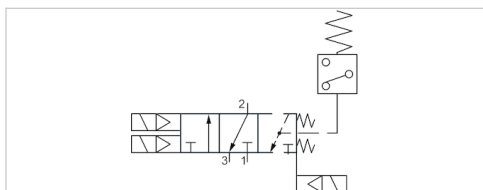


3/2 directional safety valve, Series SV09

- with electrical return unit
- $Q_n = 3000 \text{ l/min}$
- Pipe connection
- Compressed air connection output : G 1/2
- Electrical connection : Plug, EN 175301-803, form A, Protected against polarity reversal
- With spring return



Version	Twin poppet valve with electric return unit
Activation	Electrically
Sealing principle	Soft sealing
Standards	ISO 13849-1
Certificates	UR (Underwriters Laboratories), CSA (Canadian Standards Association), CE declaration of conformity
Working pressure min./max.	2 ... 8 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	4 ... 80 °C
Medium	Compressed air, Neutral gases
Max. particle size	40 µm
Oil content of compressed air	0 ... 1 mg/m ³
Nominal flow Q_n	3000 l/min
Protection class, with connection	IP65, IP65
Duty cycle	100 %
Typ. switch-on time	27 ms
Typ. switch-off time	42 ms
Weight	See table below
Comment	The delivered product may vary from that in the illustration.

Technical data

Part No.		Compressed air connection	
		Input	Output
R412010949	NC	G 1/2	G 1/2
R412010950	NC	G 1/2	G 1/2

Part No.	Compressed air connection		Operational voltage	Voltage tolerance
	Exhaust		DC	DC
R412010949	G 1/2		24 V	-10% / +10%
R412010950	G 1/2		24 V	-10% / +10%

Part No.	Power consumption	Weight	Fig.	
	DC			
R412010949	6 W	2,6 kg	Fig. 2	-
R412010950	6 W	2,8 kg	Fig. 1	1)

The delivery contents include: Silencer, 2x blanking plugs for air connections 1 and 2

1) With error display module

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).

Status indicator unit: Switches to "On" when operating pressure is present and the valve functions normally. Switches to "Off" in case of a failed switching operation or if the input pressure is 2 bar .

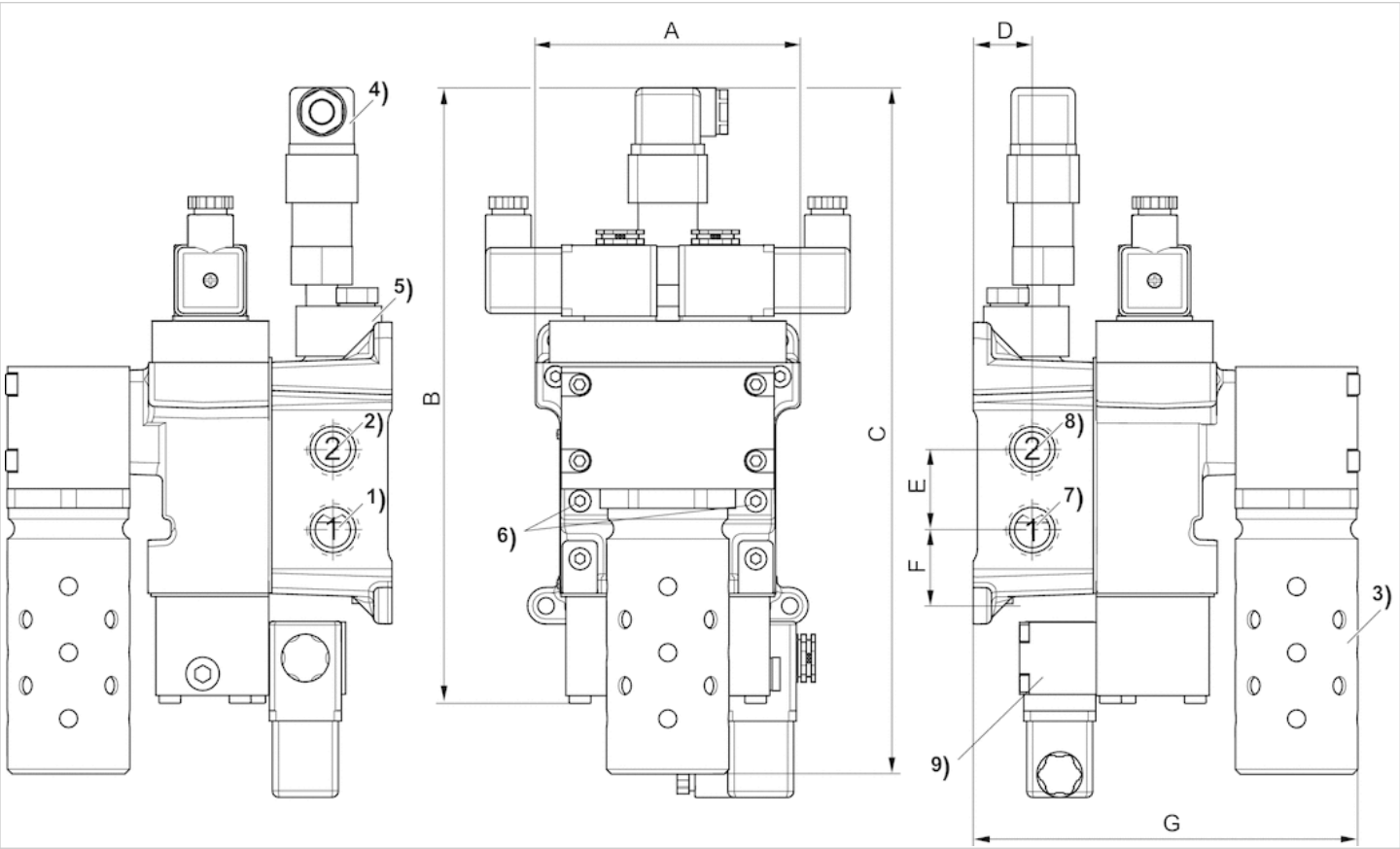
ISO 13849-1, category 4, performance level: e (possible)

