

3/2-directional valve, electrically operated, Series AS5-SOV

- Compressed air connection G 3/4 G 1
- Pipe connection
- ATEX optional



Type

Poppet valve, Can be assembled into blocks

Parts

3/2-directional valve, electrically operated

Nominal flow

12500 l/min

Nominal flow 1 ► 2

12500 l/min

Nominal flow 2 ► 3

3700 l/min

Working pressure min./max.

See table below

Medium

Compressed air Neutral gases

Medium temperature min./max.

-10 ... 50 °C

Ambient temperature min./max.

-10 ... 50 °C

Sealing principle

Soft sealing

Protection class acc. to DIN EN 61140 with plug

See table below

Weight

See table below

Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
R412009265			G 3/4	G 3/4	G 1/2
R412009266			G 3/4	G 3/4	G 1/2
R412009267			G 3/4	G 3/4	G 1/2
R412009269			G 1	G 1	G 1/2
R412009270			G 1	G 1	G 1/2
R412009271			G 1	G 1	G 1/2
R412009264		—	G 3/4	G 3/4	G 1/2
R412009258		—	G 3/4	G 3/4	G 1/2
R412009375			G 3/4	G 3/4	G 1/2
R412009268		—	G 1	G 1	G 1/2
R412009376			G 1	G 1	G 1/2
R412009259		—	G 1	G 1	G 1/2

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
R412009265	24 V	-	-
R412009266	-	110 V	110 V
R412009267	-	220 V	230 V
R412009269	24 V	-	-
R412009270	-	110 V	110 V
R412009271	-	220 V	230 V
R412009264	-	-	-
R412009258	-	-	-
R412009375	24 V	-	-

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
R412009268	-	-	-
R412009376	24 V	-	-
R412009259	-	-	-

Part No.	Power consumption	Holding power	Holding power	Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
R412009265	2 W	-	-	-
R412009266	-	1,6 VA	1,4 VA	2,2 VA
R412009267	-	1,6 VA	1,4 VA	2,2 VA
R412009269	2 W	-	-	-
R412009270	-	1,6 VA	1,4 VA	2,2 VA
R412009271	-	1,6 VA	1,4 VA	2,2 VA
R412009264	-	-	-	-
R412009258	-	-	-	-
R412009375	2 W	-	-	-
R412009268	-	-	-	-
R412009376	2 W	-	-	-
R412009259	-	-	-	-

Part No.	Switch-on power	Working pressure min./max.	Protection class	Electrical connection
	AC 60 Hz			Pilot valve
R412009265	-	2,5 ... 10 bar	IP65	Plug, ISO 15217, form C
R412009266	1,6 VA	2,5 ... 10 bar	IP65	Plug, ISO 15217, form C
R412009267	1,6 VA	2,5 ... 10 bar	IP65	Plug, ISO 15217, form C
R412009269	-	2,5 ... 10 bar	IP65	Plug, ISO 15217, form C
R412009270	1,6 VA	2,5 ... 10 bar	IP65	Plug, ISO 15217, form C
R412009271	1,6 VA	2,5 ... 10 bar	IP65	Plug, ISO 15217, form C
R412009264	-	2,5 ... 16 bar	-	-
R412009258	-	2,5 ... 16 bar	-	-
R412009375	-	2,5 ... 10 bar	IP65	Plug, M12x1
R412009268	-	2,5 ... 16 bar	-	-
R412009376	-	2,5 ... 10 bar	IP65	Plug, M12x1
R412009259	-	2,5 ... 16 bar	-	-

Part No.	Connector standard	basic valve with electrical connector
R412009265	ISO 15217	Basic valve with pilot valve
R412009266	ISO 15217	Basic valve with pilot valve
R412009267	ISO 15217	Basic valve with pilot valve
R412009269	ISO 15217	Basic valve with pilot valve
R412009270	ISO 15217	Basic valve with pilot valve
R412009271	ISO 15217	Basic valve with pilot valve
R412009264	-	Basic valve without pilot valve
R412009258	-	Basic valve without pilot valve, with CNOMO subbase
R412009375	-	Basic valve with pilot valve
R412009268	-	Basic valve without pilot valve
R412009376	-	Basic valve with pilot valve
R412009259	-	Basic valve without pilot valve, with CNOMO subbase

Part No.	Reverse polarity protection	Weight	Fig.	
R412009265	Protected against polarity reversal	0,677 kg	Fig. 3	-
R412009266	Protected against polarity reversal	0,677 kg	Fig. 3	-
R412009267	Protected against polarity reversal	0,677 kg	Fig. 3	-
R412009269	Protected against polarity reversal	0,677 kg	Fig. 3	-
R412009270	Protected against polarity reversal	0,677 kg	Fig. 3	-
R412009271	Protected against polarity reversal	0,677 kg	Fig. 3	-
R412009264	-	0,641 kg	Fig. 1	1)
R412009258	-	0,62 kg	Fig. 2	1)
R412009375	-	0,65 kg	Fig. 4	-
R412009268	-	0,641 kg	Fig. 1	1)
R412009376	-	0,65 kg	Fig. 4	-
R412009259	-	0,62 kg	Fig. 2	1)

Nominal flow Q_n with secondary pressure p₂ = 6 bar at Δp = 1 bar, MO = Manual override

1) Suitable for use in Ex zones 1, 2, 21, 22.

