














Filling unit, electrically operated, Series AS5-SSU

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



Type	Poppet valve, Can be assembled into blocks
Parts	Filling valve, 3/2-directional valve, electrically operated
Nominal flow	8750 l/min
Nominal flow 1 ▶ 2	8750 l/min
Nominal flow 2 ▶ 3	3700 l/min
Working pressure min./max.	2,5 ... 10 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 ... 50 °C
Ambient temperature min./max.	-10 ... 50 °C
Pilot	Internal
Sealing principle	Soft sealing
Max. particle size	25 µm
Protection class acc. to DIN EN 61140 with plug	IP65
Protection class acc. to DIN EN 61140 Without valve plug connector	See table below
Duty cycle	100 %
Weight	See table below

Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
R412009277		—	G 3/4	G 3/4	G 1/2
R412009282		—	G 1	G 1	G 1/2
R412009287		—	G 1	G 1	G 1/2
R412009278			G 3/4	G 3/4	G 1/2
R412009280			G 3/4	G 3/4	G 1/2
R412009378			G 1	G 1	G 1/2
R412009283			G 1	G 1	G 1/2
R412009285			G 1	G 1	G 1/2

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
R412009277	-	-	-
R412009282	-	-	-
R412009287	-	-	-
R412009278	24 V	-	-
R412009280	-	220 V	230 V
R412009378	24 V	-	-
R412009283	24 V	-	-
R412009285	-	220 V	230 V

Part No.	Power consumption	Holding power	Holding power	Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
R412009277	-	-	-	-
R412009282	-	-	-	-
R412009287	-	-	-	-
R412009278	2 W	-	-	-
R412009280	-	1,6 VA	1,4 VA	2,2 VA
R412009378	2 W	-	-	-
R412009283	2 W	-	-	-
R412009285	-	1,6 VA	1,4 VA	2,2 VA

Part No.	Switch-on power	Electrical connection	Connector standard
	AC 60 Hz	Pilot valve	
R412009277	-	-	-
R412009282	-	-	-
R412009287	-	-	-
R412009278	-	Plug, EN 175301-803, form C	ISO 15217
R412009280	1,6 VA	Plug, EN 175301-803, form C	ISO 15217
R412009378	-	Plug, M12x1	-
R412009283	-	Plug, EN 175301-803, form C	ISO 15217
R412009285	1,6 VA	Plug, EN 175301-803, form C	ISO 15217

Part No.	basic valve with electrical connector
R412009277	Basic valve without pilot valve
R412009282	Basic valve without pilot valve

Part No.	basic valve with electrical connector
R412009287	Basic valve without pilot valve, with CNOMO subbase
R412009278	Basic valve with pilot valve
R412009280	Basic valve with pilot valve
R412009378	Basic valve with pilot valve
R412009283	Basic valve with pilot valve
R412009285	Basic valve with pilot valve

Part No.	Reverse polarity protection	Weight	Fig.	
R412009277	-	0,889 kg	Fig. 1	1)
R412009282	-	0,889 kg	Fig. 1	1)
R412009287	-	0,895 kg	Fig. 2	1)
R412009278	Protected against polarity reversal	0,924 kg	Fig. 3	-
R412009280	Protected against polarity reversal	0,924 kg	Fig. 3	-
R412009378	-	0,9 kg	Fig. 4	2)
R412009283	Protected against polarity reversal	0,924 kg	Fig. 3	-
R412009285	Protected against polarity reversal	0,924 kg	Fig. 3	-

Nominal flow Q_n with secondary pressure $p_2 = 6$ bar at $\Delta p = 1$ bar

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

2) With adjustment screw lock

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.

Do not position filling valves or filling units upstream of open consumers, such as nozzles, air barriers, air curtains, since these may prevent through connection of components.