Technical information

Material	
Housing	Aluminum, painted
Seals	Nitrile butadiene rubber

Dimensions

Fig. 1



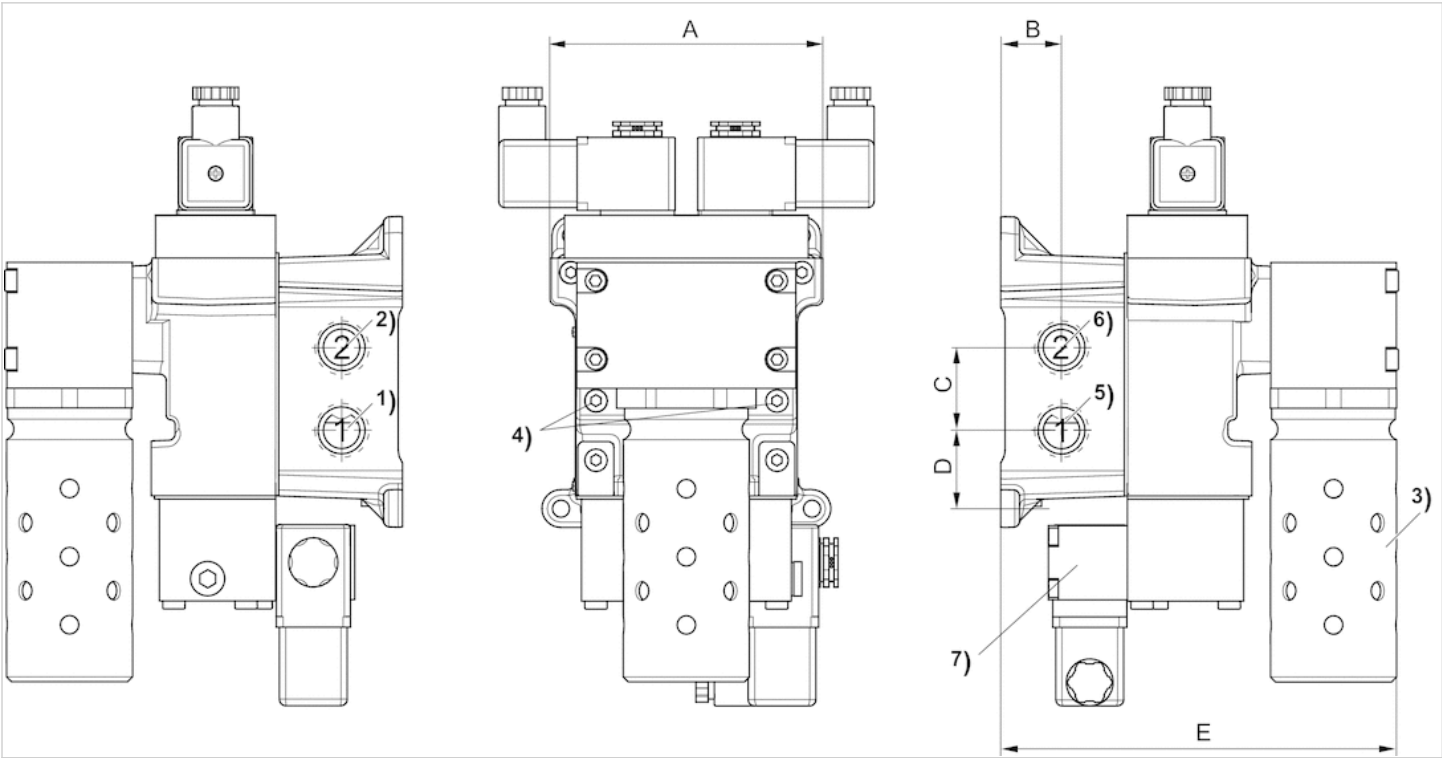
- 1) Input
- 2) Output
- 3) Exhaust
- 4) Error display module
- 5) Pressure Switches
- 6) Valve fastening
- 7) Inlet (closed with plugs at the factory)
- 8) Outlet (closed with plugs at the factory)
- 9) Electric return unit

Dimensions

Part No.	A	B	C	D	E	F	G
R412010950	110.2	253.2	287.5	24.6	33.5	31.5	160.8

Dimensions

Fig. 2



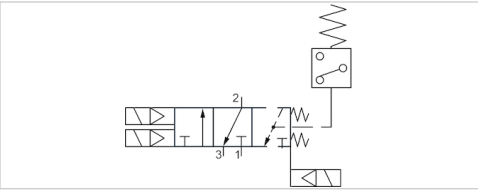
- 1) Input
- 2) Output
- 3) Exhaust
- 4) Valve fastening
- 5) Inlet (closed with plugs at the factory)
- 6) Outlet (closed with plugs at the factory)
- 7) Electric return unit

Dimensions

Part No.	A	B	C	D	E
R412010949	110.2	24.6	33.5	31.5	160.8

3/2 directional safety valve, Series SV09

- with electrical return unit
- Qn = 4400 l/min
- Pipe connection
- Compressed air connection output : G 3/4, G 1
- Electrical connection : Plug, EN 175301-803, form A, Protected against polarity reversal
- With spring return
- Pilot : internal



Version	Twin poppet valve with electric return unit
Activation	Electrically
Pilot	internal
Sealing principle	Soft sealing
Standards	ISO 13849-1
Certificates	UR (Underwriters Laboratories), CSA (Canadian Standards Association), CE declaration of conformity
Working pressure min./max.	2 ... 8 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	4 ... 80 °C
Medium	Compressed air, Neutral gases
Max. particle size	40 µm
Oil content of compressed air	0 ... 1 mg/m³
Nominal flow Qn	4400 l/min
Protection class,with connection	IP65
Duty cycle	100 %
Typ. switch-on time	28 ms
Typ. switch-off time	31 ms
Weight	See table below
Comment	The delivered product may vary from that in the illustration.

