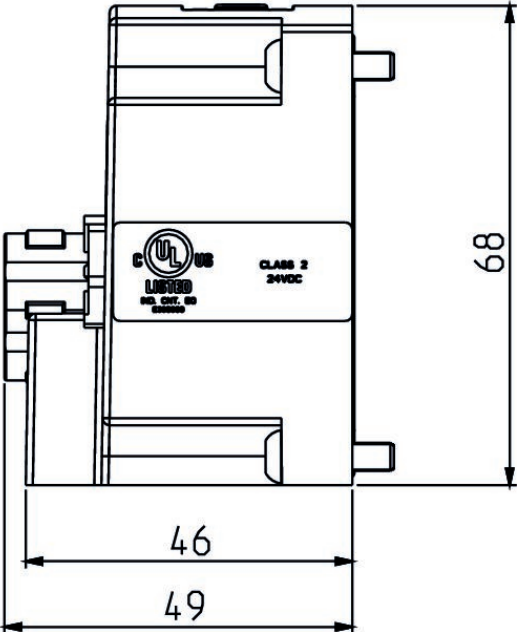
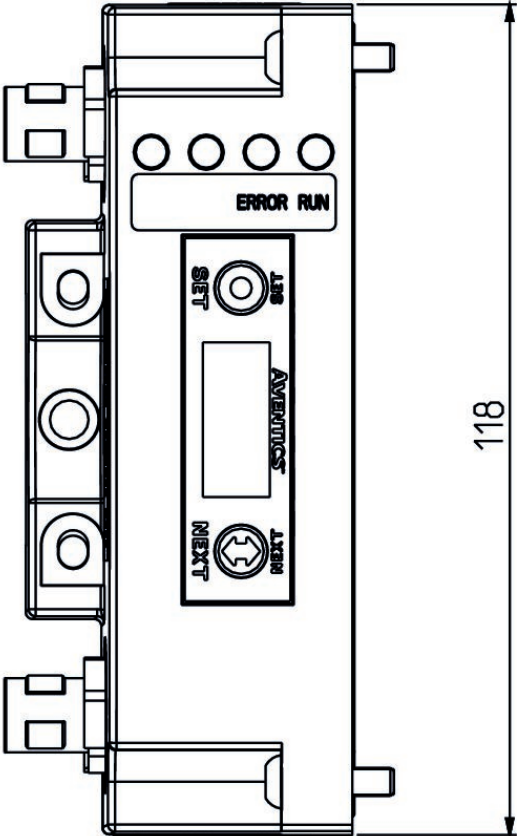
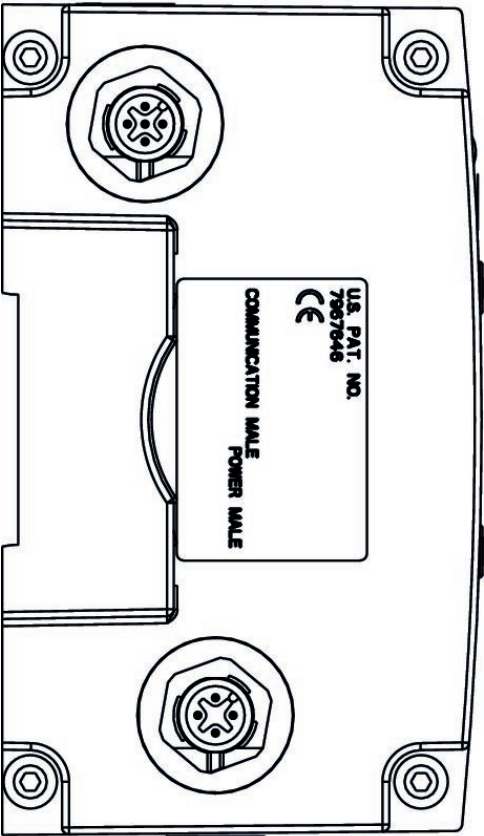
Number of inputs	E/A capable	Number of I/O connections	Part No.
8	connection with I/O	8 inputs	240-326



Bus coupler, Series 580



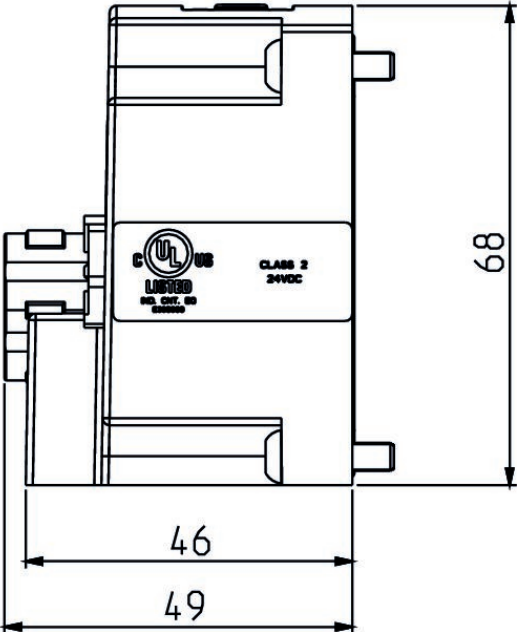
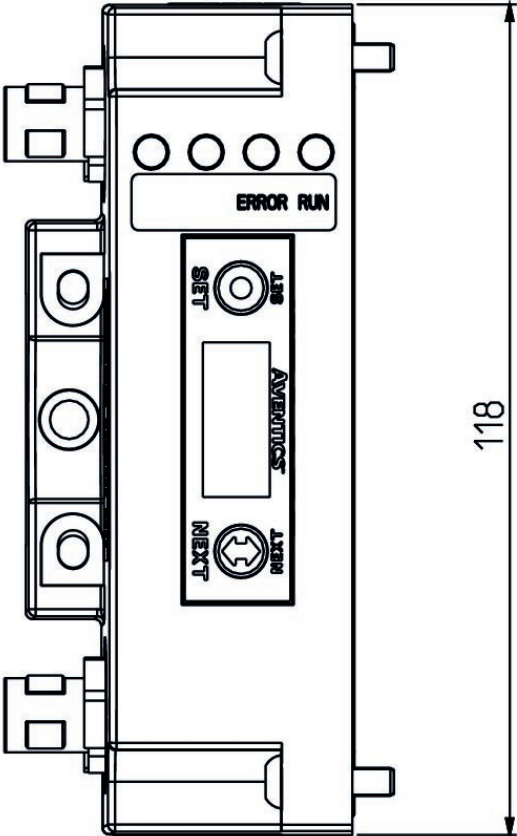
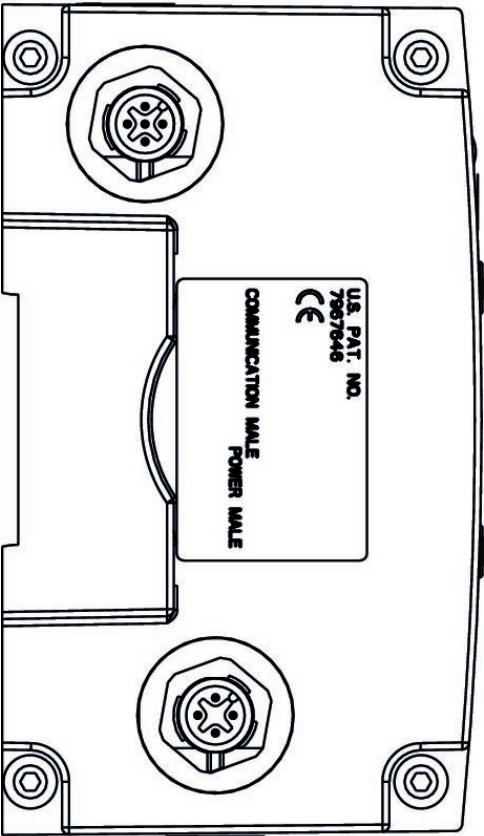
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
CANopen	4-pin	24 V DC	-10% / +10%	P580AE- CO1010A00



Series 580



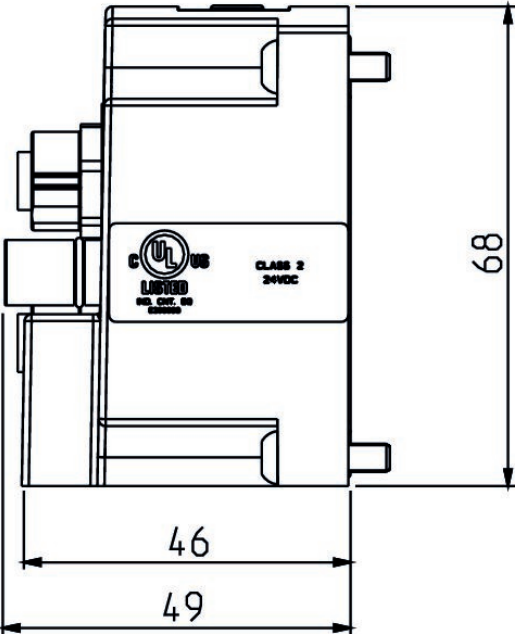
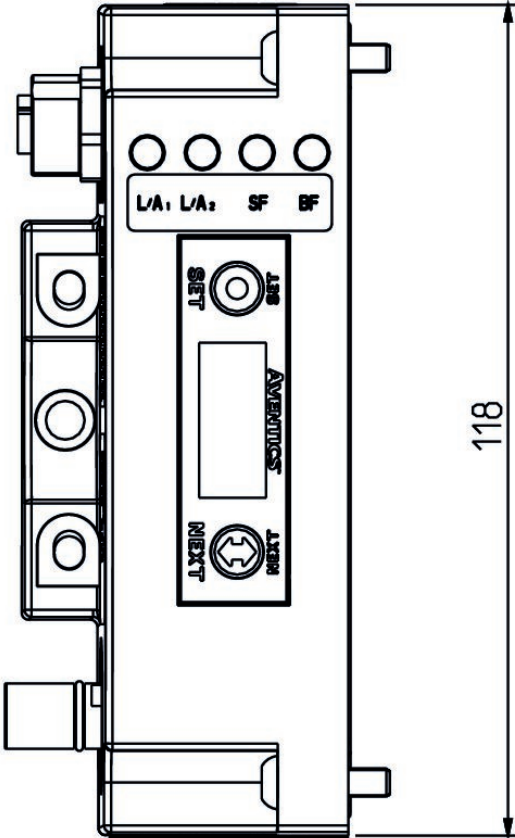
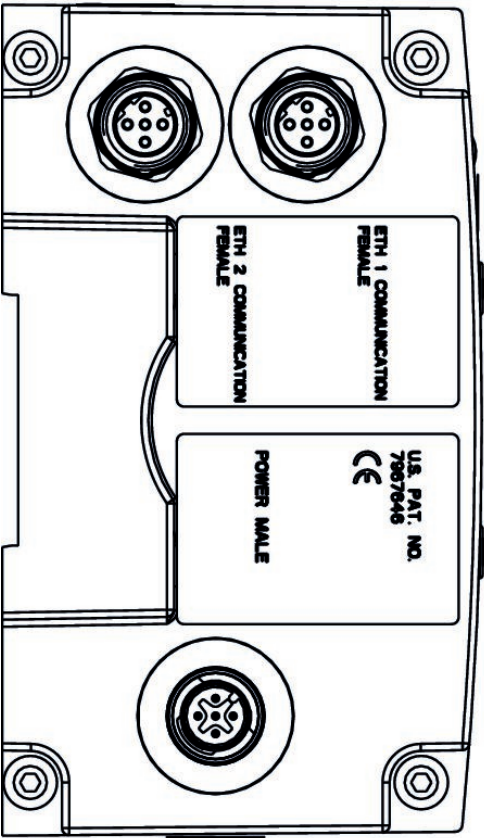
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
DeviceNet	4-pin	24 V DC	-10% / +10%	P580AEDN1010A00



