

Series AS1

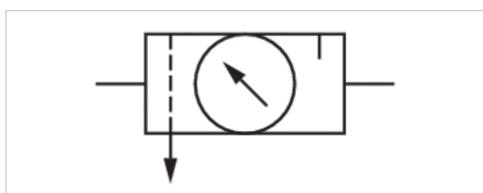


AVENTICS™ Series AS1



Air preparation unit, 2-part, Series AS1-ACD

- G 1/4
- Air supply left
- filter porosity 5 μm
- With integrated pressure gauge



Version	2-part, Can be assembled into blocks
Parts	Filter pressure regulator, Lubricator
Mounting orientation	vertical
Working pressure min./max.	1.5 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Nominal flow Qn	700 l/min
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	0.5 ... 8 bar
Pressure supply	single
Filter reservoir volume	16 cm ³
Filter element	exchangeable
Lubricator reservoir volume	35 cm ³
Type of filling	Manual oil filling
Weight	See table below

Technical data

Part No.	Port	filter porosity	Flow	Condensate drain
			Qn	
R412014672	G 1/4	5 μm	700 l/min	semi-automatic, open without pressure
R412014673	G 1/4	5 μm	700 l/min	fully automatic, open without pressure

Part No.	Pressure gauge	Weight
R412014672	With integrated pressure gauge	0.504 kg
R412014673	With integrated pressure gauge	0.522 kg

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar

Technical information

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information". Also suitable for separation of fluid oil or water due to the design.

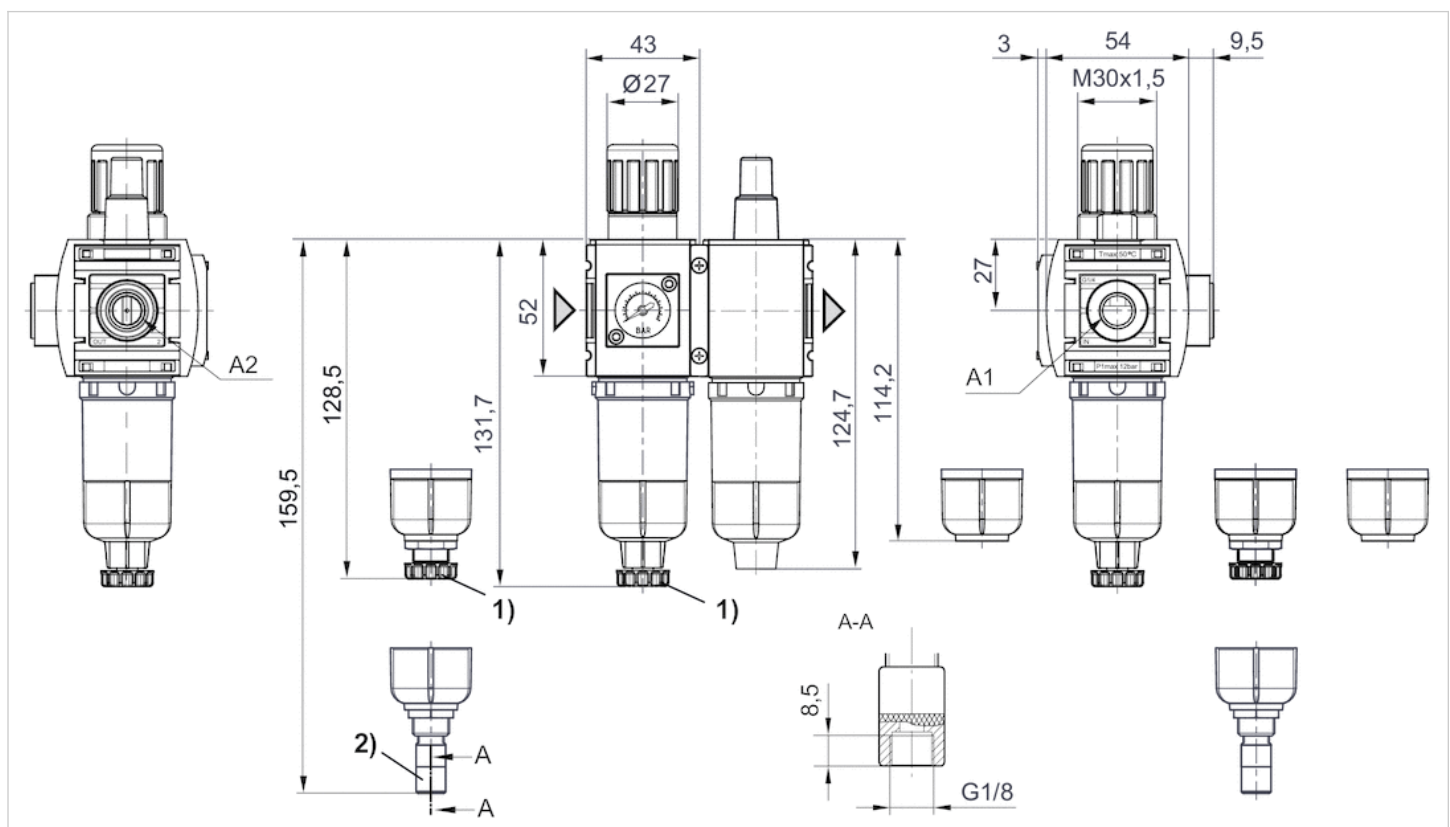
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
Protective guard	Polyamide
Filter insert	Cellpor

Dimensions

Dimensions



A1 = input

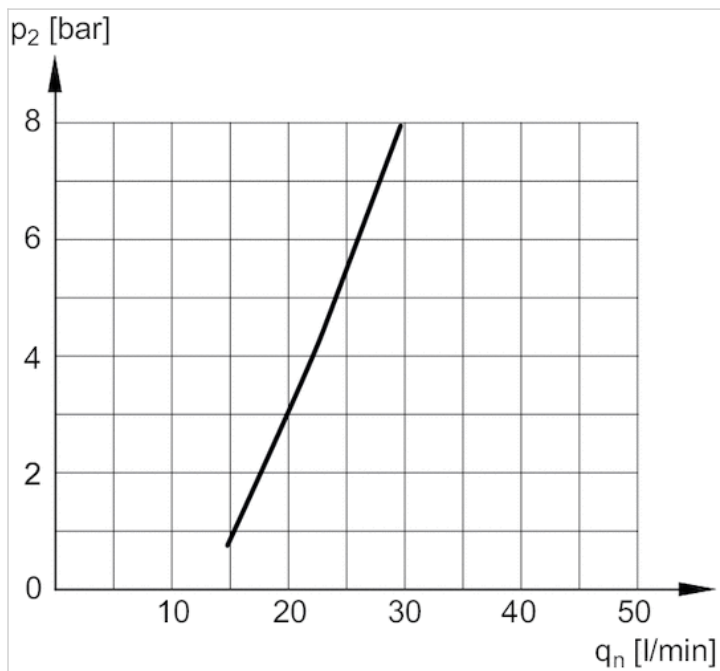
A2 = output

1) Semi-automatic condensate drain

2) Fully automatic condensate drain

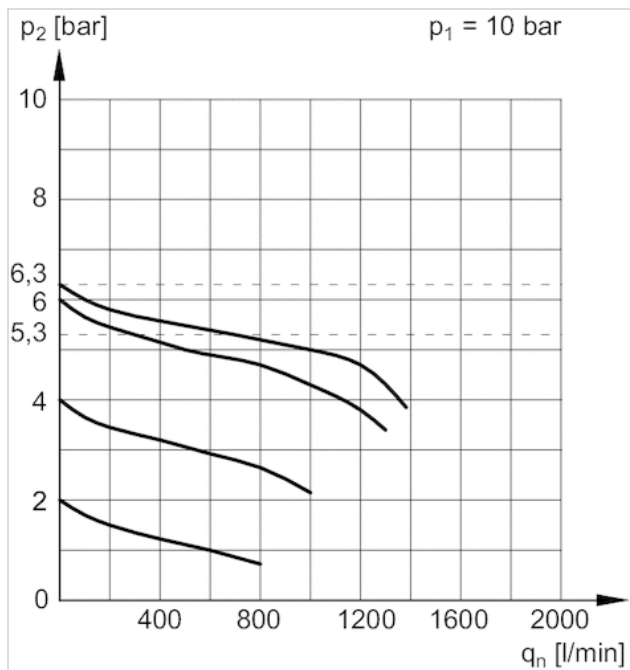
Diagrams

Lubricator activation margin



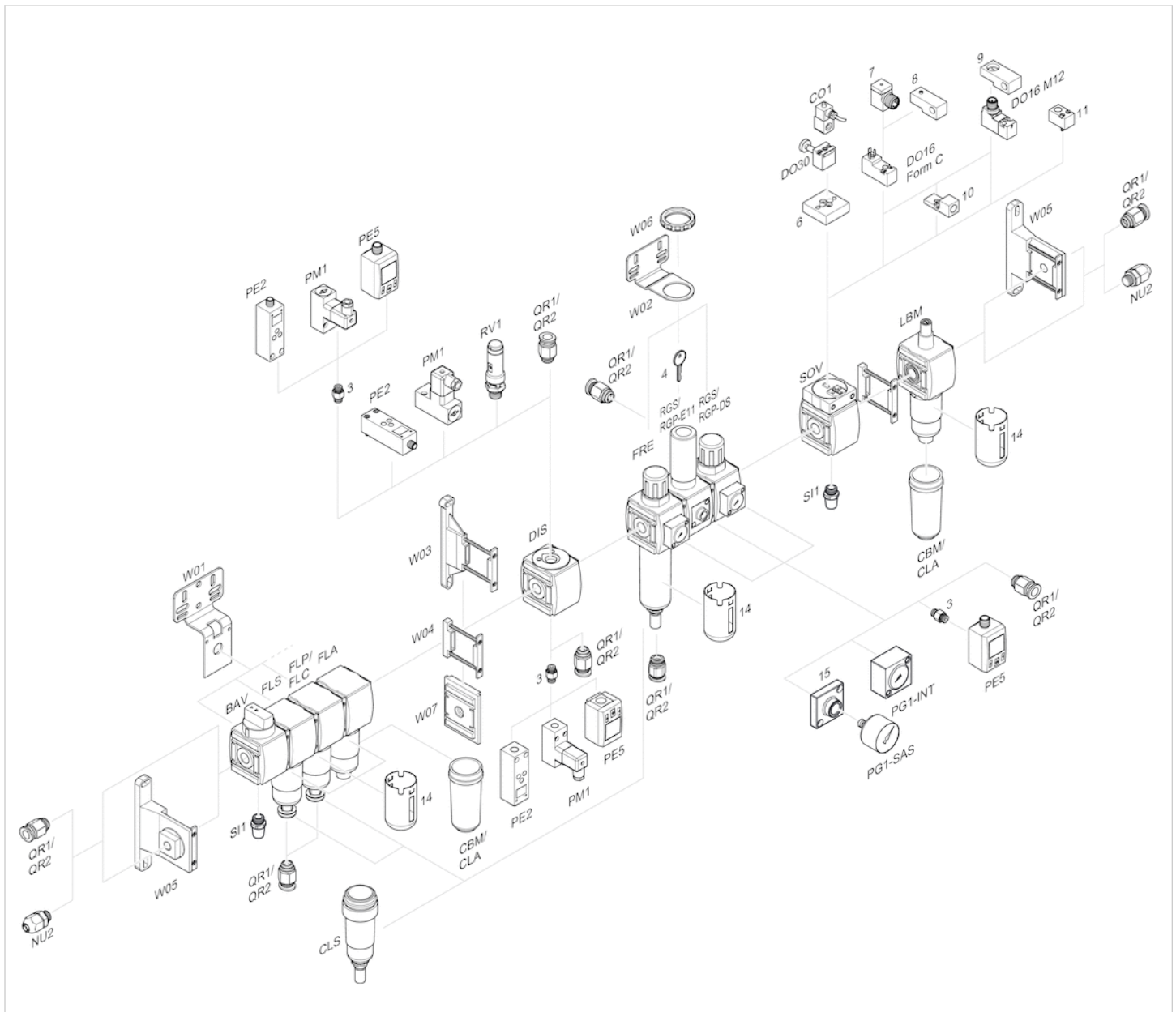
p_2 = secondary pressure
 q_n = nominal flow

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Air preparation unit, 2-part, Series AS1-ACC

- G 1/4
- Air supply left
- filter porosity 5 µm
- With integrated pressure gauge



Version	2-part, Can be assembled into blocks
Parts	Shut-off valve, Filter pressure regulator, Pressure gauge, Silencer, Mountings
Mounting orientation	vertical
Working pressure min./max.	1.5 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	0.5 ... 8 bar
Pressure supply	single
Filter reservoir volume	16 cm ³
Filter element	exchangeable
Weight	See table below

Technical data

Part No.	Port	filter porosity	Condensate drain
R412027663	G 1/4	5 µm	semi-automatic, open without pressure
R412027664	G 1/4	5 µm	fully automatic, open without pressure

Part No.	Pressure gauge	Weight	Fig.
R412027663	With integrated pressure gauge	0.821 kg	Fig. 1
R412027664	With integrated pressure gauge	0.839 kg	Fig. 2

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
 Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
 Also suitable for separation of fluid oil or water due to the design.

Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

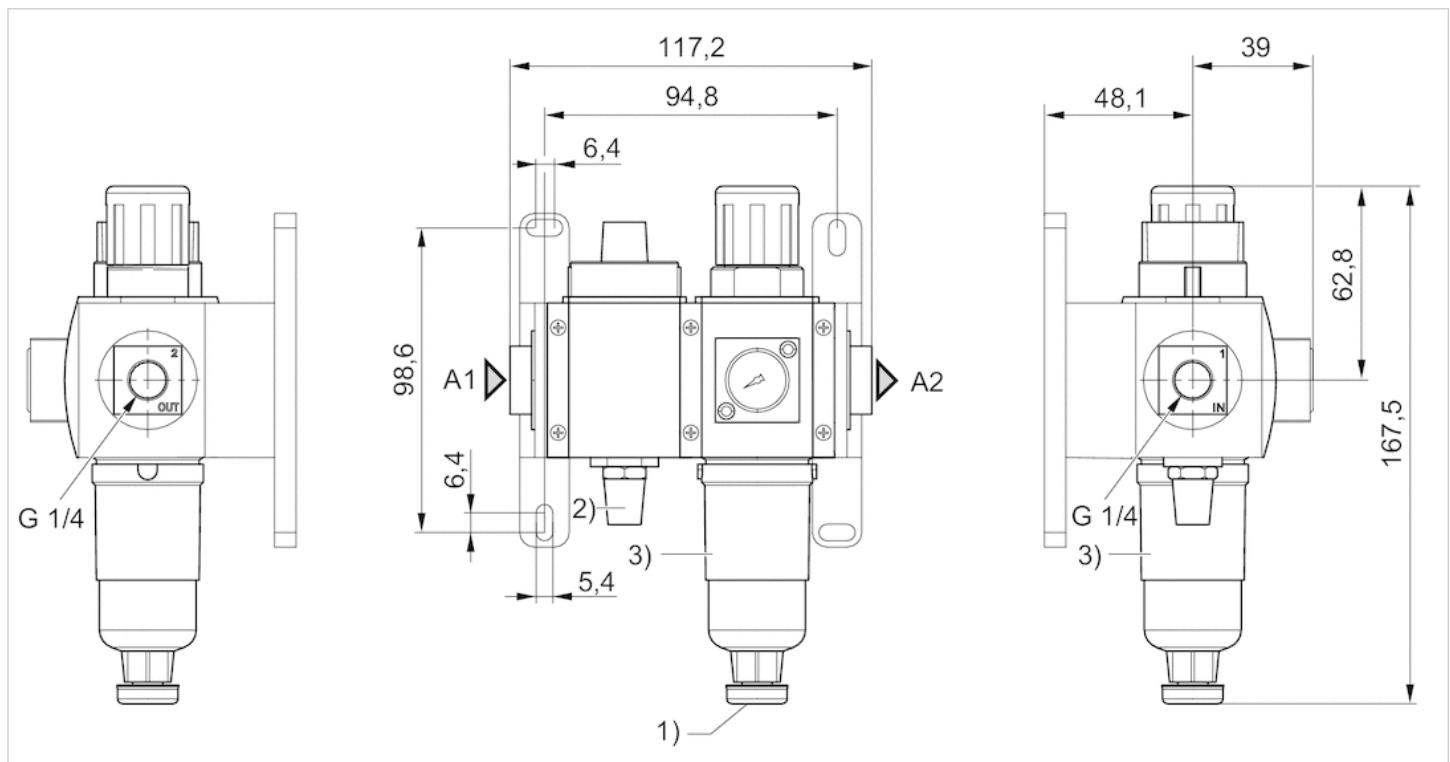
Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Material	
Reservoir	Polycarbonate
Filter insert	Cellpor

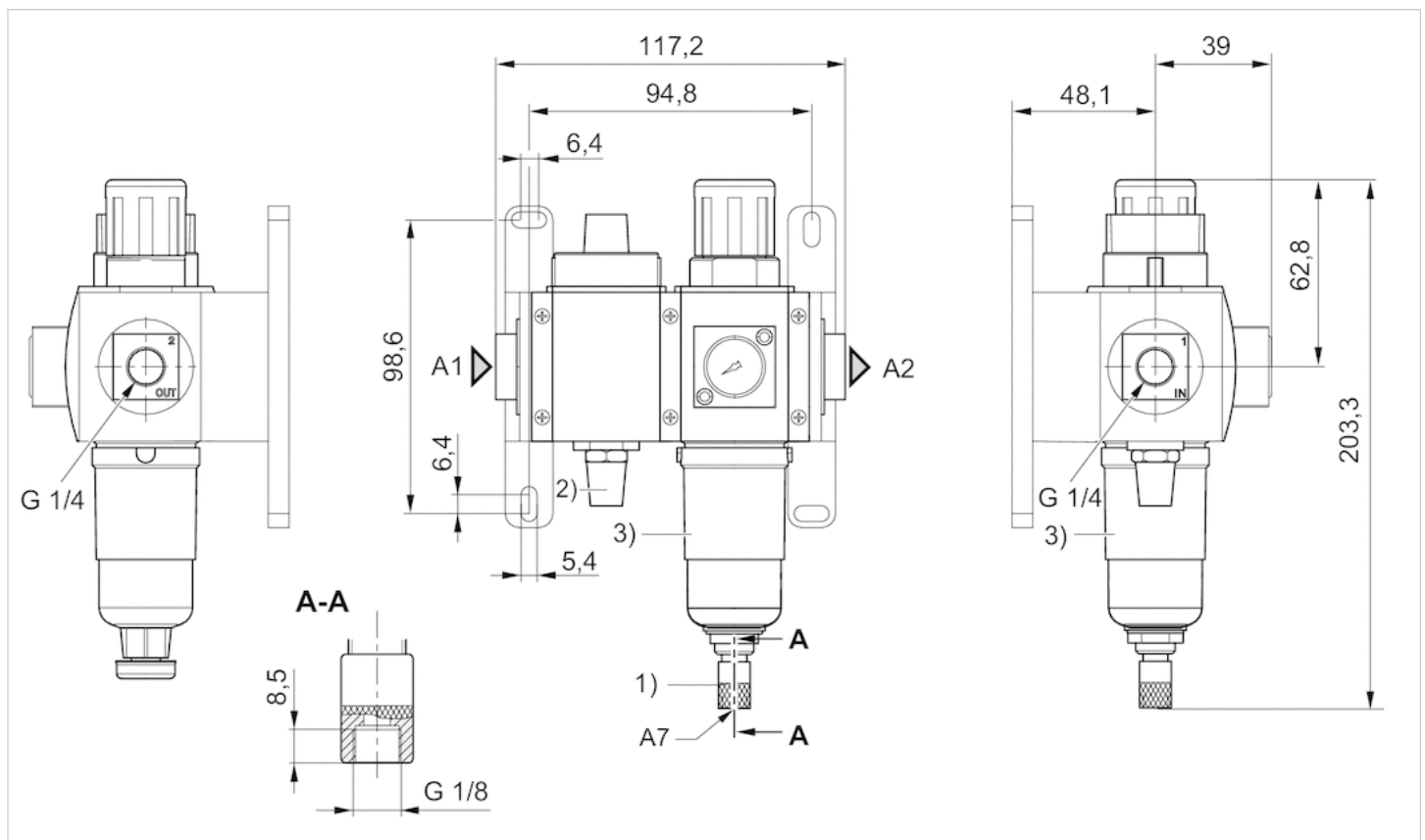
Dimensions

Dimensions in mm, Fig. 1



- A1 = input
- A2 = output
- A7 = condensate drain
- 1) semi-automatic condensate drain
- 2) Silencer
- 3) Reservoir: polycarbonate

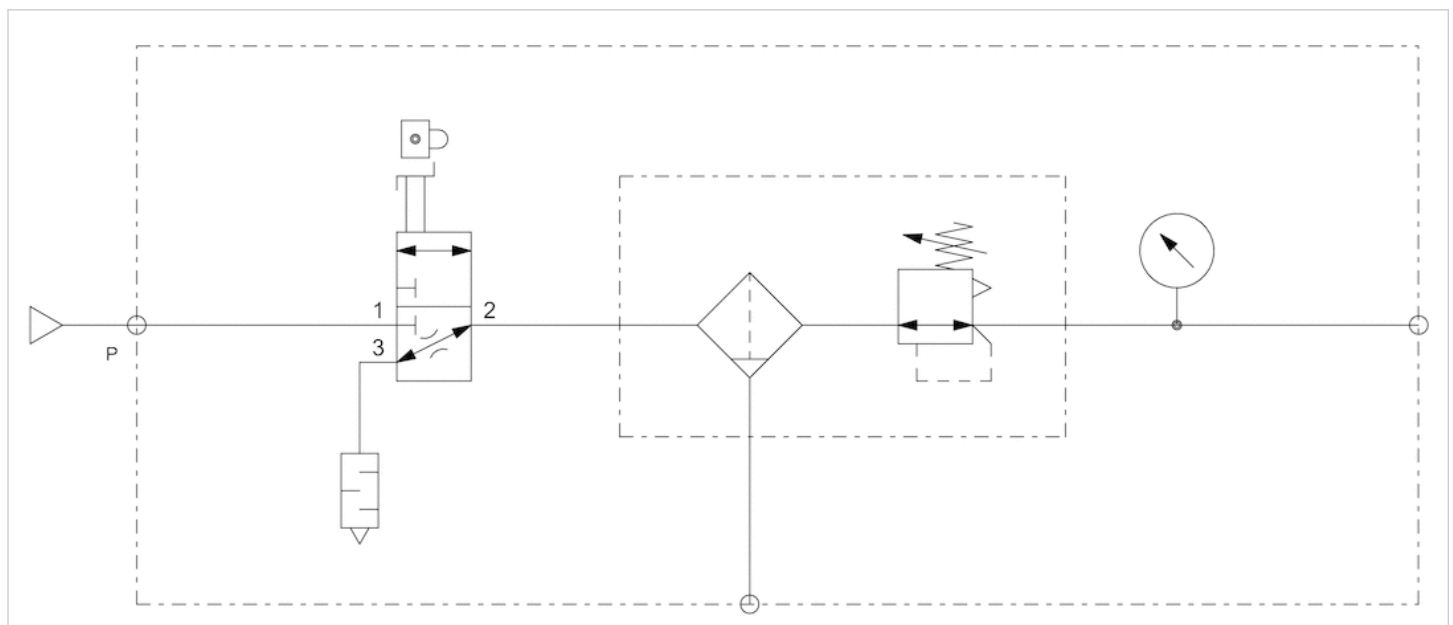
Dimensions in mm, Fig. 2



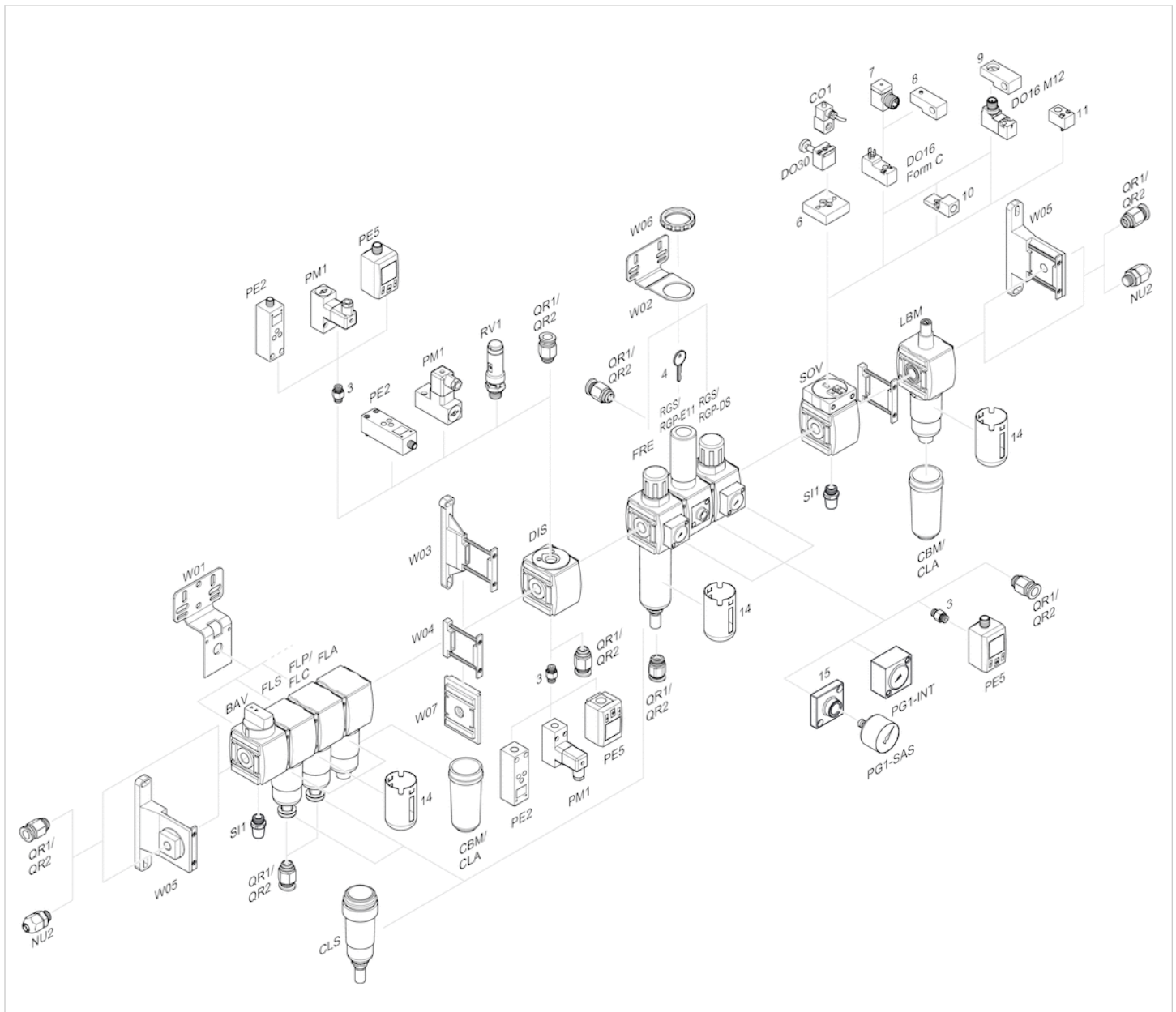
- A1 = input
 A2 = output
 A7 = condensate drain
 1) Fully automatic condensate drain
 2) Silencer
 3) Reservoir: polycarbonate

Circuit diagram

Block diagram



Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Air preparation unit, 2-part, Series AS1-ACC

- G 1/4
- Air supply left
- filter porosity 5 µm
- With integrated pressure gauge



Version	2-part, Can be assembled into blocks
Parts	Shut-off valve, Filter pressure regulator, Pressure gauge, Silencer, Mountings
Mounting orientation	vertical
Working pressure min./max.	1.5 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	0.5 ... 8 bar
Pressure supply	single
Filter reservoir volume	16 cm ³
Filter element	exchangeable
Weight	See table below

Technical data

Part No.	Port	filter porosity	Condensate drain
R412027665	G 1/4	5 µm	semi-automatic, open without pressure
R412027666	G 1/4	5 µm	fully automatic, open without pressure

Part No.	Pressure gauge	Weight	Fig.
R412027665	With integrated pressure gauge	0.488 kg	Fig. 1
R412027666	With integrated pressure gauge	0.506 kg	Fig. 2

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
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Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

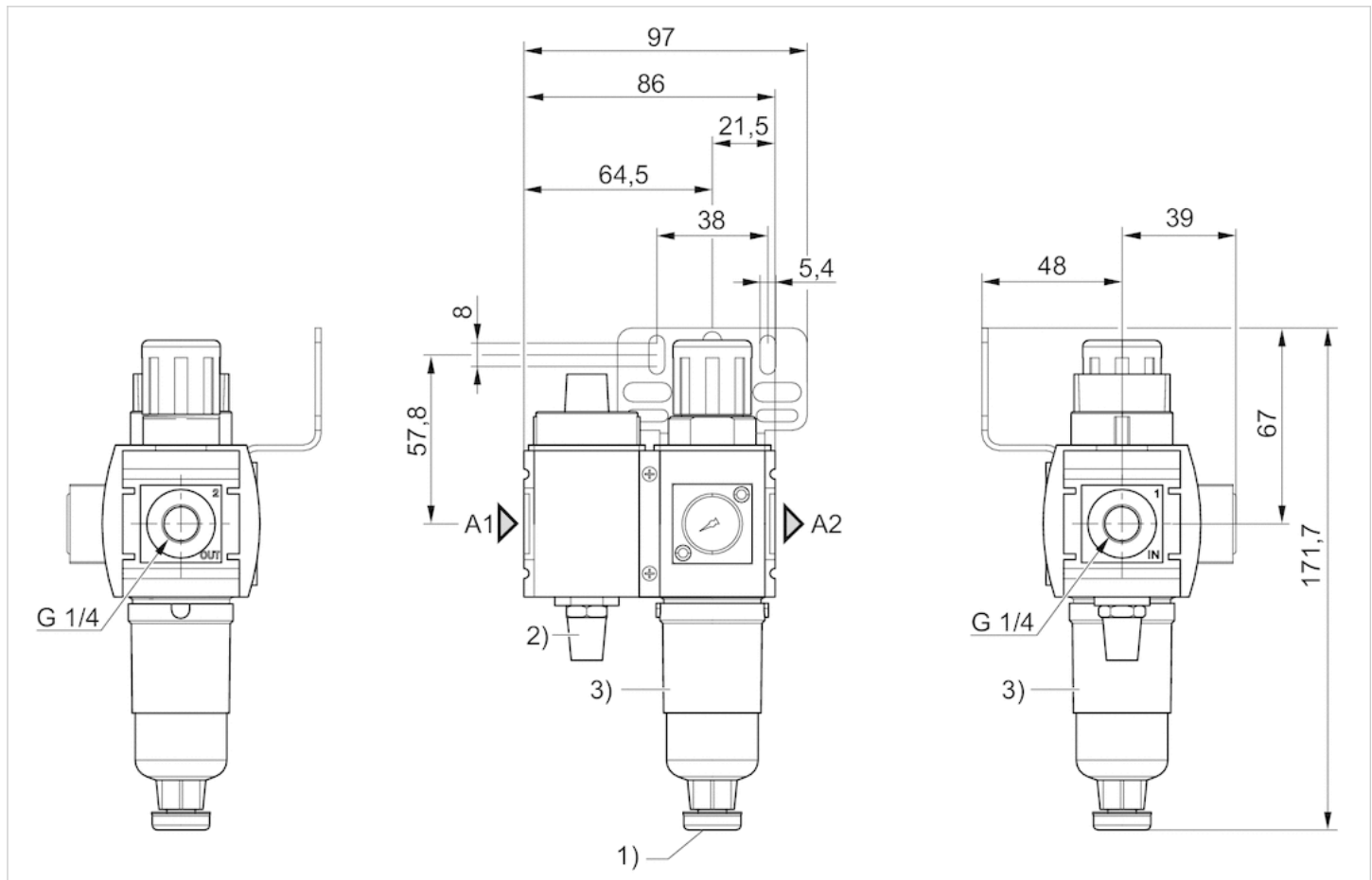
Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Material	
Reservoir	Polycarbonate
Filter insert	Cellpor

Dimensions

Dimensions in mm, Fig. 1



A1 = input

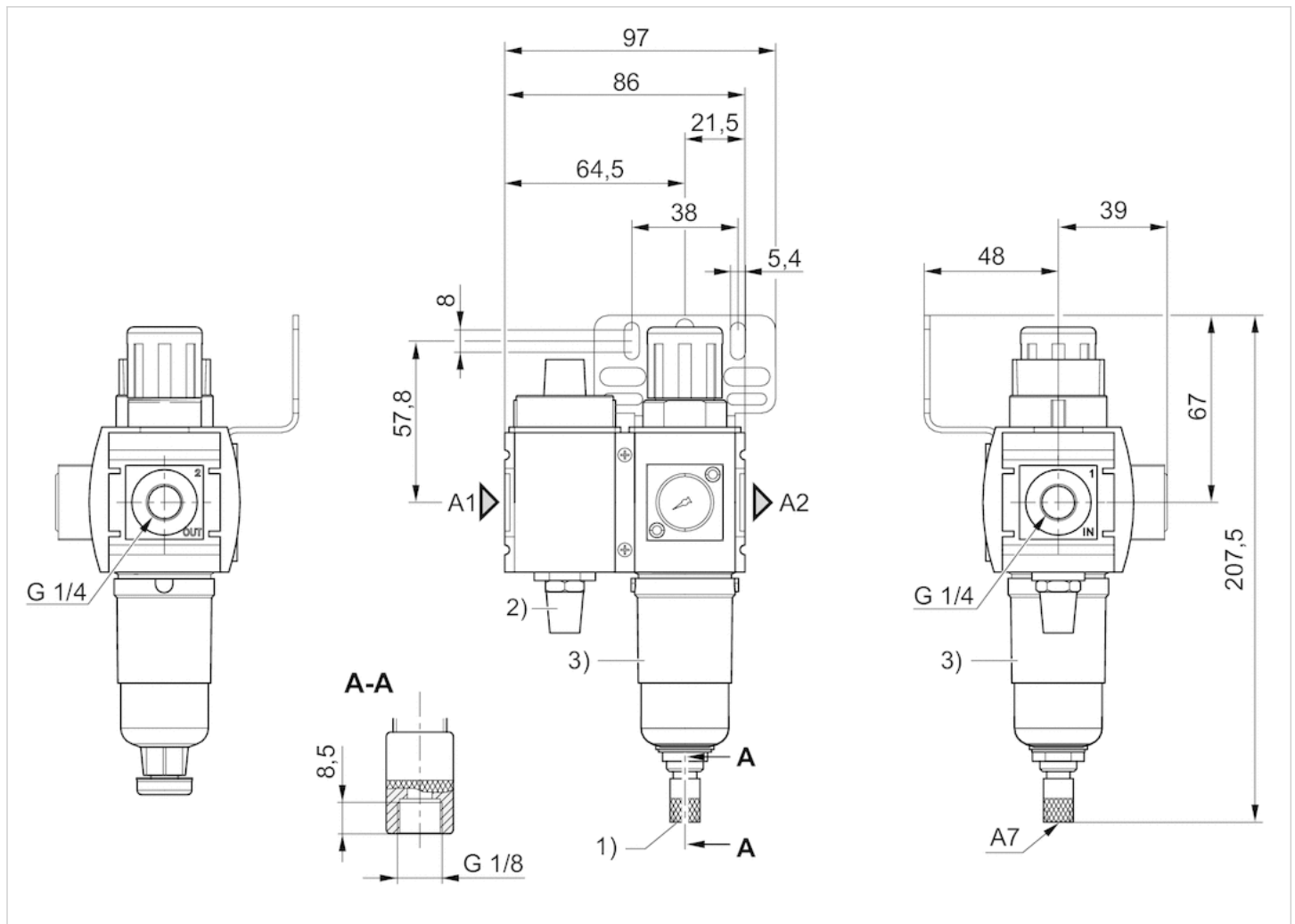
A2 = output

1) semi-automatic condensate drain

2) Silencer

3) Reservoir: polycarbonate

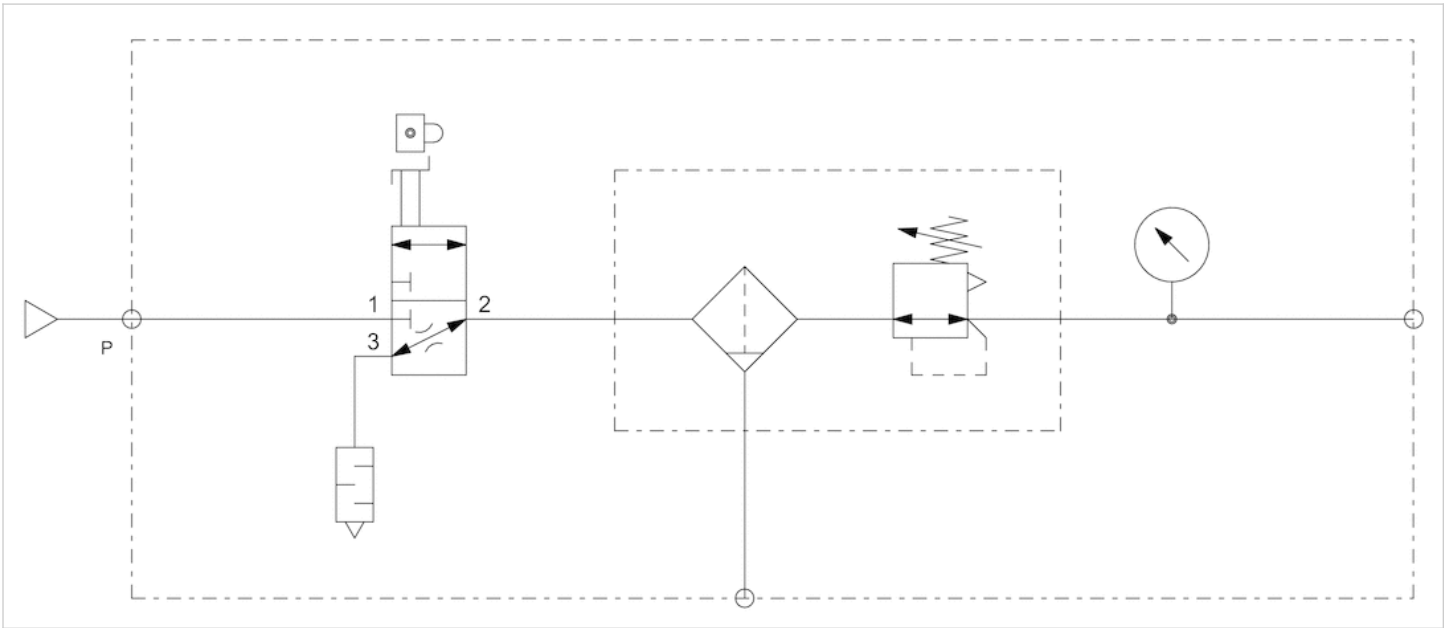
Dimensions in mm, Fig. 2



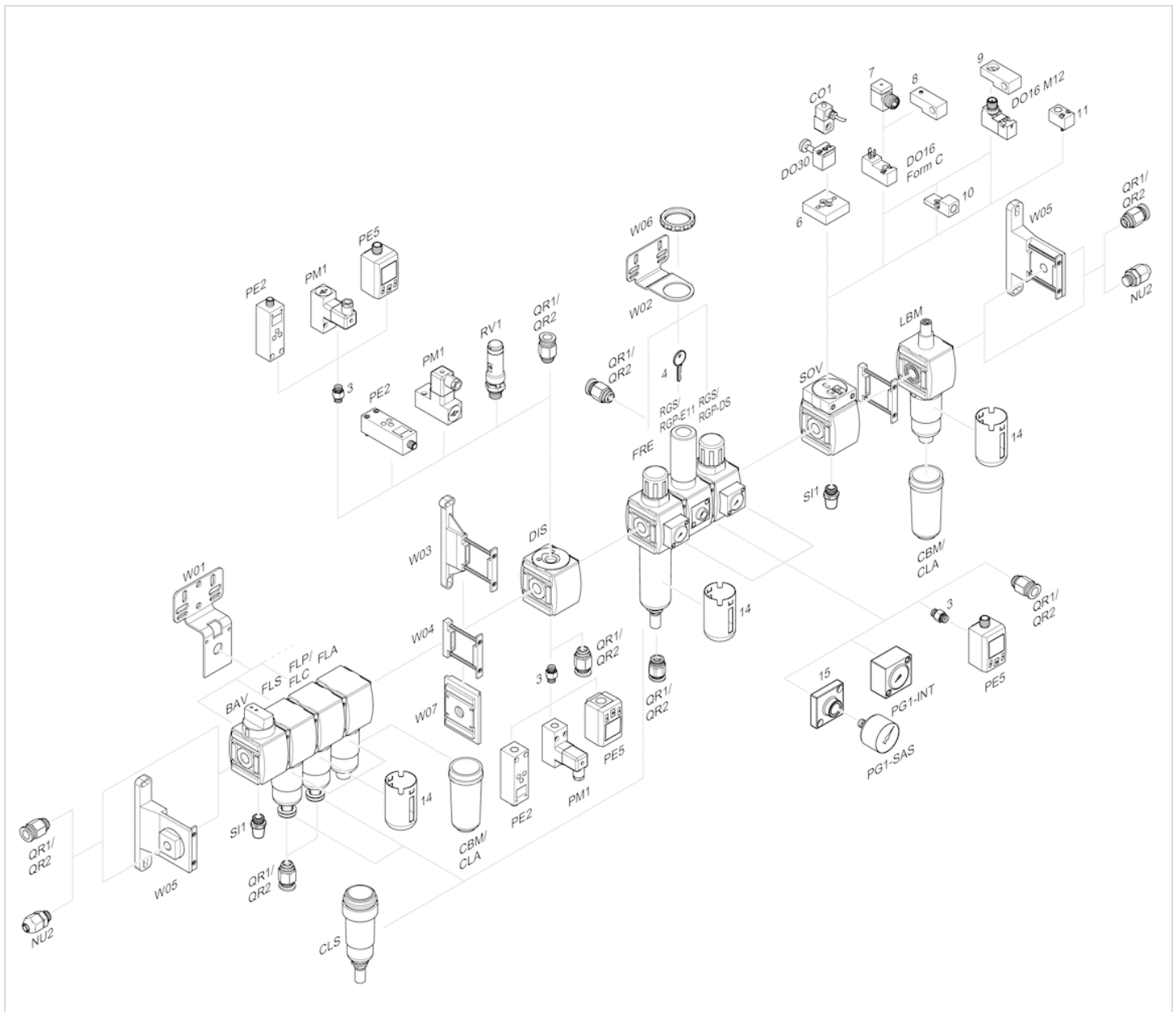
- A1 = input
 A2 = output
 A7 = condensate drain
 1) Fully automatic condensate drain
 2) Silencer
 3) Reservoir: polycarbonate

Circuit diagram

Block diagram



Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Pressure regulator, Series AS1-RGS

- G 1/4
- Air supply left
- Qn = 1000 l/min
- Standard pressure regulator
- Activation Manual



Parts	Pressure regulator
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Regulator type	Diaphragm-type pressure regulator Can be assembled into blocks with relieving air exhaust
Regulator function	
Adjustment range min./max.	See table below
Activation	Manual
Weight	See table below

Technical data

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412014627			G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014628			G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014629			G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar
R412014633		—	G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014634		—	G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014635		—	G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar

Part No.	Max. pressure gauge Ø in blocked state	Pressure gauge	Weight	Fig.
R412014627	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412014628	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412014629	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412014633	40 mm	-	0.206 kg	Fig. 2
R412014634	40 mm	-	0.206 kg	Fig. 2
R412014635	40 mm	-	0.206 kg	Fig. 2

Part No.	
R412014627	-
R412014628	-
R412014629	-
R412014633	1)
R412014634	1)
R412014635	1)

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

1) Order pressure gauge separately

Technical information

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

Relieving exhaust (≤ 0.3 bar over set pressure).

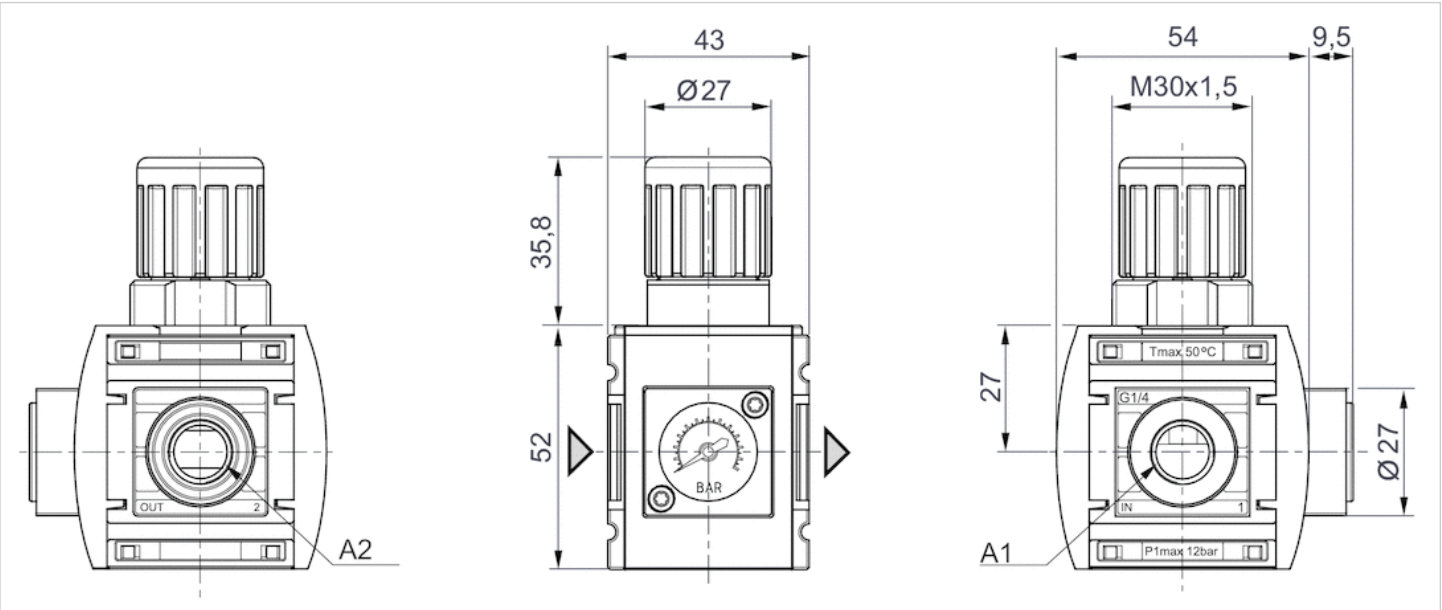
With rear exhaust (> 3 bar).