Technical information

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

A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

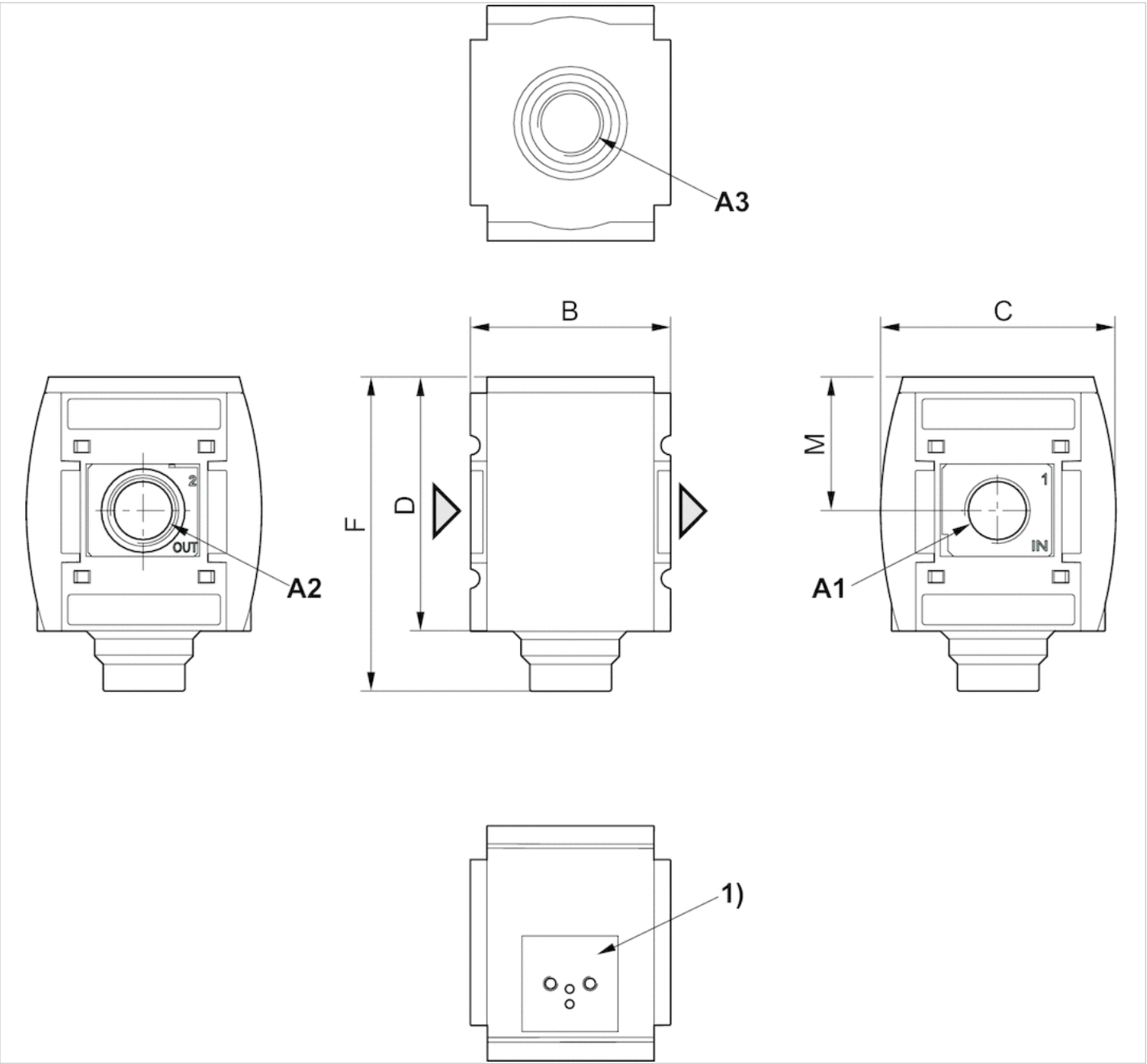
ATEX optional: The ATEX ID depends on the selected pilot valve.

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc

Dimensions

3/2-directional valve without pilot valve with porting configuration for series DO16



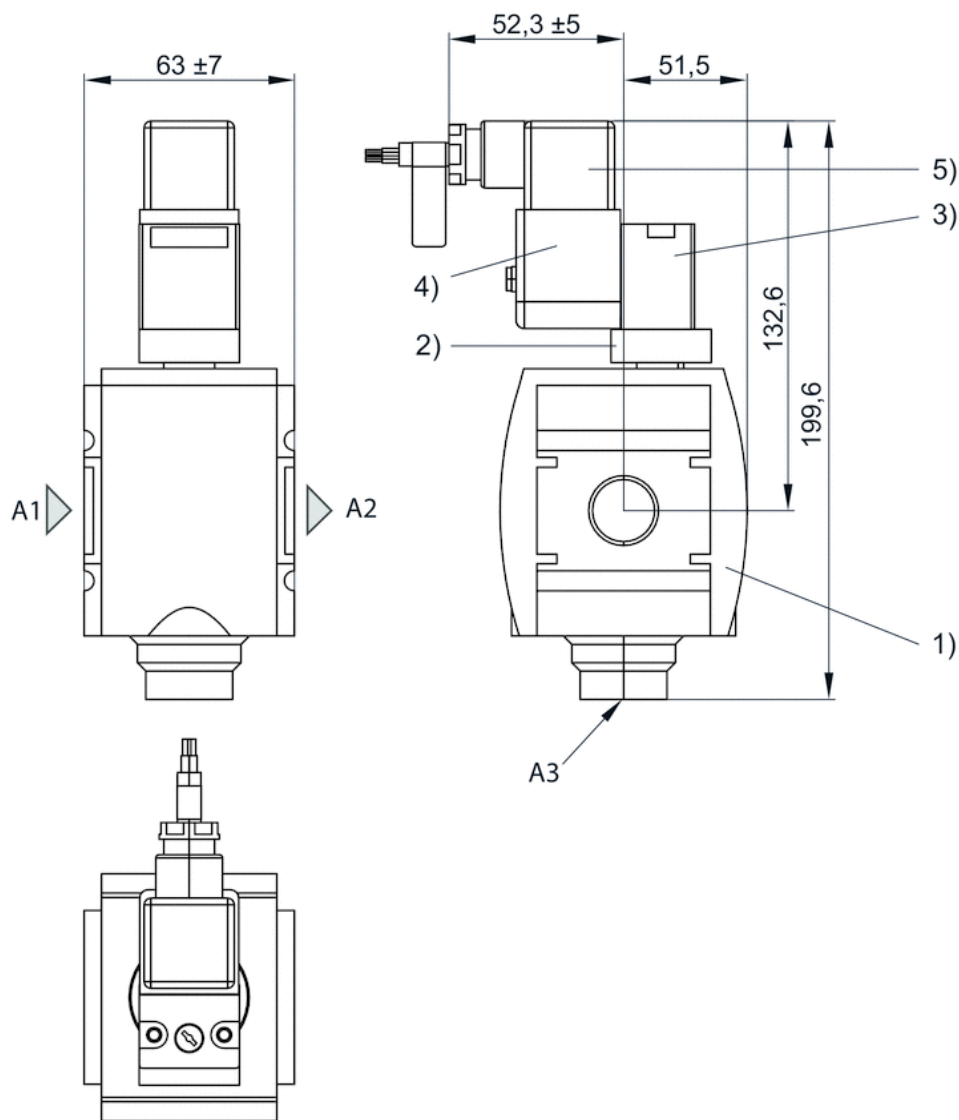
A1 = input
A2 = output
A3 = ventilation port
1) For pilot valve series DO16

Dimensions in mm

A1	A2	A3	B	C	D	F	M
G 3/4	G 3/4	G 1/2	63	103	80	125	42.5
G 1	G 1	G 1/2	63	103	80	125	42.5

Dimensions

Fig. 2: 3/2 directional valve with transition plate (suitable for ATEX)