Series 580



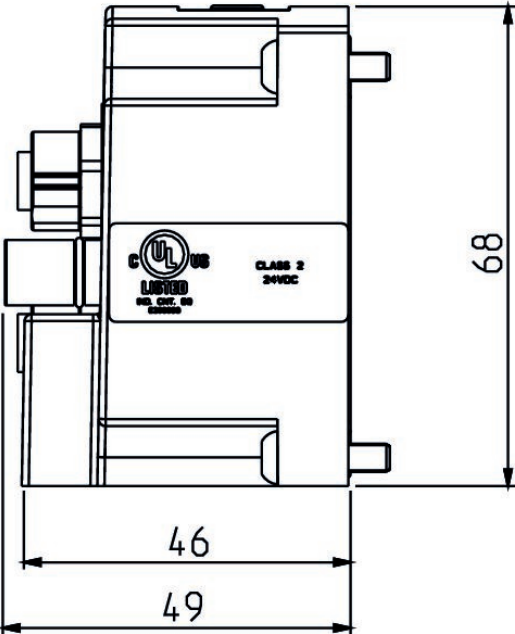
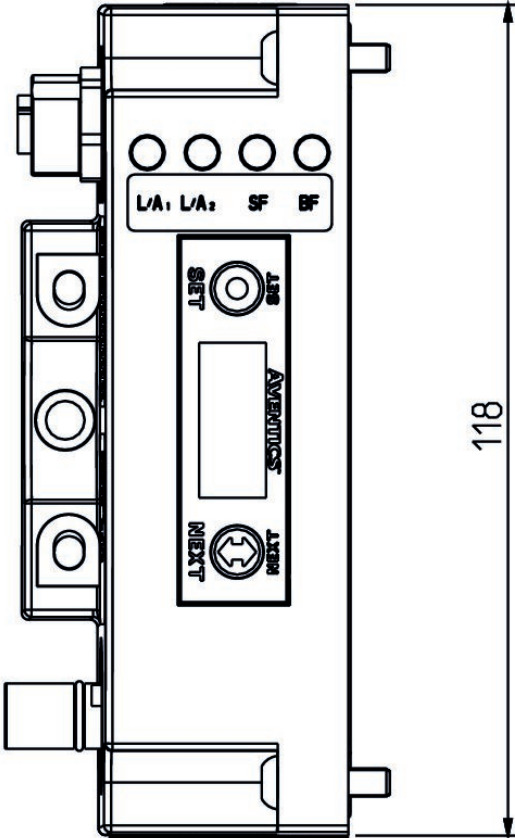
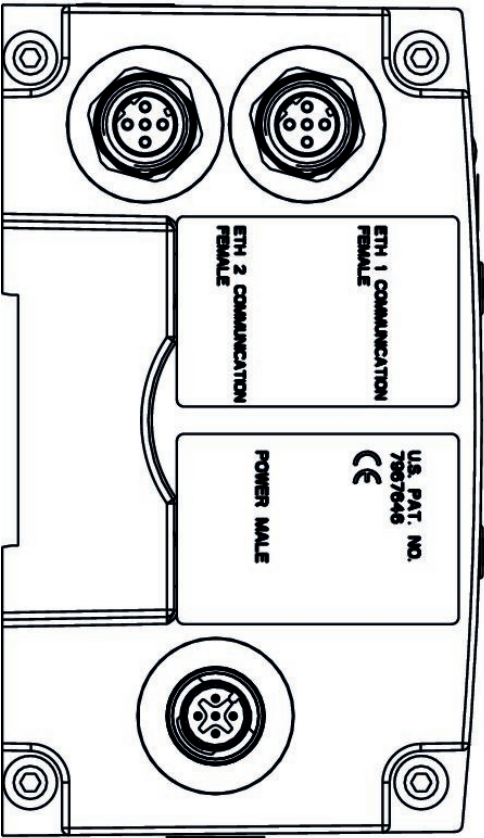
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
EtherCAT	5-pin	24 V DC	-10% / +10%	P580AEEC1010A00



Series 580



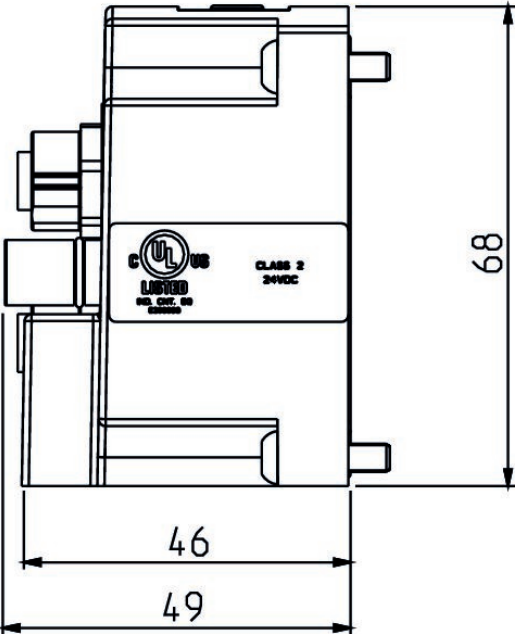
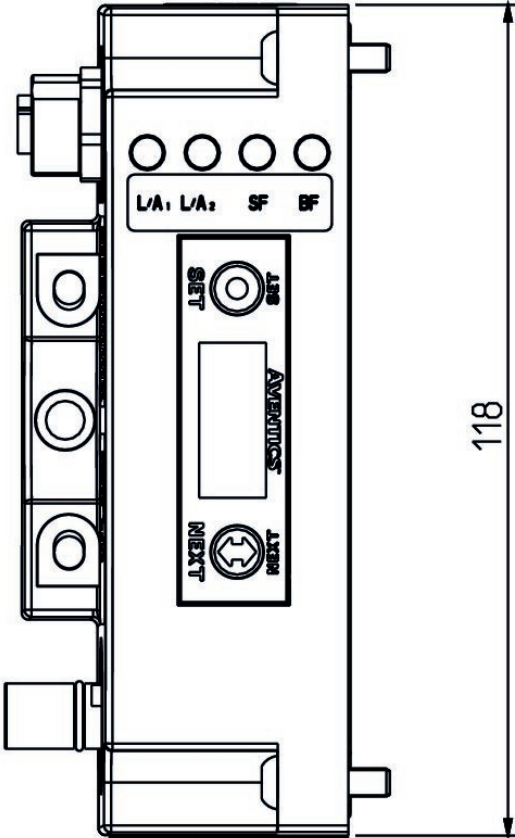
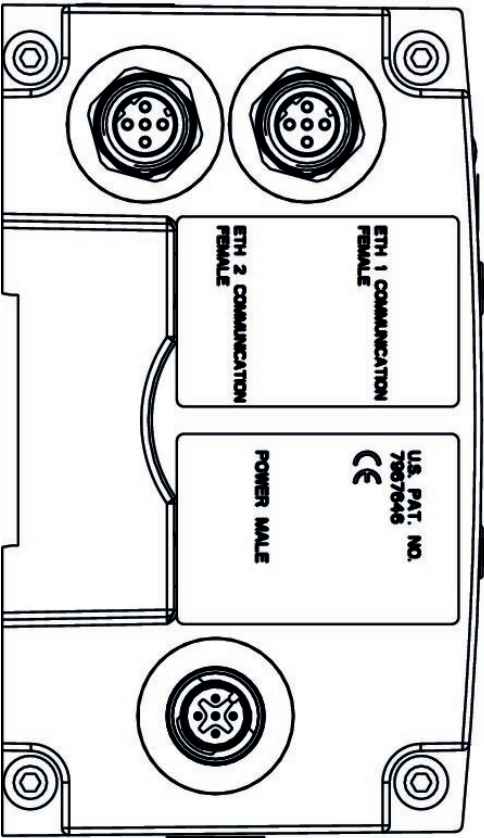
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
EtherNet/IP	4-pin	24 V DC	-10% / +10%	P580AEED1010A00



