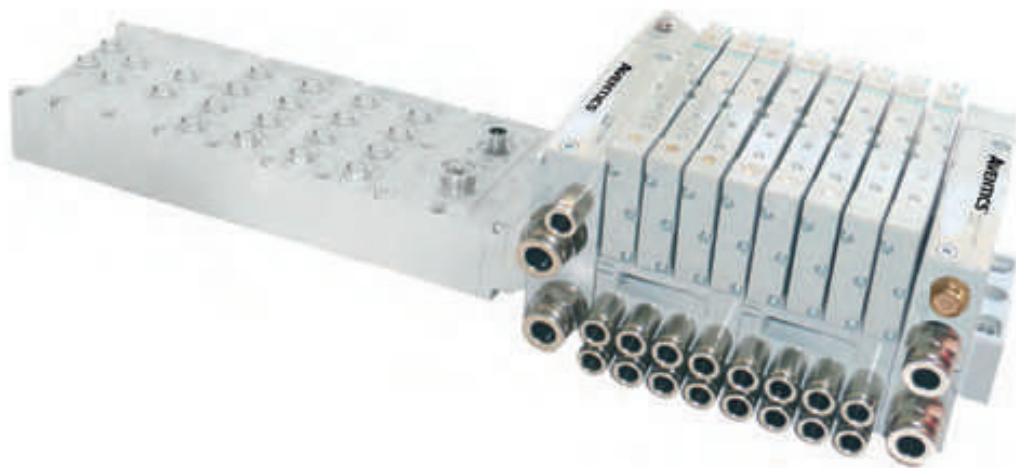


# Series 502



AVENTICS™ Series 502



# Series 502

- System overview



## Technical information

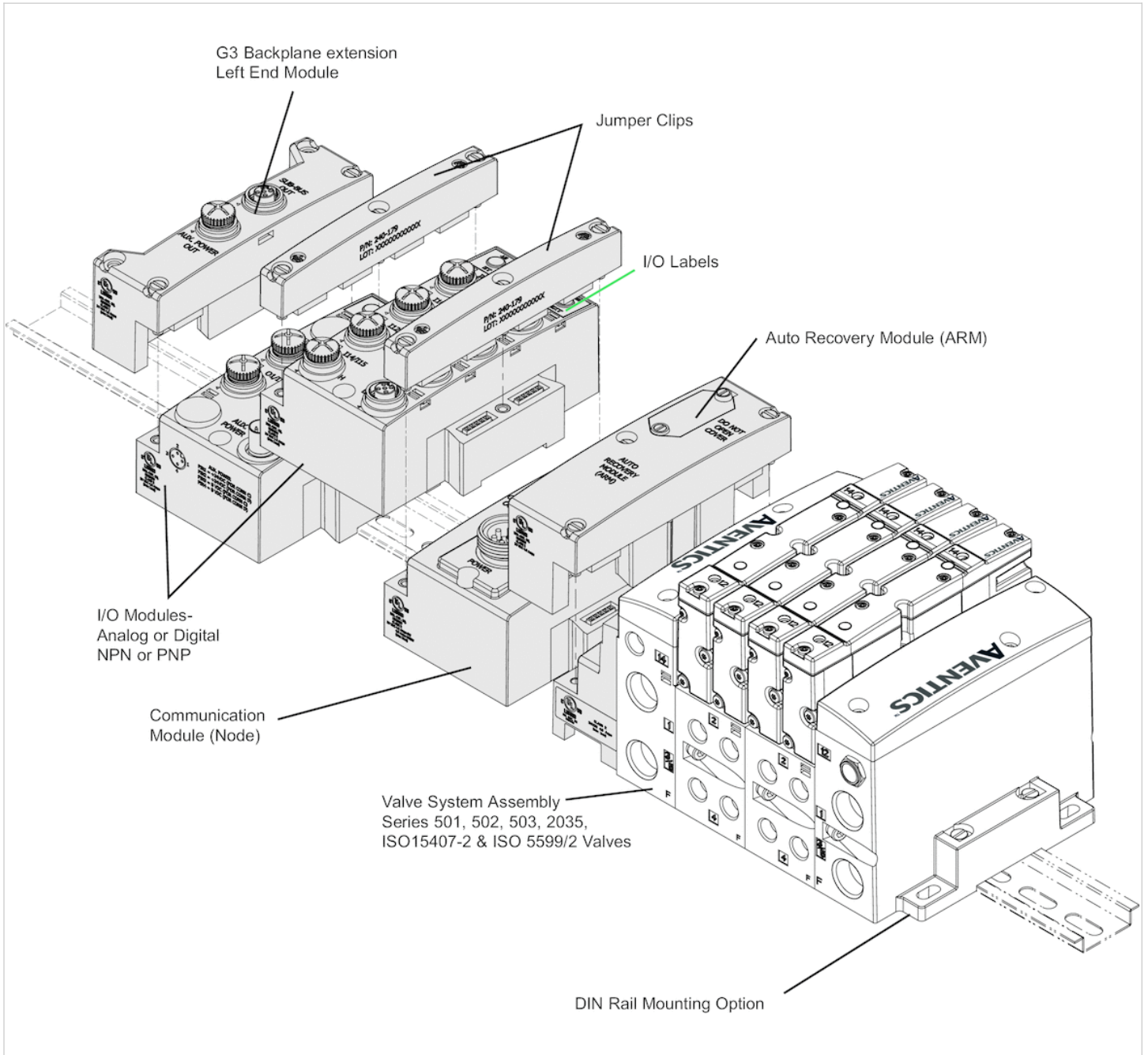
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

# Accessories overview











## 2x3/2-directional valve, Series 502

- 2x3/2
- $Q_n = 650$  l/min
- NC/NC NO/NO
- Plate connection
- Can be assembled into blocks
- double solenoid
- With spring/air spring return
- Pilot : External



Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Blocking principle	Single base plate principle, can be assembled into blocks
Working pressure min./max.	-0.95 ... 8 bar
Control pressure min./max.	4 ... 8 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m <sup>3</sup>
Nominal flow $Q_n$	650 l/min
Pilot control exhaust	with directional pilot air exhaust
Protection class with connection	IP65
Protective circuit	Z-diode
Reverse polarity protection	Protected against polarity reversal
LED status display	Yellow
Typ. switch-on time	36 ms
Typ. switch-off time	15 ms
mounting screws	with hexagon socket
Mounting screw tightening torque	2 Nm
Weight	0.169 kg

### Technical data

Part No.		MO		Voltage tolerance	Power consumption
				DC	DC
R502A2BD0MA00F1			NC/NC	-15% / +10%	1.1 W
R502A2BA0MA00F1			NO/NO	-15% / +10%	1.1 W
R502A2BD0M11BF1			NC/NC	-15% / +10%	1.1 W
R502A2BA0M11BF1			NO/NO	-15% / +10%	1.1 W

### Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

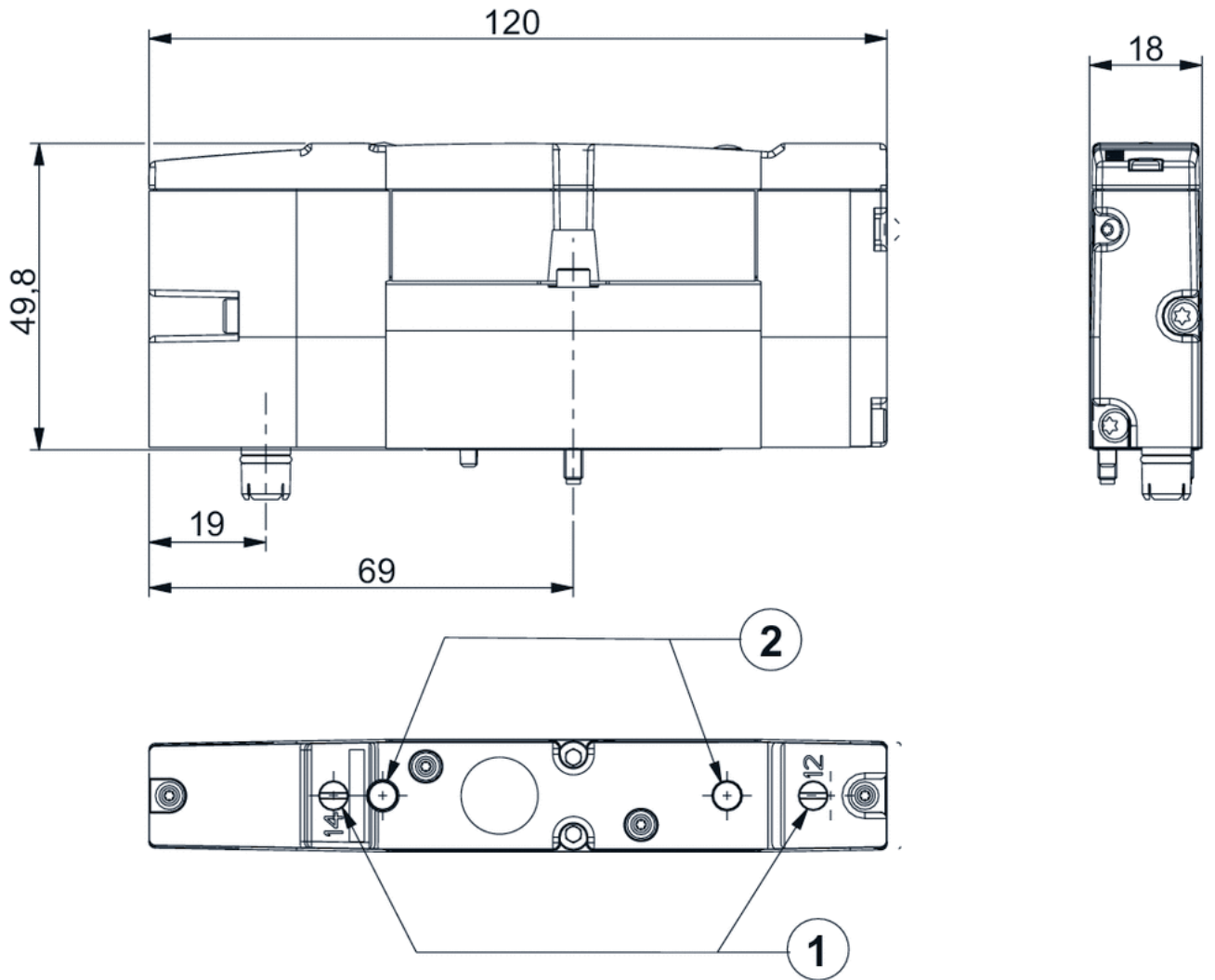
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die cast zinc
Seals	Nitrile butadiene rubber Polyurethane
Front plate	Polyamide
End plate	Polyamide

## Dimensions

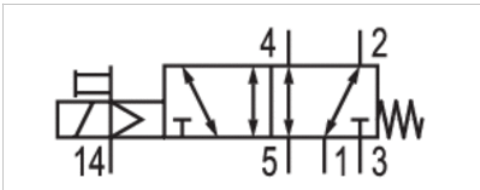
### Dimensions



- 1) Manual override
- 2) LED



# 5/2-directional valve, Series 502

- 5/2
- $Q_n = 470$  l/min
- Plate connection
- Can be assembled into blocks
- single solenoid
- With spring/air spring return
- Pilot : External



Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	metal/metal sealing
Blocking principle	Single base plate principle, can be assembled into blocks
Working pressure min./max.	-0.95 ... 8 bar
Control pressure min./max.	2 ... 8 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m <sup>3</sup>
Nominal flow $Q_n$	470 l/min
Pilot control exhaust	with directional pilot air exhaust
Protection class with connection	IP65
Protective circuit	Z-diode
Reverse polarity protection	Protected against polarity reversal
LED status display	Yellow
Duty cycle	100 %
Typ. switch-on time	16 ms
Typ. switch-off time	49 ms
mounting screws	with hexagon socket
Mounting screw tightening torque	2 Nm
Weight	0.169 kg

## Technical data

Part No.	MO	Voltage tolerance	Power consumption
		DC	DC
R502A1B10MA00F1		-15% / +10%	1.1 W
R502A1B10M11BF1		-15% / +10%	1.1 W

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

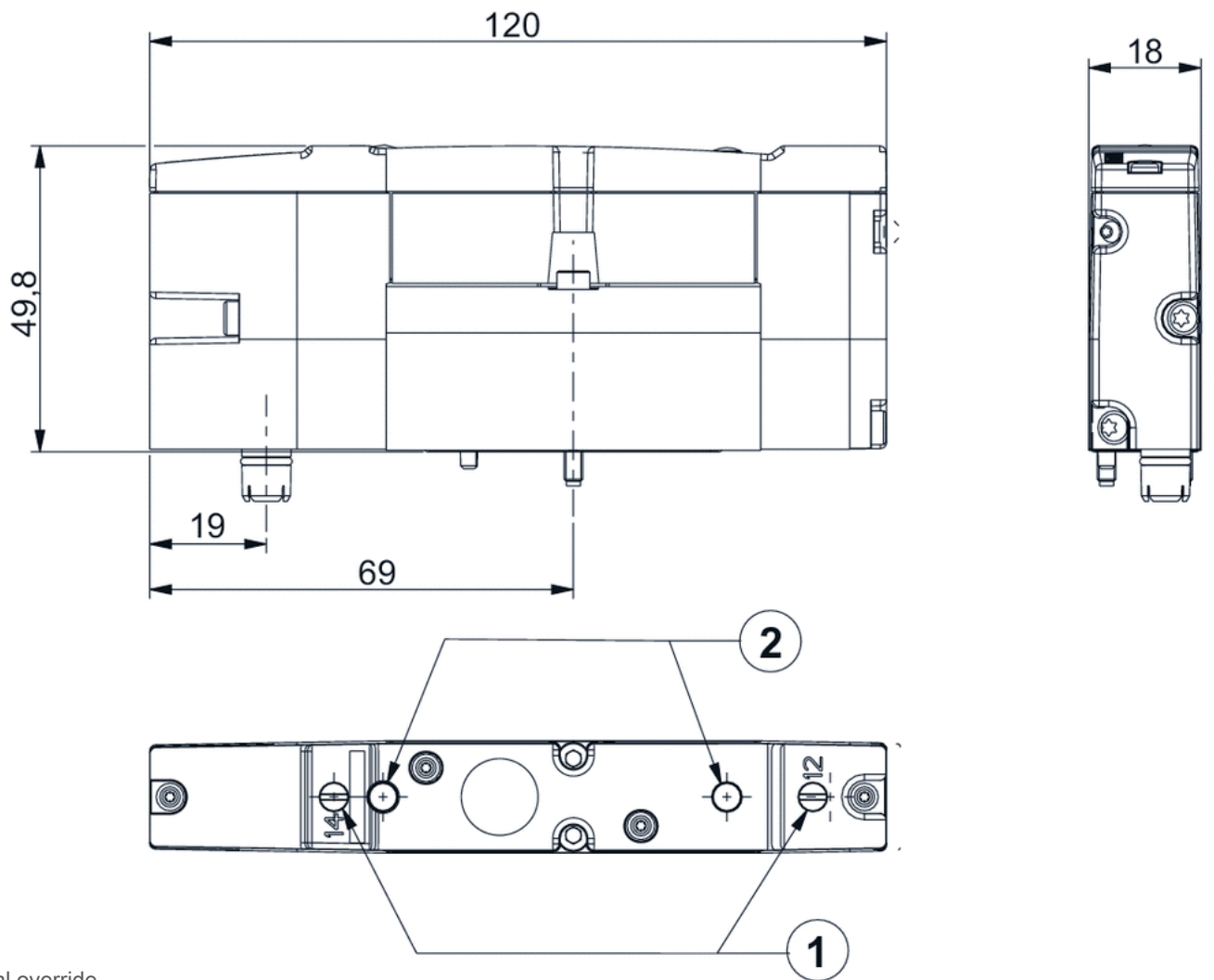
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die cast zinc
Seals	Nitrile butadiene rubber Polyurethane
Front plate	Polyamide
End plate	Polyamide

## Dimensions

### Dimensions



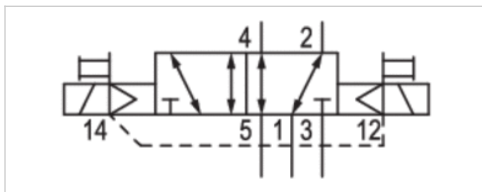
1) Manual override

2) LED



# 5/2-directional valve, Series 502

- 5/2
- Qn = 470 l/min
- Plate connection
- Can be assembled into blocks
- double solenoid
- Pilot : External



Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	metal/metal sealing
Blocking principle	Single base plate principle, can be assembled into blocks
Working pressure min./max.	-0.95 ... 8 bar
Control pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow Qn	470 l/min
Pilot control exhaust	with directional pilot air exhaust
Protection class with connection	IP65
Protective circuit	Z-diode
Reverse polarity protection	Protected against polarity reversal
LED status display	Yellow
Duty cycle	100 %
mounting screws	with hexagon socket
Mounting screw tightening torque	2 Nm
Weight	0.169 kg

## Technical data

Part No.	MO	Voltage tolerance	Power consumption
		DC	DC
R502A1BN0MA00F1		-15% / +10%	1.1 W
R502A1B40MA00F1		-15% / +10%	1.1 W
R502A1BN0M11BF1		-15% / +10%	1.1 W
R502A1B40M11BF1		-15% / +10%	1.1 W

Part No.	Control pressure min./max.	Typ. switch-on time	Typ. switch-off time
R502A1BN0MA00F1	1.5 ... 8 bar	11 ms	26 ms
R502A1B40MA00F1	2 ... 8 bar	16 ms	16 ms
R502A1BN0M11BF1	1.5 ... 8 bar	11 ms	26 ms
R502A1B40M11BF1	2 ... 8 bar	16 ms	16 ms

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

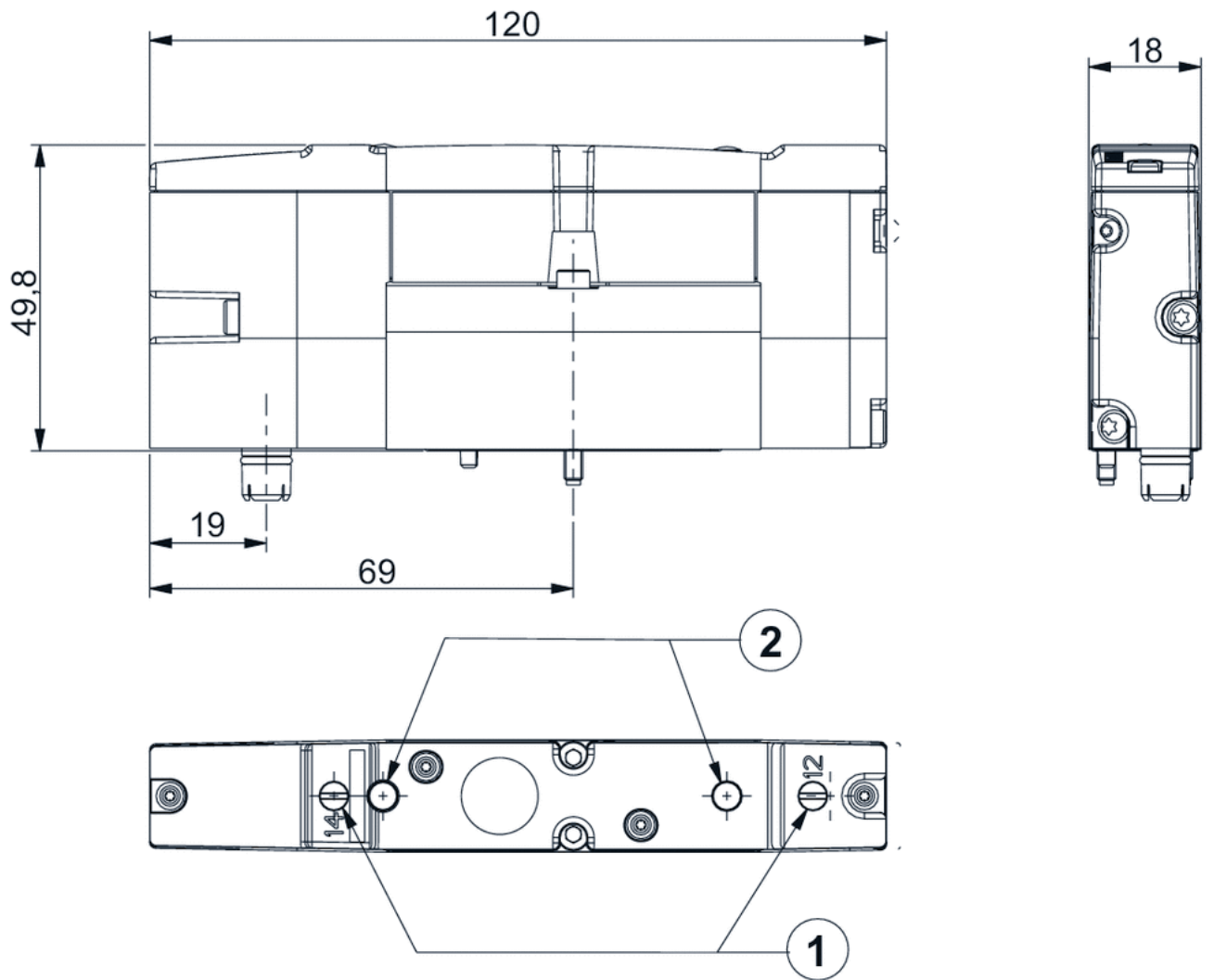
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die cast zinc
Seals	Nitrile butadiene rubber Polyurethane
Front plate	Polyamide
End plate	Polyamide

## Dimensions

### Dimensions



- 1) Manual override
- 2) LED



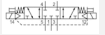

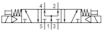

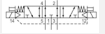

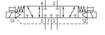

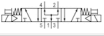

# 5/3-directional valve, Series 502

- 5/3
- $Q_n = 380-420$  l/min
- exhausted center closed center pressurized center
- Plate connection
- Can be assembled into blocks
- double solenoid
- Pilot : External



Type	Spool valve, positive overlapping
Activation	Electrically
Pilot	External
Sealing principle	metal/metal sealing
Blocking principle	Single base plate principle, can be assembled into blocks
Working pressure min./max.	-0.95 ... 8 bar
Control pressure min./max.	1.5 ... 8 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m <sup>3</sup>
Nominal flow $Q_n$	See table below
Pilot control exhaust	with directional pilot air exhaust
Protection class with connection	IP65
Protective circuit	Z-diode
Reverse polarity protection	Protected against polarity reversal
LED status display	Yellow
mounting screws	with hexagon socket
Mounting screw tightening torque	2 Nm
Weight	0.169 kg

## Technical data

Part No.		MO		Voltage tolerance
				DC
R502A1B50MA00F1			exhausted center	-15% / +10%
R502A1B60MA00F1			closed center	-15% / +10%
R502A1B70MA00F1			pressurized center	-15% / +10%
R502A1B50M11BF1			exhausted center	-15% / +10%
R502A1B60M11BF1			closed center	-15% / +10%
R502A1B70M11BF1			pressurized center	-15% / +10%

Part No.	Power consumption	Nominal flow $Q_n$	Typ. switch-on time	Typ. switch-off time
	DC			
R502A1B50MA00F1	1.1 W	380 l/min	23 ms	13 ms
R502A1B60MA00F1	1.1 W	420 l/min	12 ms	12 ms
R502A1B70MA00F1	1.1 W	420 l/min	13 ms	23 ms
R502A1B50M11BF1	1.1 W	380 l/min	23 ms	13 ms
R502A1B60M11BF1	1.1 W	420 l/min	12 ms	12 ms

Part No.	Power consumption	Nominal flow Qn	Typ. switch-on time	Typ. switch-off time
	DC			
R502A1B70M11BF1	1.1 W	420 l/min	13 ms	23 ms

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

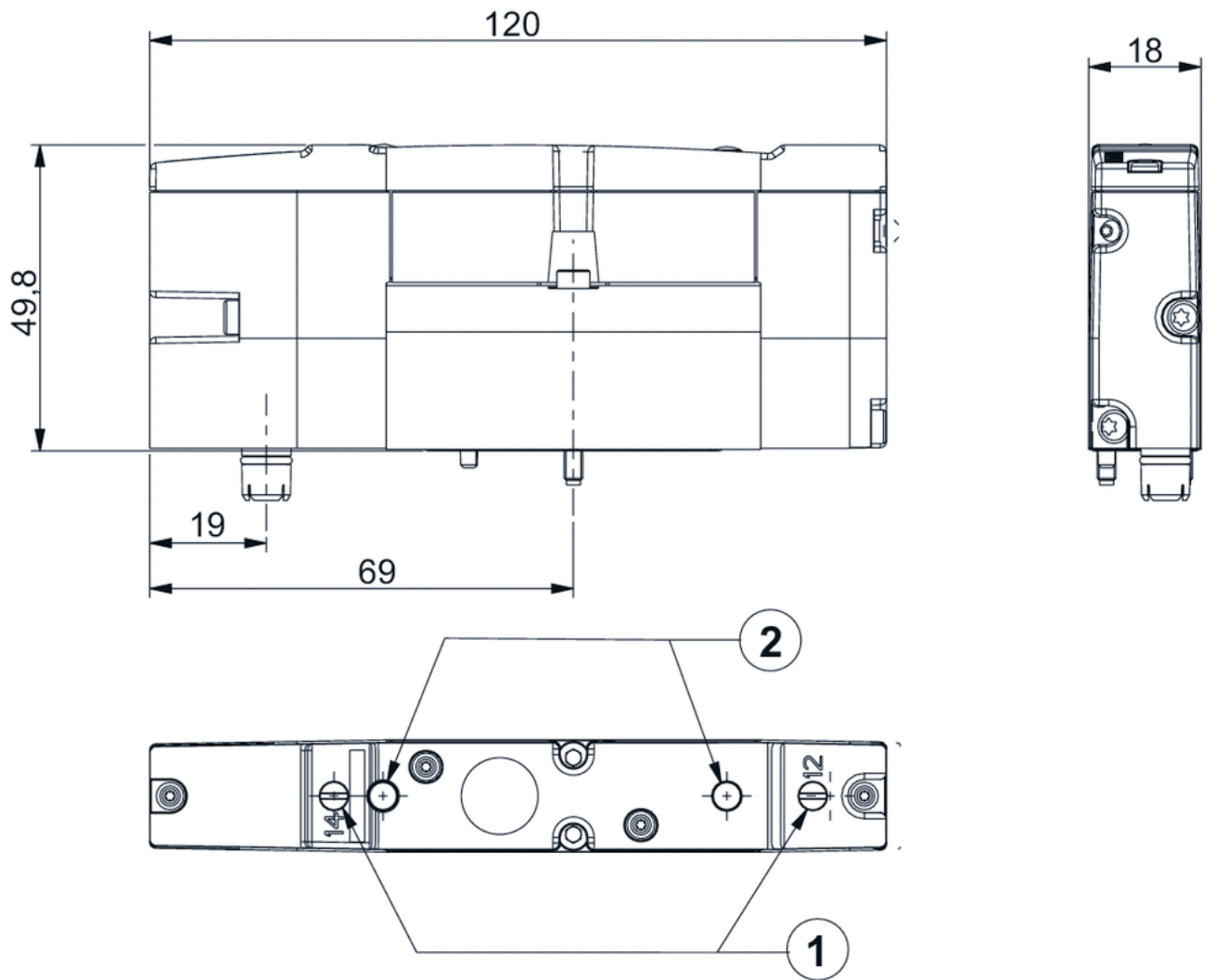
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die cast zinc
Seals	Nitrile butadiene rubber Polyurethane
Front plate	Polyamide
End plate	Polyamide

## Dimensions

### Dimensions



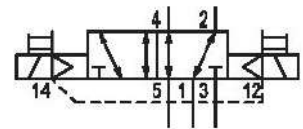
- 1) Manual override
- 2) LED

# 5/2-directional valve, Series 502

## R502A2B10M11BF1

### General series information 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.



### Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Q<sub>n</sub>  
630 l/min

Switching principle  
5/2

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

### Note

Valve type  
Spool valve, positive overlapping

Connection type  
Plate connection

Return  
with spring/air spring return

Blocking principle  
Single base plate principle, can be assembled into blocks

Can be assembled into blocks  
Can be assembled into blocks

Control pressure min.  
3 bar

Control pressure max.  
8 bar

Min. ambient temperature  
-10 °C

Max. ambient temperature  
50 °C

Min. medium temperature  
-10 °C

Max. medium temperature  
50 °C

Medium  
Compressed air

Max. particle size  
50 µm

Oil content of compressed air min.  
0 mg/m<sup>3</sup>

Oil content of compressed air max.  
5 mg/m<sup>3</sup>

Pilot control exhaust  
with directional pilot air exhaust

Power consumption DC  
1.1 W

LED status display  
Yellow

Duty cycle  
100 %

Typ. switch-on time  
17 ms

Typ. switch-off time  
38 ms

Protection class with connection  
IP65

Protective circuit  
TVS diode

Reverse polarity protection  
Protected against polarity reversal

mounting screws  
with hexagon socket

Mounting screw tightening torque  
2 Nm

Weight  
0.153 kg

Housing material  
Die cast zinc

Seal material  
Nitrile butadiene rubber  
Polyurethane

Material front plate  
Polyamide

Material end plate  
Polyamide

Part No.  
R502A2B10M11BF1

## Technical information

At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

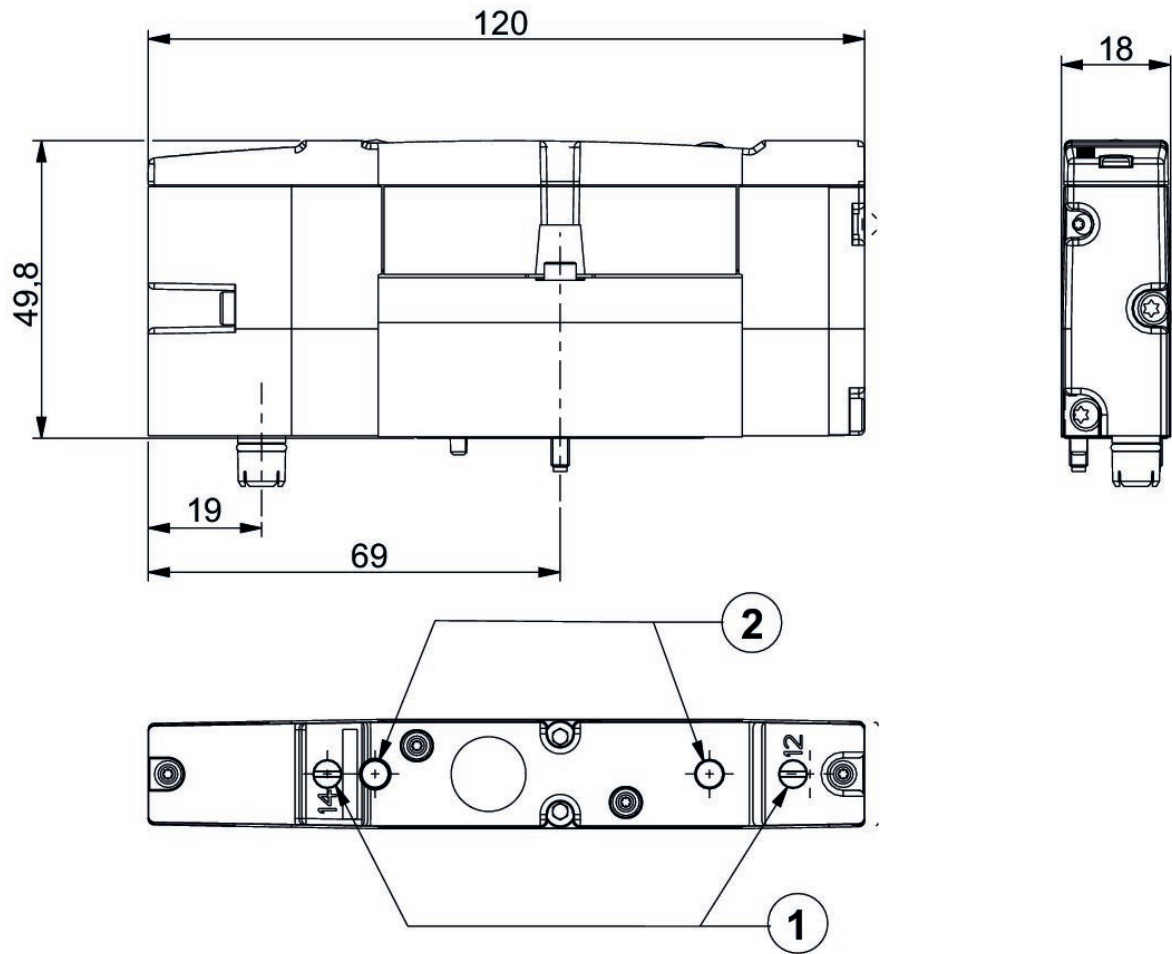
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.