A1 = input

A2 = output

A3 = ventilation port

1) Shut-off valve

2) Transition plate

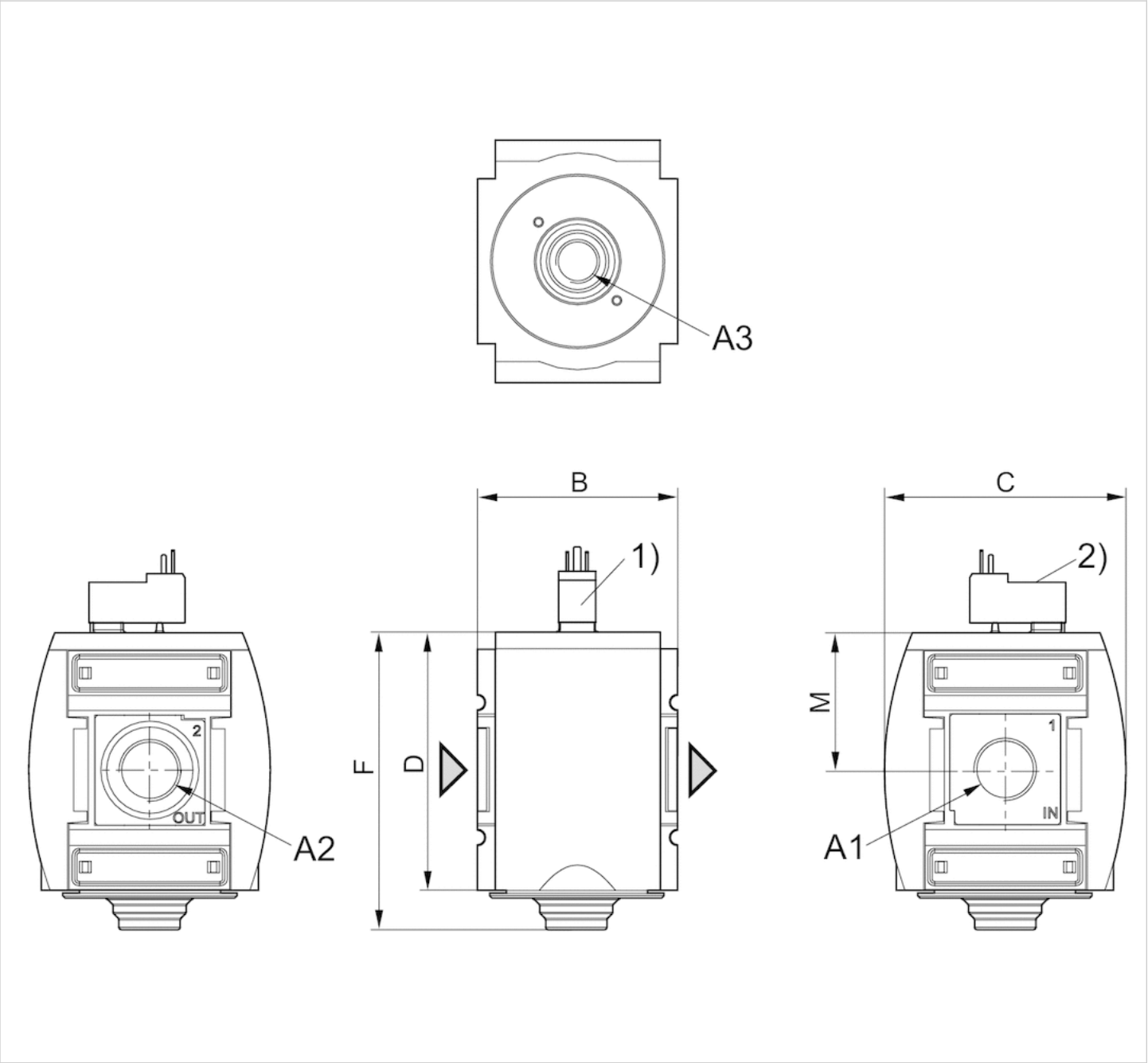
3) Pilot valve

4) Coil

5) Electrical connector

See accessories for pilot valve and coil

Fig. 3: 3/2 directional valve with pilot valve and connection for valve plug connector



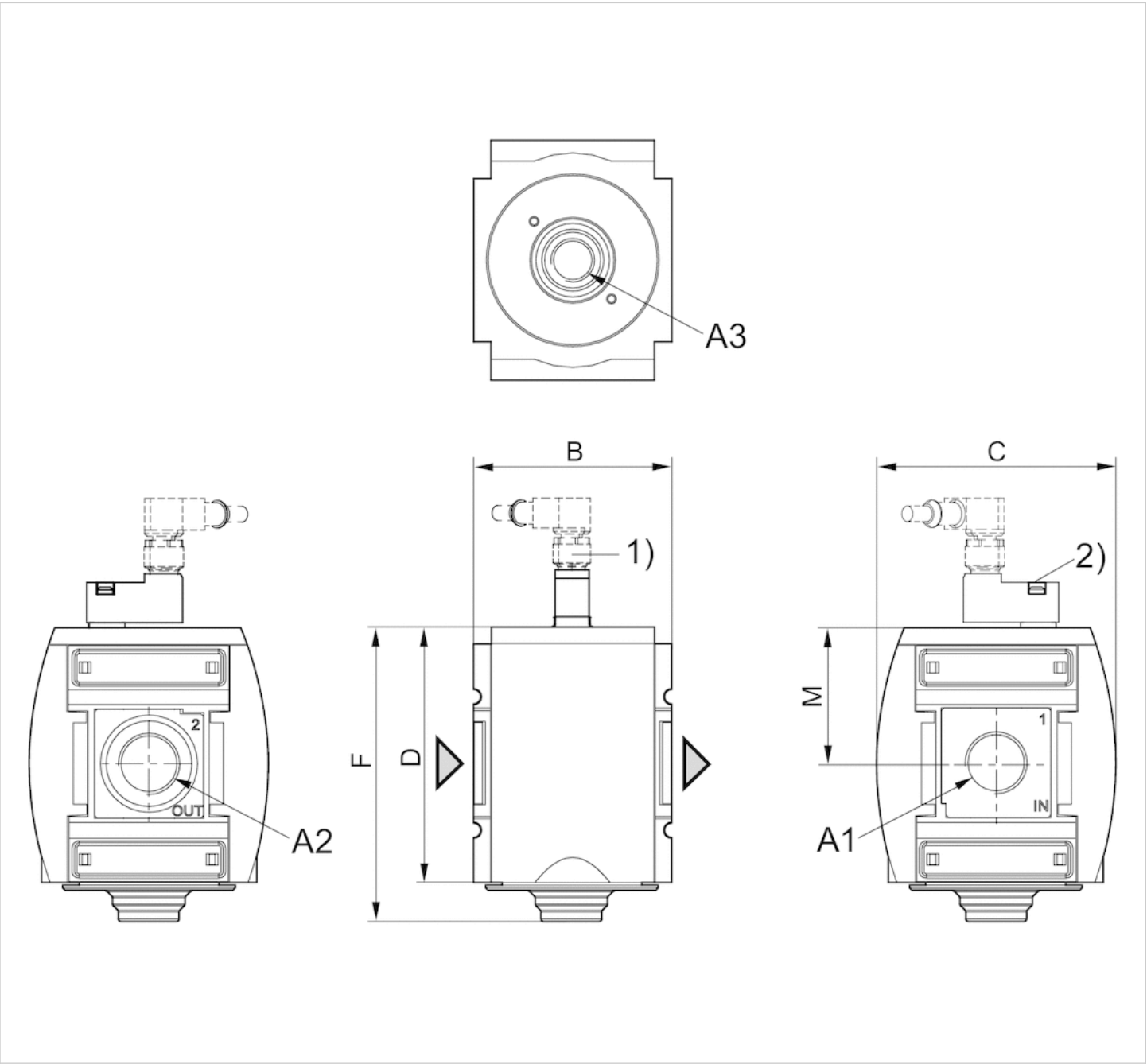
- A1 = input
- A2 = output
- A3 = ventilation port
- 1) For valve plug connectors according to ISO 15217 (form C)
- 2) Manual override