Series 580



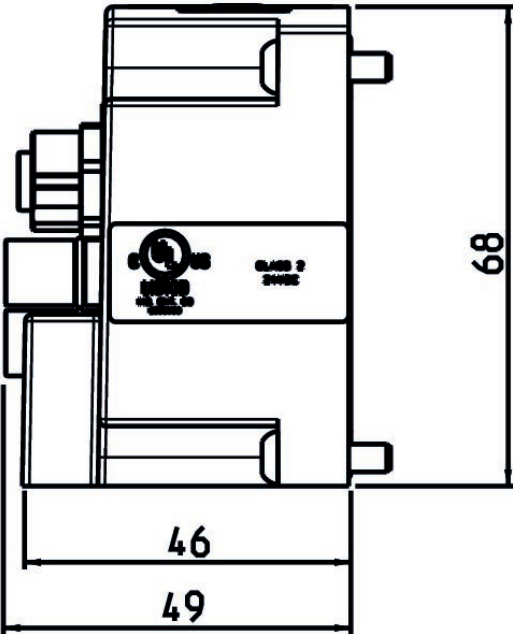
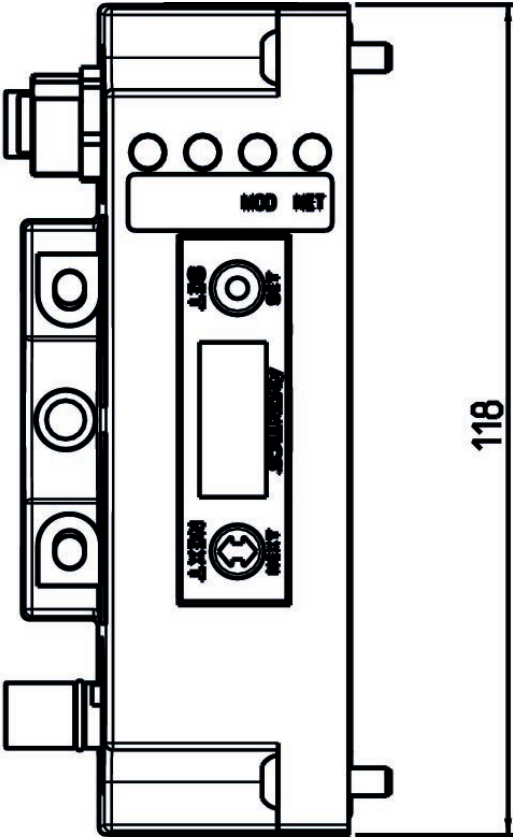
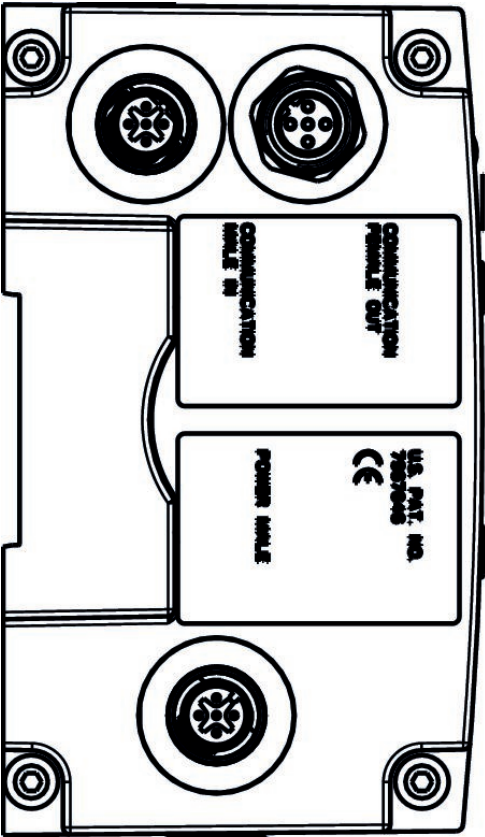
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
POWERLINK	4-pin	24 V DC	-10% / +10%	P580AEPL1010A00



Series 580



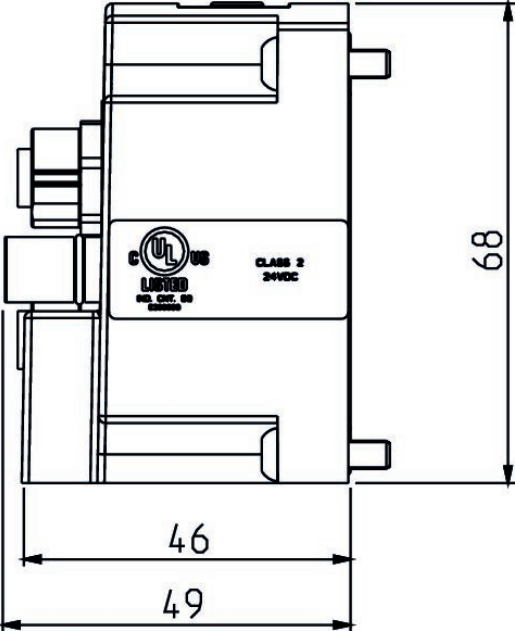
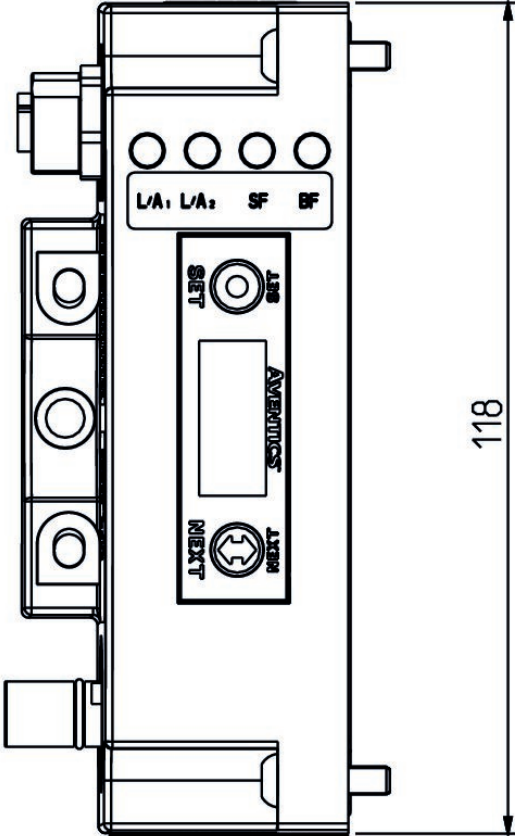
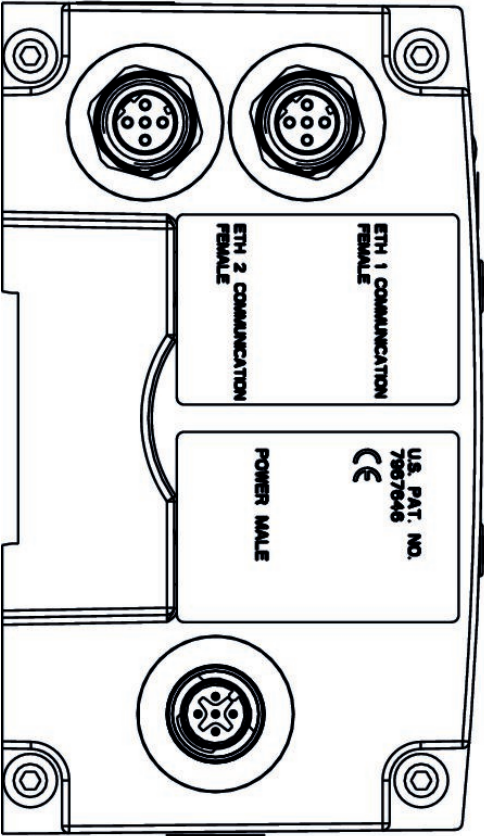
Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
PROFIBUS DP	5-pin	24 V DC	-10% / +10%	P580AEPT1010A00



Series 580



Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
Profinet	5-pin	24 V DC	-10% / +10%	P580AEPN1010A00

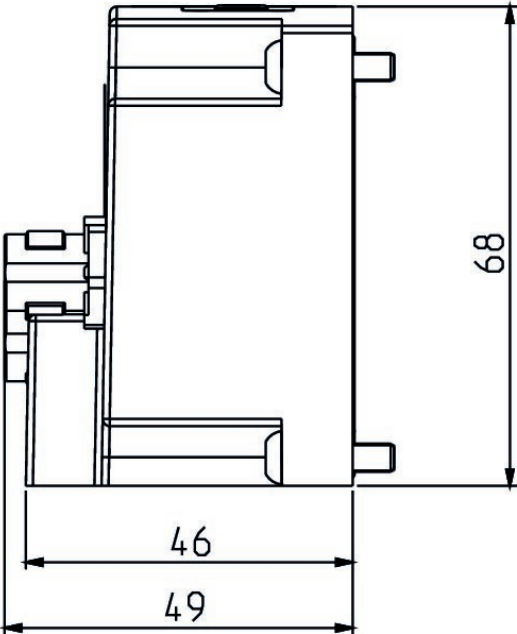
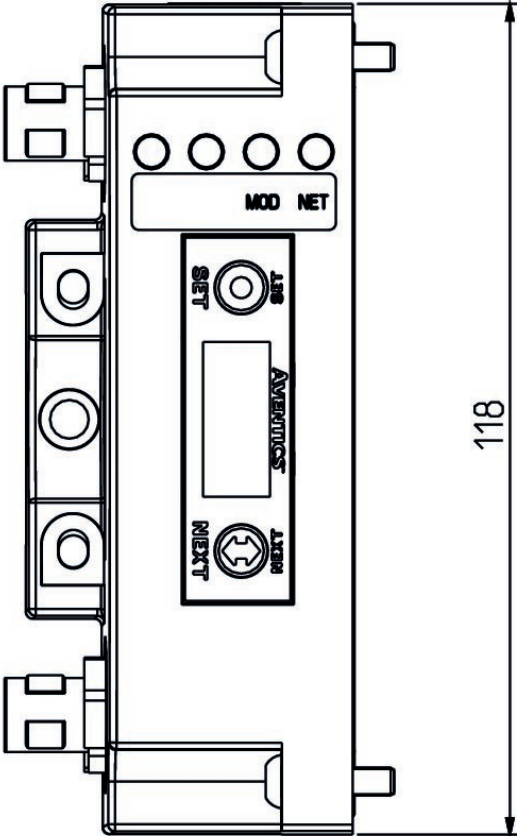
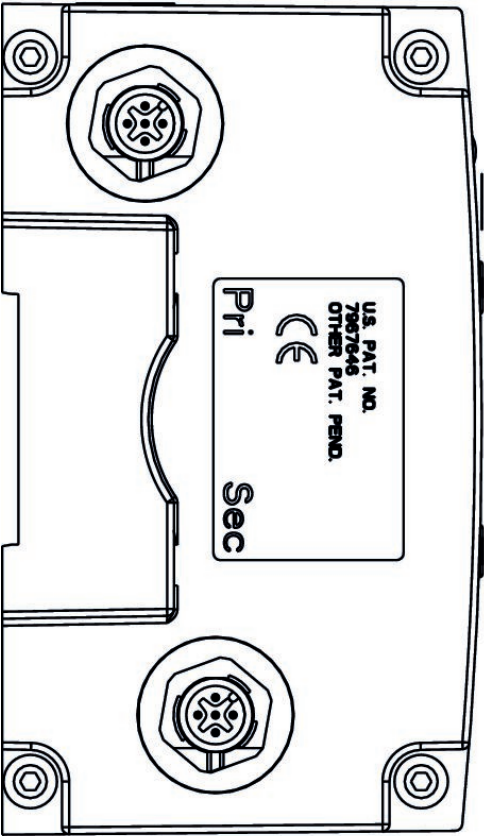