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

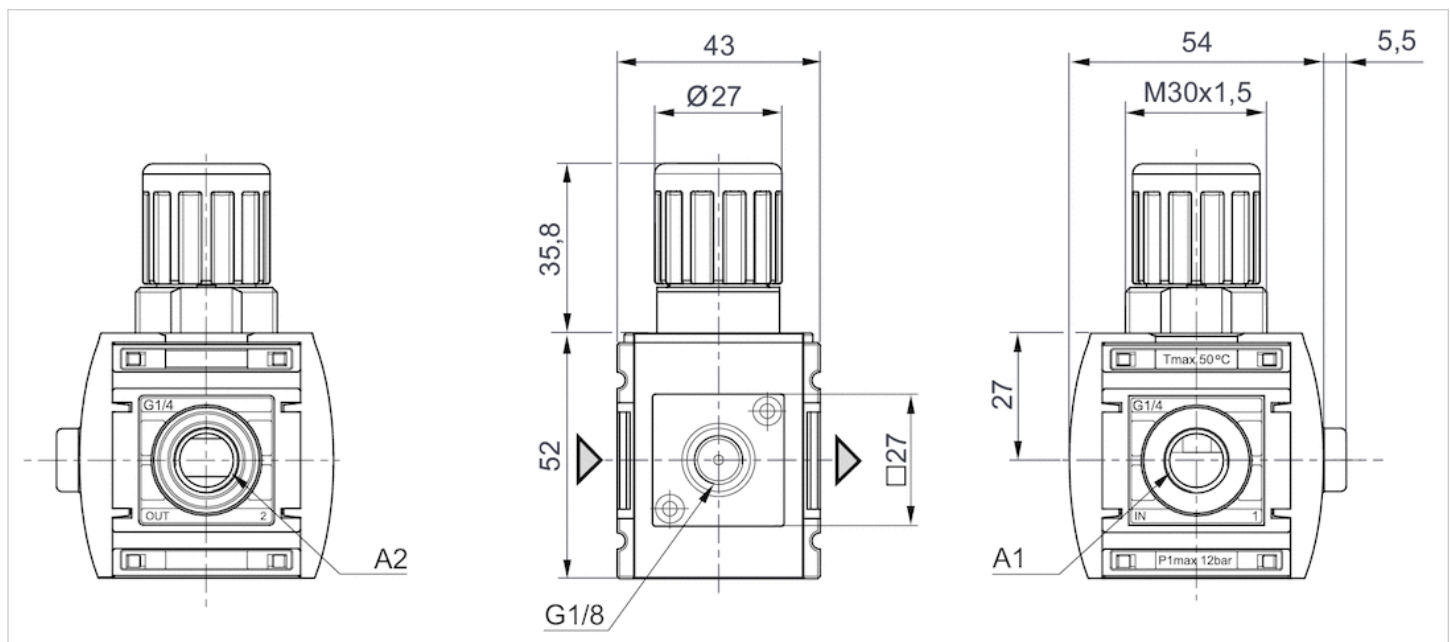
Dimensions, Fig. 1



A1 = input

A2 = output

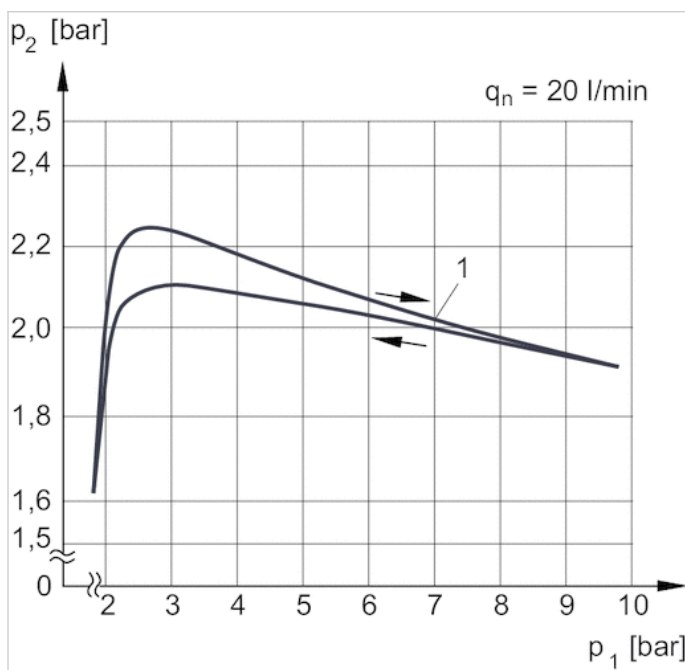
Dimensions, Fig. 2



A1 = input
A2 = output

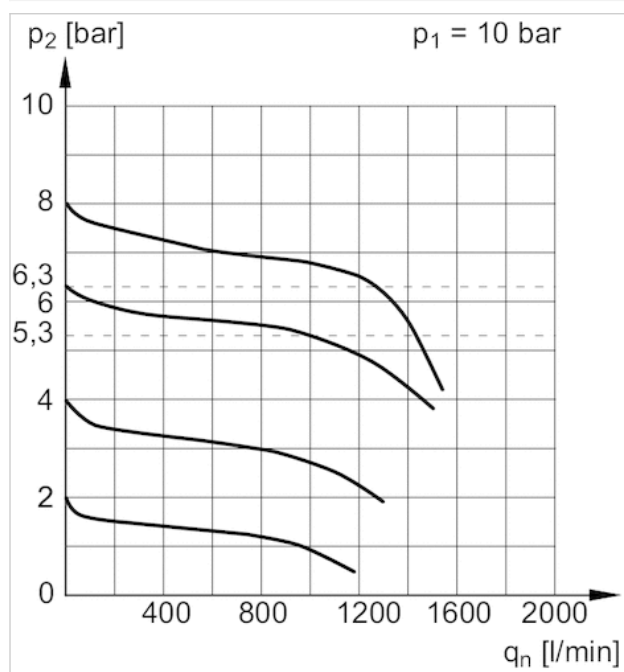
Diagrams

Pressure characteristics curve



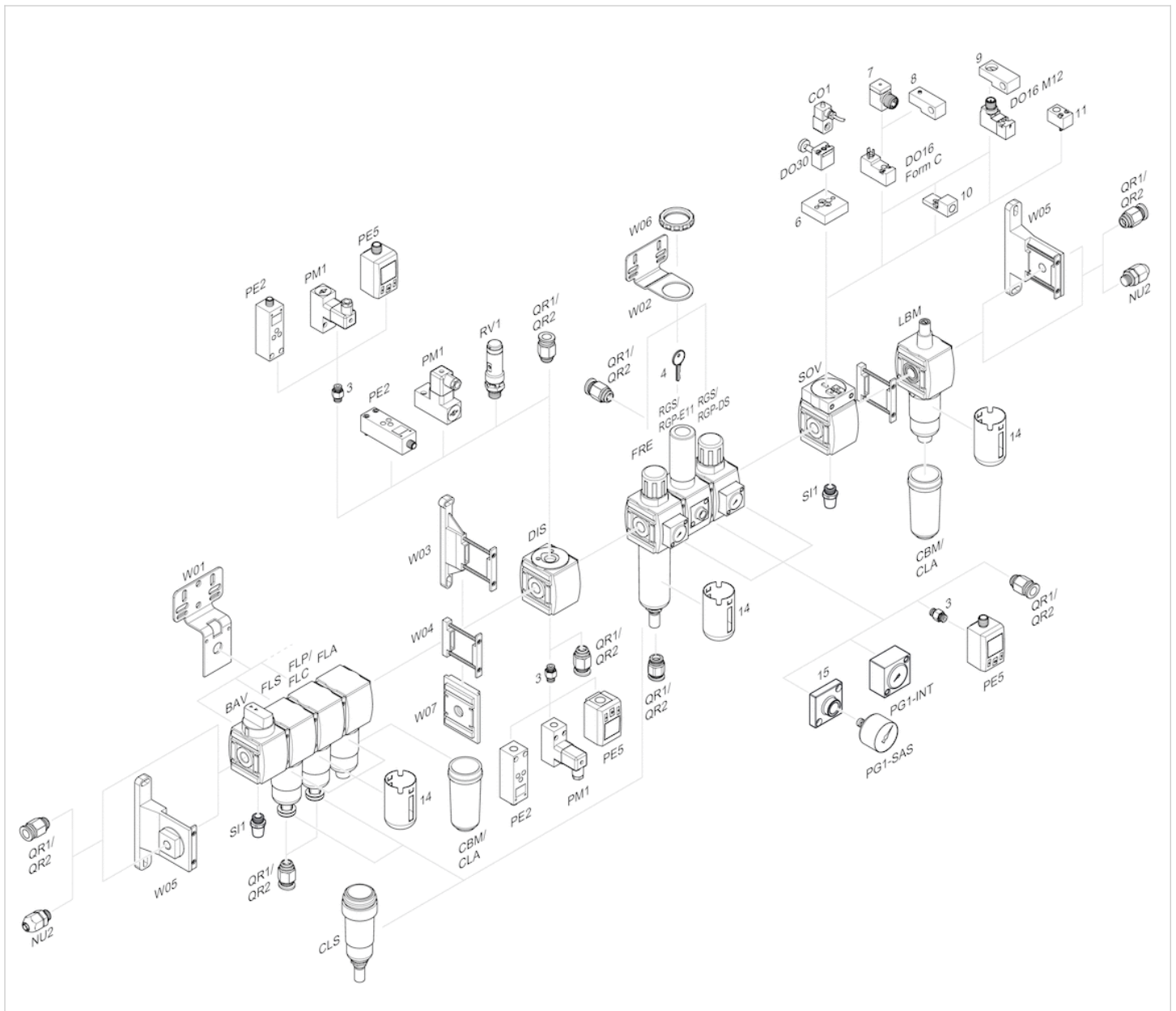
p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow
 1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Pressure regulator, Series AS1-RGS

- G 1/4
- Air supply left
- $Q_n = 1000 \text{ l/min}$
- Standard pressure regulator
- Activation Manual
- with pressure gauge in hand wheel



Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Regulator type

Regulator function

Adjustment range min./max.

Activation

Weight

Pressure regulator

Any

See table below

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

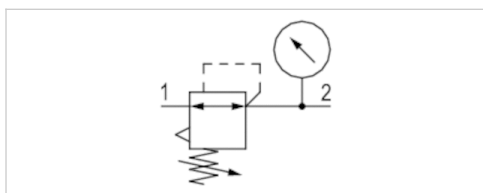
Diaphragm-type pressure regulator Can be assembled into blocks

with relieving air exhaust

See table below

Manual

0.239 kg



Technical data

Part No.		Port	Flow	Working pressure min./max.	Adjustment range min./max.
			Q_n		
R412014639		G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014640		G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014641		G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar

Part No.	Pressure gauge
R412014639	with pressure gauge in hand wheel
R412014640	with pressure gauge in hand wheel
R412014641	with pressure gauge in hand wheel

Panel nut included in scope of delivery, Nominal flow Q_n with secondary pressure $p_2 = 6 \text{ bar}$ at $\Delta p = 1 \text{ bar}$

Technical information

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

Relieving exhaust ($\leq 0.3 \text{ bar}$ over set pressure).

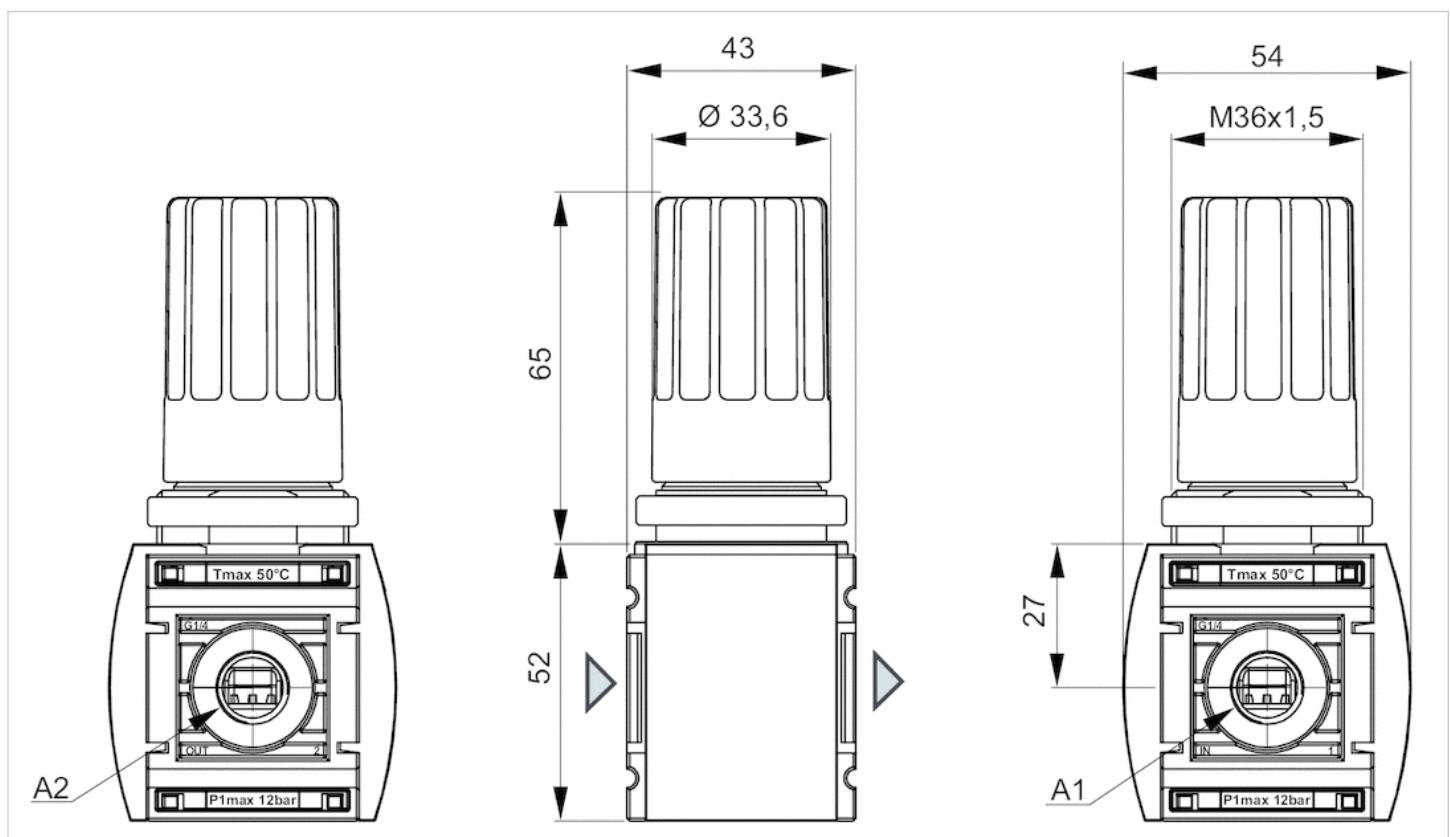
With rear exhaust ($> 3 \text{ bar}$).

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions



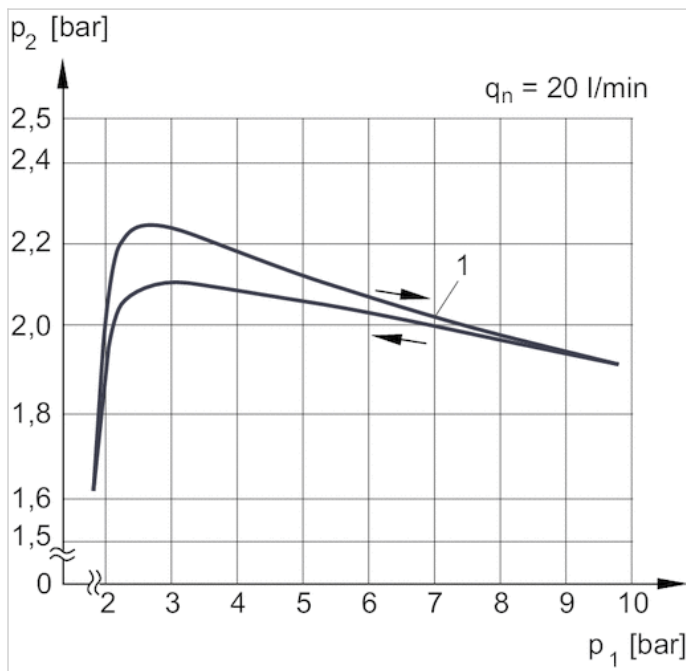
A1 = input

A2 = output

Panel nut included in scope of delivery

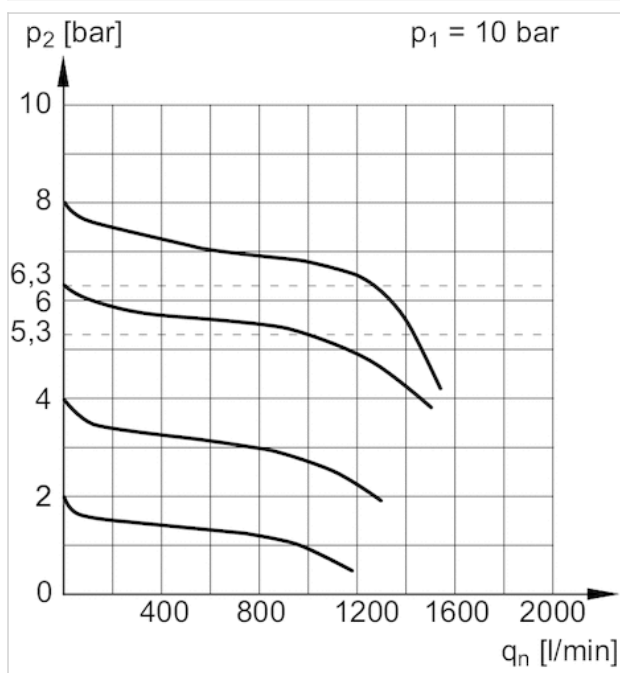
Diagrams

Pressure characteristics curve



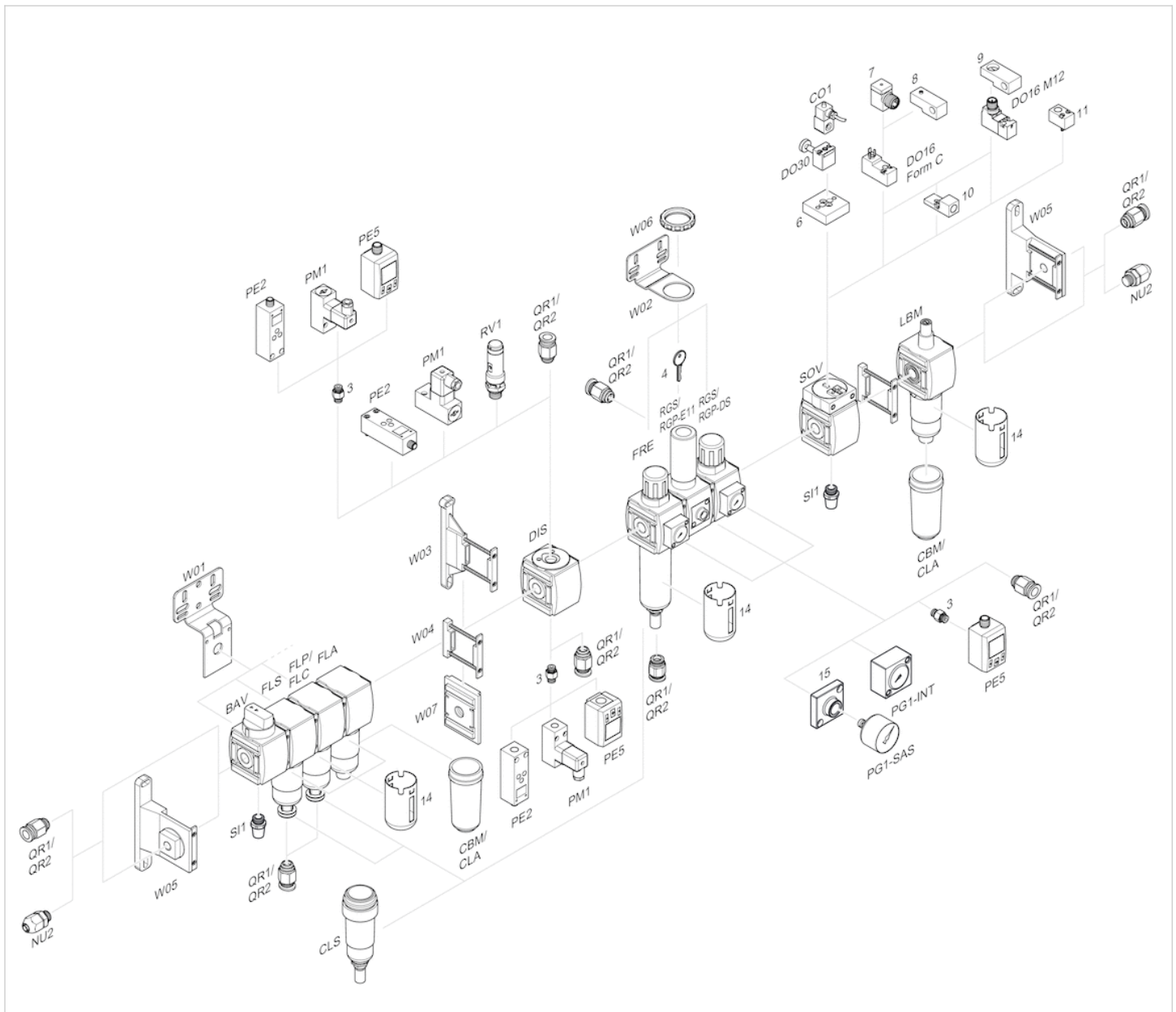
p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow
 1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

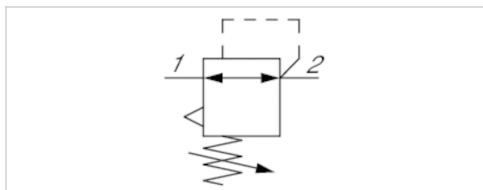
Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Pressure regulator, Series AS1-RGS-...-E11

- G 1/4
- Air supply left
- $Q_n = 1000 \text{ l/min}$
- Standard pressure regulator
- Activation Manual
- lockable
- with E11 locking



Parts	Pressure regulator
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Regulator type	Diaphragm-type pressure regulator Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Lock type	with E11 locking
Activation	Manual
Weight	0.206 kg

Technical data

Part No.	Port	Flow	Working pressure min./max.	Adjustment range min./max.
		Q_n		
R412010648	G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar
R412010649	G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar

Part No.	Max. pressure gauge Ø in blocked state
R412010648	40 mm
R412010649	40 mm

Order pressure gauge separately, Nominal flow Q_n with secondary pressure $p_2 = 6 \text{ bar}$ at $\Delta p = 1 \text{ bar}$

Technical information

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

Relieving exhaust ($\leq 0.3 \text{ bar}$ over set pressure).

With rear exhaust ($> 3 \text{ bar}$).

The E11 locking is delivered without a key (see accessories for keys).

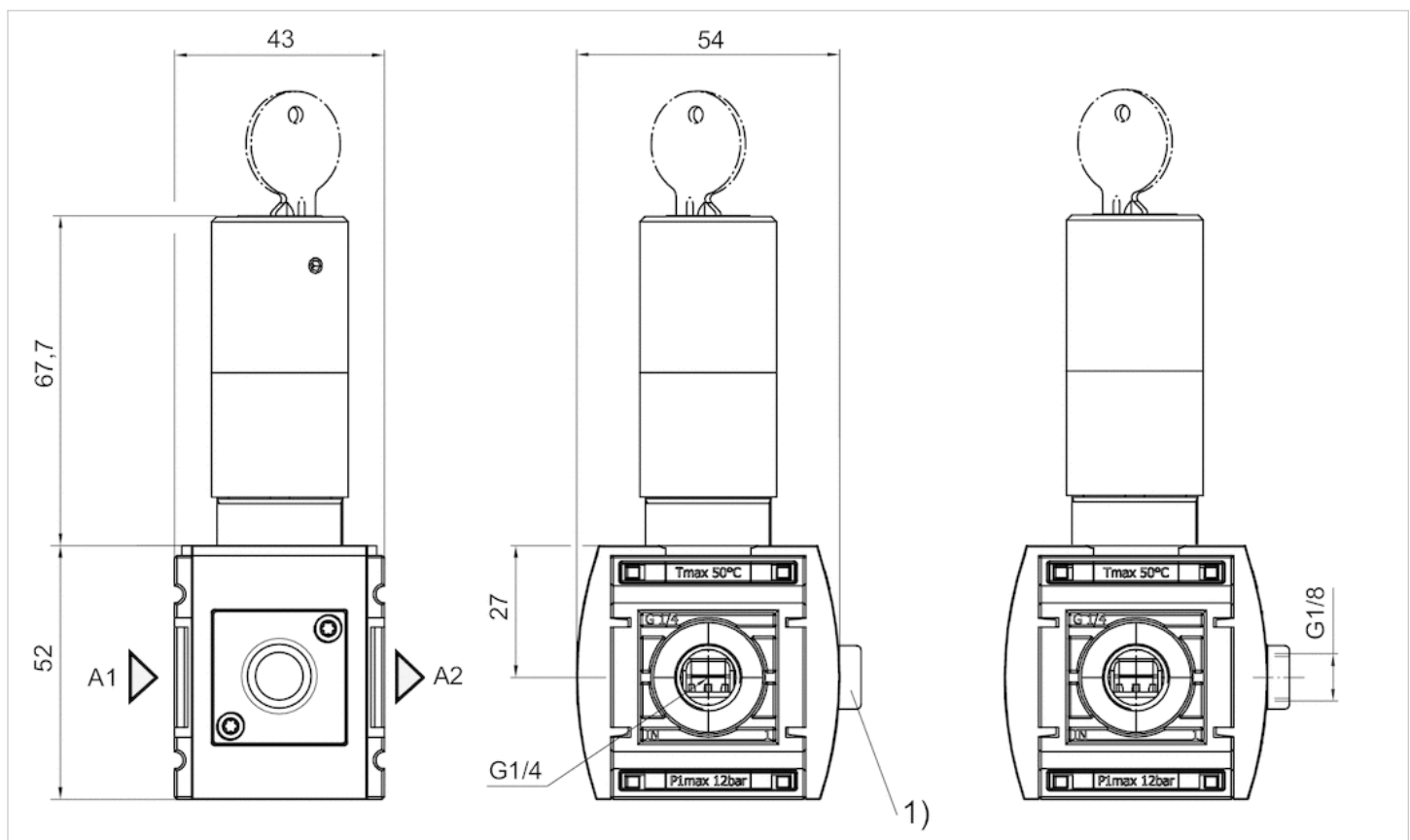
The rear pressure gauge connection on the pressure regulator is closed with a blanking plug, the front connection is open. Depending on the customer application, a second blanking plug may be necessary. Please order separately (see accessories).

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions



A1 = input

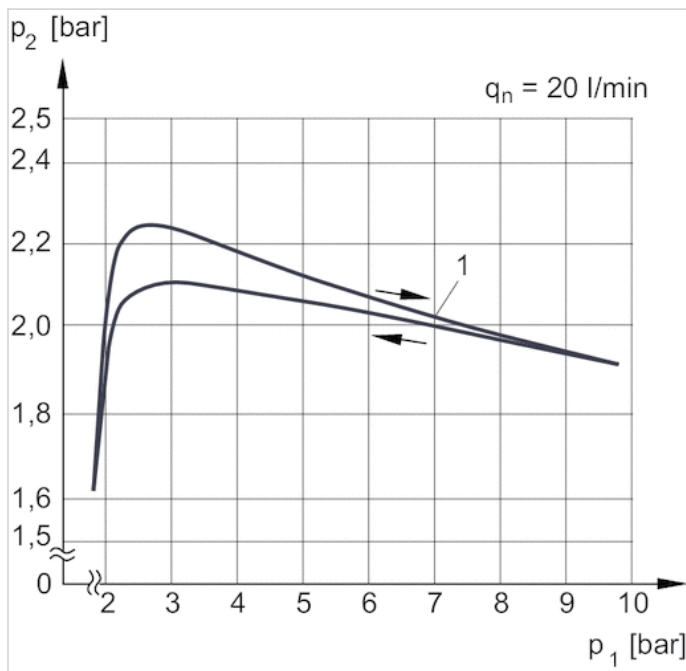
A2 = output

1) Adapter

Order pressure gauge separately

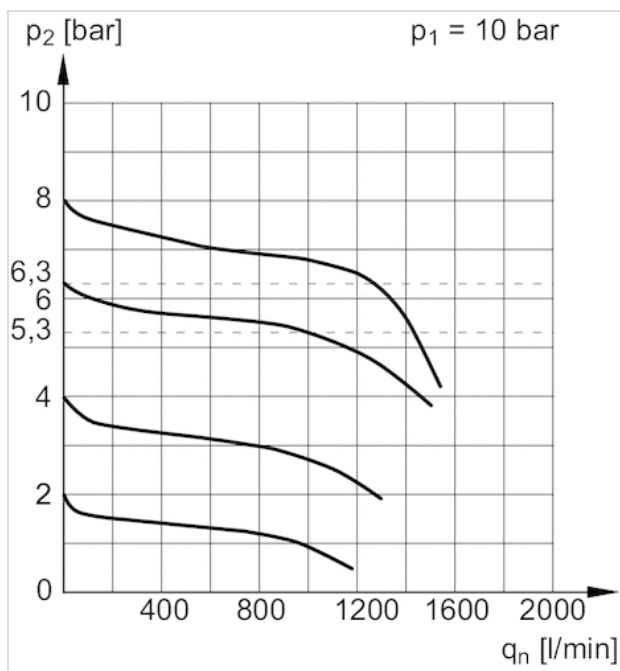
Diagrams

Pressure characteristics curve



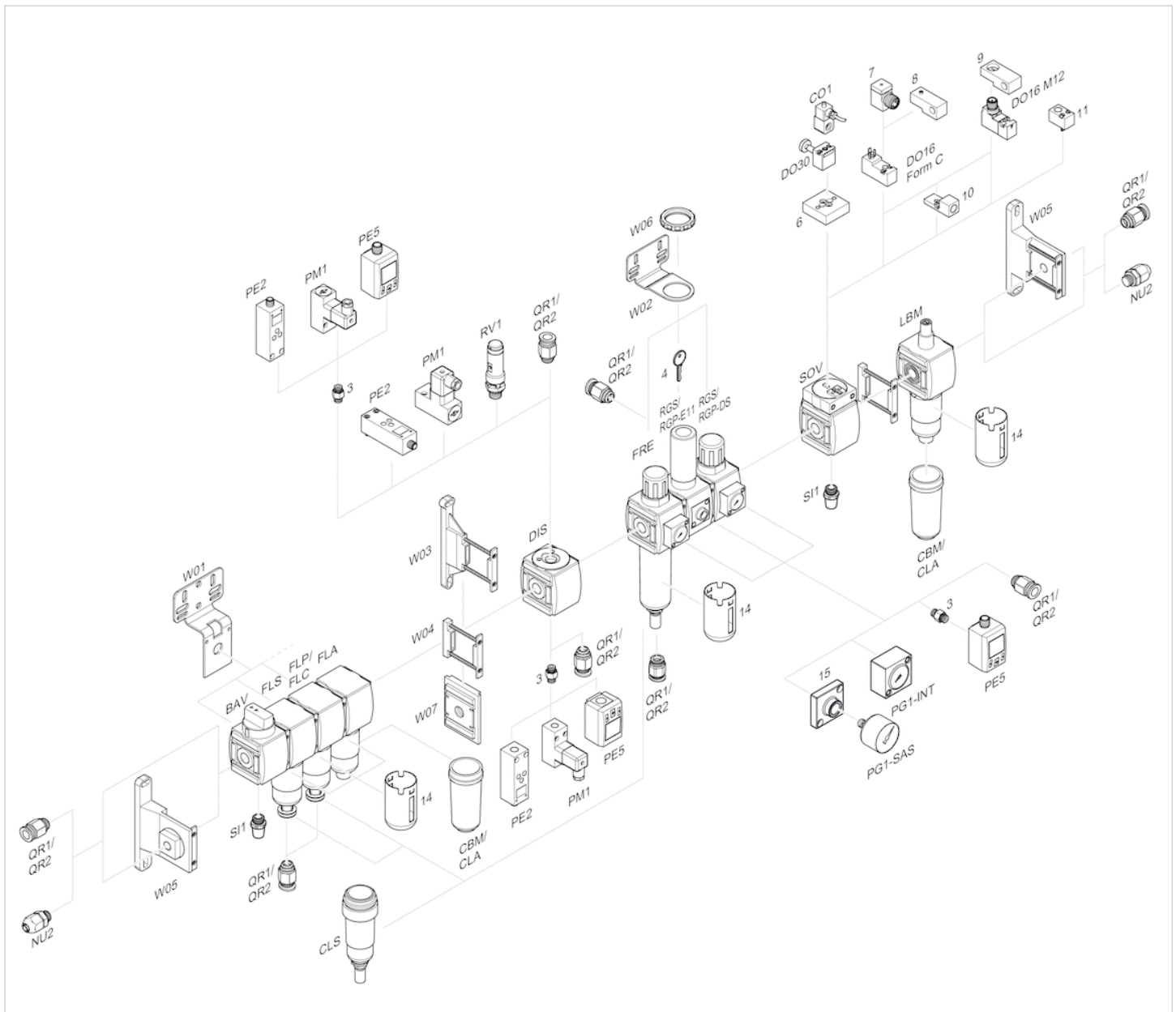
p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow
 1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Pressure regulator, Series AS1-RGS-...-DS

- G 1/4
- Air supply left
- Qn = 1000 l/min
- Standard pressure regulator
- Activation Manual
- with continuous pressure supply



Parts	Pressure regulator with continuous pressure supply
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Regulator type	Diaphragm-type pressure regulator Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Pressure supply	double
Activation	Manual
Weight	See table below

Technical data

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412014630			G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014631			G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014632			G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar
R412010558		—	G 1/4	1000 l/min	0.1 ... 12 bar	0.1 ... 1 bar
R412014636		—	G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014637		—	G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014638		—	G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar

Part No.	Max. pressure gauge Ø in blocked state	Pressure gauge	Weight	Fig.
R412014630	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412014631	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412014632	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412010558	40 mm	-	0.206 kg	Fig. 2
R412014636	40 mm	-	0.206 kg	Fig. 2
R412014637	40 mm	-	0.206 kg	Fig. 2
R412014638	40 mm	-	0.206 kg	Fig. 2

Part No.	
R412014630	1)
R412014631	1)

Part No.	
R412014632	1)
R412010558	2)
R412014636	2)
R412014637	2)
R412014638	2)

Nominal flow Q_n with secondary pressure p₂ = 6 bar at Δp = 1 bar

1) regulator with pressure gauge

2) Order pressure gauge separately

Technical information

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

Relieving exhaust (≤ 0.3 bar over set pressure).

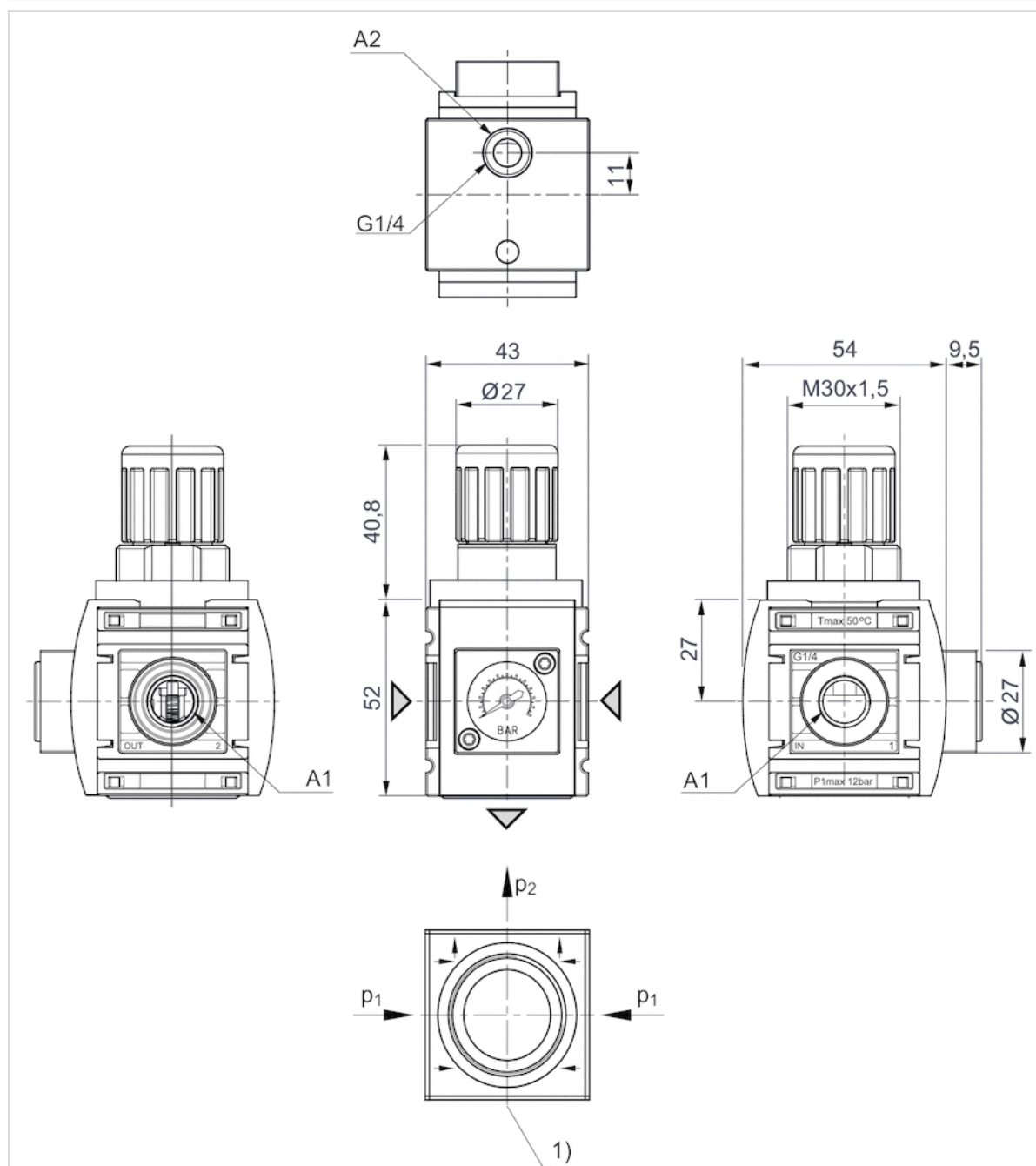
With rear exhaust (> 3 bar).

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions, Fig. 1

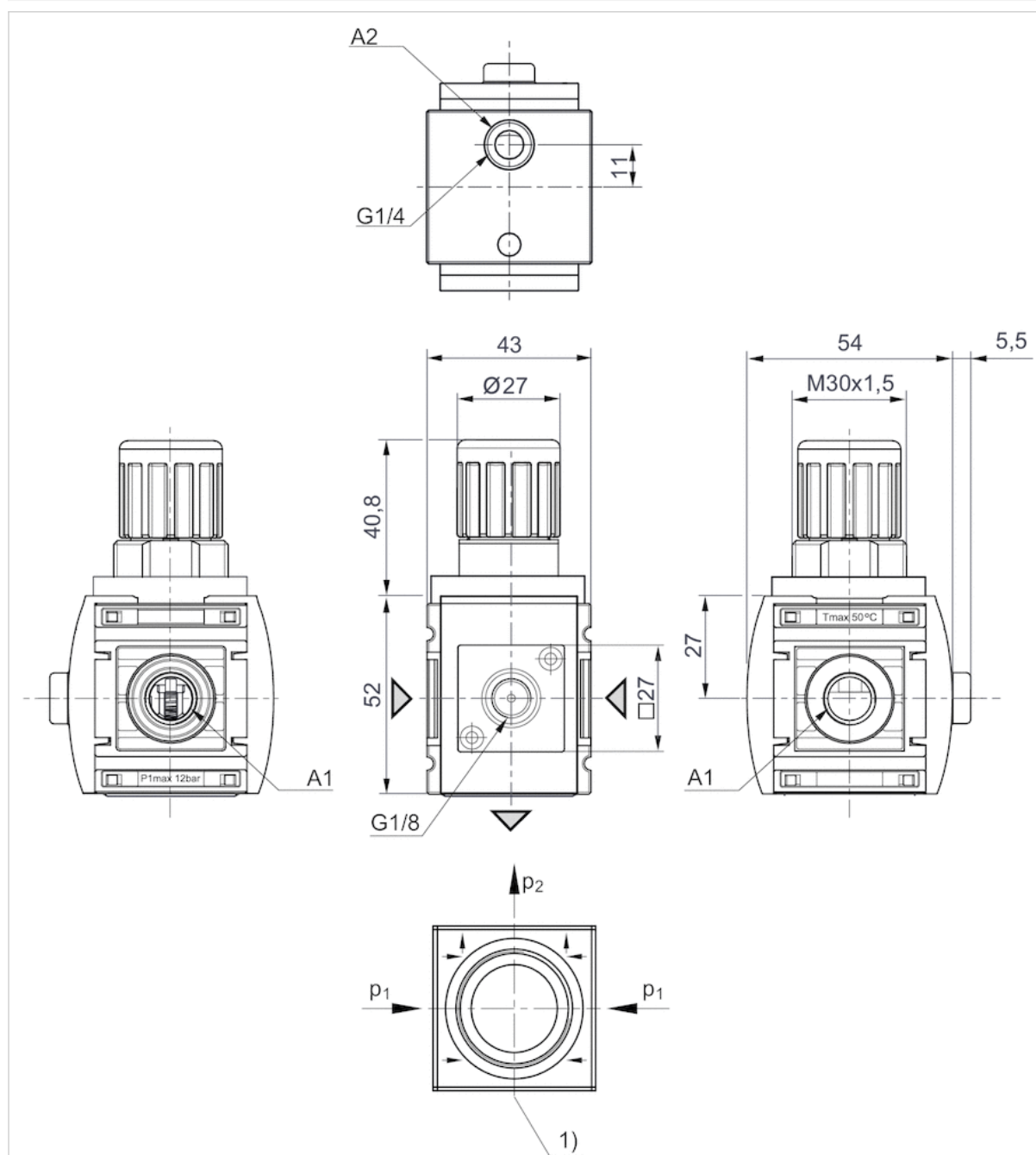


A1 = input

A2 = output

1) Pressure gauge connection

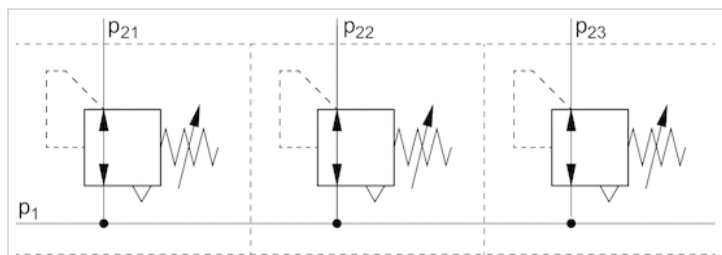
Dimensions in mm, Fig. 2



A1 = input
A2 = output

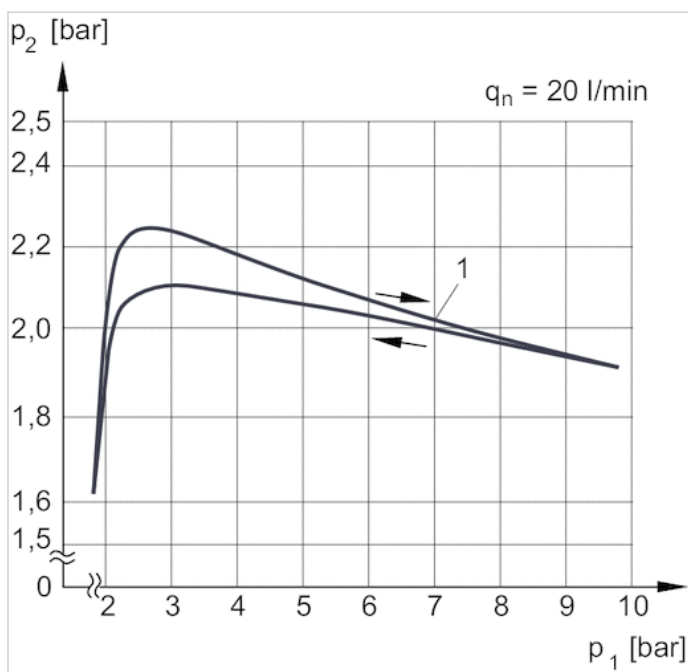
Diagrams

Application example



p_1 = working pressure

Pressure characteristics curve



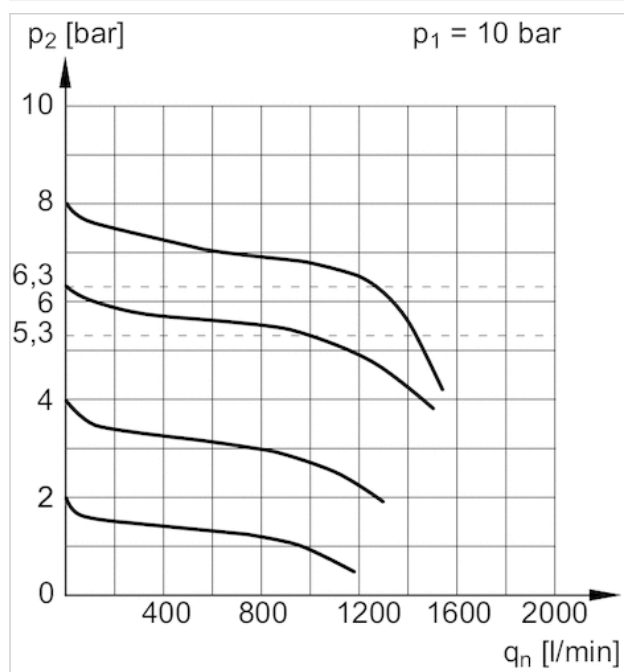
p_1 = working pressure

p_2 = secondary pressure

q_n = nominal flow

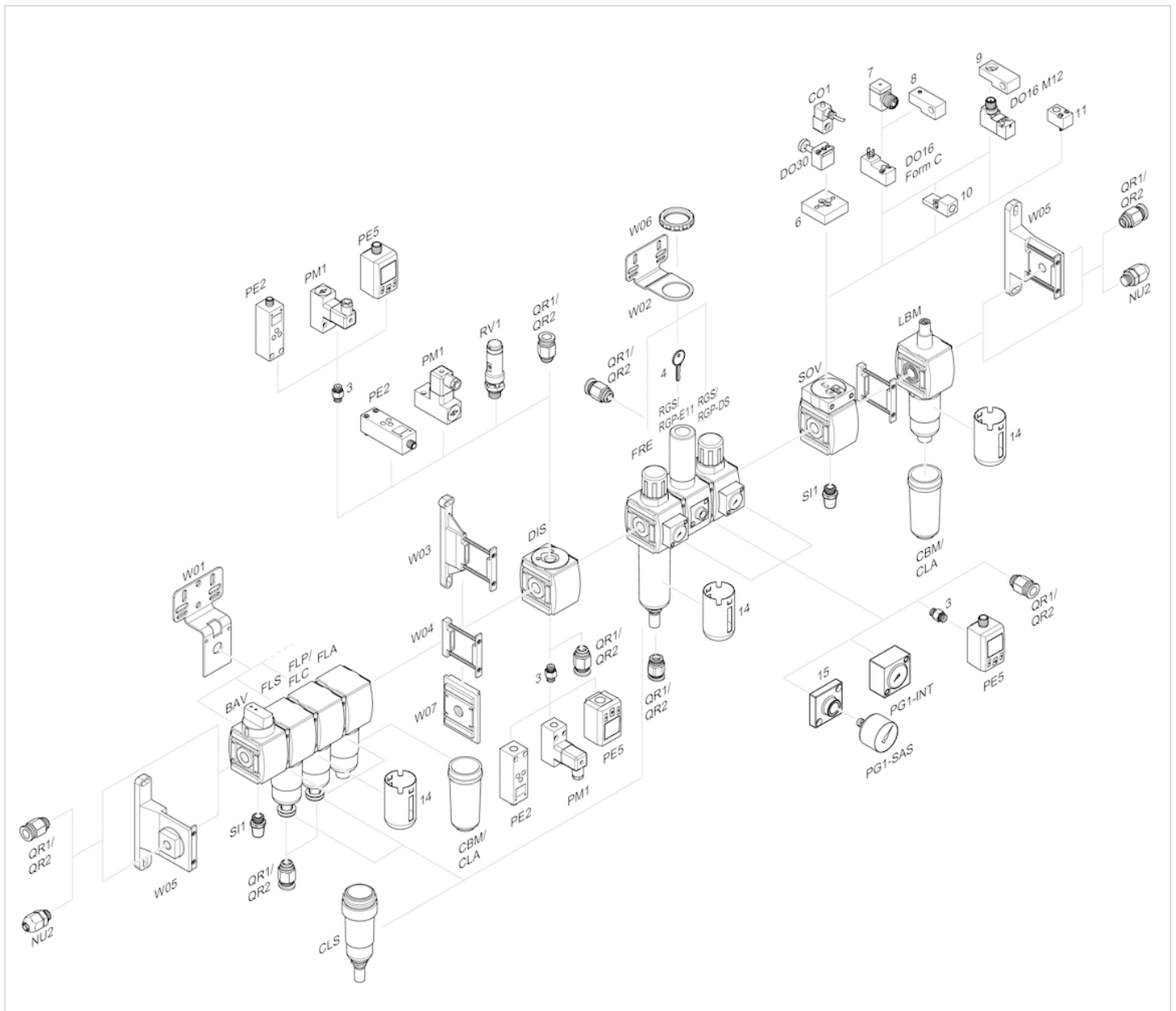
1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

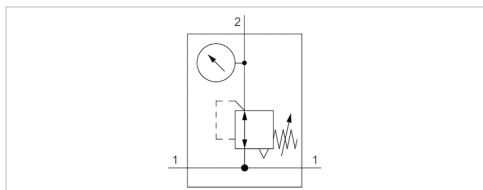
Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Pressure regulator, Series AS1-RGS-...-DS

- G 1/4
- Air supply left
- $Q_n = 1000 \text{ l/min}$
- Standard pressure regulator
- Activation Manual
- with continuous pressure supply
- with pressure gauge in hand wheel



Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Regulator type

Regulator function

Adjustment range min./max.