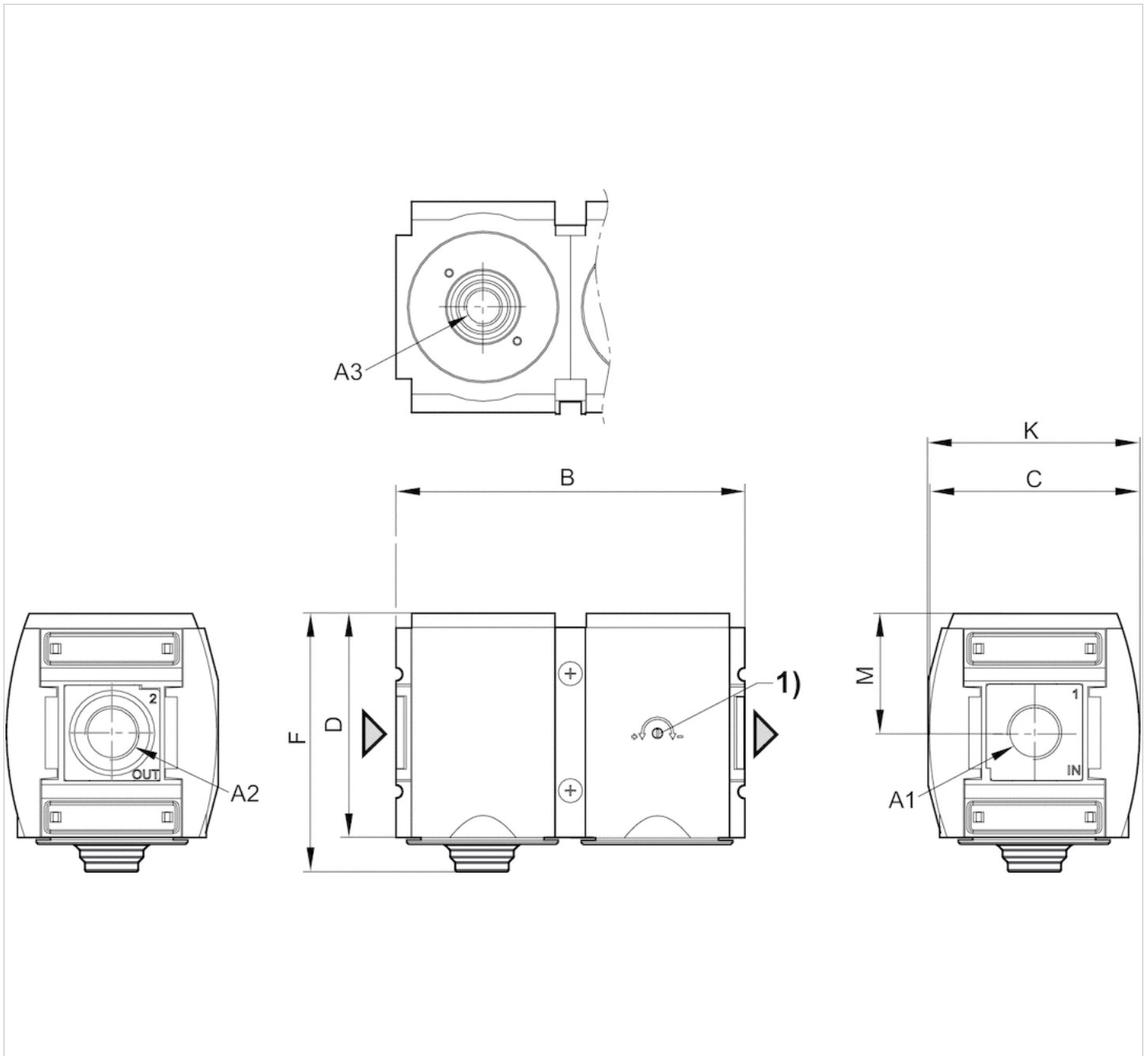
The filling valve builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a recommissioning after a mains pressure failure or avoids emergency OFF switching. This allows dangerous abrupt cylinder motions to be avoided.

Technical information

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

Dimensions

Fig. 1: Filling unit without pilot valve with porting configuration for series DO16