Bus coupler, Series 580

Plug
M12x1



Fieldbus protocol	Number of poles	Operational volt- age electronics	Operational volt- age electronics	Part No.
DeltaV	5-pin	24 V DC	-10% / +10%	P580AECH2010A00

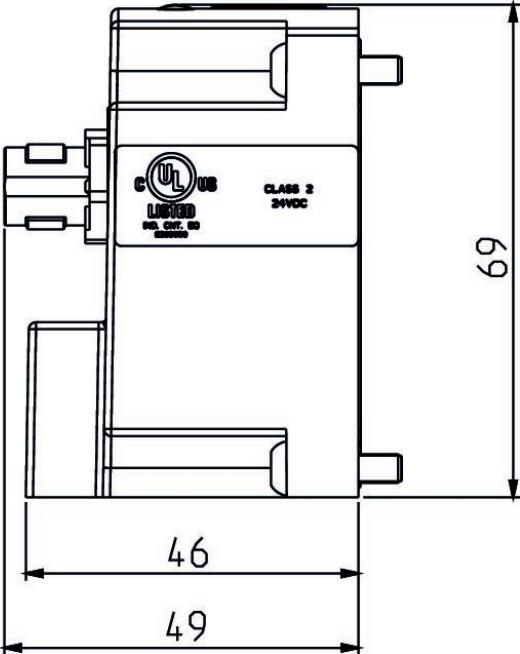
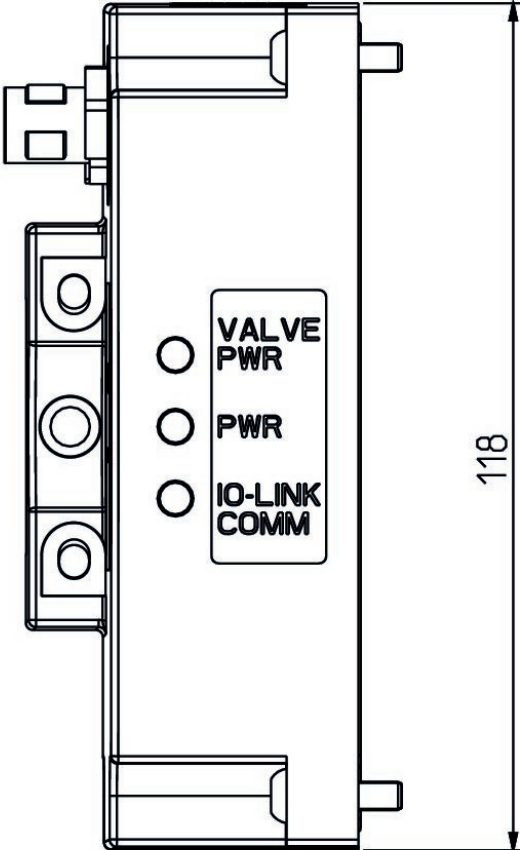
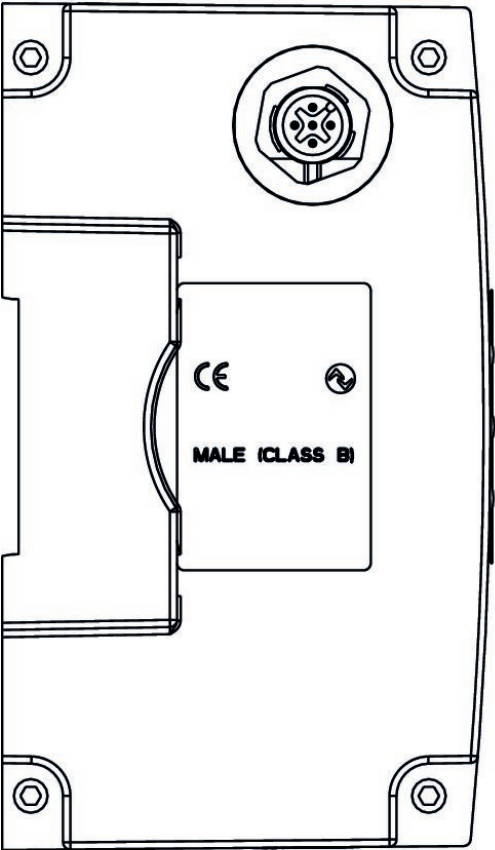


Series 580



Fieldbus protocol	Operational voltage electronics		Part No.
IO-Link	24 V DC	-10% / +10%	P580AELM1010A00
IO-Link	24 V DC	-10% / +10%	P580AELM2010A00

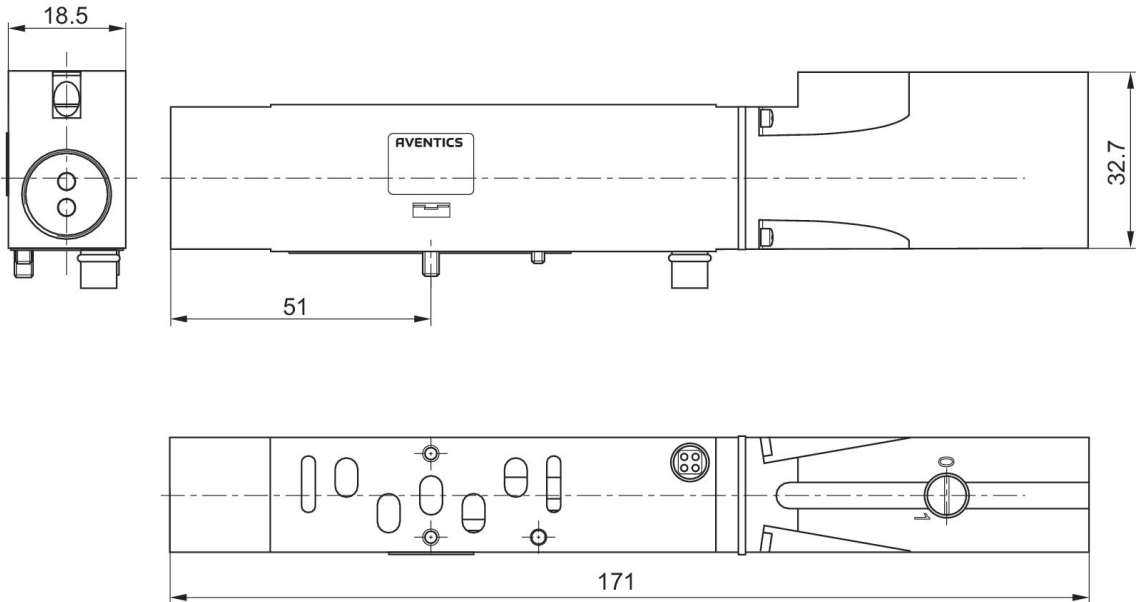
Dimensions



Shut-off sandwich plate lockable accessory, series 502



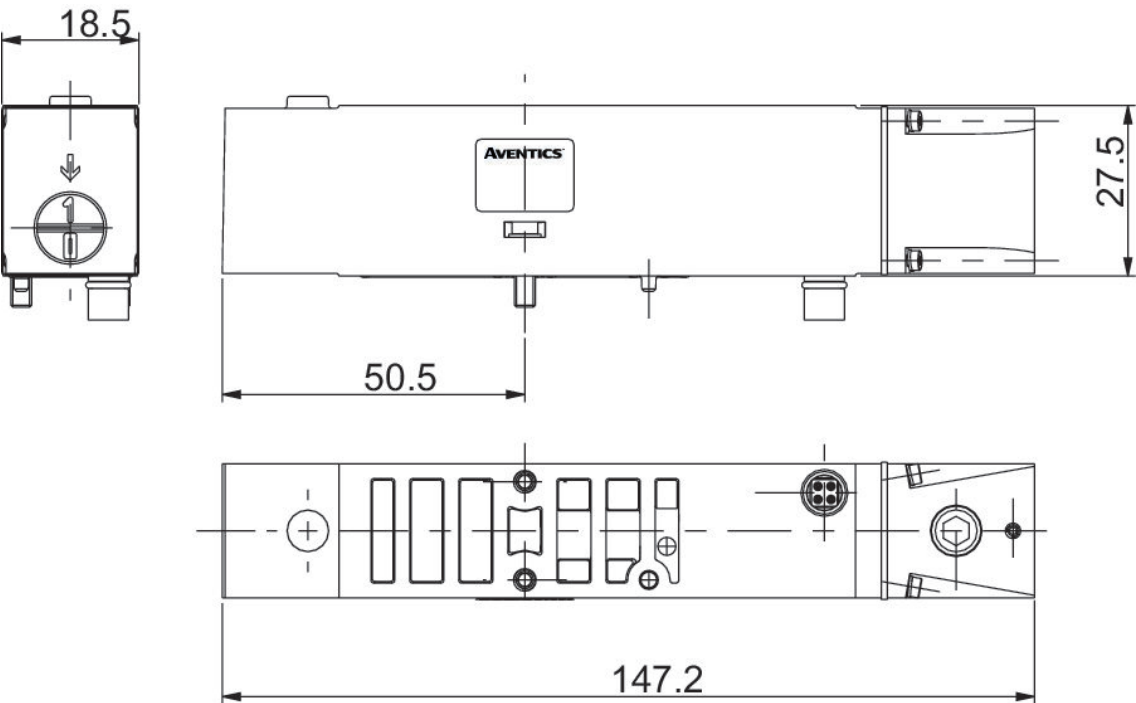
Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	R502AY429409001
Sandwich plate, sealing kit, mounting screws	R502AY429409004