Pressure supply

Activation

Weight

Pressure regulator with continuous pressure supply

Any

See table below

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

Diaphragm-type pressure regulator Can be assembled into blocks with relieving air exhaust

See table below

double

Manual

0.239 kg

Technical data

Part No.		Port	Flow	Working pressure min./max.	Adjustment range min./max.
			Q_n		
R412014642		G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014643		G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014644		G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar

Part No.	Pressure gauge
R412014642	with pressure gauge in hand wheel
R412014643	with pressure gauge in hand wheel
R412014644	with pressure gauge in hand wheel

Panel nut included in scope of delivery, Nominal flow Q_n with secondary pressure $p_2 = 6 \text{ bar}$ at $\Delta p = 1 \text{ bar}$

Technical information

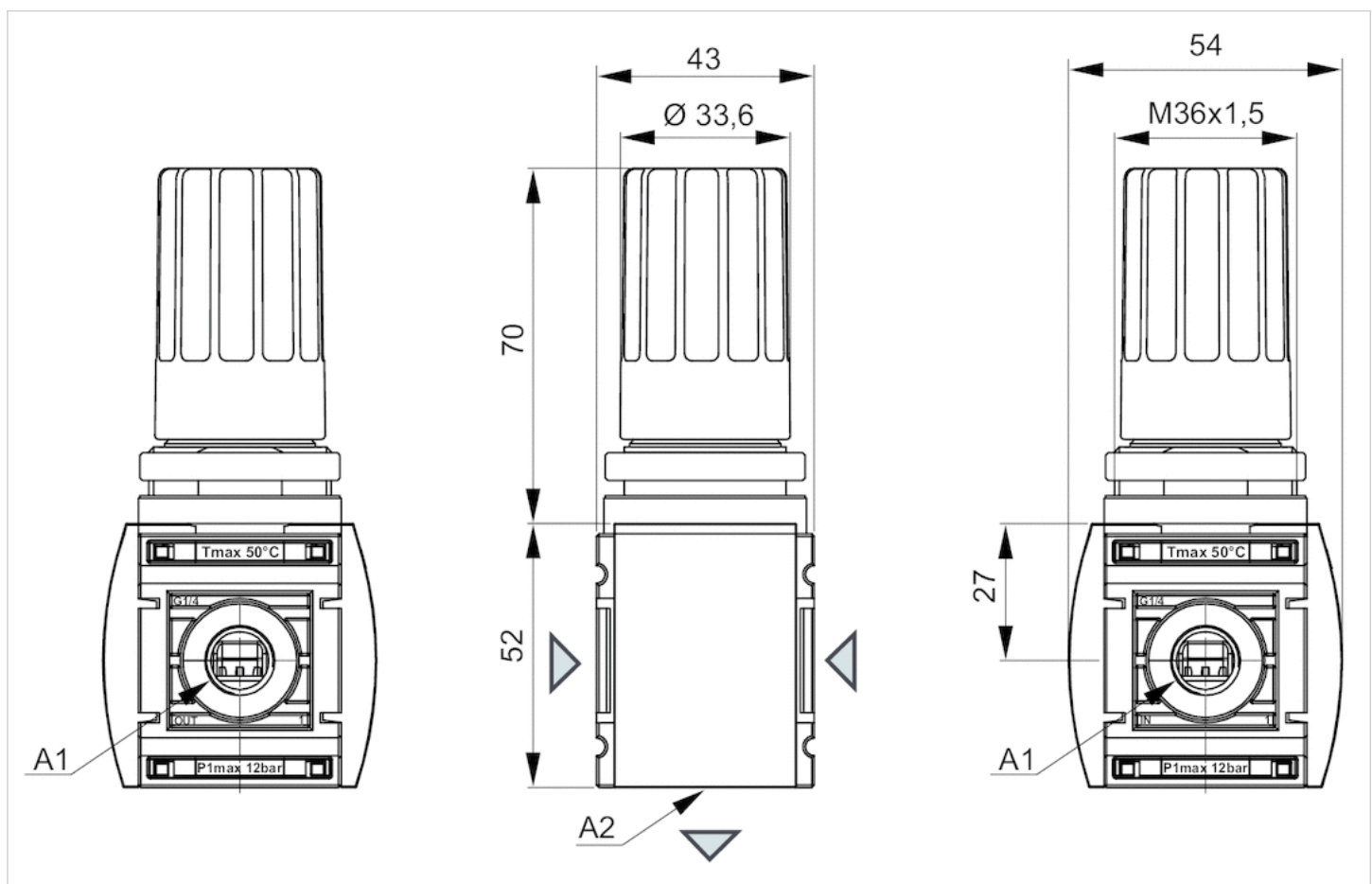
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
 Relieving exhaust ($\leq 0.3 \text{ bar}$ over set pressure).
 With rear exhaust ($> 3 \text{ bar}$).

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

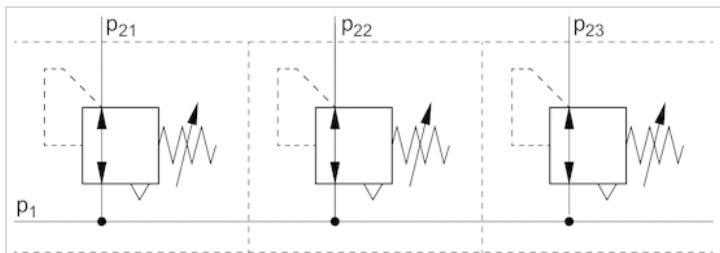
Dimensions in mm



A1 = input
A2 = output

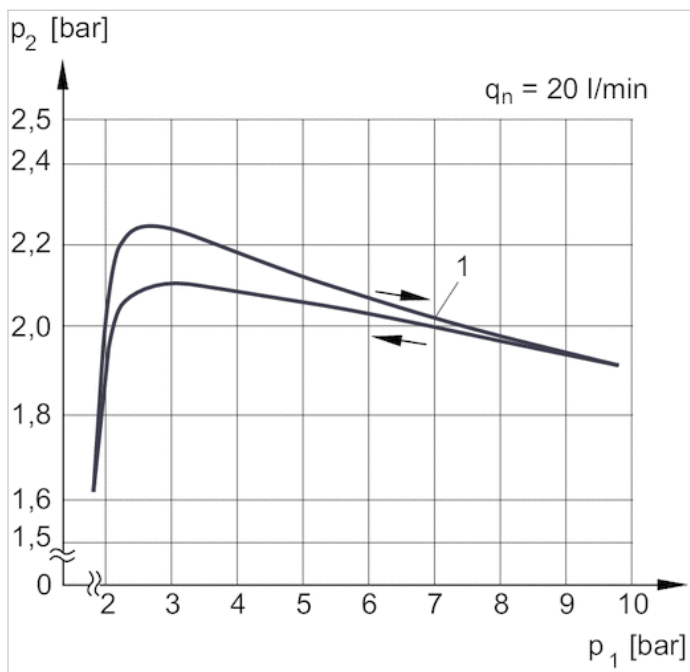
Diagrams

Application example



p_1 = working pressure

Pressure characteristics curve



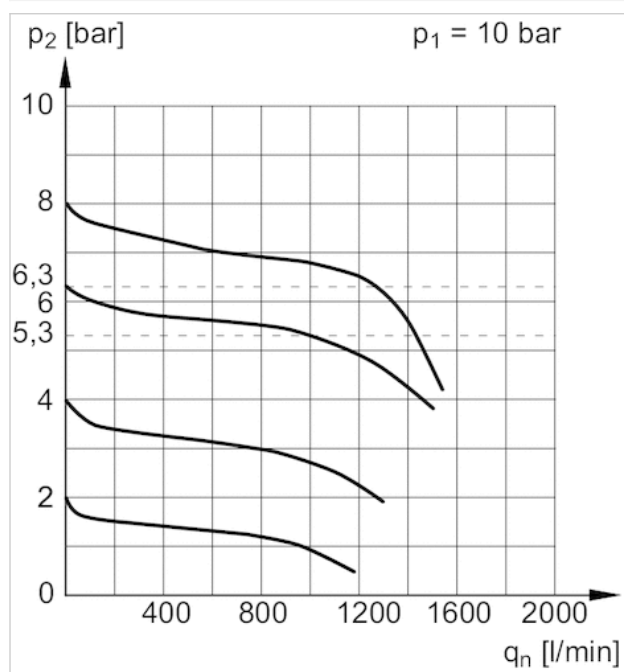
p_1 = working pressure

p_2 = secondary pressure

q_n = nominal flow

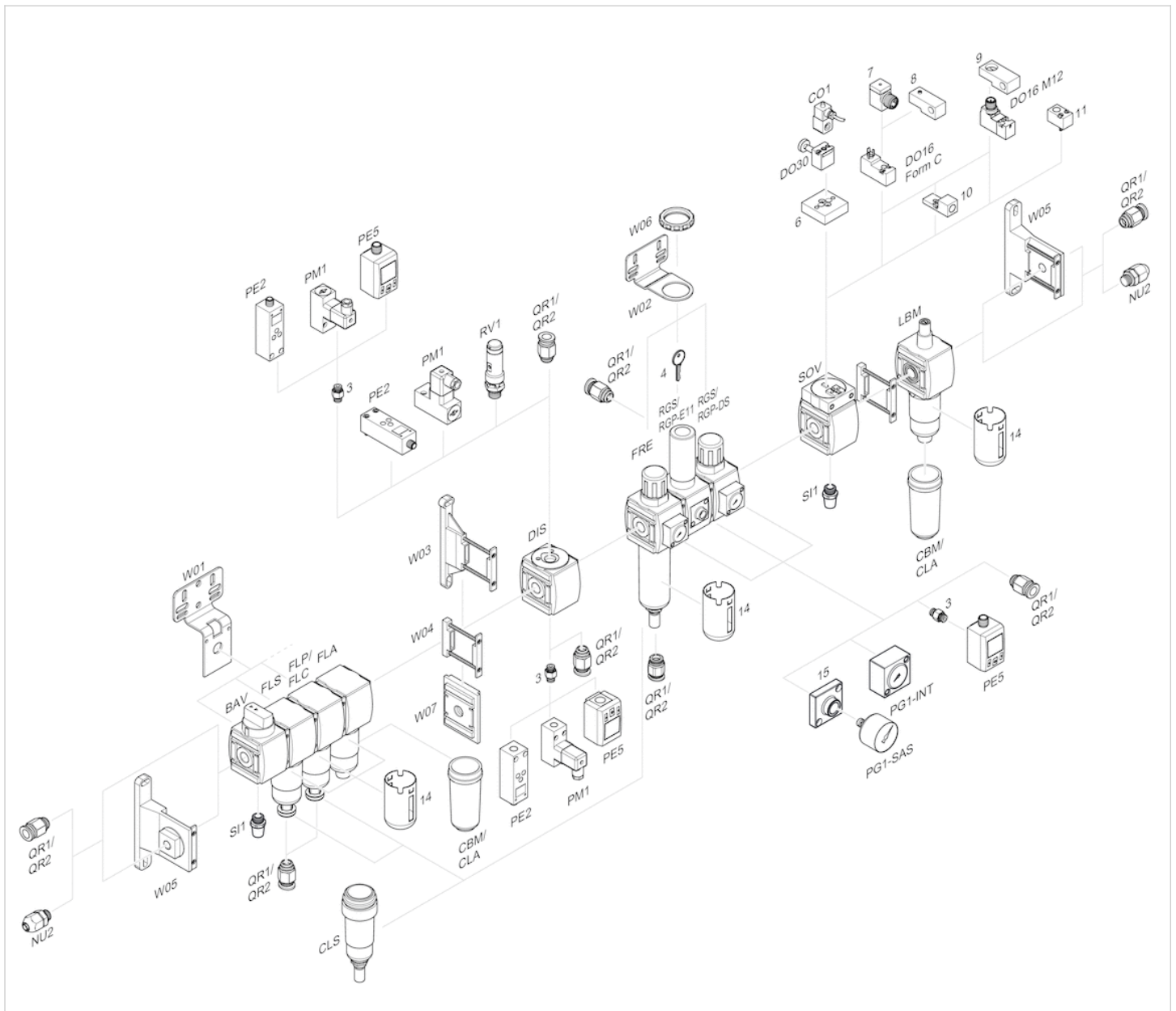
1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Filter pressure regulator, Series AS1-FRE

- G 1/4
- Air supply left
- filter porosity 5 µm



Version	1-part, Can be assembled into blocks
Parts	Filter pressure regulator
Mounting orientation	vertical
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Nominal flow Qn	1000 l/min
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Pressure supply	single
Filter reservoir volume	16 cm ³
Filter element	exchangeable
Weight	See table below

Technical data

Part No.			Port	filter porosity	Flow	Working pressure min./max.
					Qn	
R412014645			G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014646			G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014647			G 1/4	5 µm	1000 l/min	1.5 ... 16 bar
R412014648			G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014649			G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014650			G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014651			G 1/4	5 µm	1000 l/min	1.5 ... 16 bar
R412014652		—	G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014653		—	G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014654		—	G 1/4	5 µm	1000 l/min	1.5 ... 16 bar
R412014655			G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014656			G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014657			G 1/4	5 µm	1000 l/min	1.5 ... 16 bar
R412014658			G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014659			G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014660			G 1/4	5 µm	1000 l/min	1.5 ... 12 bar
R412014661			G 1/4	5 µm	1000 l/min	1.5 ... 16 bar

Part No.	Adjustment range min./max.	Condensate drain
R412014645	0.5 ... 8 bar	semi-automatic, open without pressure
R412014646	0.5 ... 8 bar	fully automatic, open without pressure
R412014647	0.5 ... 8 bar	fully automatic, closed without pressure

Part No.	Adjustment range min./max.	Condensate drain
R412014648	0.5 ... 8 bar	semi-automatic, open without pressure
R412014649	0.5 ... 8 bar	semi-automatic, open without pressure
R412014650	0.5 ... 8 bar	fully automatic, open without pressure
R412014651	0.5 ... 8 bar	fully automatic, closed without pressure
R412014652	0.5 ... 8 bar	semi-automatic, open without pressure
R412014653	0.5 ... 8 bar	fully automatic, open without pressure
R412014654	0.5 ... 8 bar	fully automatic, closed without pressure
R412014655	0.5 ... 10 bar	semi-automatic, open without pressure
R412014656	0.5 ... 10 bar	fully automatic, open without pressure
R412014657	0.5 ... 10 bar	fully automatic, closed without pressure
R412014658	0.5 ... 10 bar	semi-automatic, open without pressure
R412014659	0.5 ... 10 bar	semi-automatic, open without pressure
R412014660	0.5 ... 10 bar	fully automatic, open without pressure
R412014661	0.5 ... 10 bar	fully automatic, closed without pressure

Part No.	Pressure gauge	Max. pressure gauge Ø in blocked state	Reservoir
R412014645	With integrated pressure gauge	-	Polycarbonate
R412014646	With integrated pressure gauge	-	Polycarbonate
R412014647	With integrated pressure gauge	-	Polycarbonate
R412014648	With integrated pressure gauge	-	Polycarbonate
R412014649	With integrated pressure gauge	-	Die cast zinc
R412014650	With integrated pressure gauge	-	Die cast zinc
R412014651	With integrated pressure gauge	-	Die cast zinc
R412014652	-	40 mm	Polycarbonate
R412014653	-	40 mm	Polycarbonate
R412014654	-	40 mm	Polycarbonate
R412014655	With integrated pressure gauge	-	Polycarbonate
R412014656	With integrated pressure gauge	-	Polycarbonate
R412014657	With integrated pressure gauge	-	Polycarbonate
R412014658	With integrated pressure gauge	-	Polycarbonate
R412014659	With integrated pressure gauge	-	Die cast zinc
R412014660	With integrated pressure gauge	-	Die cast zinc
R412014661	With integrated pressure gauge	-	Die cast zinc

Part No.	Protective guard	Weight	Fig.	
R412014645	-	0.241 kg	Fig. 1	1)
R412014646	-	0.259 kg	Fig. 1	1)
R412014647	-	0.259 kg	Fig. 1	1)
R412014648	metal	0.274 kg	Fig. 1	1)
R412014649	-	0.318 kg	Fig. 1	1)
R412014650	-	0.33 kg	Fig. 1	1)
R412014651	-	0.33 kg	Fig. 1	1)
R412014652	-	0.238 kg	Fig. 2	2)
R412014653	-	0.256 kg	Fig. 2	2)
R412014654	-	0.256 kg	Fig. 2	2)
R412014655	-	0.241 kg	Fig. 1	1)
R412014656	-	0.259 kg	Fig. 1	1)

Part No.	Protective guard	Weight	Fig.	
R412014657	-	0.259 kg	Fig. 1	1)
R412014658	metal	0.274 kg	Fig. 1	1)
R412014659	-	0.318 kg	Fig. 1	1)
R412014660	-	0.33 kg	Fig. 1	1)
R412014661	-	0.33 kg	Fig. 1	1)

Nominal flow Q_n with secondary pressure p₂ = 6 bar at Δp = 1 bar

1) regulator with pressure gauge

2) Order pressure gauge separately

Technical information

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

Also suitable for separation of fluid oil or water due to the design.

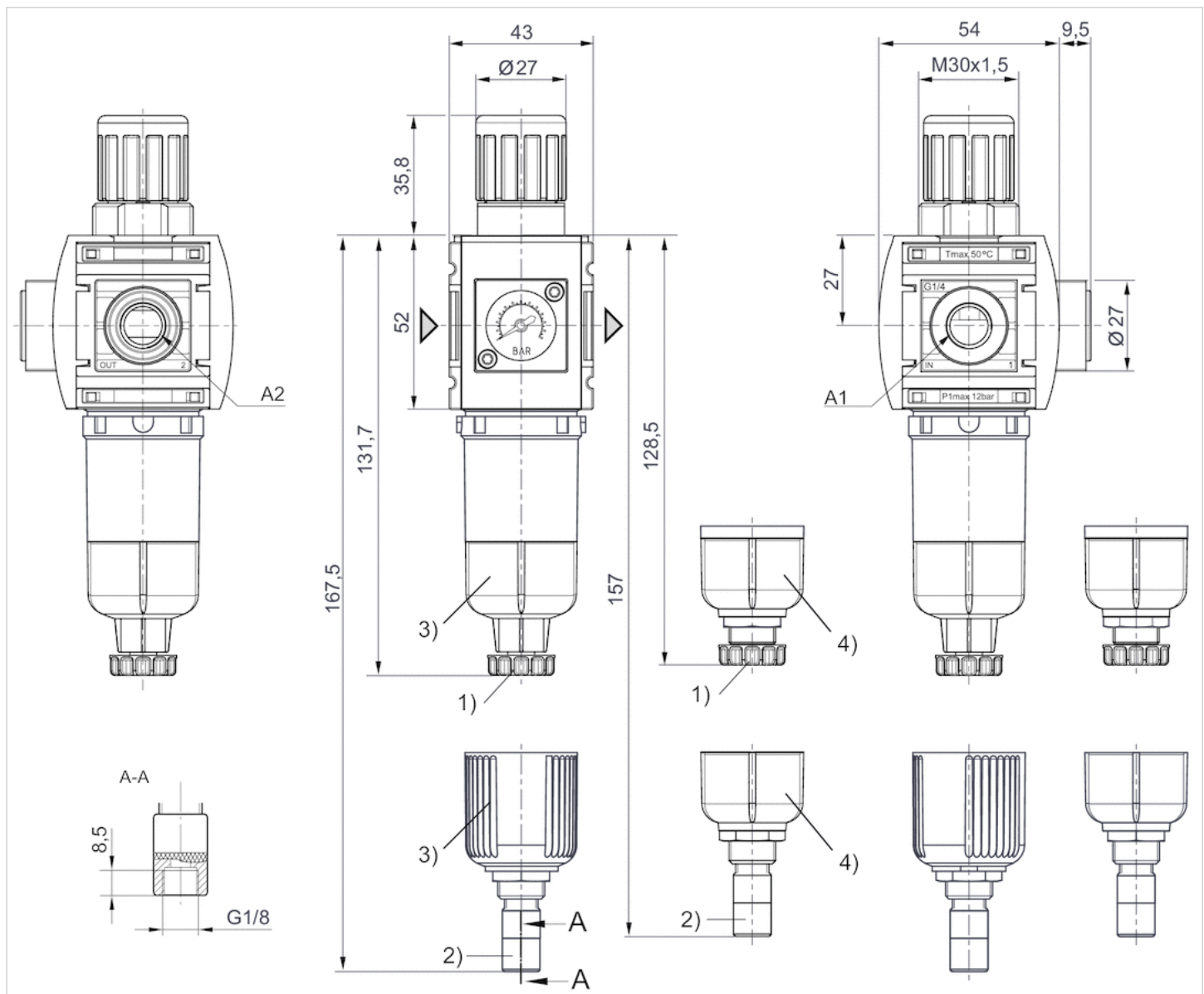
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate Die cast zinc
Protective guard	metal
Filter insert	Cellpor

Dimensions

Dimensions, Fig. 1



A1 = input

A2 = output

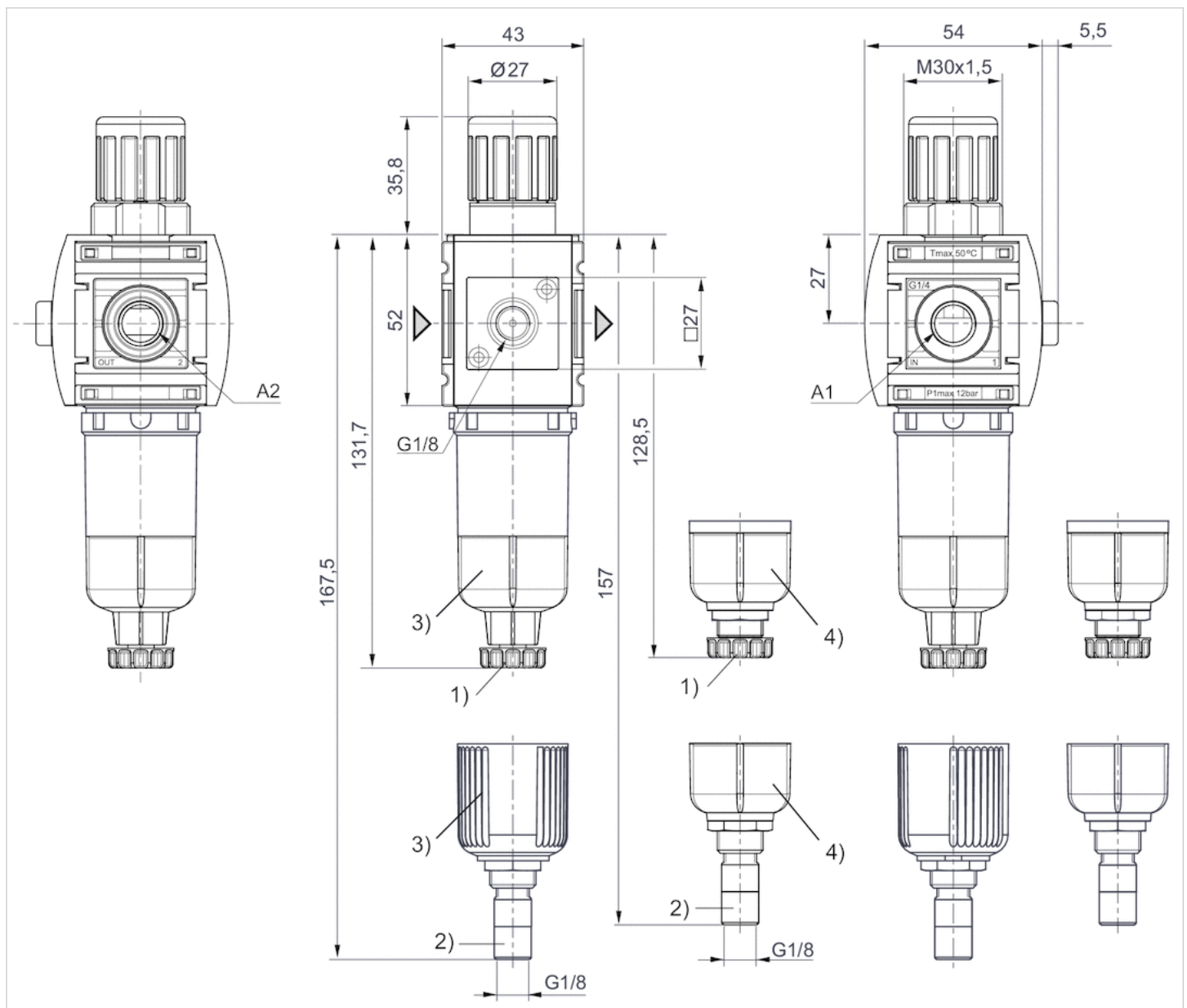
1) Semi-automatic condensate drain

2) Fully automatic condensate drain

3) Reservoir: polycarbonate

4) Reservoir: metal

Dimensions, Fig. 2



A1 = input

1) A2 = output

2) Semi-automatic condensate drain

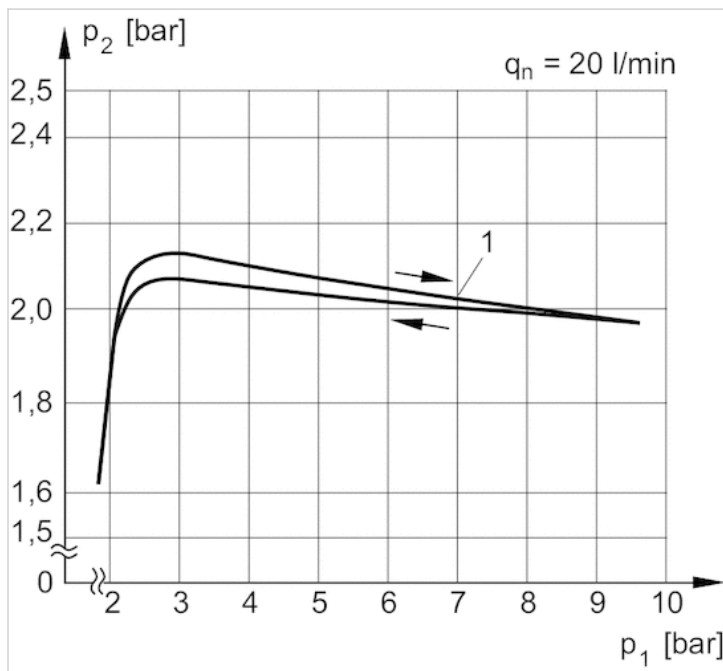
3) Fully automatic condensate drain

4) Reservoir: polycarbonate

Reservoir: metal

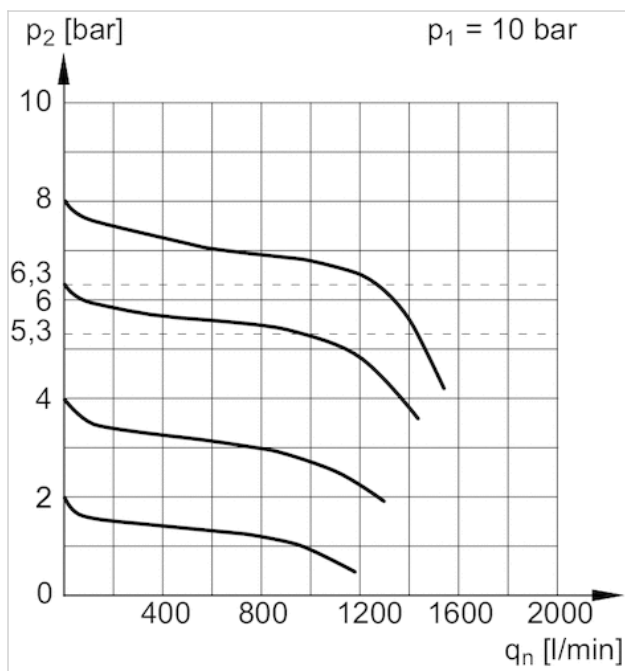
Diagrams

Pressure characteristics curve



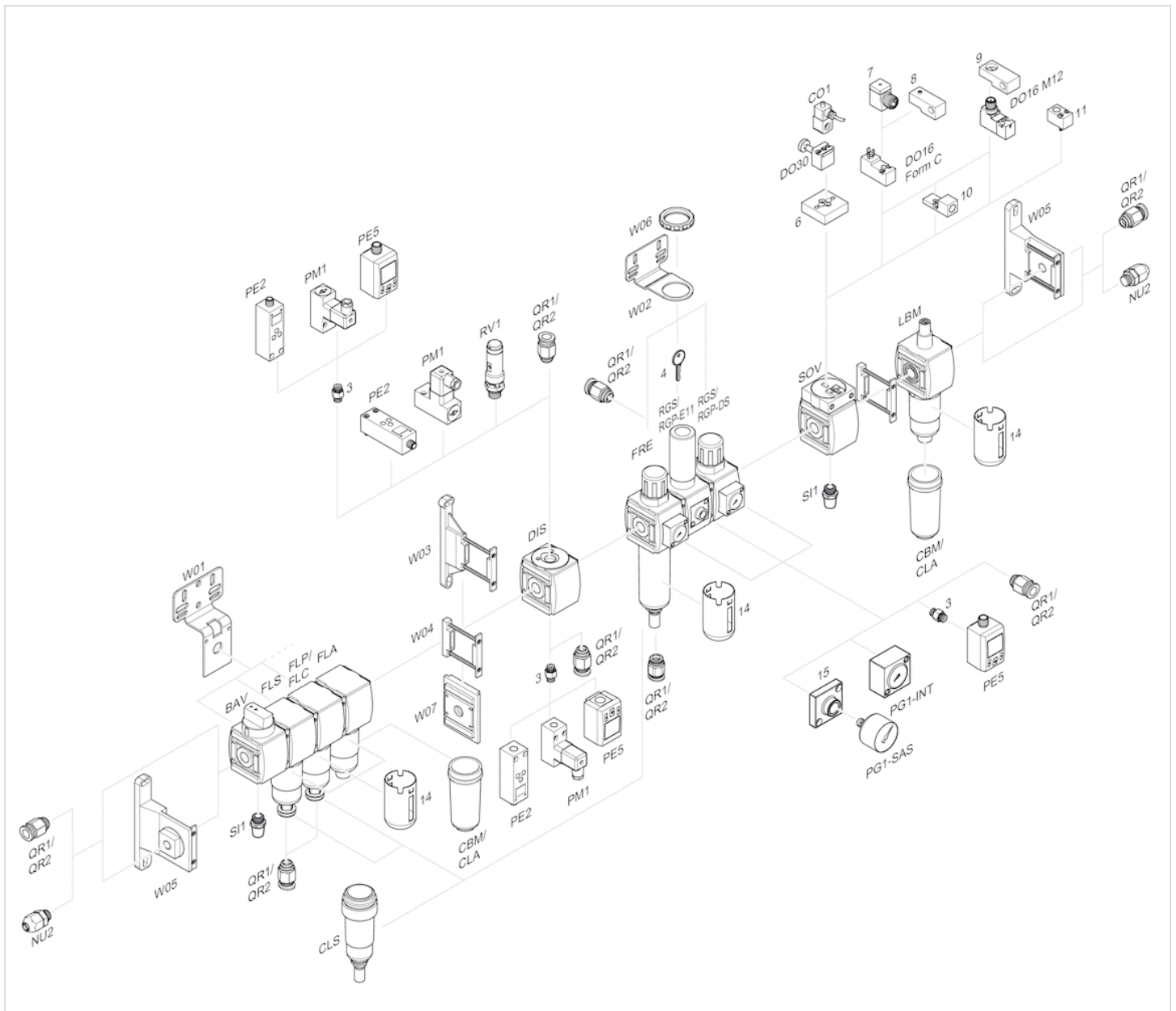
p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow
 1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

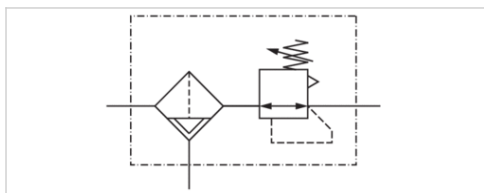
Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Filter pressure regulator, Series AS1-FRE-...-E11

- G 1/4
- Air supply left
- filter porosity 5 µm
- lockable
- with E11 locking



Version	1-part, Can be assembled into blocks
Parts	Filter pressure regulator
Mounting orientation	vertical
Working pressure min./max.	1.5 ... 16 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Nominal flow Qn	1000 l/min
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	0.5 ... 8 bar
Pressure supply	single
Filter reservoir volume	16 cm ³
Filter element	exchangeable
Condensate drain	fully automatic, closed without pressure
Weight	0.256 kg

Technical data

Part No.	Port	filter porosity	Flow	Condensate drain
			Qn	
R412010650	G 1/4	5 µm	1000 l/min	fully automatic, closed without pressure

Part No.	Max. pressure gauge Ø in blocked state
R412010650	40 mm

Order pressure gauge separately, Nominal flow Qn with secondary pressure p₂ = 6 bar at Δp = 1 bar

Technical information

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

Also suitable for separation of fluid oil or water due to the design.

The rear pressure gauge connection on the pressure regulator is closed with a blanking plug, the front connection is open. Depending on the customer application, a second blanking plug may be necessary. Please order separately (see accessories).

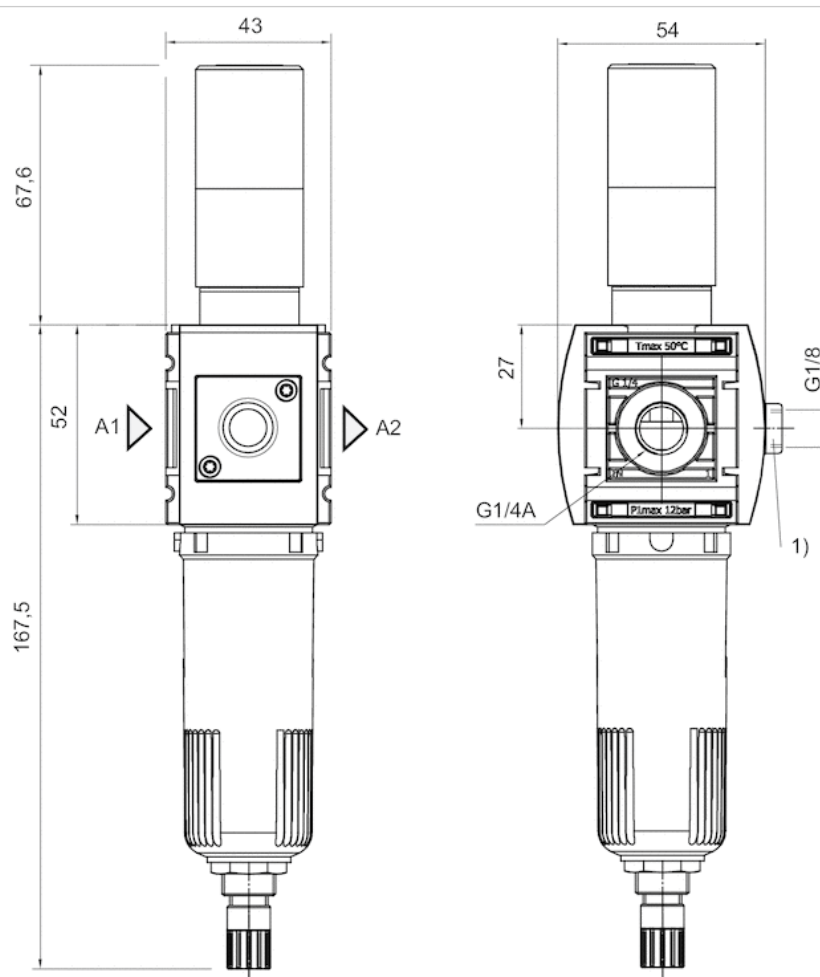
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
Filter insert	Cellpor

Dimensions

Dimensions



A1 = input

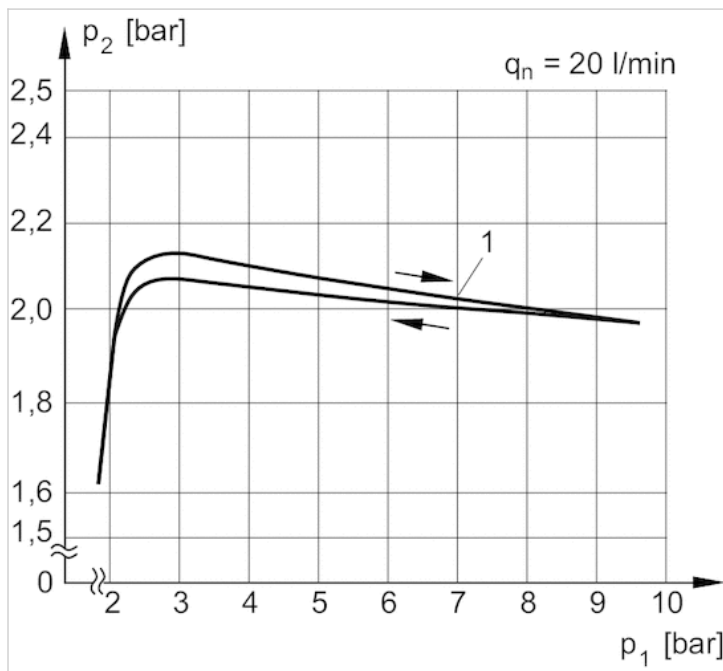
A2 = output

1) Adapter

Order pressure gauge separately

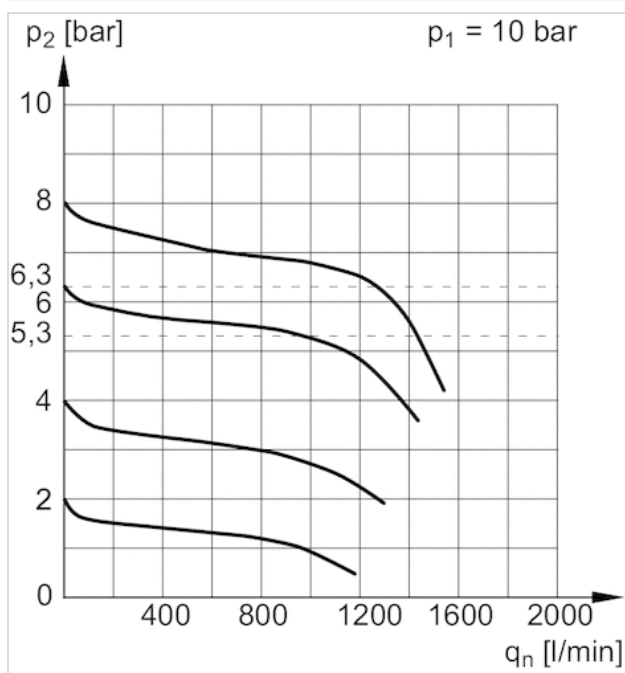
Diagrams

Pressure characteristics curve



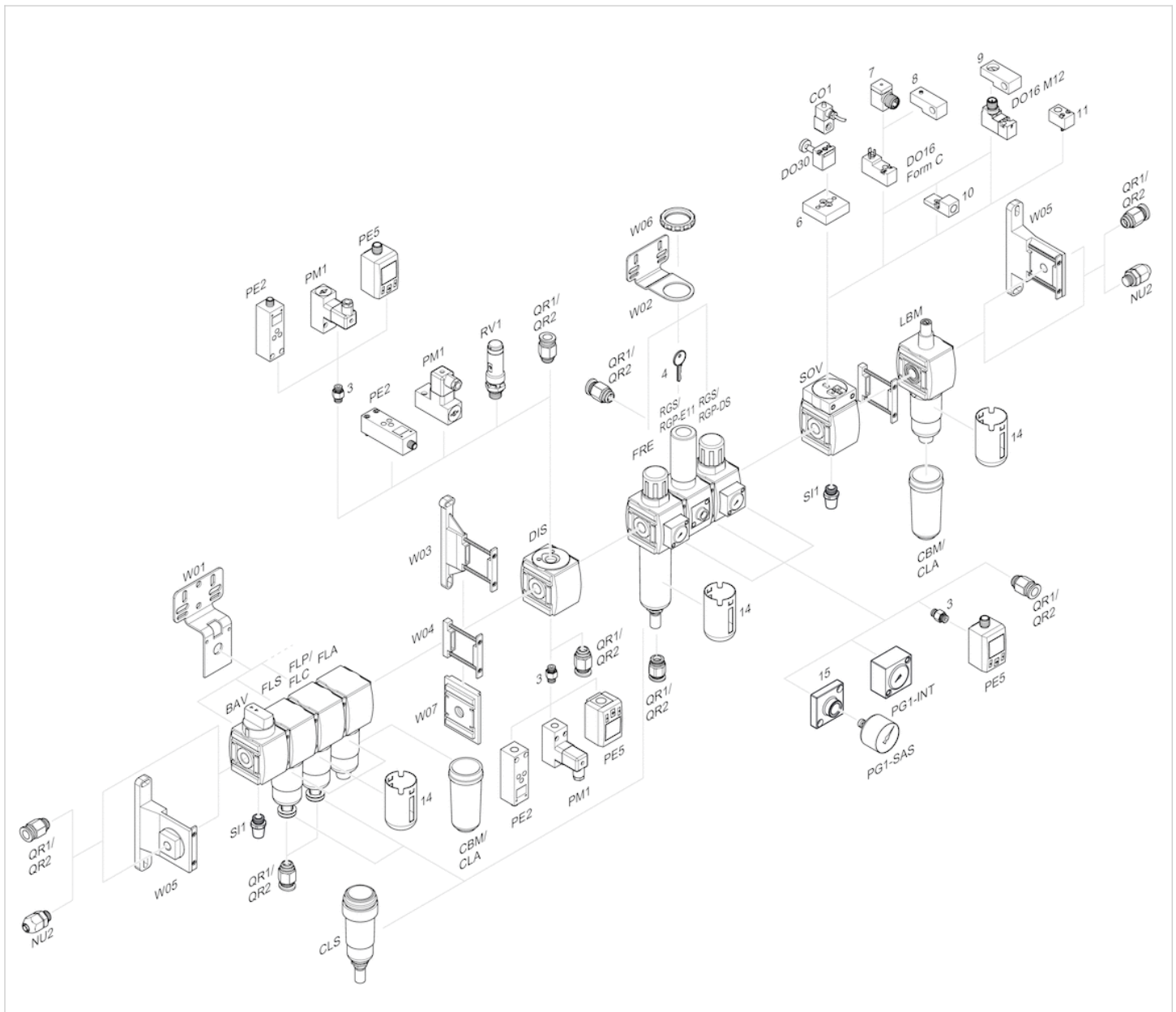
p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow
 1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

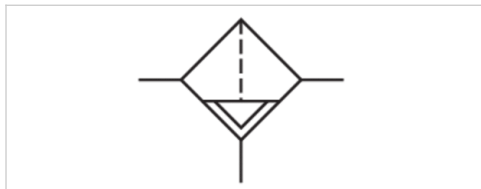
Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Standard filter, Series AS1-FLS

- G 1/4
- Air supply left
- filter porosity 5 µm



Version

Parts

Mounting orientation
Working pressure min./max.
Ambient temperature min./max.
Medium temperature min./max.
Medium
Filter reservoir volume
Filter element
filter porosity
Condensate drain
Weight

Standard filter, Can be assembled into blocks

Filter

vertical
See table below
-10 ... 50 °C
-10 ... 50 °C
Compressed air Neutral gases
16 cm³
exchangeable
5 µm
See table below
See table below

Technical data

Part No.	Port	Flow Qn	Working pressure min./max.
R412014600	G 1/4	1000 l/min	1.5 ... 12 bar
R412014601	G 1/4	1000 l/min	1.5 ... 12 bar
R412014602	G 1/4	1000 l/min	1.5 ... 16 bar
R412014603	G 1/4	1000 l/min	1.5 ... 12 bar
R412014604	G 1/4	1000 l/min	1.5 ... 12 bar
R412014605	G 1/4	1000 l/min	1.5 ... 12 bar
R412014606	G 1/4	1000 l/min	1.5 ... 16 bar

Part No.	Condensate drain
R412014600	semi-automatic, open without pressure
R412014601	fully automatic, open without pressure
R412014602	fully automatic, closed without pressure
R412014603	semi-automatic, open without pressure
R412014604	semi-automatic, open without pressure
R412014605	fully automatic, open without pressure
R412014606	fully automatic, closed without pressure

Part No.	Version	Weight
R412014600	reservoir, polycarbonate, without protective guard	0.166 kg
R412014601	reservoir, polycarbonate, without protective guard	0.184 kg
R412014602	reservoir, polycarbonate, without protective guard	0.184 kg

Part No.	Version	Weight
R412014603	reservoir, polycarbonate, with metal protective guard	0.193 kg
R412014604	Metal reservoir without window	0.243 kg
R412014605	Metal reservoir without window	0.255 kg
R412014606	Metal reservoir without window	0.255 kg