## Dimensions



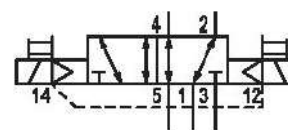
- 1) Manual override
- 2) LED

# 5/2-directional valve, Series 502

R502A2B10MA00F1

## General series information 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.



## Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Qn  
630 l/min

Switching principle  
5/2

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

## Note

Valve type  
Spool valve, positive overlapping

Connection type  
Plate connection

Return  
with spring/air spring return

Blocking principle  
Single base plate principle, can be assembled into blocks

Can be assembled into blocks  
Can be assembled into blocks

Control pressure min.  
3 bar

Control pressure max.  
8 bar

Min. ambient temperature  
-10 °C

Max. ambient temperature  
50 °C

Min. medium temperature  
-10 °C

Max. medium temperature  
50 °C

Medium  
Compressed air

Max. particle size  
50 µm

Oil content of compressed air min.  
0 mg/m<sup>3</sup>

Oil content of compressed air max.  
5 mg/m<sup>3</sup>

Pilot control exhaust  
with directional pilot air exhaust

Power consumption DC  
1.1 W

LED status display  
Yellow

Duty cycle  
100 %

Typ. switch-on time  
17 ms

Typ. switch-off time  
38 ms

Protection class with connection  
IP65

Protective circuit  
TVS diode

Reverse polarity protection  
Protected against polarity reversal

mounting screws  
with hexagon socket

Mounting screw tightening torque  
2 Nm

Weight  
0.153 kg

Housing material  
Die cast zinc

Seal material  
Nitrile butadiene rubber  
Polyurethane

Material front plate  
Polyamide

Material end plate  
Polyamide

Part No.  
R502A2B10MA00F1

## Technical information

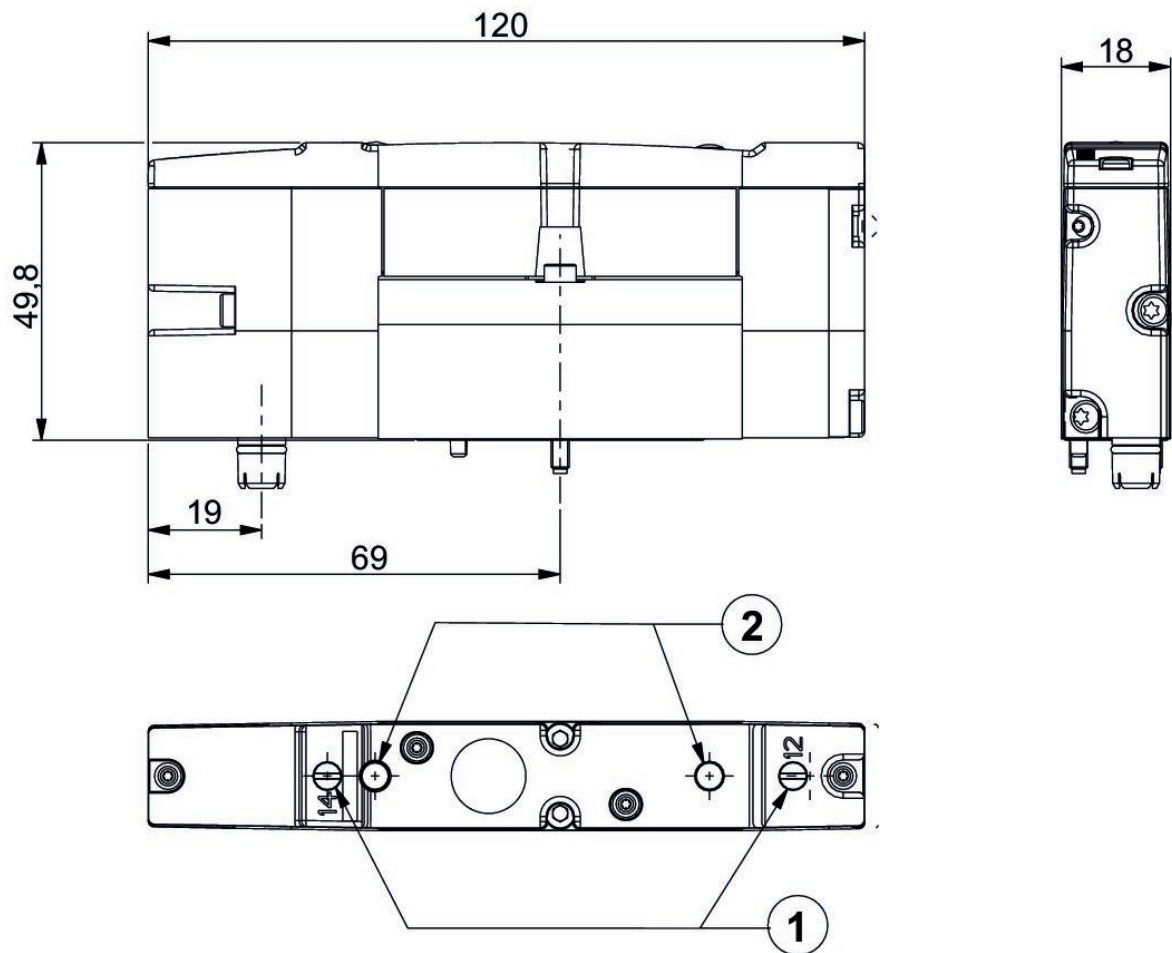
At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



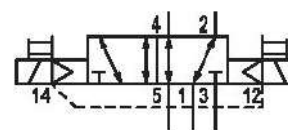
- 1) Manual override
- 2) LED

# 5/2-directional valve, Series 502

## R502A2B40M11BF1

### General series information 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.



### Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Qn  
630 l/min

Switching principle  
5/2

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

### Note

Valve type  
Spool valve, positive overlapping

Connection type  
Plate connection

Blocking principle  
Single base plate principle, can be assembled into blocks

Can be assembled into blocks  
Can be assembled into blocks

Control pressure min.  
2 bar

Control pressure max.  
8 bar

Min. ambient temperature  
-10 °C

Max. ambient temperature  
50 °C

Min. medium temperature  
-10 °C

Max. medium temperature  
50 °C

Medium  
Compressed air

Max. particle size  
50 µm

Oil content of compressed air min.  
0 mg/m<sup>3</sup>

Oil content of compressed air max.  
5 mg/m<sup>3</sup>

Pilot control exhaust  
with directional pilot air exhaust

Power consumption DC  
1.1 W

LED status display  
Yellow

Duty cycle  
100 %

Typ. switch-on time  
14 ms

Typ. switch-off time  
14 ms

Protection class with connection  
IP65

Protective circuit  
TVS diode

Reverse polarity protection  
Protected against polarity reversal

mounting screws  
with hexagon socket

Mounting screw tightening torque  
2 Nm

Weight  
0.167 kg

Housing material  
Die cast zinc

Seal material  
Nitrile butadiene rubber  
Polyurethane

Material front plate  
Polyamide

Material end plate  
Polyamide

Part No.  
R502A2B40M11BF1

## Technical information

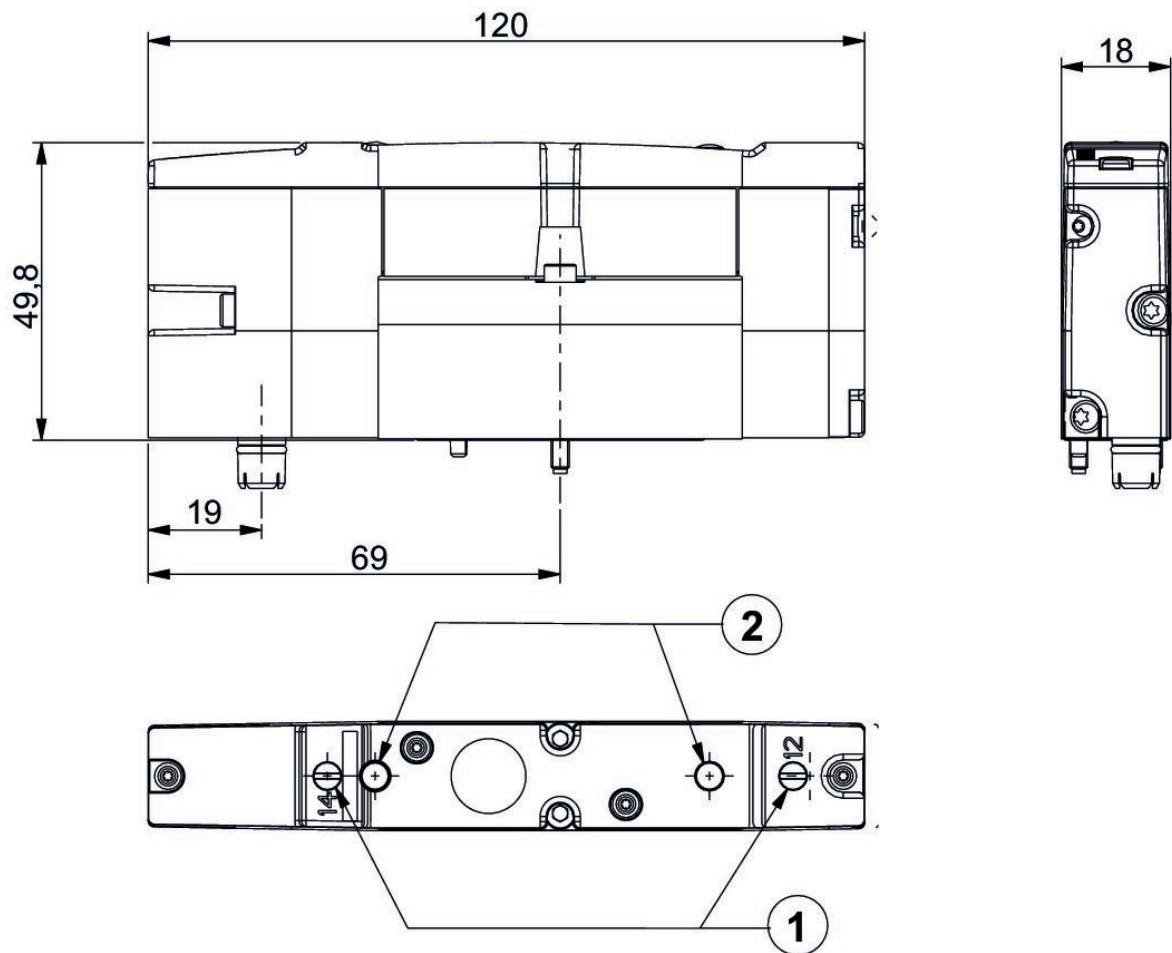
At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



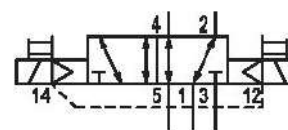
- 1) Manual override
- 2) LED

# 5/2-directional valve, Series 502

## R502A2B40MA00F1

### General series information 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.



### Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Qn  
630 l/min

Switching principle  
5/2

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
metal/metal sealing

Pilot  
External

### Note

Valve type  
Spool valve, positive overlapping

Connection type  
Plate connection

Blocking principle  
Single base plate principle, can be assembled into blocks

Can be assembled into blocks  
Can be assembled into blocks



Control pressure min.  
2 bar

Control pressure max.  
8 bar

Min. ambient temperature  
-10 °C

Max. ambient temperature  
50 °C

Min. medium temperature  
-10 °C

Max. medium temperature  
50 °C

Medium  
Compressed air

Max. particle size  
50 µm

Oil content of compressed air min.  
0 mg/m<sup>3</sup>

Oil content of compressed air max.  
5 mg/m<sup>3</sup>

Pilot control exhaust  
with directional pilot air exhaust

Power consumption DC  
1.1 W

LED status display  
Yellow

Duty cycle  
100 %

Typ. switch-on time  
14 ms

Typ. switch-off time  
14 ms

Protection class with connection  
IP65

Protective circuit  
TVS diode

Reverse polarity protection  
Protected against polarity reversal

mounting screws  
with hexagon socket

Mounting screw tightening torque  
2 Nm

Weight  
0.167 kg

Housing material  
Die cast zinc

Seal material  
Nitrile butadiene rubber  
Polyurethane

Material front plate  
Polyamide

Material end plate  
Polyamide

Part No.  
R502A2B40MA00F1

## Technical information

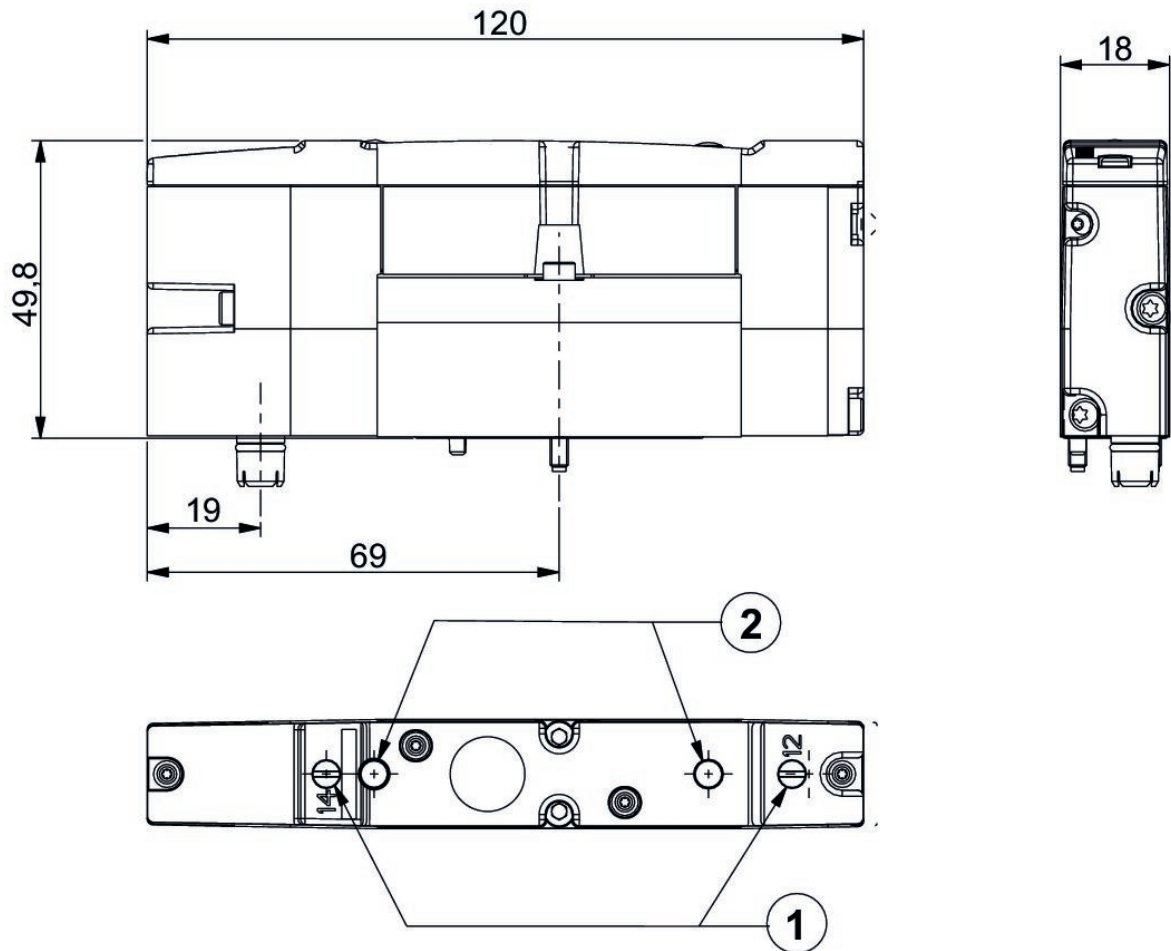
At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



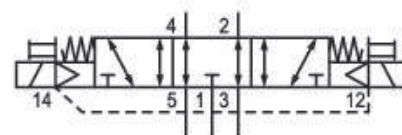
- 1) Manual override
- 2) LED

# 5/3-directional valve, Series 502

R502A2B50M11BF1

General series information  
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.



## Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Qn  
430 l/min

Switching principle  
5/3

Version  
Exhausted Center

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

## Note

<b>Valve type</b> Spool valve, positive overlapping	<b>Blocking principle</b> Single base plate principle, can be assembled into blocks
<b>Connection type</b> Plate connection	<b>Can be assembled into blocks</b> Can be assembled into blocks
<b>Control pressure min.</b> 3 bar	<b>Max. medium temperature</b> 50 °C
<b>Control pressure max.</b> 8 bar	<b>Medium</b> Compressed air
<b>Min. ambient temperature</b> -10 °C	<b>Max. particle size</b> 50 µm
<b>Max. ambient temperature</b> 50 °C	<b>Oil content of compressed air min.</b> 0 mg/m <sup>3</sup>
<b>Min. medium temperature</b> -10 °C	<b>Oil content of compressed air max.</b> 5 mg/m <sup>3</sup>
<b>Pilot control exhaust</b> with directional pilot air exhaust	
<b>Power consumption DC</b> 1.1 W	<b>Typ. switch-on time</b> 36 ms
<b>LED status display</b> Yellow	<b>Typ. switch-off time</b> 21 ms
<b>Protection class with connection</b> IP65	<b>mounting screws</b> with hexagon socket
<b>Protective circuit</b> TVS diode	<b>Mounting screw tightening torque</b> 2 Nm
<b>Reverse polarity protection</b> Protected against polarity reversal	<b>Weight</b> 0.167 kg
<b>Housing material</b> Die cast zinc	<b>Material front plate</b> Polyamide
<b>Seal material</b> Nitrile butadiene rubber Polyurethane	<b>Material end plate</b> Polyamide
	<b>Part No.</b> R502A2B50M11BF1

## Technical information

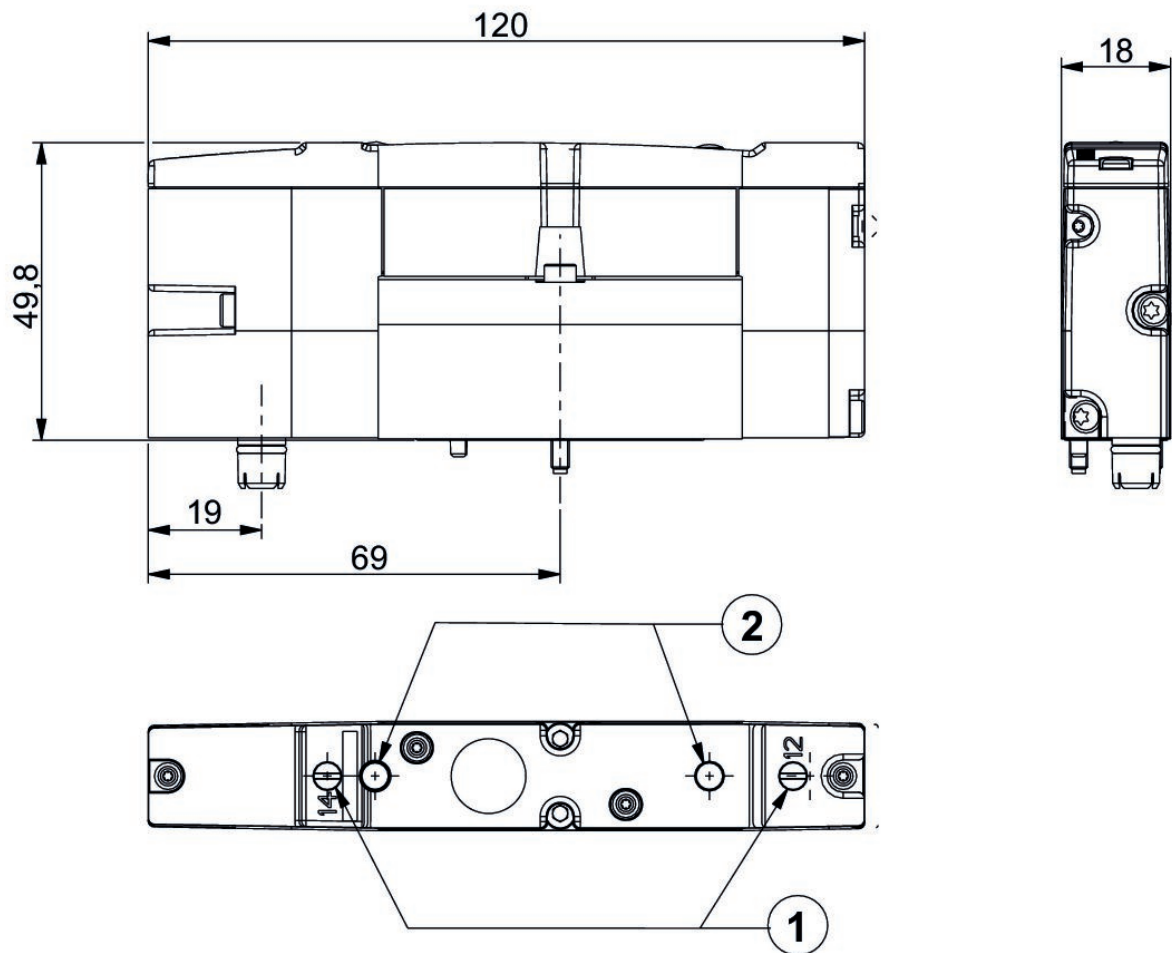
At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



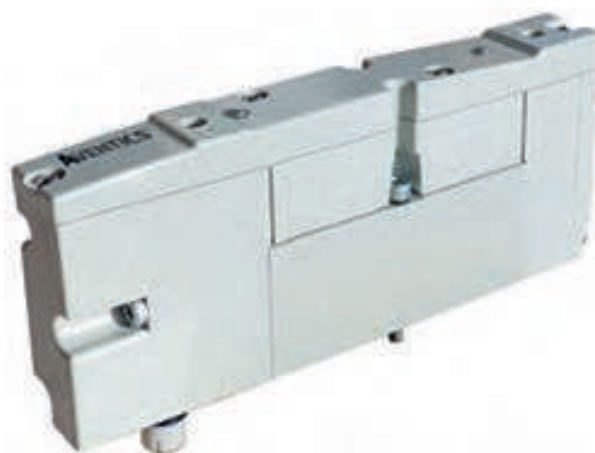
- 1) Manual override
- 2) LED

# 5/3-directional valve, Series 502

R502A2B50MA00F1

## General series information 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.



## Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Q<sub>n</sub>  
430 l/min

Switching principle  
5/3

Version  
Exhausted Center

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

## Note

<b>Valve type</b> Spool valve, positive overlapping	<b>Blocking principle</b> Single base plate principle, can be assembled into blocks
<b>Connection type</b> Plate connection	<b>Can be assembled into blocks</b> Can be assembled into blocks
<b>Control pressure min.</b> 3 bar	<b>Max. medium temperature</b> 50 °C
<b>Control pressure max.</b> 8 bar	<b>Medium</b> Compressed air
<b>Min. ambient temperature</b> -10 °C	<b>Max. particle size</b> 50 µm
<b>Max. ambient temperature</b> 50 °C	<b>Oil content of compressed air min.</b> 0 mg/m <sup>3</sup>
<b>Min. medium temperature</b> -10 °C	<b>Oil content of compressed air max.</b> 5 mg/m <sup>3</sup>
<b>Pilot control exhaust</b> with directional pilot air exhaust	
<b>Power consumption DC</b> 1.1 W	<b>Typ. switch-on time</b> 36 ms
<b>LED status display</b> Yellow	<b>Typ. switch-off time</b> 21 ms
<b>Protection class with connection</b> IP65	<b>mounting screws</b> with hexagon socket
<b>Protective circuit</b> TVS diode	<b>Mounting screw tightening torque</b> 2 Nm
<b>Reverse polarity protection</b> Protected against polarity reversal	<b>Weight</b> 0.167 kg
<b>Housing material</b> Die cast zinc	<b>Material front plate</b> Polyamide
<b>Seal material</b> Nitrile butadiene rubber Polyurethane	<b>Material end plate</b> Polyamide
	<b>Part No.</b> R502A2B50MA00F1

## Technical information

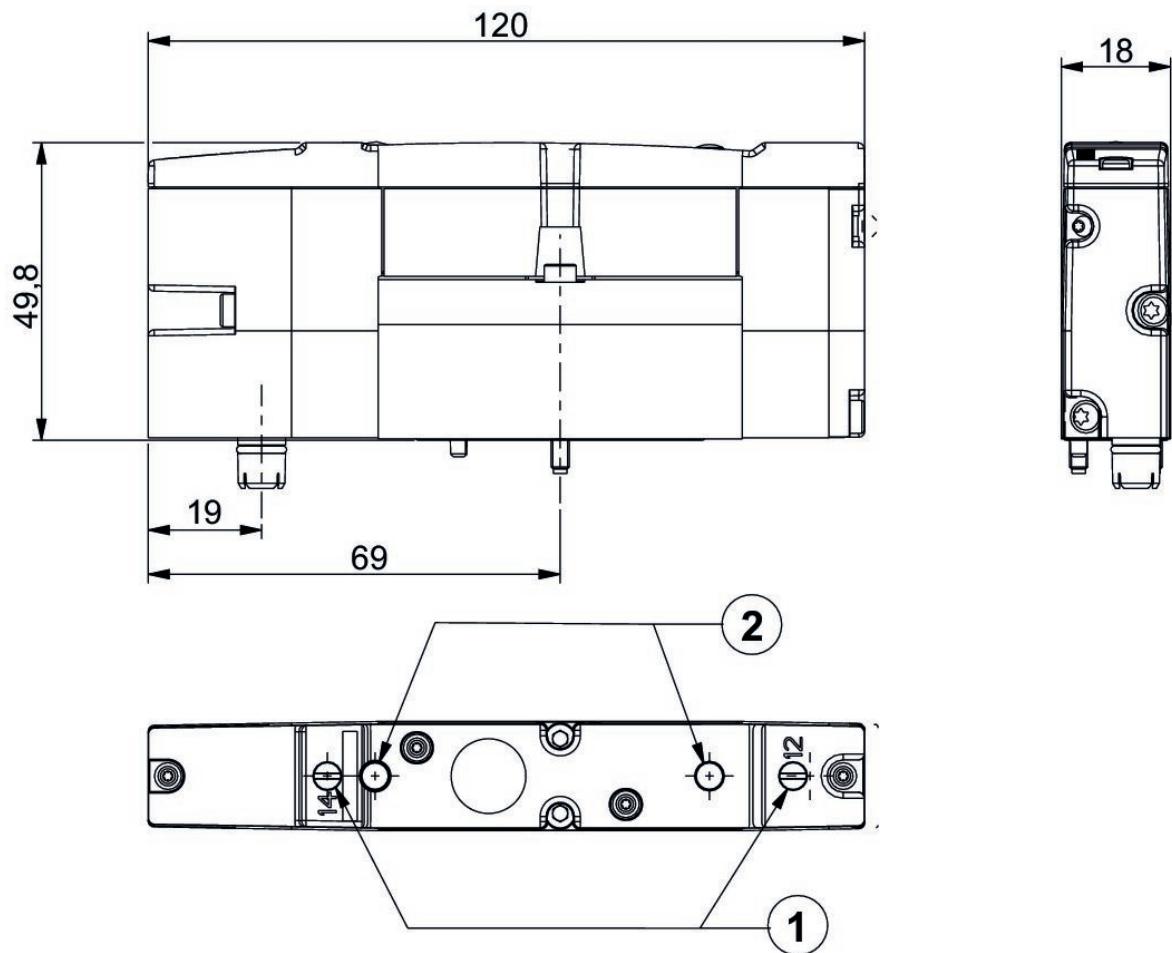
At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



- 1) Manual override
- 2) LED

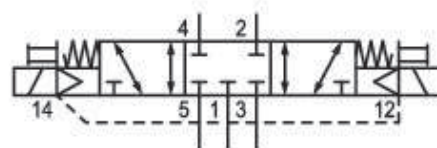


# 5/3-directional valve, Series 502

R502A2B60M11BF1

## General series information 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.



## Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Qn  
560 l/min

Switching principle  
5/3

Version  
Closed Center

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

## Note

**Valve type**  
Spool valve, positive overlapping

**Connection type**  
Plate connection

**Blocking principle**  
Single base plate principle, can be assembled into blocks

**Can be assembled into blocks**  
Can be assembled into blocks

**Control pressure min.**  
3 bar

**Control pressure max.**  
8 bar

**Min. ambient temperature**  
-10 °C

**Max. ambient temperature**  
50 °C

**Min. medium temperature**  
-10 °C

**Max. medium temperature**  
50 °C

**Medium**  
Compressed air

**Max. particle size**  
50 µm

**Oil content of compressed air min.**  
0 mg/m<sup>3</sup>

**Oil content of compressed air max.**  
5 mg/m<sup>3</sup>

**Pilot control exhaust**  
with directional pilot air exhaust

**Power consumption DC**  
1.1 W

**LED status display**  
Yellow

**Typ. switch-on time**  
18 ms

**Typ. switch-off time**  
18 ms

**Protection class with connection**  
IP65

**Protective circuit**  
TVS diode

**Reverse polarity protection**  
Protected against polarity reversal

**mounting screws**  
with hexagon socket

**Mounting screw tightening torque**  
2 Nm

**Weight**  
0.167 kg

**Housing material**  
Die cast zinc

**Seal material**  
Nitrile butadiene rubber  
Polyurethane

**Material front plate**  
Polyamide

**Material end plate**  
Polyamide

**Part No.**  
R502A2B60M11BF1

## Technical information

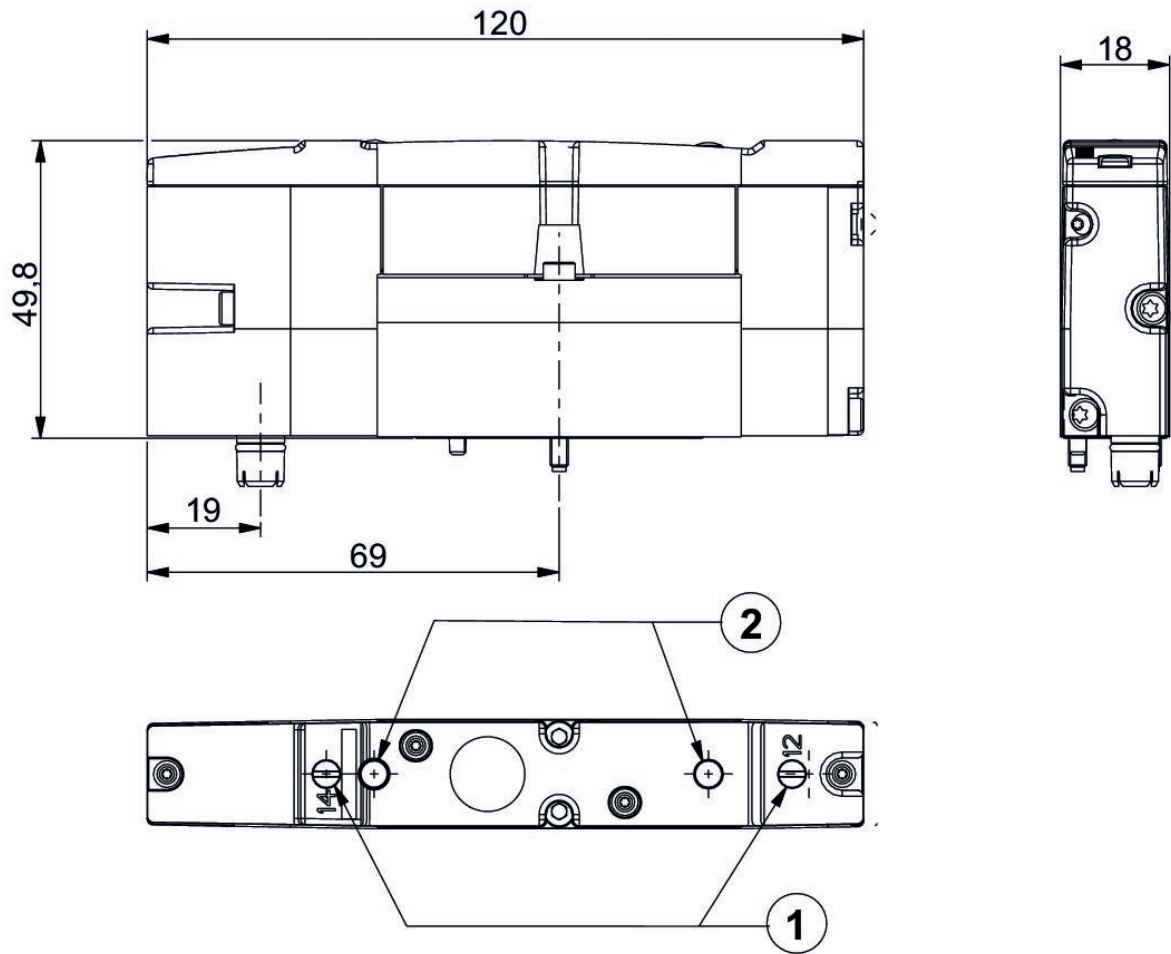
At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



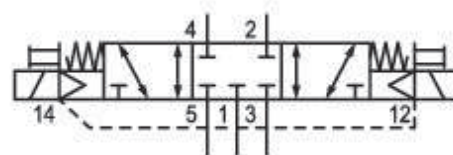
- 1) Manual override
- 2) LED

# 5/3-directional valve, Series 502

R502A2B60MA00F1

## General series information 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.



## Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Q<sub>n</sub>  
560 l/min

Switching principle  
5/3

Version  
Closed Center

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

## Note

<b>Valve type</b> Spool valve, positive overlapping	<b>Blocking principle</b> Single base plate principle, can be assembled into blocks
<b>Connection type</b> Plate connection	<b>Can be assembled into blocks</b> Can be assembled into blocks
<b>Control pressure min.</b> 3 bar	<b>Max. medium temperature</b> 50 °C
<b>Control pressure max.</b> 8 bar	<b>Medium</b> Compressed air
<b>Min. ambient temperature</b> -10 °C	<b>Max. particle size</b> 50 µm
<b>Max. ambient temperature</b> 50 °C	<b>Oil content of compressed air min.</b> 0 mg/m <sup>3</sup>
<b>Min. medium temperature</b> -10 °C	<b>Oil content of compressed air max.</b> 5 mg/m <sup>3</sup>
<b>Pilot control exhaust</b> with directional pilot air exhaust	
<b>Power consumption DC</b> 1.1 W	<b>Typ. switch-on time</b> 18 ms
<b>LED status display</b> Yellow	<b>Typ. switch-off time</b> 18 ms
<b>Protection class with connection</b> IP65	<b>mounting screws</b> with hexagon socket
<b>Protective circuit</b> TVS diode	<b>Mounting screw tightening torque</b> 2 Nm
<b>Reverse polarity protection</b> Protected against polarity reversal	<b>Weight</b> 0.167 kg
<b>Housing material</b> Die cast zinc	<b>Material front plate</b> Polyamide
<b>Seal material</b> Nitrile butadiene rubber Polyurethane	<b>Material end plate</b> Polyamide
	<b>Part No.</b> R502A2B60MA00F1

## Technical information

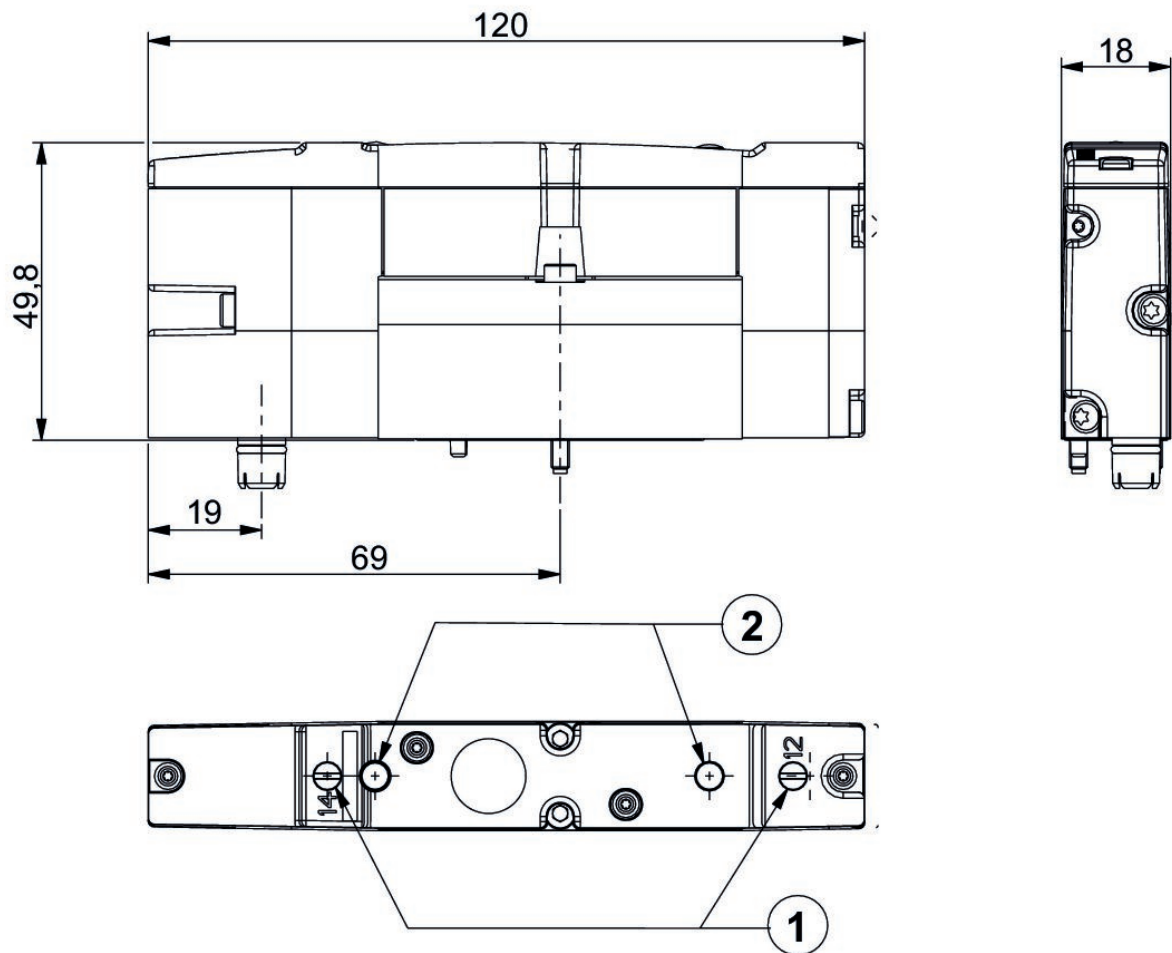
At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



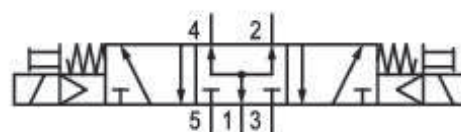
- 1) Manual override
- 2) LED

# 5/3-directional valve, Series 502

R502A2B70M11BF1

## General series information 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.



## Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Q<sub>n</sub>  
490 l/min

Switching principle  
5/3

Version  
Pressurized Center

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

## Note

**Valve type**

Spool valve, positive overlapping

**Connection type**

Plate connection

**Blocking principle**

Single base plate principle, can be assembled into blocks

Can be assembled into blocks

Can be assembled into blocks

**Control pressure min.**

3 bar

**Control pressure max.**

8 bar

**Min. ambient temperature**

-10 °C

**Max. ambient temperature**

50 °C

**Min. medium temperature**

-10 °C

**Max. medium temperature**

50 °C

**Medium**

Compressed air

**Max. particle size**

50 µm

**Oil content of compressed air min.**

0 mg/m<sup>3</sup>

**Oil content of compressed air max.**

5 mg/m<sup>3</sup>

**Pilot control exhaust**

with directional pilot air exhaust

**Power consumption DC**

1.1 W

**LED status display**

Yellow

**Typ. switch-on time**

21 ms

**Typ. switch-off time**

27 ms

**Protection class with connection**

IP65

**Protective circuit**

TVS diode

**Reverse polarity protection**

Protected against polarity reversal

**mounting screws**

with hexagon socket

**Mounting screw tightening torque**

2 Nm

**Weight**

0.167 kg

**Housing material**

Die cast zinc

**Seal material**

Nitrile butadiene rubber

Polyurethane

**Material front plate**

Polyamide

**Material end plate**

Polyamide

**Part No.**

R502A2B70M11BF1

## Technical information

At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

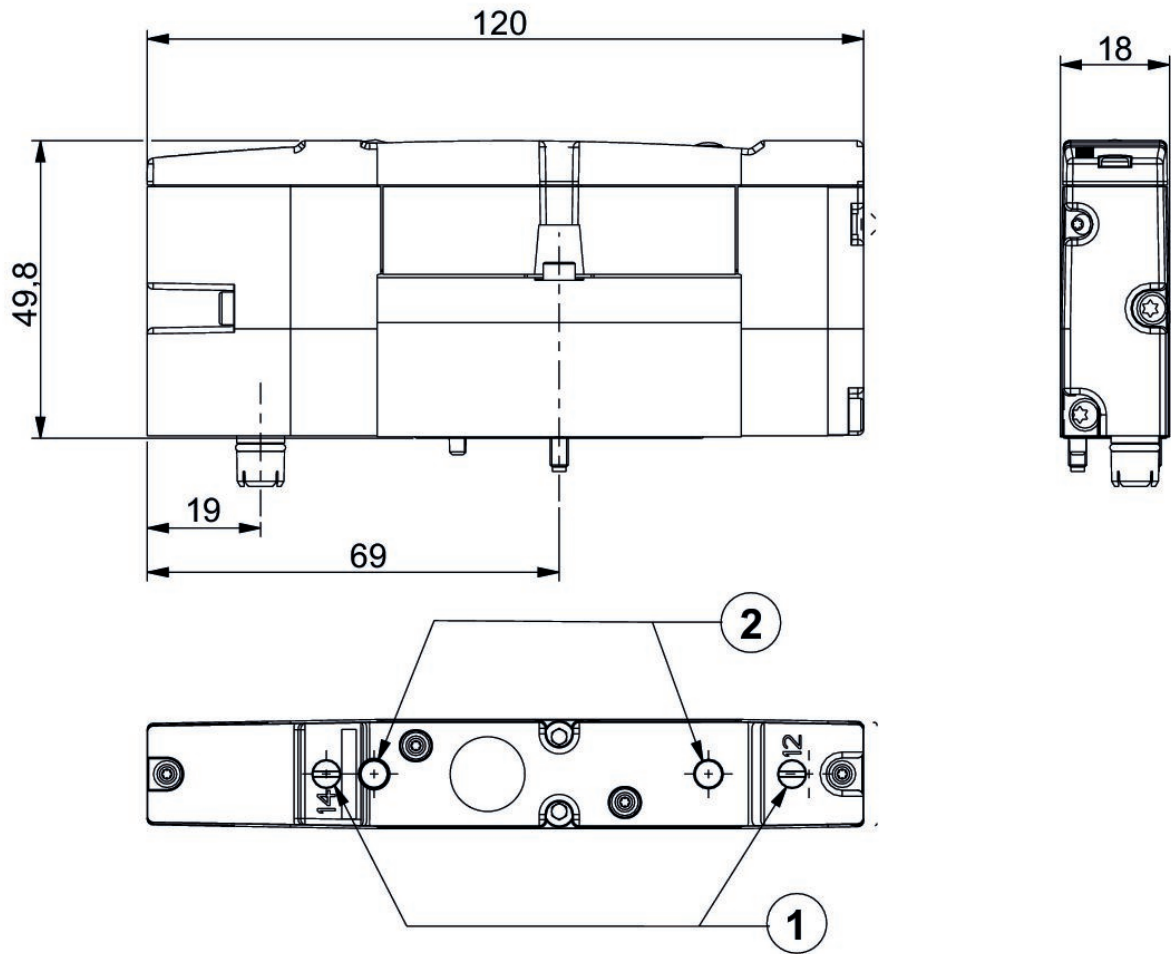
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.