Technical data

Part No.		Compressed air connection	
		Input	Output
R412010952	NC	G 3/4	G 3/4
R412010951	NC	G 3/4	G 3/4
R412010954	NC	G 1	G 1
R412010953	NC	G 1	G 1

Part No.	Compressed air connection	Operationalvoltage	Voltage tolerance
	Exhaust	DC	DC
R412010952	G 3/4	24 V	-10% / +10%
R412010951	G 3/4	24 V	-10% / +10%
R412010954	G 1	24 V	-10% / +10%
R412010953	G 1	24 V	-10% / +10%

Part No.	Power consumption	Weight	Fig.	
	DC			
R412010952	15 W	3,9 kg	Fig. 1	1)
R412010951	15 W	3,7 kg	Fig. 2	-
R412010954	15 W	3,9 kg	Fig. 1	1)
R412010953	15 W	3,7 kg	Fig. 2	-

The delivery contents include: Silencer, 2x blanking plugs for air connections 1 and 2

1) With error display module

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).

Status indicator unit: Switches to "On" when operating pressure is present and the valve functions normally. Switches to "Off" in case of a failed switching operation or if the input pressure is 2 bar .

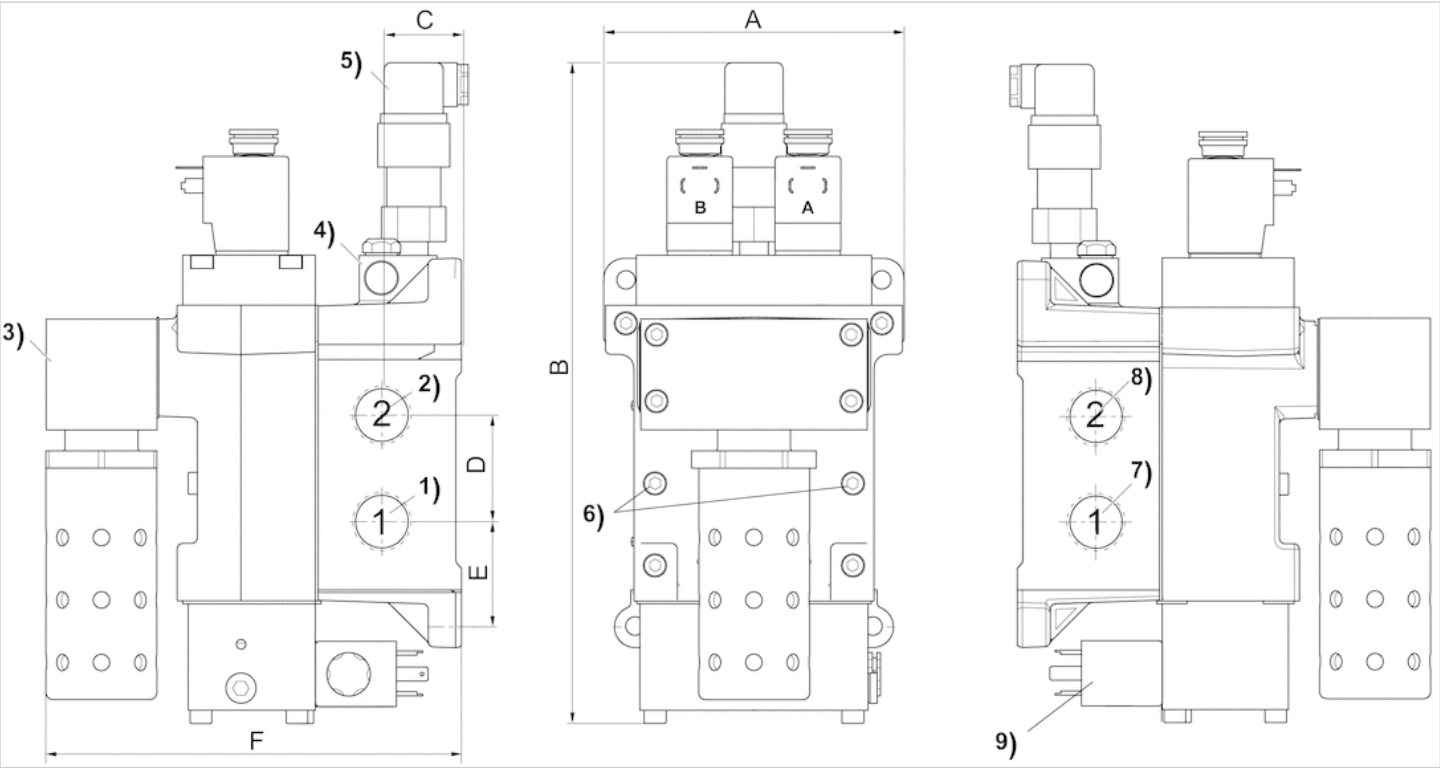
ISO 13849-1, category 4, performance level: e (possible)