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

Technical information

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

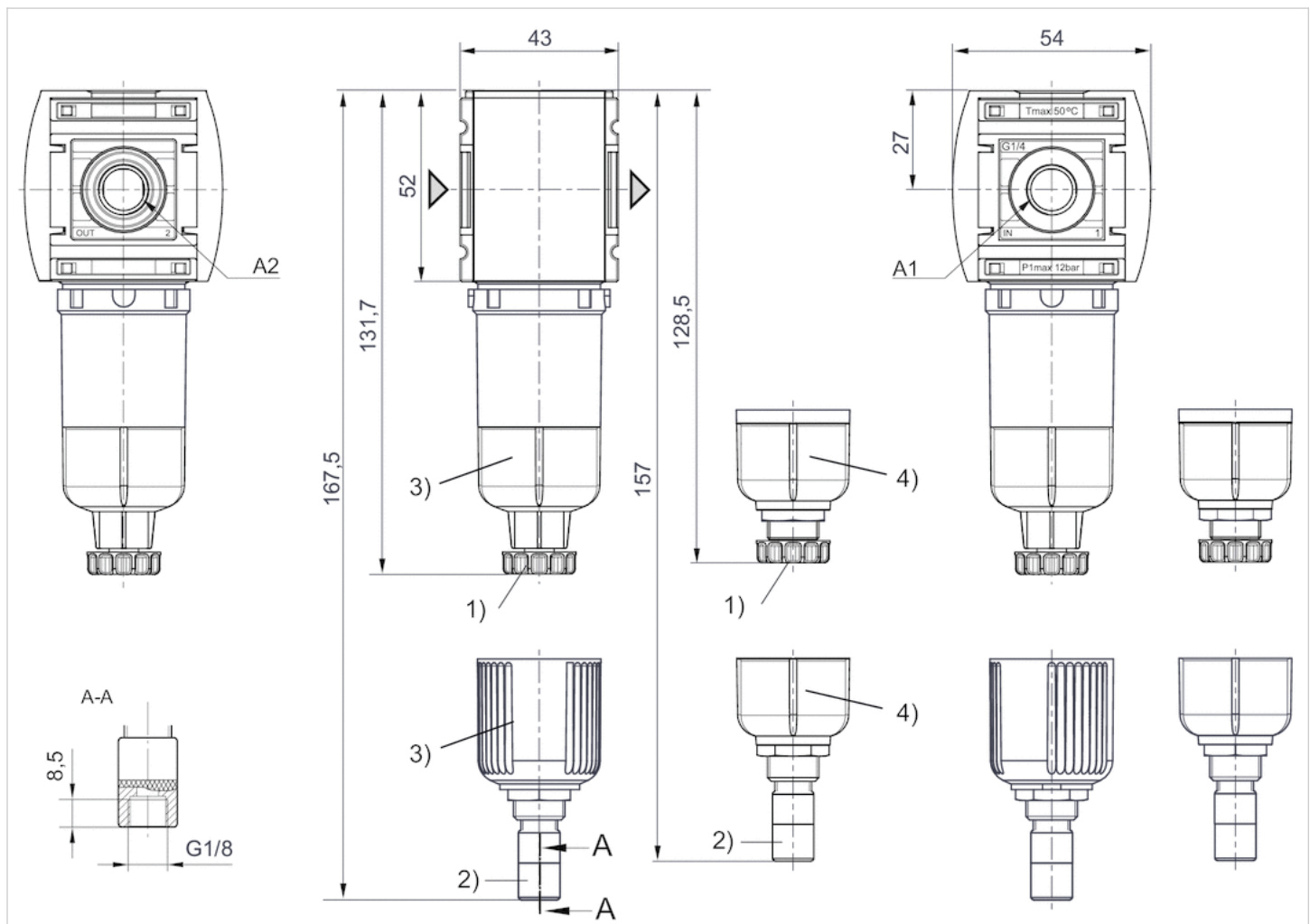
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate metal
Protective guard	metal
Filter insert	Cellpor

Dimensions

Dimensions



A1 = input

A2 = output

1) Semi-automatic condensate drain

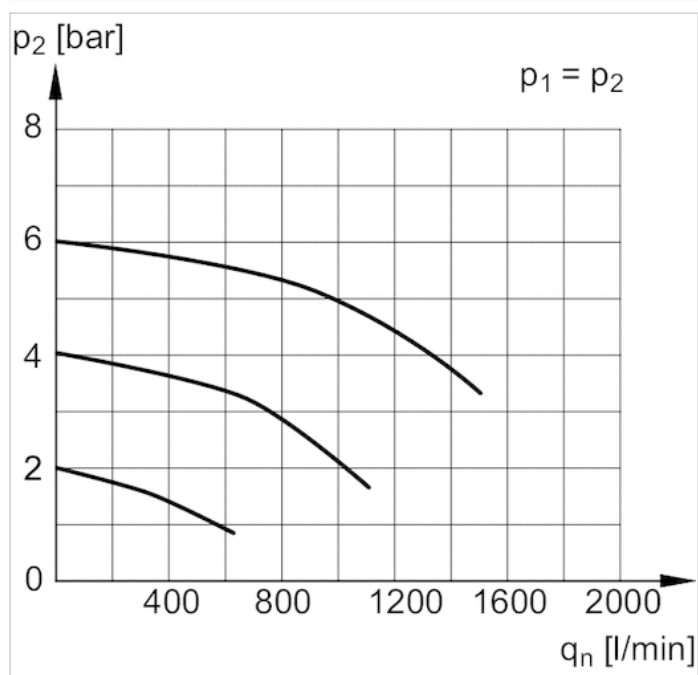
2) Fully automatic condensate drain

3) Reservoir: polycarbonate

4) Reservoir: metal

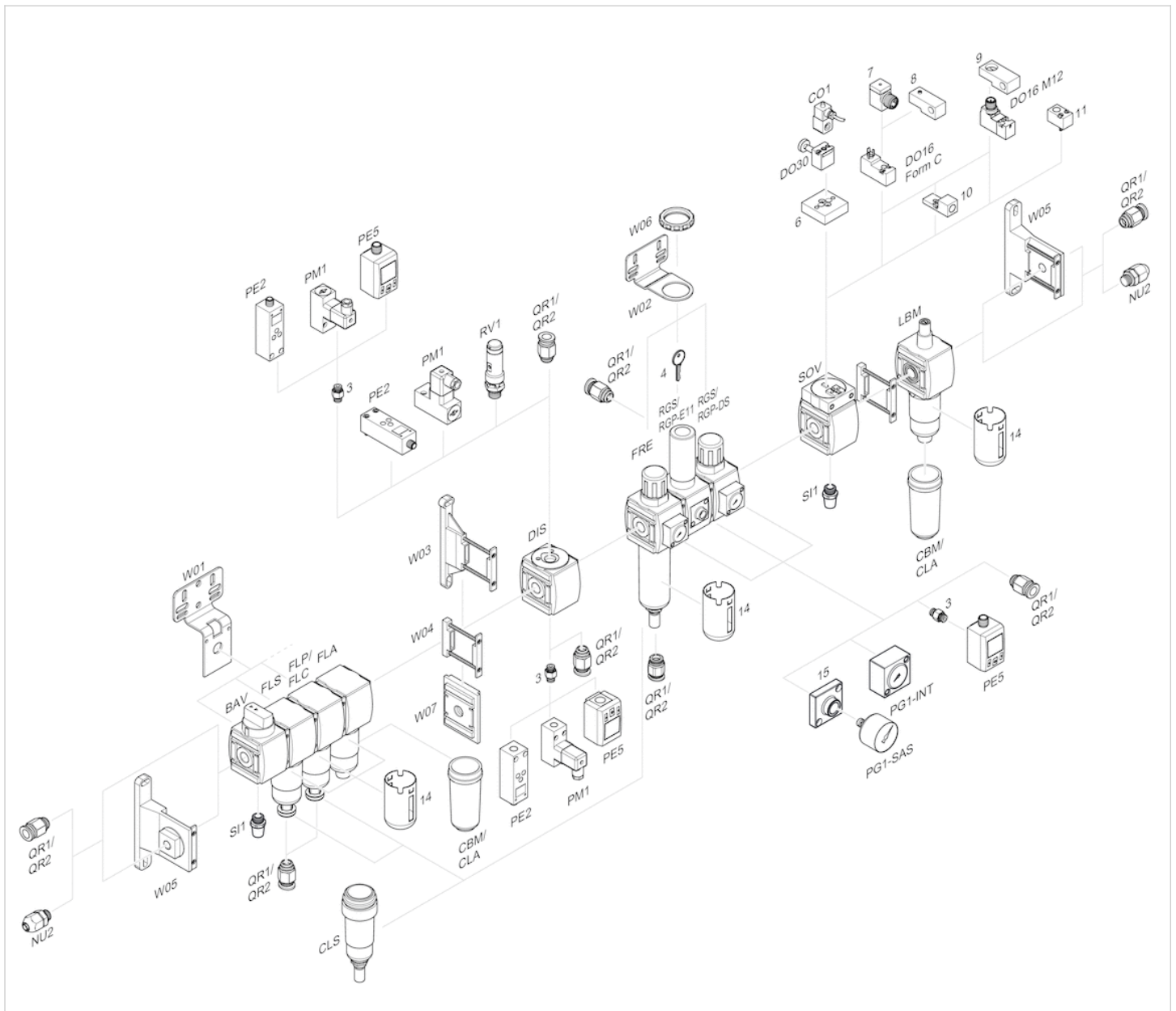
Diagrams

Flow rate characteristic



p1 = working pressure
p2 = secondary pressure
qn = nominal flow

Accessories overview



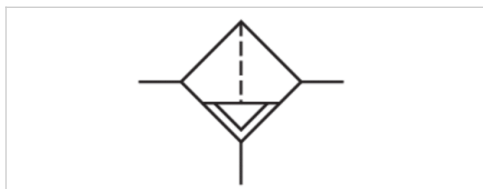
- 3 = Double nipple
- 4 = Key for E11 locking
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- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Pre-filter, Series AS1-FLP

- G 1/4
- Air supply left
- filter porosity 0.3 µm



Version	Pre-filter, Can be assembled into blocks
Parts	Pre-filter
Mounting orientation	vertical
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Filter reservoir volume	12 cm ³
Filter element	exchangeable
filter porosity	0.3 µm
Condensate drain	See table below
Weight	See table below



Technical data

Part No.	Port	Flow Qn	Working pressure min./max.	Condensate drain
R412014607	G 1/4	350 l/min	1.5 ... 12 bar	semi-automatic, open without pressure
R412014608	G 1/4	350 l/min	1.5 ... 12 bar	fully automatic, open without pressure
R412014609	G 1/4	350 l/min	1.5 ... 16 bar	fully automatic, closed without pressure
R412014610	G 1/4	350 l/min	1.5 ... 12 bar	semi-automatic, open without pressure
R412014611	G 1/4	350 l/min	1.5 ... 12 bar	semi-automatic, open without pressure
R412014612	G 1/4	350 l/min	1.5 ... 12 bar	fully automatic, open without pressure
R412014613	G 1/4	350 l/min	1.5 ... 16 bar	fully automatic, closed without pressure

Part No.	Version	Weight
R412014607	reservoir, polycarbonate, without protective guard	0.169 kg
R412014608	reservoir, polycarbonate, without protective guard	0.187 kg
R412014609	reservoir, polycarbonate, without protective guard	0.187 kg
R412014610	reservoir, polycarbonate, with metal protective guard	0.202 kg
R412014611	Metal reservoir without window	0.246 kg
R412014612	Metal reservoir without window	0.258 kg
R412014613	Metal reservoir without window	0.258 kg

Nominal flow Qn with secondary pressure p₂ = 6 bar at Δp = 0.1 bar

Technical information

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

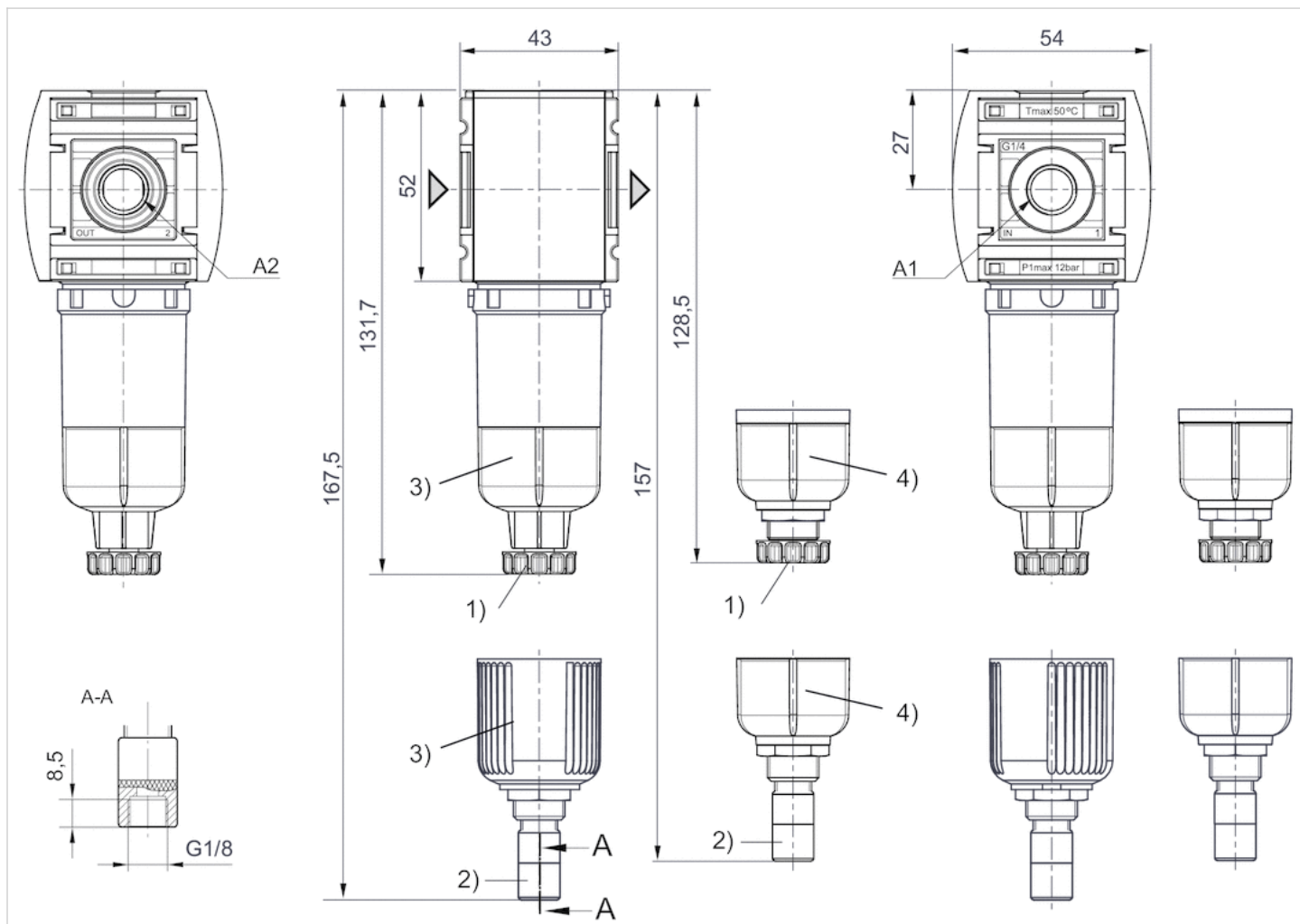
Max. achievable compressed air class acc. to ISO 8573-1:2010 2 : - : 3

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate metal
Protective guard	metal
Filter insert	Impregnated paper

Dimensions

Dimensions



A1 = input

A2 = output

1) Semi-automatic condensate drain

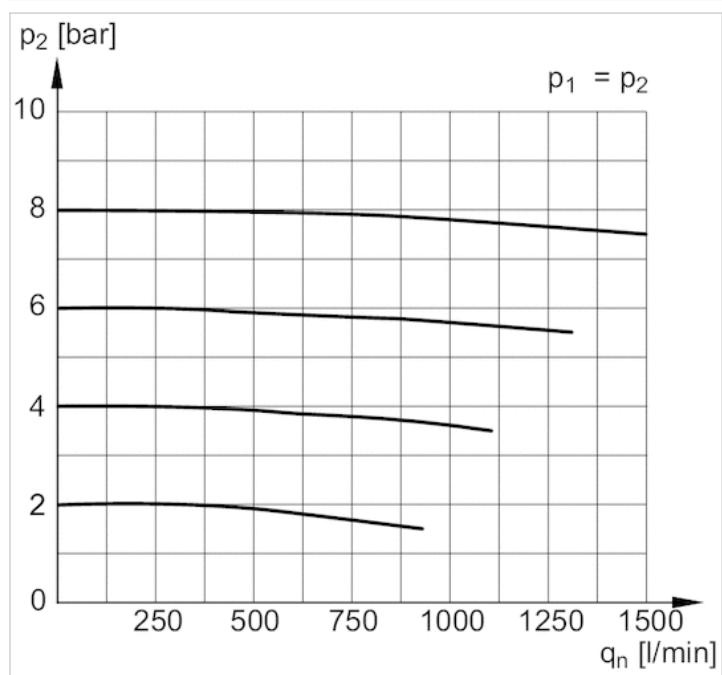
2) Fully automatic condensate drain

3) Reservoir: polycarbonate

4) Reservoir: metal

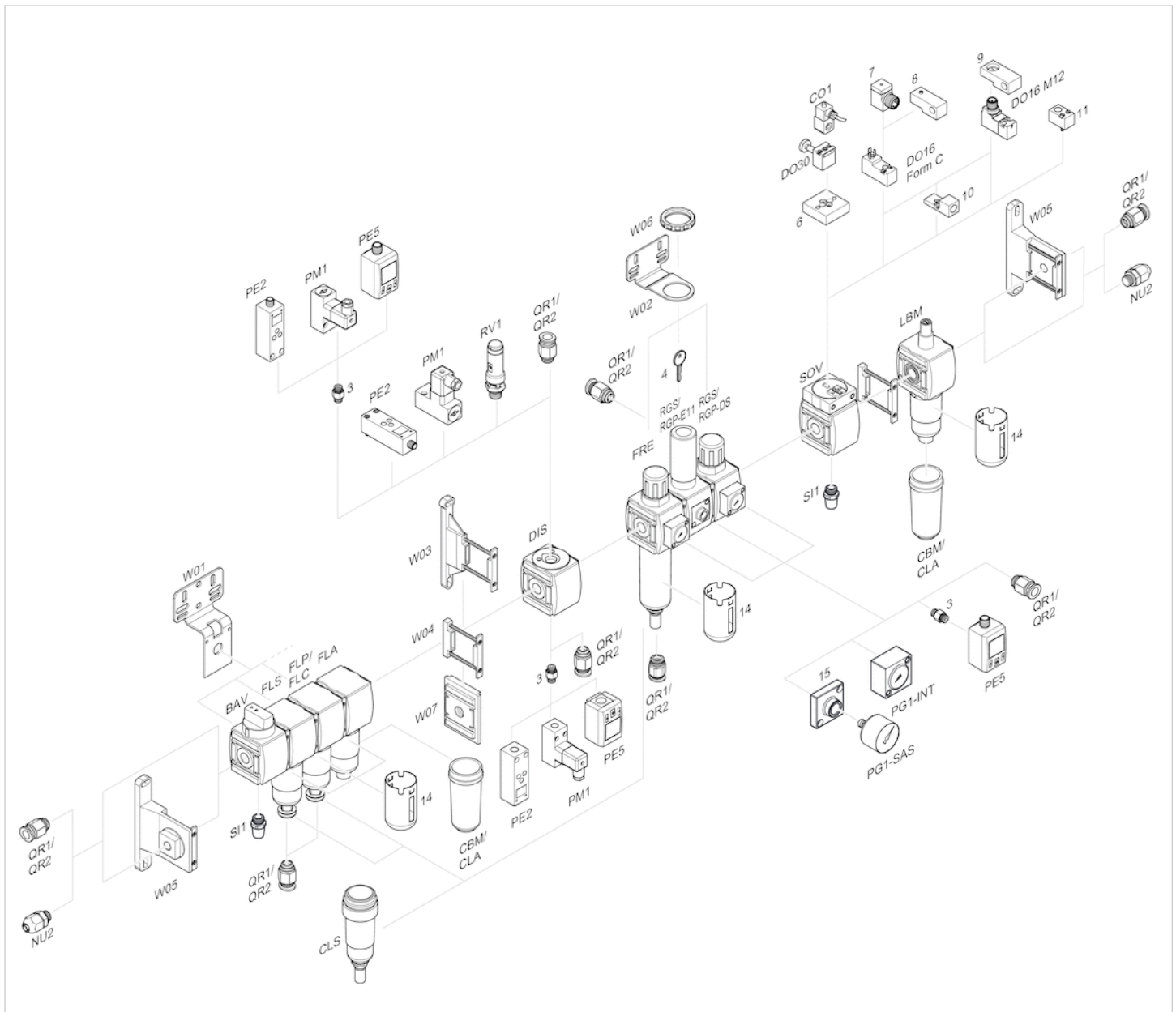
Diagrams

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



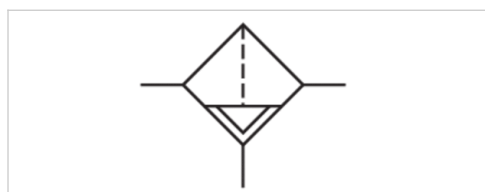
- 3 = Double nipple
- 4 = Key for E11 locking
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Microfilter, Series AS1-FLC

- G 1/4
- Air supply left
- filter porosity 0.01 µm



Version	Microfilter, Can be assembled into blocks
Parts	Microfilter
Mounting orientation	vertical
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Filter reservoir volume	12 cm ³
Filter element	exchangeable
filter porosity	0.01 µm
Condensate drain	See table below
Weight	See table below



Technical data

Part No.	Port	Flow Qn	Working pressure min./max.	Condensate drain
R412014614	G 1/4	350 l/min	1.5 ... 12 bar	semi-automatic, open without pressure
R412014615	G 1/4	350 l/min	1.5 ... 12 bar	fully automatic, open without pressure
R412014616	G 1/4	350 l/min	1.5 ... 16 bar	fully automatic, closed without pressure
R412014617	G 1/4	350 l/min	1.5 ... 12 bar	semi-automatic, open without pressure
R412014618	G 1/4	350 l/min	1.5 ... 12 bar	semi-automatic, open without pressure
R412014619	G 1/4	350 l/min	1.5 ... 12 bar	fully automatic, open without pressure
R412014620	G 1/4	350 l/min	1.5 ... 16 bar	fully automatic, closed without pressure

Part No.	Version	Weight
R412014614	reservoir, polycarbonate, without protective guard	0.169 kg
R412014615	reservoir, polycarbonate, without protective guard	0.187 kg
R412014616	reservoir, polycarbonate, without protective guard	0.187 kg
R412014617	reservoir, polycarbonate, with metal protective guard	0.202 kg
R412014618	Metal reservoir without window	0.246 kg
R412014619	Metal reservoir without window	0.258 kg
R412014620	Metal reservoir without window	0.258 kg

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 0.1 bar

Technical information

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

Recommended pre-filtering 0.3 µm

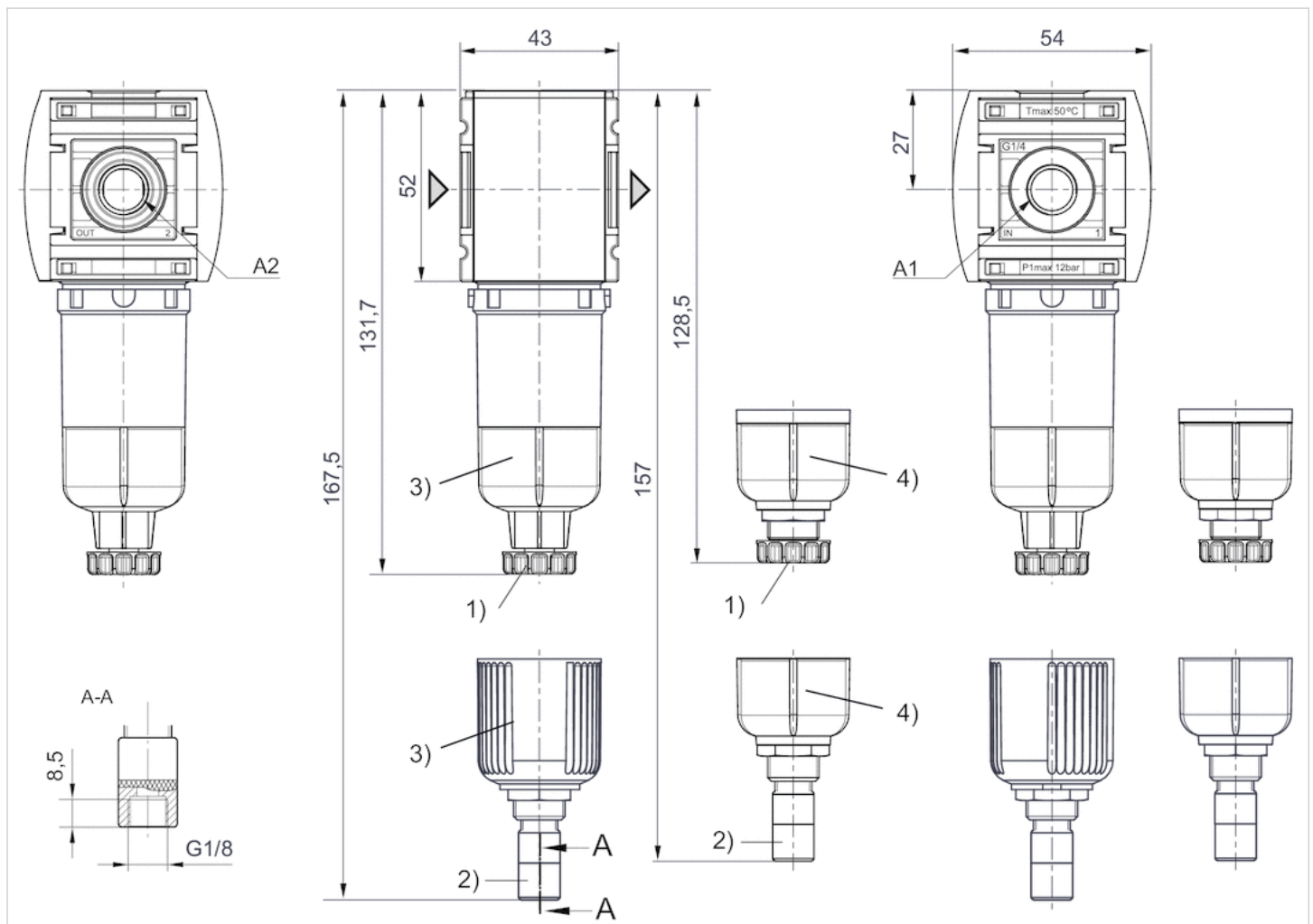
Max. achievable compressed air class acc. to ISO 8573-1:2010 1 : - : 2

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate metal
Protective guard	metal
Filter insert	Borosilicate aluminum

Dimensions

Dimensions



A1 = input

A2 = output

1) Semi-automatic condensate drain

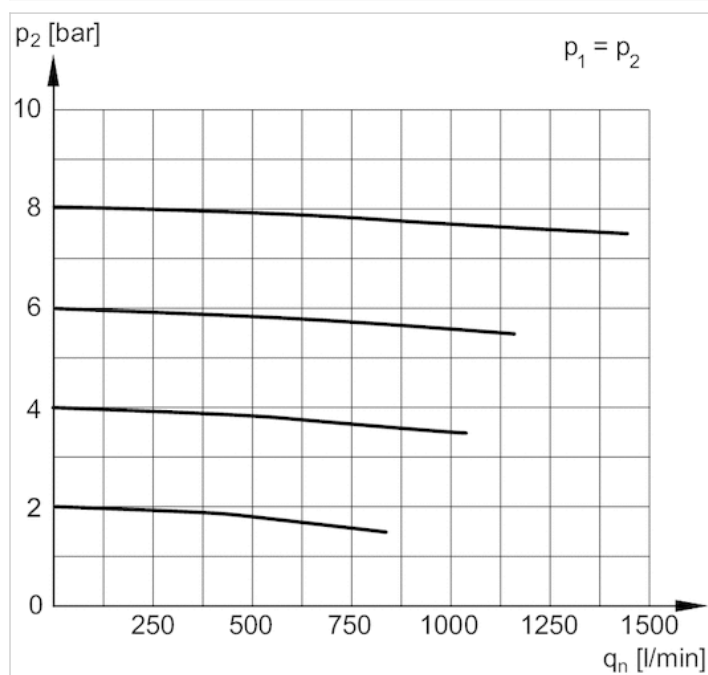
2) Fully automatic condensate drain

3) Reservoir: polycarbonate

4) Reservoir: metal

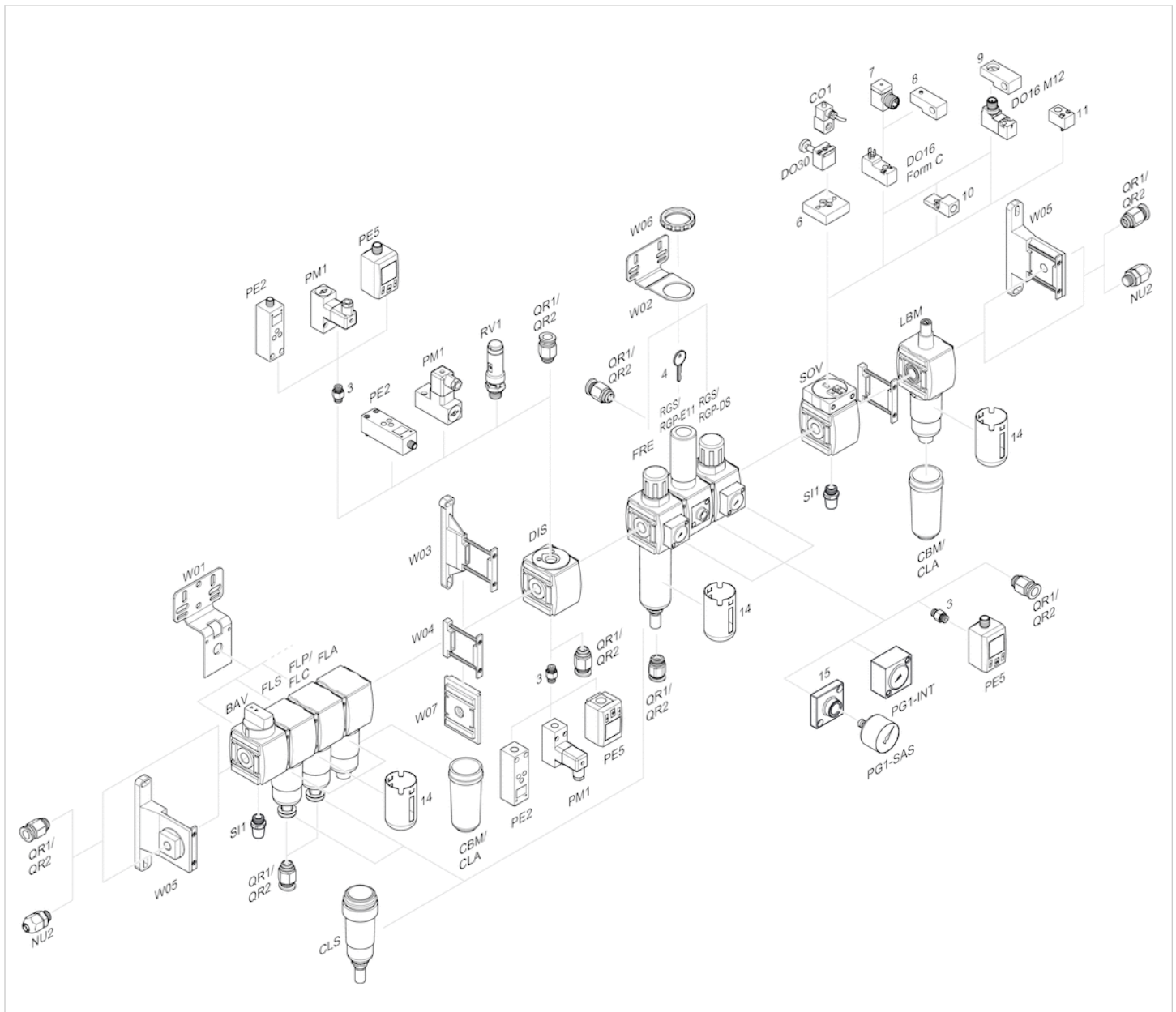
Diagrams

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Active carbon filter, Series AS1-FLA

- G 1/4

- Air supply left



Version

Active carbon filter, Can be assembled into blocks

Parts

Active carbon filter

Mounting orientation

vertical

Working pressure min./max.

0 ... 12 bar

Ambient temperature min./max.

-10 ... 50 °C

Medium temperature min./max.

-10 ... 50 °C

Medium

Compressed air Neutral gases

Filter reservoir volume

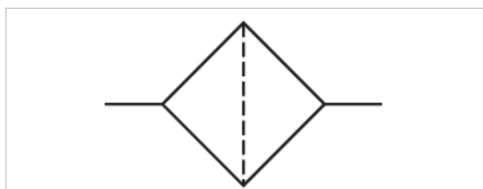
12 cm³

Filter element

exchangeable

Weight

See table below



Technical data

Part No.	Port	Flow Qn	Version
R412014621	G 1/4	350 l/min	reservoir, polycarbonate, without protective guard
R412014622	G 1/4	350 l/min	reservoir, polycarbonate, with metal protective guard
R412014623	G 1/4	350 l/min	Metal reservoir without window

Part No.	Weight
R412014621	0.171 kg
R412014622	0.204 kg
R412014623	0.232 kg

Nominal flow Qn with secondary pressure p₂ = 6 bar at Δp = 0.1 bar

Technical information

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

Recommended pre-filtering 0.01 μm

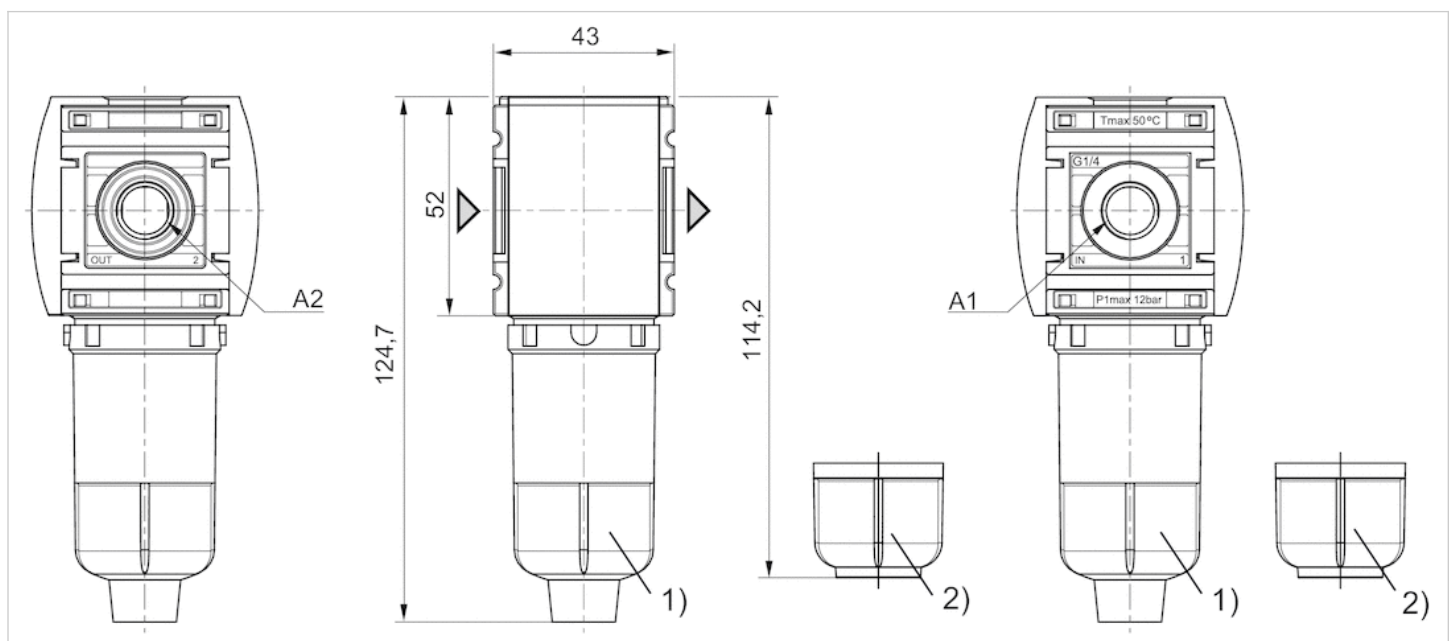
Max. achievable compressed air class acc. to ISO 8573-1:2010 - : - : 1

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate metal
Protective guard	metal
Filter insert	Active carbon

Dimensions

Dimensions



A1 = input

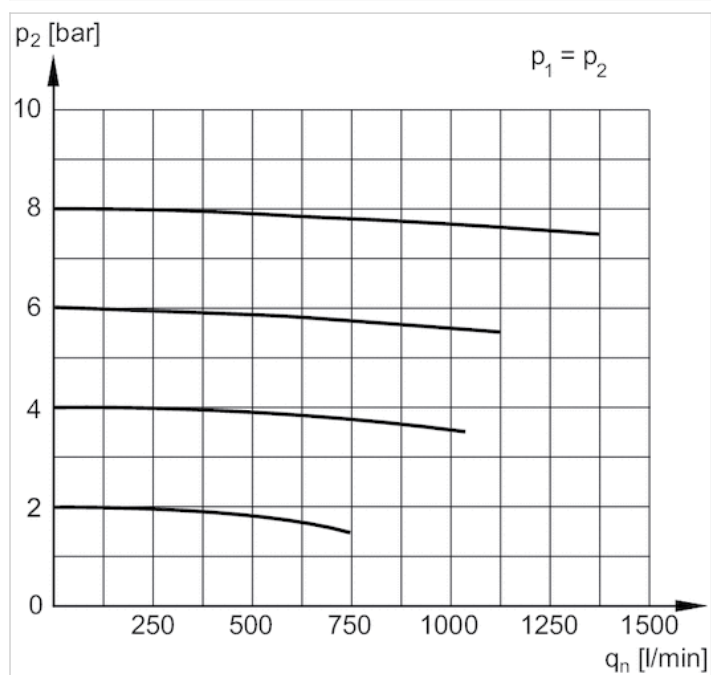
A2 = output

1) Reservoir: polycarbonate

2) Reservoir: metal

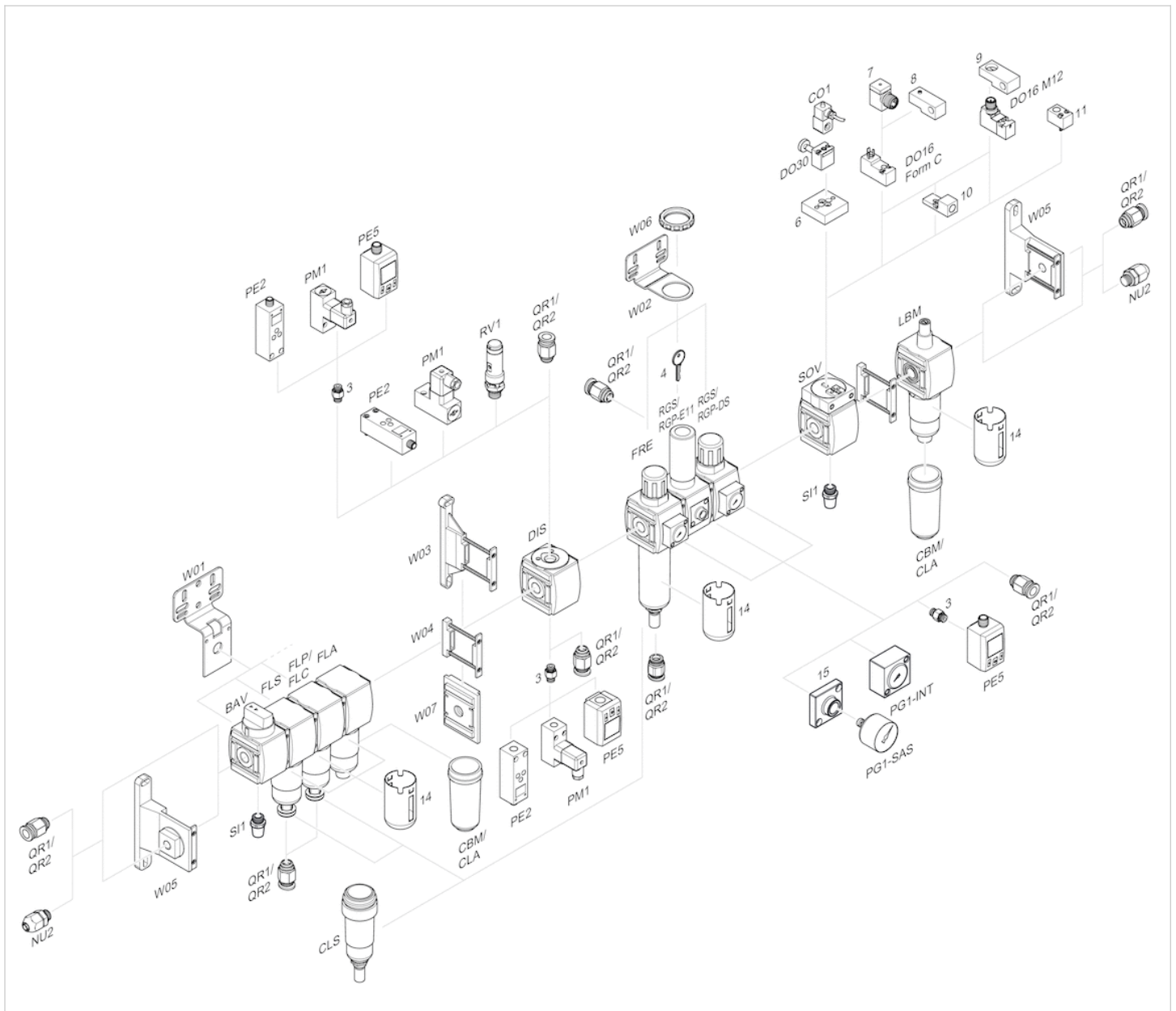
Diagrams

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



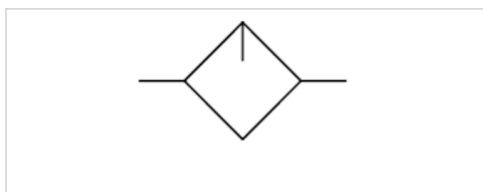
- 3 = Double nipple
- 4 = Key for E11 locking
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Micro oil-mist lubricator, Series AS1-LBM

- G 1/4
- Air supply left



Version	Micro oil-mist lubricator, Can be assembled into blocks
Parts	Micro oil-mist lubricator
Mounting orientation	vertical
Compressed air connection	G 1/4
Working pressure min./max.	0.8 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Lubricator reservoir volume	35 cm ³
Type of filling	Manual oil filling
Weight	See table below



Technical data

Part No.	Port	Nominal flow Q _n	Material Reservoir	Protective guard
R412014624	G 1/4	1400 l/min	Polycarbonate	-
R412014625	G 1/4	1400 l/min	Polycarbonate	metal
R412014626	G 1/4	1400 l/min	Die cast zinc	-

Part No.	Reservoir	Weight
R412014624	reservoir, polycarbonate, without protective guard	0.187 kg
R412014625	reservoir, polycarbonate, with metal protective guard	0.22 kg
R412014626	Metal reservoir without window	0.248 kg

Nominal flow Q_n with secondary pressure p₂ = 6 bar at Δp = 1 bar

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
Only approx. 10% of the preset drip quantity enters the compressed air system.

oil filling not possible during operation.