## Dimensions



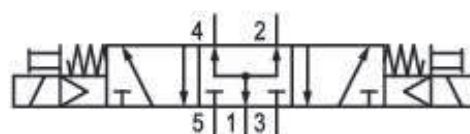
- 1) Manual override
- 2) LED

# 5/3-directional valve, Series 502

R502A2B70MA00F1

## General series information 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.



## Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Q<sub>n</sub>  
490 l/min

Switching principle  
5/3

Version  
Pressurized Center

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

## Note

**Valve type**

Spool valve, positive overlapping

**Connection type**

Plate connection

**Blocking principle**

Single base plate principle, can be assembled into blocks

Can be assembled into blocks

Can be assembled into blocks

**Control pressure min.**

3 bar

**Control pressure max.**

8 bar

**Min. ambient temperature**

-10 °C

**Max. ambient temperature**

50 °C

**Min. medium temperature**

-10 °C

**Max. medium temperature**

50 °C

**Medium**

Compressed air

**Max. particle size**

50 µm

**Oil content of compressed air min.**

0 mg/m<sup>3</sup>

**Oil content of compressed air max.**

5 mg/m<sup>3</sup>

**Pilot control exhaust**

with directional pilot air exhaust

**Power consumption DC**

1.1 W

**LED status display**

Yellow

**Typ. switch-on time**

21 ms

**Typ. switch-off time**

27 ms

**Protection class with connection**

IP65

**Protective circuit**

TVS diode

**Reverse polarity protection**

Protected against polarity reversal

**mounting screws**

with hexagon socket

**Mounting screw tightening torque**

2 Nm

**Weight**

0.167 kg

**Housing material**

Die cast zinc

**Seal material**

Nitrile butadiene rubber

Polyurethane

**Material front plate**

Polyamide

**Material end plate**

Polyamide

**Part No.**

R502A2B70MA00F1

## Technical information

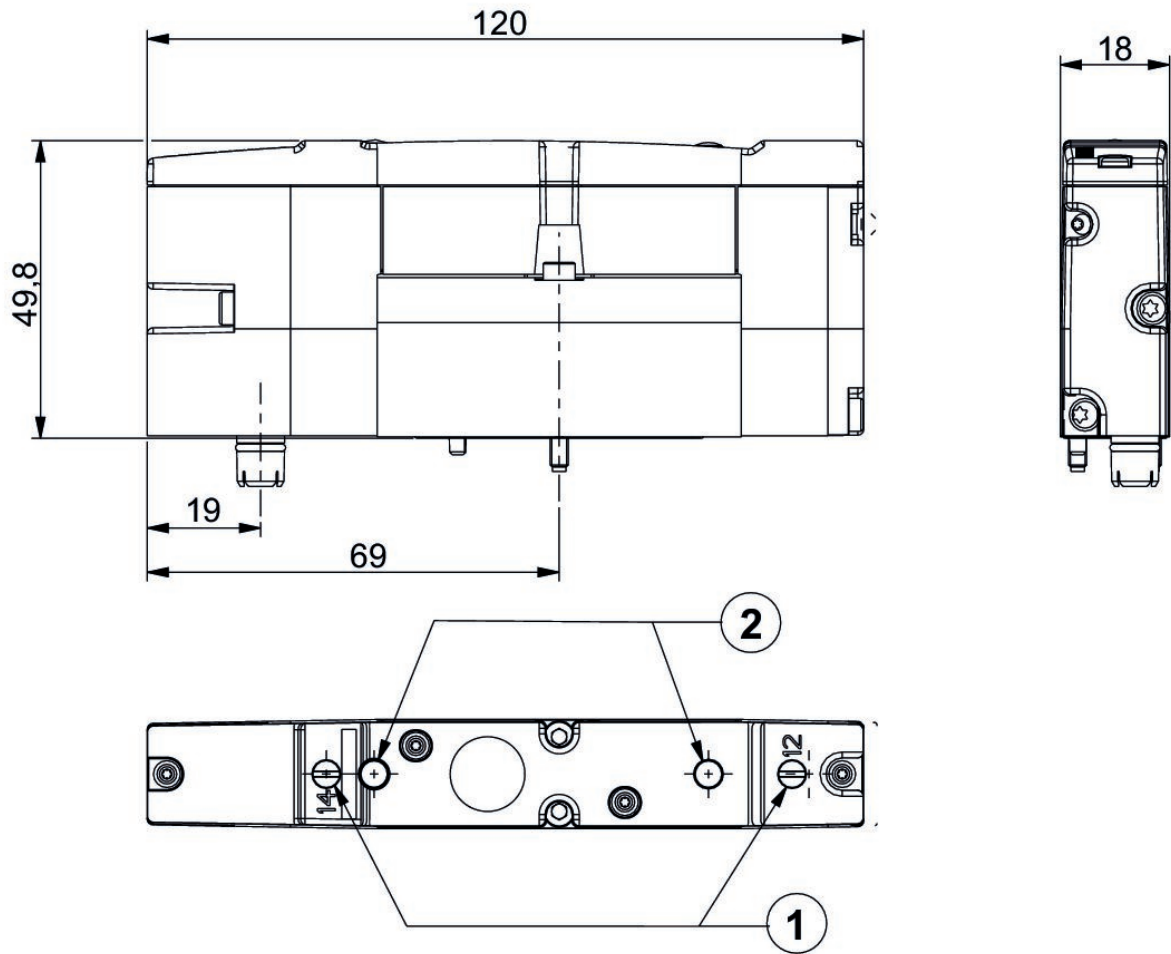
At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



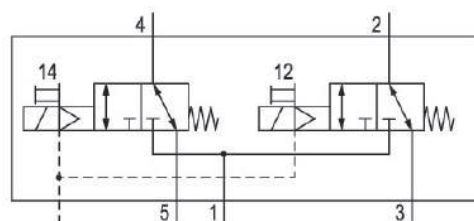
- 1) Manual override
- 2) LED

# 2x3/2-directional valve, Series 502

R502A2BD0M11BF1

## General series information 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.



## Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow  $Q_n$   
650 l/min

Switching principle  
2x3/2

Version  
NC/NC

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

Standards  
ISO 8573-1: class 7-4-4

## Note

Valve type  
Spool valve, positive overlapping

Connection type  
Plate connection

Return  
with spring/air spring return

Blocking principle  
Single base plate principle, can be assembled into blocks

Can be assembled into blocks  
Can be assembled into blocks

Control pressure min.  
2 bar

Control pressure max.  
8 bar

Min. ambient temperature  
-10 °C

Max. ambient temperature  
50 °C

Min. medium temperature  
-10 °C

Max. medium temperature  
50 °C

Medium  
Compressed air

Oil content of compressed air min.  
0 mg/m<sup>3</sup>

Oil content of compressed air max.  
5 mg/m<sup>3</sup>

Pilot control exhaust  
with directional pilot air exhaust

Power consumption DC  
1.1 W

LED status display  
Yellow

Typ. switch-on time  
39 ms

Typ. switch-off time  
19 ms

Protection class with connection  
IP65

Protective circuit  
TVS diode

Reverse polarity protection  
Protected against polarity reversal

mounting screws  
with hexagon socket

Mounting screw tightening torque  
2 Nm

Weight  
0.169 kg

Housing material  
Die cast zinc

Seal material  
Nitrile butadiene rubber  
Polyurethane

Material front plate  
Polyamide

Material end plate  
Polyamide

Part No.  
R502A2BD0M11BF1

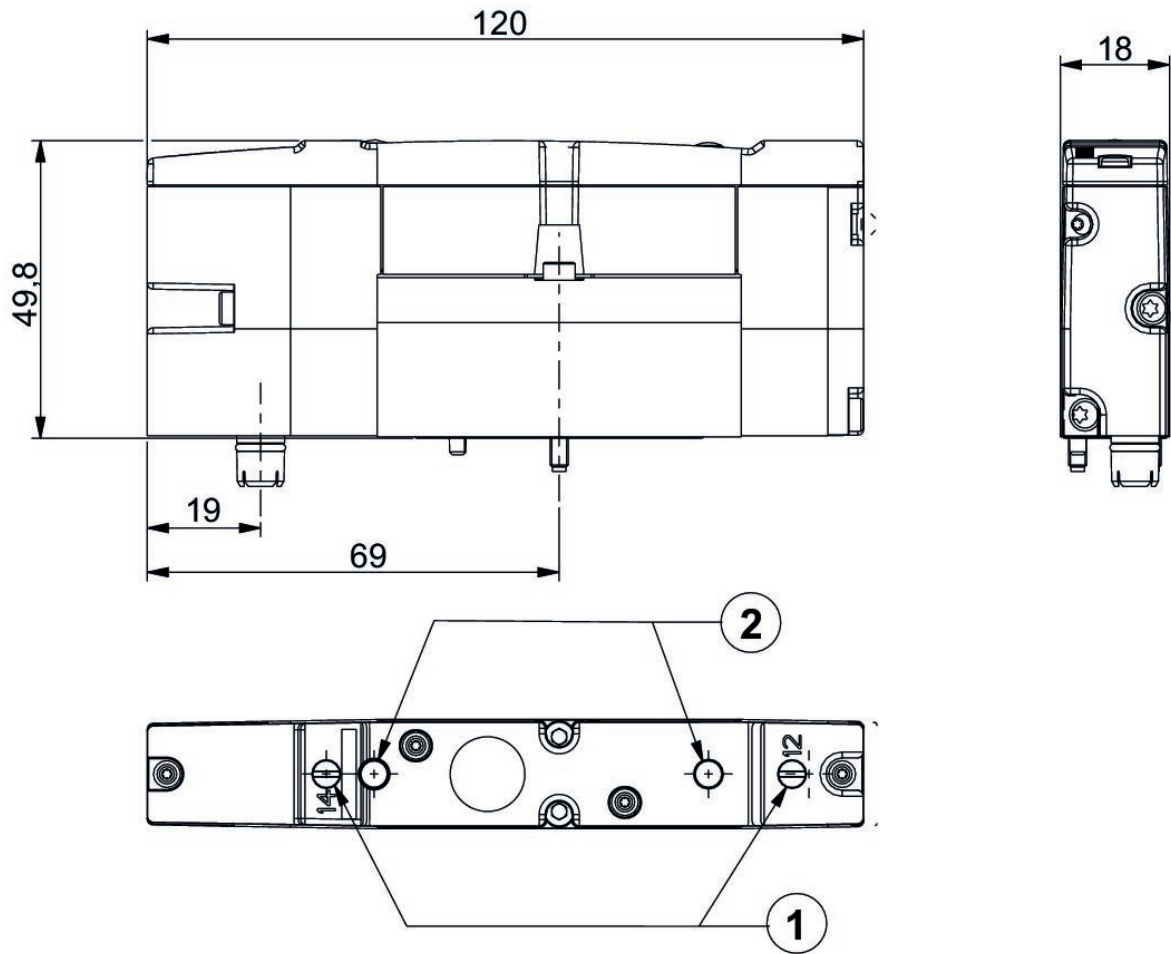
## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



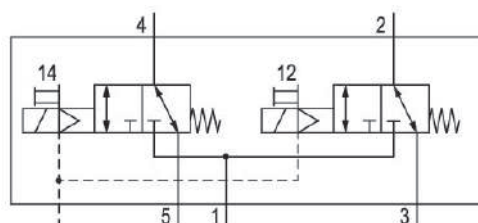
- 1) Manual override
- 2) LED

# 2x3/2-directional valve, Series 502

R502A2BD0MA00F1

## General series information 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.



## Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Q<sub>n</sub>  
650 l/min

Switching principle  
2x3/2

Version  
NC/NC

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

Standards  
ISO 8573-1: class 7-4-4

## Note

Valve type  
Spool valve, positive overlapping

Connection type  
Plate connection

Return  
with spring/air spring return

Blocking principle  
Single base plate principle, can be assembled into blocks



Can be assembled into blocks  
Can be assembled into blocks

Control pressure min.  
2 bar

Control pressure max.  
8 bar

Min. ambient temperature  
-10 °C

Max. ambient temperature  
50 °C

Min. medium temperature  
-10 °C

Max. medium temperature  
50 °C

Medium  
Compressed air

Oil content of compressed air min.  
0 mg/m<sup>3</sup>

Oil content of compressed air max.  
5 mg/m<sup>3</sup>

Pilot control exhaust  
with directional pilot air exhaust

Power consumption DC  
1.1 W

LED status display  
Yellow

Typ. switch-on time  
39 ms

Typ. switch-off time  
19 ms

Protection class with connection  
IP65

Protective circuit  
TVS diode

Reverse polarity protection  
Protected against polarity reversal

mounting screws  
with hexagon socket

Mounting screw tightening torque  
2 Nm

Weight  
0.169 kg

Housing material  
Die cast zinc

Seal material  
Nitrile butadiene rubber  
Polyurethane

Material front plate  
Polyamide

Material end plate  
Polyamide

Part No.  
R502A2BD0MA00F1

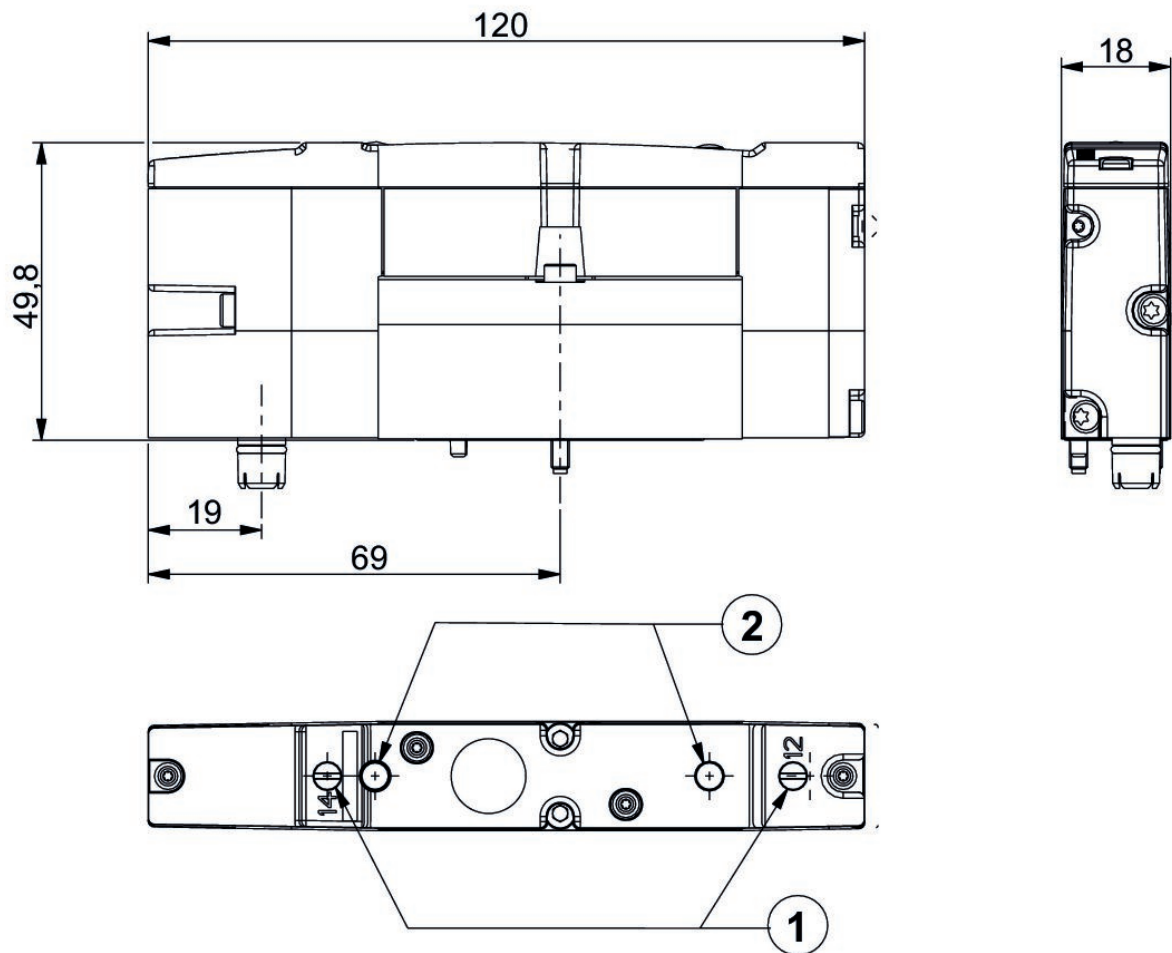
## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



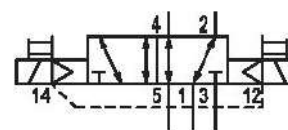
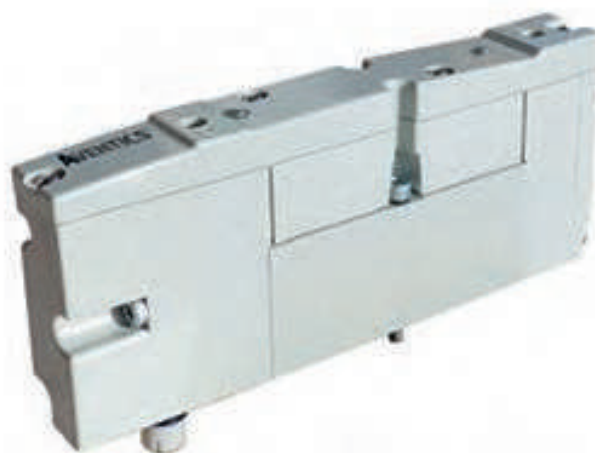
- 1) Manual override
- 2) LED

# 5/2-directional valve, Series 502

## R502A2BN0M11BF1

### General series information 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.



### Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Qn  
630 l/min

Switching principle  
5/2

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
Soft Seal

Pilot  
External

### Note

Valve type  
Spool valve, positive overlapping

Connection type  
Plate connection

Return  
with differential piston

Blocking principle  
Single base plate principle, can be assembled into blocks

Can be assembled into blocks  
Can be assembled into blocks

Control pressure min.  
2 bar

Control pressure max.  
8 bar

Min. ambient temperature  
-10 °C

Max. ambient temperature  
50 °C

Min. medium temperature  
-10 °C

Max. medium temperature  
50 °C

Medium  
Compressed air

Max. particle size  
50 µm

Oil content of compressed air min.  
0 mg/m<sup>3</sup>

Oil content of compressed air max.  
5 mg/m<sup>3</sup>

Pilot control exhaust  
with directional pilot air exhaust

Power consumption DC  
1.1 W

LED status display  
Yellow

Duty cycle  
100 %

Typ. switch-on time  
17 ms

Typ. switch-off time  
44 ms

Protection class with connection  
IP65

Protective circuit  
TVS diode

Reverse polarity protection  
Protected against polarity reversal

mounting screws  
with hexagon socket

Mounting screw tightening torque  
2 Nm

Weight  
0.153 kg

Housing material  
Die cast zinc

Seal material  
Nitrile butadiene rubber  
Polyurethane

Material front plate  
Polyamide

Material end plate  
Polyamide

Part No.  
R502A2BN0M11BF1

## Technical information

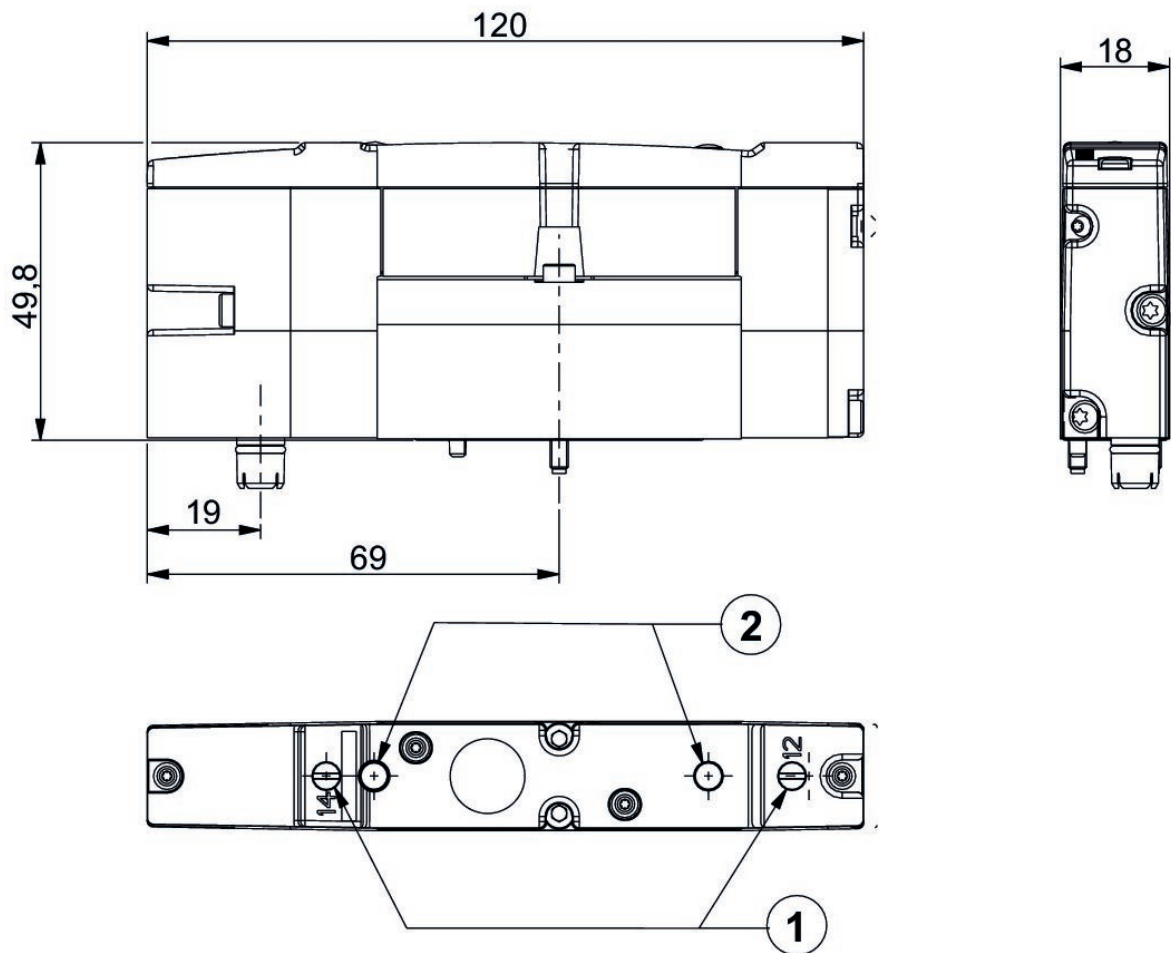
At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



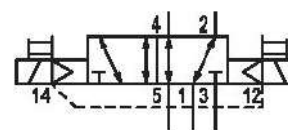
- 1) Manual override
- 2) LED

# 5/2-directional valve, Series 502

## R502A2BN0MA00F1

### General series information 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.



### Technical data

Industry  
Industrial

Activation  
Electrically

Nominal flow Qn  
630 l/min

Switching principle  
5/2

Working pressure min.  
-0.95 bar

Working pressure max  
8 bar

Voltage tolerance DC  
-15% / +10%

Actuating control  
Double Solenoid

Sealing principle  
metal/metal sealing

Pilot  
External

### Note

Valve type  
Spool valve, positive overlapping

Connection type  
Plate connection

Return  
with differential piston

Blocking principle  
Single base plate principle, can be assembled into blocks

Can be assembled into blocks  
Can be assembled into blocks

Control pressure min.  
1.5 bar

Control pressure max.  
8 bar

Min. ambient temperature  
-10 °C

Max. ambient temperature  
50 °C

Min. medium temperature  
-10 °C

Max. medium temperature  
50 °C

Medium  
Compressed air

Max. particle size  
50 µm

Oil content of compressed air min.  
0 mg/m<sup>3</sup>

Oil content of compressed air max.  
5 mg/m<sup>3</sup>

Pilot control exhaust  
with directional pilot air exhaust

Power consumption DC  
1.1 W

LED status display  
Yellow

Duty cycle  
100 %

Typ. switch-on time  
17 ms

Typ. switch-off time  
44 ms

Protection class with connection  
IP65

Protective circuit  
TVS diode

Reverse polarity protection  
Protected against polarity reversal

mounting screws  
with hexagon socket

Mounting screw tightening torque  
2 Nm

Weight  
0.153 kg

Housing material  
Die cast zinc

Seal material  
Nitrile butadiene rubber  
Polyurethane

Material front plate  
Polyamide

Material end plate  
Polyamide

Part No.  
R502A2BN0MA00F1

## Technical information

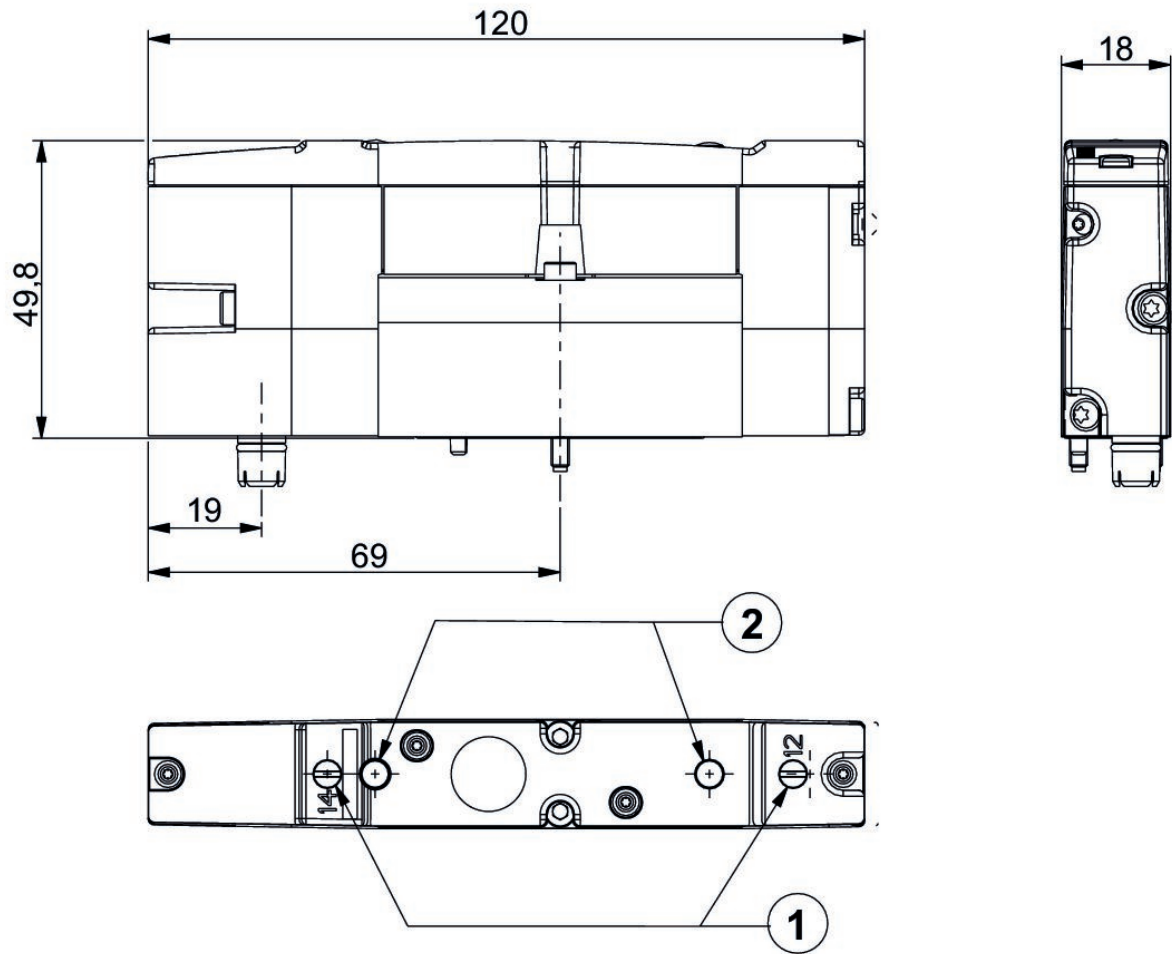
At operating voltage 24 DC, power consumption for coil (cold) = 1,3 W, coil (hot) = 1,1 W

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

## Dimensions



- 1) Manual override
- 2) LED



# Bus coupler, Series G3

- Fieldbus connection with I/O functionality, power supply 7/8", 4-pin
- Bus coupler
- Fieldbus protocol DeviceNet



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.11 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	32
Number of valve positions max.	32
Diagnosis	Undervoltage
I/O module extension max.	16
Weight	0.252 kg

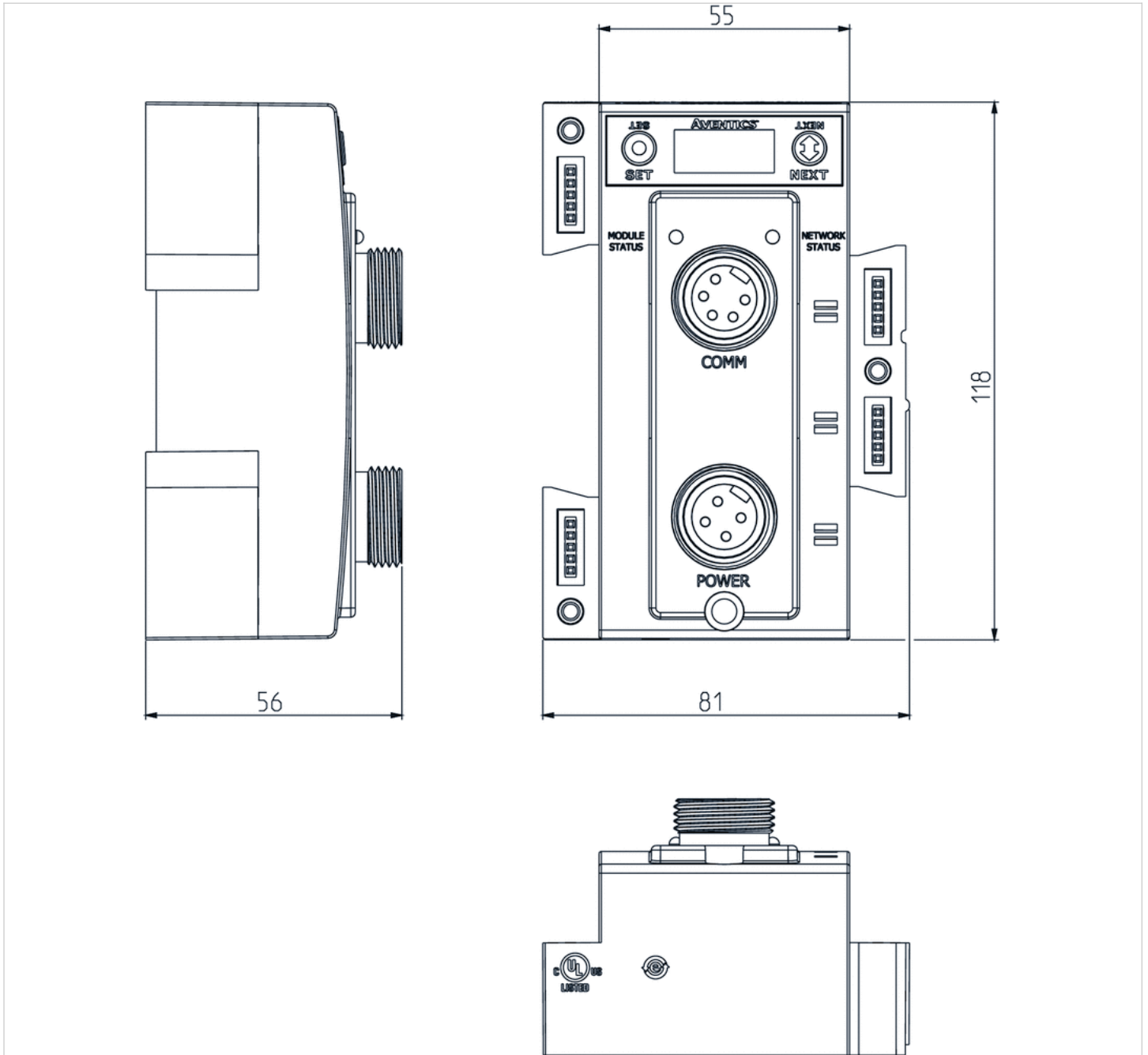
## Technical data

Part No.	Fieldbus protocol	power supply
240-180	DeviceNet	Plug (male), 7/8", 4-pin

## Technical information

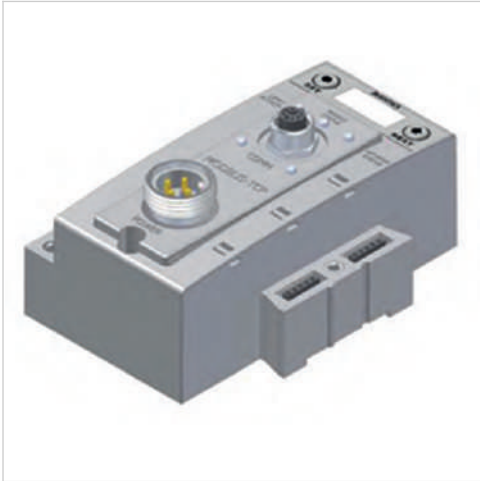
Material	
Housing	Polybutyleneterephthalate

# Dimensions



# Series G3

- Fieldbus connection with I/O functionality, power supply 7/8", 4-pin
- Bus coupler
- Fieldbus protocol MODBUS TCP



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.104 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	128
Number of valve positions max.	110
Diagnosis	Undervoltage
I/O module extension max.	16
Weight	0.255 kg