Technical information

Material	
Housing	Aluminum, painted
Seals	Nitrile butadiene rubber

Dimensions

Fig. 1



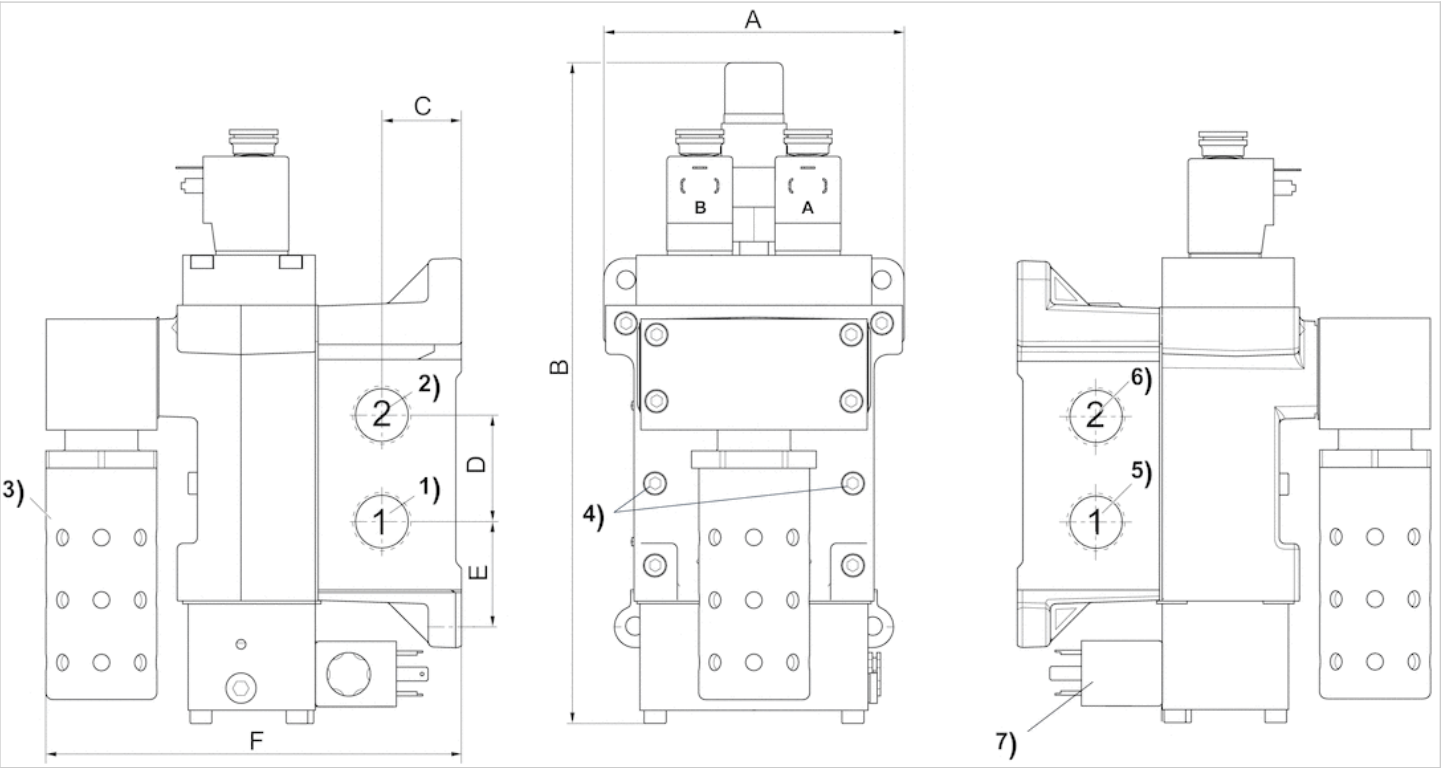
- 1) Input2) Output3) Exhaust
- 4) Error display module
- 5) Pressure Switches
- 6) Valve fastening
- 7) Inlet (closed with plugs at the factory)8) Outlet (closed with plugs at the factory)
- 9) Electric return unit

Dimensions

Part No.	A	B	C	D	E
R412010952	137.4	302.3	36.3	48.3	48.5
R412010954	137.4	302.3	36.3	48.3	48.5

Dimensions

Fig. 2



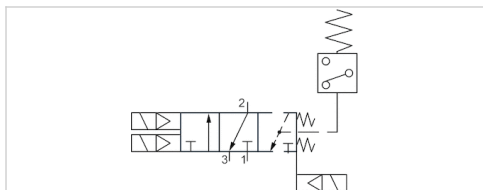
- 1) Input
- 2) Output
- 3) Exhaust
- 4) Valve fastening
- 5) Inlet (closed with plugs at the factory)
- 6) Outlet (closed with plugs at the factory)
- 7) Electric return unit

Dimensions

Part No.	A	C	D	E
R412010951	137.4	36.3	48.3	48.8
R412010953	137.4	36.3	48.3	48.8

3/2 directional safety valve, Series SV09

- with electrical return unit
- $Q_n = 8600 \text{ l/min}$
- Pipe connection
- Compressed air connection output : G 1
- Electrical connection : Plug, EN 175301-803, form A, Protected against polarity reversal
- With spring return



Version	Twin poppet valve with electric return unit
Activation	Electrically
Sealing principle	Soft sealing
Standards	ISO 13849-1
Certificates	UR (Underwriters Laboratories), CSA (Canadian Standards Association), CE declaration of conformity
Working pressure min./max.	2 ... 8 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	4 ... 80 °C
Medium	Compressed air, Neutral gases
Max. particle size	40 µm
Oil content of compressed air	0 ... 1 mg/m³
Nominal flow Q_n	8600 l/min
Protection class, with connection	IP65
Duty cycle	100 %
Typ. switch-on time	31 ms
Typ. switch-off time	38 ms
Weight	See table below
Comment	The delivered product may vary from that in the illustration.

Technical data

Part No.		Compressed air connection	
		Input	Output
R412010956	NC	G 1	G 1
R412010955	NC	G 1	G 1

Part No.	Compressed air connection	Operational voltage	Voltage tolerance
	Exhaust	DC	DC
R412010956	G 1	24 V	-10% / +10%
R412010955	G 1	24 V	-10% / +10%

Part No.	Power consumption	Weight	Fig.	
	DC			
R412010956	6 W	6,9 kg	Fig. 1	1)
R412010955	6 W	6,7 kg	Fig. 2	-

The delivery contents include: Silencer, 2x blanking plugs for air connections 1 and 2

1) With error display module

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).