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

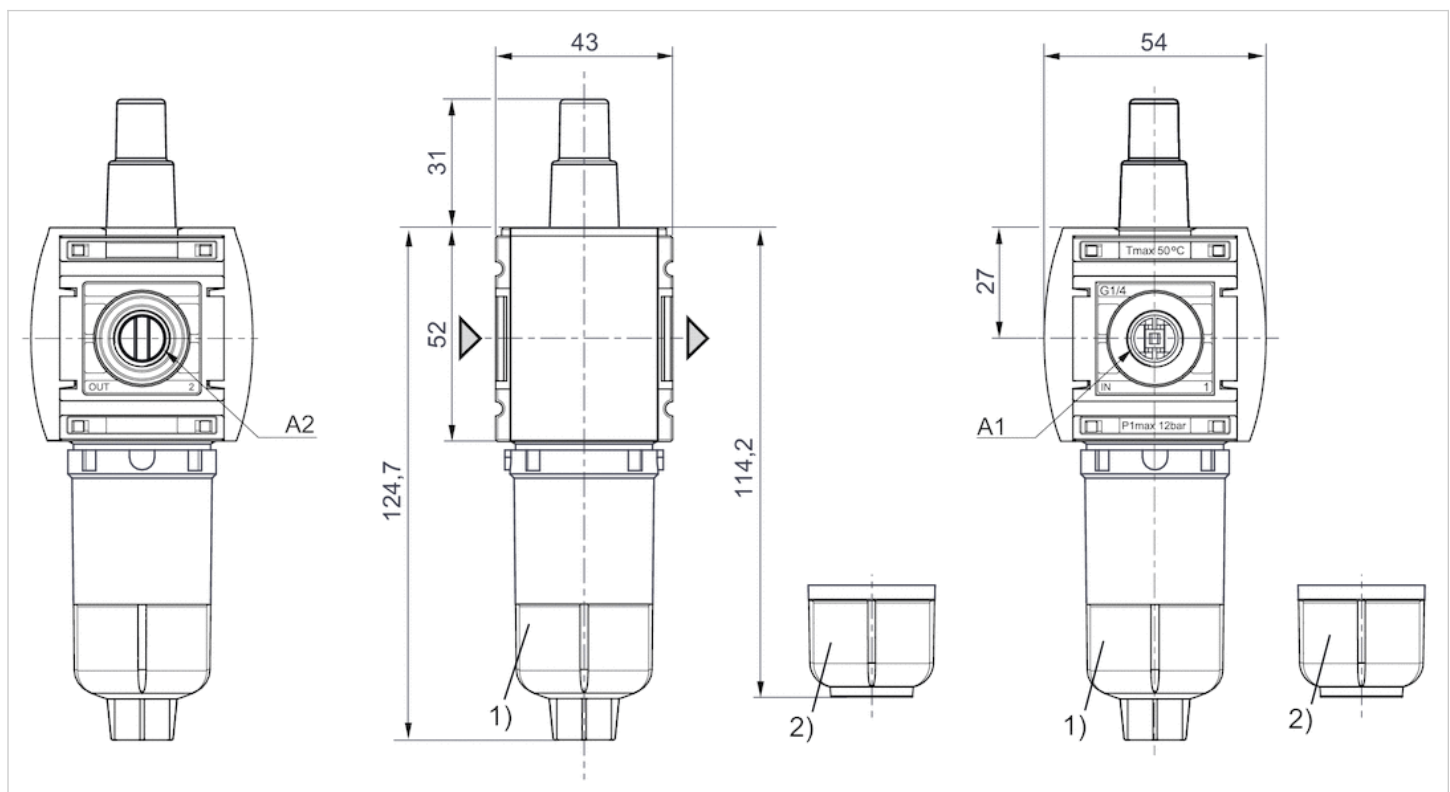
Oil dosing at 1000 l/min 10-20 drops

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate Die cast zinc
Protective guard	metal

Dimensions

Dimensions



A1 = input

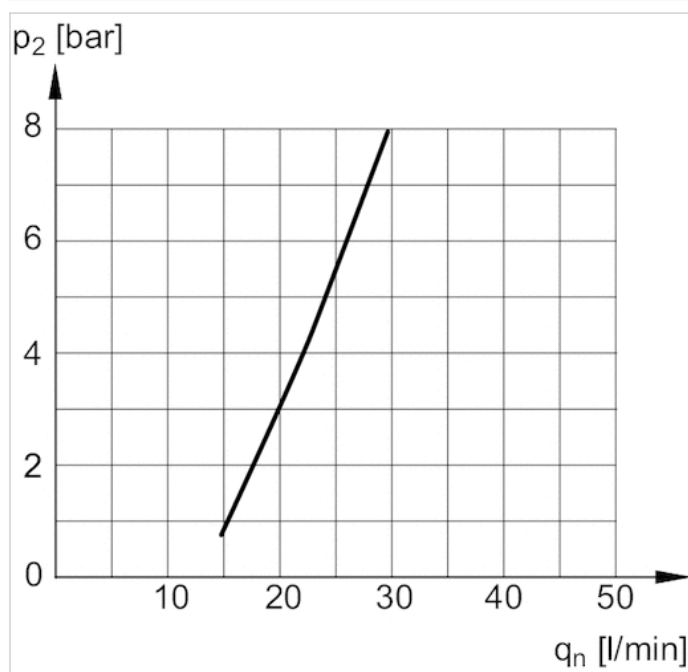
A2 = output

1) Reservoir: polycarbonate

2) Reservoir: metal

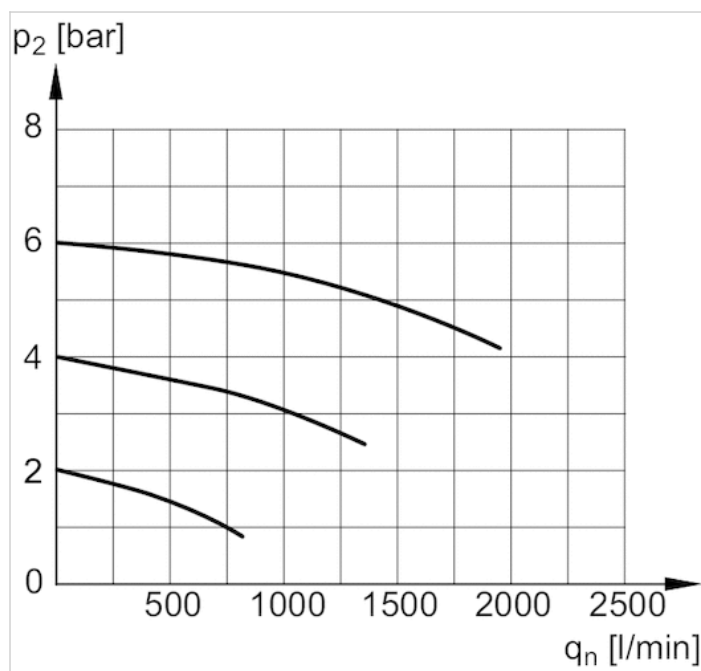
Diagrams

Lubricator activation margin



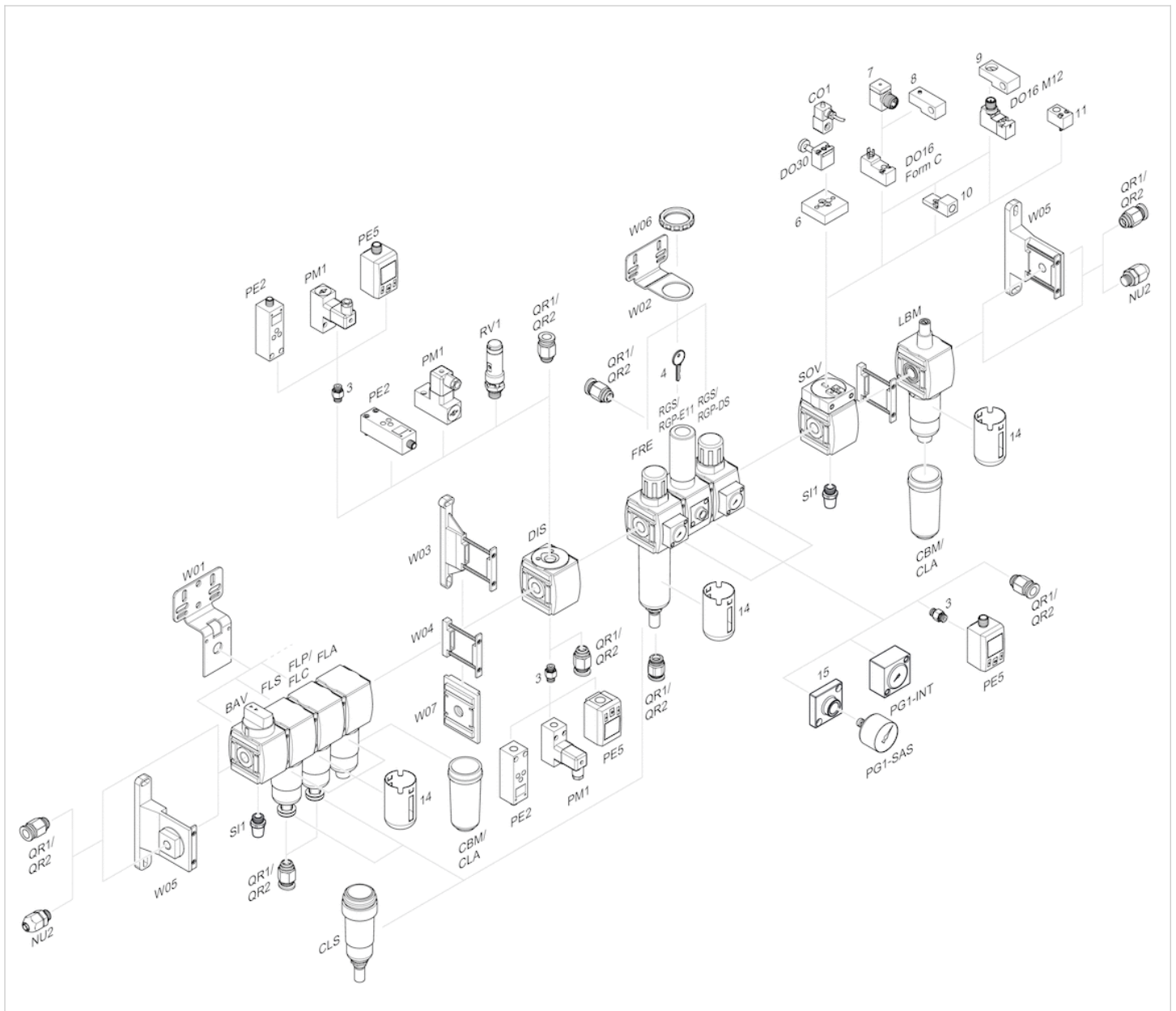
p_2 = secondary pressure
 q_n = nominal flow

Flow rate characteristic



p_2 = secondary pressure
 q_n = nominal flow

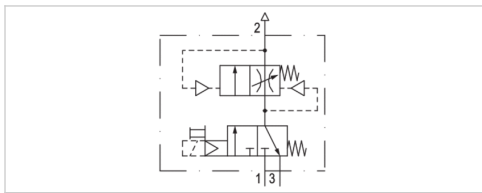
Accessories overview



- 3 = Double nipple
4 = Key for E11 locking
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
14 = Protective guard
15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Filling unit, electrically operated, Series AS1-SSU

- adjustable filling time
- Compressed air connection G 1/4
- Air supply left
- Pipe connection



Version

Parts

Nominal flow
 Nominal flow 1 ► 2
 Nominal flow 2 ► 3
 Working pressure min./max.
 Medium
 Medium temperature min./max.
 Ambient temperature min./max.
 Pilot
 Sealing principle
 Max. particle size
 Protection class acc. to DIN EN 61140 with plug
 Duty cycle
 Weight

Poppet valve, Can be assembled into blocks
 Filling valve, 3/2-directional valve, electrically operated
 1300 l/min
 1300 l/min
 380 l/min
 2.5 ... 10 bar
 Compressed air Neutral gases
 -10 ... 50 °C
 -10 ... 50 °C
 Internal
 Soft sealing
 25 µm
 IP65
 100 %
 See table below

Technical data

Part No.		Compressed air connection input	Compressed air connection output	Exhaust
R412010484		G 1/4	G 1/4	G 1/4
R412010682		G 1/4	G 1/4	G 1/4

Part No.	Operational voltage	Power consumption	Electrical connection
		DC	Pilot valve
R412010484	24 V	2 W	Plug, ISO 15217, form C
R412010682	24 V	2 W	Plug, M12

Part No.	basic valve with electrical connector	Weight	Fig.
R412010484	Basic valve with pilot valve	0.36 kg	Fig. 1
R412010682	Basic valve with pilot valve	0.377 kg	Fig. 2

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

Technical information

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

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.

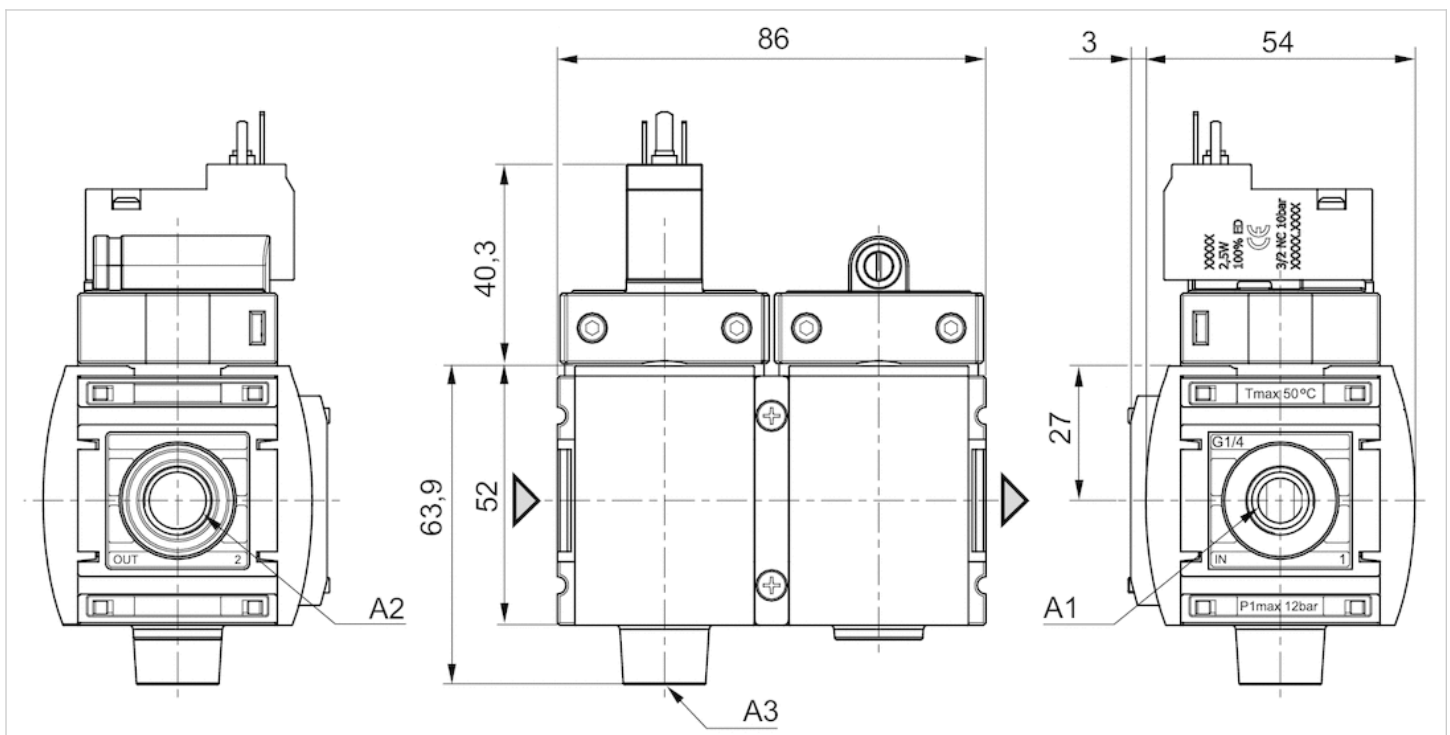
Do not position filling valves or filling units upstream of open consumers, such as nozzles, air barriers, air curtains, since these may prevent through connection of components.

Technical information

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

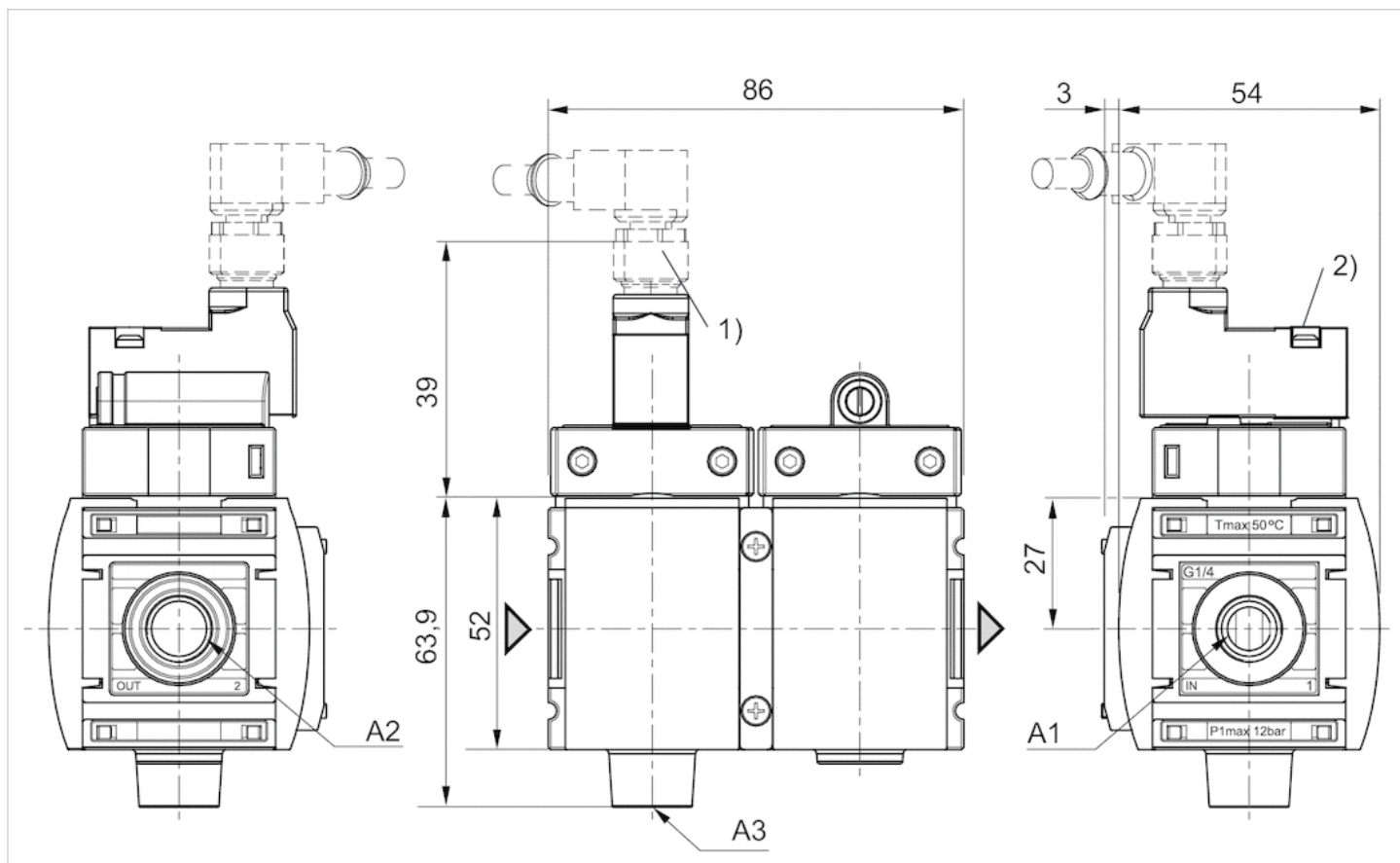
Dimensions

Fig. 1: Filling unit with pilot valve and port for electrical connector form C



A1 = input
A2 = output
A3 = ventilation port

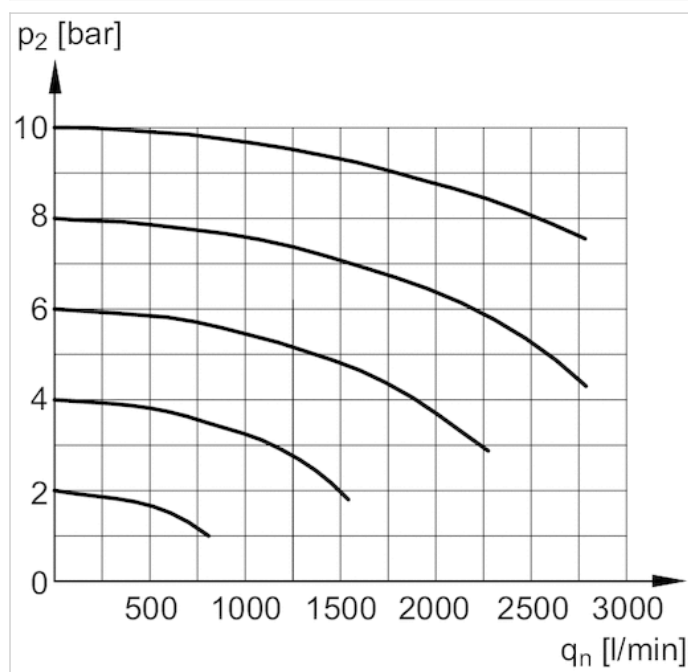
Fig. 2: Filling unit with pilot valve and electrical connector for plug M12x1



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

Diagrams

Flow rate characteristic

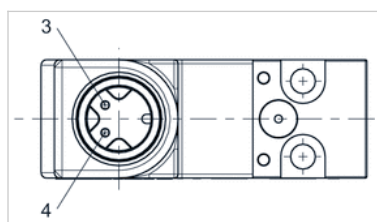


p_2 = secondary pressure

q_n = nominal flow

Pin assignments

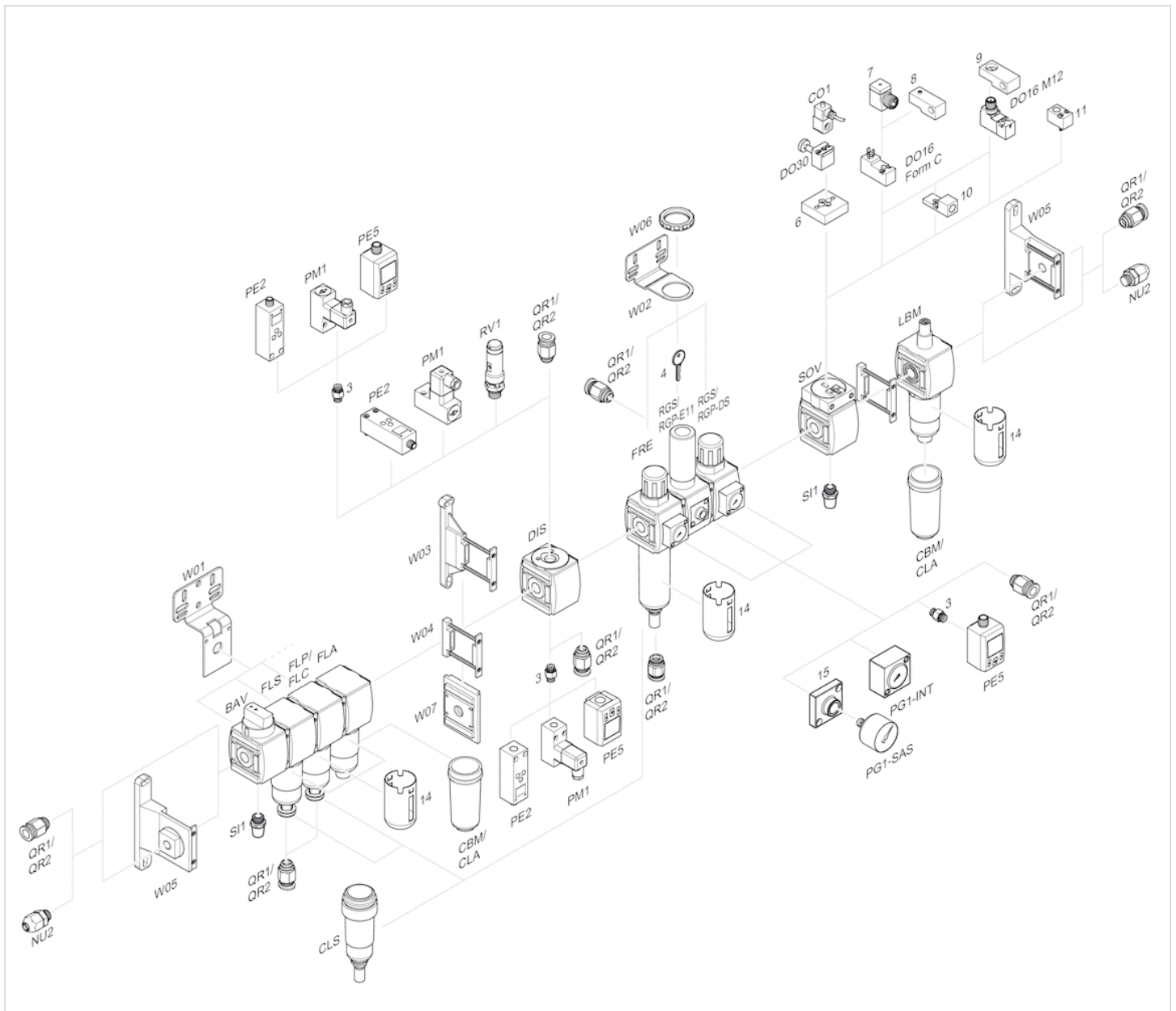
Pin assignment M12x1



3: +/-

4: +/-

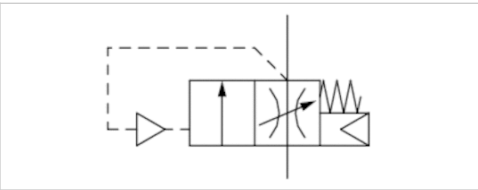
Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Filling valve, Series AS1-SSV

- adjustable filling time
- Compressed air connection G 1/4
- Air supply left
- Pipe connection



Version	Poppet valve, Can be assembled into blocks
Sealing principle	Soft sealing
Working pressure min./max.	0 ... 16 bar
Control pressure min./max.	2.5 ... 16 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Max. particle size	40 µm
Weight	0.134 kg

Technical data

Part No.	Port	Flow	Flow
		Qn	Qn 1►2
R412014671	G 1/4	2000 l/min	2000 l/min

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

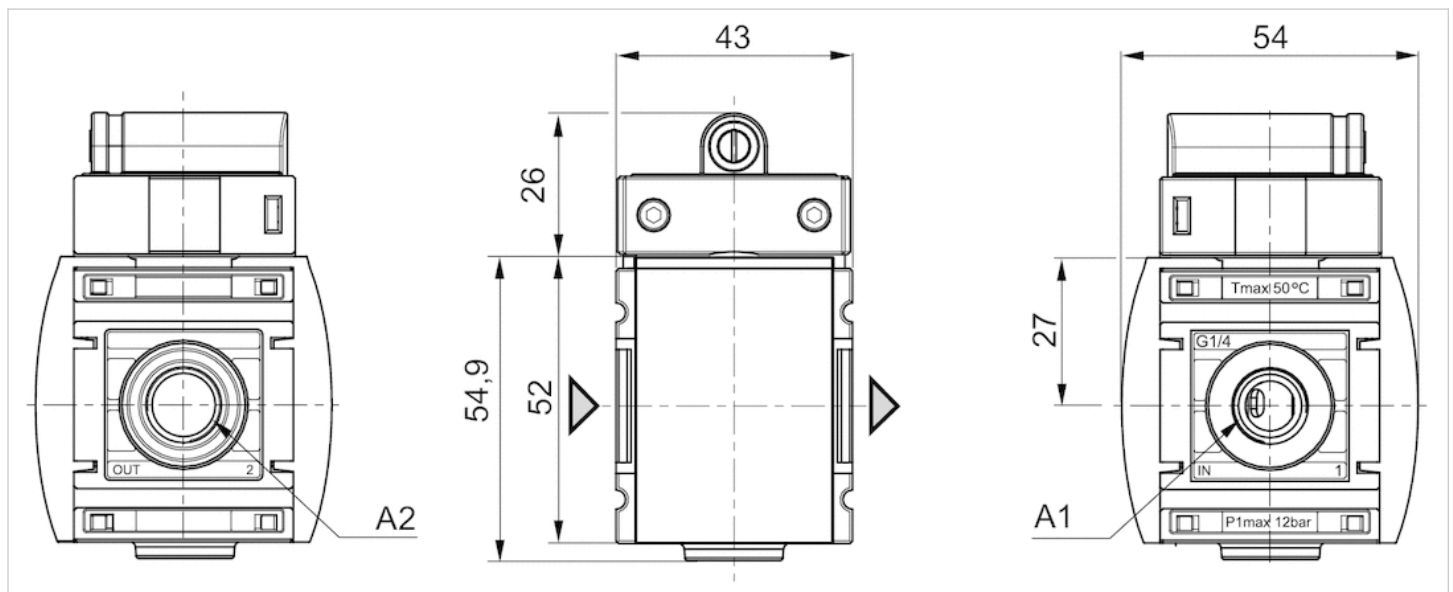
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
Do not position filling valves or filling units upstream of open consumers, such as nozzles, air barriers, air curtains, since these may prevent through connection of components.

Technical information

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

Dimensions

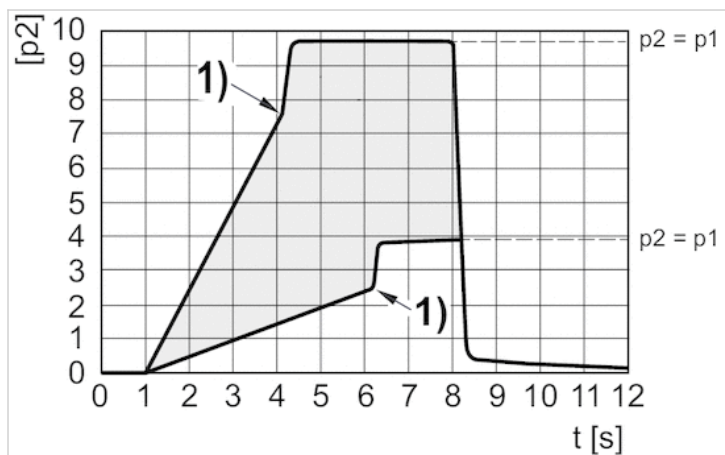
Dimensions in mm



A1 = input
A2 = output

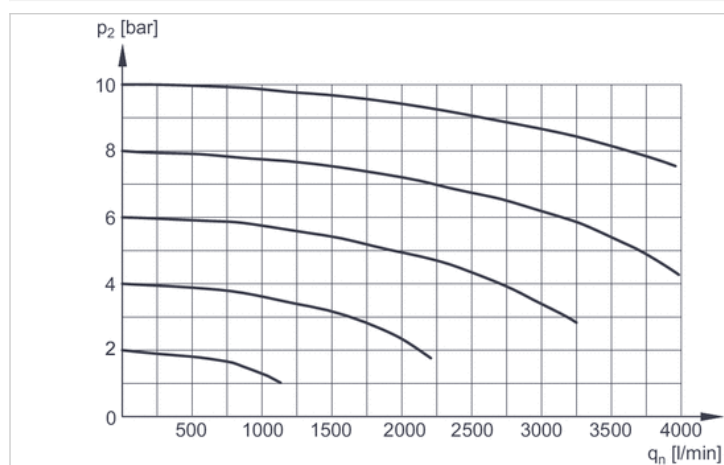
Diagrams

Secondary pressure while filling



p_1 = working pressure
 p_2 = secondary pressure
 t = filling time, adjustable via adjustment screw (throttle)
 Change-over pressure individually adjustable via pneumatic signal
 1) Switching point: adjustable filling time and change-over pressure

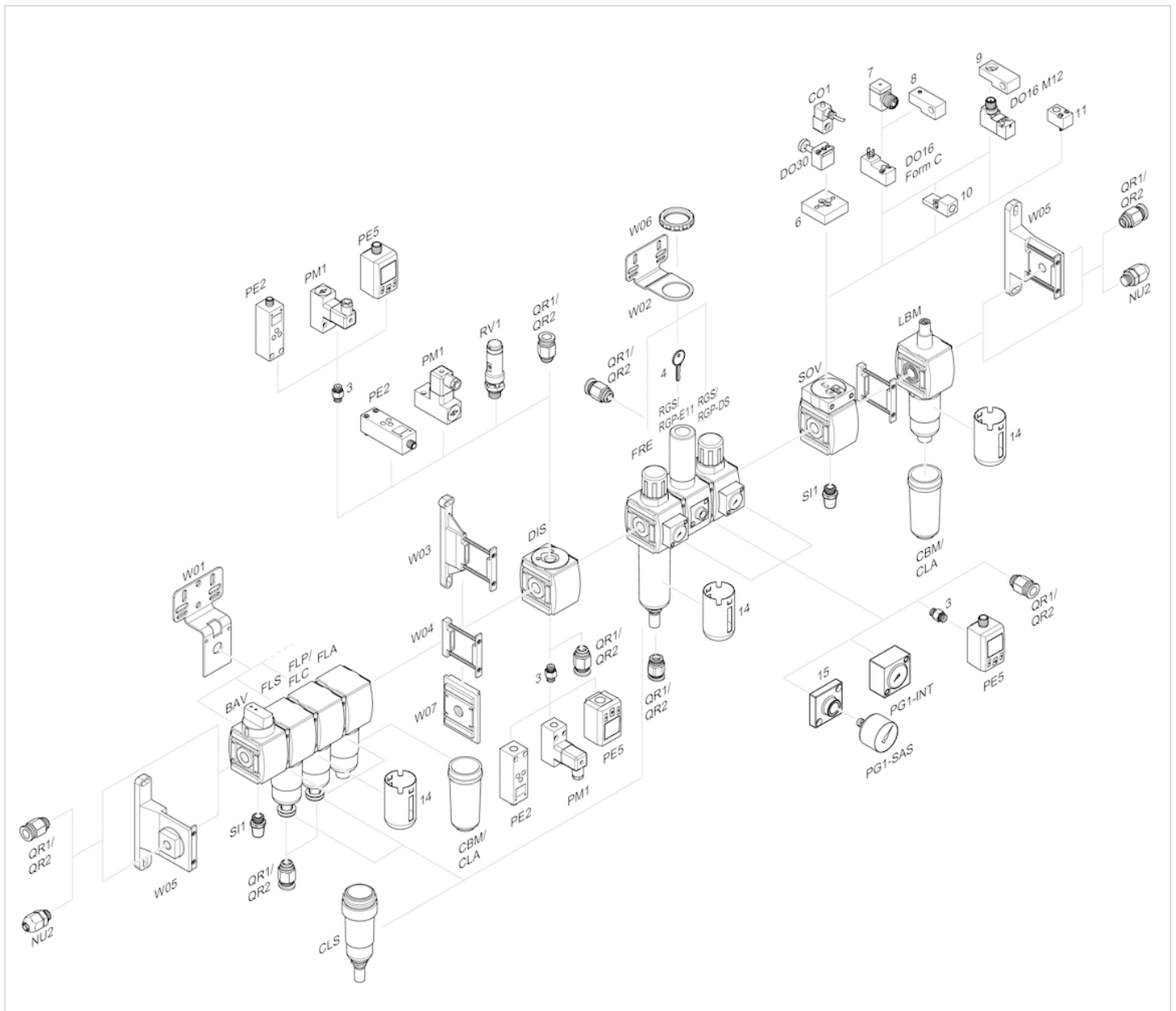
Flow rate characteristic



p_2 = secondary pressure

q_n = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

3/2-directional valve, electrically operated, Series AS1-SOV

- Compressed air connection G 1/4
- Air supply left
- Pipe connection
- NC



Version

Parts

Nominal flow 1 ► 2

Nominal flow 2 ► 3

Working pressure min./max.

Medium

Medium temperature min./max.

Ambient temperature min./max.

Pilot

Sealing principle

Max. particle size

Oil content of compressed air

Protection class acc. to DIN EN 61140 with plug

Weight

Poppet valve, Can be assembled into blocks

3/2-directional valve, electrically operated

2000 l/min

380 l/min

See table below

Compressed air Neutral gases

-10 ... 50 °C

-10 ... 50 °C

Internal

Soft sealing

25 µm

0 ... 5 mg/m³

IP65

See table below

Technical data

Part No.				Compressed air connection input	Compressed air connection output	Exhaust
R412014669		—	NC	G 1/4	G 1/4	G 1/4
R412014670		—	NC	G 1/4	G 1/4	G 1/4
R412014666			NC	G 1/4	G 1/4	G 1/4
R412014668			NC	G 1/4	G 1/4	G 1/4
R412010680			NC	G 1/4	G 1/4	G 1/4

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
R412014669	-	-	-
R412014670	-	-	-
R412014666	24 V	-	-
R412014668	-	230 V	230 V
R412010680	24 V	-	-

Part No.	Power consumption	Holding power	Switch-on power	Switch-on power
	DC	AC 50 Hz	AC 50 Hz	AC 60 Hz
R412014669	-	-	-	-
R412014670	-	-	-	-
R412014666	2 W	-	-	-
R412014668	-	1.6 VA	3 VA	3 VA
R412010680	2 W	-	-	-

Part No.	Working pressure min./max.	Electrical connection	Connector standard
		Pilot valve	
R412014669	2 ... 12 bar	-	-
R412014670	2 ... 12 bar	-	-
R412014666	2 ... 10 bar	Plug, ISO 15217, form C	EN 175301-803, form C
R412014668	2 ... 10 bar	Plug, ISO 15217, form C	EN 175301-803, form C
R412010680	2 ... 10 bar	Plug, M12	-

Part No.	basic valve with electrical connector	Weight	Fig.
R412014669	Basic valve without pilot valve	0.196 kg	Fig. 1
R412014670	Basic valve without pilot valve, with CNOMO subbase	0.21 kg	Fig. 1
R412014666	Basic valve with pilot valve	0.215 kg	Fig. 2
R412014668	Basic valve with pilot valve	0.214 kg	Fig. 2
R412010680	Basic valve with pilot valve	0.232 kg	Fig. 3

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

Technical information

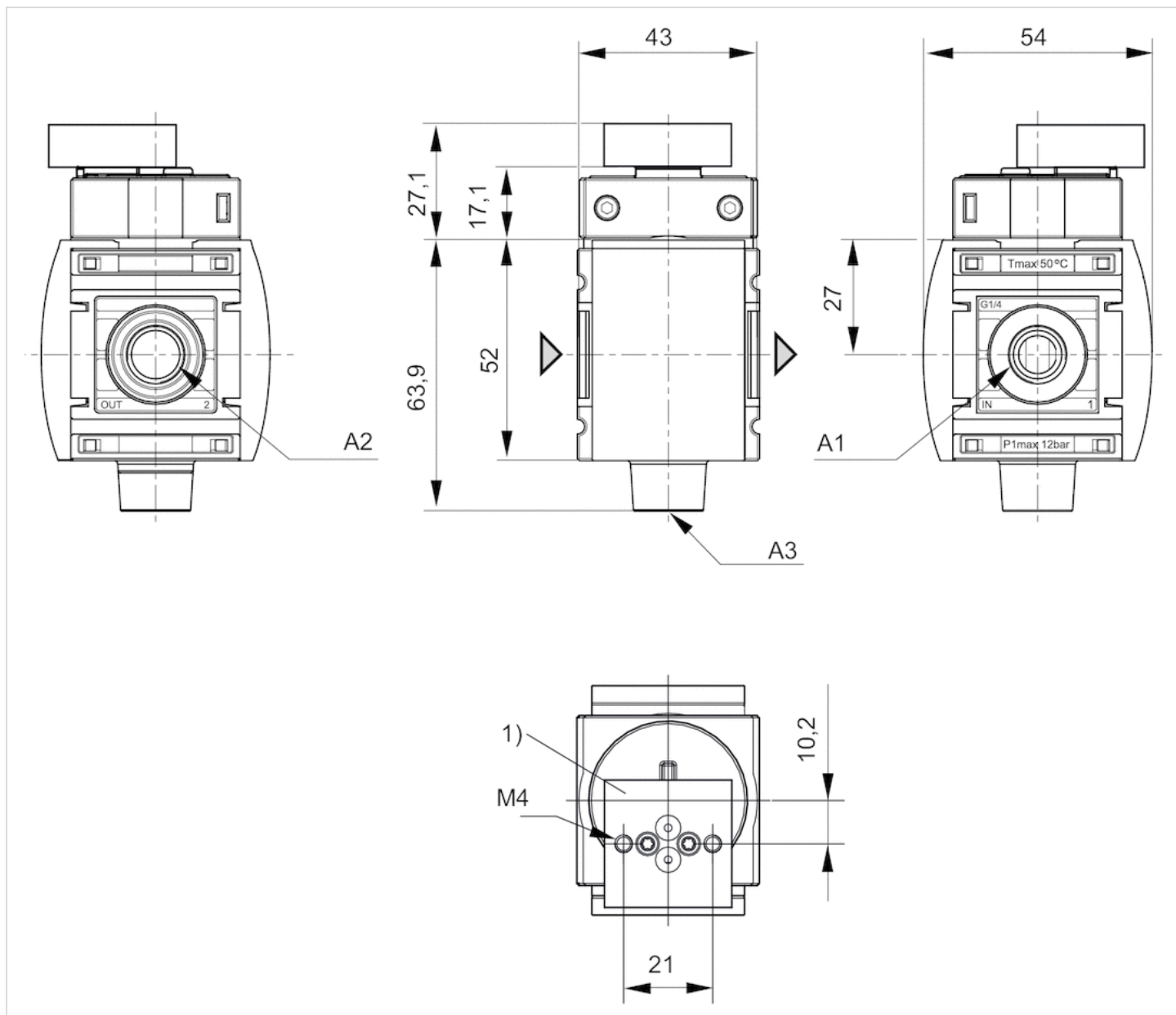
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

Fig. 1: 3/2-directional valve with transition plate for pilot valve series DO30



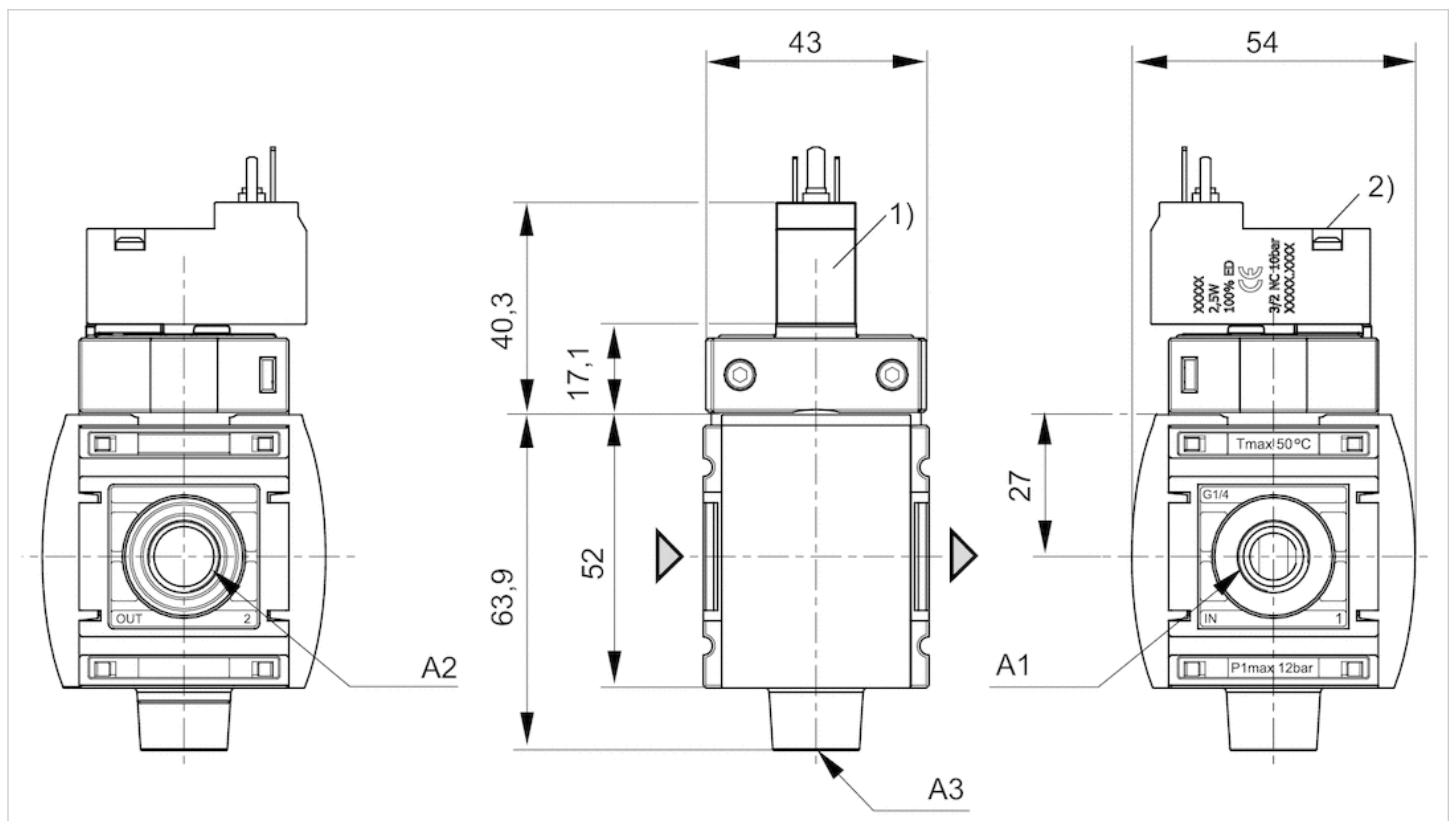
A1 = input

A2 = output

A3 = ventilation port

1) Transition plate with CNOMO porting configuration for pilot valve DO30

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



A1 = input

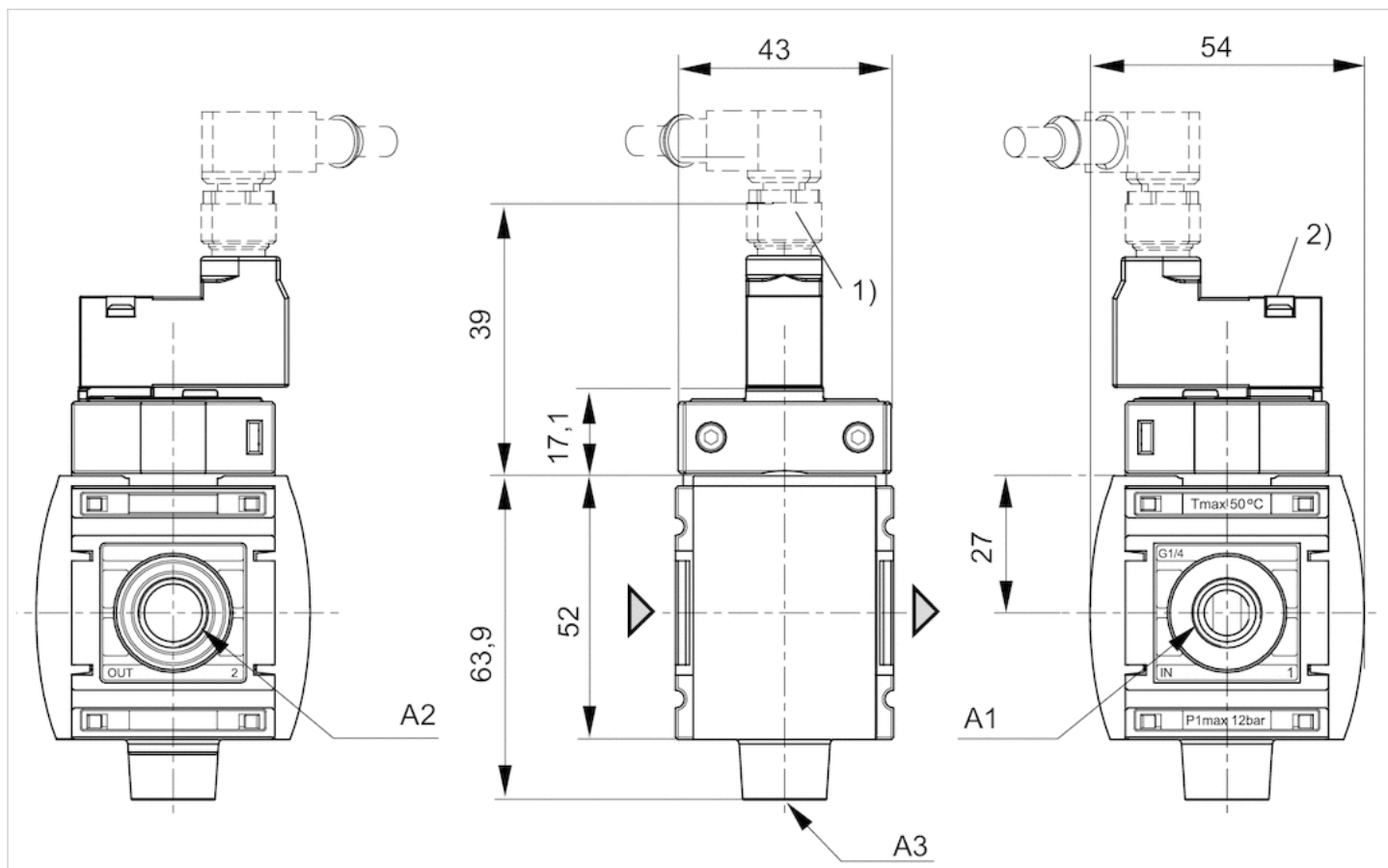
A2 = output

A3 = ventilation port

1) For valve plug connectors according to ISO 15217 (form C)