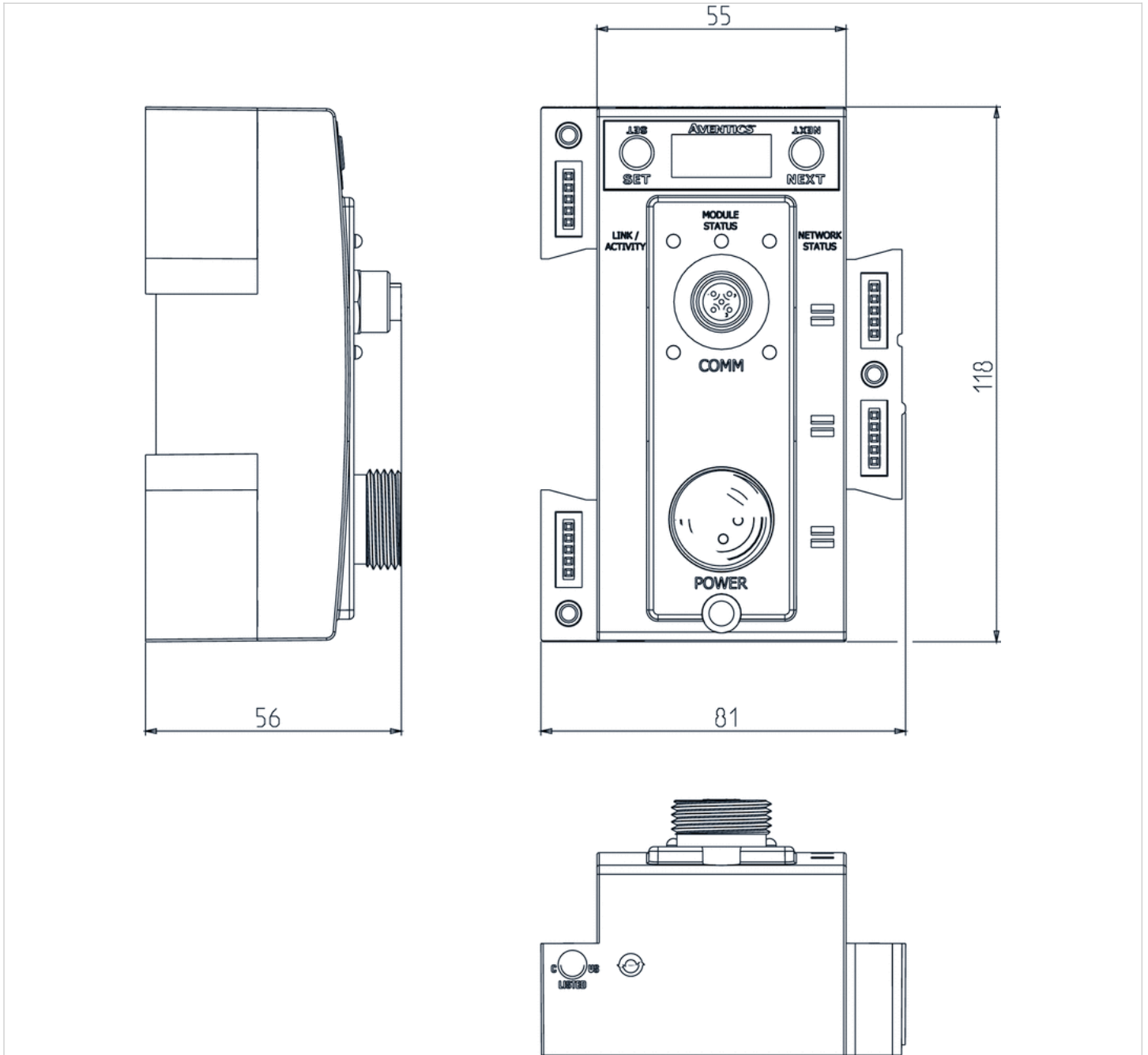
## Technical data

Part No.	Fieldbus protocol	power supply
240-292	MODBUS TCP	Plug (male), 7/8", 4-pin

## Technical information

Material	
Housing	Polybutyleneterephthalate

# Dimensions



## Series G3

- Fieldbus connection with I/O functionality, power supply 7/8", 5-pin
- Bus coupler
- Fieldbus protocol PROFIBUS DP



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.104 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	128
Number of valve positions max.	110
Diagnosis	Undervoltage
I/O module extension max.	16
Weight	0.227 kg

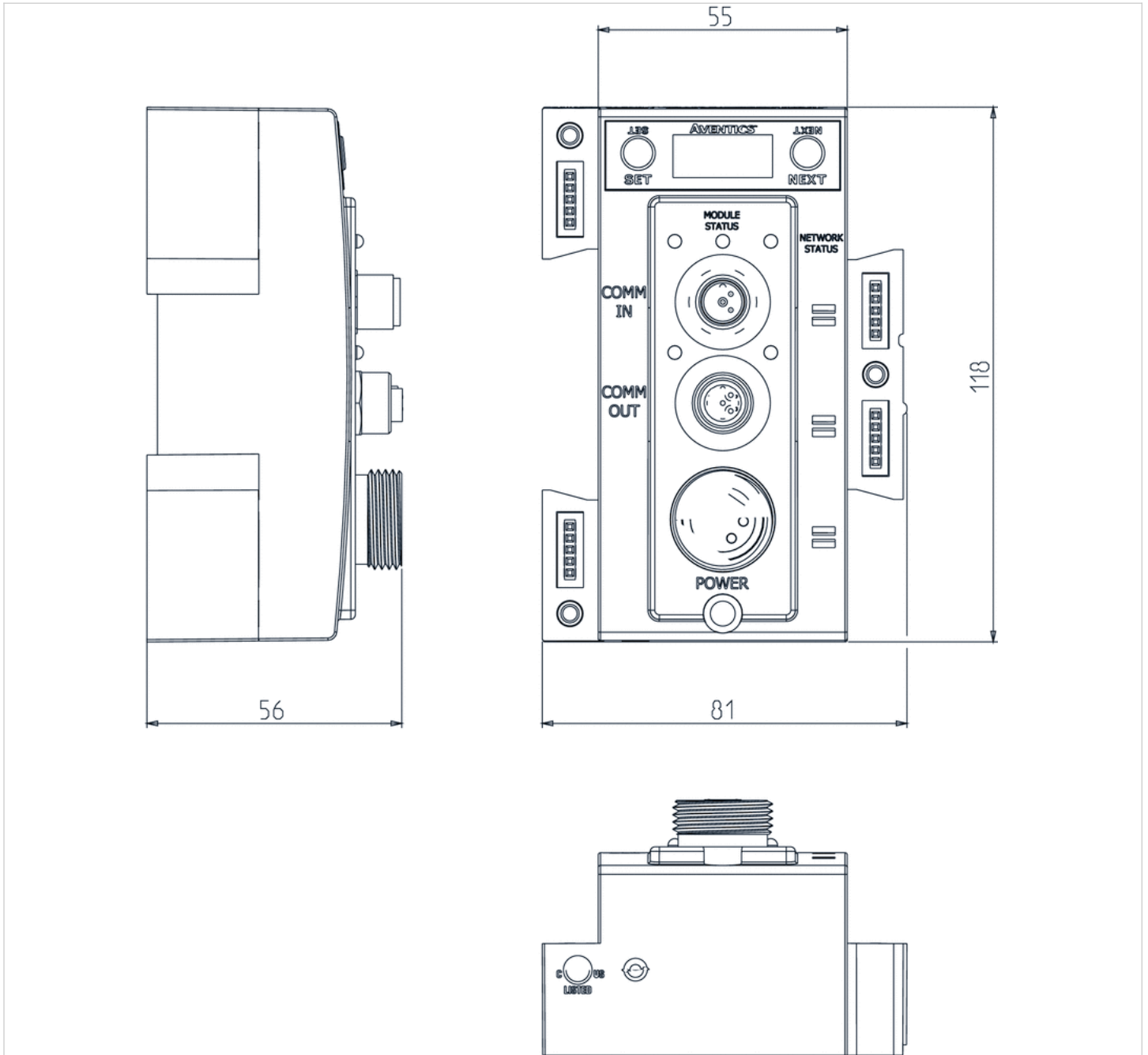
### Technical data

Part No.	Fieldbus protocol	power supply
240-239	PROFIBUS DP	Plug (male), 7/8", 5-pin

### Technical information

Material	
Housing	Polybutyleneterephthalate

# Dimensions



## Series G3

- Fieldbus connection with I/O functionality, power supply 7/8", 5-pin
- Bus coupler
- Fieldbus protocol Profinet



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.104 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	128
Number of valve positions max.	110
Diagnosis	Undervoltage
I/O module extension max.	16
Weight	0.227 kg

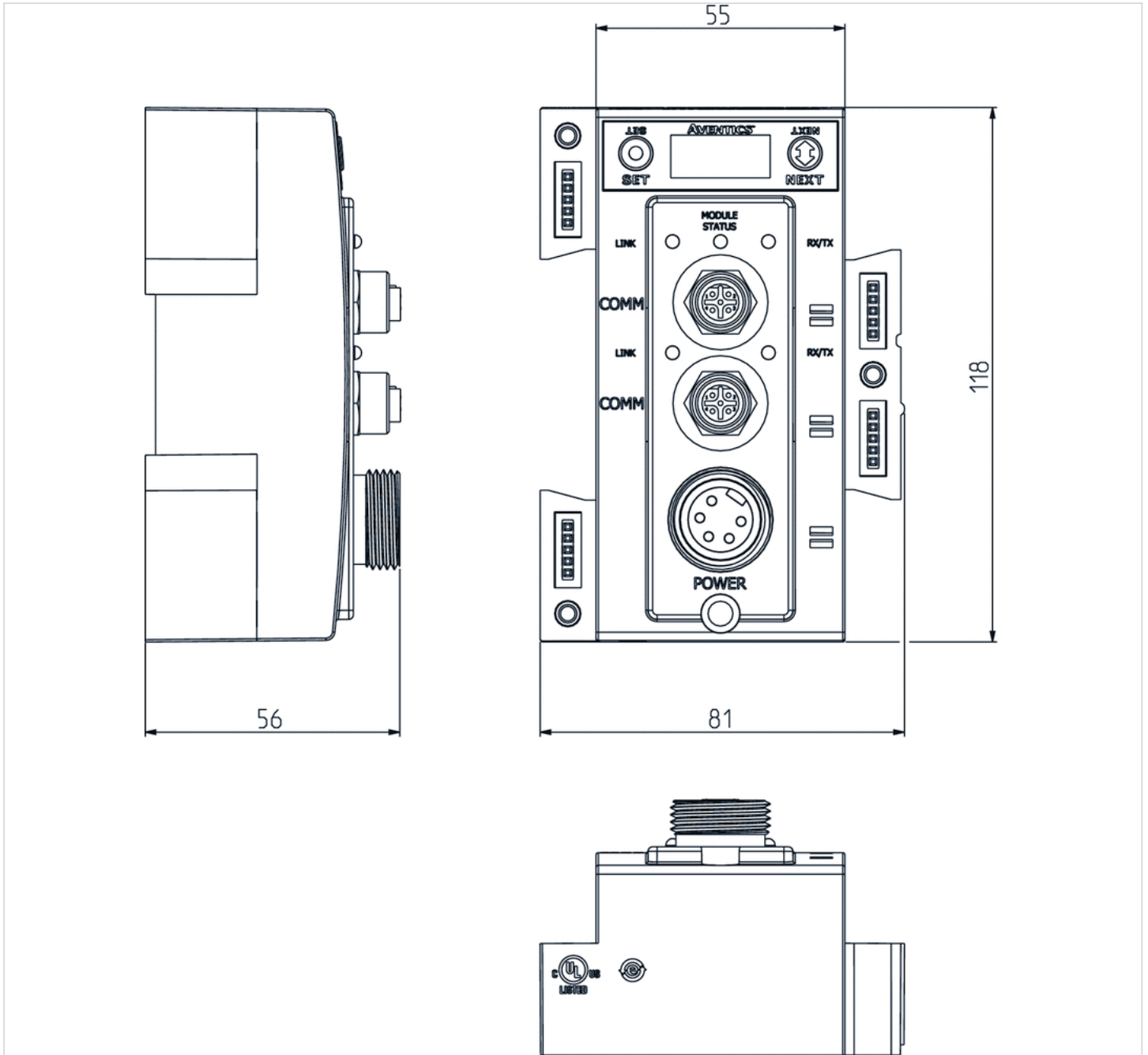
### Technical data

Part No.	Fieldbus protocol	power supply
240-240	Profinet	Plug (male), 7/8", 5-pin

### Technical information

Material	
Housing	Polybutyleneterephthalate

# Dimensions





## Series G3

- Fieldbus connection with I/O functionality, power supply 7/8", 5-pin
- Bus coupler
- Fieldbus protocol POWERLINK



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.104 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	128
Number of valve positions max.	110
Diagnosis	Undervoltage
I/O module extension max.	16
Weight	0.227 kg

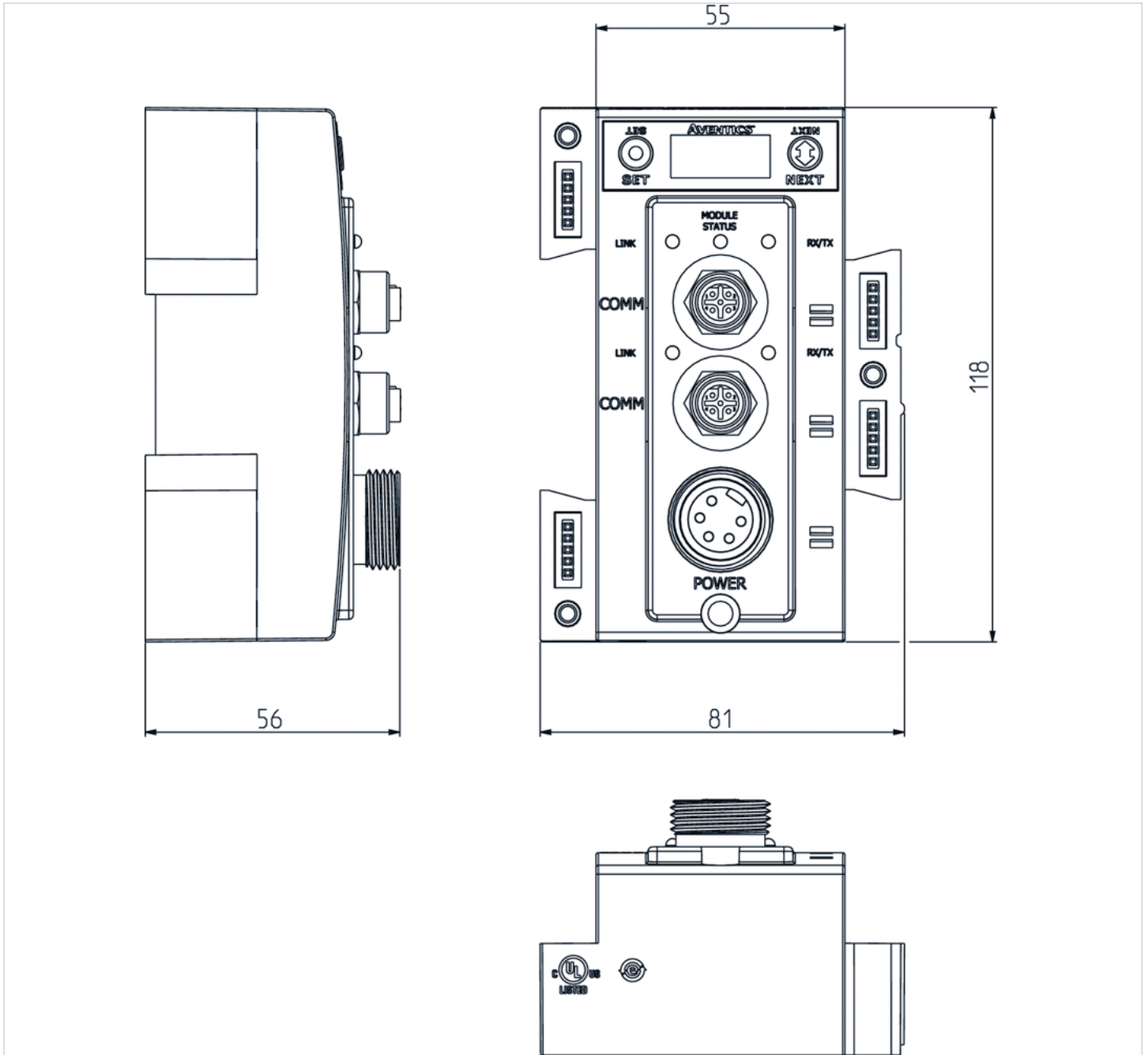
### Technical data

Part No.	Fieldbus protocol	power supply
240-309	POWERLINK	Plug (male), 7/8", 5-pin

### Technical information

Material	
Housing	Polybutyleneterephthalate

# Dimensions



# Series G3

- Fieldbus connection with I/O functionality, power supply 7/8", 4-pin
- Bus coupler
- Fieldbus protocol CANopen



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.11 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	32
Number of valve positions max.	32
Diagnosis	Undervoltage
I/O module extension max.	16
Weight	0.252 kg

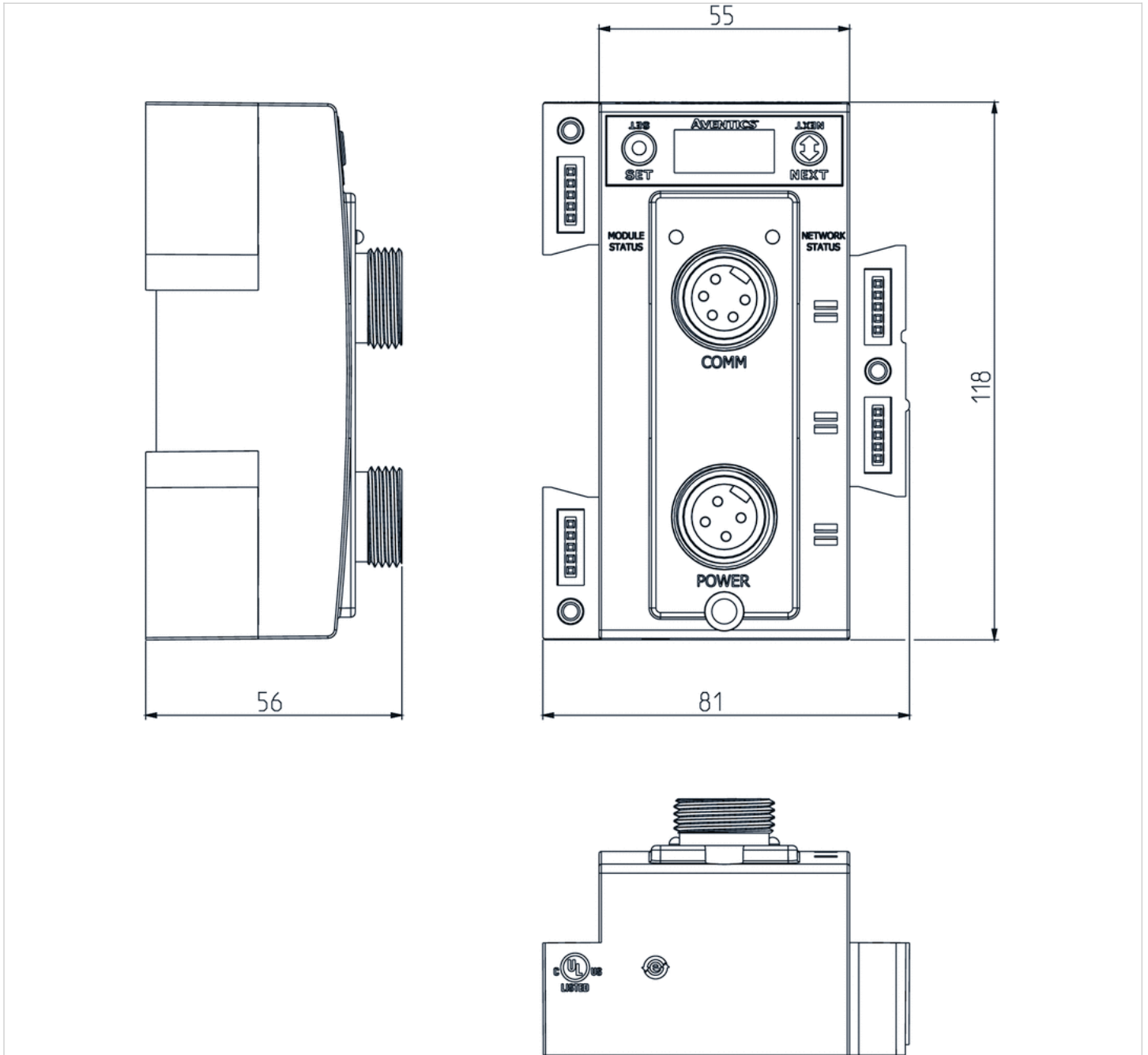
## Technical data

Part No.	Fieldbus protocol	power supply
240-291	CANopen	Plug (male), 7/8", 4-pin

## Technical information

Material	
Housing	Polybutyleneterephthalate

# Dimensions



# Series G3

- Fieldbus connection with I/O functionality, power supply 7/8", 4-pin
- Bus coupler
- Fieldbus protocol EtherNET/IP



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.104 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	128
Number of valve positions max.	110
Diagnosis	Undervoltage
I/O module extension max.	16
Weight	0.227 kg

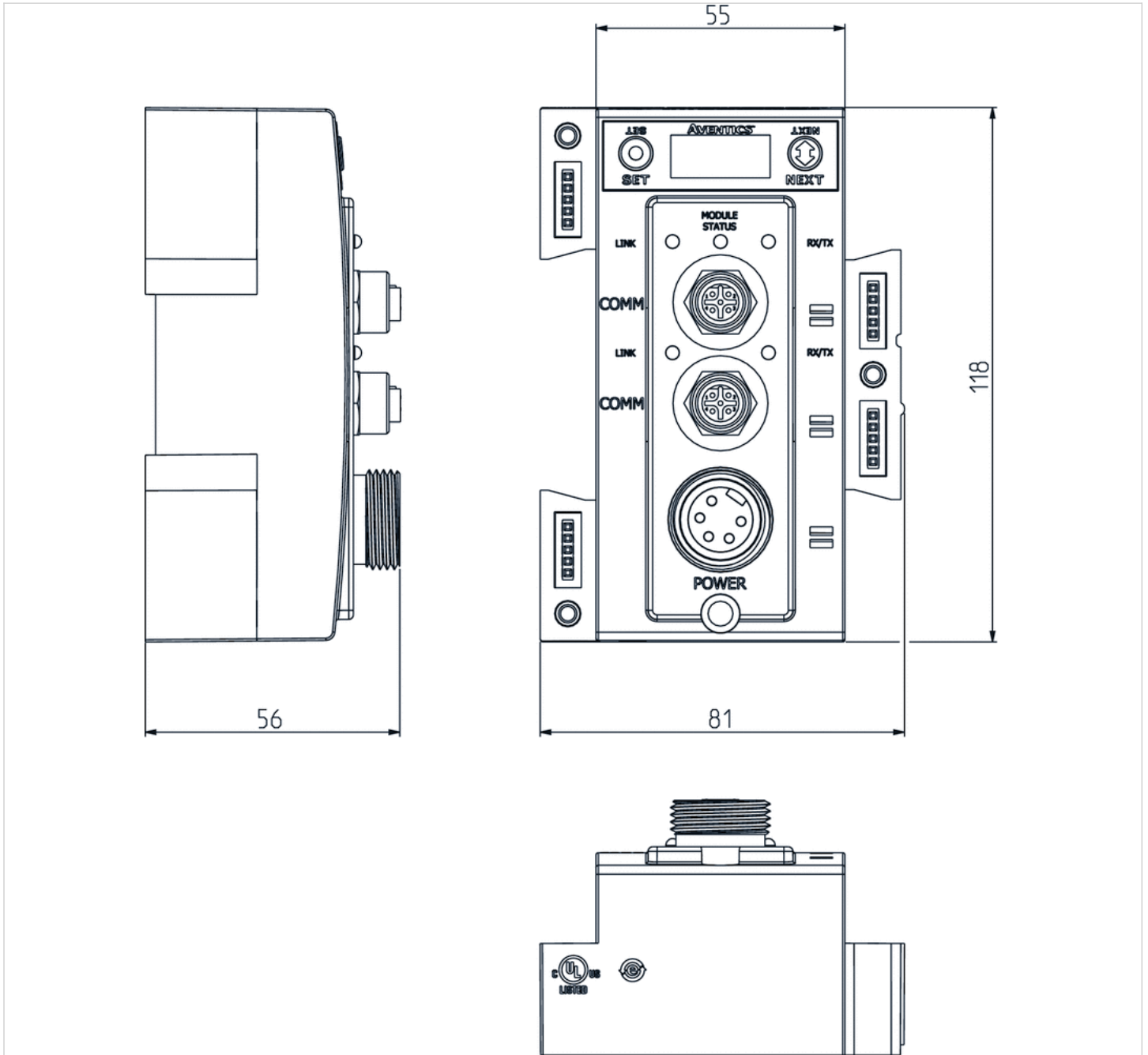
## Technical data

Part No.	Fieldbus protocol	power supply
240-325	EtherNET/IP	Plug (male), 7/8", 4-pin

## Technical information

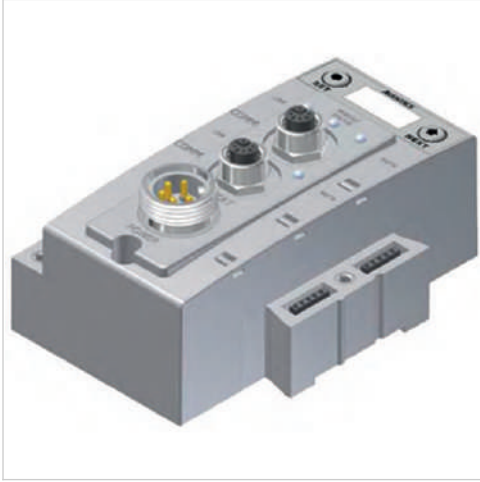
Material	
Housing	Polybutyleneterephthalate

# Dimensions



# Series G3

- Fieldbus connection with I/O functionality, power supply 7/8", 4-pin
- Bus coupler
- Fieldbus protocol EtherCAT



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.104 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	128
Number of valve positions max.	110
Diagnosis	Undervoltage
I/O module extension max.	16
Weight	0.227 kg

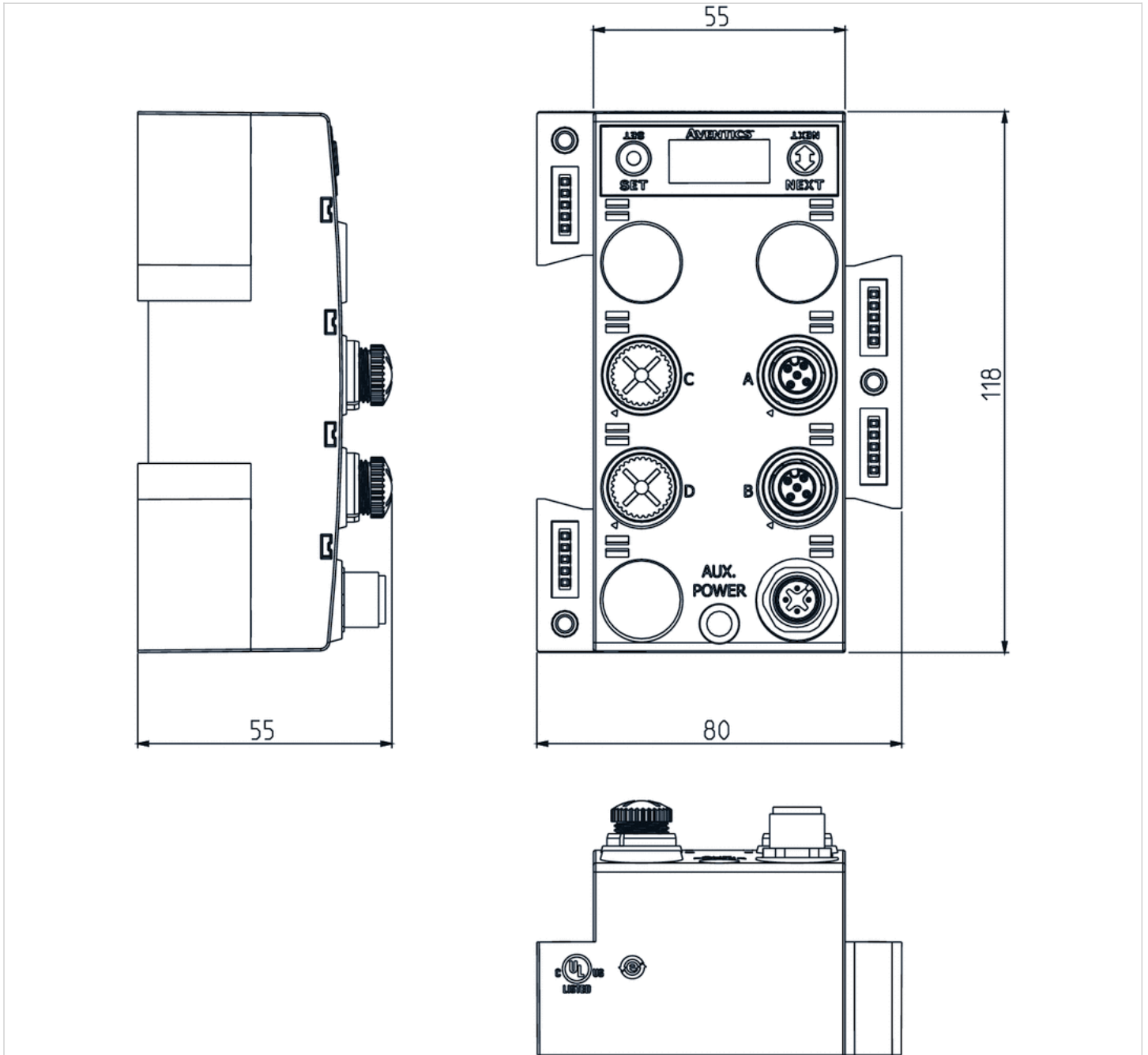
## Technical data

Part No.	Fieldbus protocol	power supply
240-310	EtherCAT	Plug (male), 7/8", 4-pin

## Technical information

Material	
Housing	Polybutyleneterephthalate

# Dimensions





# Series G3

- Fieldbus connection with I/O functionality, power supply 7/8", 4-pin
- Bus coupler
- Fieldbus protocol EtherCAT



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.11 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Diagnosis	Undervoltage
I/O module extension max.	16
Weight	0.269 kg

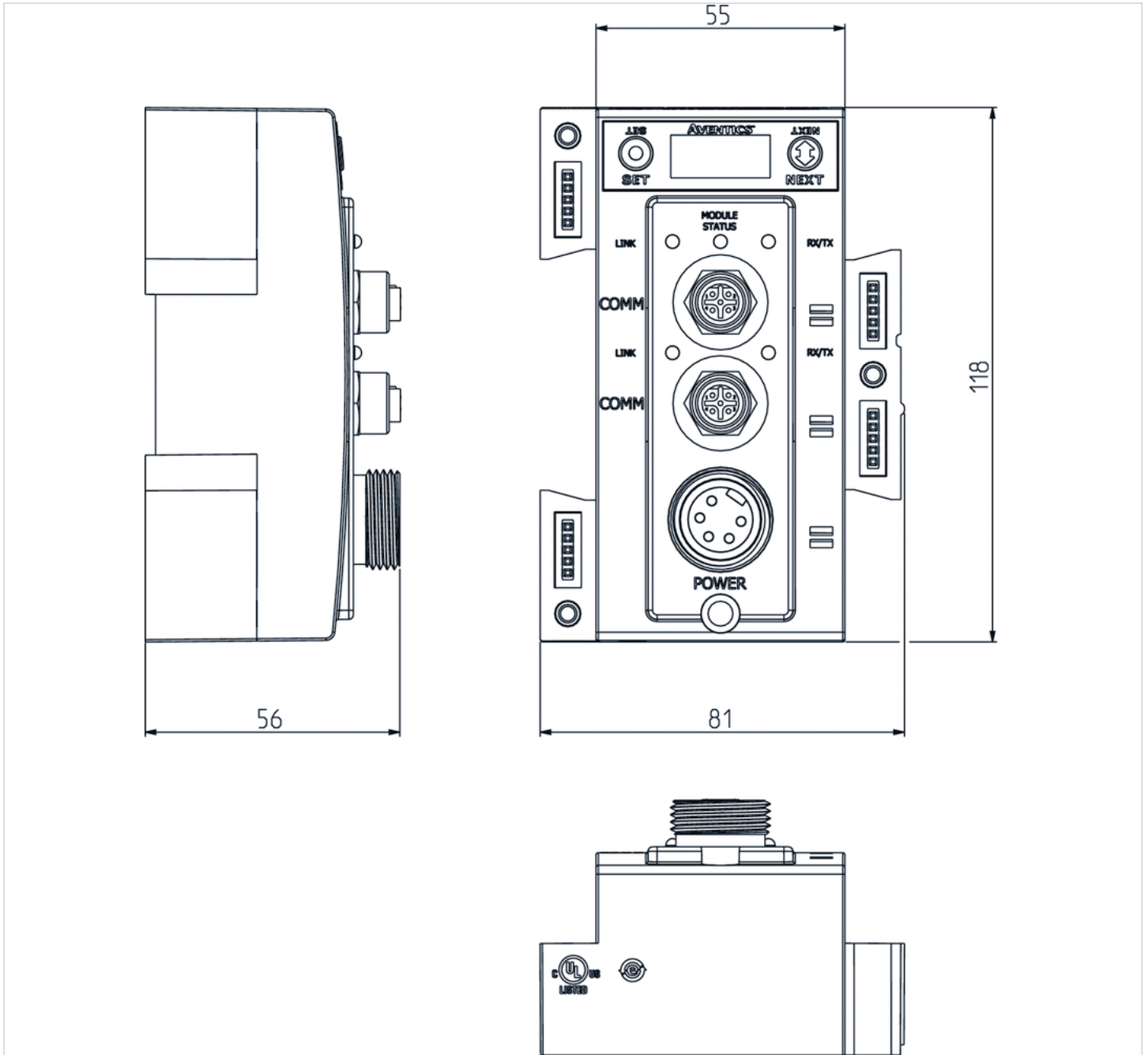
## Technical data

Part No.	Fieldbus protocol	power supply
240-362	EtherCAT	Plug, 7/8", 4-pin

## Technical information

Material	
Housing	Polybutyleneterephthalate

# Dimensions



# End plate left

- Left end plate G3



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Total current for actuators	4 A
Protection class	IP65
Weight	0.091 kg

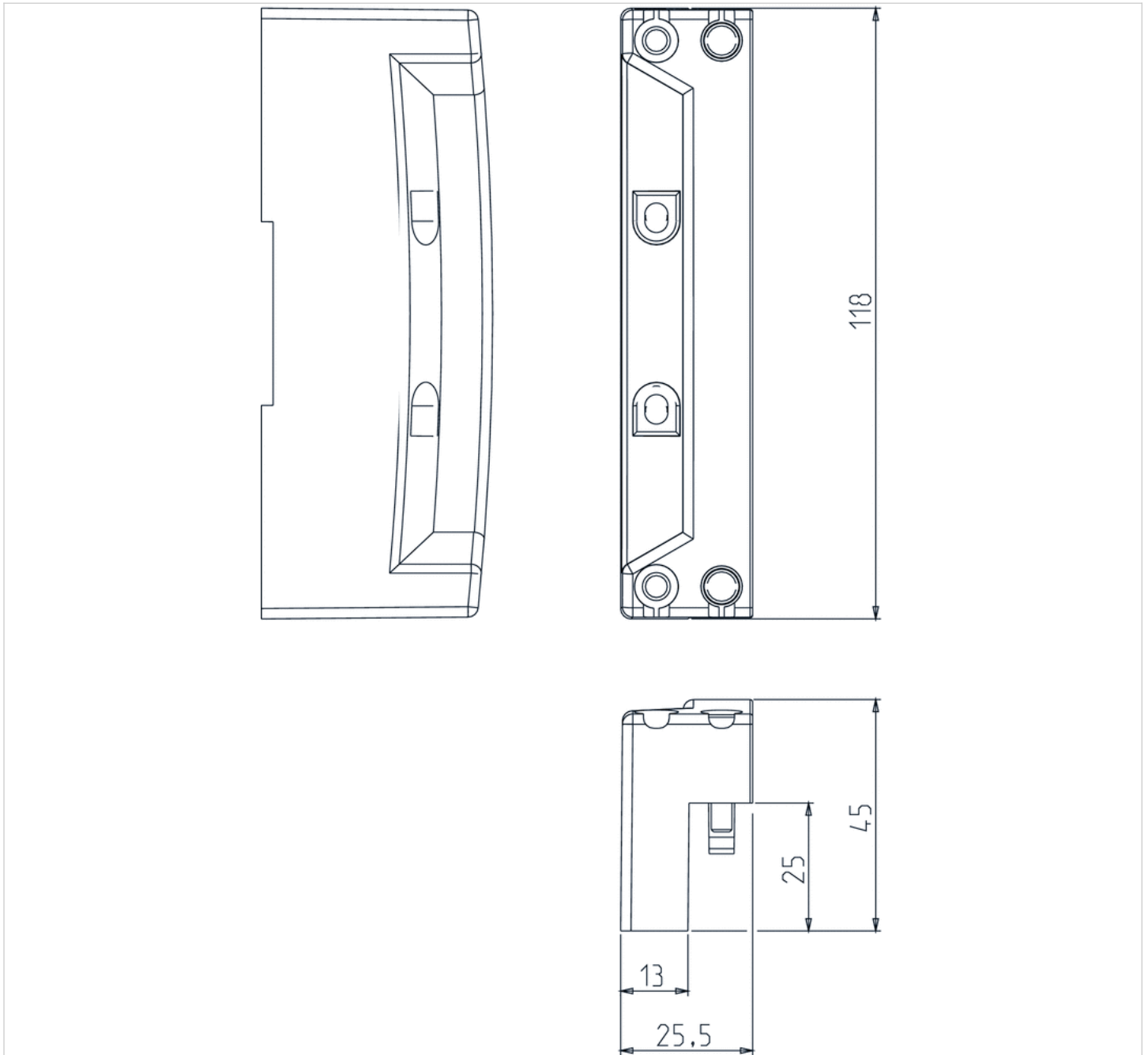
## Technical data

Part No.	power supply
240-184	4

## Technical information

Material	
Housing	polyethyleneterephthalate

# Dimensions



## Left end plate for Subbus G3



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Total current for actuators	4 A
Protection class	IP65
I/O connection	M12x1, 4-pin
Weight	0.13 kg