Dimensions in mm

A1	A2	A3	B	C	D	F	M
G 3/4	G 3/4	G 1/2	85	103	109	125	58
G 1	G 1	G 1/2	85	103	109	125	58

Dimensions

Fig. 4: 3/2-directional valve with pilot valve, push-in fitting M12x1

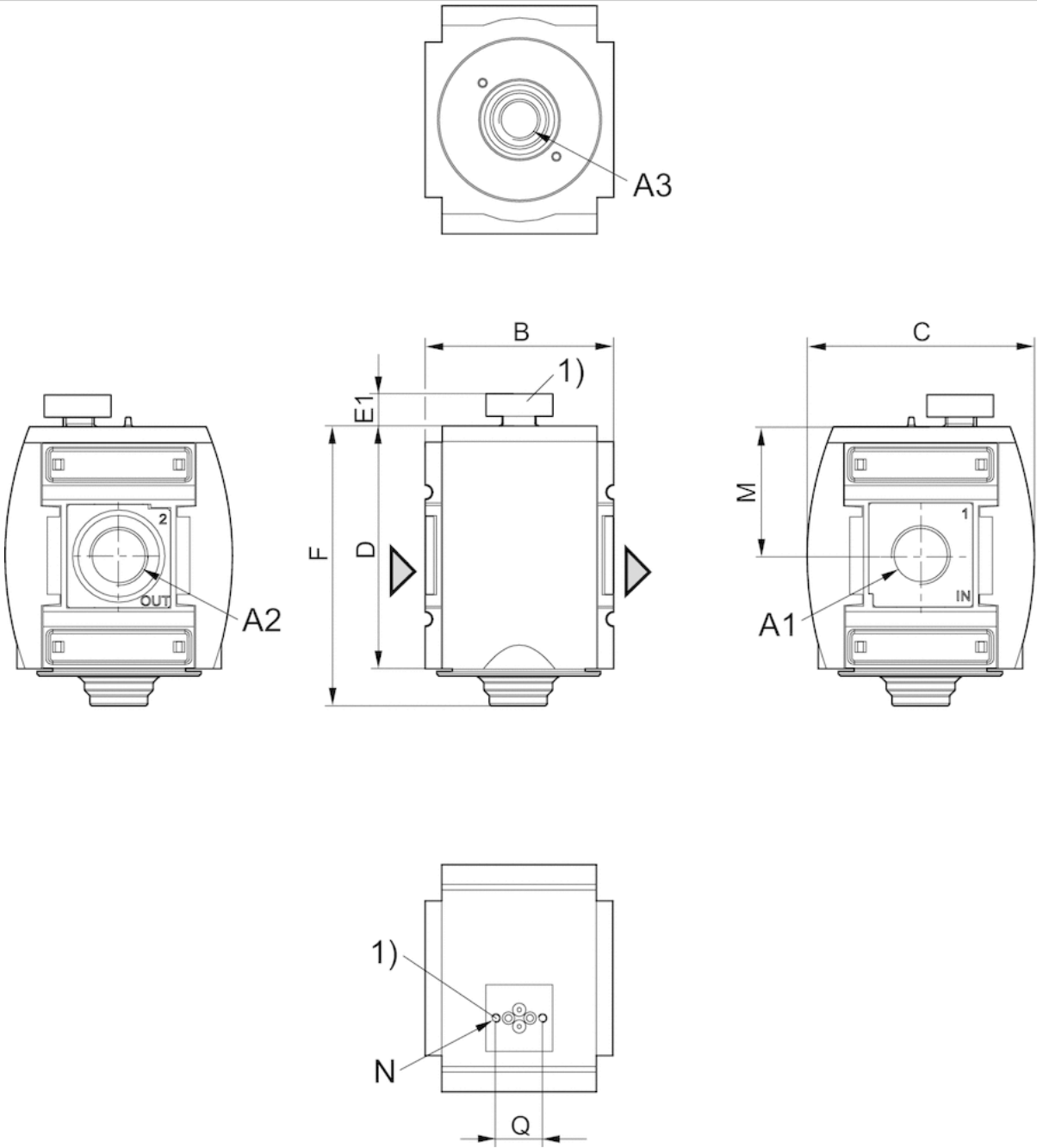


- A1 = input
- A2 = output
- A3 = ventilation port
- 1) plug M12
- 2) Manual override

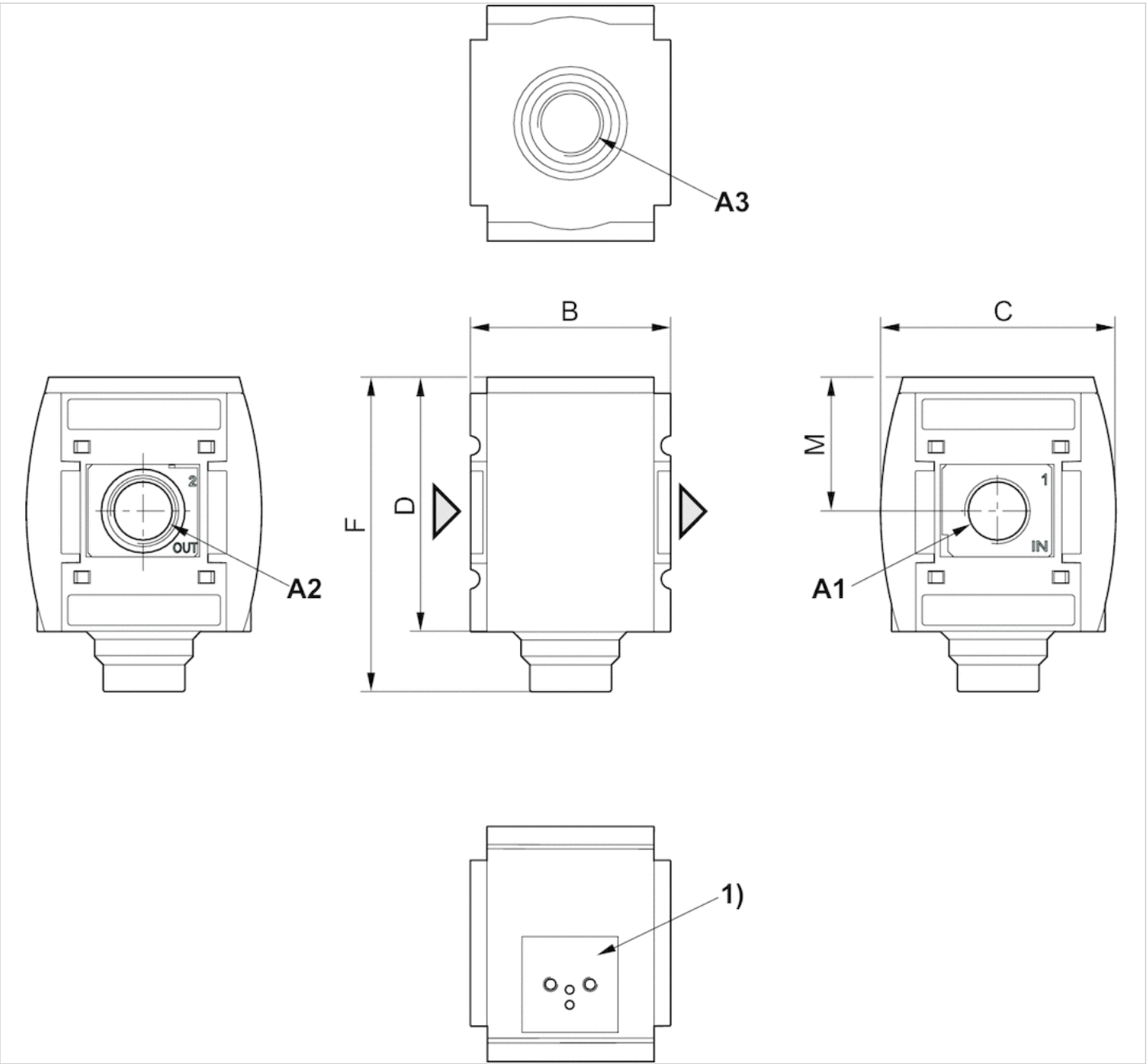
Dimensions in mm

A1	A2	A3	B	C	D	F	M
G 1	G 1	G 1/2	85	103	109	125	58

Dimensions



3/2-directional valve without pilot valve with porting configuration for series DO16