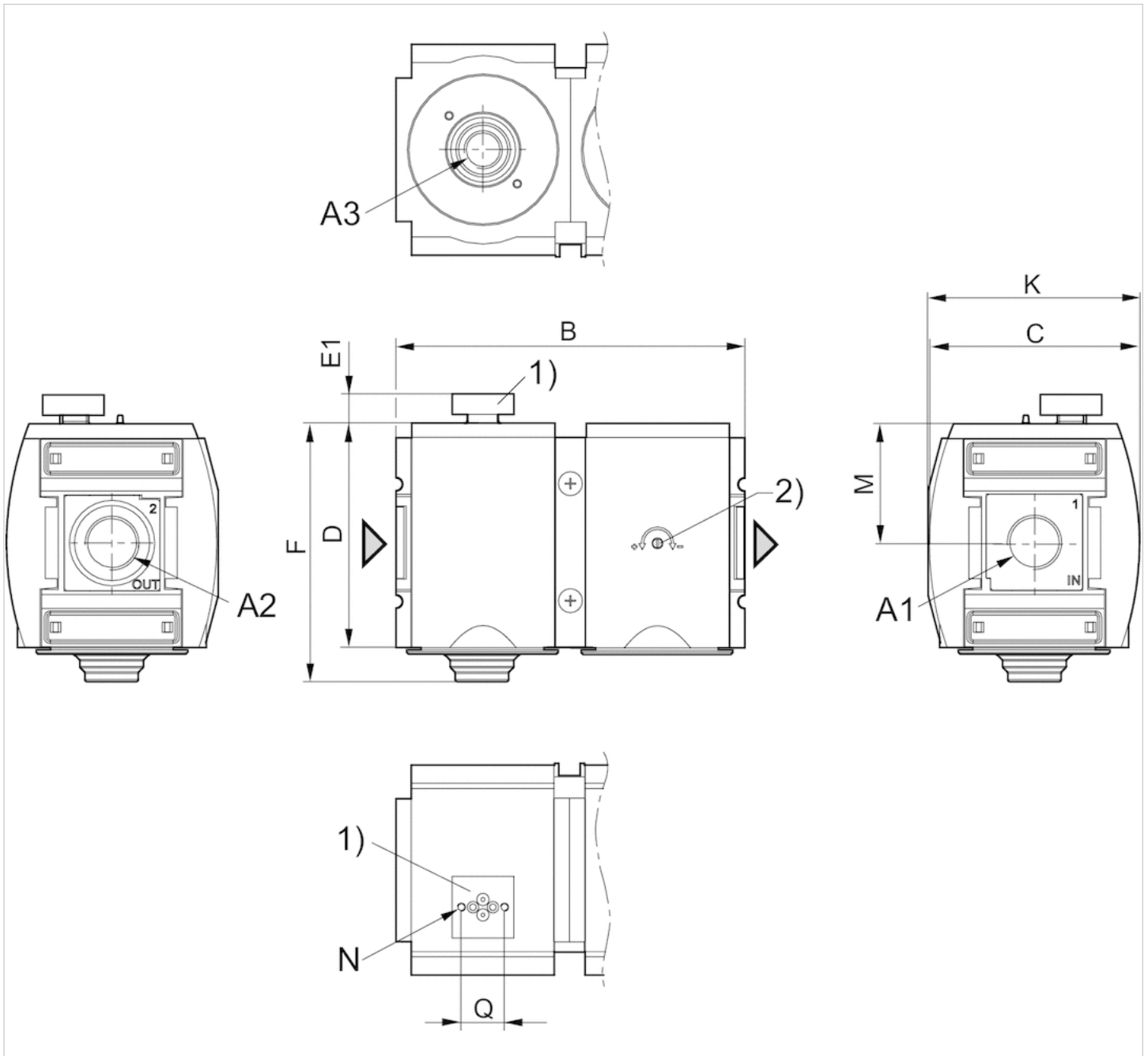
- A1 = input
- A2 = output
- A3 = ventilation port
- 1) Adjustment screw for filling time