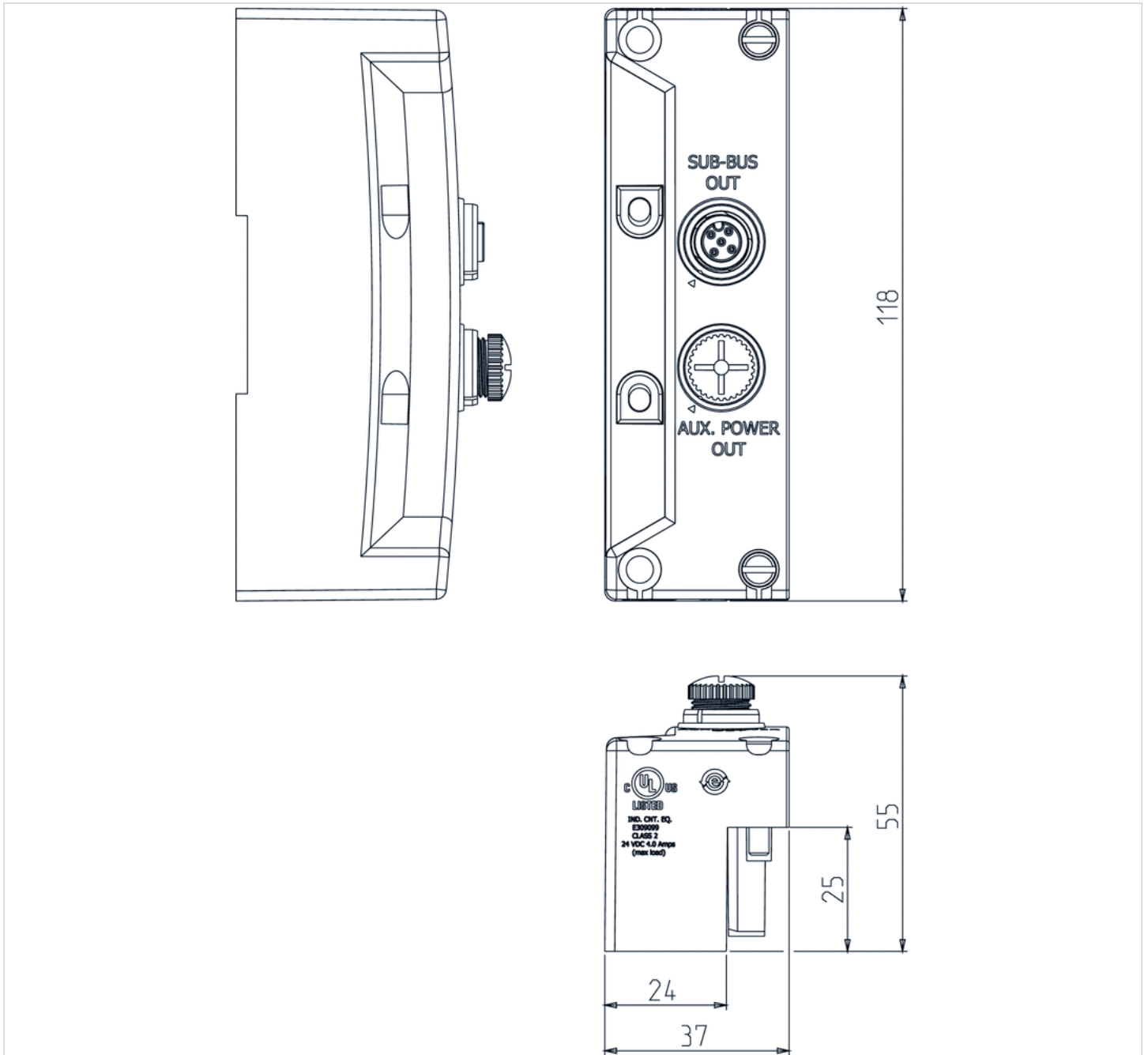
### Technical data

Part No.	power supply	I/O connection
240-183	4	M12x1, 4-pin

### Technical information

Material	
Housing	polyethyleneterephthalate

# Dimensions



## End plate right



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Total current for actuators	4 A
Protection class	IP65
I/O connection	M12x1, 4-pin
Weight	0.13 kg

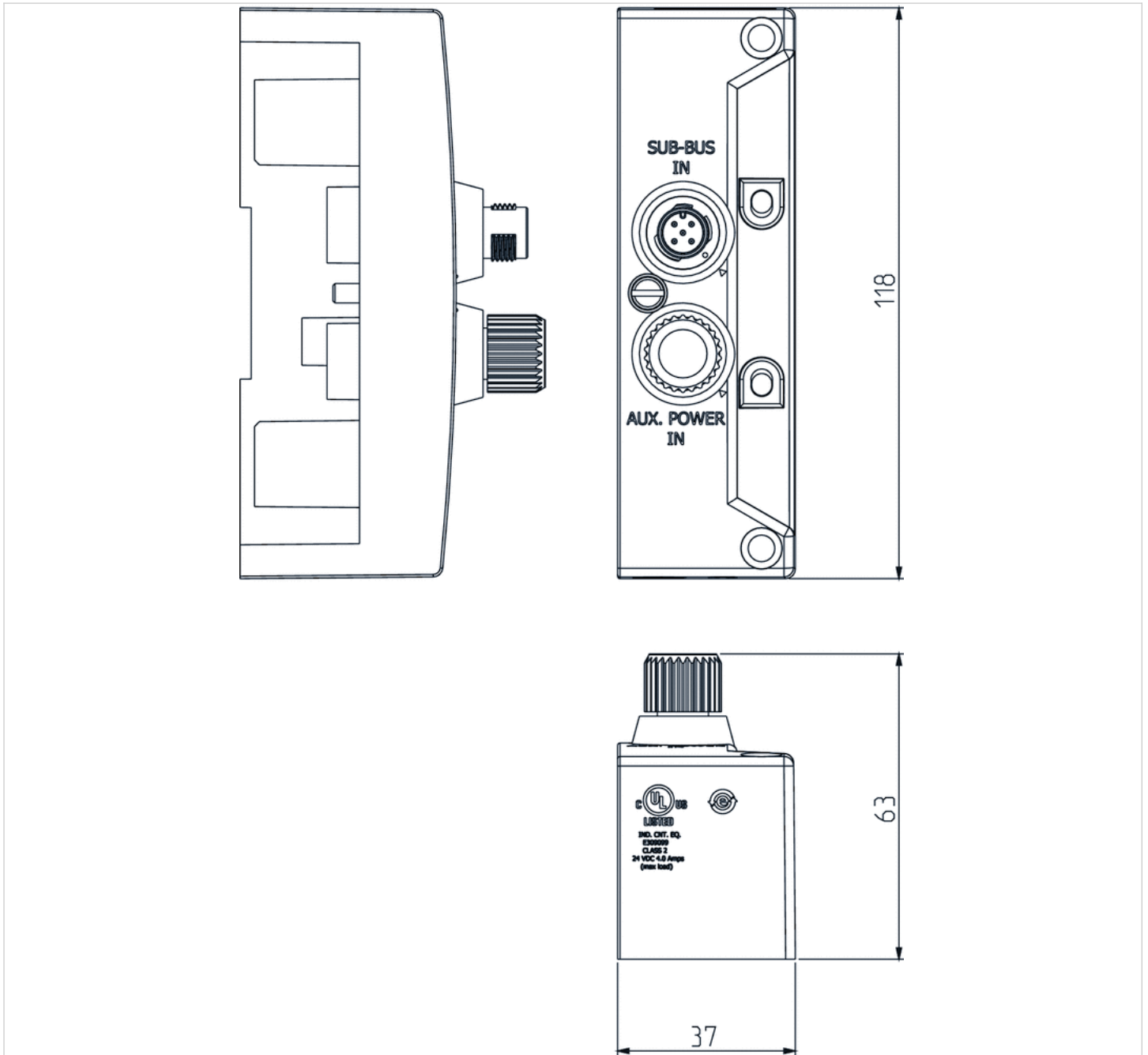
### Technical data

Part No.	power supply	I/O connection
240-185	4	M12x1, 4-pin

### Technical information

Material	
Housing	polyethyleneterephthalate

# Dimensions





## End plate right



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Total current for actuators	4 A
Protection class	IP65
Weight	0.071 kg

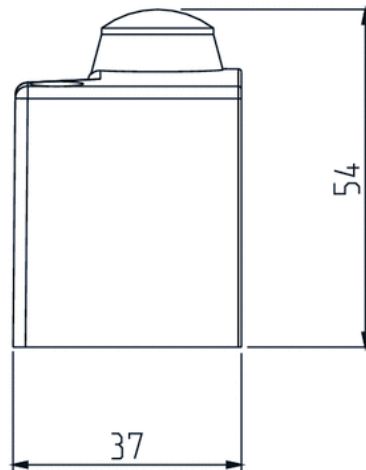
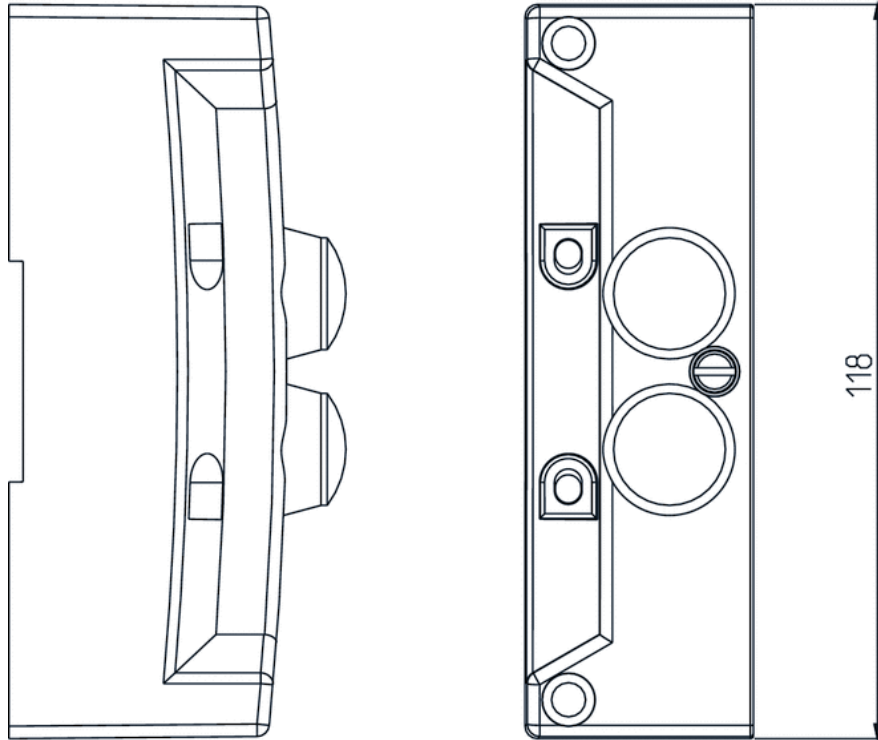
### Technical data

Part No.	power supply
240-255	4

### Technical information

Material	
Housing	polyethyleneterephthalate

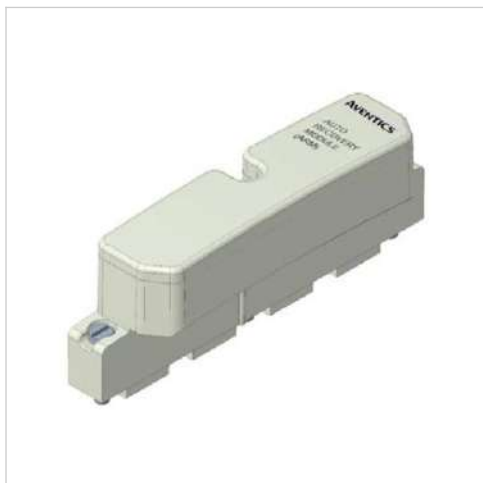
# Dimensions



# Spring clamp element

- Series G3

- GPC



Ambient temperature min./max.

-10 ... 50 °C

## Technical data

Part No.

240-383

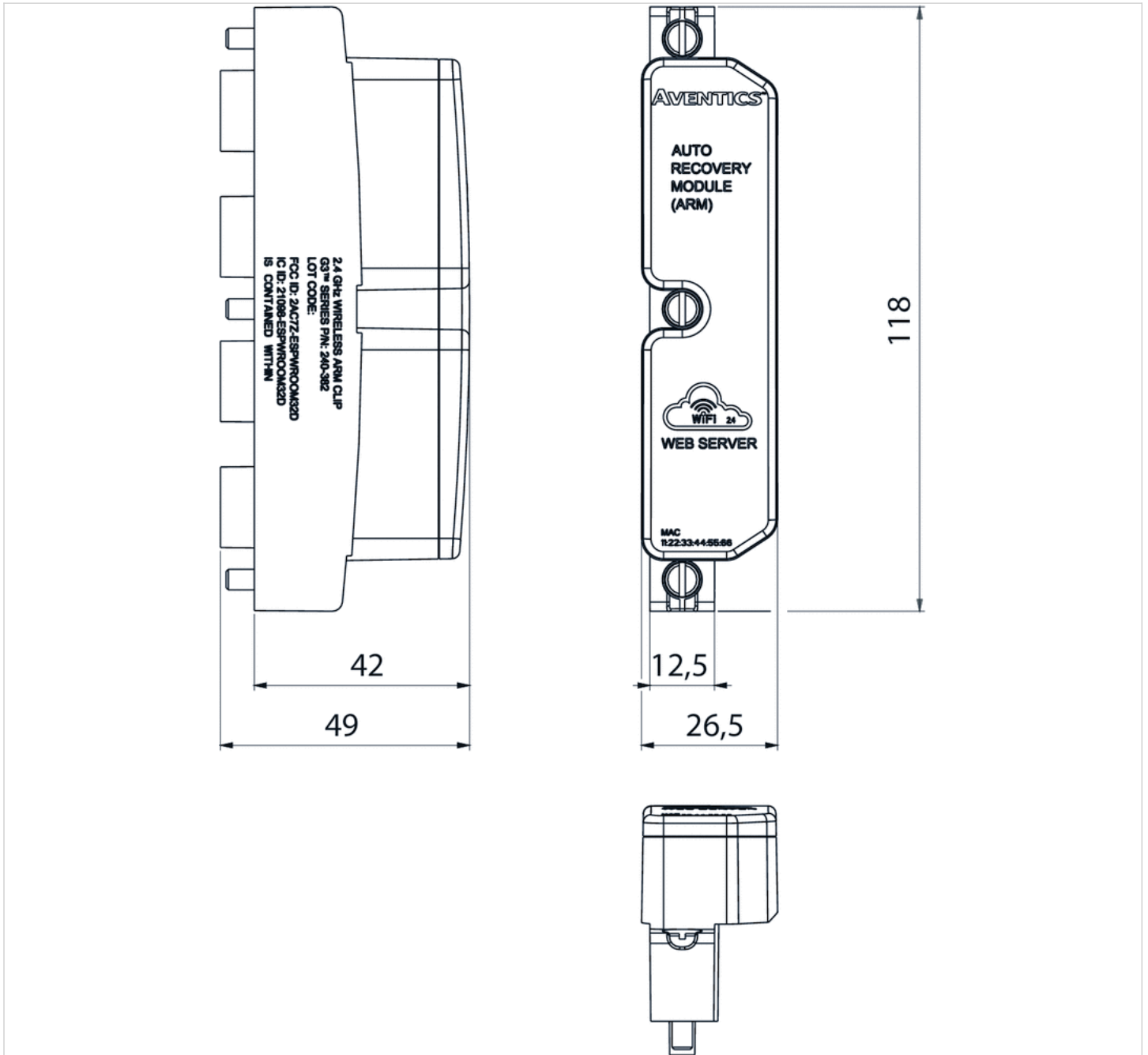
## Technical information

Material

Housing

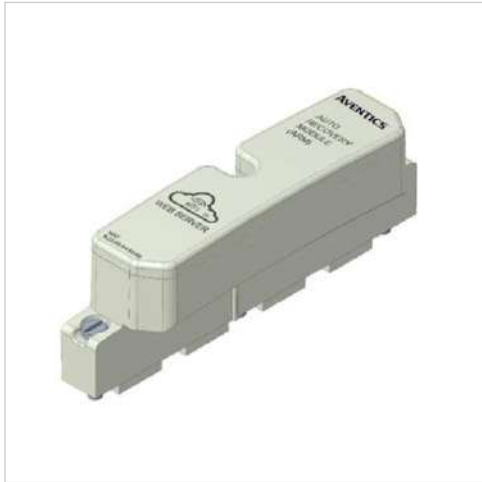
Polybutyleneterephthalate

# Dimensions



# Spring clamp element

- Series G3
- GPC



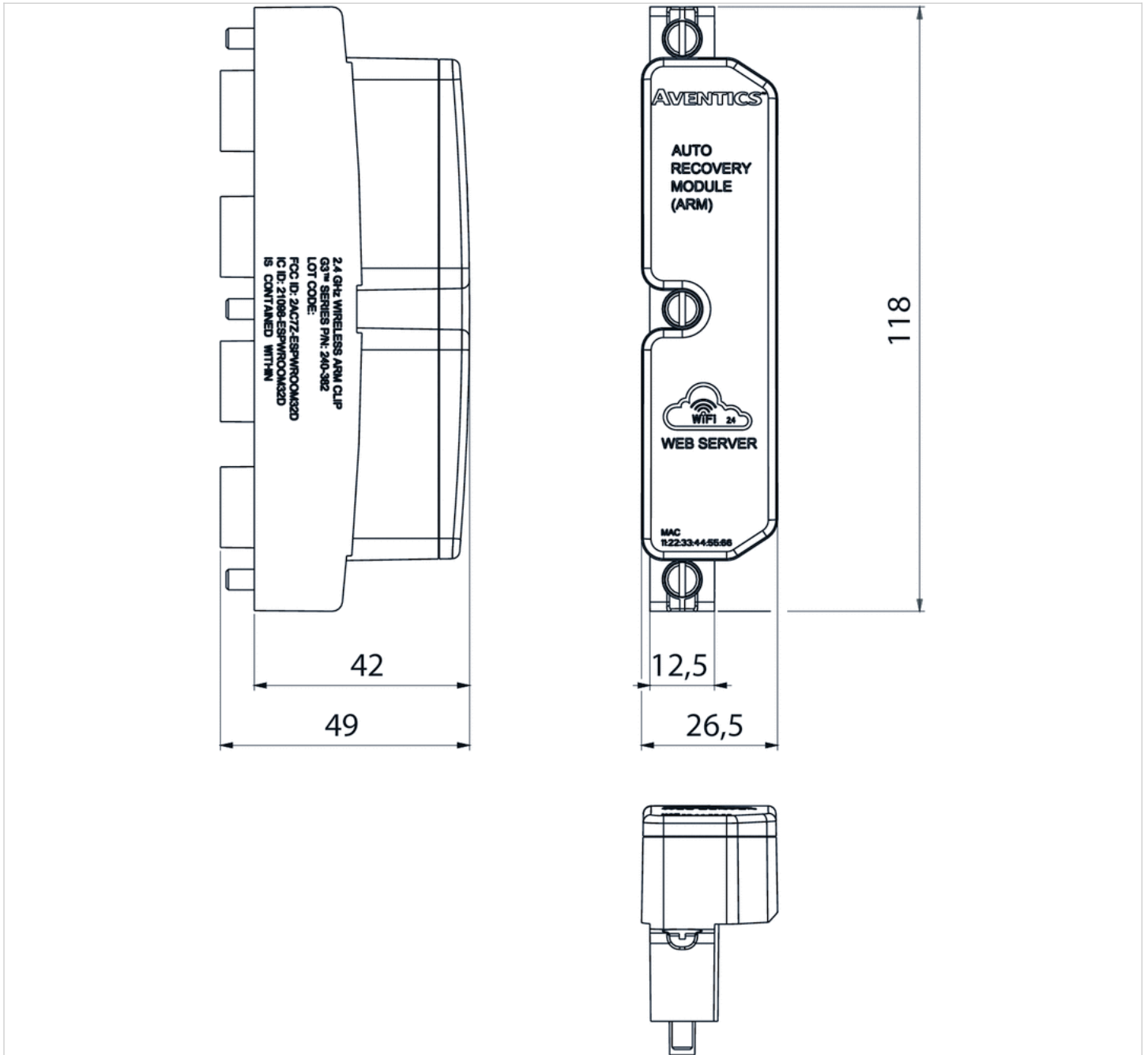
Ambient temperature min./max. -10 ... 50 °C

## Technical data

Part No.

240-382

# Dimensions



# Distributor

- Valve driver, Series 500



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Total current for actuators	4 A
Protection class	IP65

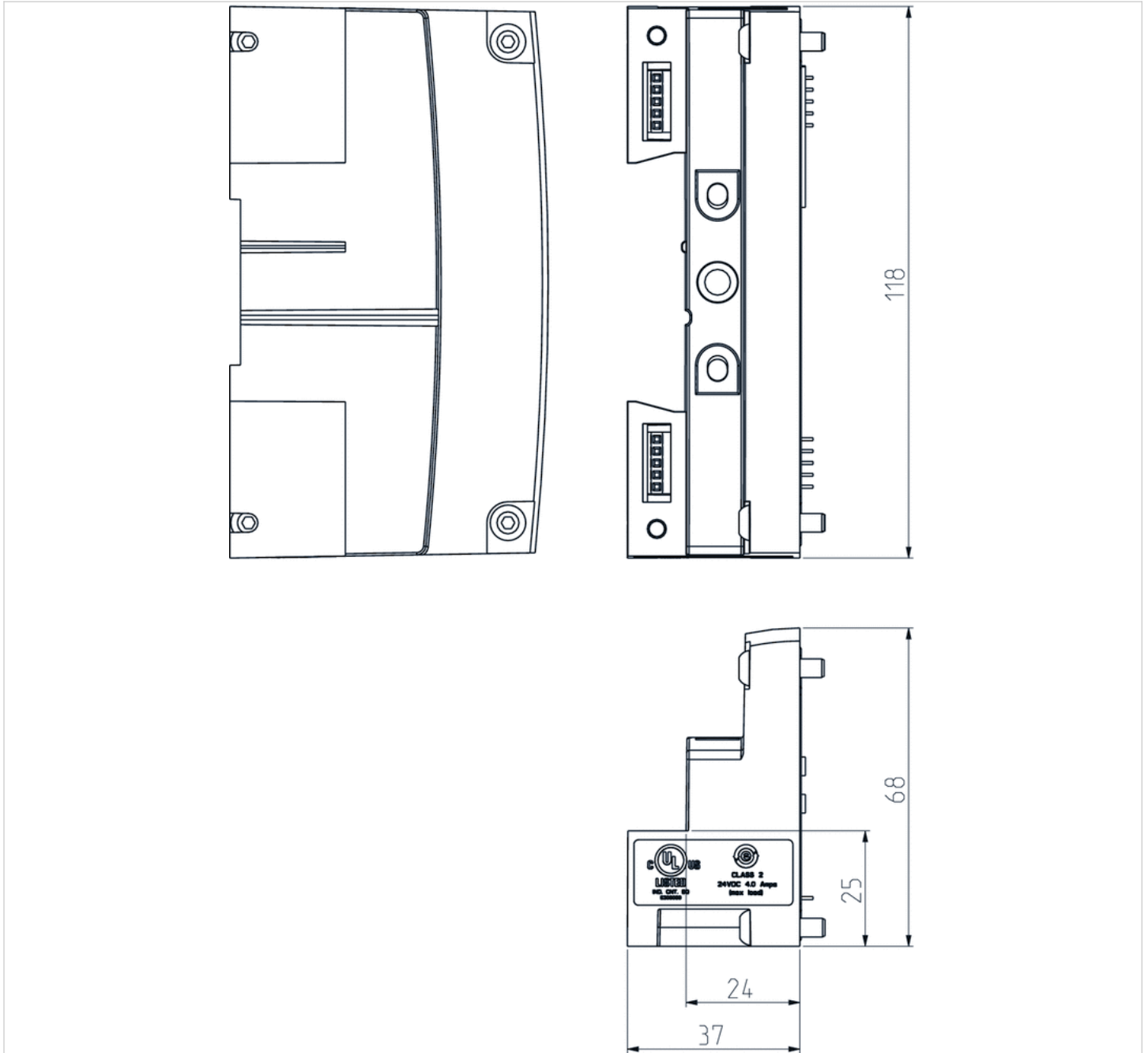
## Technical data

Part No.	power supply
P599AE508827001	4

## Technical information

Material	
Housing	polyethyleneterephthalate

# Dimensions





# Distributor

- Power supply plug 7/8", 4-pin



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.03 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of valve positions max.	32
Diagnosis	Undervoltage
I/O module extension max.	15
Weight	0.235 kg

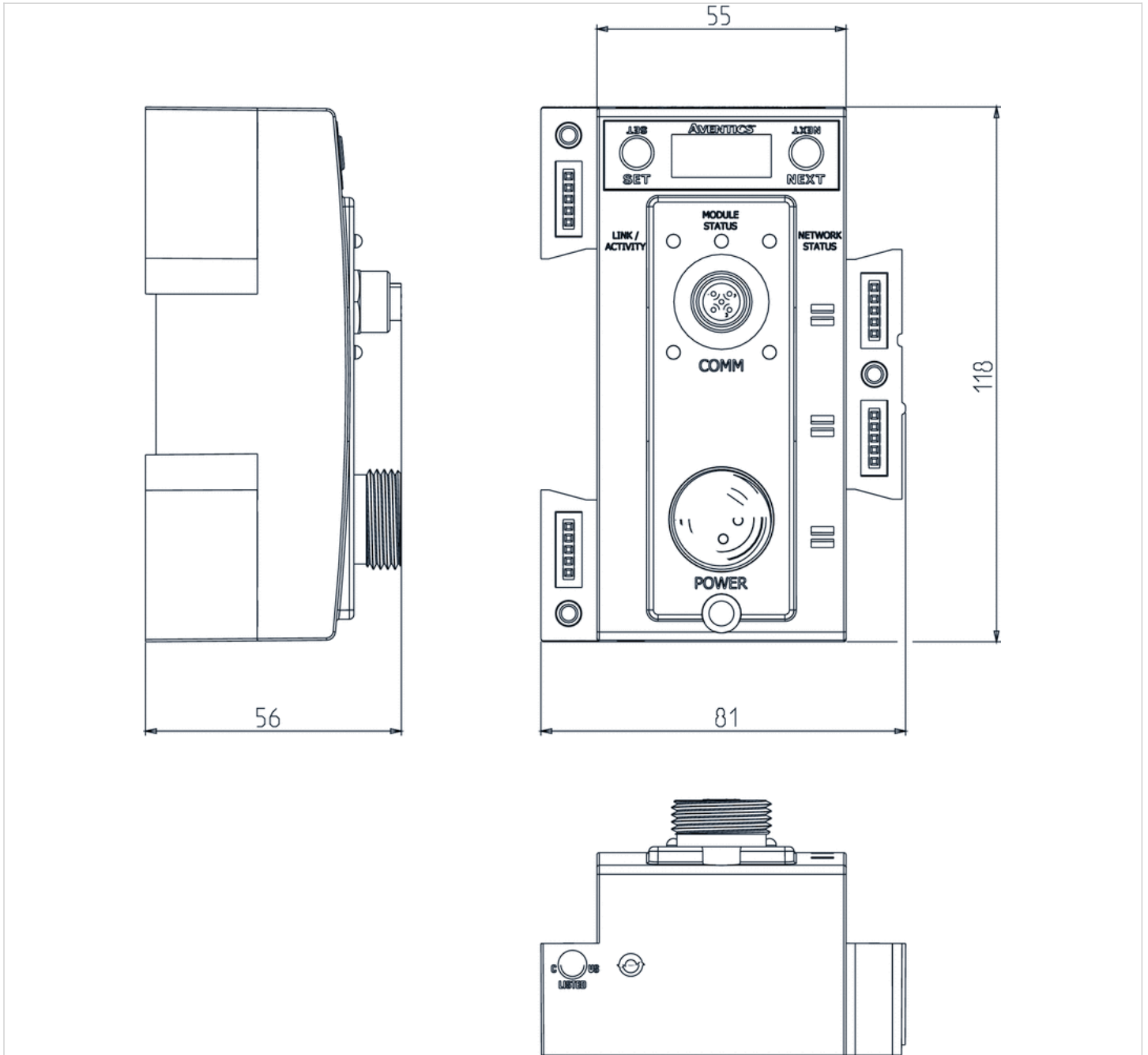
## Technical data

Part No.	power supply
240-241	Plug, 7/8", 4-pin

## Technical information

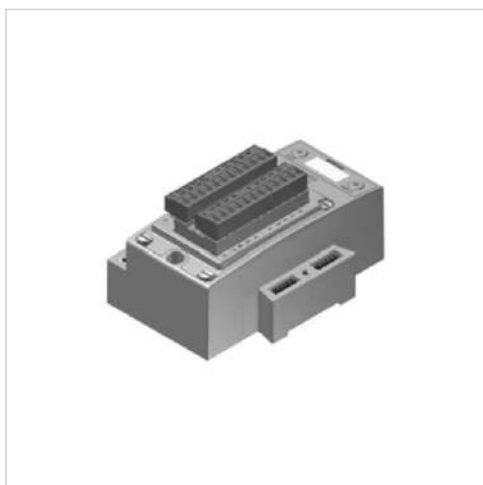
Material	
Housing	polyethyleneterephthalate

# Dimensions



# I/O modules, Series G3

- Screw terminal block
- I/O module version



Version	I/O module version
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.05 A
Power supply for actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Total current of sensors max.	1,2 A
Diagnosis	Short circuit
Weight	0.274 kg

## Technical data

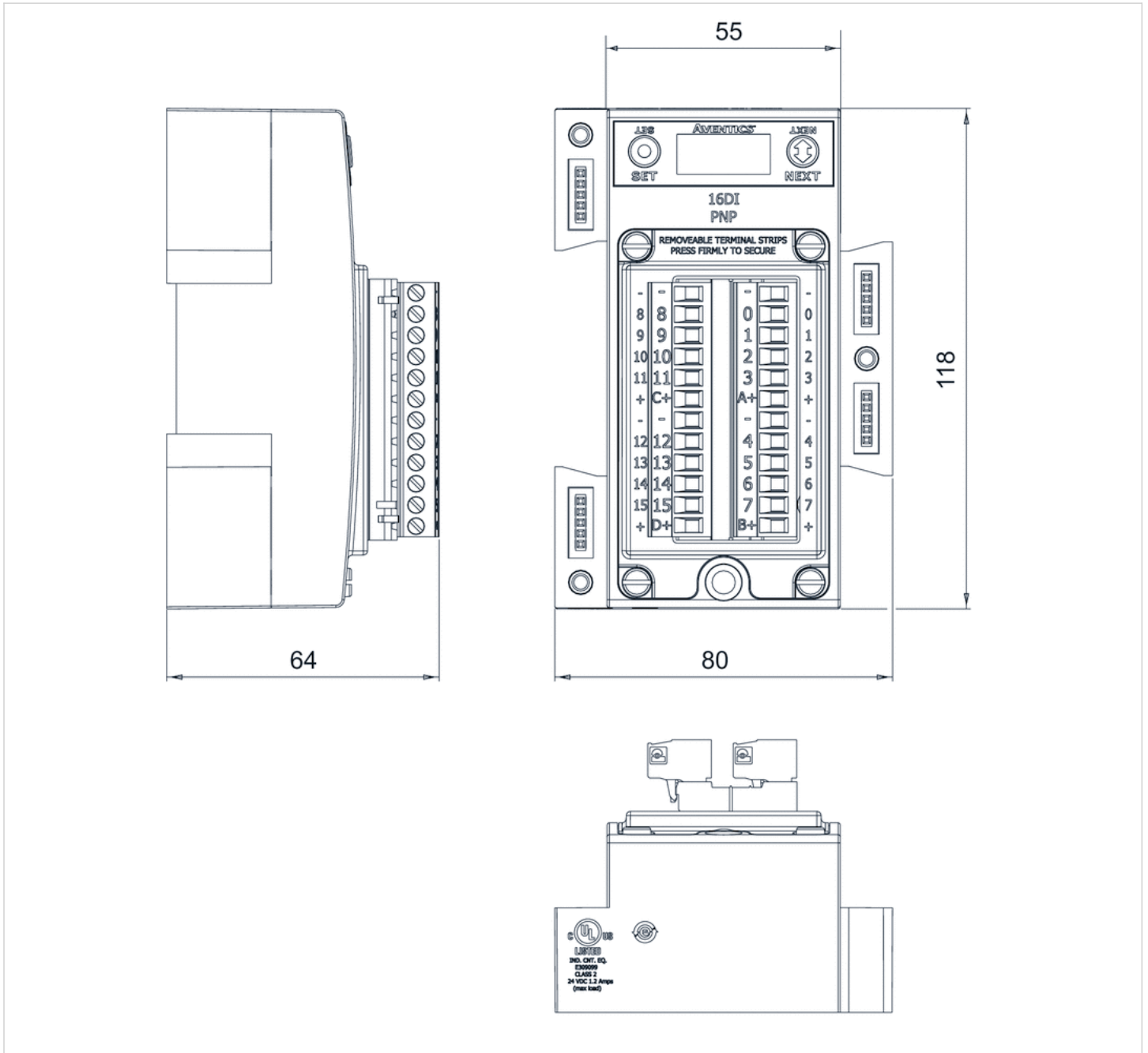
Part No.	Number of inputs	Number of outputs	I/O module version
240-203	16	-	digital inputs PNP
240-204	16	-	digital inputs NPN
240-316	8	-	digital inputs PNP
240-330	-	16	digital inputs NPN

## Technical information

Material	
Housing	polyethyleneterephthalate

# Dimensions

## Dimensions



# I/O modules, Series G3

- digital inputs PNP, Socket (female), M8x1

- I/O module version



Version	I/O module version
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	55 A
Max. current per channel	0.15 A
Power supply for actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Total current of sensors max.	1,2 A
Diagnosis	Short circuit
Weight	0.274 kg

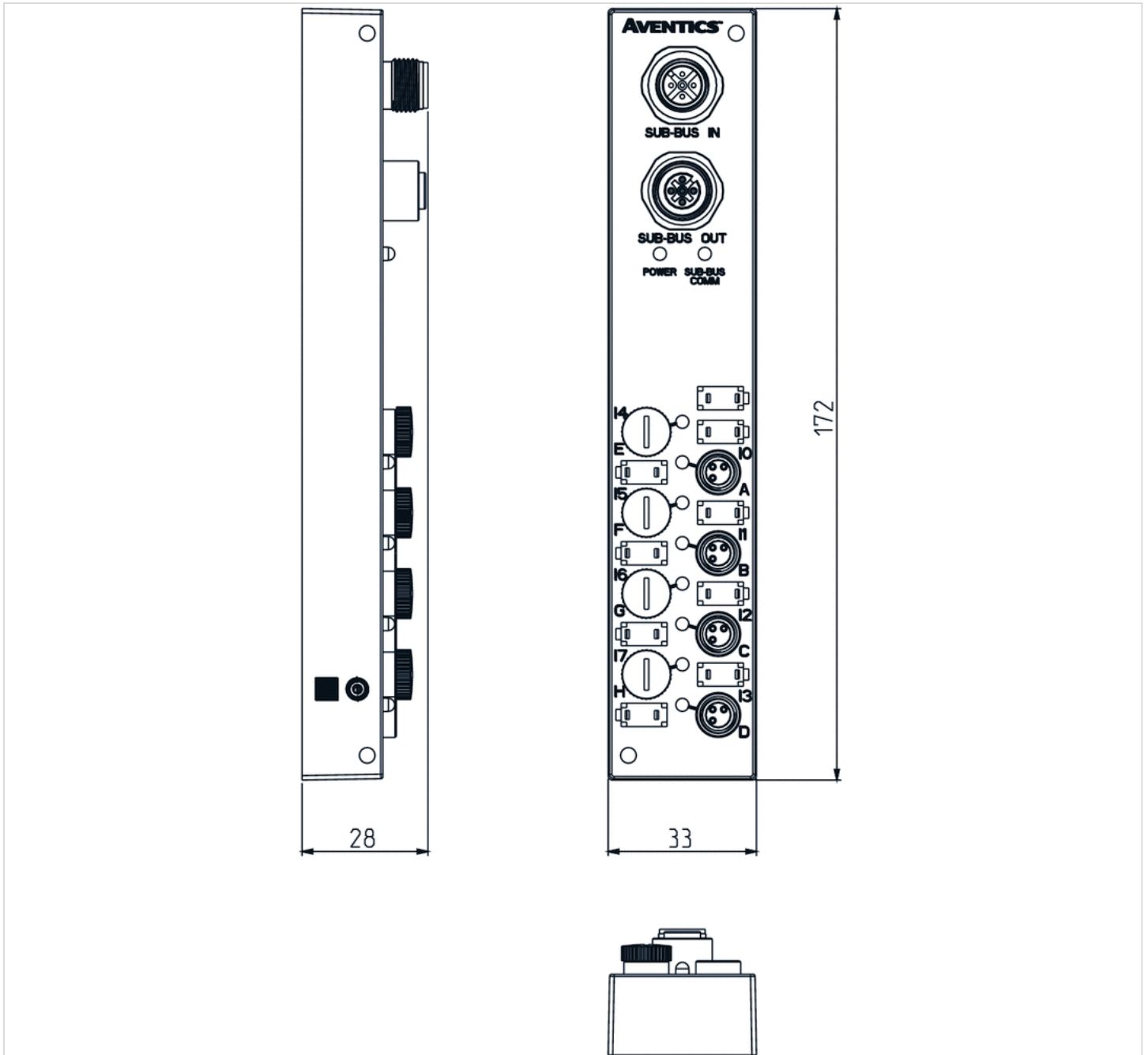
## Technical data

Part No.	Number of inputs	I/O module version
240-379	8	digital inputs PNP

## Technical information

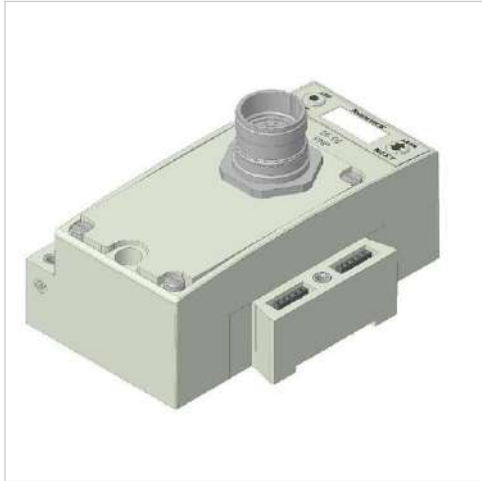
Material	
Housing	polyethyleneterephthalate