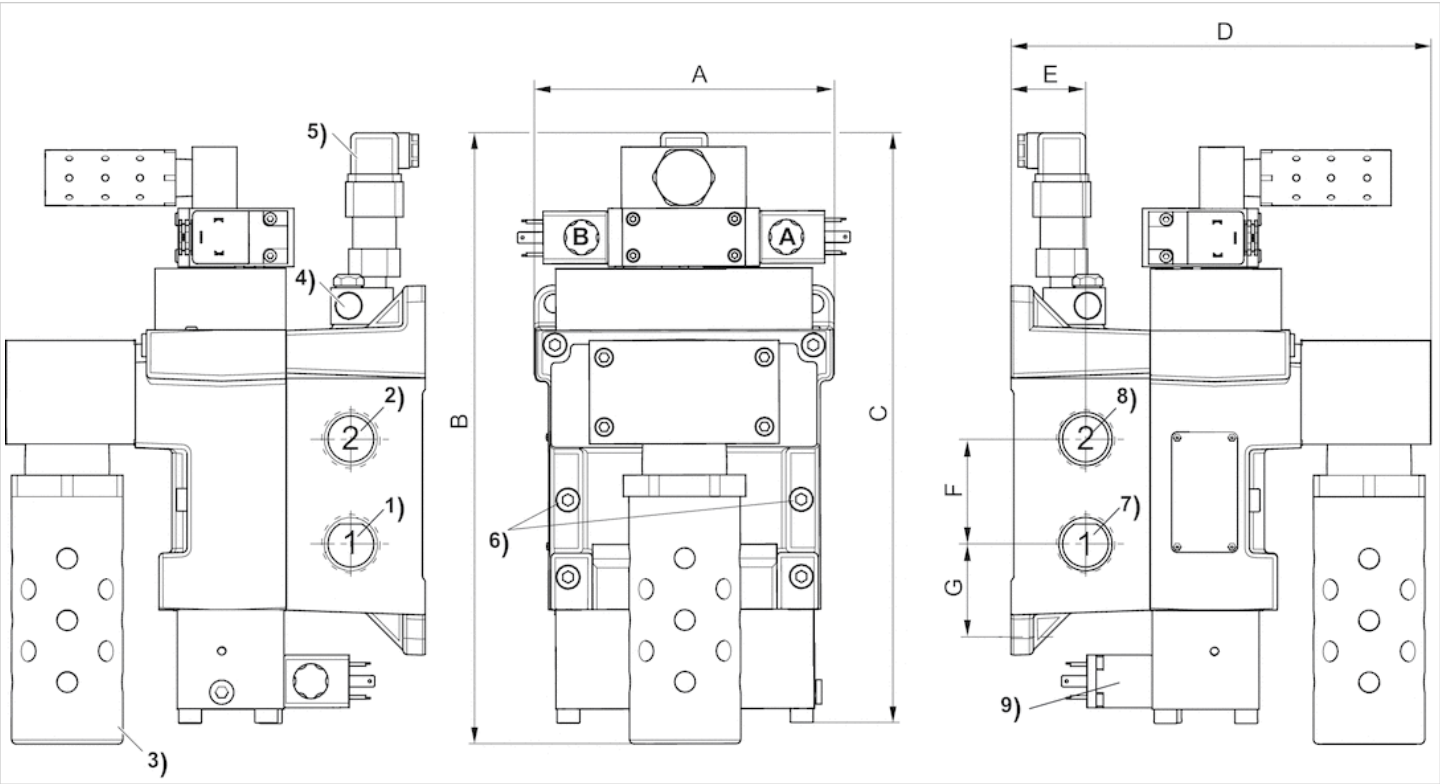
Status indicator unit: Switches to "On" when operating pressure is present and the valve functions normally. Switches to "Off" in case of a failed switching operation or if the input pressure is 2 bar .

ISO 13849-1, category 4, performance level: e (possible)

Technical information

Material	
Housing	Aluminum, painted
Seals	Nitrile butadiene rubber

Dimensions



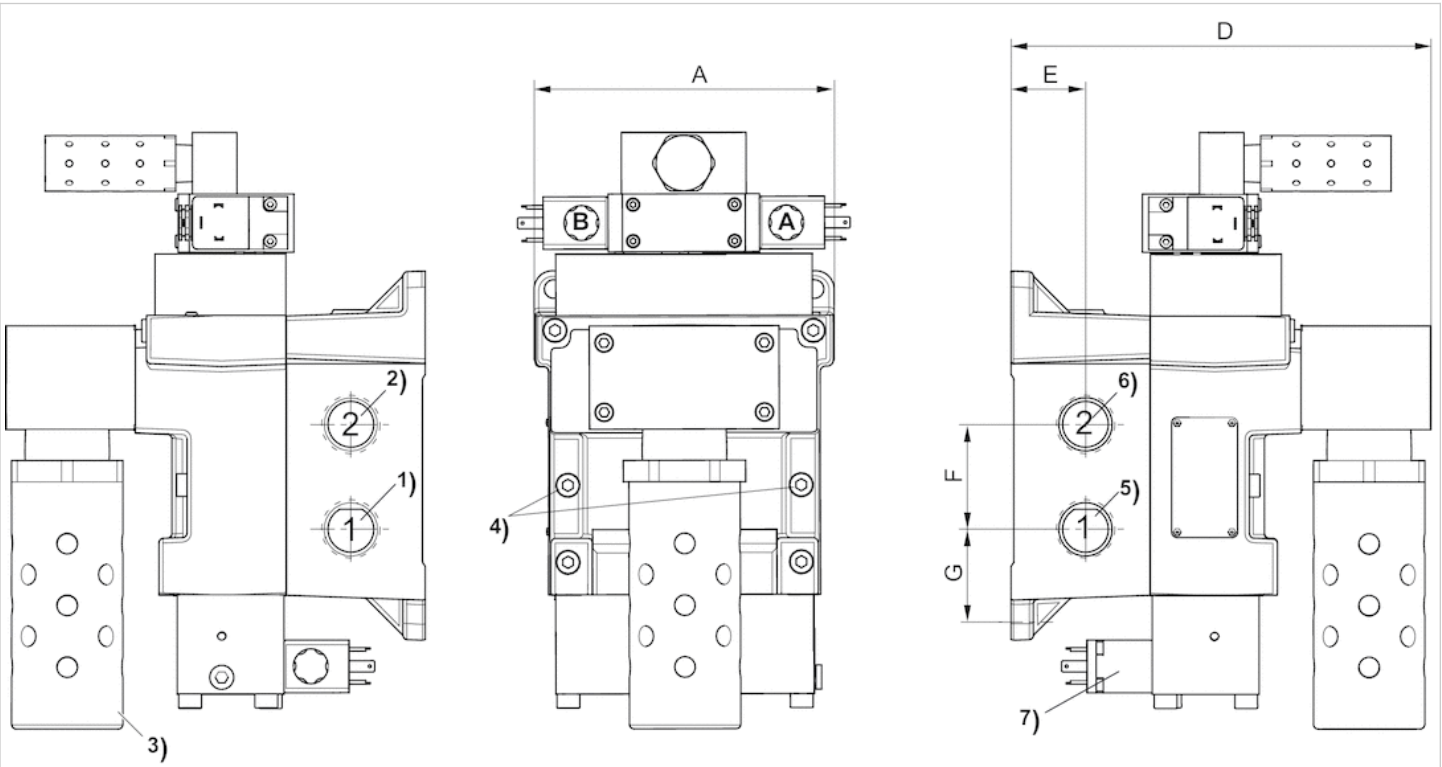
- 1) Input2) Output3) Exhaust
- 4) Error display module
- 5) Pressure Switches
- 6) Valve fastening
- 7) Inlet (closed with plugs at the factory)8) Outlet (closed with plugs at the factory)
- 9) Electric return unit