2) Manual override

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



A1 = input

A2 = output

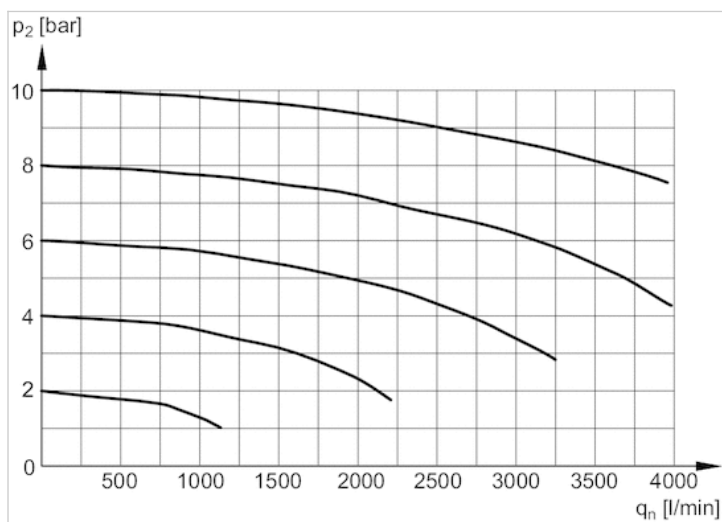
A3 = ventilation port

1) plug M12

2) Manual override

Diagrams

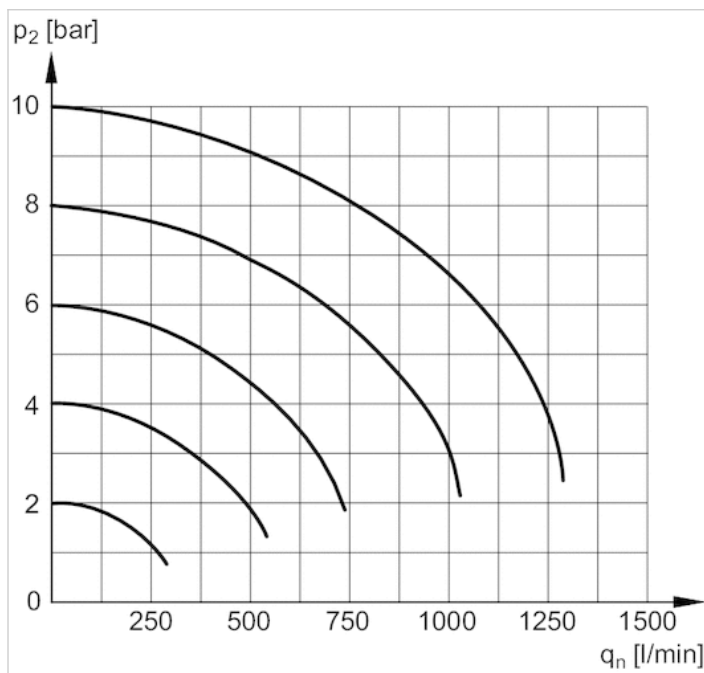
Flow rate characteristic



p2 = secondary pressure

qn = nominal flow

Rear exhaust

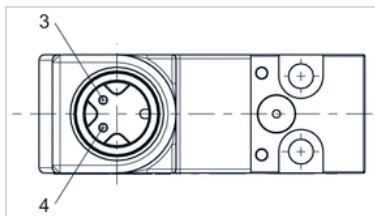


p_2 = secondary pressure

q_n = nominal flow

Pin assignments

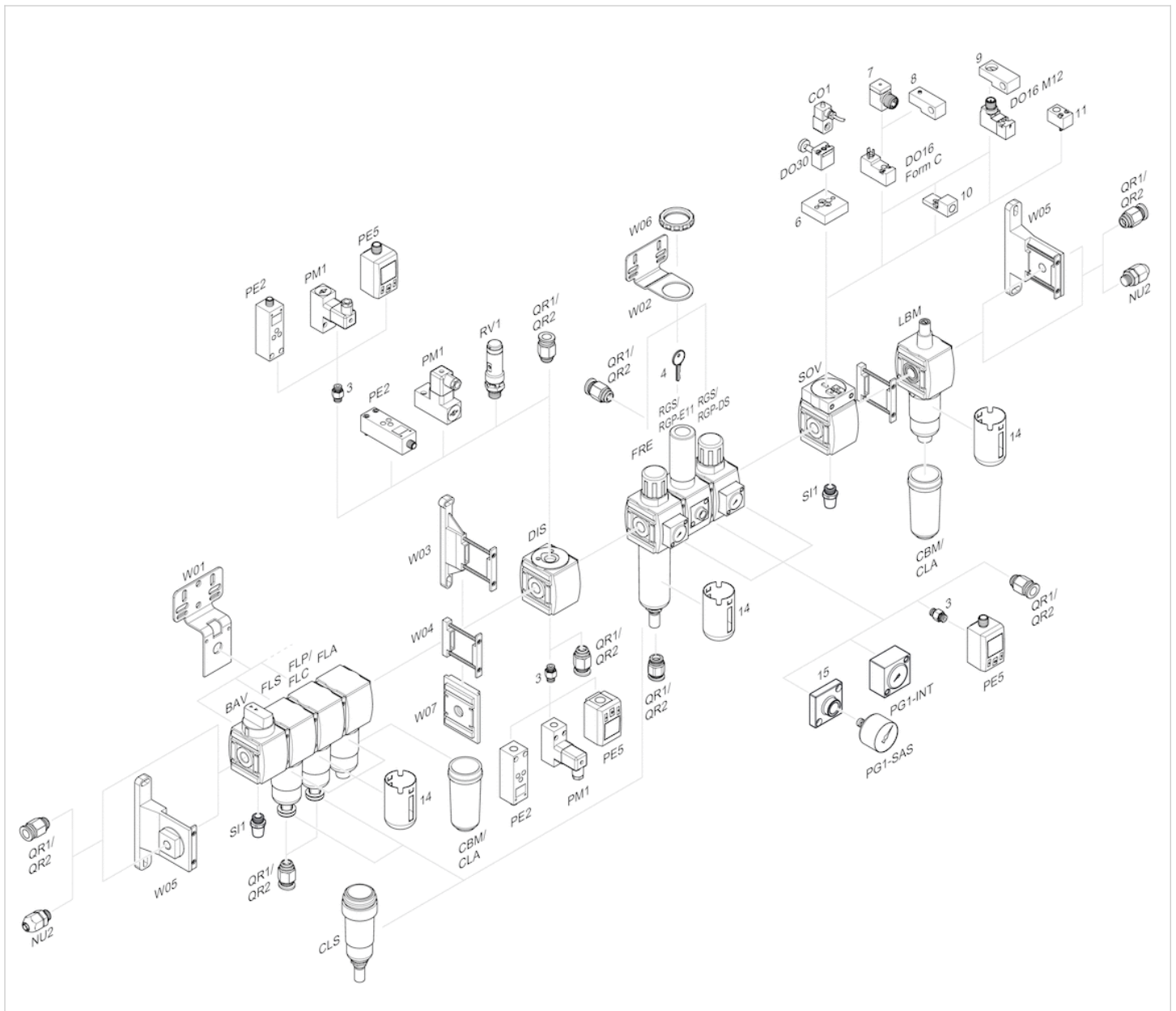
Pin assignment M12x1



3: +/-

4: +/-

Accessories overview



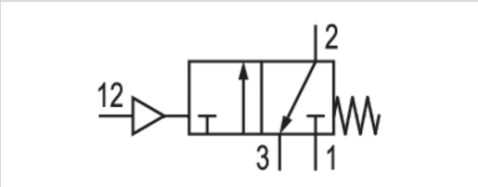
- 3 = Double nipple
- 4 = Key for E11 locking
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

3/2-directional valve, pneumatically operated, Series AS1-SOV

- Compressed air connection G 1/4
- Air supply left
- Pipe connection



Version	Poppet valve, Can be assembled into blocks
Sealing principle	Soft sealing
Working pressure min./max.	0 ... 16 bar
Control pressure min./max.	2.5 ... 16 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Weight	0.09 kg



Technical data

Part No.	Port	Pilot connection	Exhaust	Flow	Flow	Flow
				Qn	Qn 1→2	Qn 2→3
R412014665	G 1/4	G 1/8	G 1/4	2000 l/min	2000 l/min	380 l/min

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

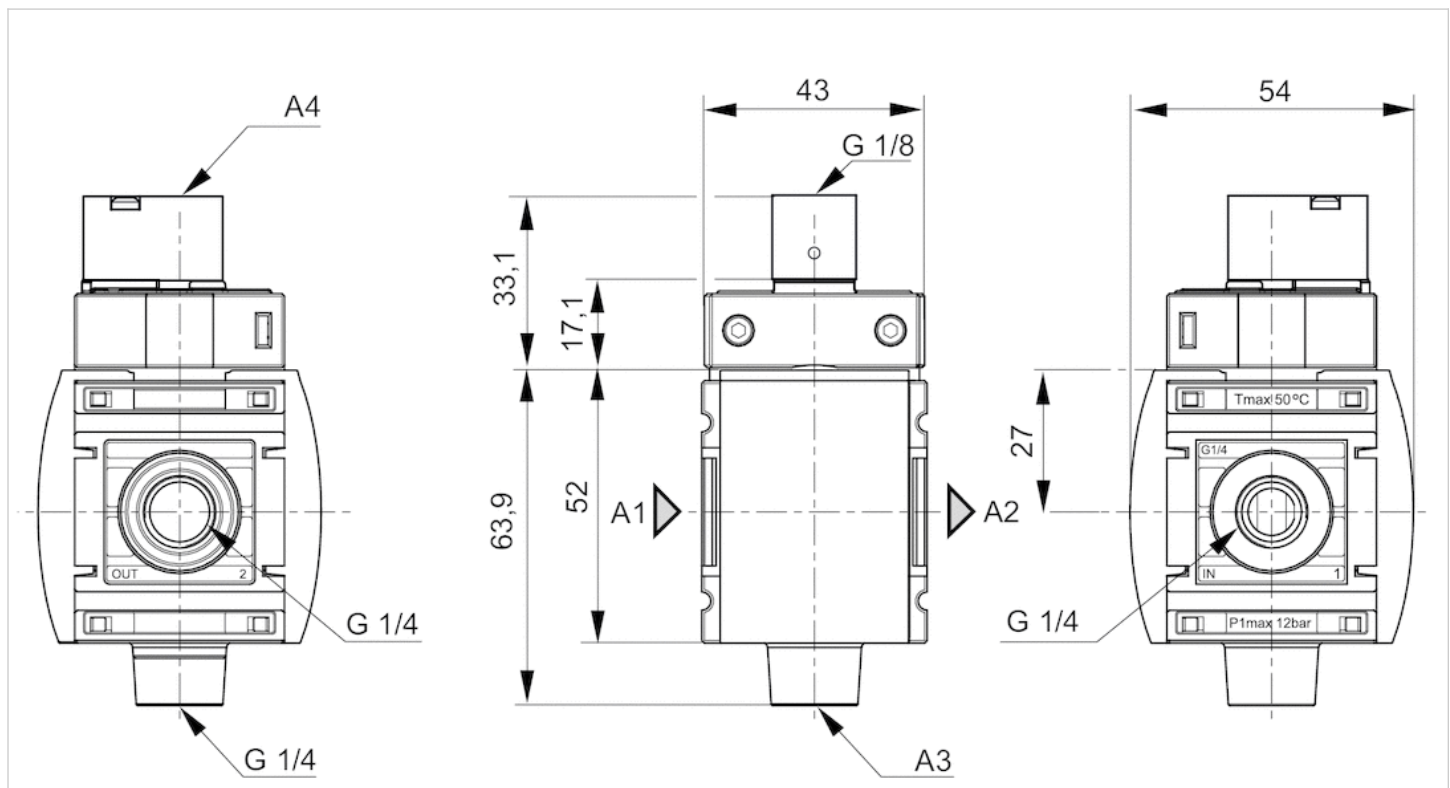
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

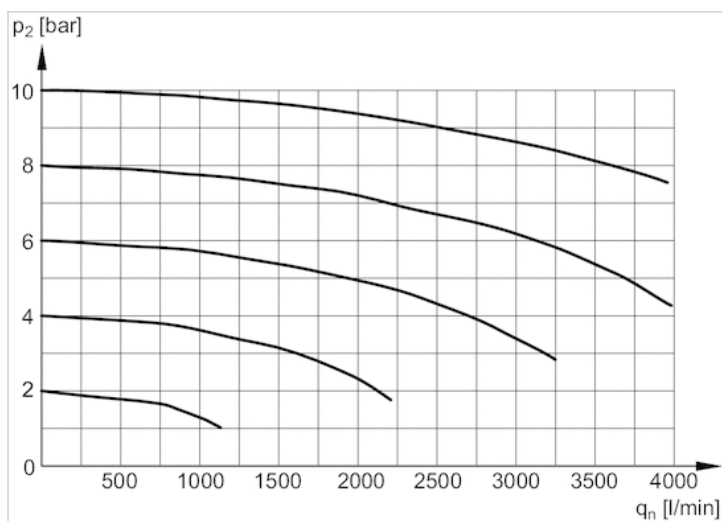
Dimensions in mm



- A1 = input
 A2 = output
 A3 = ventilation port
 A4 = control pressure connection

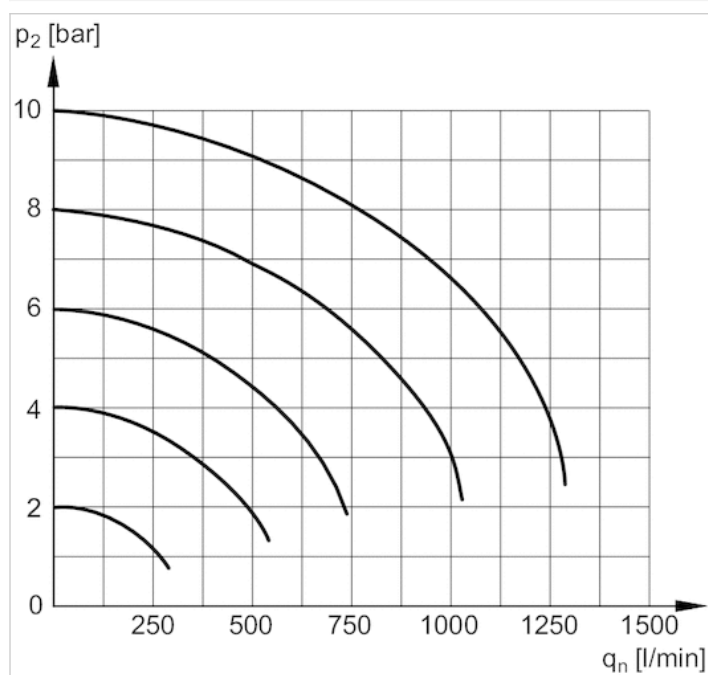
Diagrams

Flow rate characteristic



p_2 = secondary pressure
 q_n = nominal flow

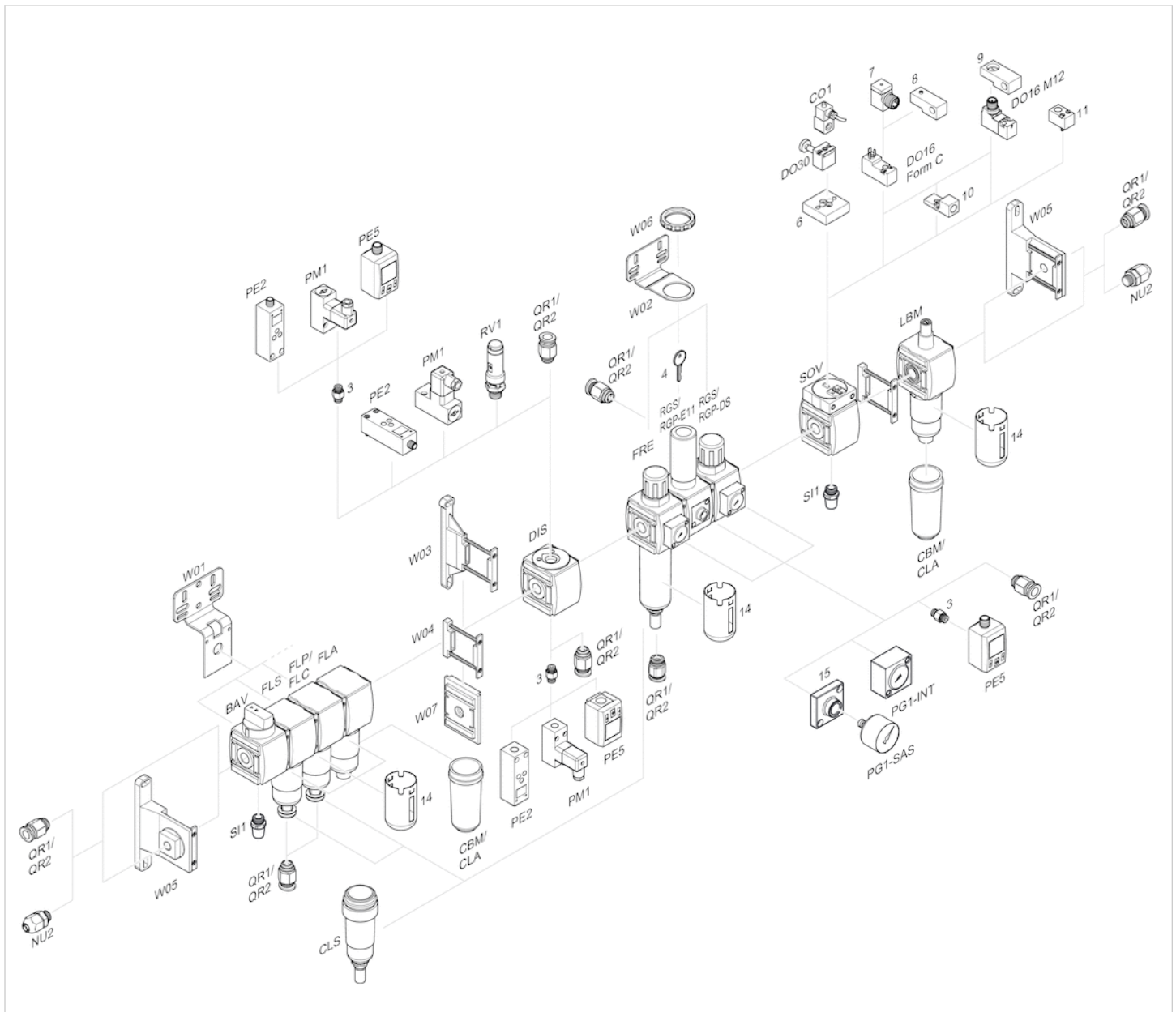
Rear exhaust



p_2 = secondary pressure

q_n = nominal flow

Accessories overview



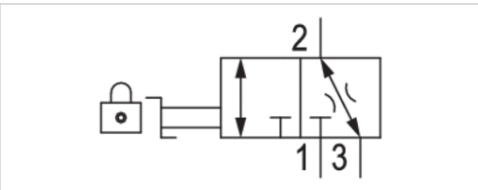
- 3 = Double nipple
- 4 = Key for E11 locking
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

3/2-shut-off valve, mechanically operated, Series AS1-BAV

- Qn 1►2 = 2600 l/min
- Qn 2►3 = 330 l/min
- Compressed air connection output G 1/4



Version	Ball valve
Activation	Mechanical
Lock type	lockable
Actuating element	rotary switch
Working pressure min./max.	0 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Max. particle size	25 µm
Weight	0.15 kg



Technical data

Part No.	Compressed air connection type	Compressed air connection Input	Compressed air connection Output	
R412014664	Internal thread	G 1/4	G 1/4	

Part No.	Compressed air connection Exhaust	Flow	Flow	Lock type
		Qn 1 ► 2	Qn 2 ► 3	
R412014664	G 1/4	2600 l/min	330 l/min	for padlocks

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

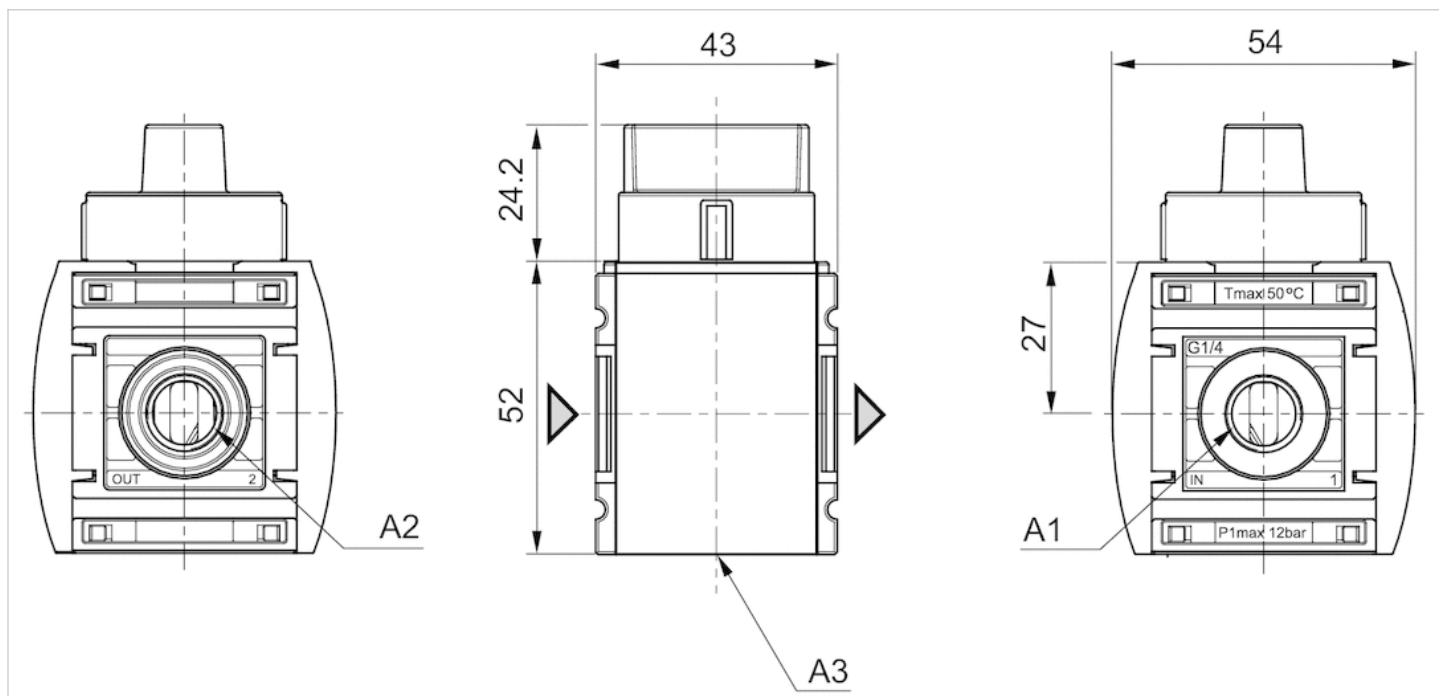
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Actuating element	Polyoxymethylene

Dimensions

Dimensions in mm



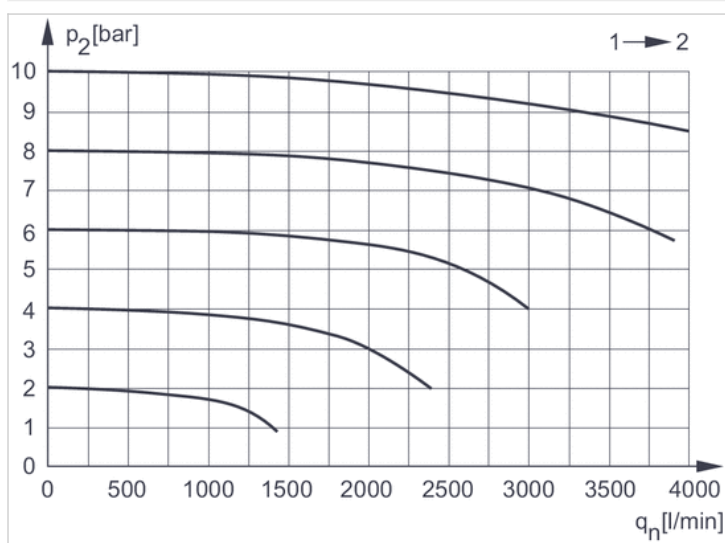
A1 = input

A2 = output

A3 = ventilation port

Diagrams

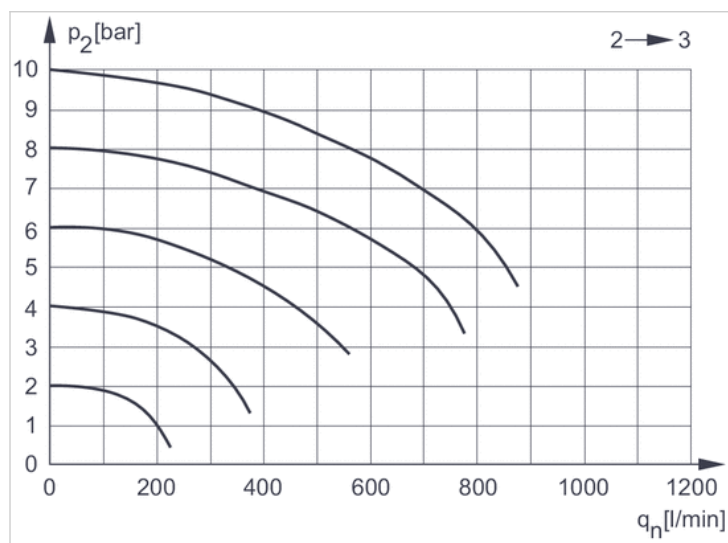
Flow rate characteristic



p_2 = secondary pressure

q_n = nominal flow

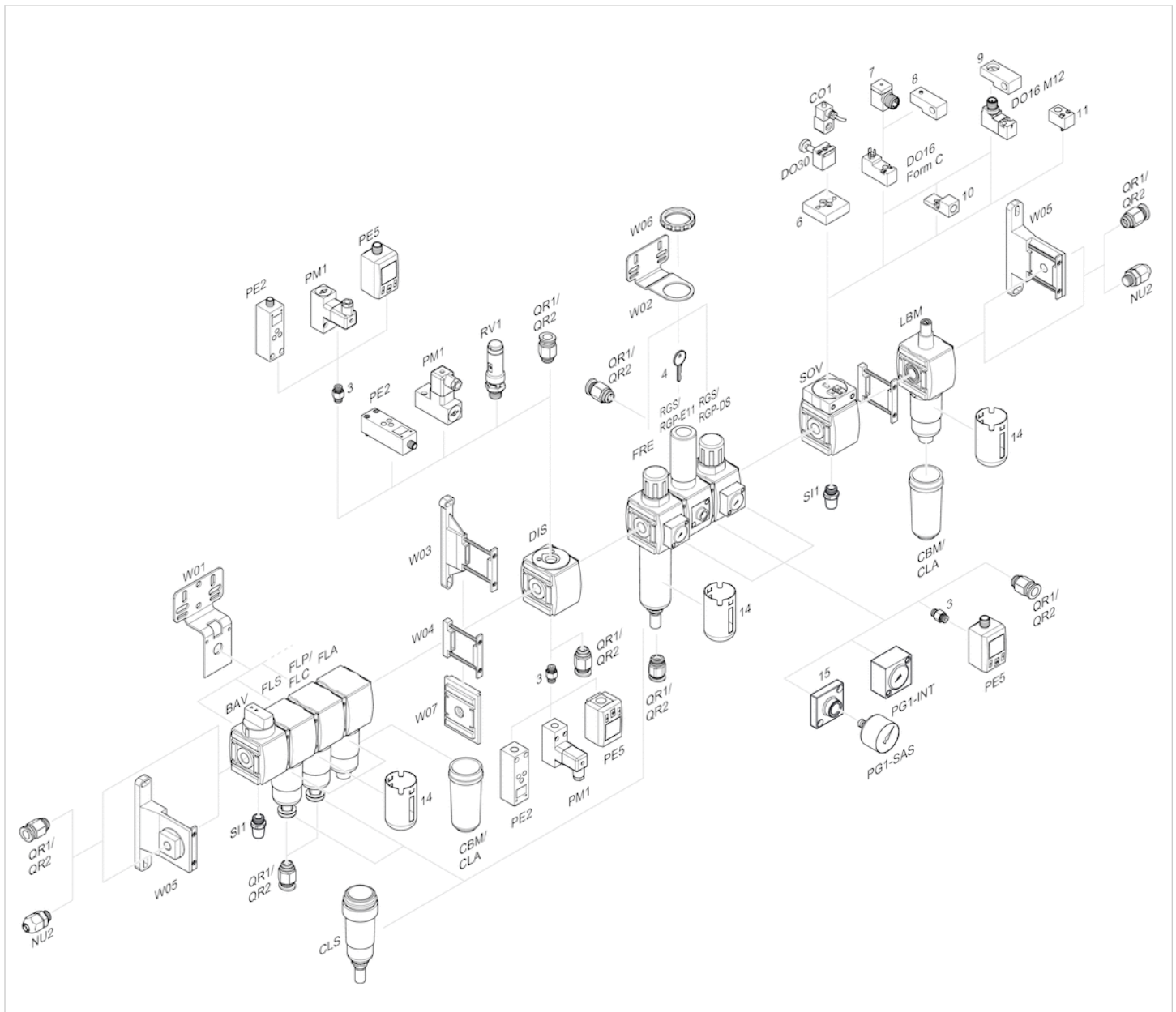
Rear exhaust



p_2 = secondary pressure

q_n = nominal flow

Accessories overview



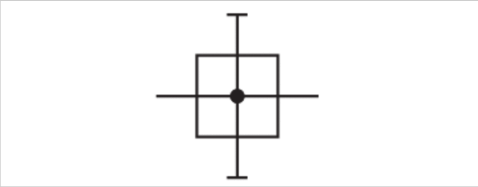
- 3 = Double nipple
- 4 = Key for E11 locking
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Distributor, Series AS1-DIS

- G 1/4
- Air supply left
- Distributor 2x
- Distributor



Version	Distributor, Can be assembled into blocks
Parts	Distributor
Mounting orientation	Any
Working pressure min./max.	0 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Weight	0.148 kg



Technical data

Part No.	Port	Nominal flow	Nominal flow	Nominal flow
		Qn 1►2	Qn 1►3	Qn 1►5
R412014662	G 1/4	2700 l/min	950 l/min	2000 l/min

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

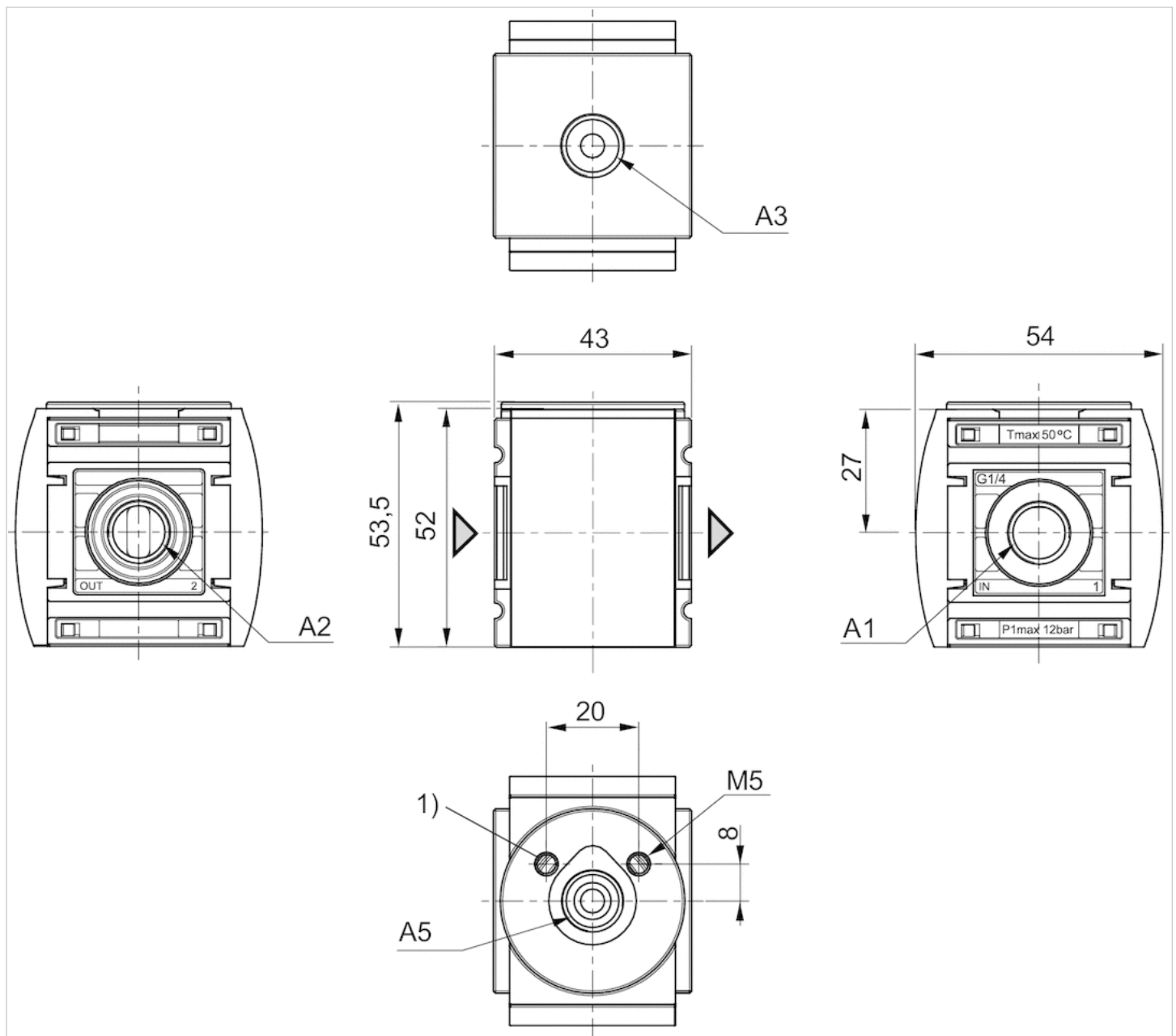
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions in mm



A1 = input

A2 = output

A3 = output

A5 = output

1) Mounting thread for pressure sensor

This diagram illustrates the assembly of a hydraulic system, showing the relationship between various components. The components are labeled with part numbers and names, and their assembly paths are indicated by lines.

Key Components and Part Numbers:

- W01, W02, W03, W04, W05, W06, W07:** Various mounting brackets and plates.
- PE1, PE2, PE3, PE4, PE5:** Pressure sensors or transmitters.
- PM1, PM2:** Proportional solenoid valves.
- RV1:** Check valve.
- QR1, QR2:** Quick release valves.
- NU1, NU2:** Non-return valves.
- DO16 M12, DO16 Form C:** Digital output modules.
- CO1, DO30:** Control and distribution units.
- SOV:** Solenoid valve.
- LBM:** Load bearing module.
- CBM/CLA:** Control bearing module.
- PG1-INT, PG1-SAS:** Pressure gauges.
- CLS:** Control line solenoid.
- DIS:** Distribution unit.
- BAV, FLS, FLC, FLP, FLA:** Various flow control valves.
- RGSE11, RGPDS:** Regulator and pressure differential sensor.
- SI1:** Solenoid inductor.
- W08:** Mounting plate.
- W09:** Mounting plate.
- W10:** Mounting plate.
- W11:** Mounting plate.
- W12:** Mounting plate.
- W13:** Mounting plate.
- W14:** Mounting plate.
- W15:** Mounting plate.
- W16:** Mounting plate.
- W17:** Mounting plate.
- W18:** Mounting plate.
- W19:** Mounting plate.
- W20:** Mounting plate.
- W21:** Mounting plate.
- W22:** Mounting plate.
- W23:** Mounting plate.
- W24:** Mounting plate.
- W25:** Mounting plate.
- W26:** Mounting plate.
- W27:** Mounting plate.
- W28:** Mounting plate.
- W29:** Mounting plate.
- W30:** Mounting plate.
- W31:** Mounting plate.
- W32:** Mounting plate.
- W33:** Mounting plate.
- W34:** Mounting plate.
- W35:** Mounting plate.
- W36:** Mounting plate.
- W37:** Mounting plate.
- W38:** Mounting plate.
- W39:** Mounting plate.
- W40:** Mounting plate.
- W41:** Mounting plate.
- W42:** Mounting plate.
- W43:** Mounting plate.
- W44:** Mounting plate.
- W45:** Mounting plate.
- W46:** Mounting plate.
- W47:** Mounting plate.
- W48:** Mounting plate.
- W49:** Mounting plate.
- W50:** Mounting plate.
- W51:** Mounting plate.
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- W62:** Mounting plate.
- W63:** Mounting plate.
- W64:** Mounting plate.
- W65:** Mounting plate.
- W66:** Mounting plate.
- W67:** Mounting plate.
- W68:** Mounting plate.
- W69:** Mounting plate.
- W70:** Mounting plate.
- W71:** Mounting plate.
- W72:** Mounting plate.
- W73:** Mounting plate.
- W74:** Mounting plate.
- W75:** Mounting plate.
- W76:** Mounting plate.
- W77:** Mounting plate.
- W78:** Mounting plate.
- W79:** Mounting plate.
- W80:** Mounting plate.
- W81:** Mounting plate.
- W82:** Mounting plate.
- W83:** Mounting plate.
- W84:** Mounting plate.
- W85:** Mounting plate.
- W86:** Mounting plate.
- W87:** Mounting plate.
- W88:** Mounting plate.
- W89:** Mounting plate.
- W90:** Mounting plate.
- W91:** Mounting plate.
- W92:** Mounting plate.
- W93:** Mounting plate.
- W94:** Mounting plate.
- W95:** Mounting plate.
- W96:** Mounting plate.
- W97:** Mounting plate.
- W98:** Mounting plate.
- W99:** Mounting plate.
- W100:** Mounting plate.

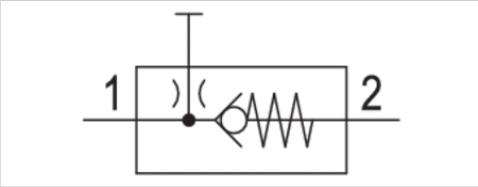
- PDF creation date: 20.06.2020

Distributor, Series AS1-DIN

- G 1/4
- Air supply left
- Distributor 1x
- Non-return valve



Version	Non-return valve, Can be assembled into blocks
Parts	Distributor
Mounting orientation	Any
Working pressure min./max.	0 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Weight	0.178 kg



Technical data

Part No.	Port	Nominal flow	Nominal flow
		Qn 1►2	Qn 1►3
R412014663	G 1/4	800 l/min	1000 l/min

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

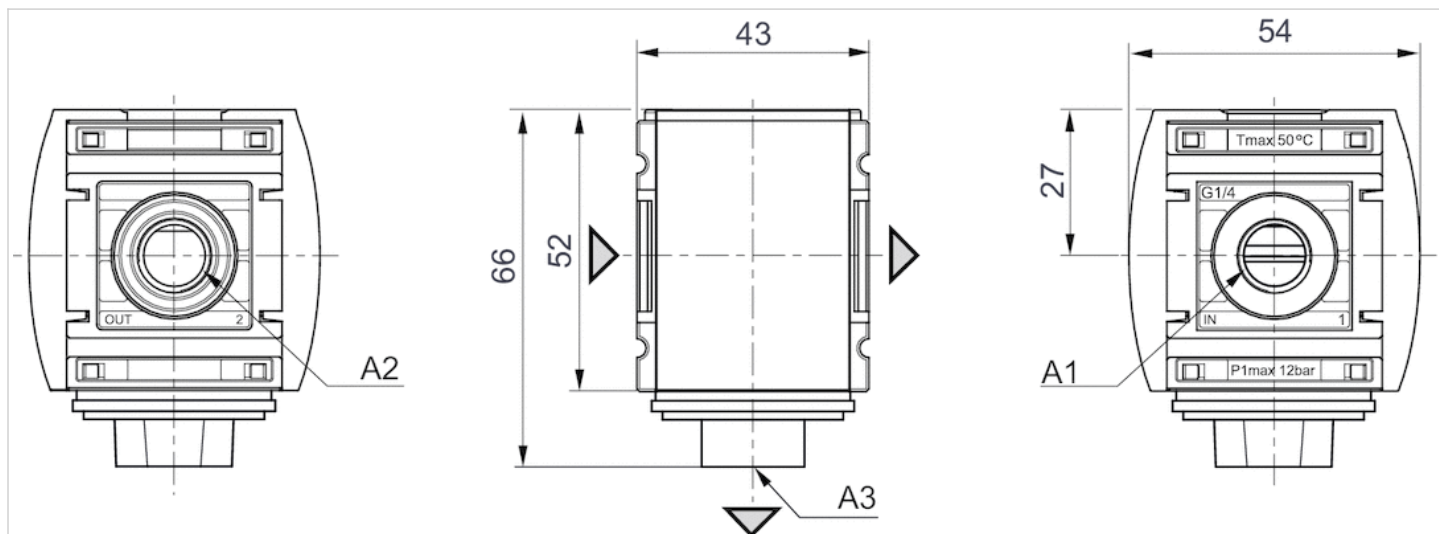
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

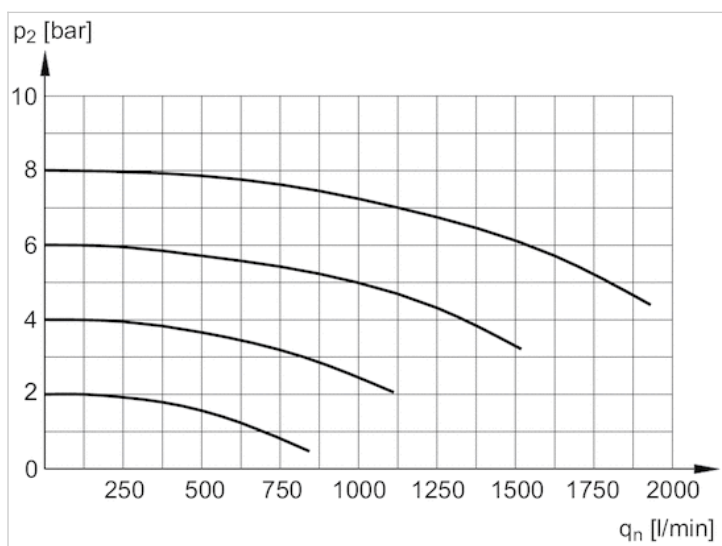
Dimensions in mm



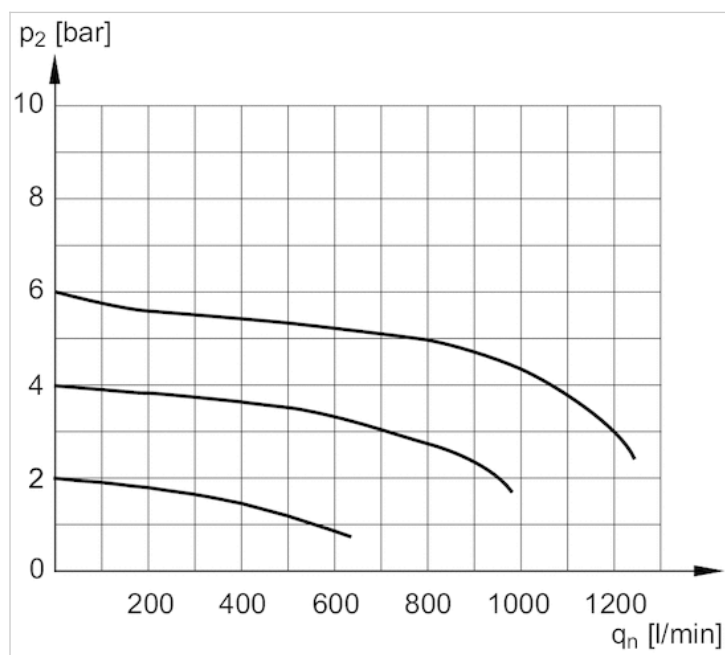
A1 = input
A2 = output
A3 = output

Diagrams

Flow rate characteristic



Nominal flow 1 ► 2
 p_2 = secondary pressure
 q_n = nominal flow

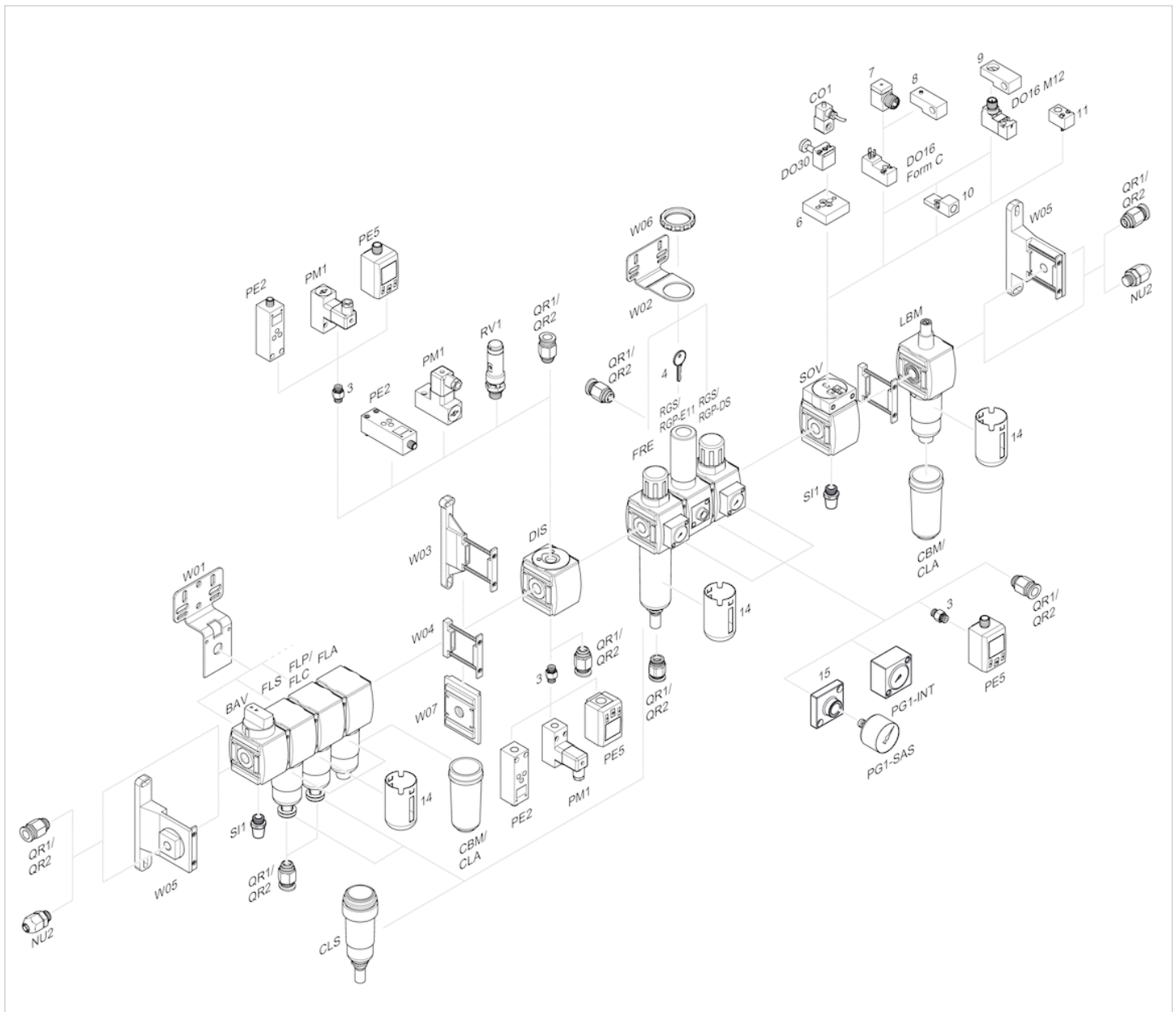


Nominal flow 1 ► 3

p_2 = secondary pressure

q_n = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Pressure regulator, Series AS1-RGS

- G 1/4
- Air supply right
- $Q_n = 1000 \text{ l/min}$
- Standard pressure regulator
- Activation Manual



Parts	Pressure regulator
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Regulator type	Diaphragm-type pressure regulator Can be assembled into blocks with relieving air exhaust
Regulator function	
Adjustment range min./max.	See table below
Activation	Manual
Weight	See table below

Technical data

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Q_n		
R412014705			G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014706			G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014707			G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar
R412014711		—	G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014712		—	G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014713		—	G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar

Part No.	Max. pressure gauge Ø in blocked state	Pressure gauge	Weight	Fig.
R412014705	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412014706	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412014707	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412014711	40 mm	-	0.206 kg	Fig. 2
R412014712	40 mm	-	0.206 kg	Fig. 2
R412014713	40 mm	-	0.206 kg	Fig. 2

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

Technical information

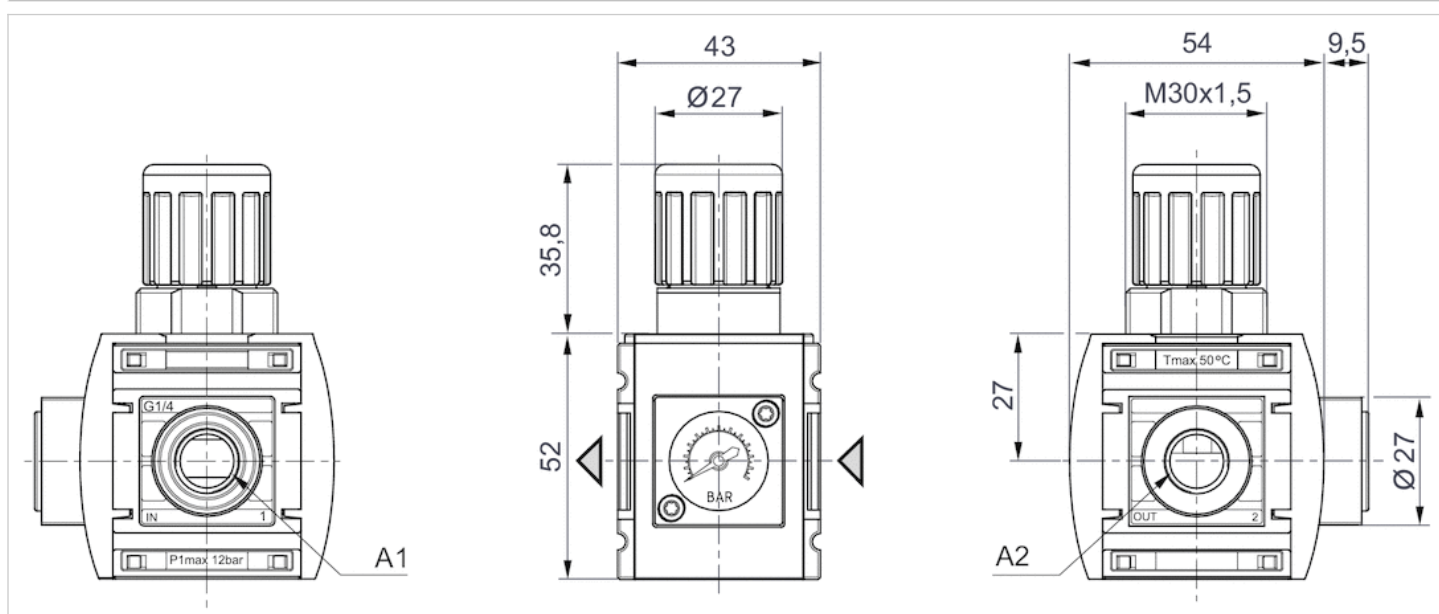
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
 Relieving exhaust ($\leq 0.3 \text{ bar}$ over set pressure).
 With rear exhaust ($> 3 \text{ bar}$).