# Dimensions



# I/O modules, Series G3

- Plug, M23x1, 19-pin, Screw terminal block
- A-design
- I/O module version



Version	I/O module version
Ambient temperature min./max.	-10 ... 50 °C
Power consumption electronics	0.05 A
Max. current per channel	0.3 A
Power supply for actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Total current of sensors max.	1,2 A
Diagnosis	Short circuit
Weight	0.274 kg

## Technical data

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

## Technical information

Material	
Housing	polyethyleneterephthalate

# I/O modules, Series G3

- Socket, M12x1
- A-design
- I/O module version



Version	I/O module version
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Max. current per channel	0.15 A
Power supply for actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Total current of sensors max.	1,2 A
Diagnosis	Short circuit
I/O connection	M12x1, 4-pin
Weight	See table below

## Technical data

Part No.	Type	Number of inputs	Number of outputs
240-205	16DI8M12 digital inputs PNP	16	-
240-206	8DI8M8 digital inputs PNP	8	-
240-207	16DO8M12 digital outputs PNP	-	16
240-208	8DO8M12 digital outputs PNP	-	8
240-209	16DI8M12 digital inputs NPN	16	-
240-210	8DI8M12 digital inputs NPN	8	-
240-211	8DO8M12 digital inputs/outputs PNP	8	8
240-300	8DO8M12	-	8

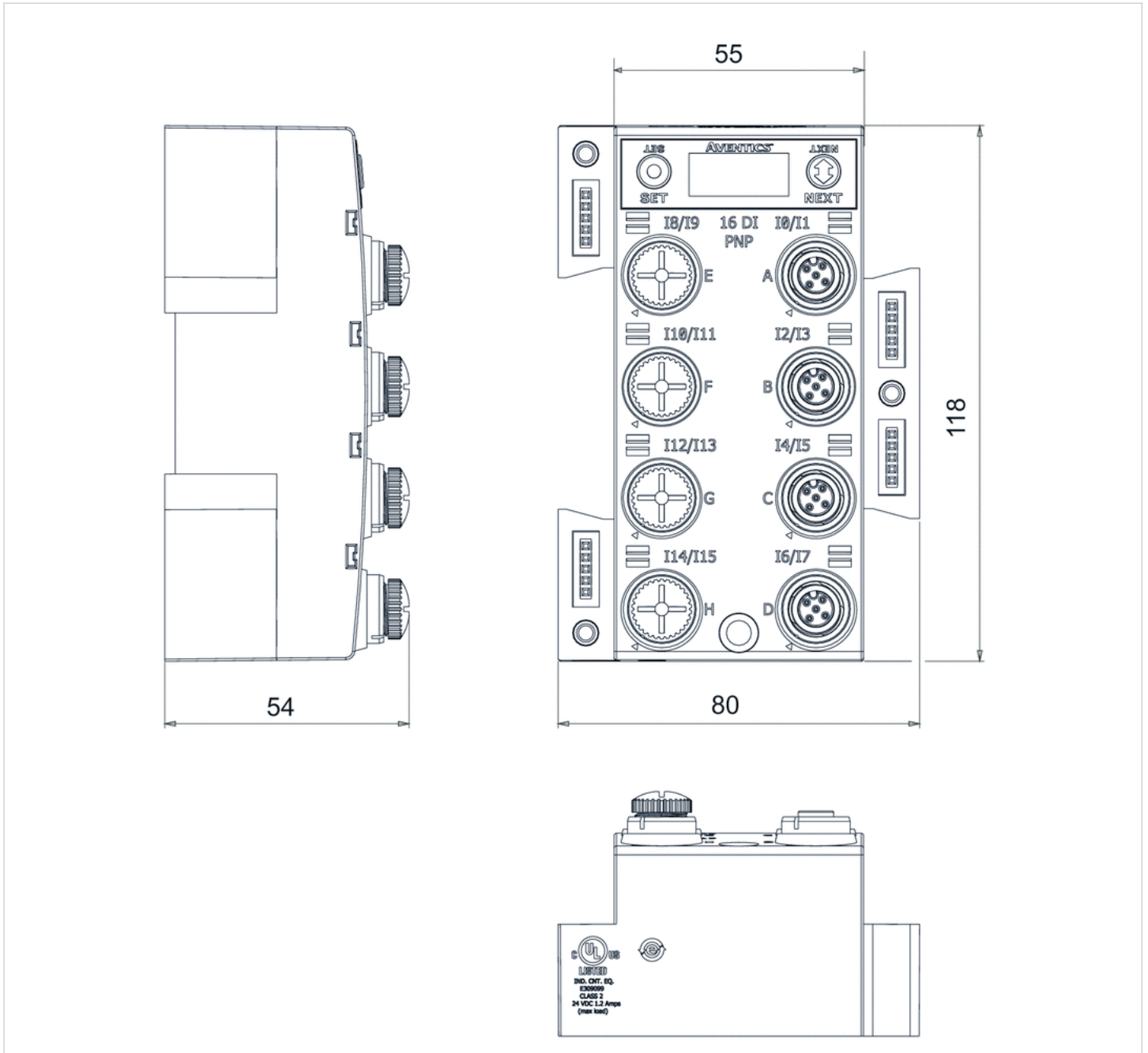
Part No.	I/O module version	I/O connection	Power consumption electronics	Weight
240-205	digital inputs PNP	M12x1, 4-pin	0.05 A	0.274 kg
240-206	digital inputs PNP	M12x1, 4-pin	0.05 A	0.274 kg
240-207	Digital outputs	M12x1, 4-pin	0.11 A	0.274 kg
240-208	digital outputs PNP	M12x1, 4-pin	0.09 A	0.274 kg
240-209	digital inputs NPN	M12x1, 4-pin	0.05 A	0.274 kg
240-210	digital inputs NPN	M12x1, 4-pin	0.05 A	0.274 kg
240-211	digital inputs/outputs PNP	M12x1, 4-pin	0.1 A	0.274 kg
240-300	Digital outputs	M12x1, 4-pin	0.09 A	0.264 kg

## Technical information

Material	
Housing	polyethyleneterephthalate



# Dimensions



# I/O modules, Series G3

- Socket, M12x1

- A-design



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power supply for actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Diagnosis	Short circuit
I/O connection	M12x1, 4-pin
Weight	See table below

## Technical data

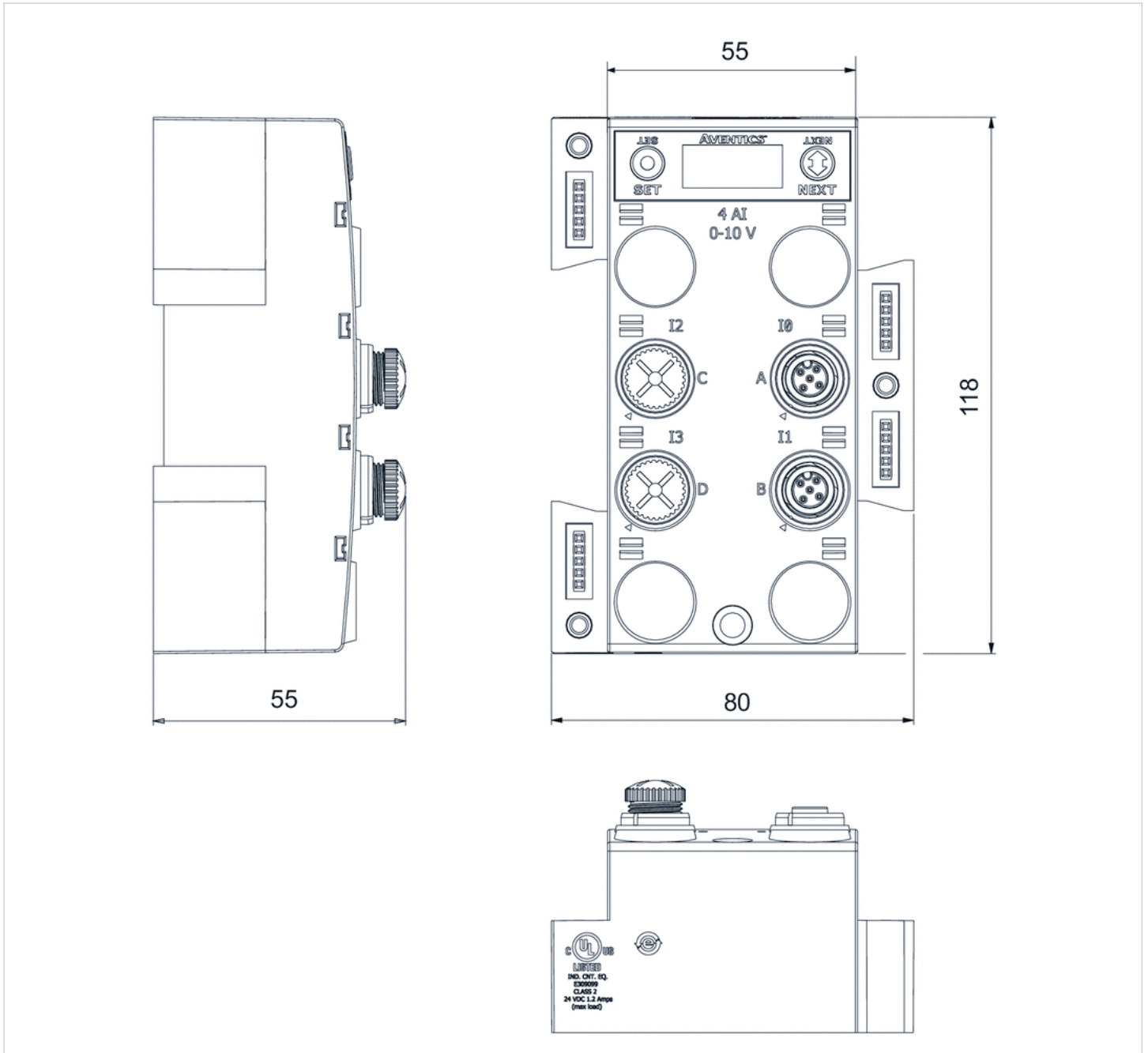
Part No.	Type	Number of inputs	Number of outputs	Analog inputs	Analog outputs	I/O module version
240-212	4AI4M12-E	4	-	0 ... 10 V	-	Analog inputs
240-213	2AIAO8M12	2	2	0 ... 10 V	0 ... 10 V	analog inputs/outputs
240-214	4AI4M12-E	4	-	4 ... 20 mA	-	Analog inputs
240-215	2AIAO4M12	2	2	4 ... 20 mA	4 ... 20 mA	analog inputs/outputs
240-307	2AIAO8M12	2	2	0 ... 10 V	0 ... 10 V	analog inputs/outputs
240-363	-	4	4	-	-	analog inputs/outputs

Part No.	I/O connection	Power consumption electronics	Total current of the power supply for the external sensors	Weight
240-212	M12x1, 4-pin	0.08 A	1,2 A	0.244 kg
240-213	M12x1, 4-pin	0.09 A	1,2 A	0.244 kg
240-214	M12x1, 4-pin	0.08 A	1,2 A	0.244 kg
240-215	M12x1, 4-pin	0.09 A	1,2 A	0.244 kg
240-307	M12x1, 4-pin	0.08 A	4 A	0.264 kg
240-363	M12x1, 4-pin	0.08 A	8 A	0.247 kg

## Technical information

Material	
Housing	polyethyleneterephthalate

# Dimensions



# Series G3

- A-design
- I/O module version



Version	I/O module version
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.07 A
Power supply for actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Total current of sensors max.	1,2 A
Diagnosis	Overvoltage Undervoltage

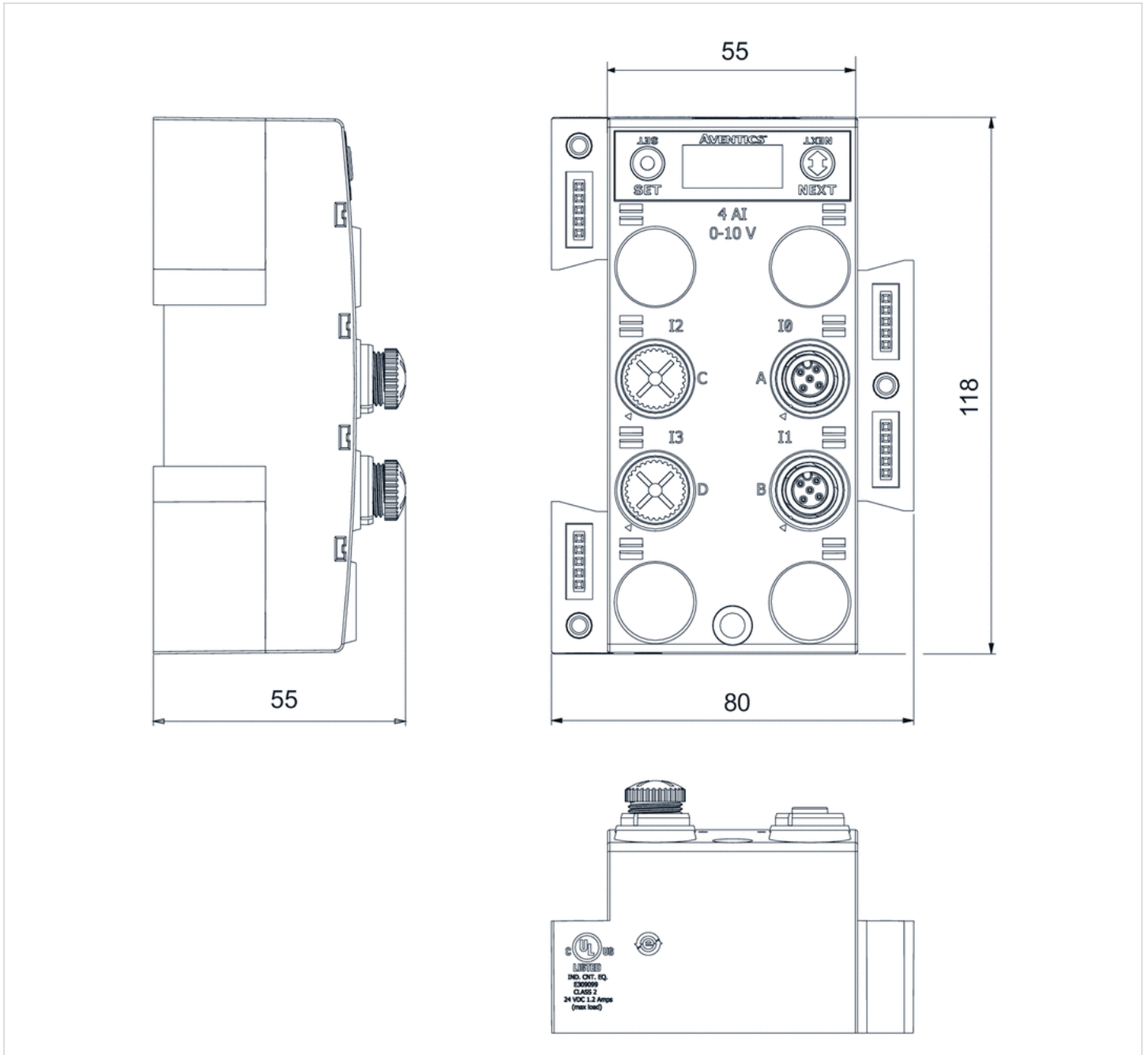
## Technical data

Part No.	Type	I/O module version
240-311	Socket, M12x1	Analog inputs

## Technical information

Material	
Housing	polyethyleneterephthalate

# Dimensions



# I/O modules, Series G3

- digital inputs PNP, Socket (female), M8x1

- I/O module version



Version	I/O module version
Ambient temperature min./max.	-10 ... 50 °C
Power consumption electronics	55 A
Max. current per channel	0.15 A
Power supply for actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Total current of sensors max.	1,2 A
Diagnosis	Short circuit
Weight	0.274 kg

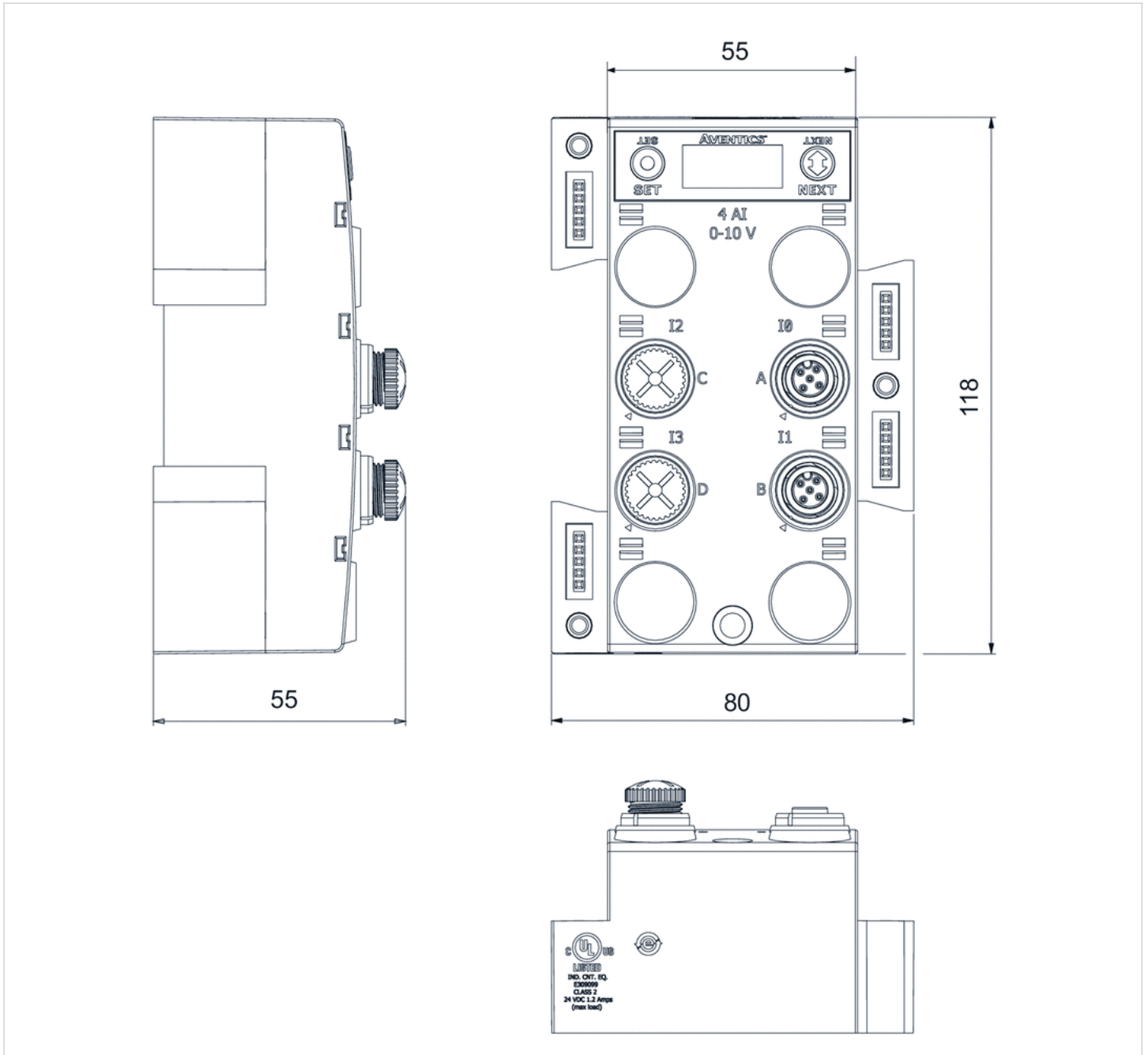
## Technical data

Part No.	Number of inputs
240-326	8

## Technical information

Material	
Housing	Polybutyleneterephthalate

# Dimensions



# Bus coupler, Series 580

- CANopen, Central fieldbus connection without I/O function, Power supply plug M12x1, 4-pin
- Bus coupler
- Fieldbus protocol CANopen



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.1 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	32
Number of valve positions max.	32
Diagnosis	Short circuit Overvoltage
Weight	0.32 kg

## Technical data

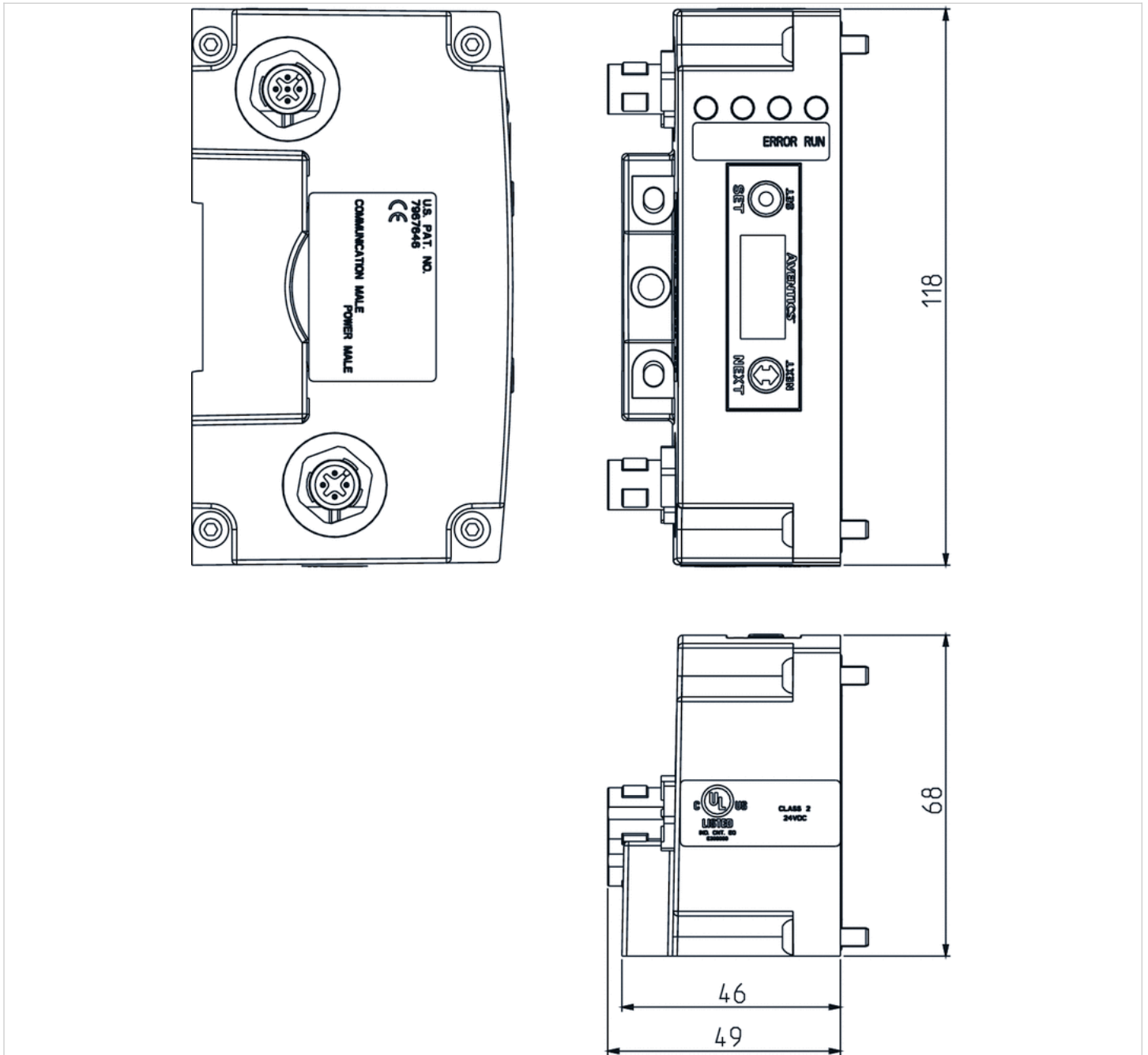
Part No.	Fieldbus protocol	power supply
P580AECO1010A00	CANopen	Plug (male), M12, 4-pin, A-coded

## Technical information

Material	
Housing	Die-cast aluminum



# Dimensions



# Series 580

- Central fieldbus connection without I/O function
- Fieldbus protocol DeviceNet



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.1 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	32
Number of valve positions max.	32
Diagnosis	Short circuit Overvoltage
Weight	0.32 kg

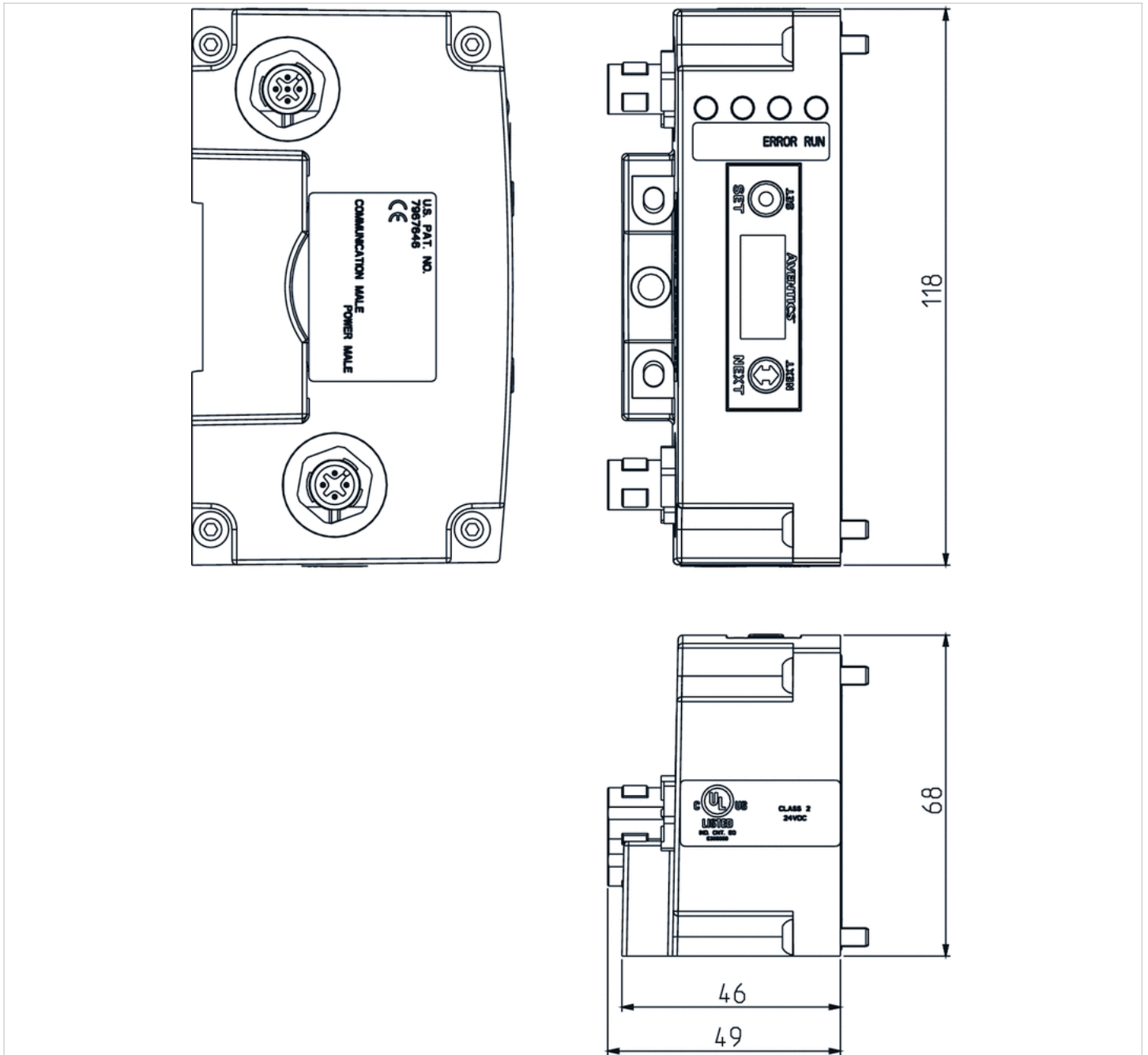
## Technical data

Part No.	Fieldbus protocol	power supply
P580AEDN1010A00	DeviceNet	Plug (male), M12, 4-pin, A-coded

## Technical information

Material	
Housing	Die-cast aluminum

# Dimensions



# Series 580

- Central fieldbus connection without I/O function
- Fieldbus protocol EtherCAT



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.11 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	128
Number of valve positions max.	110
Diagnosis	Short circuit Overvoltage
Weight	0.32 kg

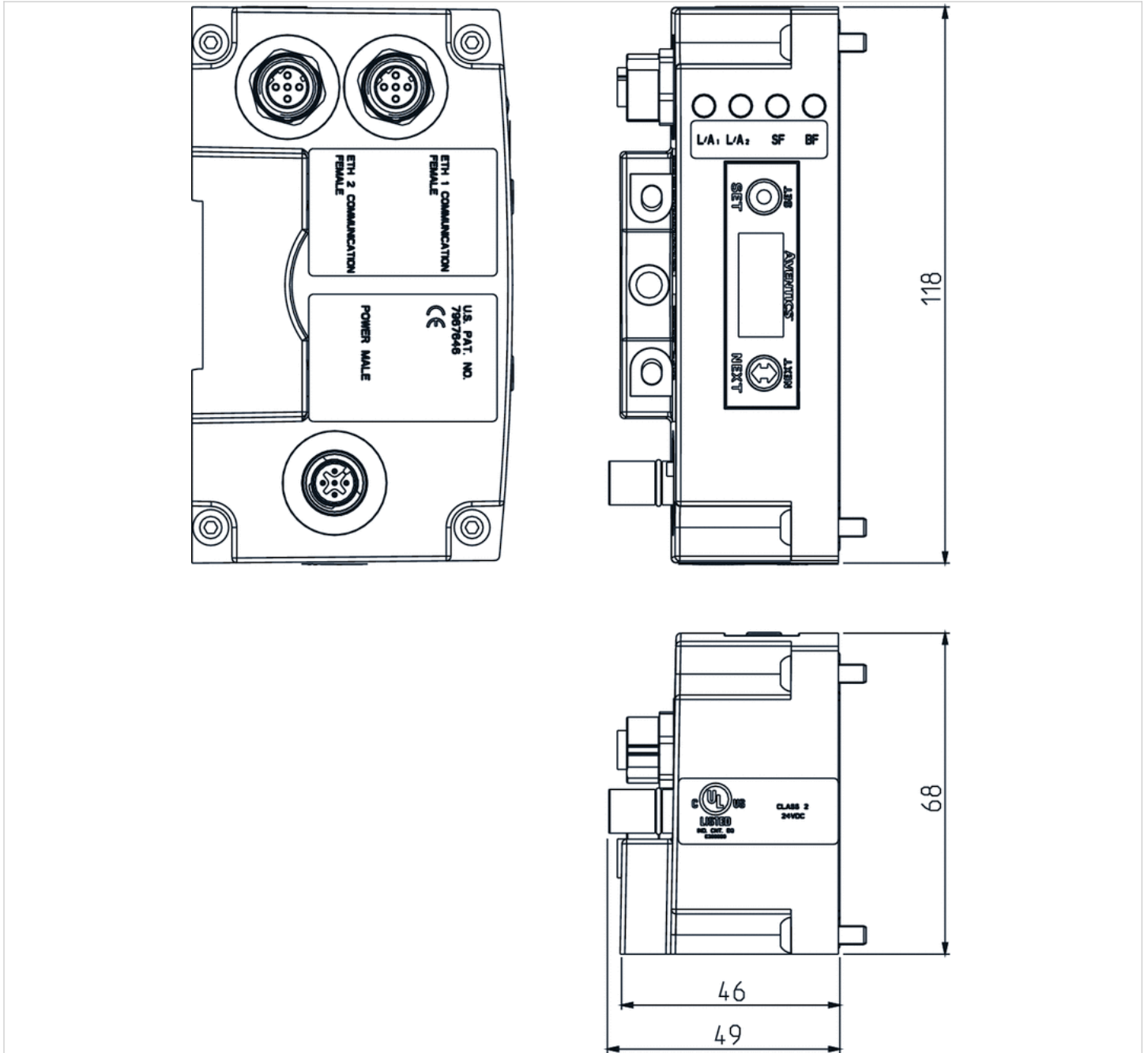
## Technical data

Part No.	Fieldbus protocol	power supply
P580AEEC1010A00	EtherCAT	Plug (male), M12, 5-pin, A-coded

## Technical information

Material	
Housing	Die-cast aluminum

# Dimensions



# Series 580

- Central fieldbus connection without I/O function
- Fieldbus protocol Ethernet



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.9 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	128
Number of valve positions max.	110
Diagnosis	Short circuit Overvoltage
Weight	0.337 kg

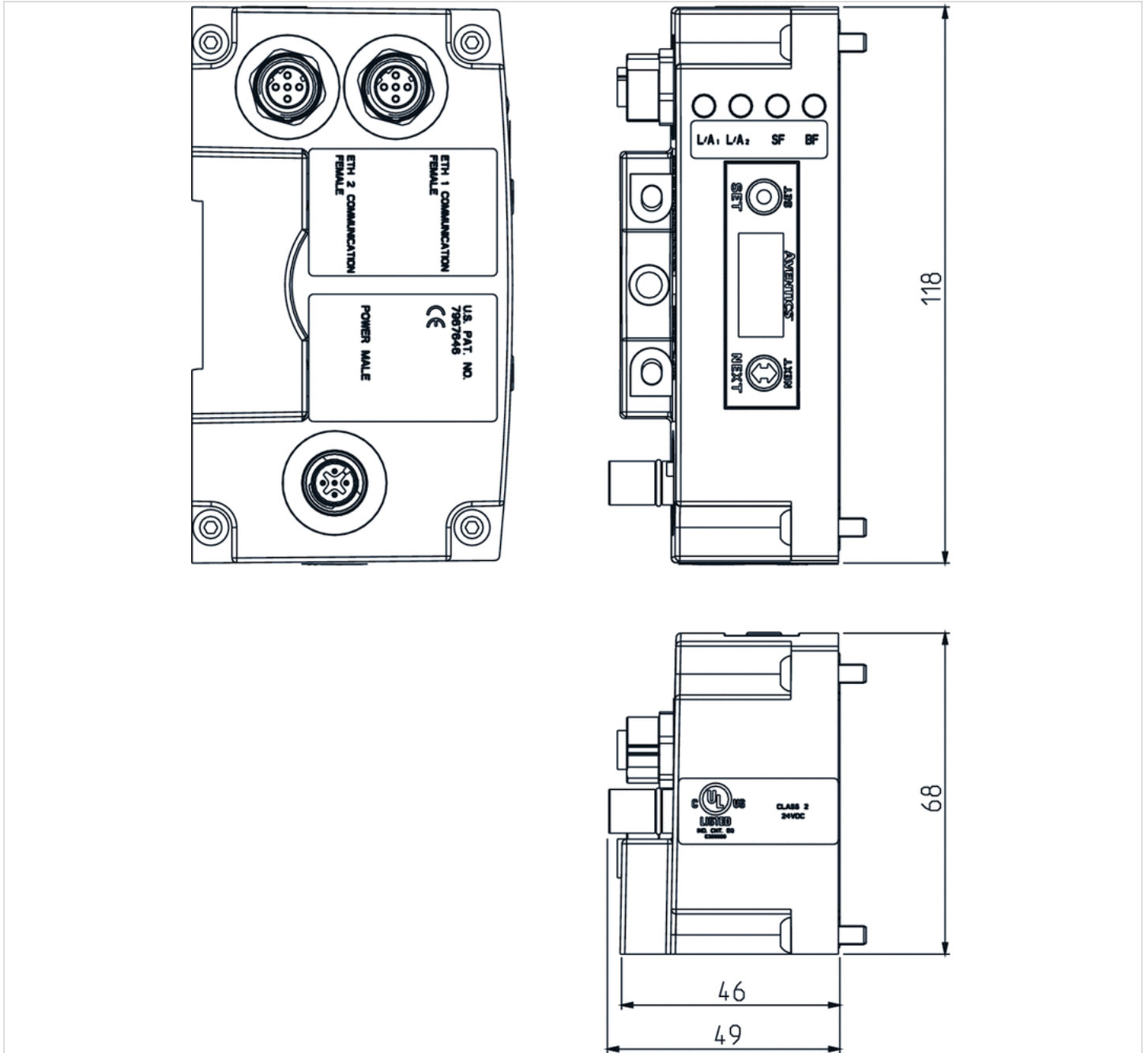
## Technical data

Part No.	Fieldbus protocol	power supply
P580AEED1010A00	Ethernet	Plug (male), M12, 4-pin, A-coded