Dimensions

Part No.	A	B	C	D	E	F	G
R412010956	117.2	348.3	336.1	239.3	42.4	59.9	52.6

Dimensions

Fig. 2



- 1) Input2) Output3) Exhaust
- 4) Valve fastening
- 5) Inlet (closed with plugs at the factory)
- 6) Outlet (closed with plugs at the factory)
- 7) Electric return unit

Dimensions

Part No.	A	D	E	F	G
-	-	-	-	-	-
R412010955	117.2	239.3	42.4	59.9	52.6

Valve plug connector, series CON-VP

- Socket, form A, 2+E, angled, 90°
- open cable ends, 3-pin
- with cable
- unshielded



Ambient temperature min./max.	-20 ... 80 °C
Operationalvoltage	See table below
Protection class	IP67
Wire cross-section	0,75 mm²
Mounting screw tightening torque	0,4 Nm
Weight	See table below

Technical data

Part No.		Operationalvoltage	Protective circuit	Contact assignment	LED status display
1834484160		230 V, AC/DC	-	2+E	-
1834484162		24 V, AC/DC	Z-diode	2+E	Yellow
1834484163		24 V, AC/DC	Z-diode	2+E	Yellow
1834484164		230 V, AC/DC	Varistor	2+E	Red
1834484165		230 V, AC/DC	Varistor	2+E	Red

Part No.	Number of wires	Cable-Ø	Cable length	Weight	Fig.	
1834484160	3	5,9 mm	3 m	0,2 kg	Fig. 1	1)
1834484162	3	5,9 mm	3 m	0,2 kg	Fig. 2	-
1834484163	3	5,9 mm	5 m	0,31 kg	Fig. 2	-
1834484164	3	5,9 mm	3 m	0,2 kg	Fig. 2	-
1834484165	3	5,9 mm	5 m	0,31 kg	Fig. 2	-