Shut-off sandwich plate accessories



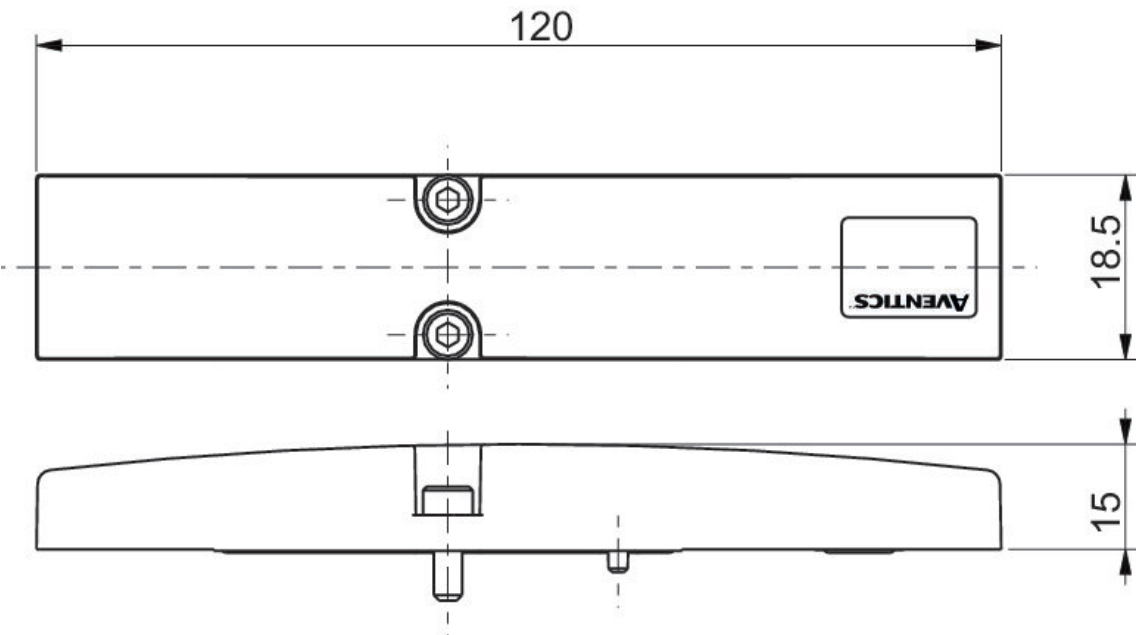
Scope of delivery	Part No.
Shut-off sandwich plate, sealing kit, mounting screws	R502AY429409002



Blanking plate, series 502



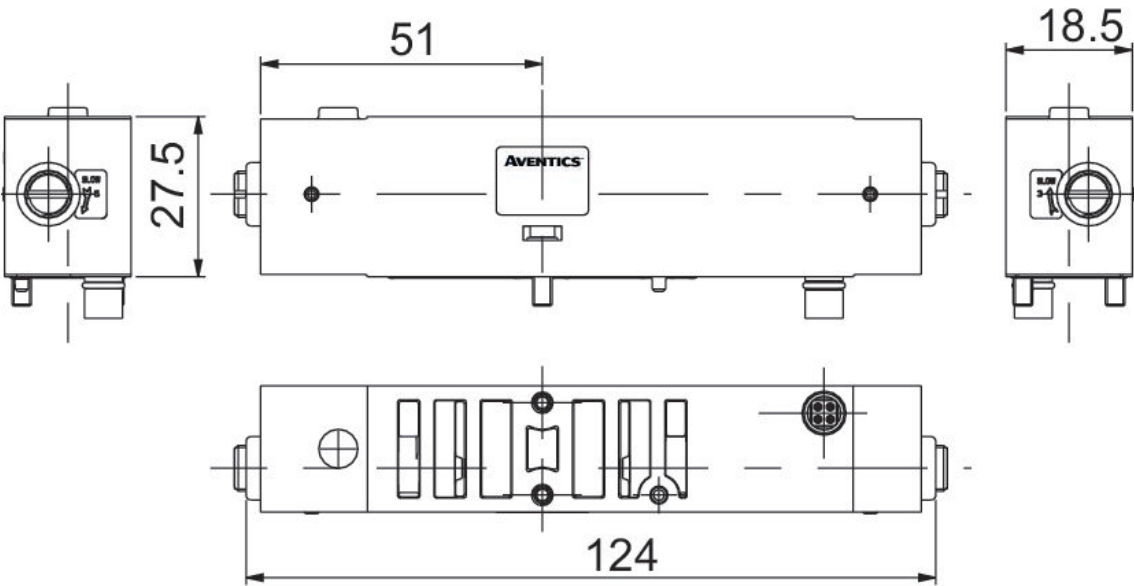
Scope of delivery	Part No.
Blind plate, sealing kit, mounting screws	P502AB431813001



Throttle sandwich plate ISO 15407-2 accessory, series 502



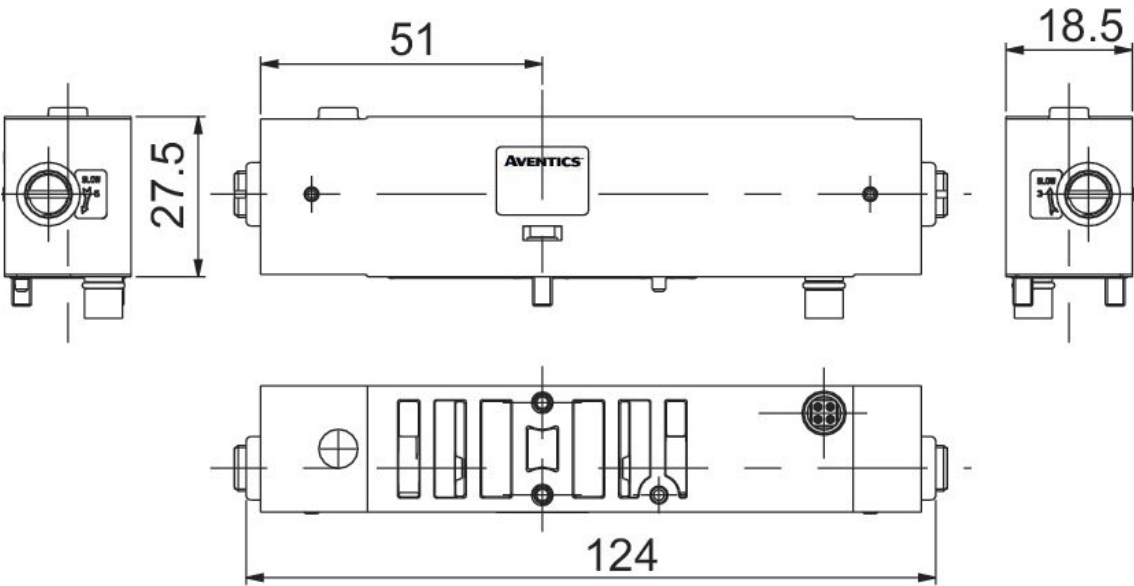
Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	R502AS429395001



Throttle sandwich plate accessories, series 502



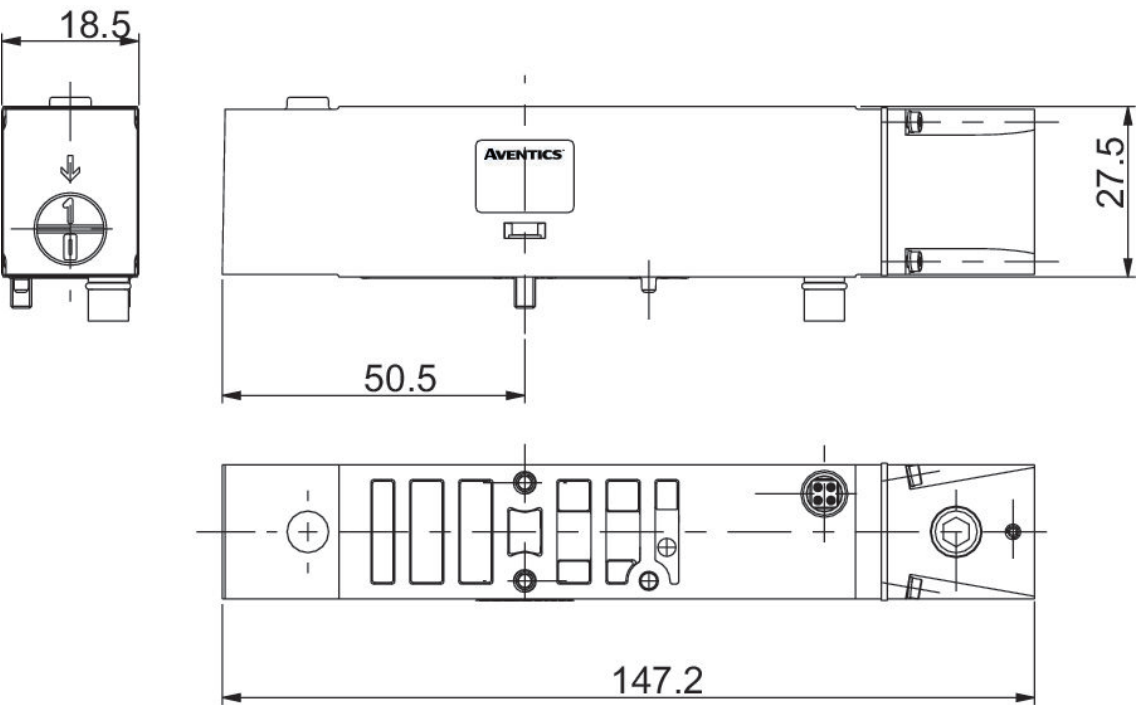
Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	R502AS429395002