## Technical information

Material	
Housing	Die-cast aluminum

# Dimensions



# Series 580

- Central fieldbus connection without I/O function
- Fieldbus protocol POWERLINK



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.11 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	128
Number of valve positions max.	110
Diagnosis	Short circuit Overvoltage
Weight	0.328 kg

## Technical data

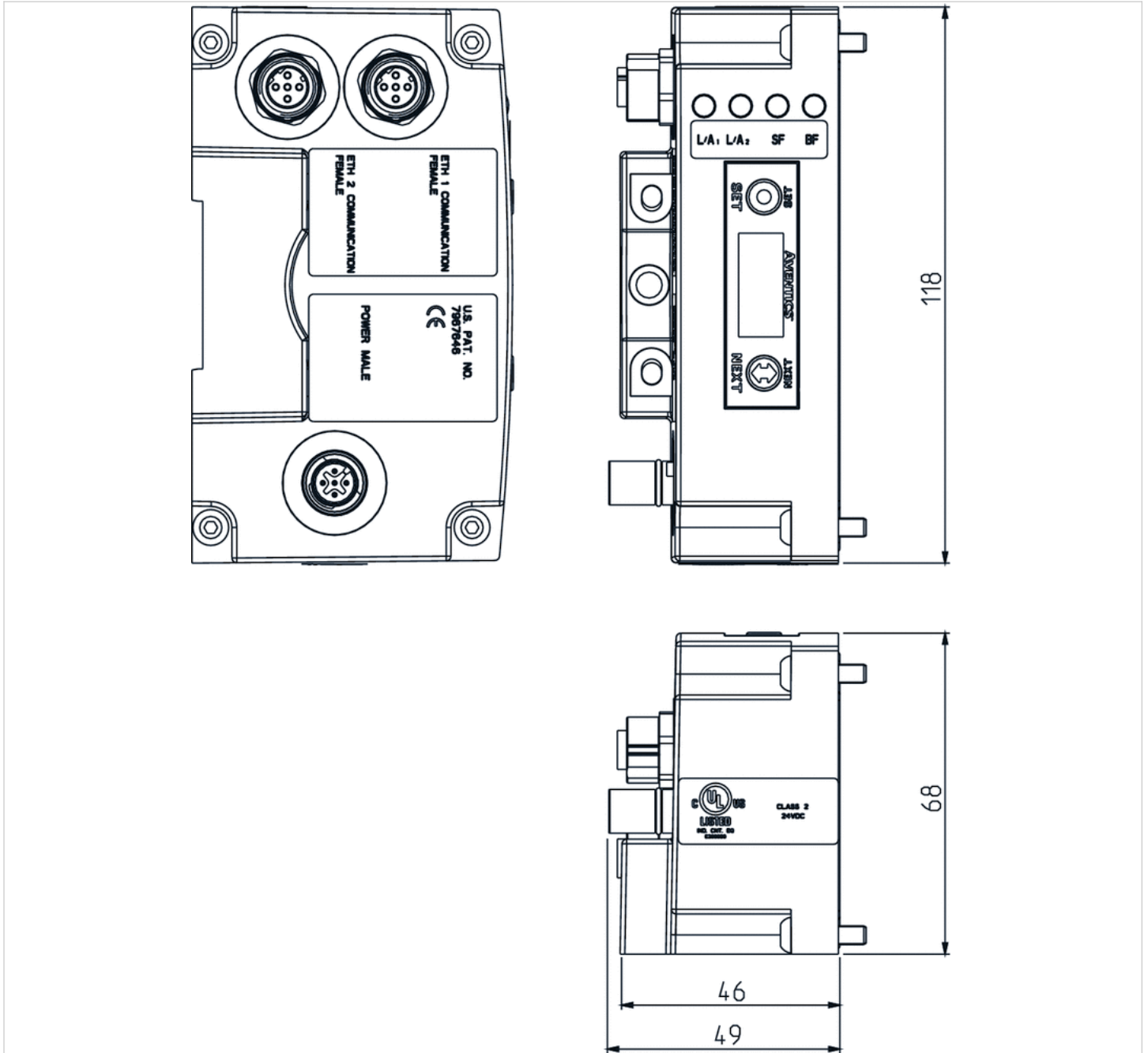
Part No.	Fieldbus protocol	power supply
P580AEPL1010A00	POWERLINK	Plug (male), M12, 4-pin, A-coded

## Technical information

Material	
Housing	Die-cast aluminum



# Dimensions



# Series 580

- Central fieldbus connection without I/O function, Power supply plug M12x1, 5-pin, class B
- Fieldbus protocol PROFIBUS DP



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.08 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	128
Number of valve positions max.	110
Diagnosis	Short circuit Overvoltage
Weight	0.326 kg

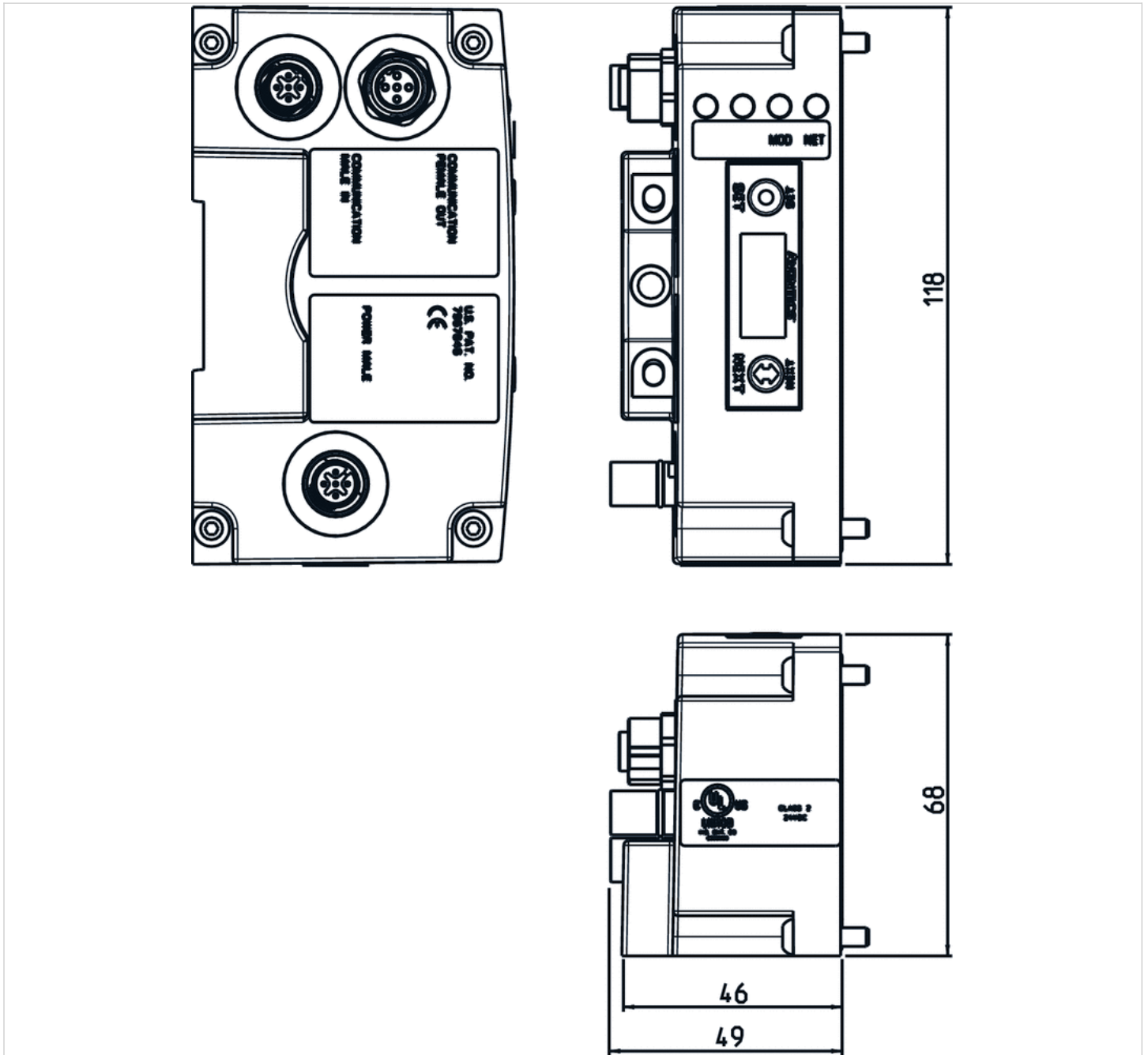
## Technical data

Part No.	Fieldbus protocol	power supply
P580AEPT1010A00	PROFIBUS DP	Plug (male), M12, 5-pin, A-coded

## Technical information

Material	
Housing	Die-cast aluminum

# Dimensions



# Series 580

- Central fieldbus connection without I/O function
- Fieldbus protocol Profinet



Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.11 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	128
Number of valve positions max.	110
Diagnosis	Short circuit Overvoltage
Weight	0.335 kg

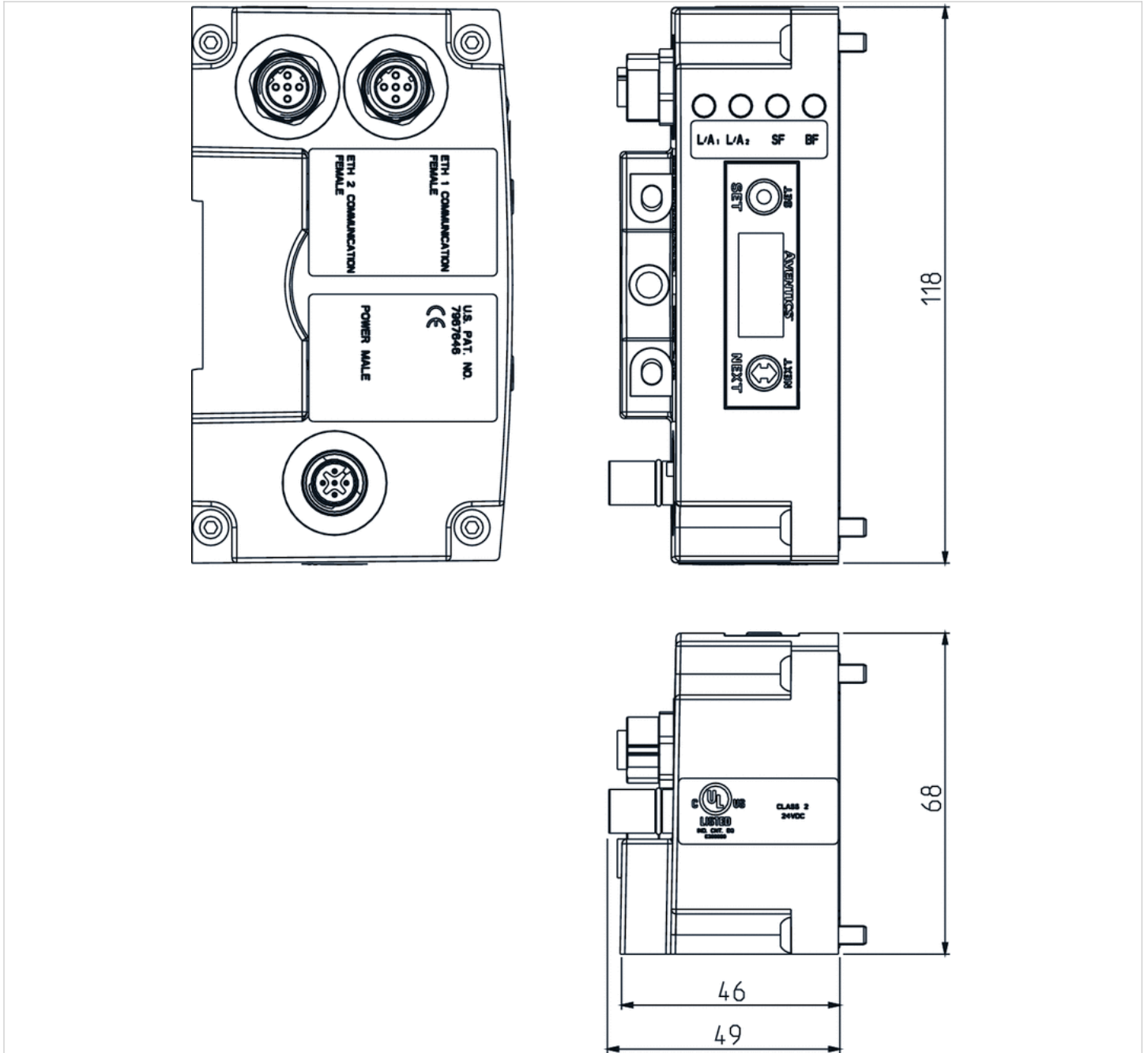
## Technical data

Part No.	Fieldbus protocol	power supply
P580AEPN1010A00	Profinet	Plug (male), M12, 5-pin, A-coded

## Technical information

Material	
Housing	Die-cast aluminum

# Dimensions



## Bus coupler, Series 580

- Central fieldbus connection without I/O function, Power supply plug M12x1, 5-pin
- Bus coupler
- Fieldbus protocol Profinet



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.3 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of valve positions max.	43
Diagnosis	Short circuit Overvoltage
Weight	0.32 kg

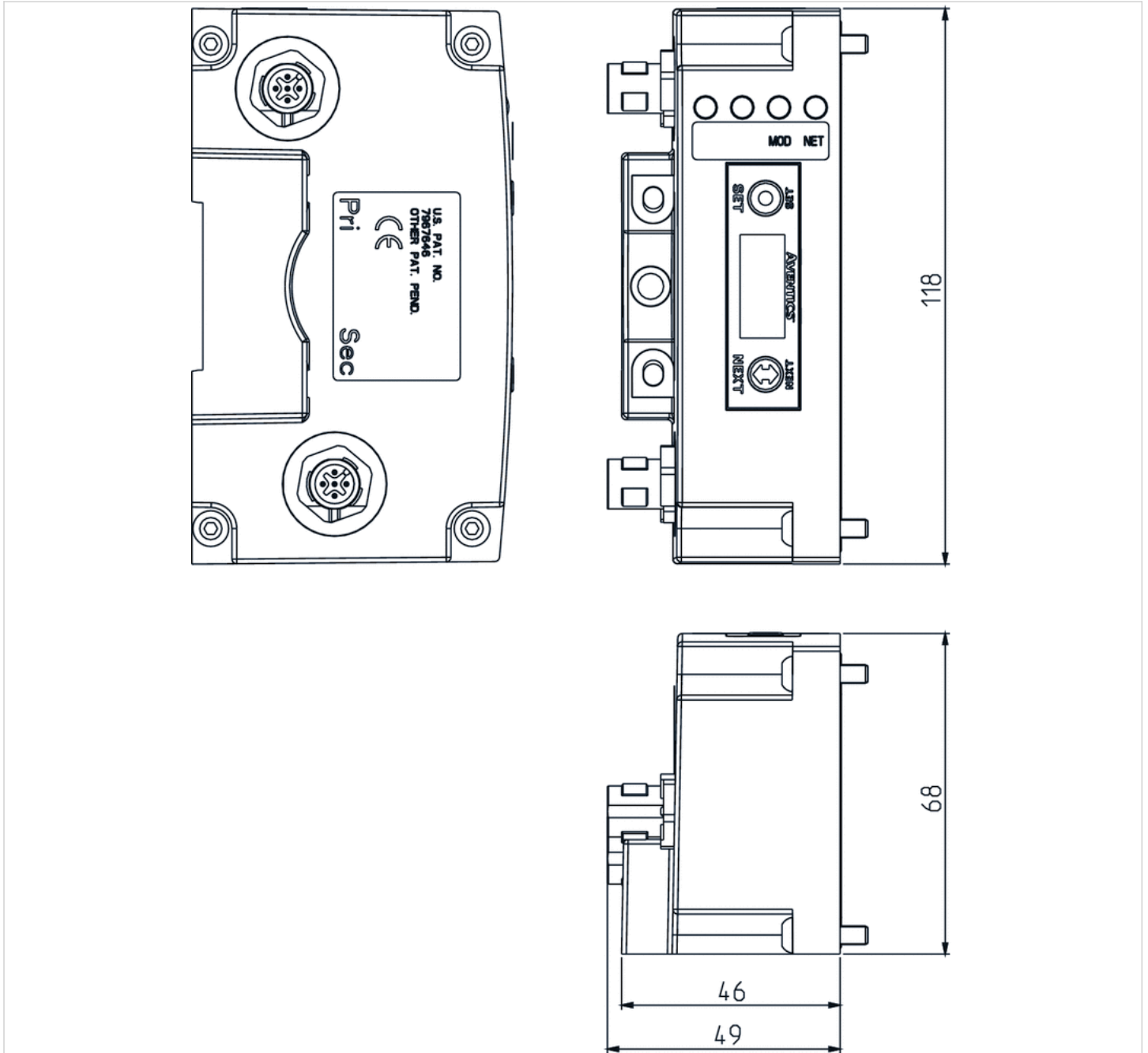
### Technical data

Part No.	Fieldbus protocol	power supply
P580AECH2010A00	Profinet	Plug, M12x1, 5-pin, A-coded

### Technical information

Material	
Housing	Die-cast aluminum

# Dimensions



## Series 580

- Central fieldbus connection without I/O function, Power supply plug M12x1, 4-pin
- Bus coupler
- Fieldbus protocol IO-Link



Version	Bus coupler
Ambient temperature min./max.	-10 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-10% / +10%
Power consumption electronics	0.04 A
Operating voltage, actuators	24 V DC
Total current for actuators	4 A
Protection class	IP65
Number of solenoid coils max.	32
Number of valve positions max.	32
Diagnosis	Short circuit Overvoltage
I/O connection	M12x1, 5-pin, A-coded
Weight	See table below

### Technical data

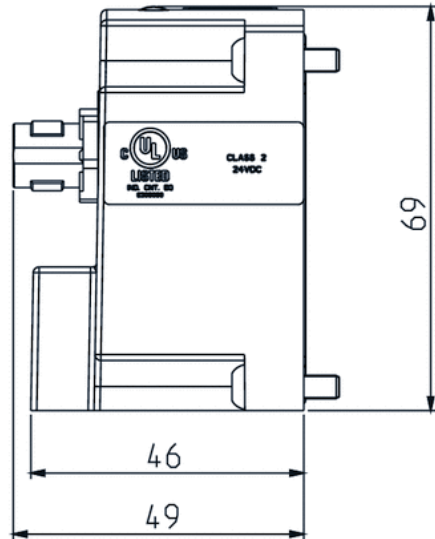
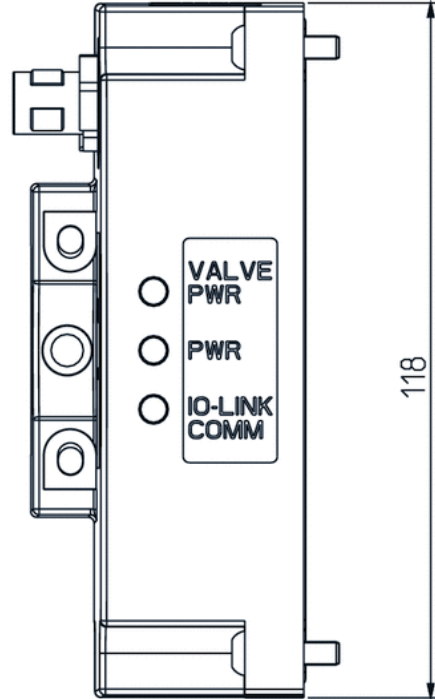
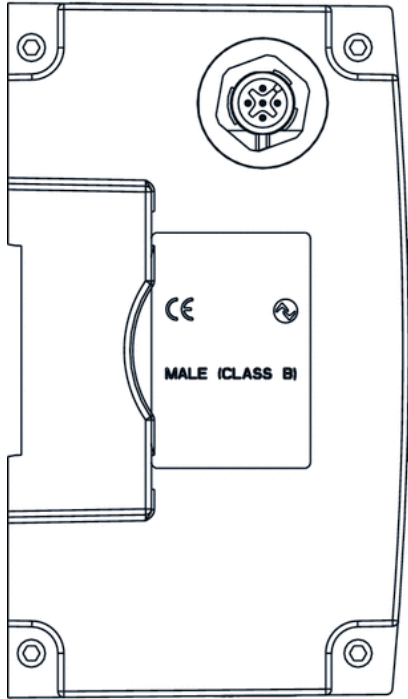
Part No.	Fieldbus protocol	I/O connection	Weight
P580AELM1010A00	IO-Link	M12x1, 5-pin, A-coded	0.298 kg
P580AELM2010A00	IO-Link	M12x1, 5-pin, A-coded	0.303 kg

### Technical information

Material	
Housing	Die-cast aluminum



# Dimensions



# Blanking plate



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Number of valve positions max.	1
Protection class	IP65
Weight	See table below

## Technical data

Part No.	Scope of delivery	Weight
R502AY429409001	Sandwich plate, sealing kit, mounting screws	145 kg
R502AY429409004	Sandwich plate, sealing kit, mounting screws	0.176 kg

Delivery includes sealing kit and 1x mounting screw

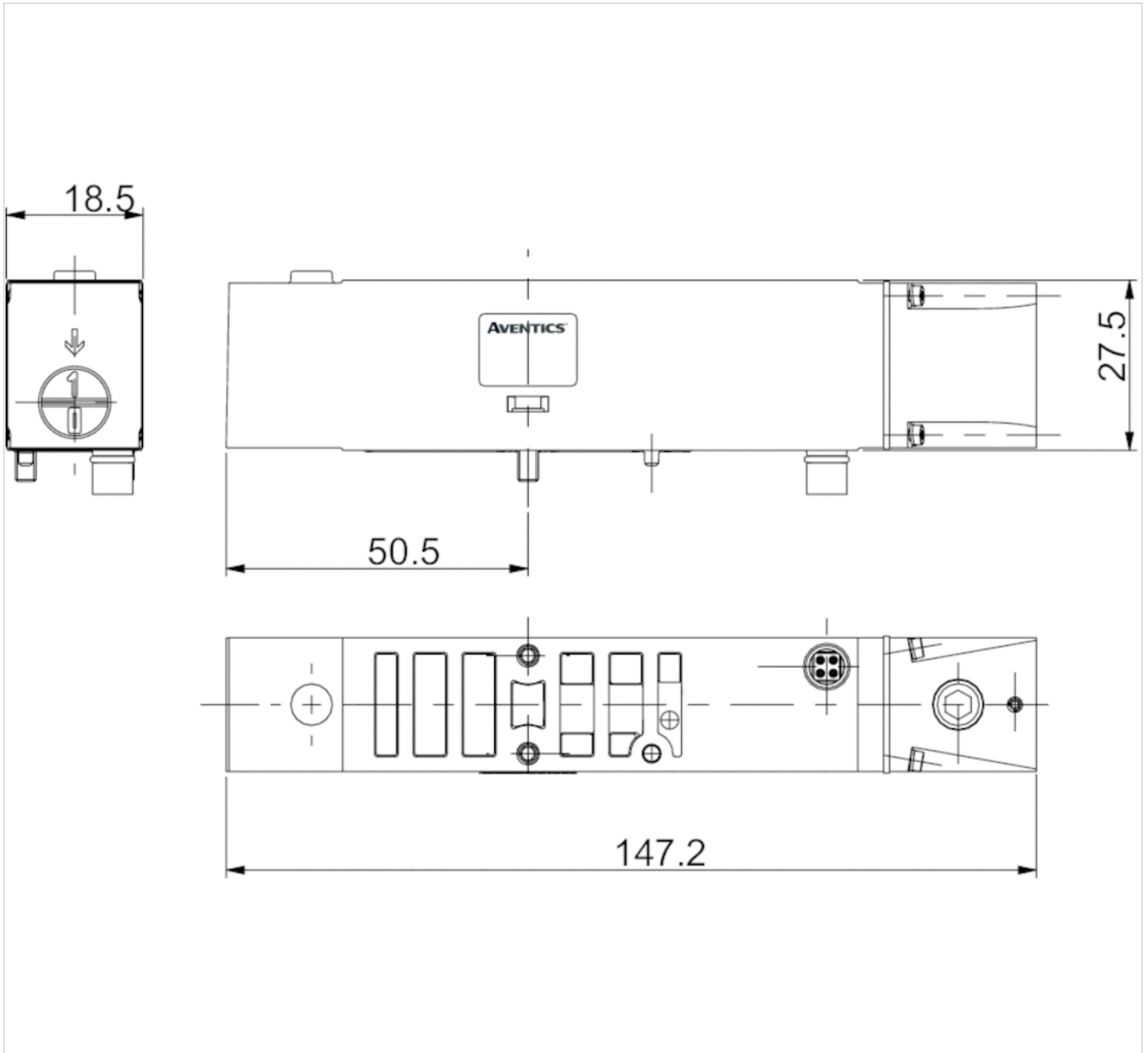
## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	Stainless steel

# Dimensions



# Stop plate to exchange valve, series 502



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Number of valve positions max.	1
Protection class	IP65
Weight	0.145 kg

## Technical data

Part No.	Scope of delivery
R502AY429409002	Sandwich plate, sealing kit, mounting screws

Delivery includes sealing kit and 1x mounting screw

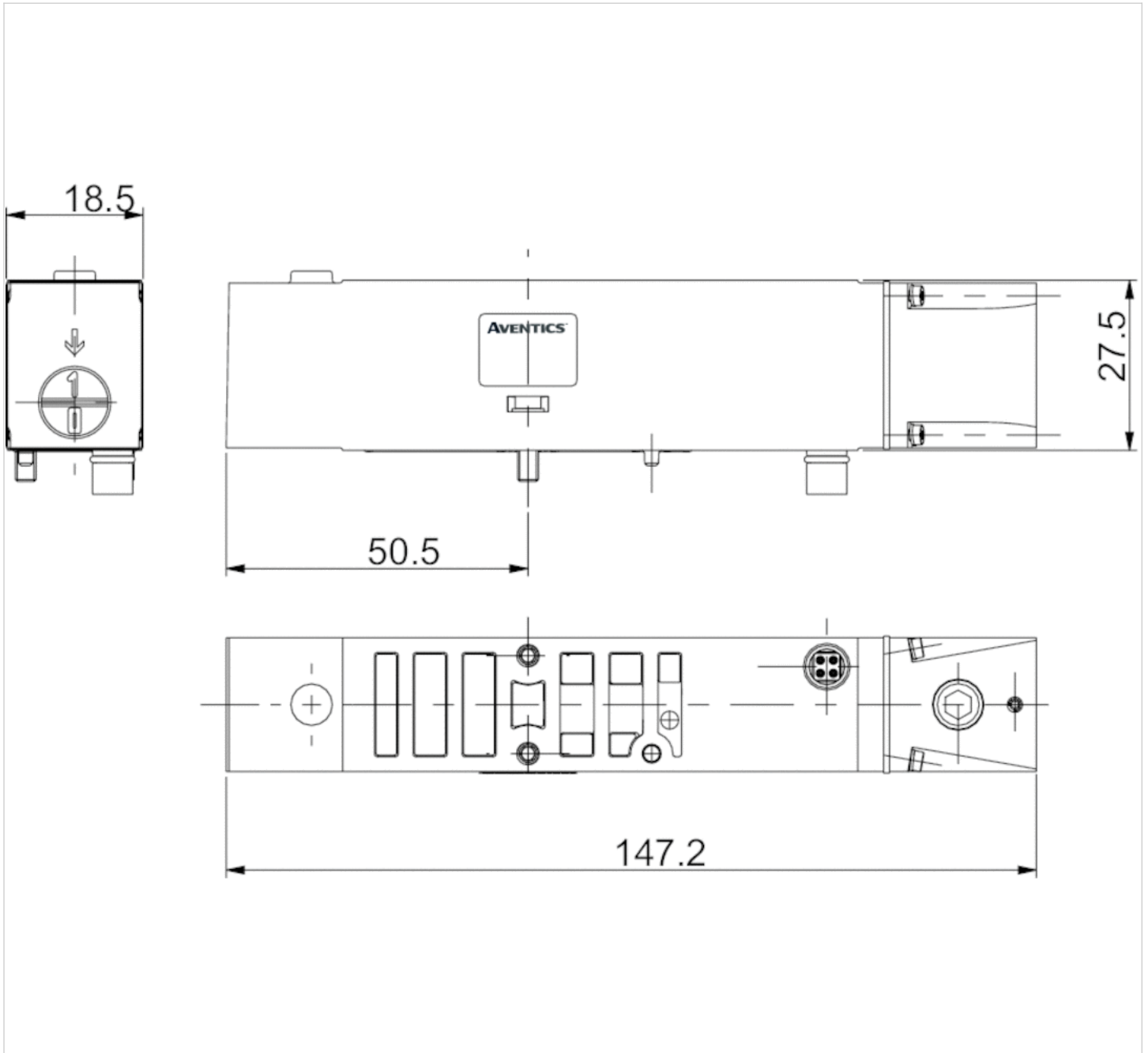
## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	Stainless steel

# Dimensions



# Blanking plate, series 502



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Number of valve positions max.	1
Protection class	IP65
Weight	0.058 kg

## Technical data

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

Delivery includes sealing kit and 1x mounting screw

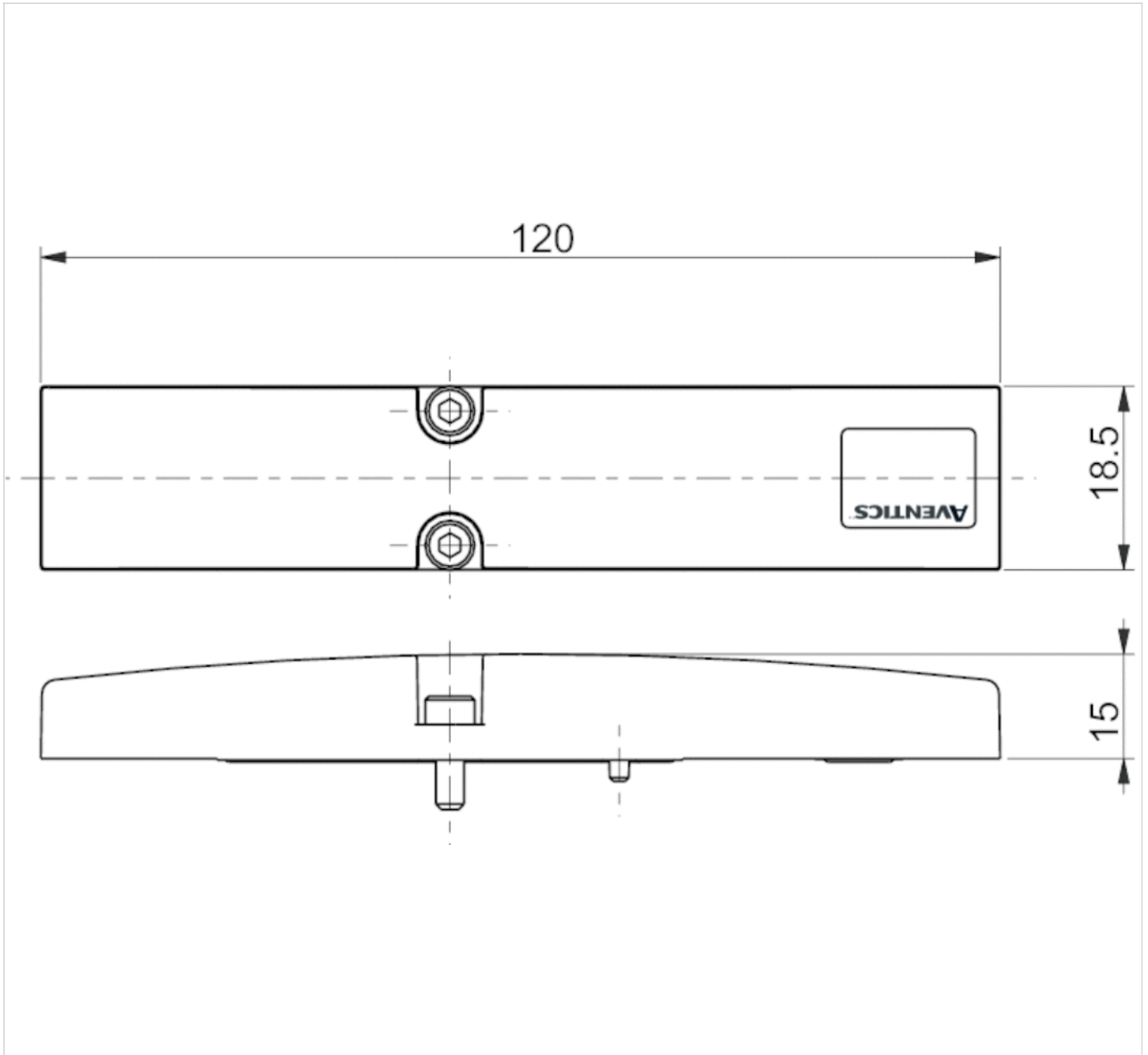
## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	galvanized steel

# Dimensions



# Throttle plate ISO 15407-2, series 502



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Number of valve positions max.	1
Protection class	IP65
Weight	0.139 kg

## Technical data

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

Delivery includes sealing kit and 1x mounting screw

## Technical information

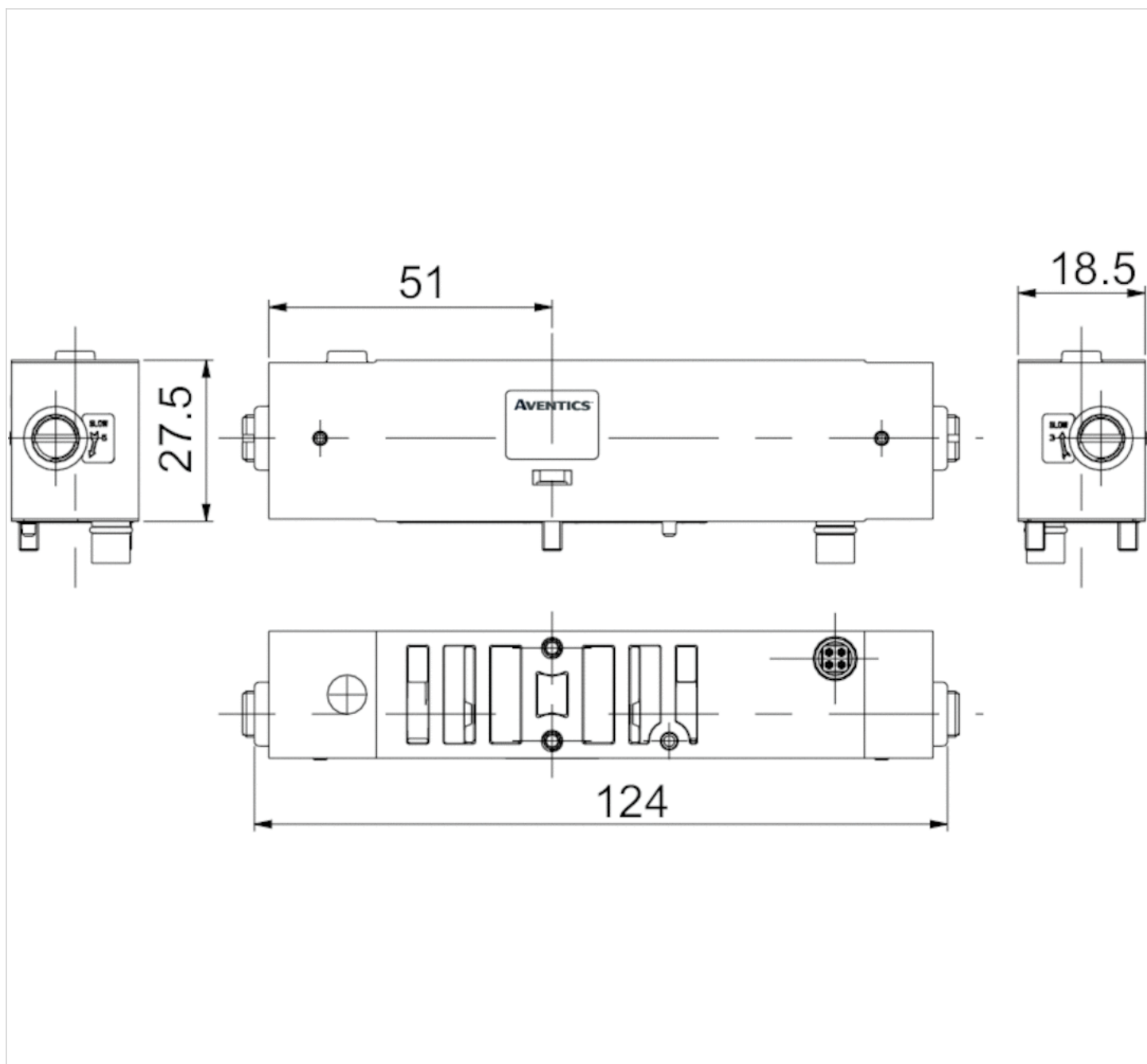
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	Stainless steel



## Dimensions



# Throttle plate, series 502



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Number of valve positions max.	1
Protection class	IP65
Weight	0.139 kg