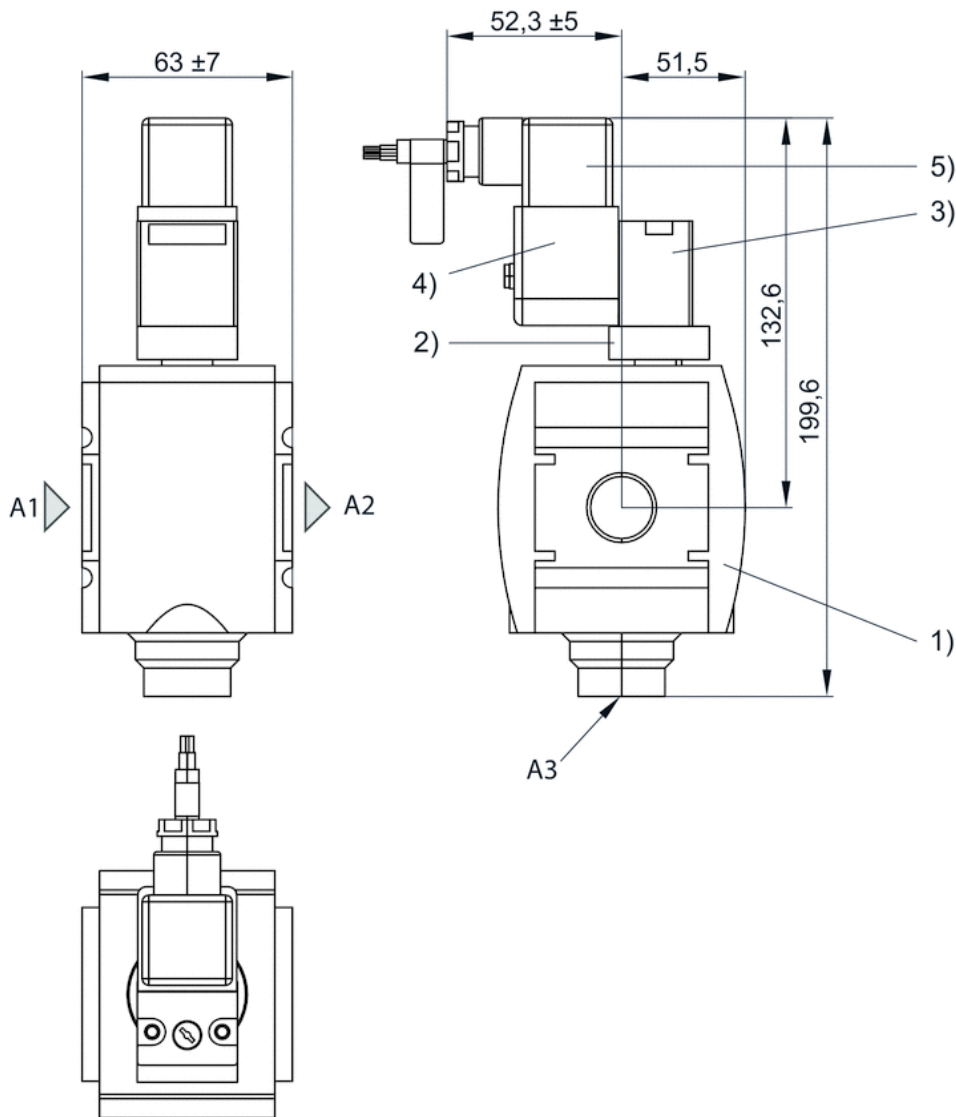
A1 = input
 A2 = output
 A3 = ventilation port
 1) For pilot valve series DO16

Dimensions in mm

A1	A2	A3	B	C	D	F	M
G 3/4	G 3/4	G 1/2	63	103	80	125	42.5
G 1	G 1	G 1/2	63	103	80	125	42.5

Dimensions

Fig. 2: 3/2 directional valve with transition plate (suitable for ATEX)