Dimensions in mm

A2	A3	B	C	D	F	K	M
G 3/4	G 1/2	170	103	109	125	103.5	58
G 1	G 1/2	170	103	109	125	103.5	58

Dimensions

Fig. 2: Filling unit with transition plate for pilot valve series DO30



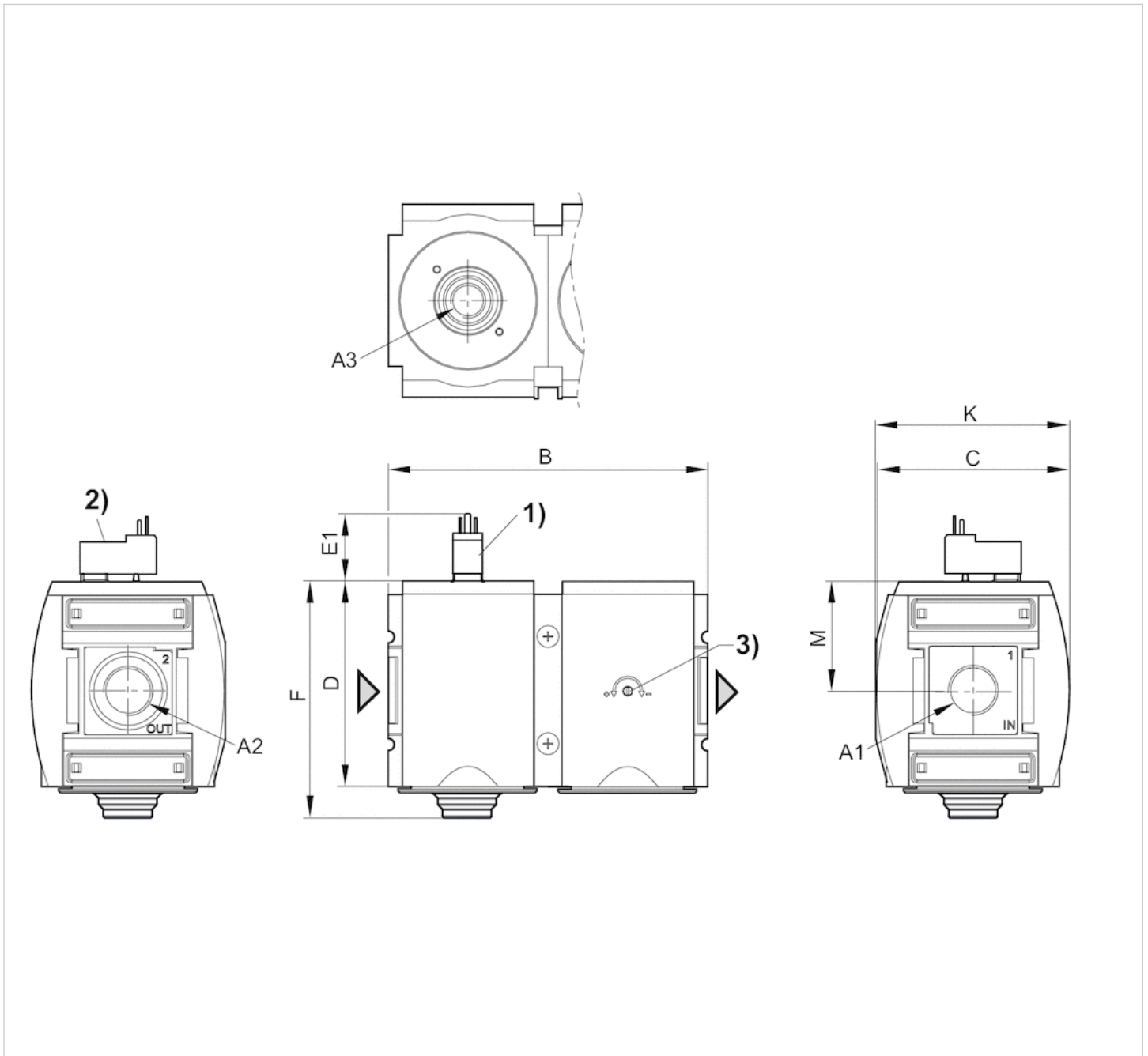
- A1 = input
- A2 = output
- A3 = ventilation port
- 1) Transition plate with CNOMO porting configuration for pilot valve DO30
- 2) Adjustment screw for filling time