Sandwich plate for additional pressure supply, series 502



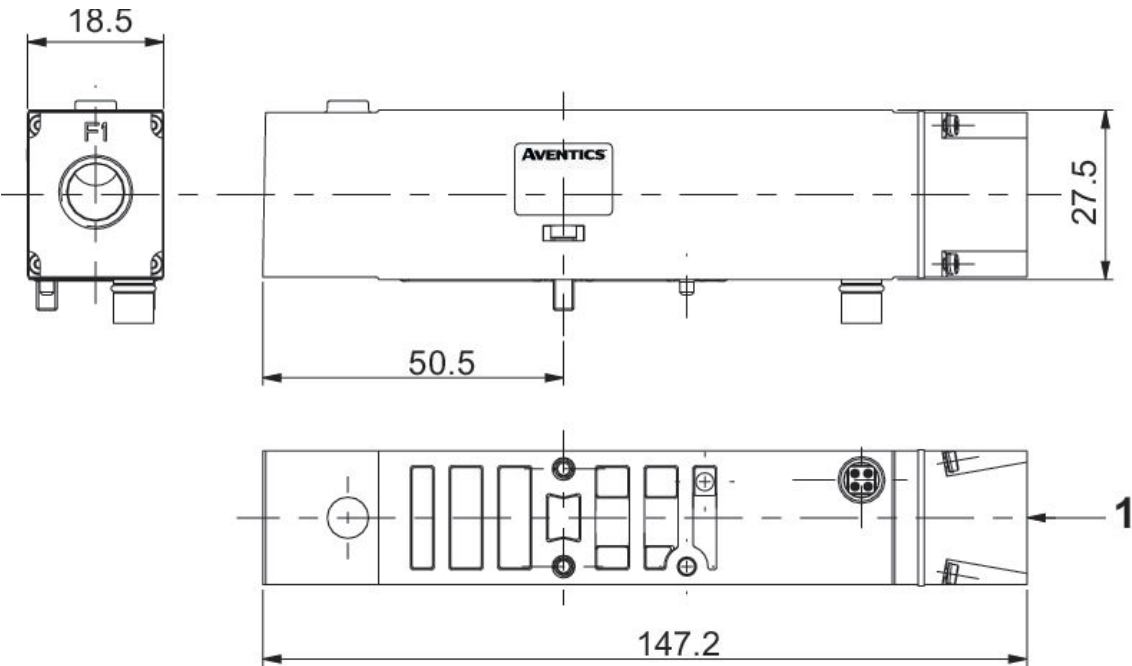
Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	G502AW428685004



Sandwich plate ISO 15407-2 for additional pressure supply, series 502



Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	G502AW428685003

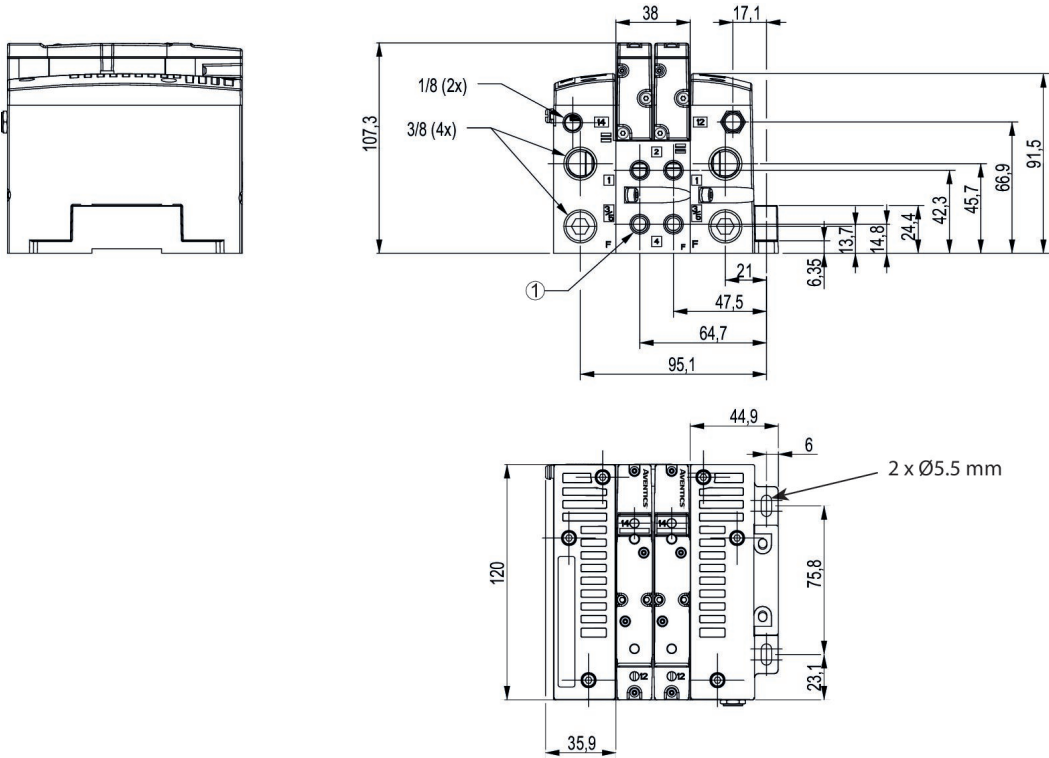


End plate, series 502



Scope of delivery	Part No.
Left and right end plate, sealing kit, mounting screws	G502AK431477013

Dimensions

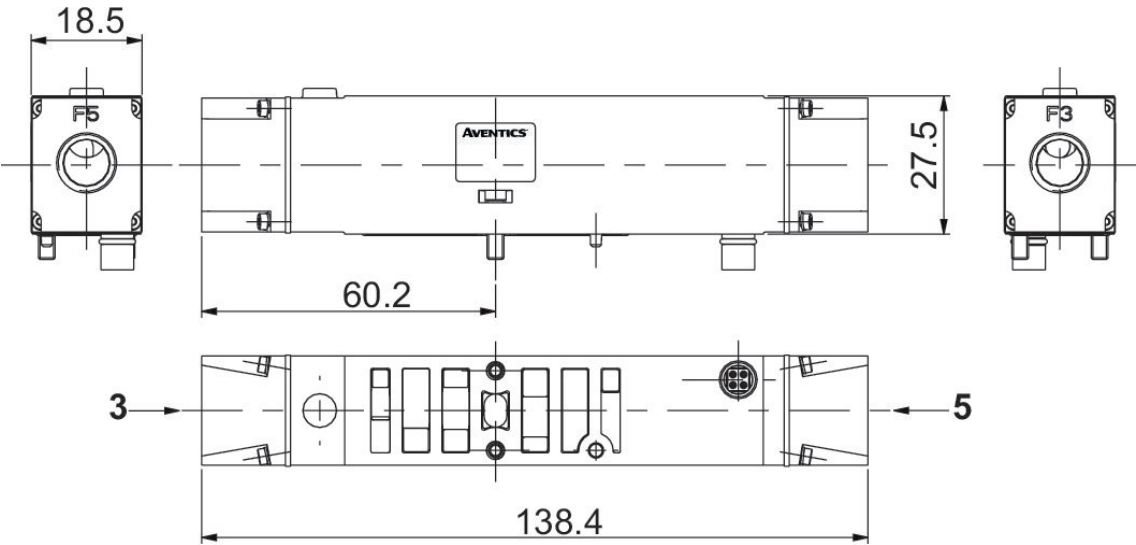


1) Push-in fitting 1/8

Sandwich exhaust plate, series 502



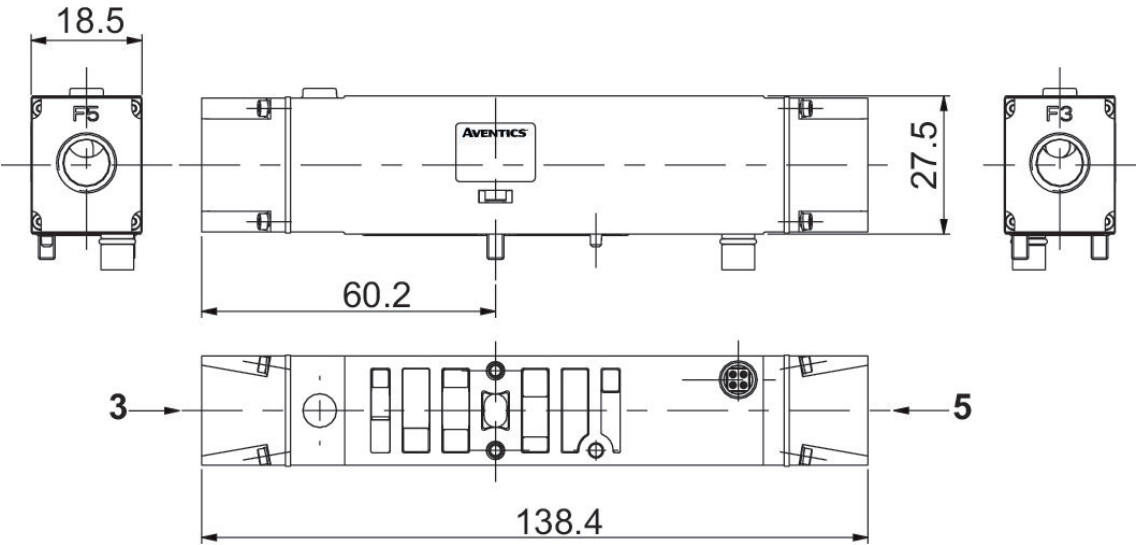
Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	G502AX428685002