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

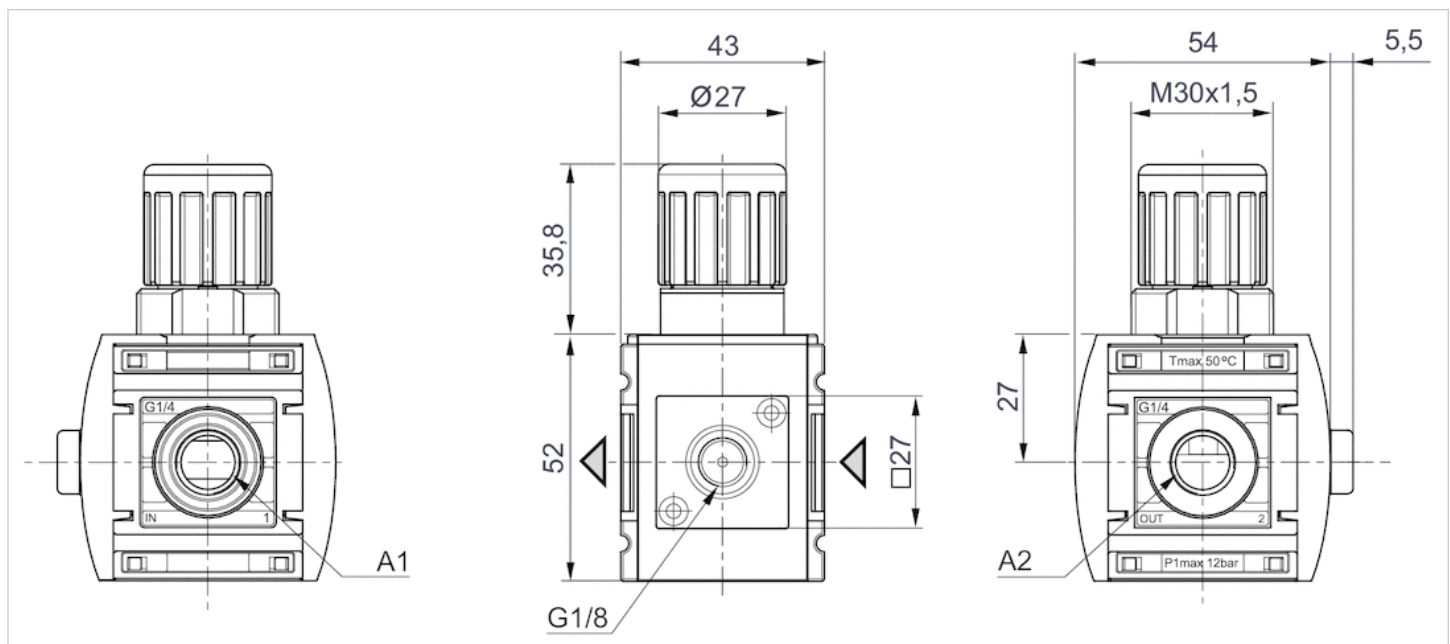
Dimensions in mm, Fig. 1



A1 = input

A2 = output

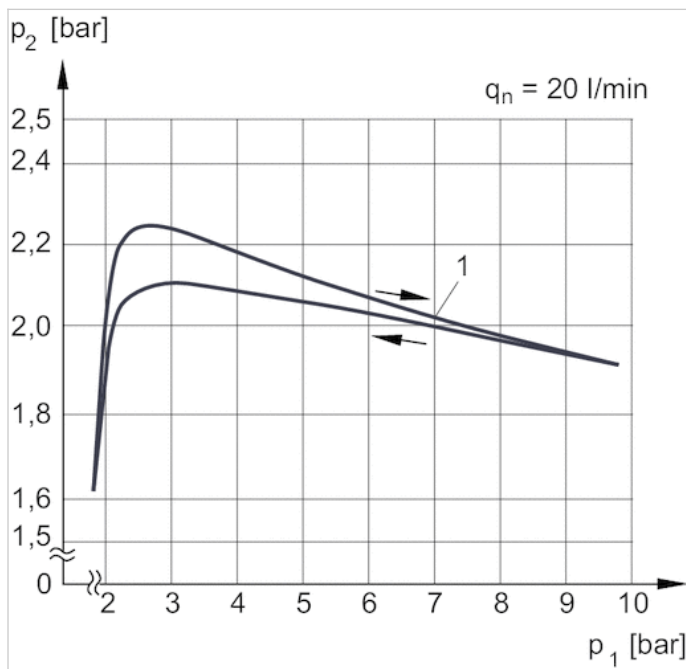
Dimensions in mm, Fig. 2



A1 = input
A2 = output

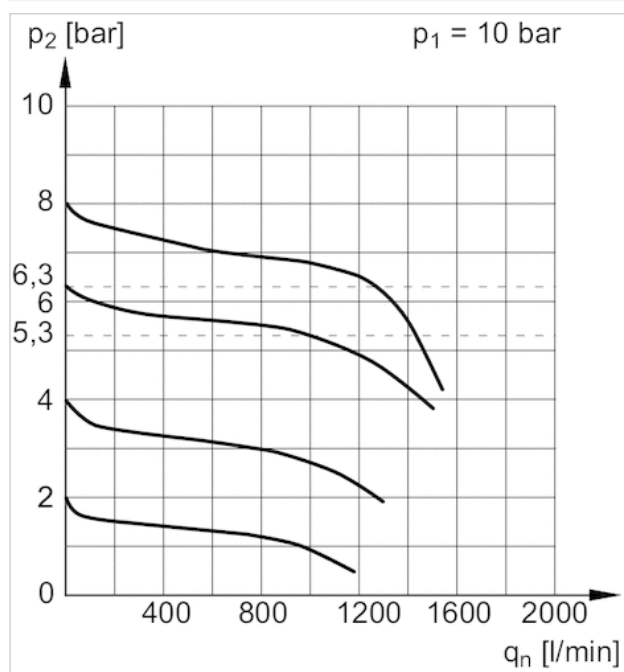
Diagrams

Pressure characteristics curve



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow
 1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

- PDF creation date: 20.06.2020

Pressure regulator, Series AS1-RGS

- G 1/4
- Air supply right
- $Q_n = 1000 \text{ l/min}$
- Standard pressure regulator
- Activation Manual
- with pressure gauge in hand wheel



Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Regulator type

Regulator function

Adjustment range min./max.

Activation

Weight

Pressure regulator

Any

See table below

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

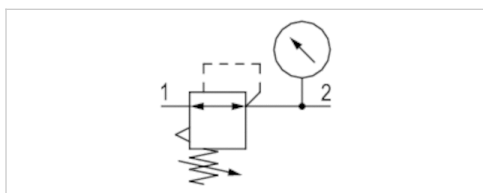
Diaphragm-type pressure regulator Can be assembled into blocks

with relieving air exhaust

See table below

Manual

0.239 kg



Technical data

Part No.		Port	Flow	Working pressure min./max.	Adjustment range min./max.
			Q_n		
R412014717		G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014718		G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014719		G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar

Part No.	Pressure gauge
R412014717	with pressure gauge in hand wheel
R412014718	with pressure gauge in hand wheel
R412014719	with pressure gauge in hand wheel

Panel nut included in scope of delivery, Nominal flow Q_n with secondary pressure $p_2 = 6 \text{ bar}$ at $\Delta p = 1 \text{ bar}$

Technical information

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

Relieving exhaust ($\leq 0.3 \text{ bar}$ over set pressure).

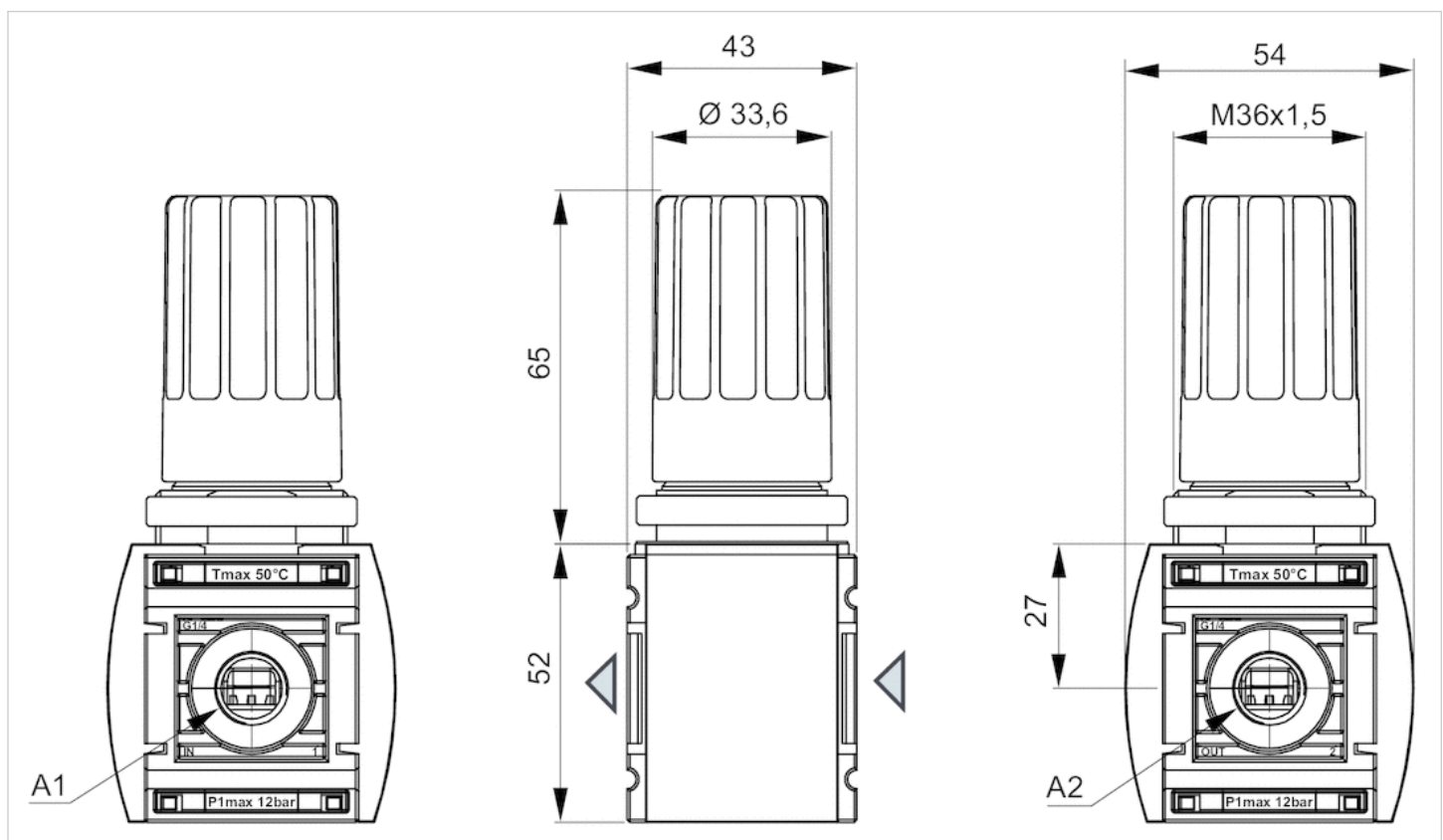
With rear exhaust ($> 3 \text{ bar}$).

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

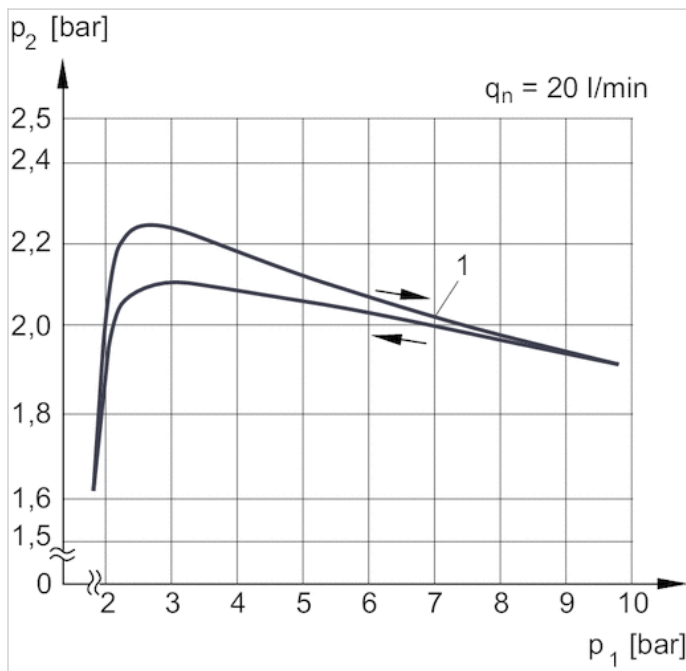
Dimensions in mm



A1 = input
A2 = output

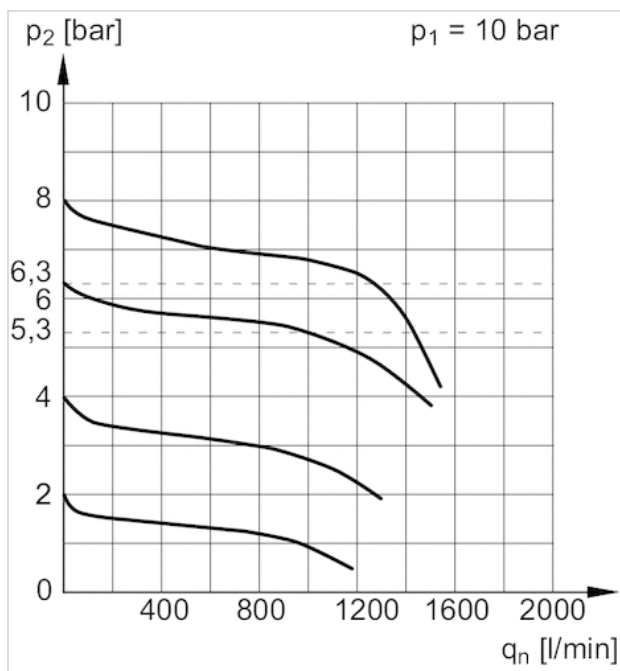
Diagrams

Pressure characteristics curve



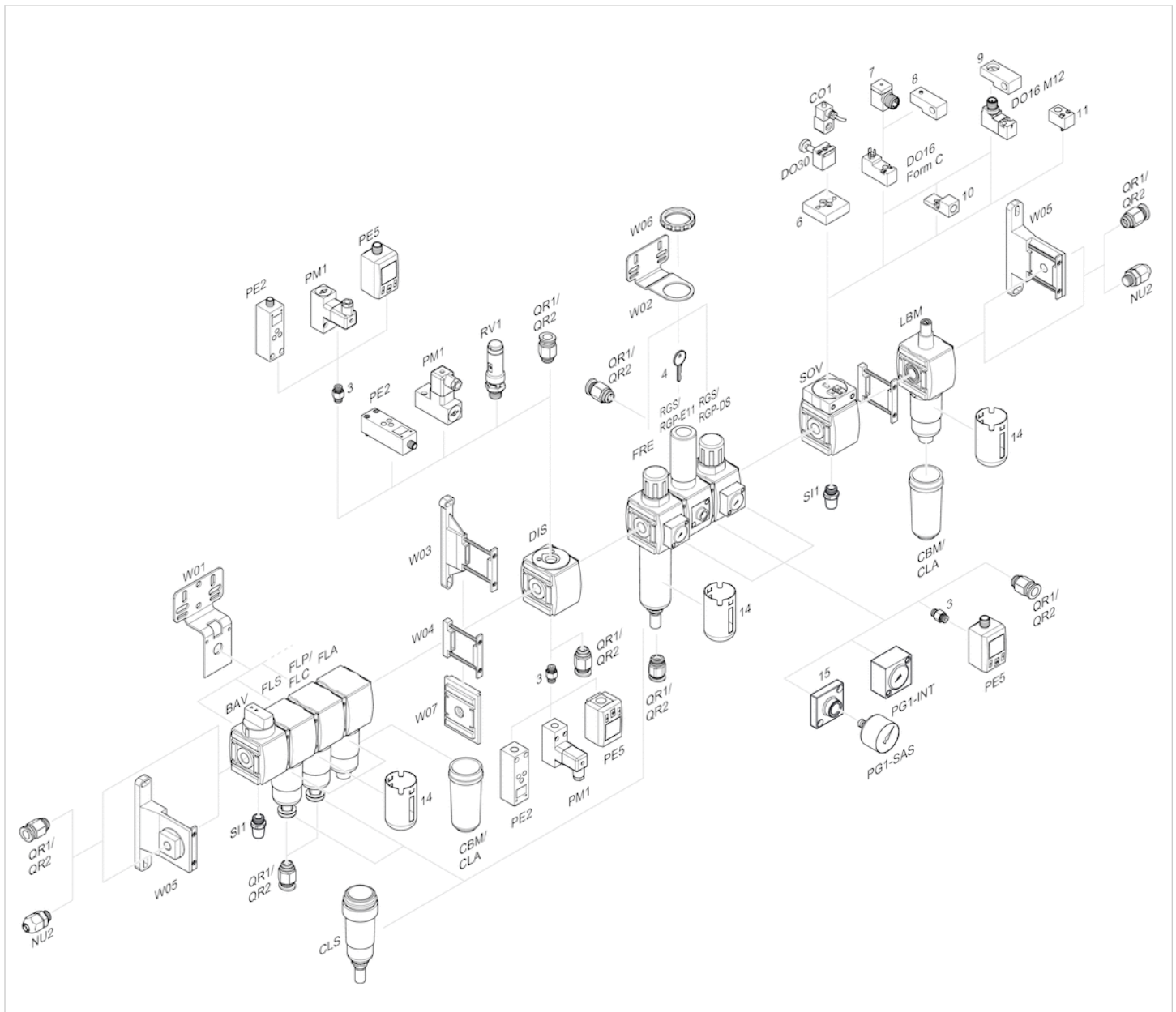
p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow
 1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Pressure regulator, Series AS1-RGS-...-DS

- G 1/4
- Air supply right
- $Q_n = 1000 \text{ l/min}$
- Standard pressure regulator
- Activation Manual
- with continuous pressure supply



Parts	Pressure regulator with continuous pressure supply
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Regulator type	Diaphragm-type pressure regulator Can be assembled into blocks
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Pressure supply	double
Activation	Manual
Weight	See table below

Technical data

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Q_n		
R412014708			G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014709			G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014710			G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar
R412010559		—	G 1/4	1000 l/min	0.1 ... 12 bar	0.1 ... 1 bar
R412014714		—	G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014715		—	G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014716		—	G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar

Part No.	Max. pressure gauge Ø in blocked state	Pressure gauge	Weight	Fig.
R412014708	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412014709	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412014710	40 mm	With integrated pressure gauge	0.209 kg	Fig. 1
R412010559	40 mm	-	0.206 kg	Fig. 2
R412014714	40 mm	-	0.206 kg	Fig. 2
R412014715	40 mm	-	0.206 kg	Fig. 2
R412014716	40 mm	-	0.206 kg	Fig. 2

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

Technical information

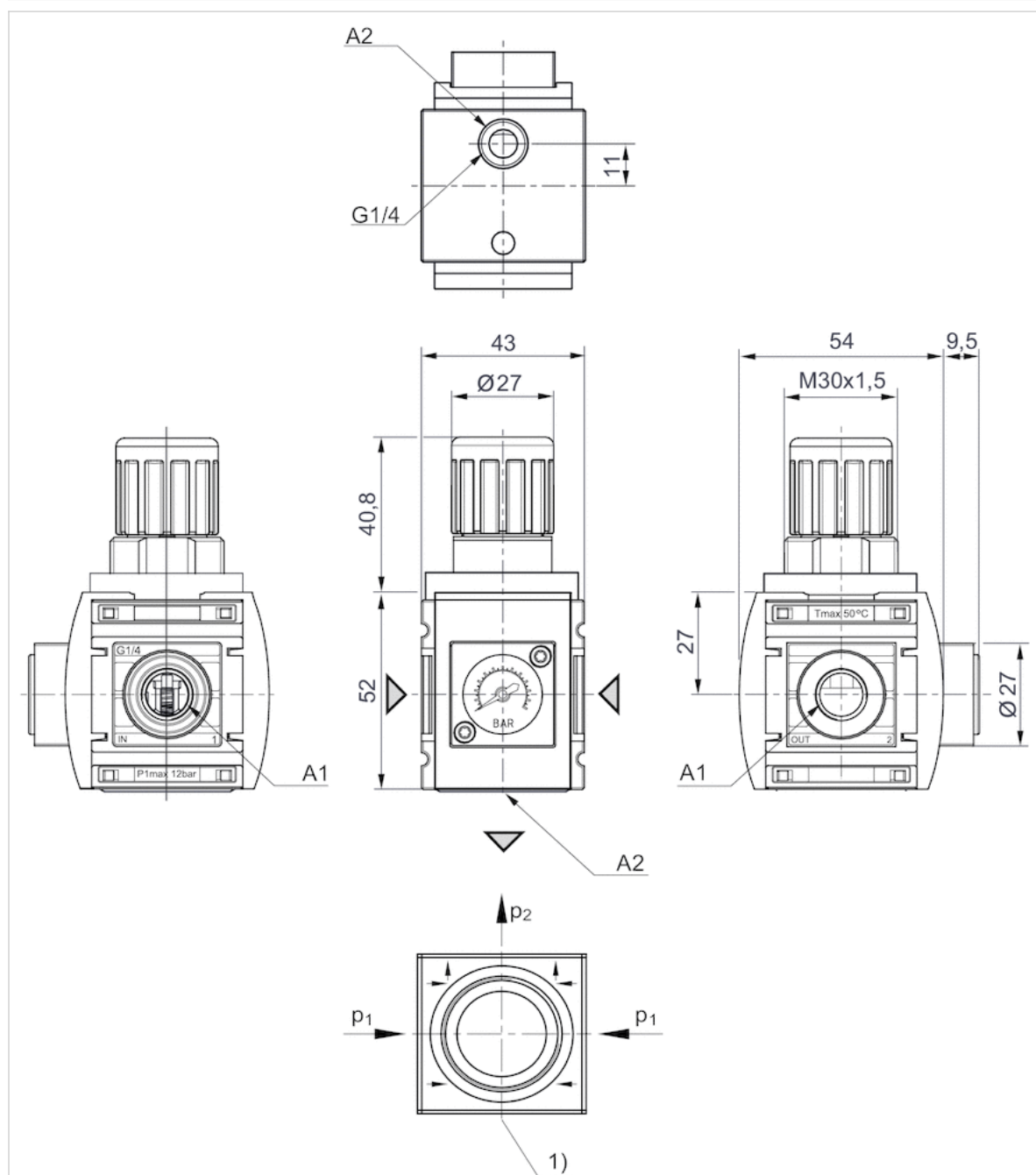
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
 Relieving exhaust (≤ 0.3 bar over set pressure).
 With rear exhaust (> 3 bar).

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

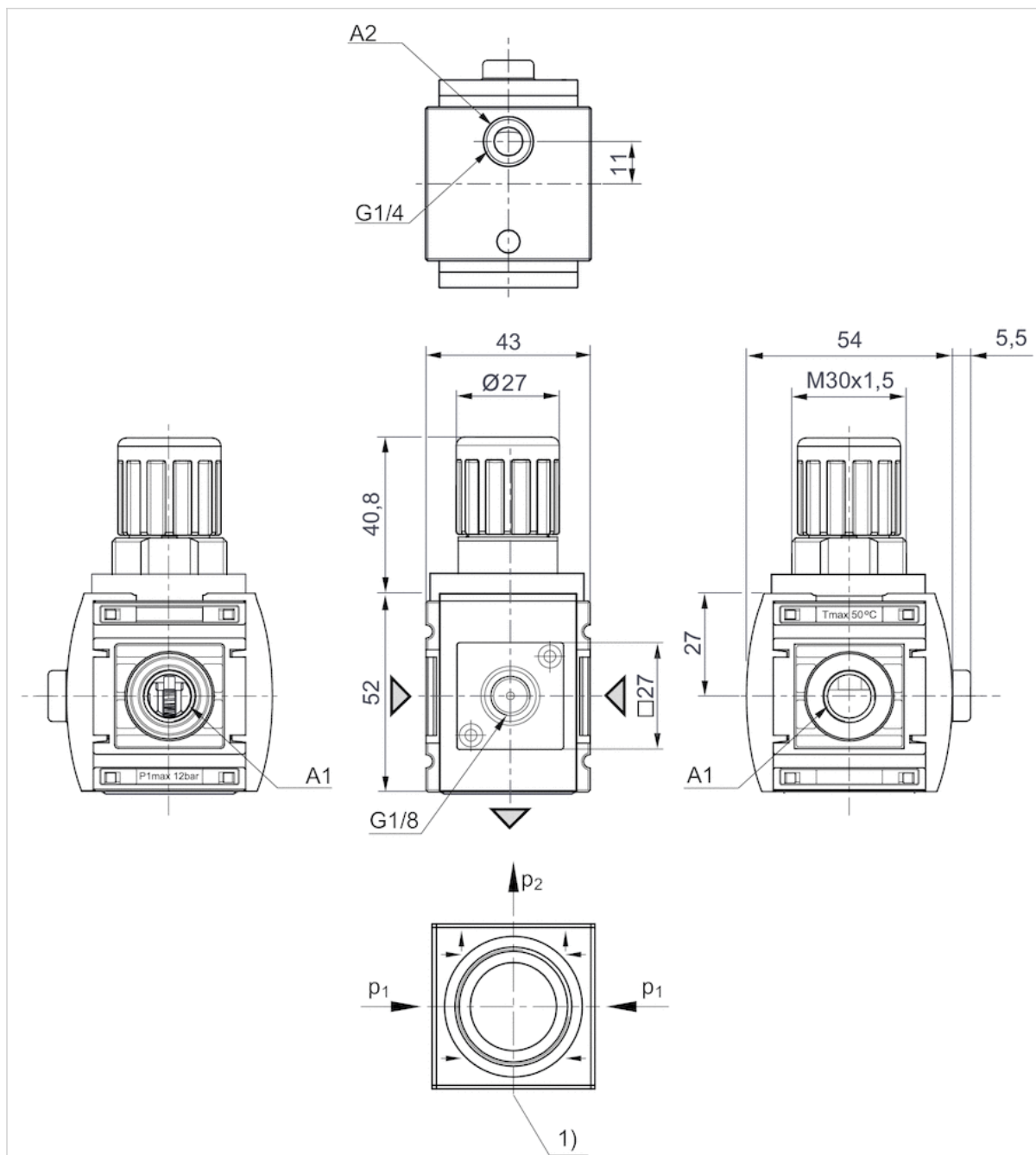
Dimensions

Dimensions in mm, Fig. 1



A1 = input
A2 = output

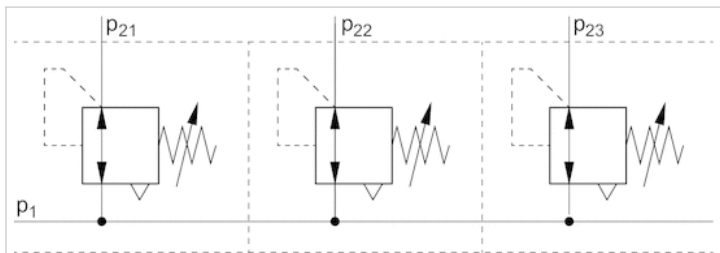
Dimensions in mm, Fig. 2



A1 = input
A2 = output

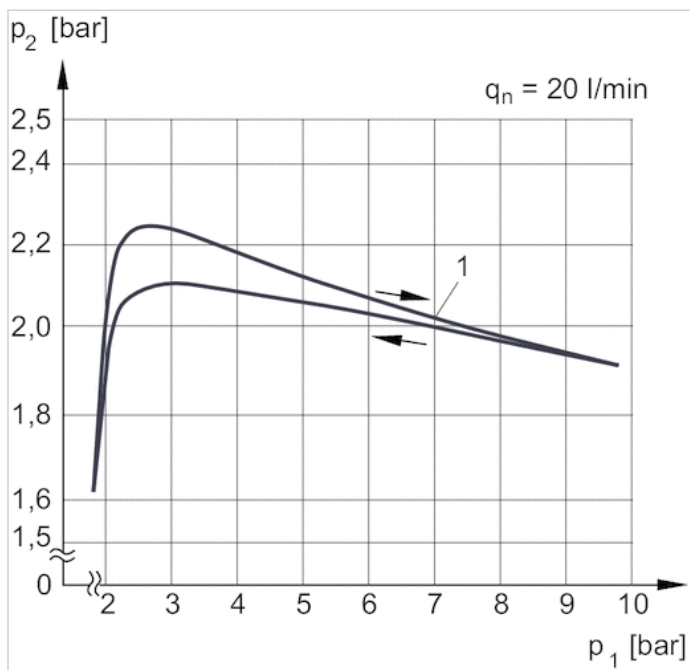
Diagrams

Application example



p_1 = working pressure

Pressure characteristics curve



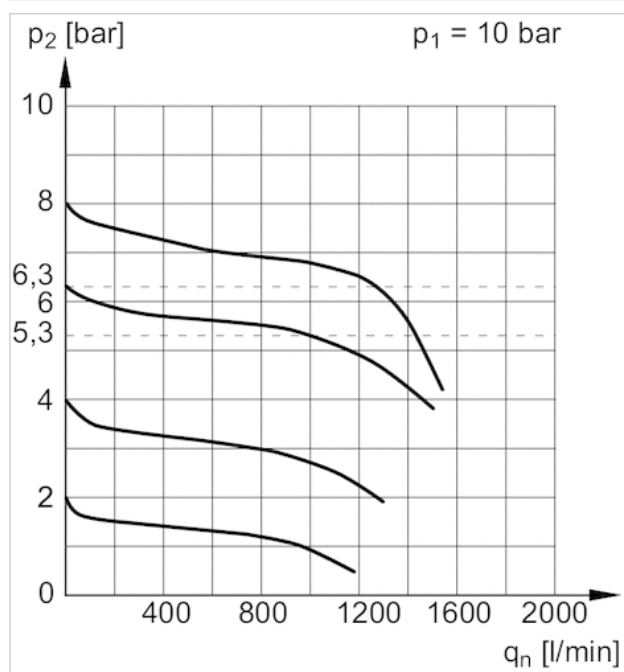
p_1 = working pressure

p_2 = secondary pressure

q_n = nominal flow

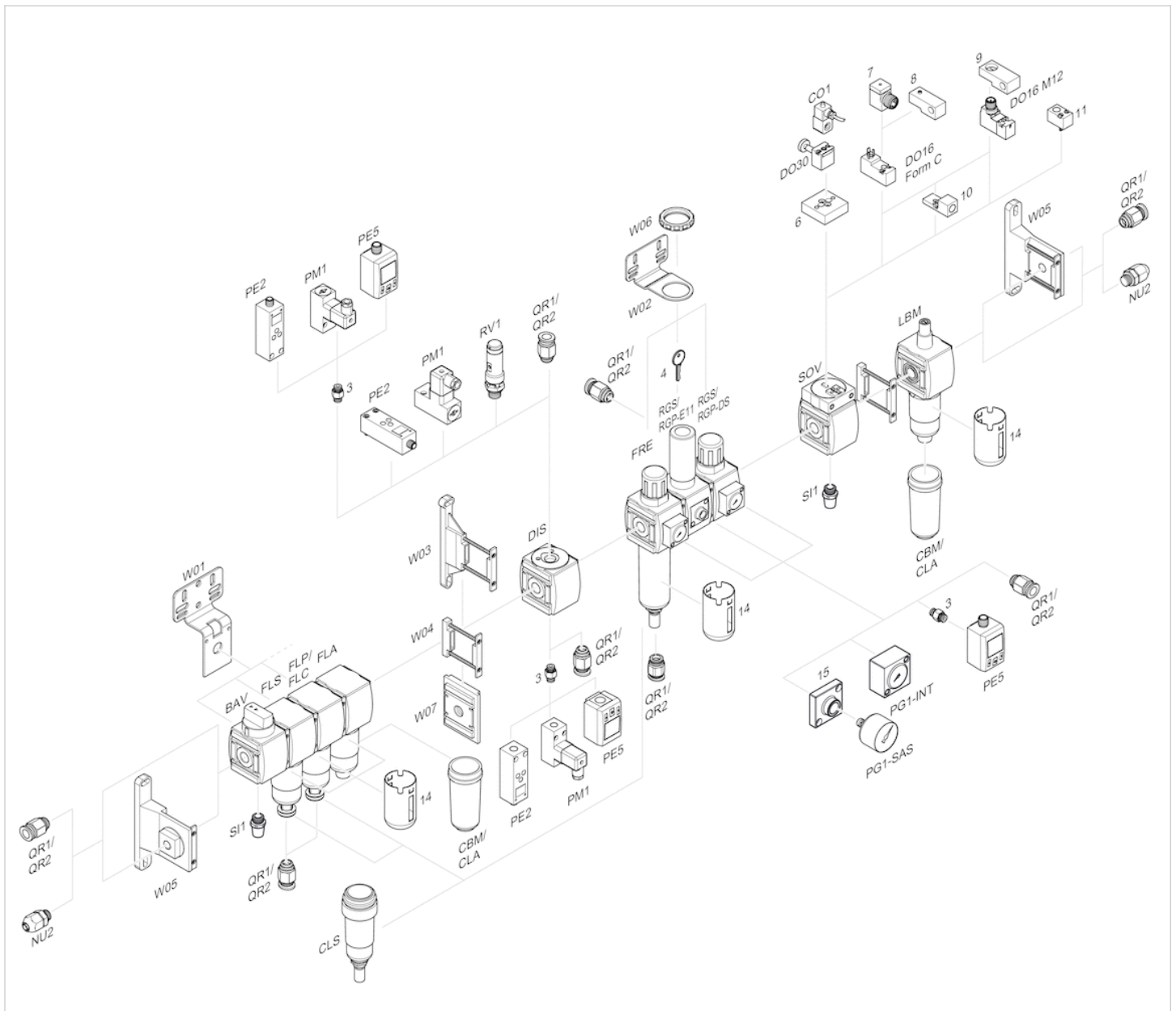
1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

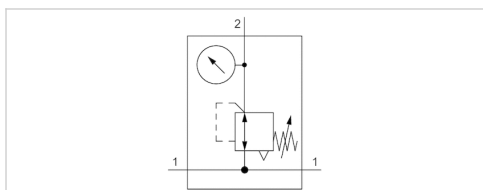
Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Pressure regulator, Series AS1-RGS-...-DS

- G 1/4
- Air supply right
- $Q_n = 1000 \text{ l/min}$
- Standard pressure regulator
- Activation Manual
- with continuous pressure supply
- with pressure gauge in hand wheel



Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Regulator type

Regulator function

Adjustment range min./max.

Pressure supply

Activation

Weight

Pressure regulator with continuous pressure supply

Any

See table below

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

Diaphragm-type pressure regulator Can be assembled into blocks with relieving air exhaust

See table below

double

Manual

0.239 kg

Technical data

Part No.		Port	Flow	Working pressure min./max.	Adjustment range min./max.
			Q_n		
R412014720		G 1/4	1000 l/min	0.2 ... 12 bar	0.2 ... 4 bar
R412014721		G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 8 bar
R412014722		G 1/4	1000 l/min	0.5 ... 12 bar	0.5 ... 10 bar

Part No.	Pressure gauge
R412014720	with pressure gauge in hand wheel
R412014721	with pressure gauge in hand wheel
R412014722	with pressure gauge in hand wheel

Panel nut included in scope of delivery, Nominal flow Q_n with secondary pressure $p_2 = 6 \text{ bar}$ at $\Delta p = 1 \text{ bar}$

Technical information

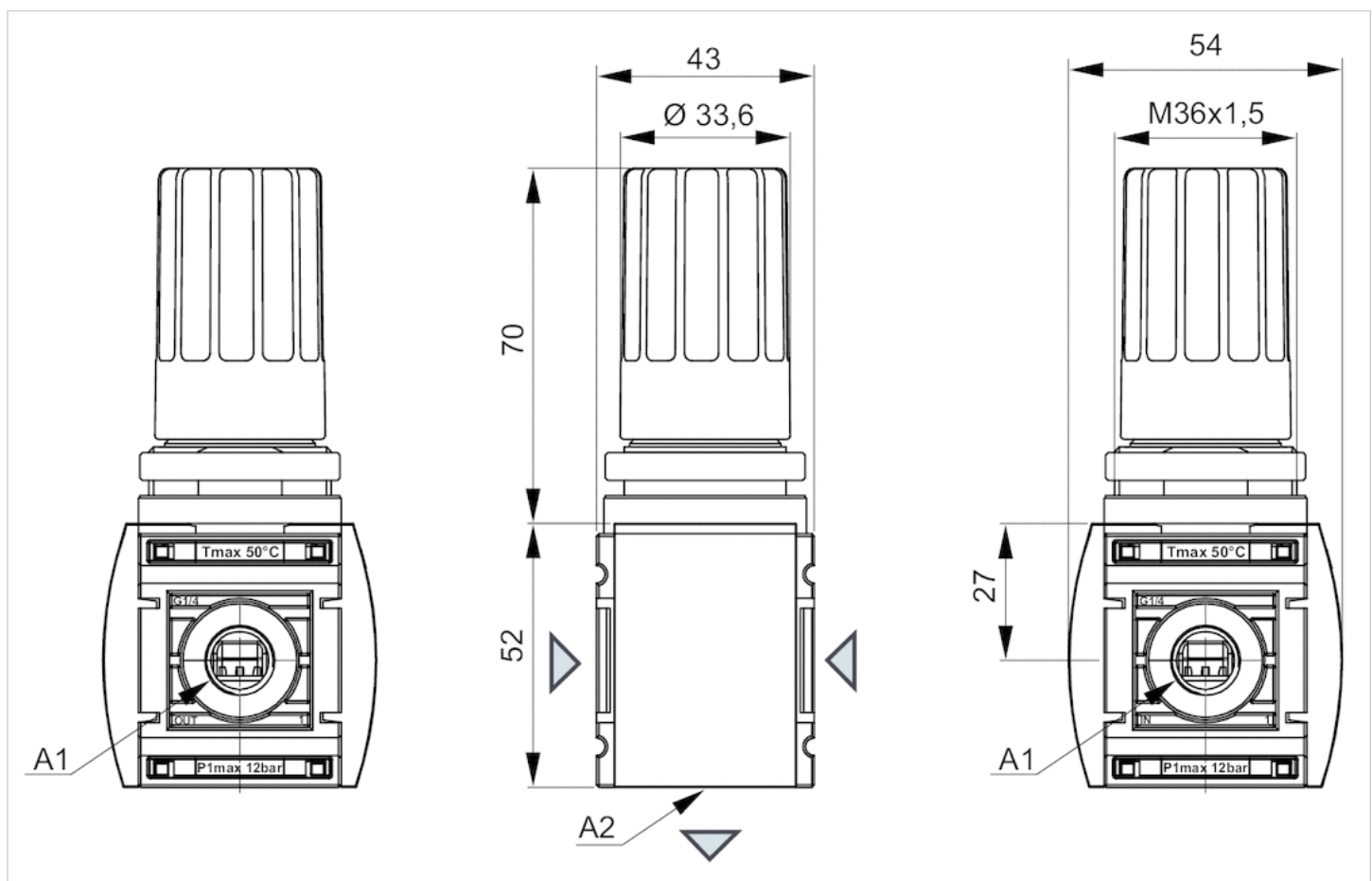
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
 Relieving exhaust ($\leq 0.3 \text{ bar}$ over set pressure).
 With rear exhaust ($> 3 \text{ bar}$).