Dimensions in mm

A1	A2	A3	B	C	D	E1	F	K	M	N	Q
G 1	G 1	G 1/2	170	103	109	14.2	125	103.5	58	M4	21

Dimensions

Fig. 3: Filling unit with pilot valve and port for electrical connector form C



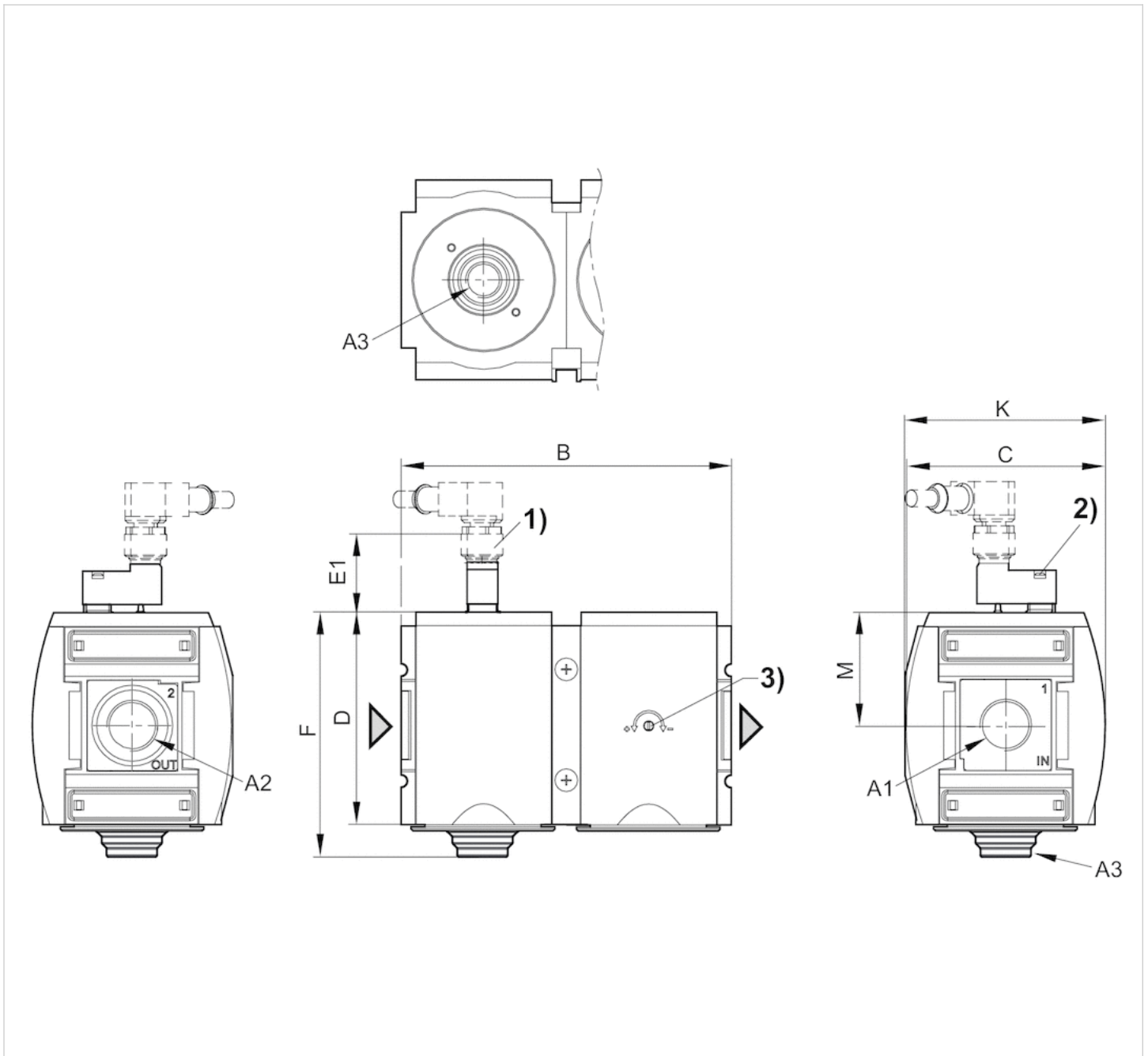
- A1 = input
- A2 = output
- A3 = ventilation port
- 1) Connection for valve plug connector according to ISO 15217 (form C)
- 2) Manual override
- 3) Adjustment screw for filling time