Sandwich exhaust plate, series 502



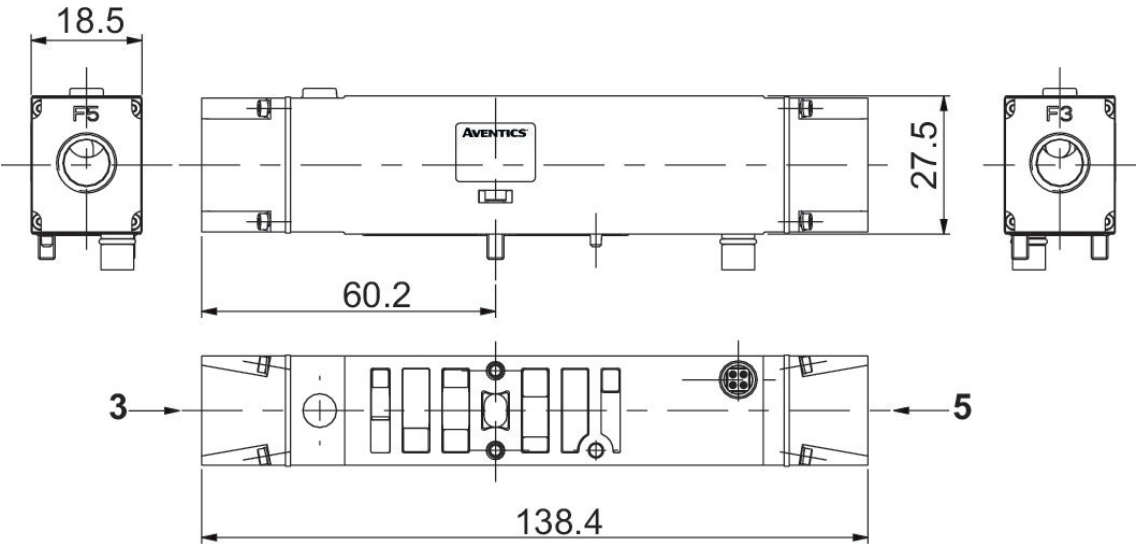
Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	8502AX428685002



Exhaust sandwich plate ISO 15407-2 for vertical stacking assembly, series 502



Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	G502AX428685001

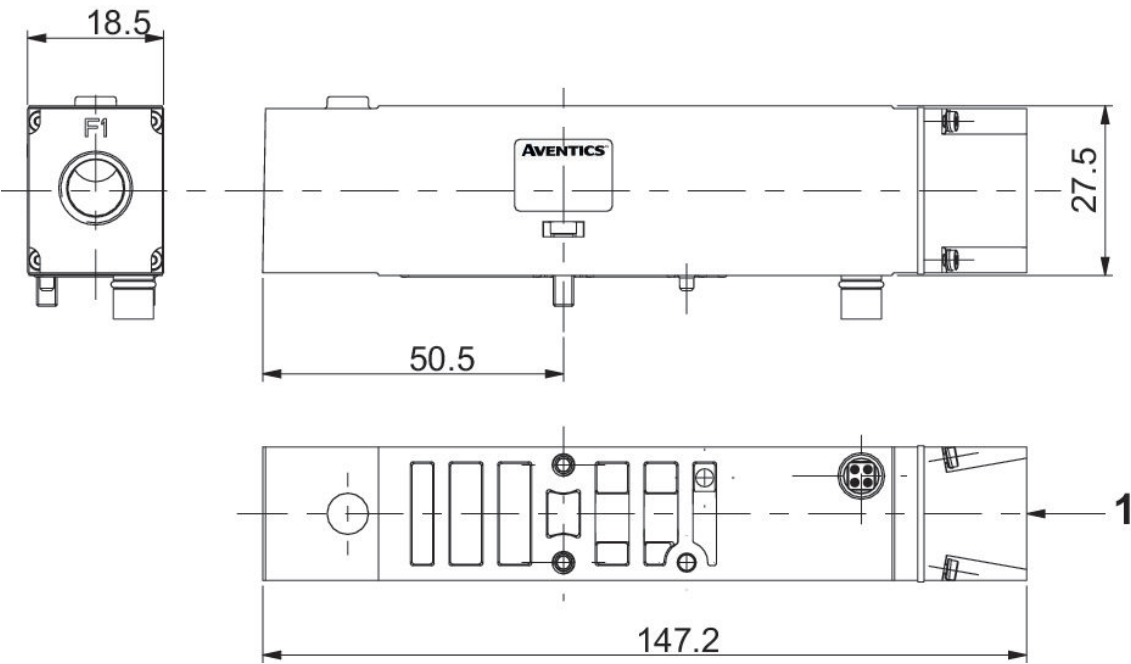


Sandwich plate for separate pressure supply

502



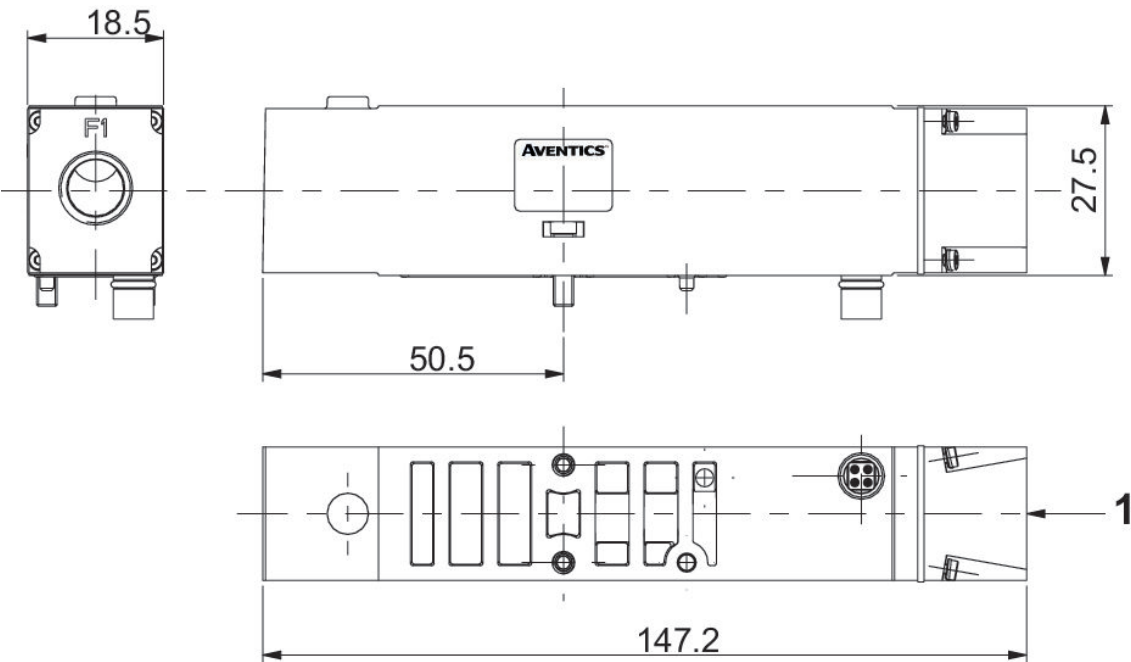
Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	G502AP428685006