1) Scope of delivery incl. flat gasket

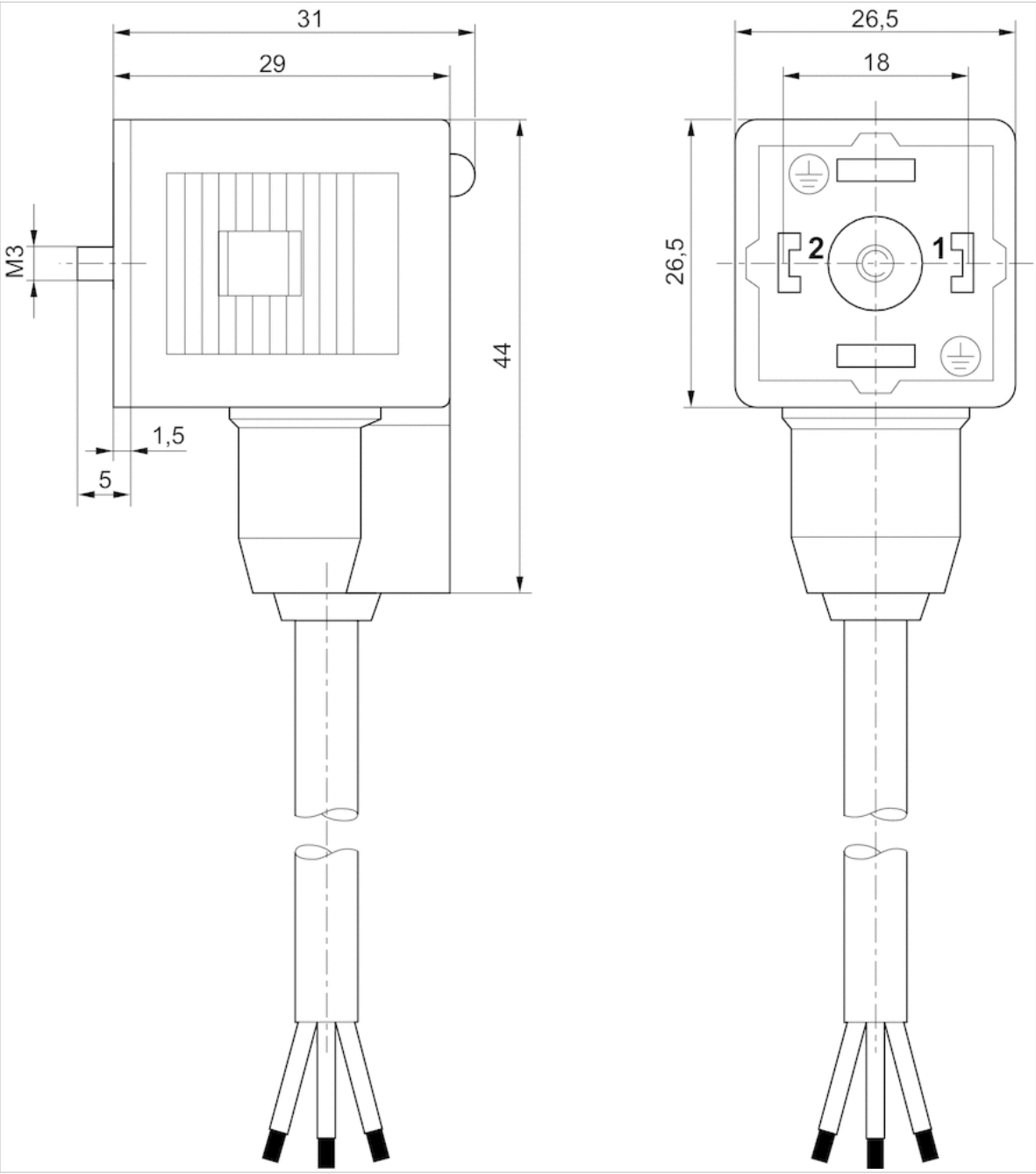
Technical information

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

Technical information

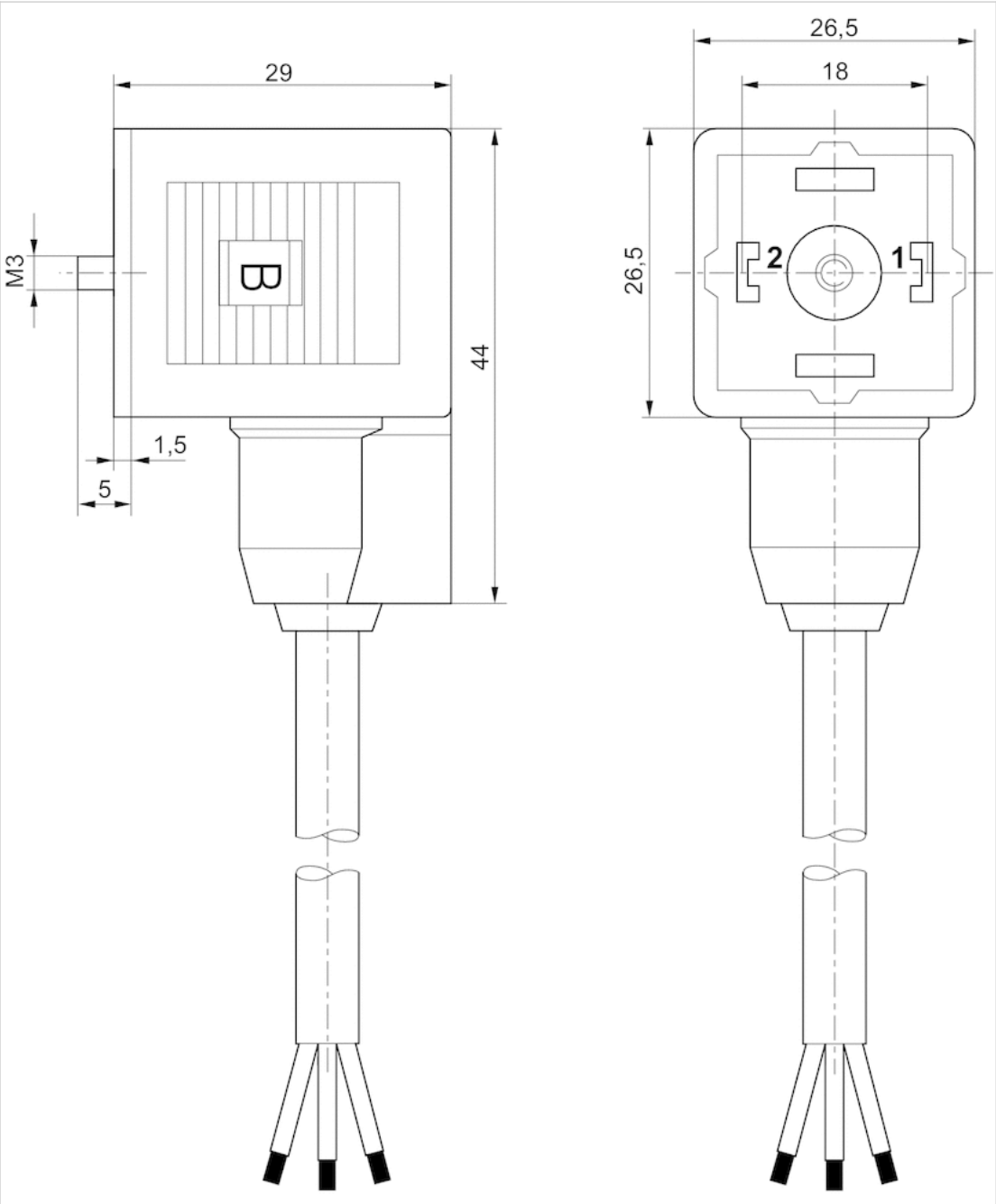
Material	
Seals	caoutchouc/butadiene caoutchouc
Cable sheath	Polyvinyl chloride

Fig. 2



Dimensions

Fig. 1



Error display module



Activation	Electrically
Working pressure min./max.	2 ... 8 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	4 ... 80 °C
Medium	Compressed air
Weight	0,2 kg



Technical data

Part No.
R412010957

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).