Dimensions in mm

A1	A2	A3	B	C	D	E1	F	K	M
G 3/4	G 3/4	G 1/2	170	103	109	25.1	125	103.5	58
G 1	G 1	G 1/2	170	103	109	25.1	125	103.5	58

Dimensions

Fig. 4: Filling unit with pilot valve, push-in fitting M12x1



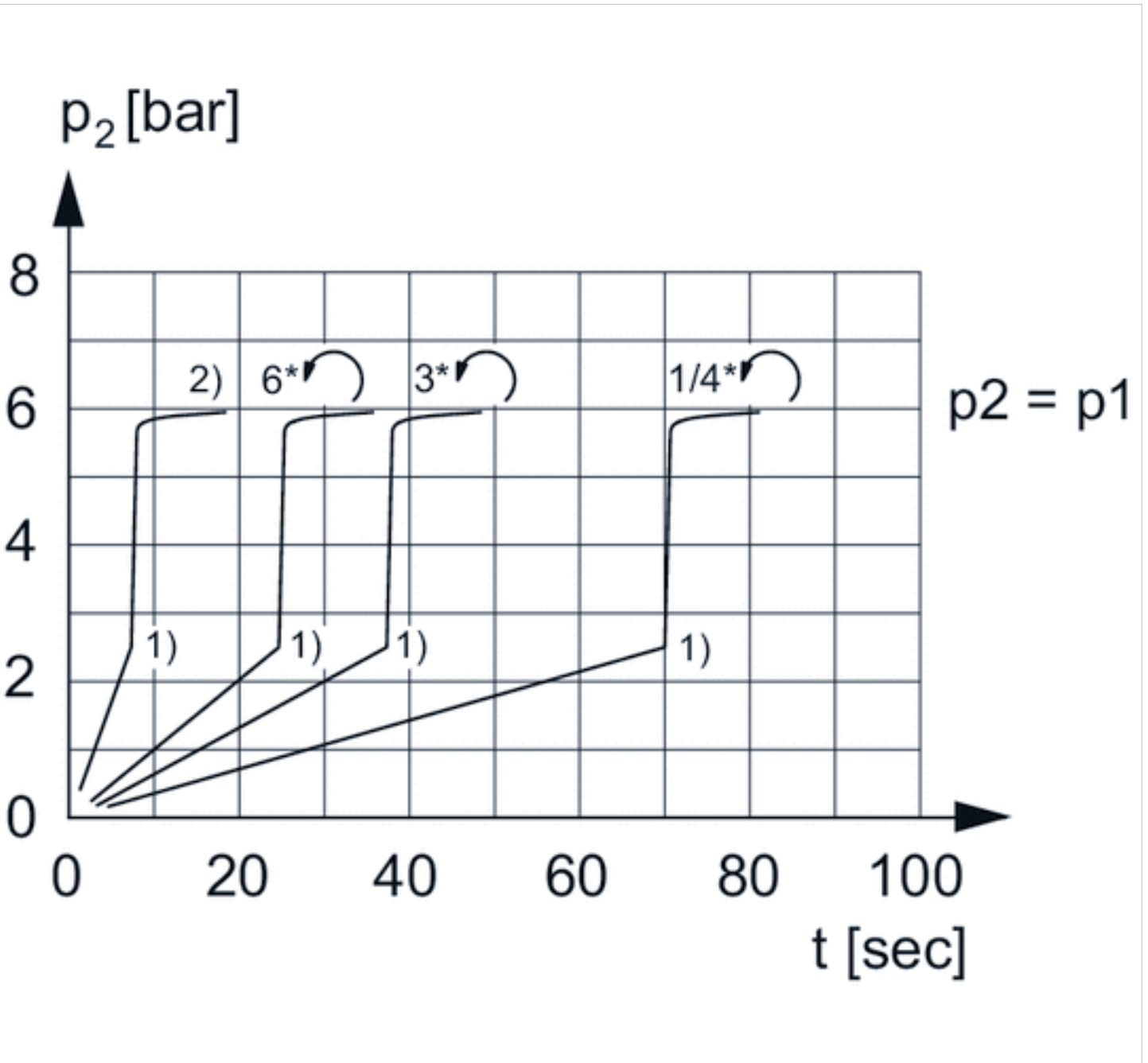
- A1 = input
- A2 = output
- A3 = ventilation port
- 1) plug M12
- 2) Manual override
- 3) Adjustment screw for filling time