A1 = input

A2 = output

A3 = ventilation port

1) Shut-off valve

2) Transition plate

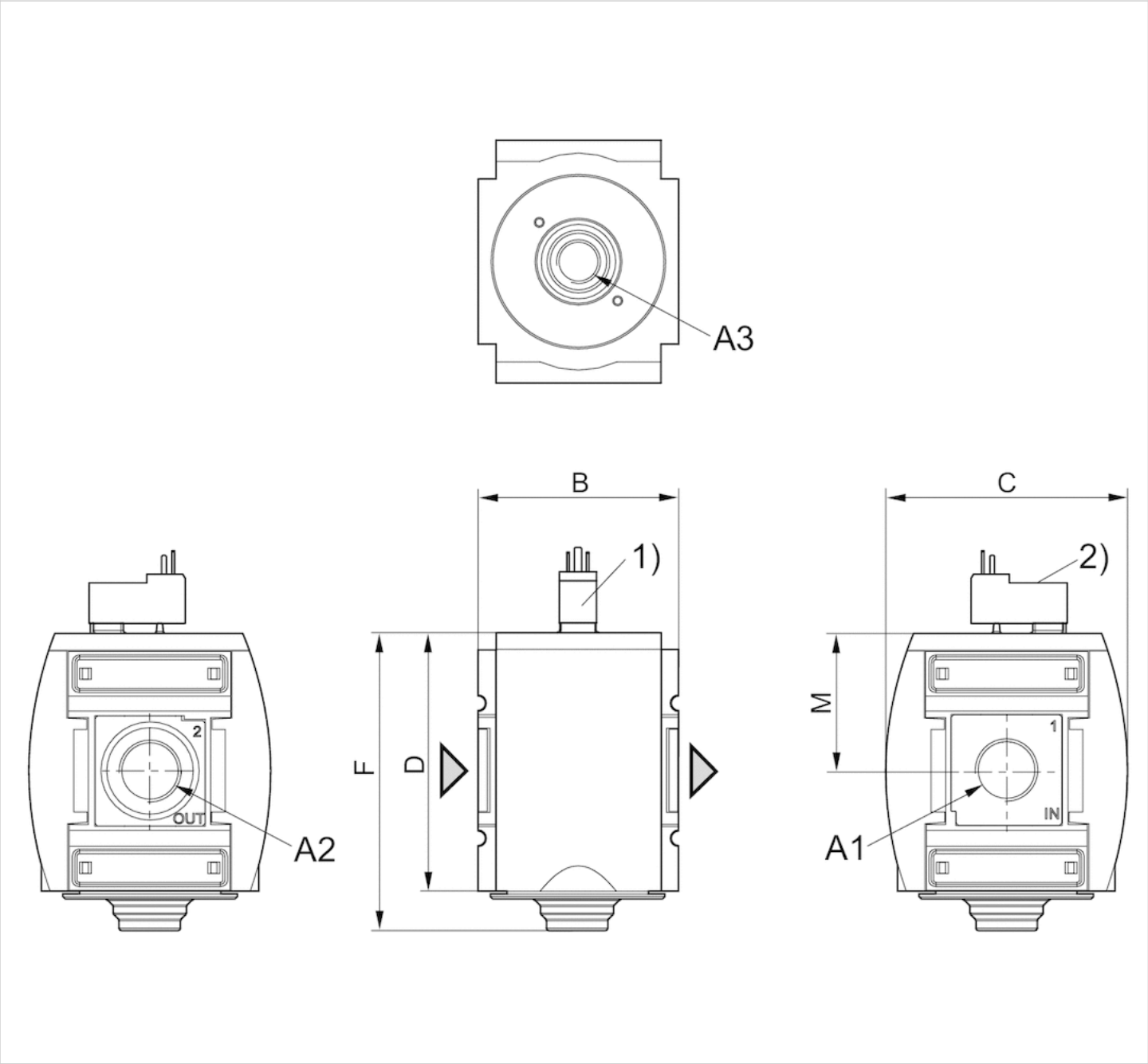
3) Pilot valve

4) Coil

5) Electrical connector

See accessories for pilot valve and coil

Fig. 3: 3/2 directional valve with pilot valve and connection for valve plug connector



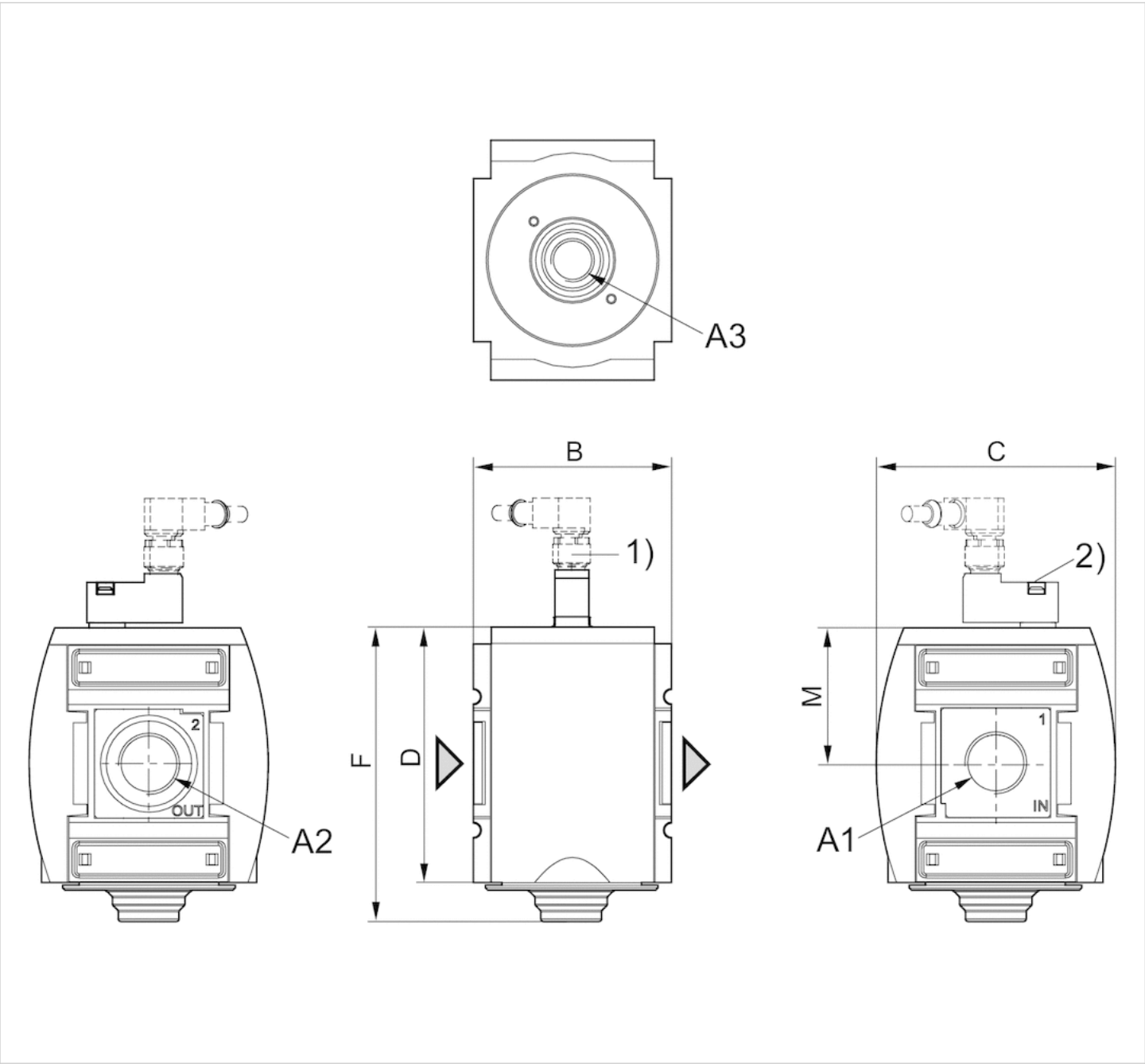
- A1 = input
 A2 = output
 A3 = ventilation port
 1) For valve plug connectors according to ISO 15217 (form C)
 2) Manual override