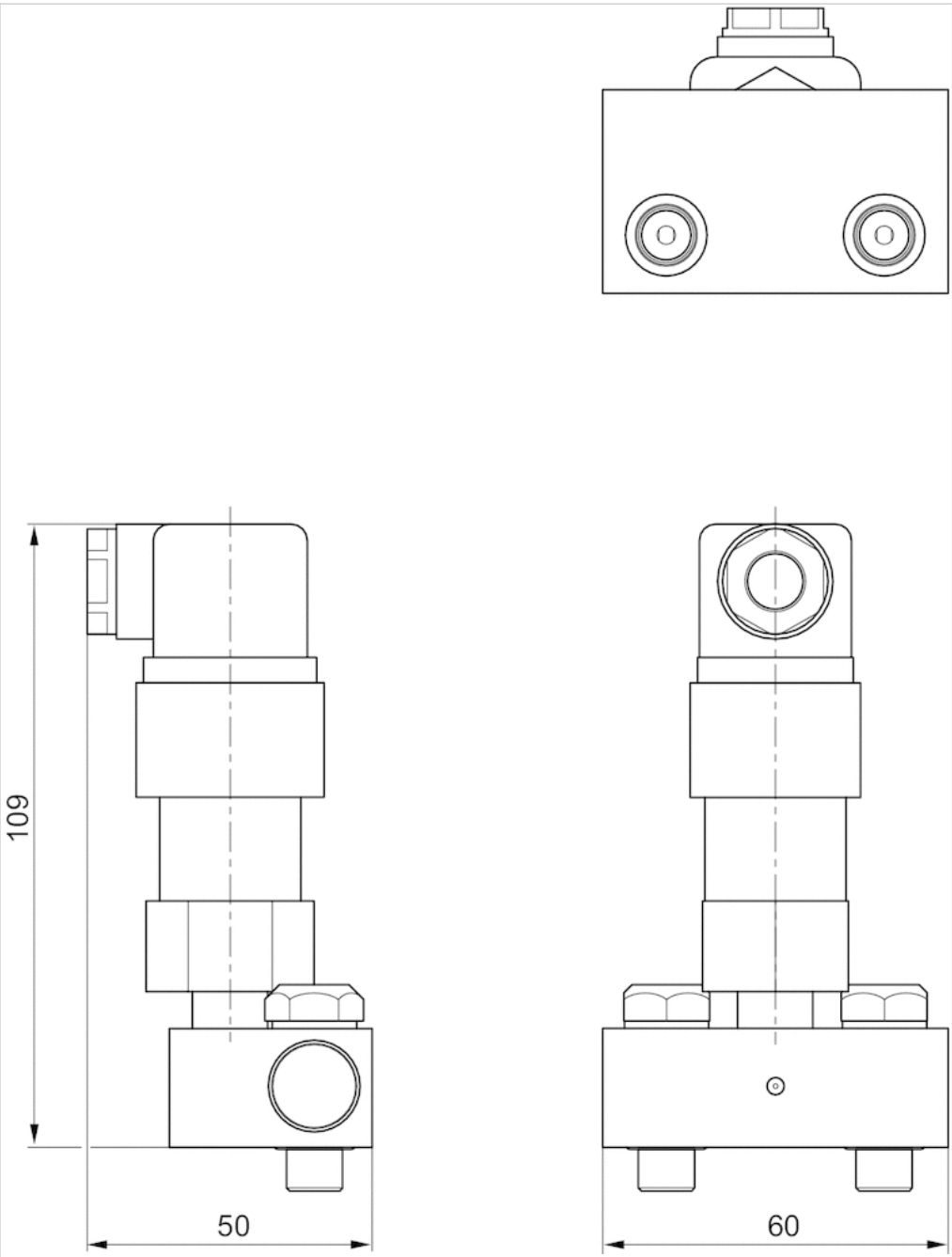
Status indicator unit: Switches to "On" when operating pressure is present and the valve functions normally. Switches to "Off" in case of a failed switching operation or if the input pressure is 2 bar .

Technical information

Material	
Housing	Aluminum, painted
Seals	Nitrile butadiene rubber

Dimensions

Dimensions



silencers

- Aluminum



Working pressure min./max.

10 bar

Medium

Compressed air

Weight

0,095 kg

Technical data

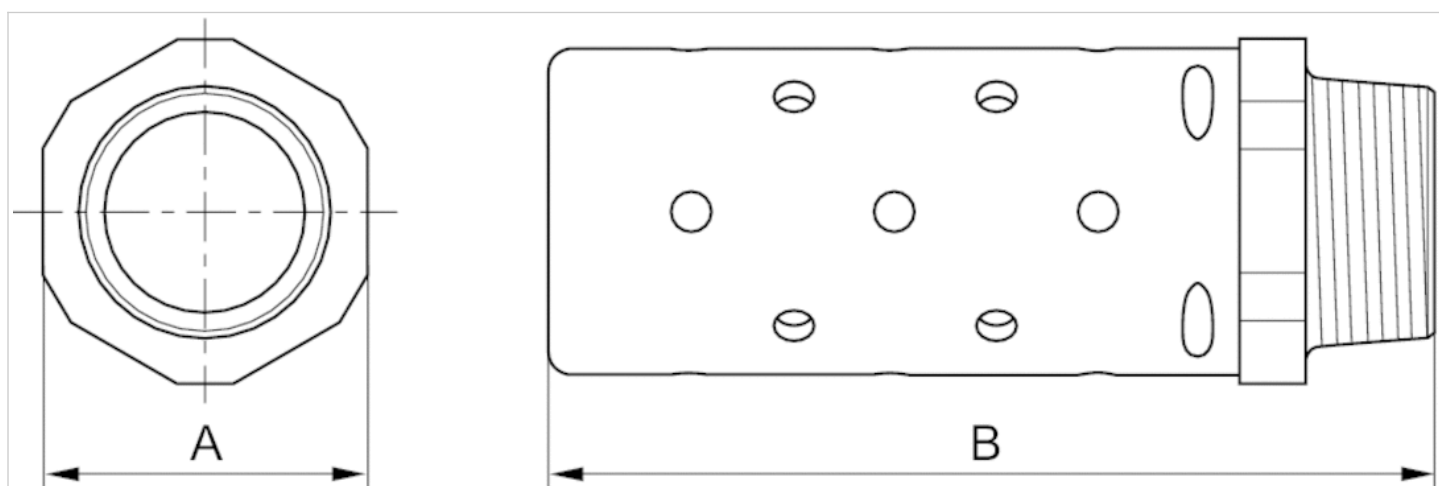
Part No.	Compressed air connection	Delivery unit
R412010958	G 1/2	1 piece
R412010959	G 3/4	1 piece
R412010960	G 1	1 piece

Technical information

Material	
Silencers	Aluminum, anodized
Silencer insert	Polyurethane

Dimensions

Dimensions



Dimensions

Part No.	Port G	A	B
R412010958	G 1/2	32	96
R412010959	G 3/4	32	96
R412010960	G 1	51	142