Dimensions in mm

A1	A2	A3	B	C	D	E1	F	M
G 1	G 1	G 1/2	170	103	109	39	125	58

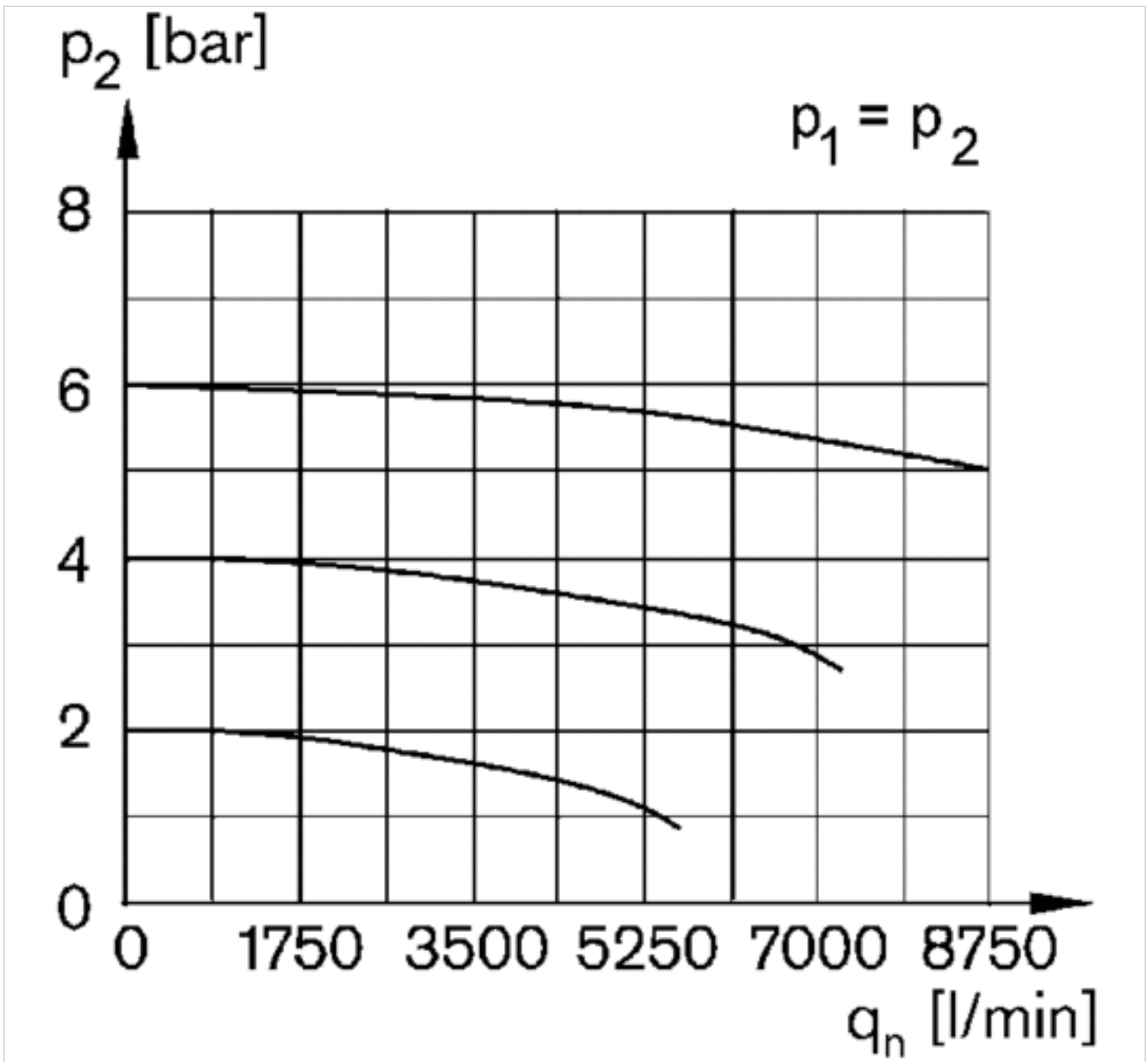
Diagrams

Secondary pressure while filling



- p_1 = working pressure
- p_2 = secondary pressure
- t = filling time, adjustable via adjustment screw (throttle)
- 1) Switching point: adjustable filling time, fixed change-over pressure $\approx 0.5 \times p_1$ (50%)
- 2) Throttle fully opened
- * Adjustment screw rotations