Dimensions in mm

A1	A2	A3	B	C	D	F	M
G 3/4	G 3/4	G 1/2	85	103	109	125	58
G 1	G 1	G 1/2	85	103	109	125	58

Dimensions

Fig. 4: 3/2-directional valve with pilot valve, push-in fitting M12x1



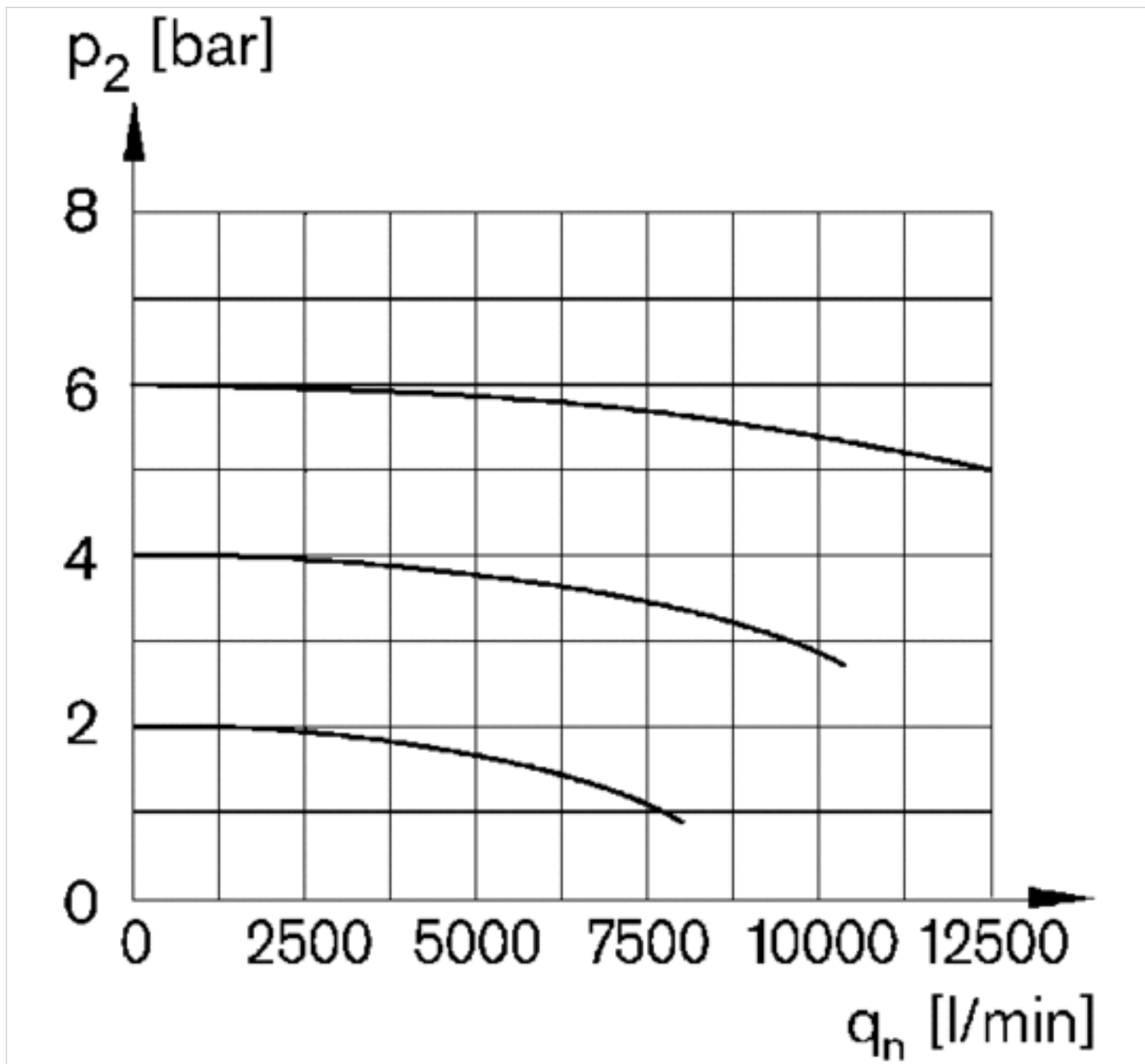
- A1 = input
- A2 = output
- A3 = ventilation port
- 1) plug M12
- 2) Manual override