Sandwich plate ISO 15407-2 for additional pressure supply, series 502



Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	G502AP428685005

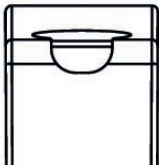
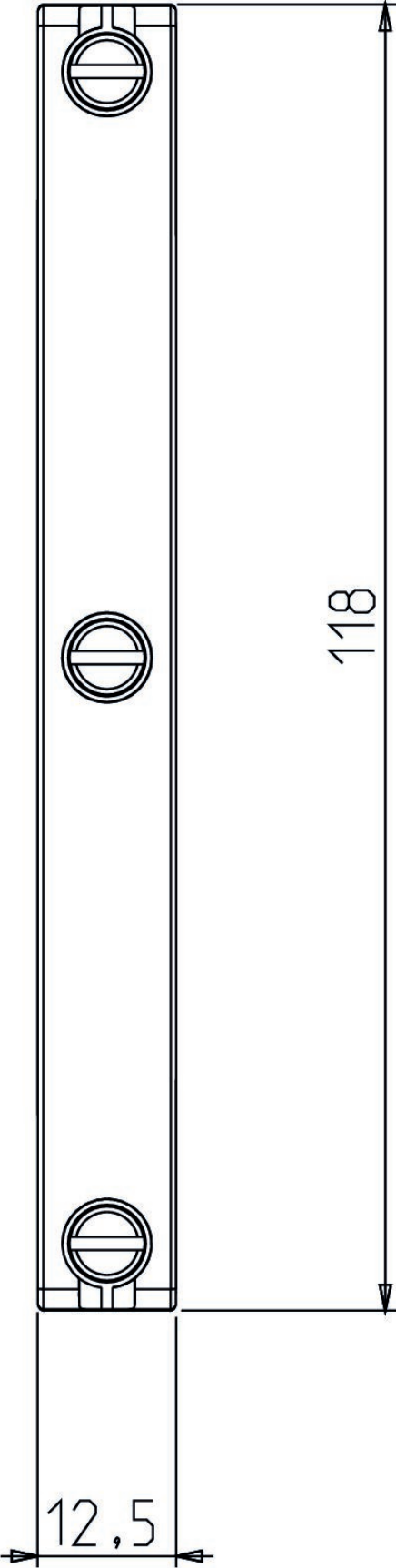
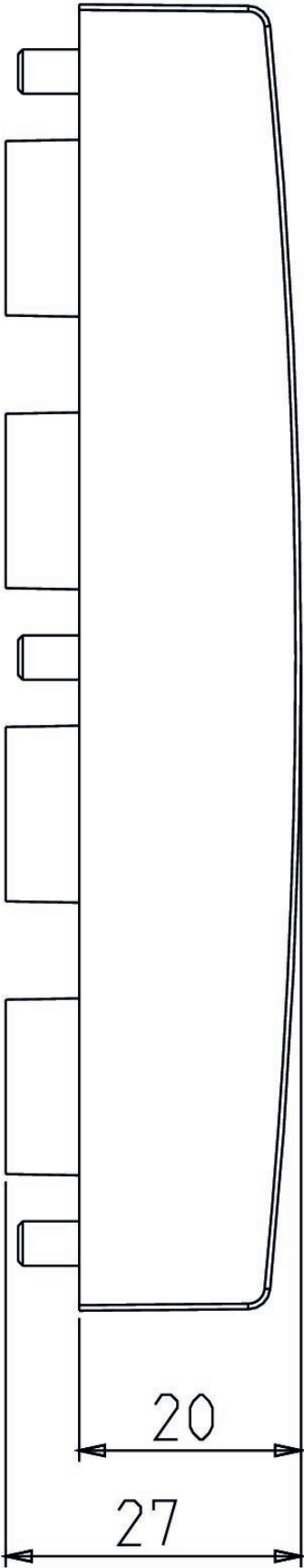


Connection piece

G3
501
502
503



Part No.
240-179

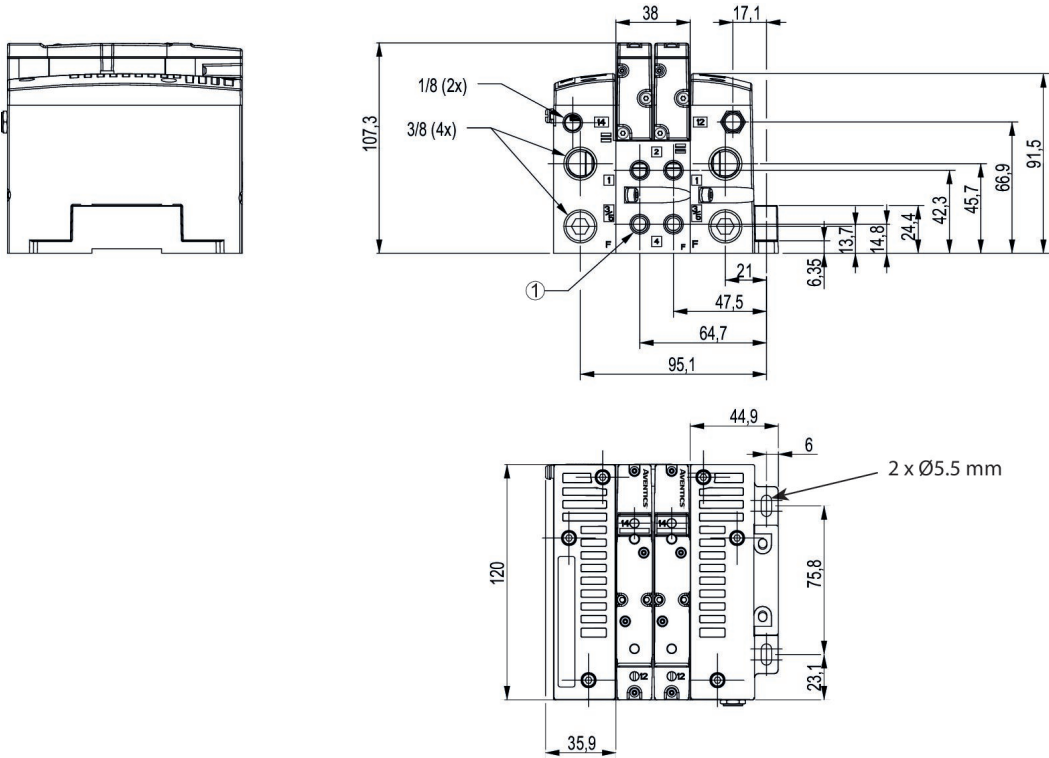


End plate, series 502



Scope of delivery	Part No.
Left and right end plate, sealing kit, mounting screws	8502AK431477001

Dimensions

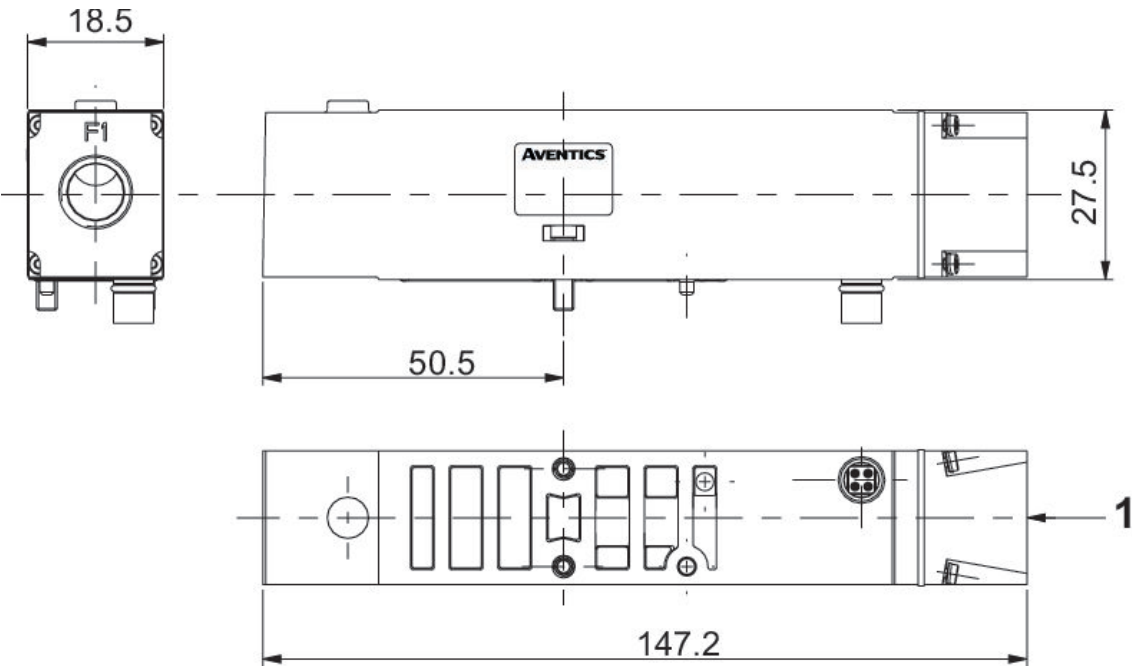


1) Push-in fitting 1/8

Sandwich plate ISO 15407-2 for additional pressure supply, series 502



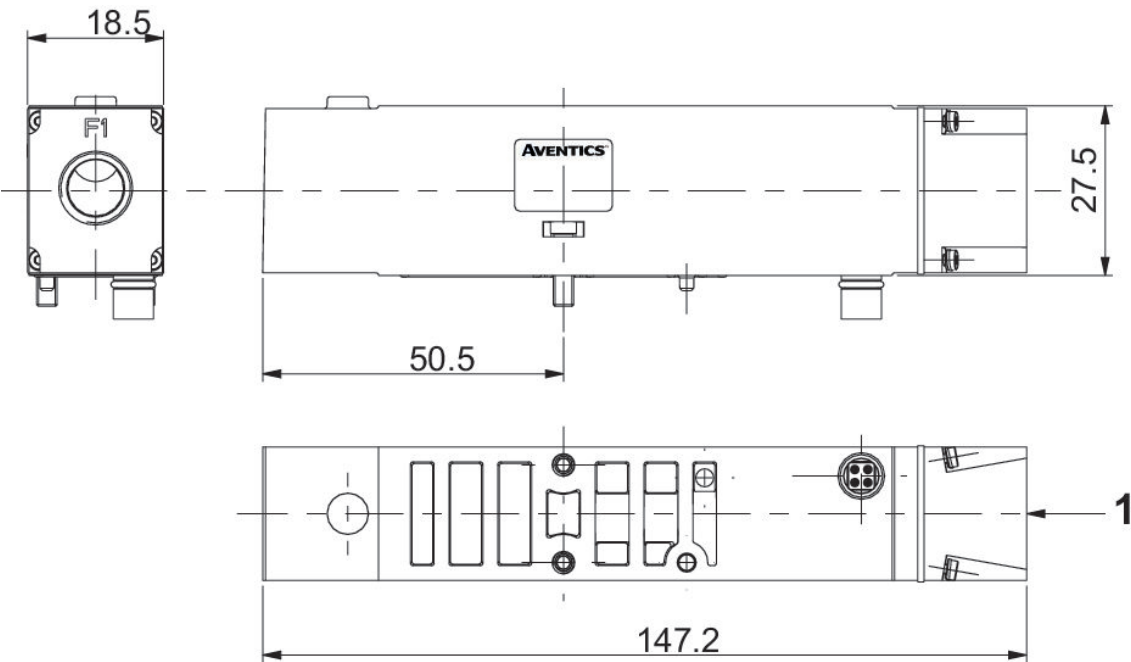
Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	8502AW428685003



Sandwich plate ISO 15407-2 for additional pressure supply, series 502



Scope of delivery	Part No.
Sandwich plate, sealing kit, mounting screws	8502AX428685001



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