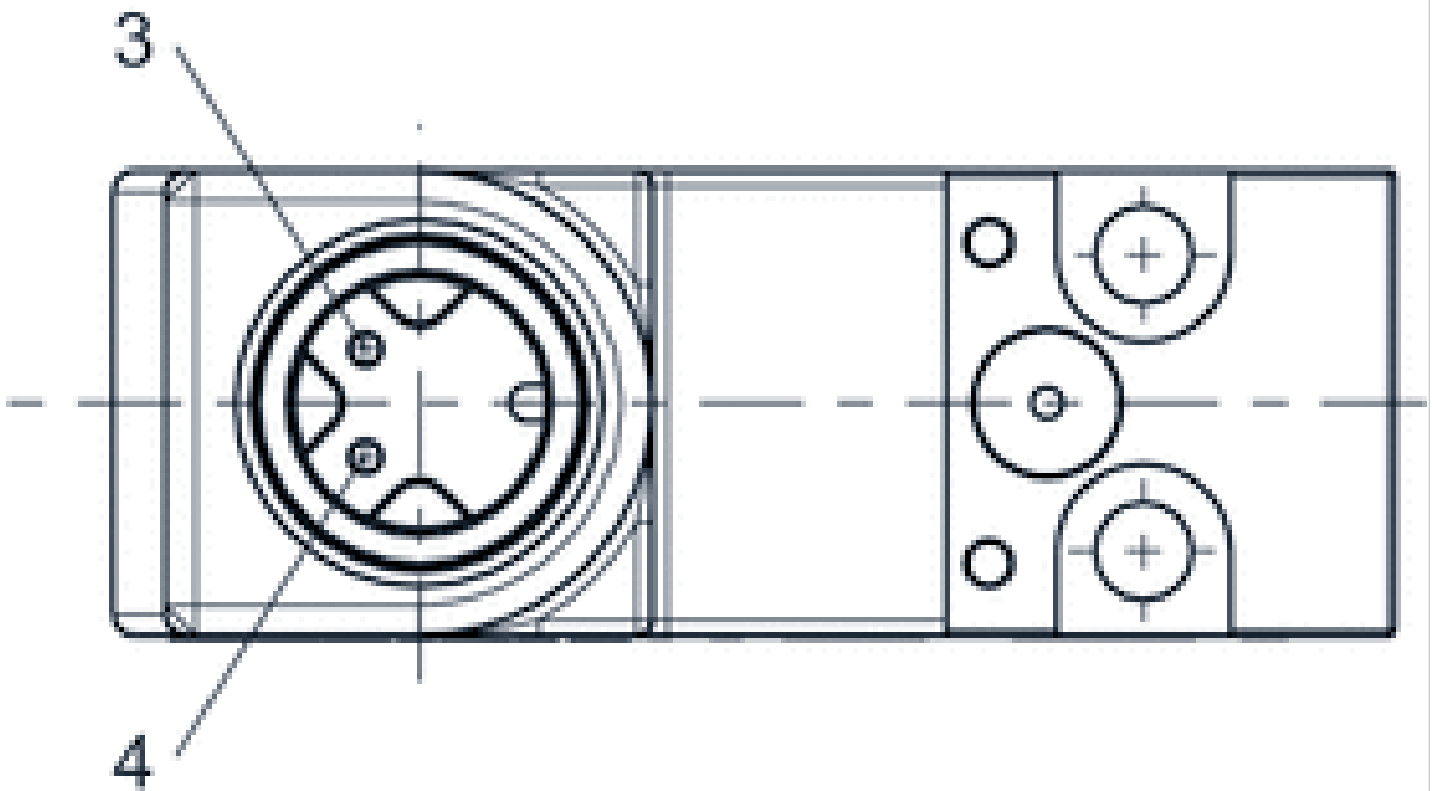
Flow rate characteristic



p_1 = Working pressure
 p_2 = Secondary pressure
 q_n = Nominal flow

Pin assignments

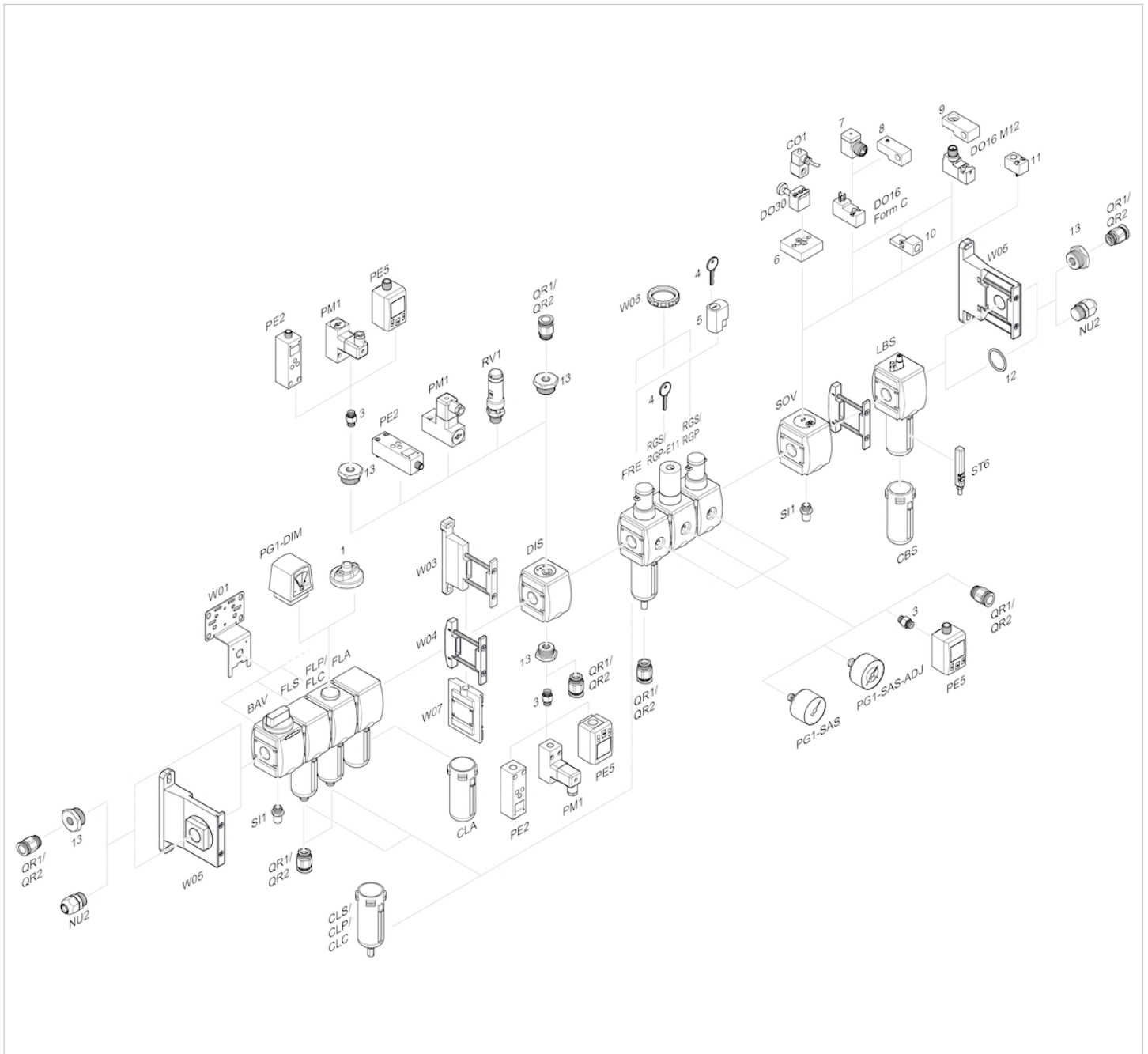
Pin assignment M12x1



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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