Dimensions in mm

A1	A2	A3	B	C	D	F	M
G 1	G 1	G 1/2	85	103	109	125	58

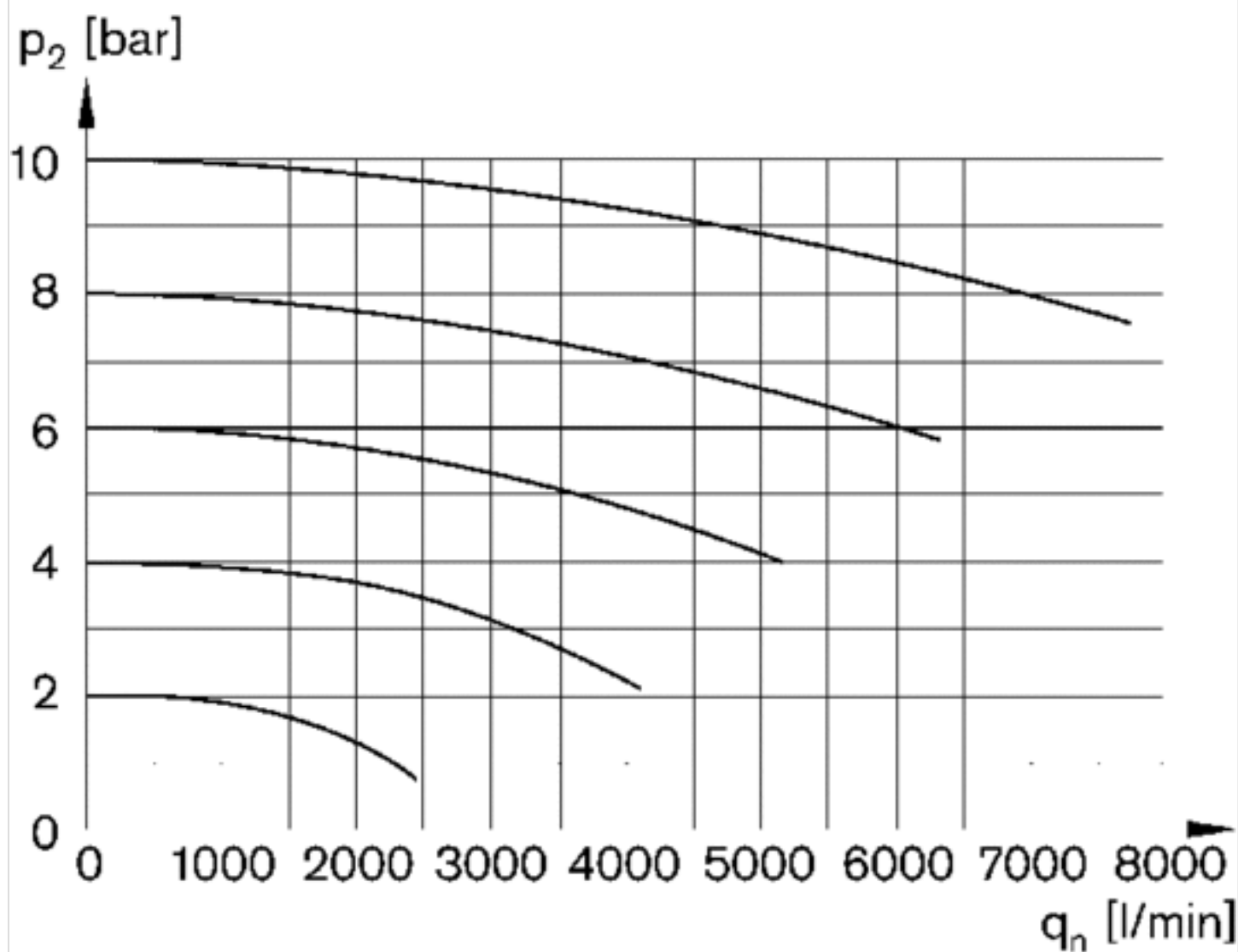
Diagrams

Flow rate characteristic, 1 2



p_2 = secondary pressure
 q_n = nominal flow

Rear exhaust, 2 3

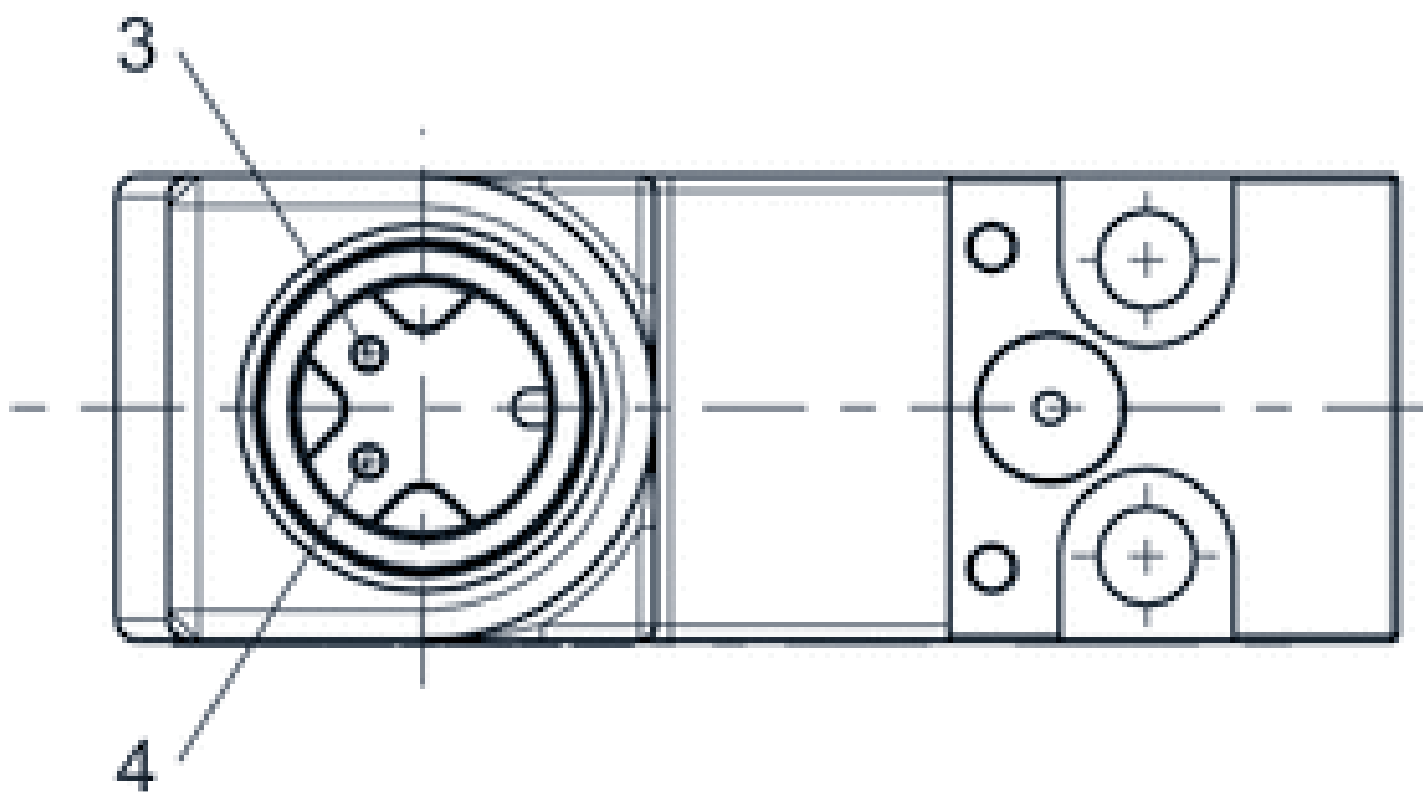


p_2 = secondary pressure

q_n = nominal flow

Pin assignments

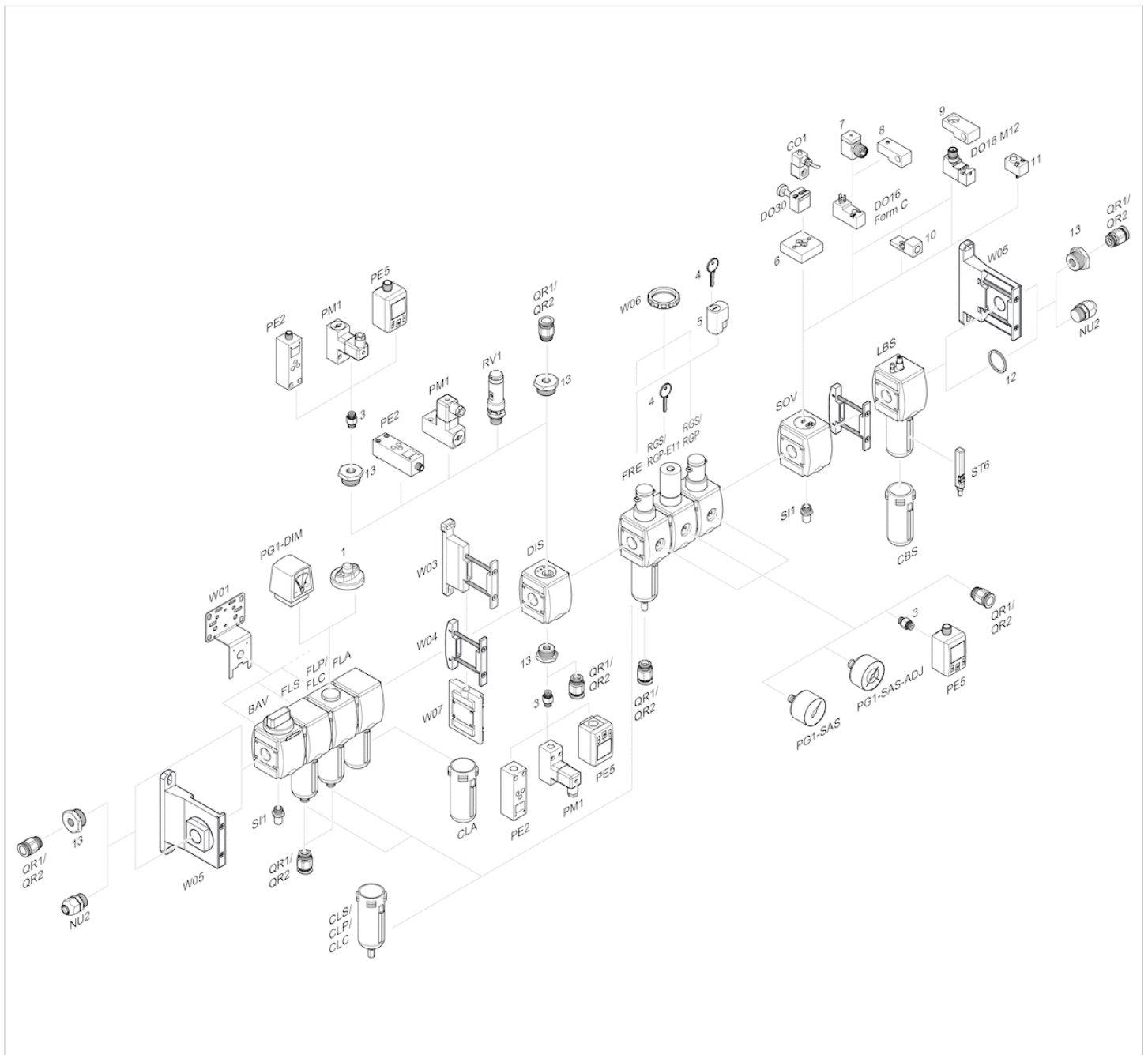
Pin assignment M12x1



3: +/-

4: +/-

Accessories overview



- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring
- 13 = Reducing nipple

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