## Technical data

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

Delivery includes sealing kit and 1x mounting screw

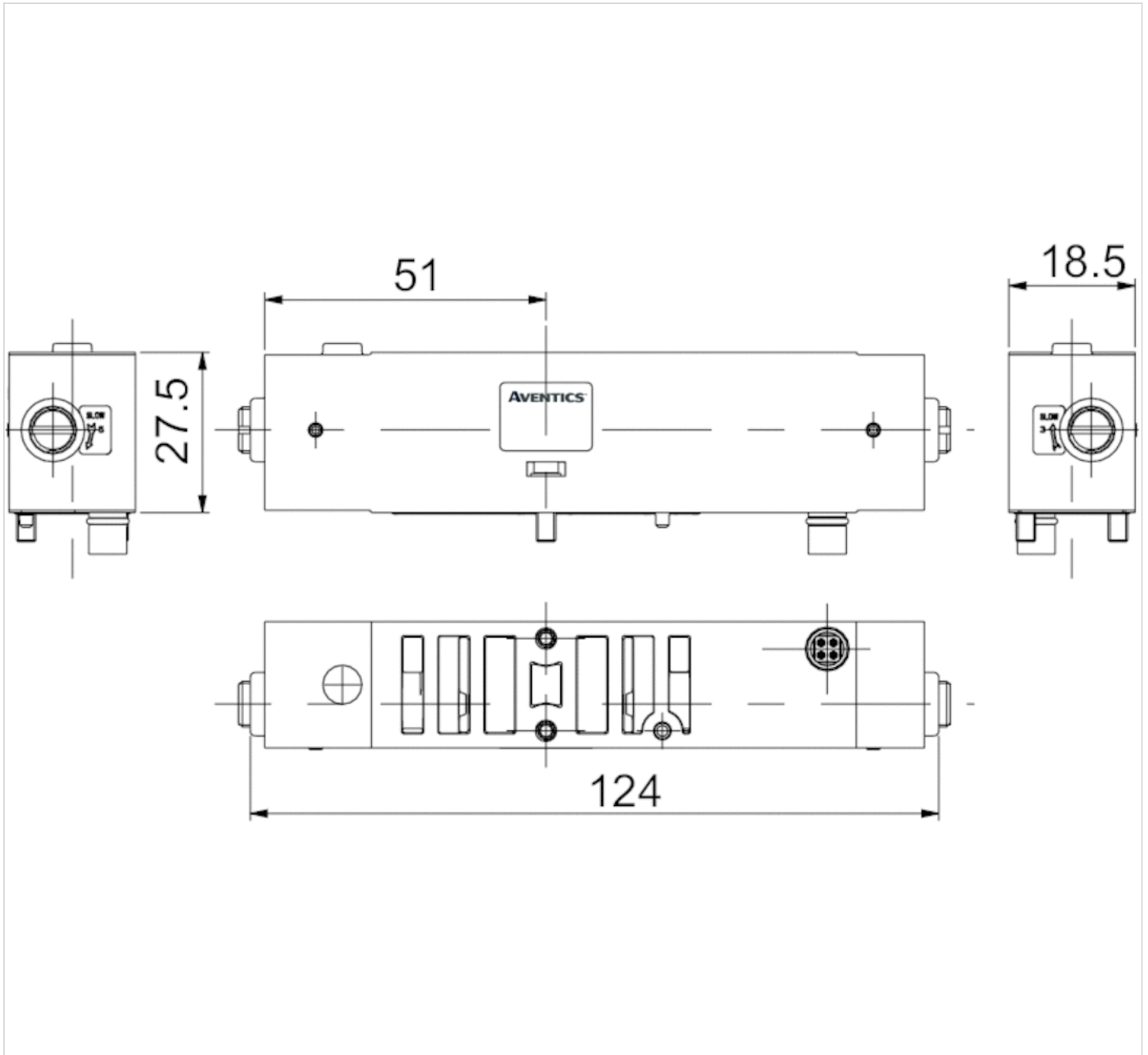
## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	Stainless steel

# Dimensions



# Pressure plate for additional pressure supply, series 502



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Number of valve positions max.	1
Protection class	IP65
Weight	0.118 kg

## Technical data

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

Part No.	Compressed air connection Input [1]
G502AW428685004	G 1/4

Delivery includes sealing kit and 1x mounting screw

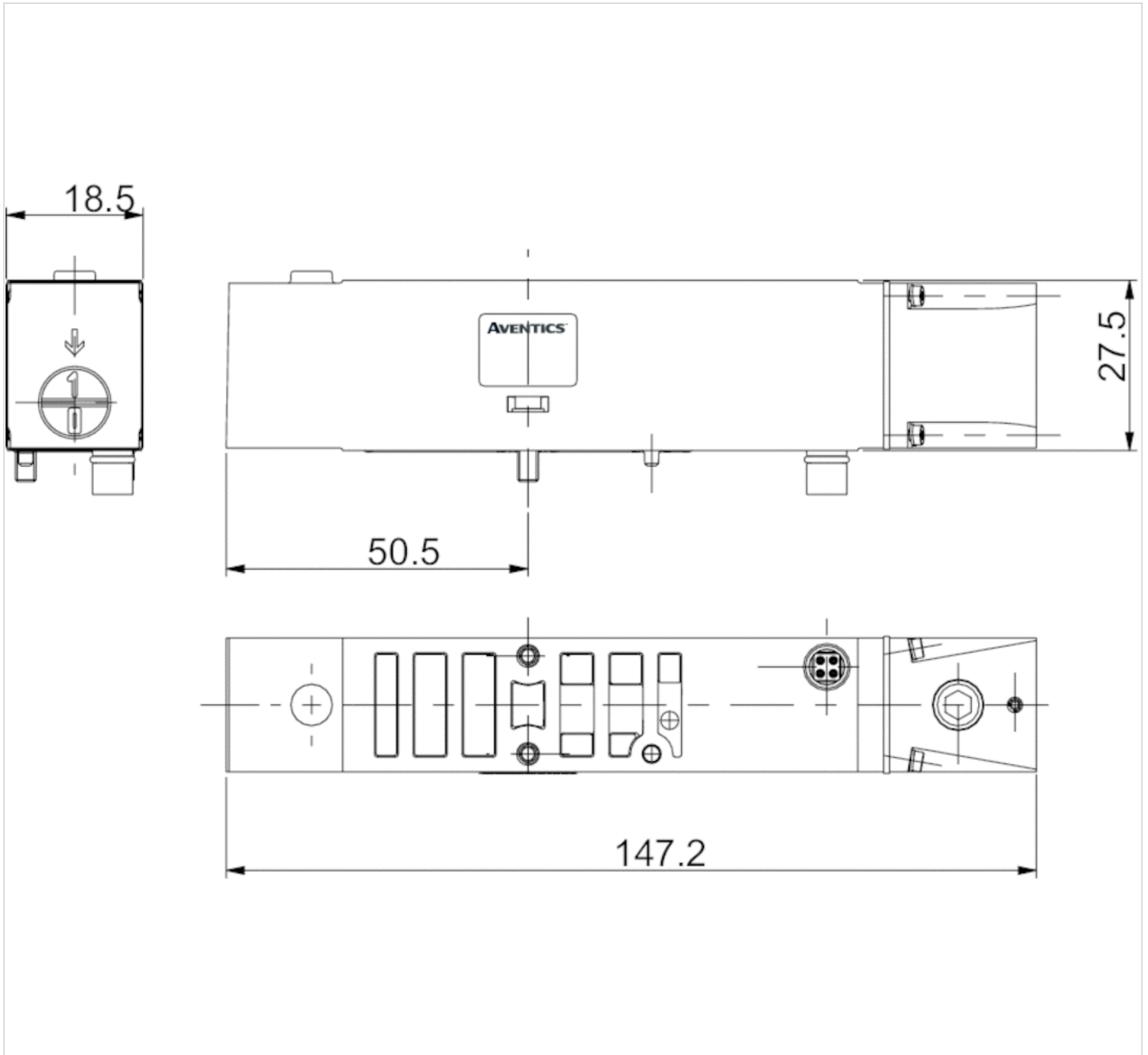
## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	Stainless steel

# Dimensions



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



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Number of valve positions max.	1
Protection class	IP65
Weight	0.118 kg

## Technical data

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

Part No.	Compressed air connection Input [1]
G502AW428685003	G 1/4

Delivery includes sealing kit and 1x mounting screw

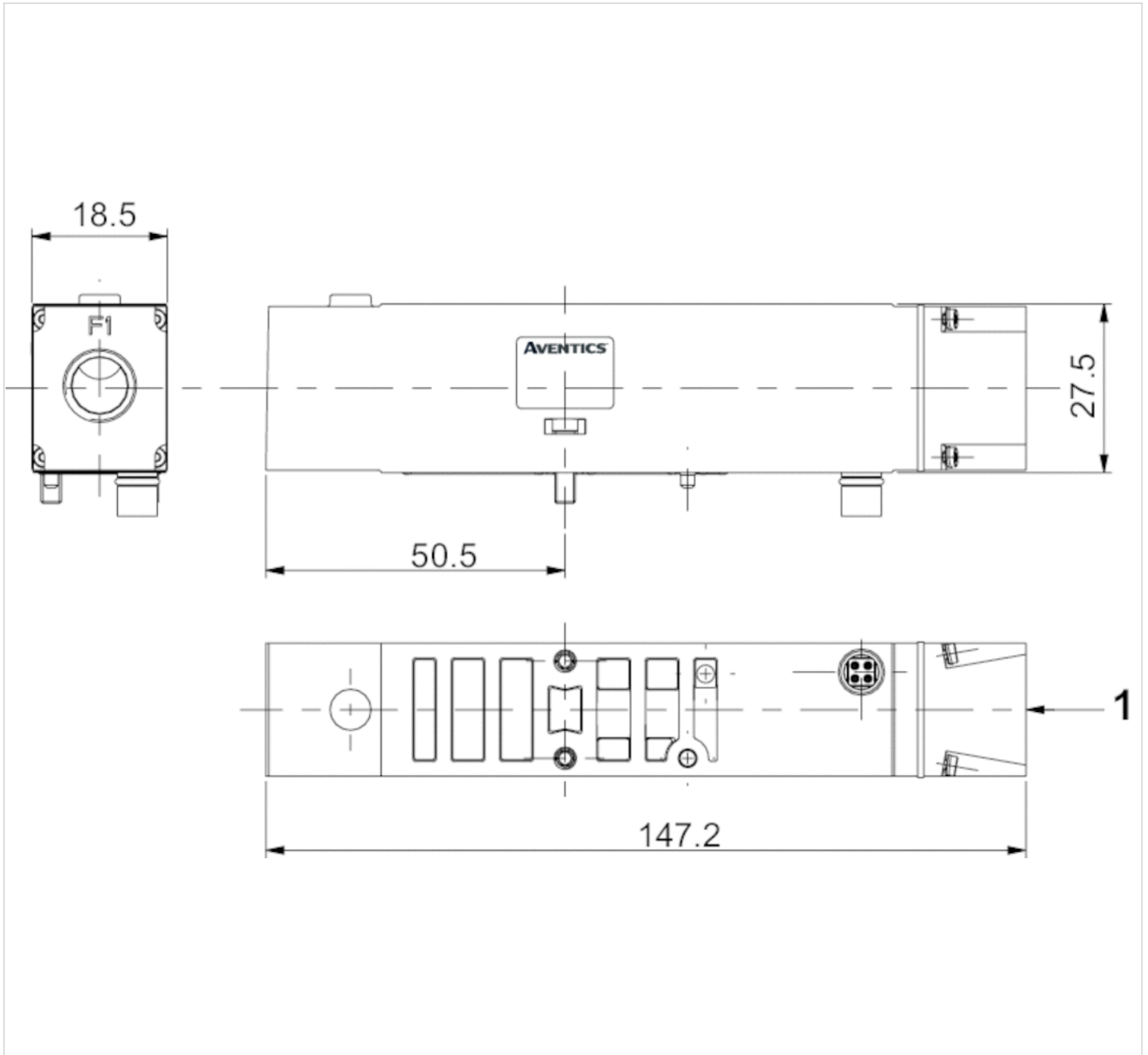
## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	Stainless steel

# Dimensions



# End plate, series 502



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Protection class	IP65
Weight	0.99 kg

## Technical data

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

Part No.	Compressed air connection Input [1]	Compressed air connection Exhaust [3 / 5]
G502AK431477013	G 3/8	G 3/8

Delivery includes sealing kit and 1x mounting screw

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

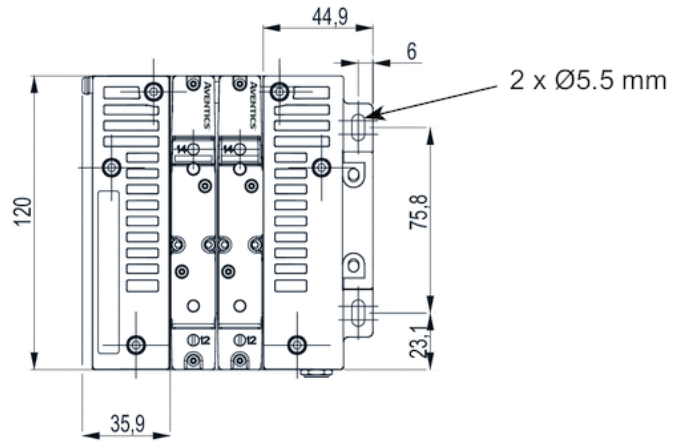
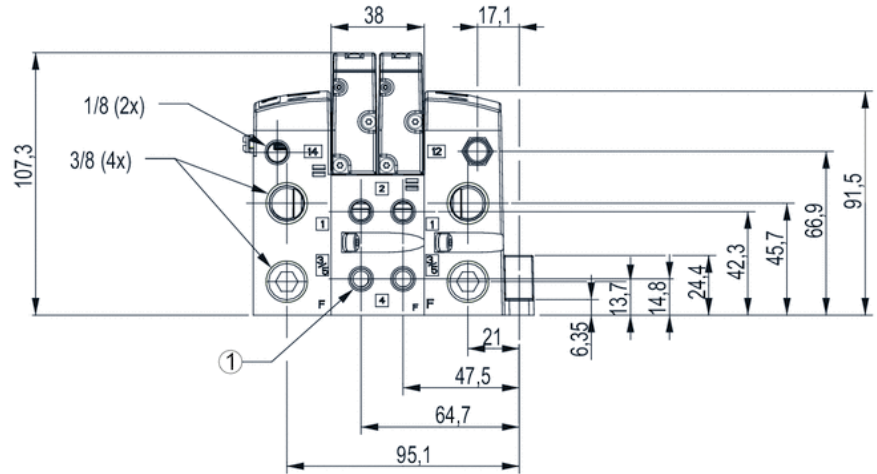
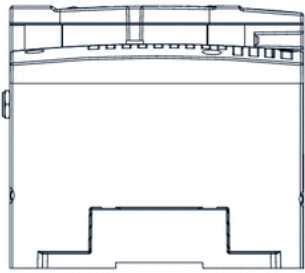
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	galvanized steel



# Dimensions



1 1/8 or push-in connector

# Exhaust plate for vertical stacking assembly, series 502



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Protection class	IP65
Weight	0.028 kg

## Technical data

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

Part No.	Compressed air connection
G502AX428685002	Exhaust [3 / 5] G 1/4

Delivery includes sealing kit and 1x mounting screw

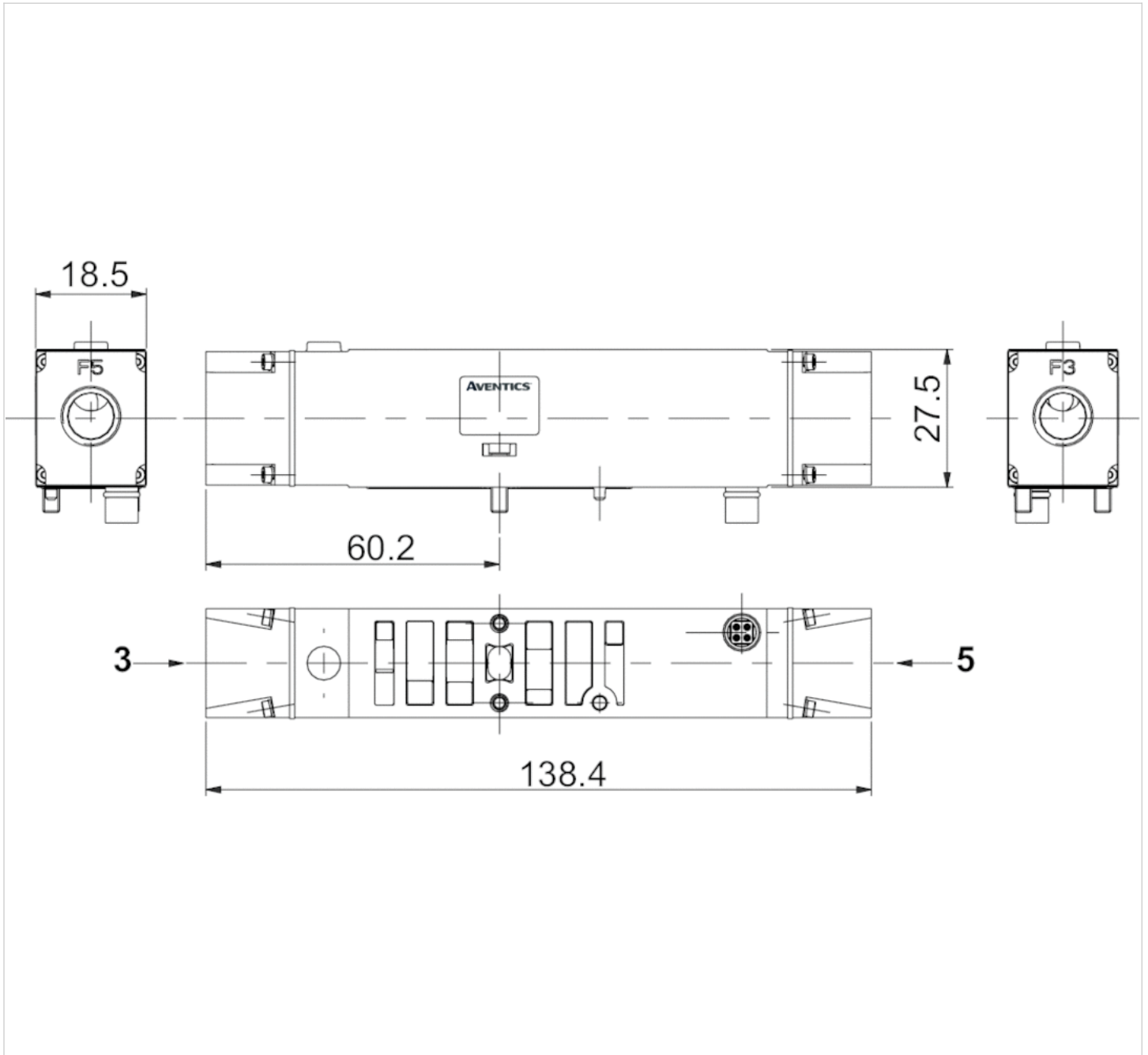
## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Nitrile rubber
Screws	Stainless steel

# Dimensions



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



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Number of valve positions max.	1
Protection class	IP65
Weight	0.133 kg

## Technical data

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

Part No.	Compressed air connection
G502AX428685001	Exhaust [3 / 5] G 1/4

Delivery includes sealing kit and 1x mounting screw

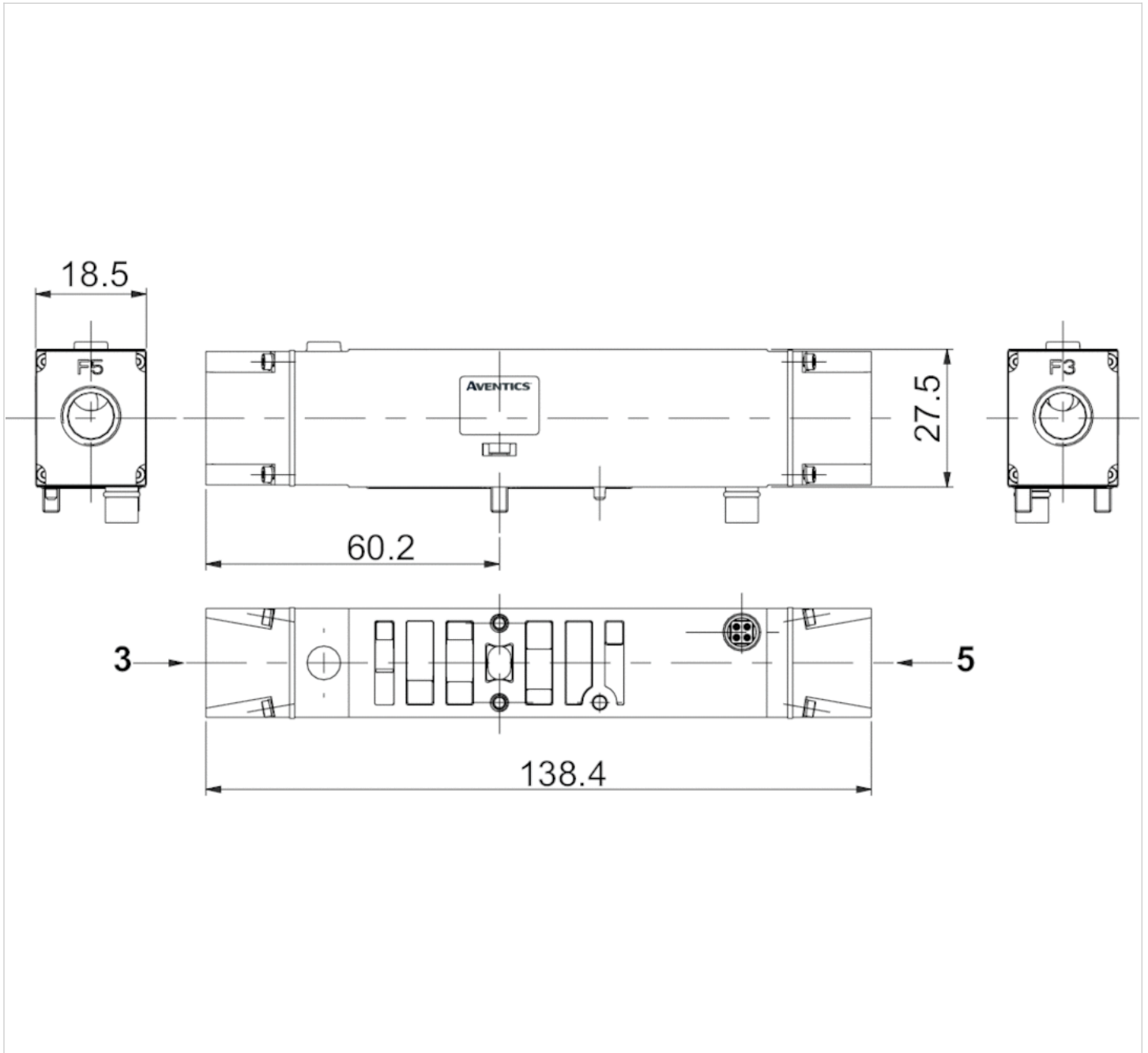
## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	Stainless steel

# Dimensions



# Base plate with optimized flow, series 502

- Compressed air connection output G 1/8	Working pressure min./max.	-0.95 ... 10 bar
	Ambient temperature min./max.	-10 ... 50 °C
	Medium temperature min./max.	-10 ... 50 °C
	Medium	Compressed air
	Number of valve positions max.	2
	Protection class	IP65
	Weight	0.342 kg

## Technical data

Part No.	Scope of delivery
G502AMS21MA001	Connection plate, sealing kit, mounting screws
G502AMM21MA001	Connection plate, sealing kit, mounting screws

Part No.	Compressed air connection Output [2 / 4]	Compressed air connection Pilot connection [12]
G502AMS21MA001	G 1/8	G 1/8
G502AMM21MA001	G 1/8	G 1/8

Part No.	Compressed air connection Pilot control exhaust [R]
G502AMS21MA001	G 1/8
G502AMM21MA001	G 1/8

Delivery includes sealing kit and 1x mounting screw

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	galvanized steel

# Base plate according to ISO 15407-2, series 502

- Compressed air connection output G 1/8

Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Number of valve positions max.	2
Protection class	IP65
Weight	0.342 kg

## Technical data

Part No.	Scope of delivery
G502AMS21MA002	Connection plate, sealing kit, mounting screws
G502AMM21MA002	Connection plate, sealing kit, mounting screws

Part No.	Compressed air connection Output [2 / 4]	Compressed air connection Pilot connection [12]
G502AMS21MA002	G 1/8	G 1/8
G502AMM21MA002	G 1/8	G 1/8

Part No.	Compressed air connection Pilot control exhaust [R]
G502AMS21MA002	G 1/8
G502AMM21MA002	G 1/8

Delivery includes sealing kit and 1x mounting screw

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	galvanized steel

# Pilot air supply plate for vertical stacking assembly, series 502



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Number of valve positions max.	1
Protection class	IP65
Weight	0.118 kg

## Technical data

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

Part No.	Compressed air connection Pilot connection [12]
G502AP428685006	G 1/4

Delivery includes sealing kit and 1x mounting screw

## Technical information

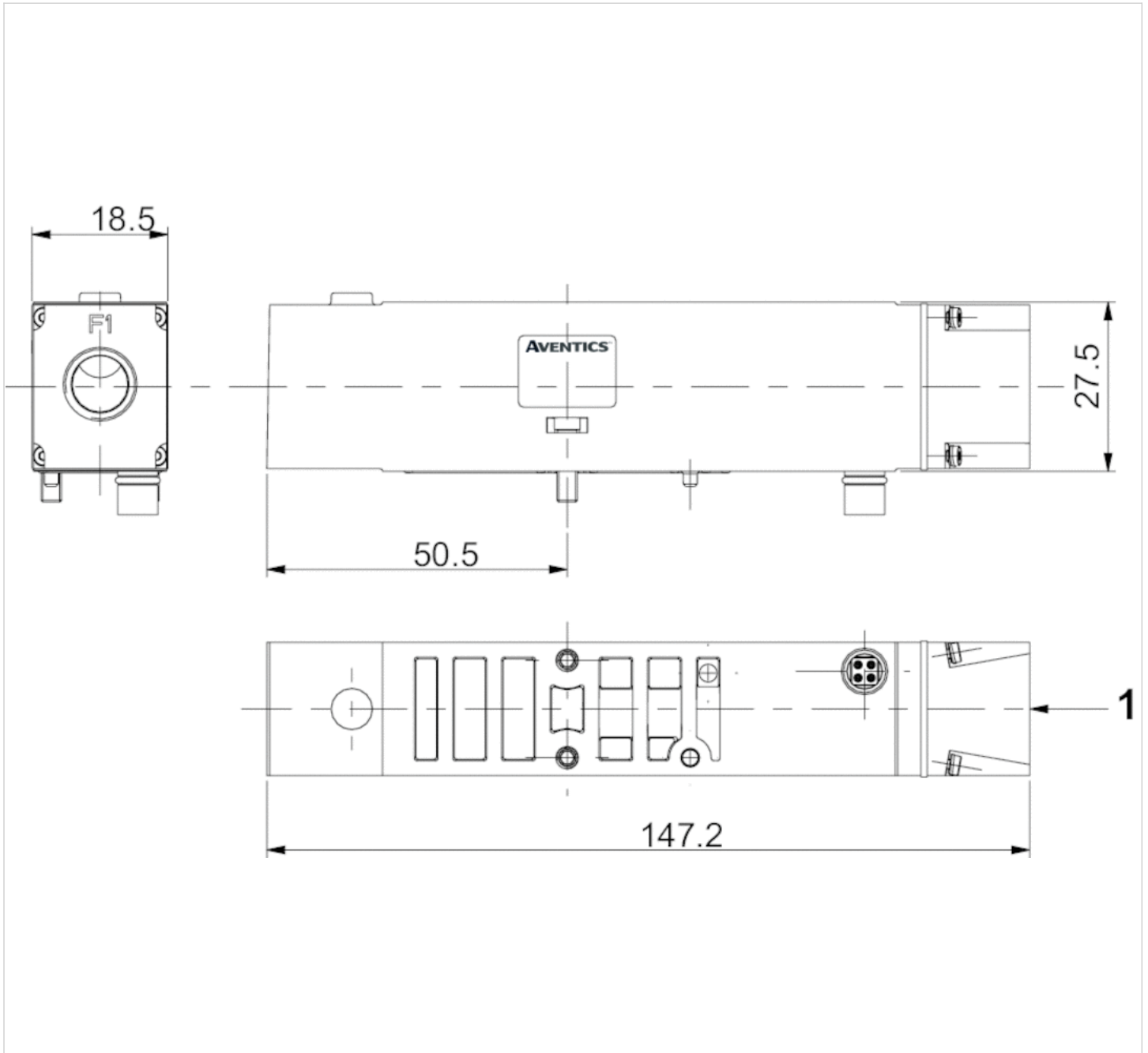
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	Stainless steel



# Dimensions



# Pilot air supply plate ISO 15407-2 for vertical stacking assembly, series 502



Working pressure min./max.	-0.95 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Number of valve positions max.	1
Protection class	IP65
Weight	0.118 kg

## Technical data

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

Part No.	Compressed air connection Pilot connection [12]
G502AP428685005	G 1/4

Delivery includes sealing kit and 1x mounting screw

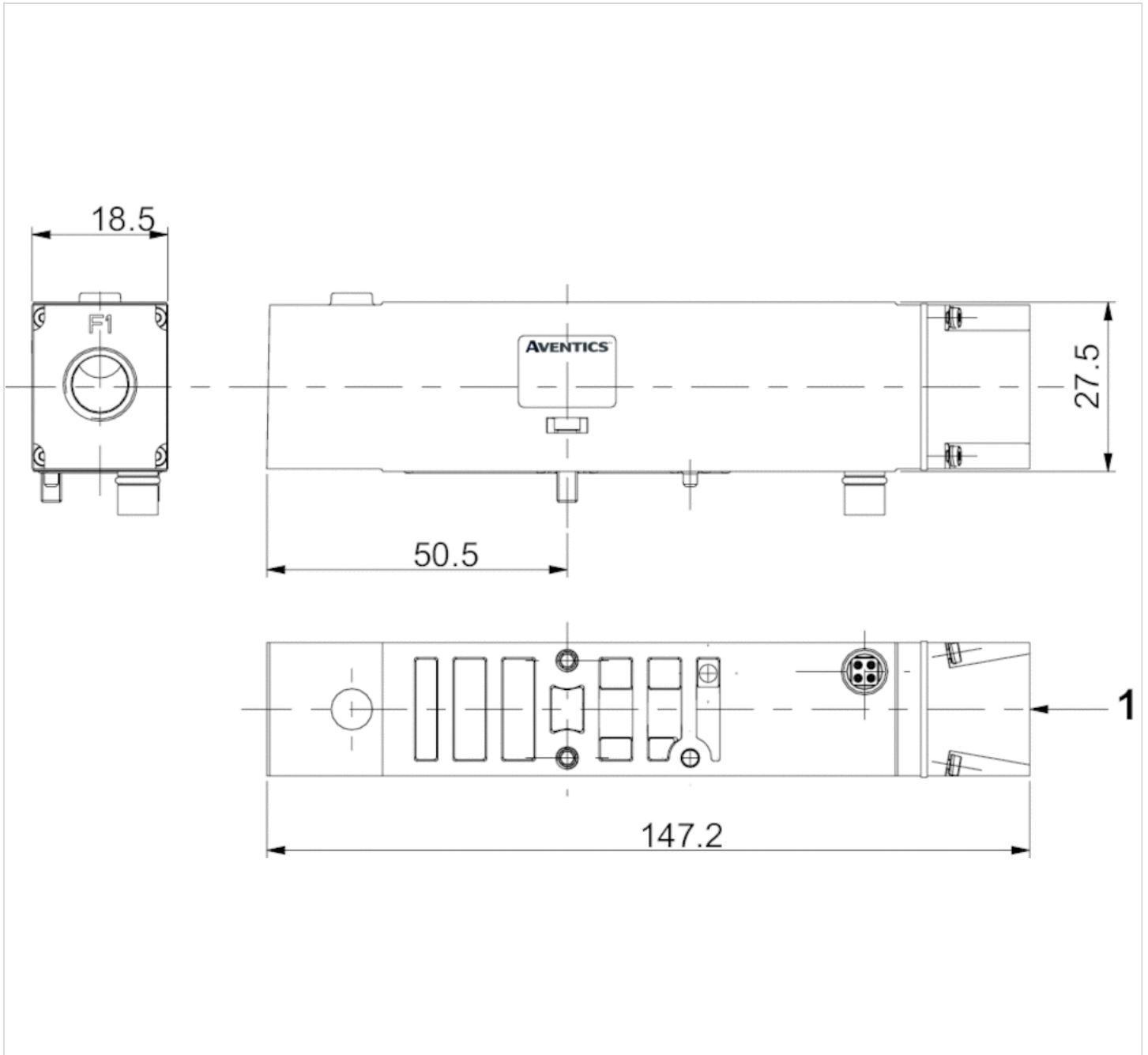
## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Screws	Stainless steel

# Dimensions



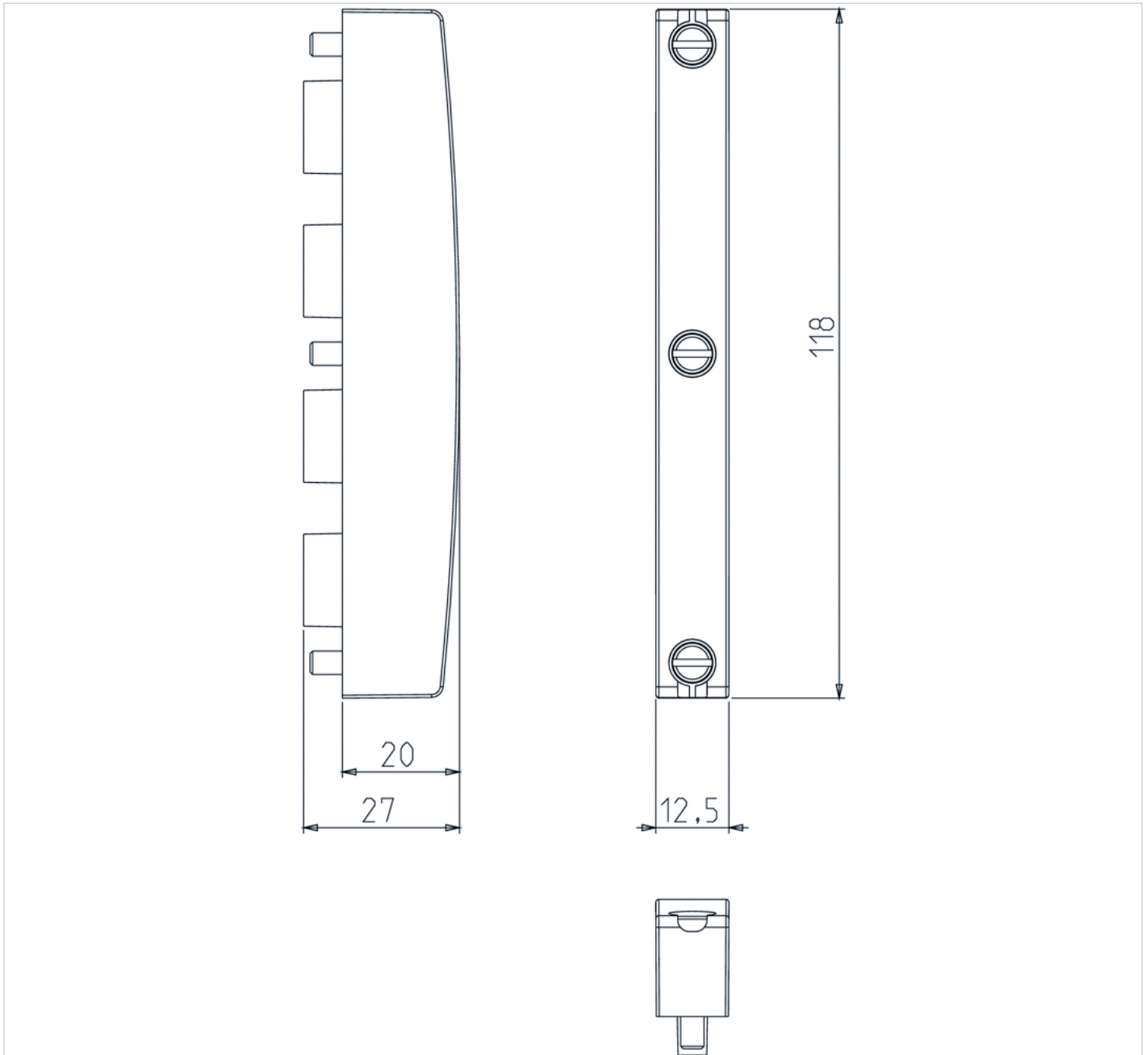
# Spring clamp element



## Technical data

Part No.
240-179

# Dimensions



# Multipole plug, series CON-MP

- Series 599, Multipole plug D-Sub (25-pin)

- Socket D-Sub 25-pin



Ambient temperature min./max.

-5 ... 50 °C

Wire cross-section

0.34 mm<sup>2</sup>

## Technical data

Part No.

P599AE428441001

## Technical information

The specified protection class is only valid in assembled and tested state.

Note for use with VS LP04: The plug can only be used in the LP04 versions with a side electrical connection.

# Multipole plug, series CON-MP

- Series 599, Multipole plug D-Sub (37-pin)

- Socket D-Sub 25-pin



Ambient temperature min./max.

-5 ... 50 °C

Wire cross-section

0.34 mm<sup>2</sup>

## Technical data

Part No.

P599AE428442001

## Technical information

The specified protection class is only valid in assembled and tested state.

Note for use with VS LP04: The plug can only be used in the LP04 versions with a side electrical connection.

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