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

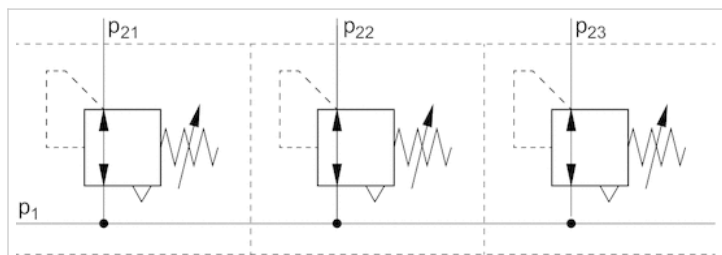
Dimensions in mm



A1 = input
A2 = output

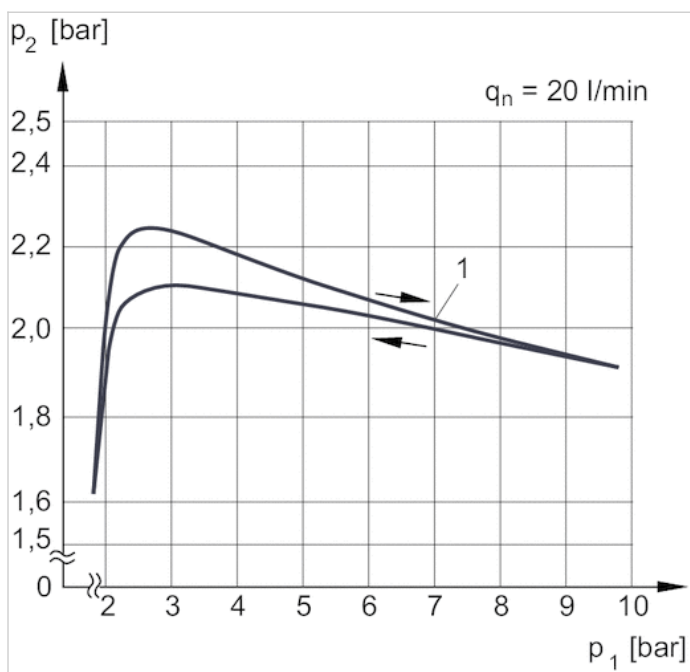
Diagrams

Application example



p_1 = working pressure

Pressure characteristics curve



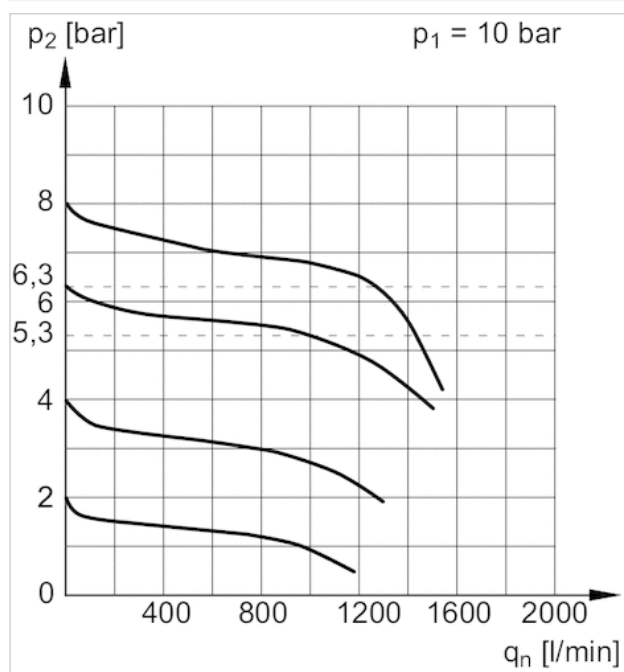
p_1 = working pressure

p_2 = secondary pressure

q_n = nominal flow

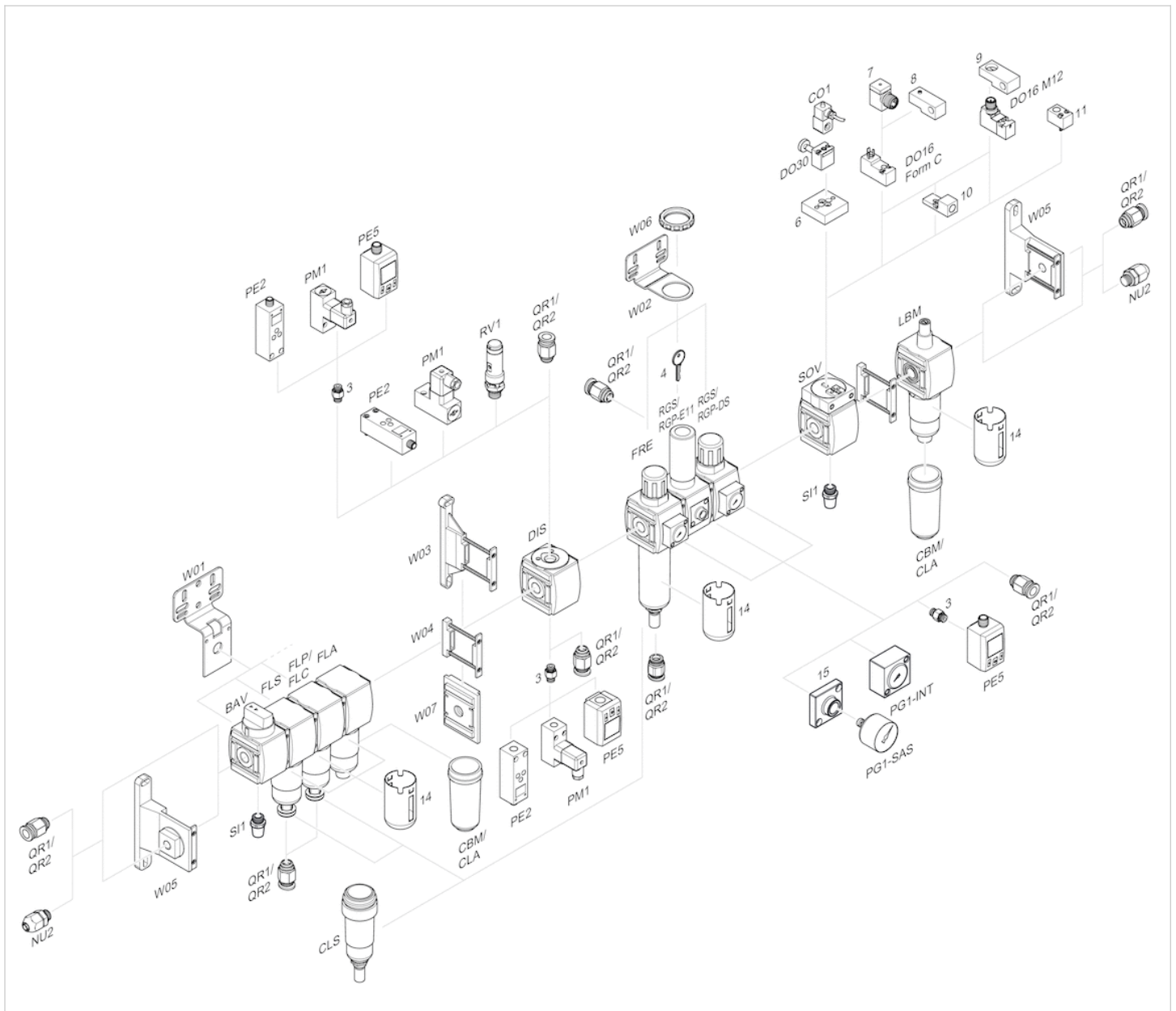
1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Filter pressure regulator, Series AS1-FRE

- G 1/4
- Air supply right
- filter porosity 5 µm



Version	1-part, Can be assembled into blocks
Parts	Filter pressure regulator
Mounting orientation	vertical
Working pressure min./max.	1.5 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Nominal flow Qn	1000 l/min
Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Adjustment range min./max.	See table below
Pressure supply	single
Filter reservoir volume	16 cm ³
Filter element	exchangeable
Weight	See table below

Technical data

Part No.			Port	filter porosity	Flow	Adjustment range min./max.
					Qn	
R412014723			G 1/4	5 µm	1000 l/min	0.5 ... 8 bar
R412014724			G 1/4	5 µm	1000 l/min	0.5 ... 8 bar
R412014725			G 1/4	5 µm	1000 l/min	0.5 ... 8 bar
R412014726			G 1/4	5 µm	1000 l/min	0.5 ... 8 bar
R412014727			G 1/4	5 µm	1000 l/min	0.5 ... 8 bar
R412014728			G 1/4	5 µm	1000 l/min	0.5 ... 8 bar
R412014729			G 1/4	5 µm	1000 l/min	0.5 ... 8 bar
R412014730		—	G 1/4	5 µm	1000 l/min	0.5 ... 8 bar
R412014731		—	G 1/4	5 µm	1000 l/min	0.5 ... 8 bar
R412014732		—	G 1/4	5 µm	1000 l/min	0.5 ... 8 bar
R412014733			G 1/4	5 µm	1000 l/min	0.5 ... 10 bar
R412014734			G 1/4	5 µm	1000 l/min	0.5 ... 10 bar
R412014735			G 1/4	5 µm	1000 l/min	0.5 ... 10 bar
R412014736			G 1/4	5 µm	1000 l/min	0.5 ... 10 bar
R412014737			G 1/4	5 µm	1000 l/min	0.5 ... 10 bar
R412014738			G 1/4	5 µm	1000 l/min	0.5 ... 10 bar
R412014739			G 1/4	5 µm	1000 l/min	0.5 ... 10 bar

Part No.	Condensate drain	Pressure gauge
R412014723	semi-automatic, open without pressure	With integrated pressure gauge
R412014724	fully automatic, open without pressure	With integrated pressure gauge
R412014725	fully automatic, closed without pressure	With integrated pressure gauge

Part No.	Condensate drain	Pressure gauge
R412014726	semi-automatic, open without pressure	With integrated pressure gauge
R412014727	semi-automatic, open without pressure	With integrated pressure gauge
R412014728	fully automatic, open without pressure	With integrated pressure gauge
R412014729	fully automatic, closed without pressure	With integrated pressure gauge
R412014730	semi-automatic, open without pressure	-
R412014731	fully automatic, open without pressure	-
R412014732	fully automatic, closed without pressure	-
R412014733	semi-automatic, open without pressure	With integrated pressure gauge
R412014734	fully automatic, open without pressure	With integrated pressure gauge
R412014735	fully automatic, closed without pressure	With integrated pressure gauge
R412014736	semi-automatic, open without pressure	With integrated pressure gauge
R412014737	semi-automatic, open without pressure	With integrated pressure gauge
R412014738	fully automatic, open without pressure	With integrated pressure gauge
R412014739	fully automatic, closed without pressure	With integrated pressure gauge

Part No.	Max. pressure gauge Ø in blocked state	Reservoir	Protective guard	Weight	Fig.
R412014723	-	Polycarbonate	-	0.241 kg	Fig. 1
R412014724	-	Polycarbonate	-	0.259 kg	Fig. 1
R412014725	-	Polycarbonate	-	0.259 kg	Fig. 1
R412014726	-	Polycarbonate	metal	0.274 kg	Fig. 1
R412014727	-	Die cast zinc	-	0.318 kg	Fig. 1
R412014728	-	Die cast zinc	-	0.33 kg	Fig. 1
R412014729	-	Die cast zinc	-	0.33 kg	Fig. 1
R412014730	40 mm	Polycarbonate	-	0.238 kg	Fig. 2
R412014731	40 mm	Polycarbonate	-	0.256 kg	Fig. 2
R412014732	40 mm	Polycarbonate	-	0.256 kg	Fig. 2
R412014733	-	Polycarbonate	-	0.241 kg	Fig. 1
R412014734	-	Polycarbonate	-	0.259 kg	Fig. 1
R412014735	-	Polycarbonate	-	0.259 kg	Fig. 1
R412014736	-	Polycarbonate	metal	0.274 kg	Fig. 1
R412014737	-	Die cast zinc	-	0.318 kg	Fig. 1
R412014738	-	Die cast zinc	-	0.33 kg	Fig. 1
R412014739	-	Die cast zinc	-	0.33 kg	Fig. 1

Nominal flow Q_n with secondary pressure p₂ = 6 bar at Δp = 1 bar

Technical information

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.

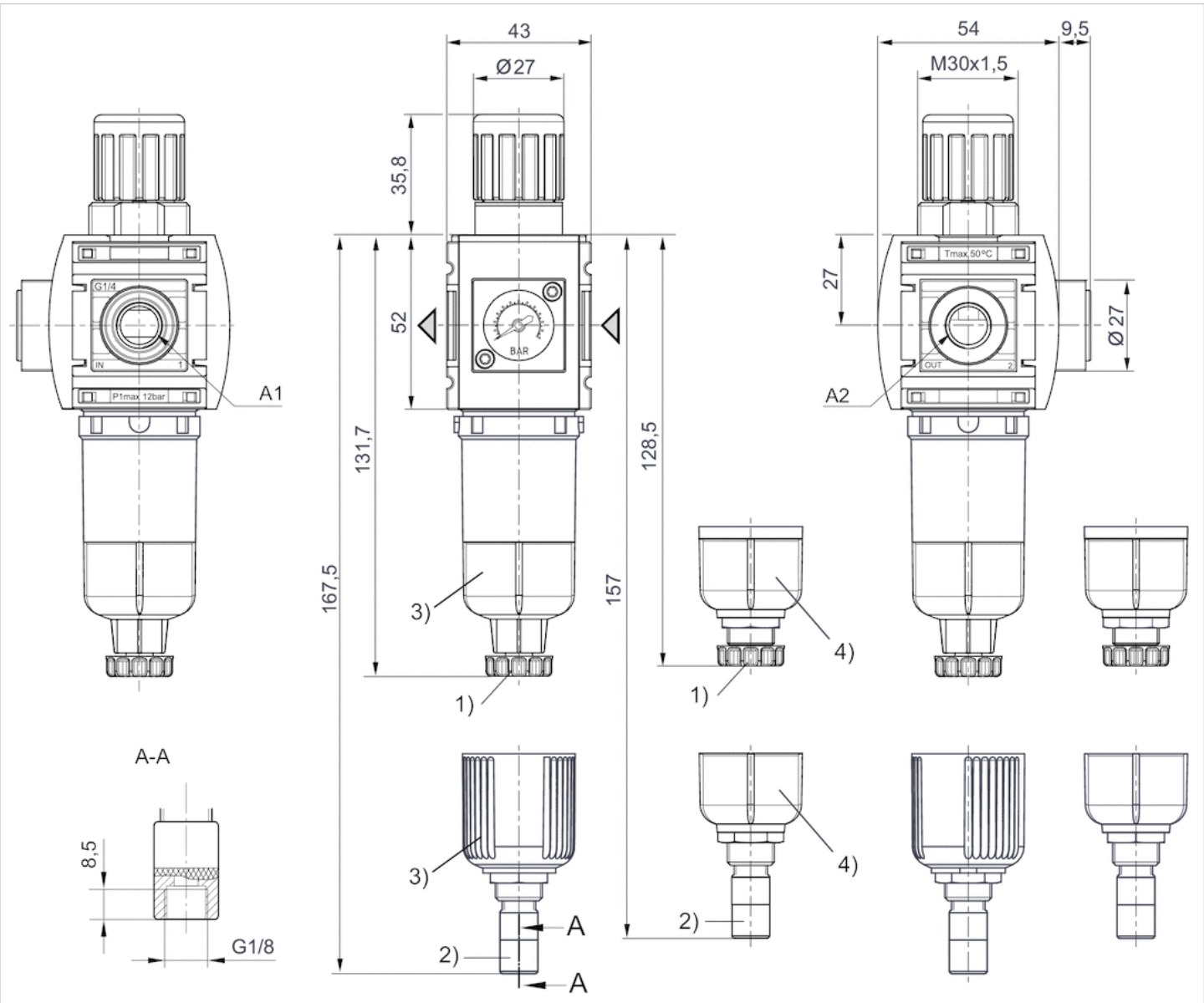
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate Die cast zinc
Protective guard	metal
Filter insert	Cellpor

Dimensions

Dimensions in mm, Fig. 1

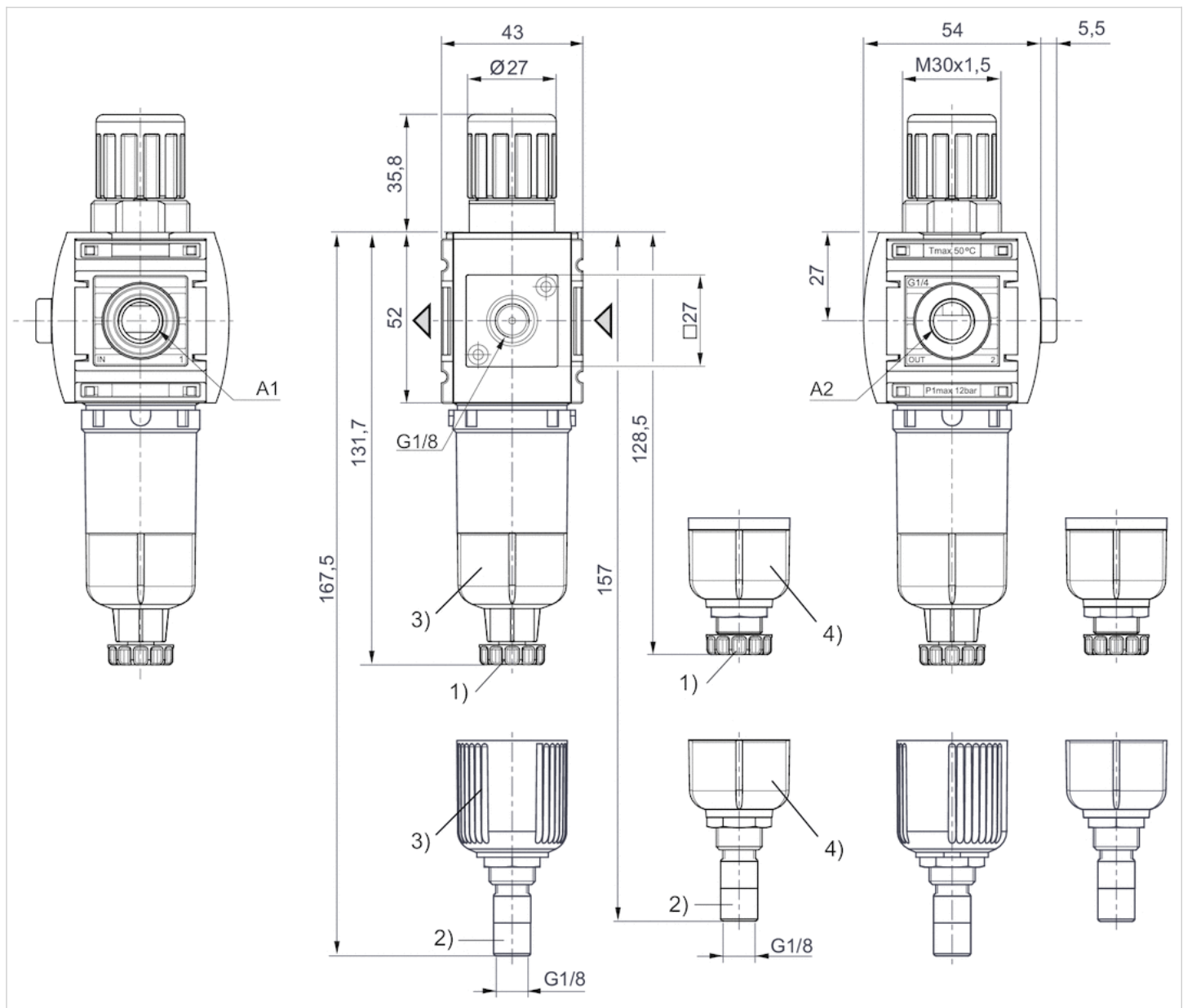


A1 = input

A2 = output

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain
- 3) Reservoir: polycarbonate
- 4) Reservoir: metal

Dimensions in mm, Fig. 2



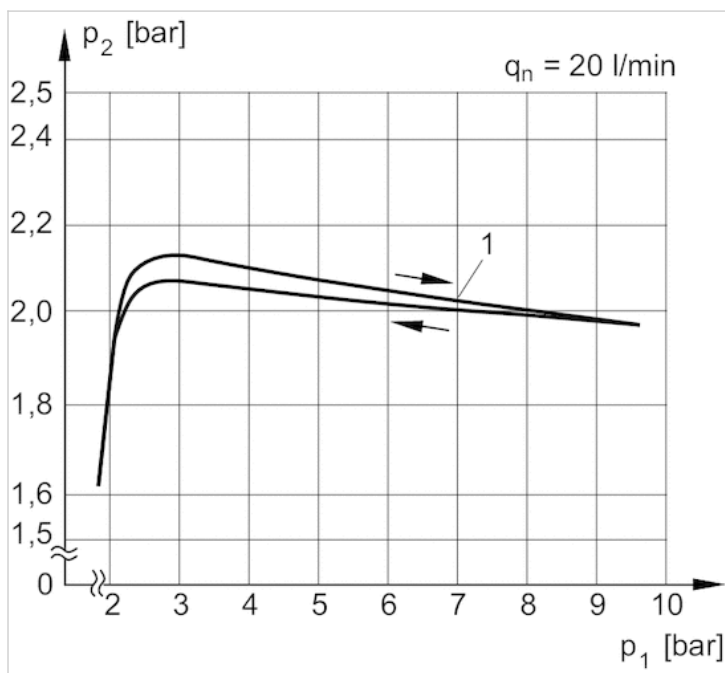
A1 = input

A2 = output

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain
- 3) Reservoir: polycarbonate
- 4) Reservoir: metal

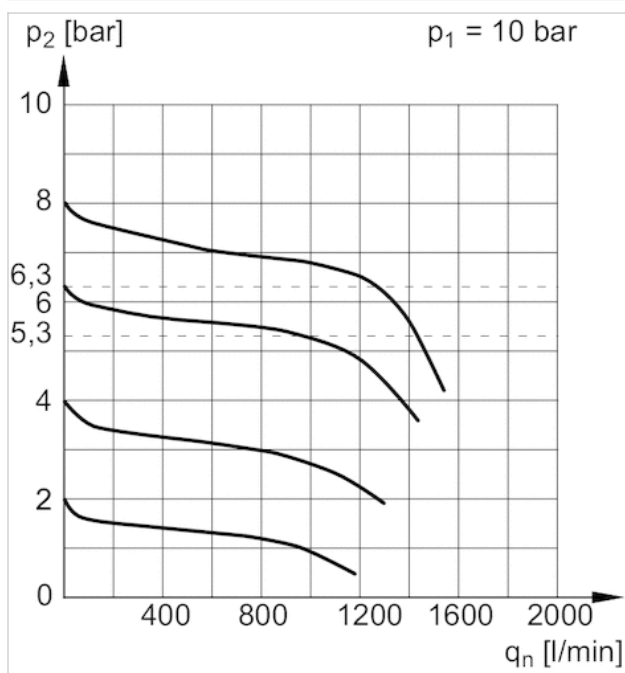
Diagrams

Pressure characteristics curve



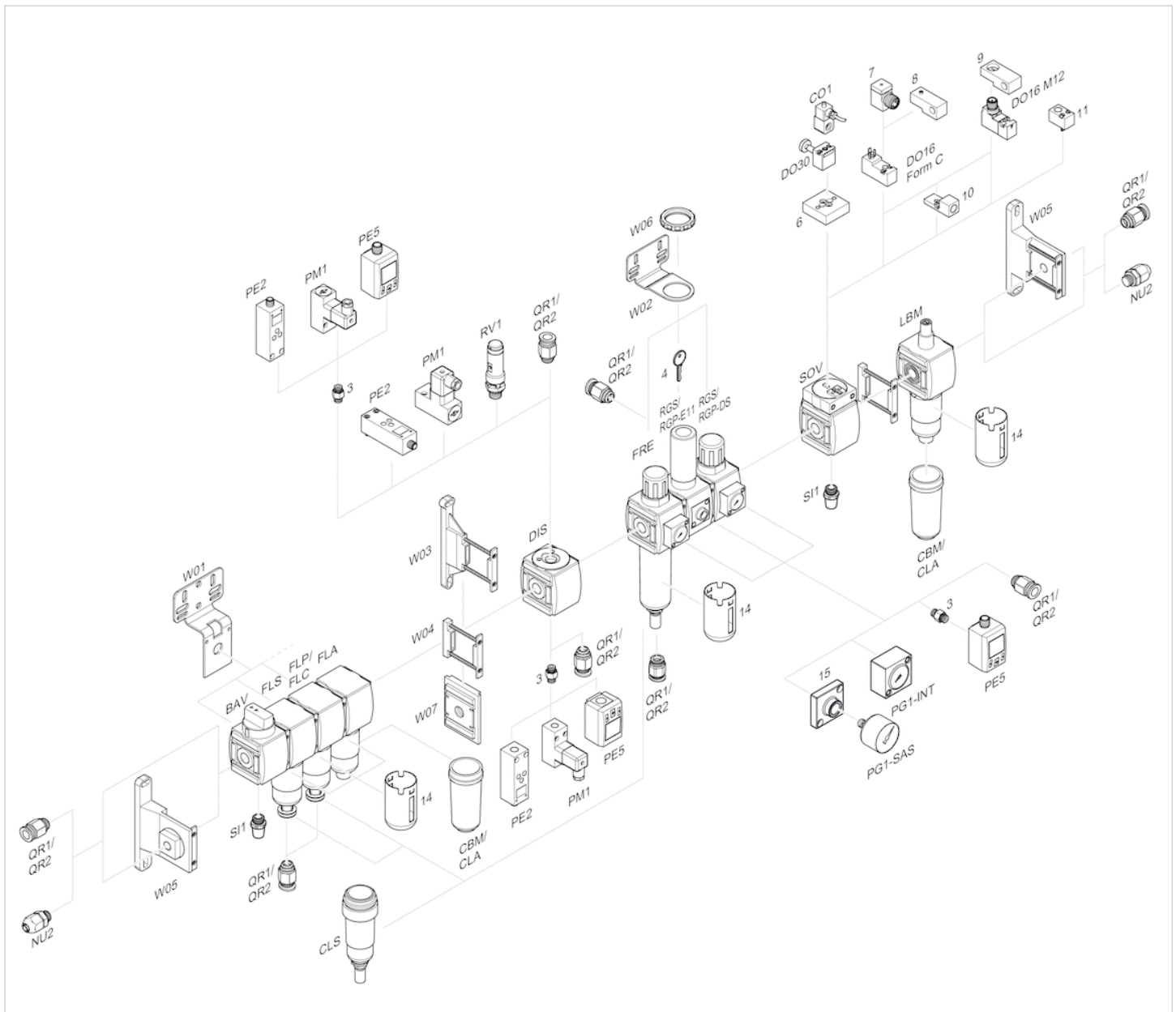
p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow
 1) = Starting point

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

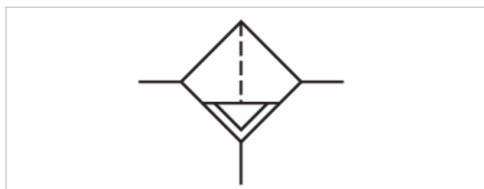
Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Standard filter, Series AS1-FLS

- G 1/4
- Air supply right
- filter porosity 5 μm



Version	Standard filter, Can be assembled into blocks
Parts	Filter
Mounting orientation	vertical
Working pressure min./max.	1.5 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Filter reservoir volume	16 cm ³
Filter element	exchangeable
filter porosity	5 μm
Condensate drain	See table below
Weight	See table below

Technical data

Part No.	Port	Flow Qn	Condensate drain
R412014678	G 1/4	1000 l/min	semi-automatic, open without pressure
R412014679	G 1/4	1000 l/min	fully automatic, open without pressure
R412014680	G 1/4	1000 l/min	fully automatic, closed without pressure
R412014681	G 1/4	1000 l/min	semi-automatic, open without pressure
R412014682	G 1/4	1000 l/min	semi-automatic, open without pressure
R412014683	G 1/4	1000 l/min	fully automatic, open without pressure
R412014684	G 1/4	1000 l/min	fully automatic, closed without pressure

Part No.	Version	Weight
R412014678	reservoir, polycarbonate, without protective guard	0.166 kg
R412014679	reservoir, polycarbonate, without protective guard	0.184 kg
R412014680	reservoir, polycarbonate, without protective guard	0.184 kg
R412014681	reservoir, polycarbonate, with metal protective guard	0.193 kg
R412014682	Metal reservoir without window	0.243 kg
R412014683	Metal reservoir without window	0.255 kg
R412014684	Metal reservoir without window	0.255 kg

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

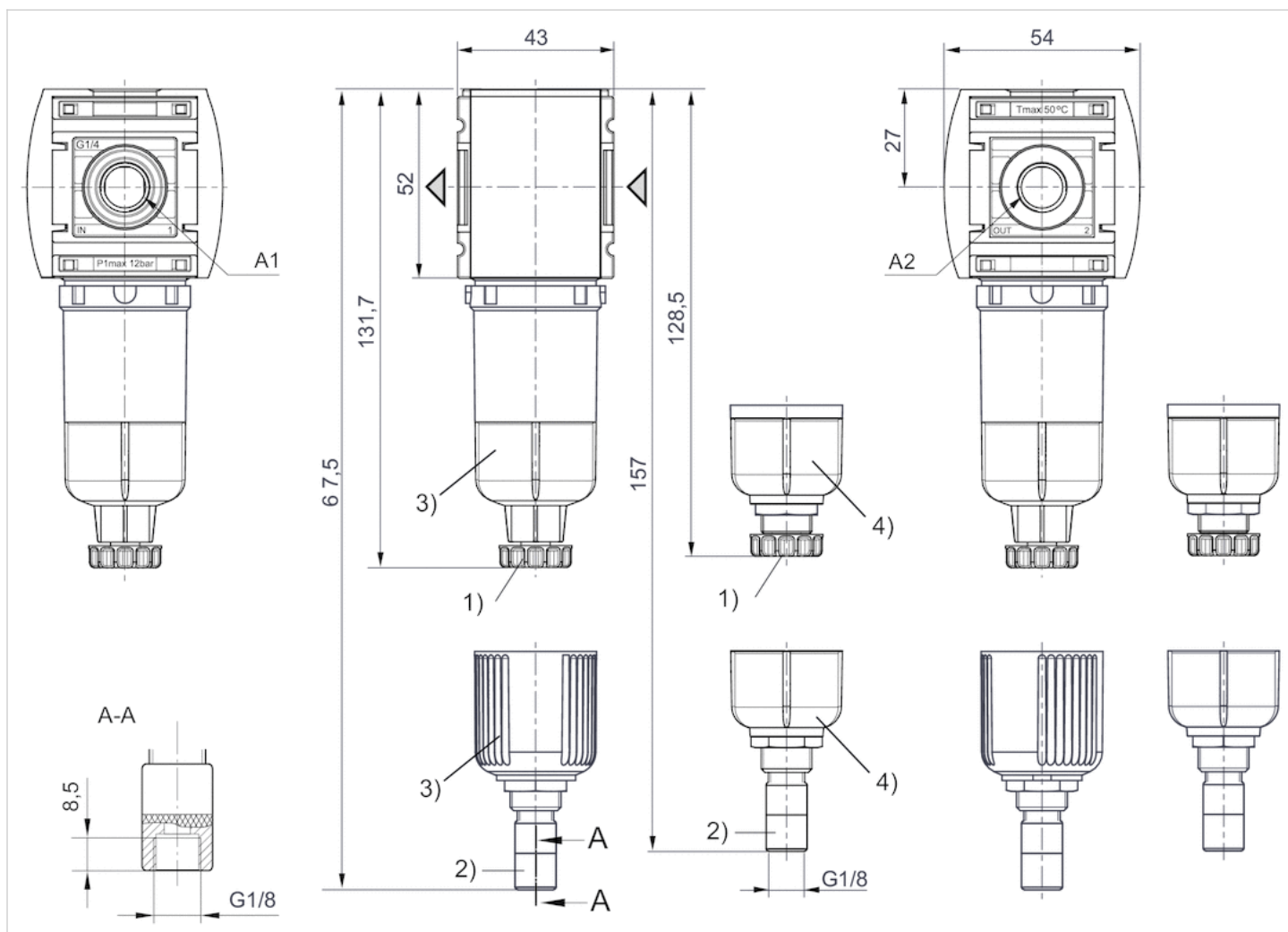
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Also suitable for separation of fluid oil or water due to the design.
Max. achievable compressed air class acc. to ISO 8573-1:2010 6 : 7 : -

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate metal
Protective guard	metal
Filter insert	Cellpor

Dimensions

Dimensions in mm



A1 = input

1) A2 = output

2) Semi-automatic condensate drain

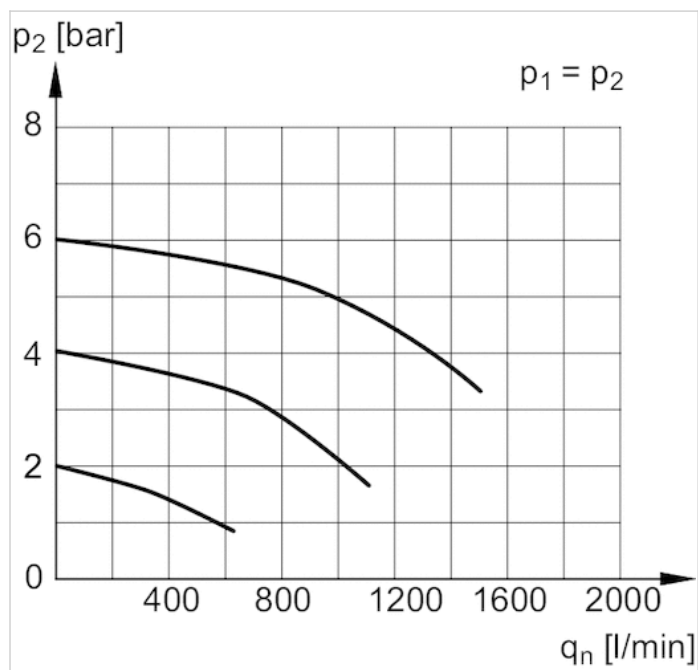
3) Fully automatic condensate drain

4) Reservoir: polycarbonate

Reservoir: metal

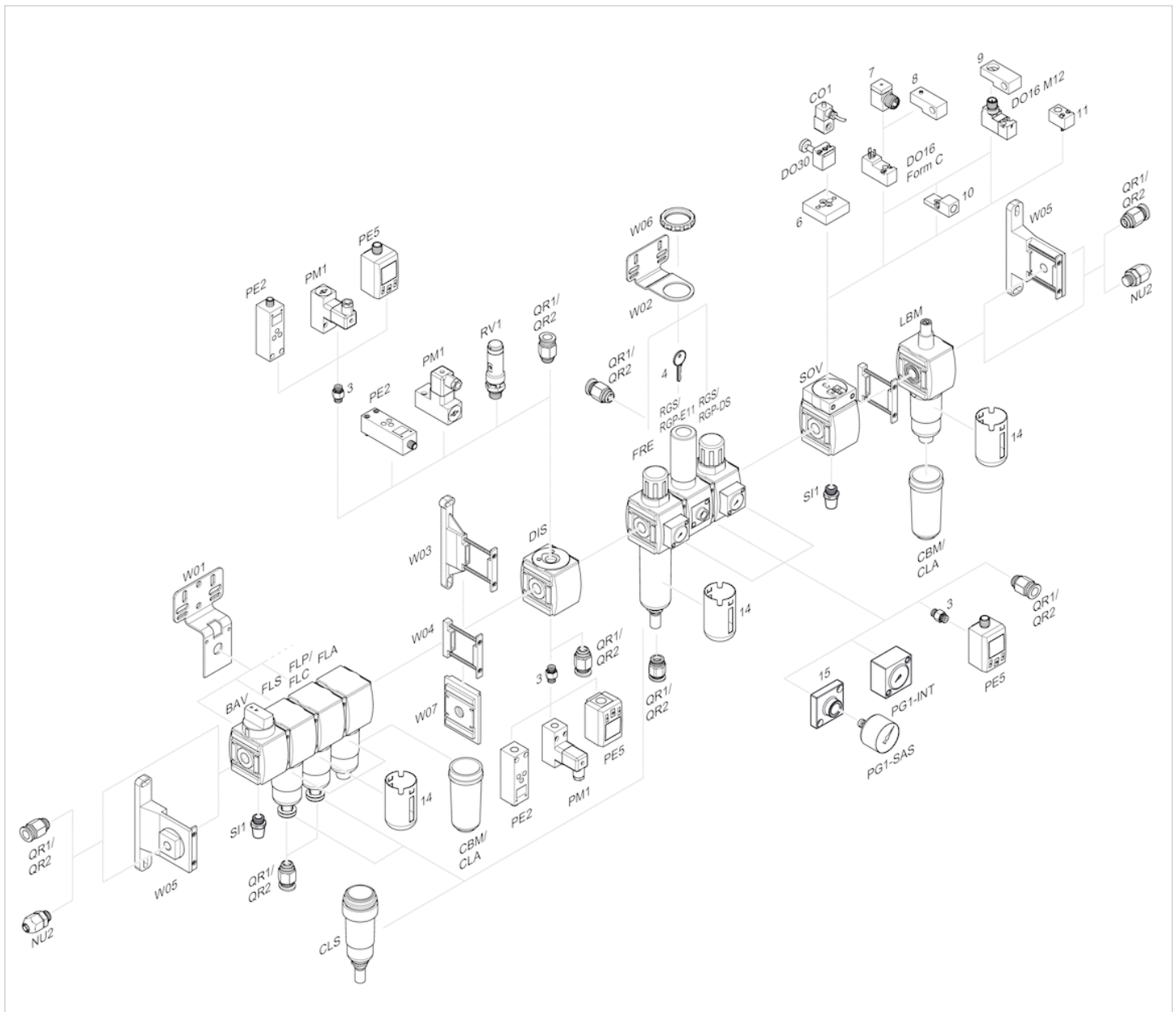
Diagrams

Flow rate characteristic



p1 = working pressure
p2 = secondary pressure
qn = nominal flow

Accessories overview



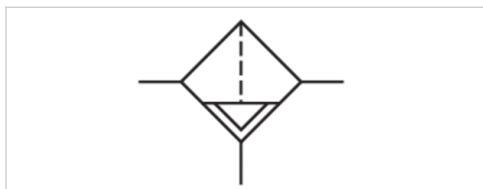
- 3 = Double nipple
- 4 = Key for E11 locking
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Pre-filter, Series AS1-FLP

- G 1/4
- Air supply right
- filter porosity 0.3 µm



Version	Pre-filter, Can be assembled into blocks
Parts	Pre-filter
Mounting orientation	vertical
Working pressure min./max.	1.5 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Filter reservoir volume	12 cm ³
Filter element	exchangeable
filter porosity	0.3 µm
Condensate drain	See table below
Weight	See table below



Technical data

Part No.	Port	Flow Qn	Condensate drain
R412014685	G 1/4	350 l/min	semi-automatic, open without pressure
R412014686	G 1/4	350 l/min	fully automatic, open without pressure
R412014687	G 1/4	350 l/min	fully automatic, closed without pressure
R412014688	G 1/4	350 l/min	semi-automatic, open without pressure
R412014689	G 1/4	350 l/min	semi-automatic, open without pressure
R412014690	G 1/4	350 l/min	fully automatic, open without pressure
R412014691	G 1/4	350 l/min	fully automatic, closed without pressure

Part No.	Version	Weight
R412014685	reservoir, polycarbonate, without protective guard	0.169 kg
R412014686	reservoir, polycarbonate, without protective guard	0.187 kg
R412014687	reservoir, polycarbonate, without protective guard	0.187 kg
R412014688	reservoir, polycarbonate, with metal protective guard	0.202 kg
R412014689	Metal reservoir without window	0.246 kg
R412014690	Metal reservoir without window	0.258 kg
R412014691	Metal reservoir without window	0.258 kg

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 0.1 bar

Technical information

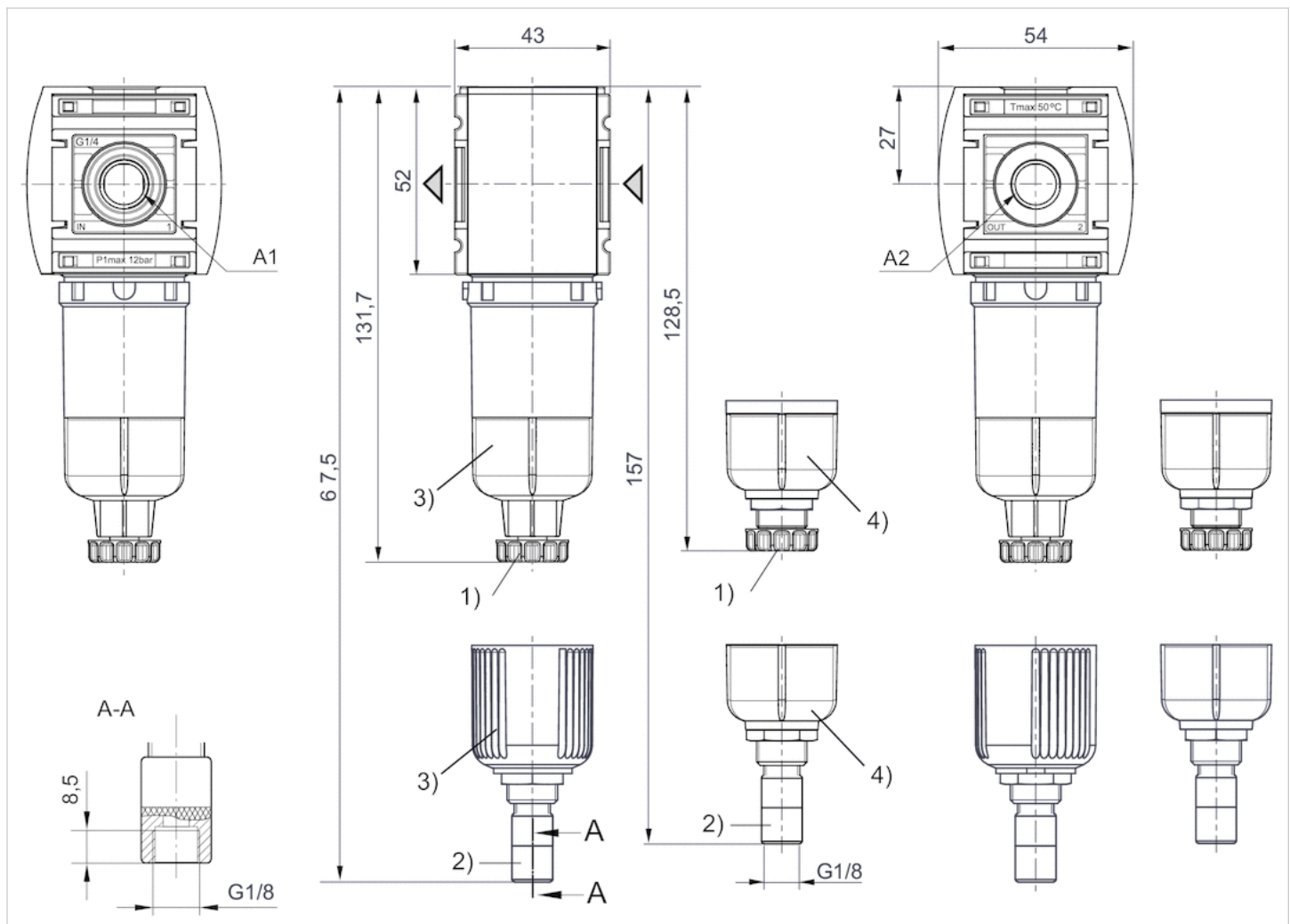
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Max. achievable compressed air class acc. to ISO 8573-1:2010 2 : - : 3

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate metal
Protective guard	metal
Filter insert	Impregnated paper

Dimensions

Dimensions in mm



A1 = input

1) A2 = output

2) Semi-automatic condensate drain

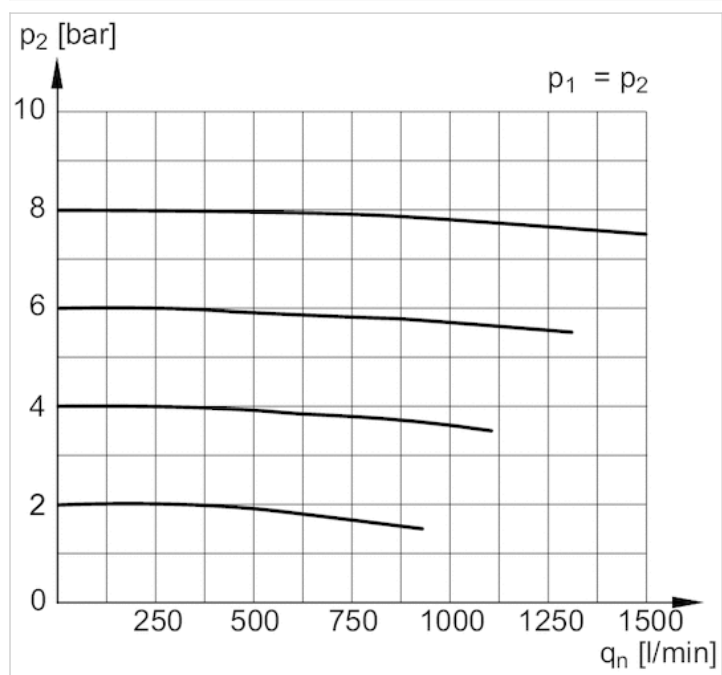
3) Fully automatic condensate drain

4) Reservoir: polycarbonate

Reservoir: metal

Diagrams

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

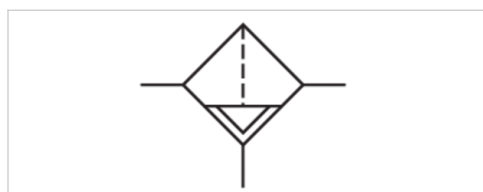
- PDF creation date: 20.06.2020

Microfilter, Series AS1-FLC

- G 1/4
- Air supply right
- filter porosity 0.01 μm



Version	Microfilter, Can be assembled into blocks
Parts	Microfilter
Mounting orientation	vertical
Working pressure min./max.	1.5 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Filter reservoir volume	12 cm ³
Filter element	exchangeable
filter porosity	0.01 μm
Condensate drain	See table below
Weight	See table below



Technical data

Part No.	Port	Flow Qn	Condensate drain
R412014692	G 1/4	350 l/min	semi-automatic, open without pressure
R412014693	G 1/4	350 l/min	fully automatic, open without pressure
R412014694	G 1/4	350 l/min	fully automatic, closed without pressure
R412014695	G 1/4	350 l/min	semi-automatic, open without pressure
R412014696	G 1/4	350 l/min	semi-automatic, open without pressure
R412014697	G 1/4	350 l/min	fully automatic, open without pressure
R412014698	G 1/4	350 l/min	fully automatic, closed without pressure

Part No.	Version	Weight
R412014692	reservoir, polycarbonate, without protective guard	0.169 kg
R412014693	reservoir, polycarbonate, without protective guard	0.187 kg
R412014694	reservoir, polycarbonate, without protective guard	0.187 kg
R412014695	reservoir, polycarbonate, with metal protective guard	0.202 kg
R412014696	Metal reservoir without window	0.246 kg
R412014697	Metal reservoir without window	0.258 kg
R412014698	Metal reservoir without window	0.258 kg

Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 0.1$ bar

Technical information

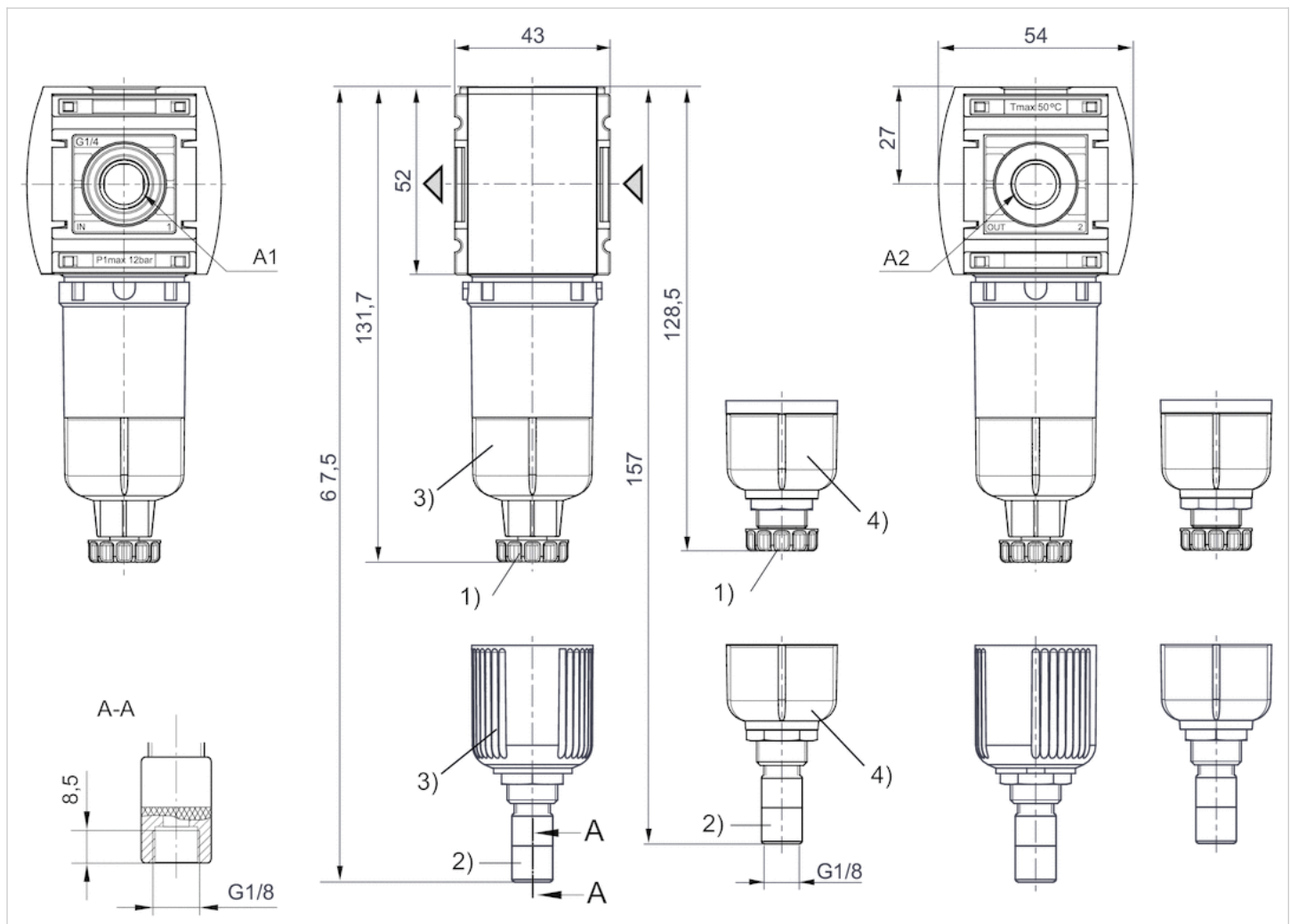
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".
Recommended pre-filtering 0.3 µm
Max. achievable compressed air class acc. to ISO 8573-1:2010 1 : - : 2

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate metal
Protective guard	metal
Filter insert	Borosilicate aluminum

Dimensions

Dimensions in mm



A1 = input

1) A2 = output

2) Semi-automatic condensate drain

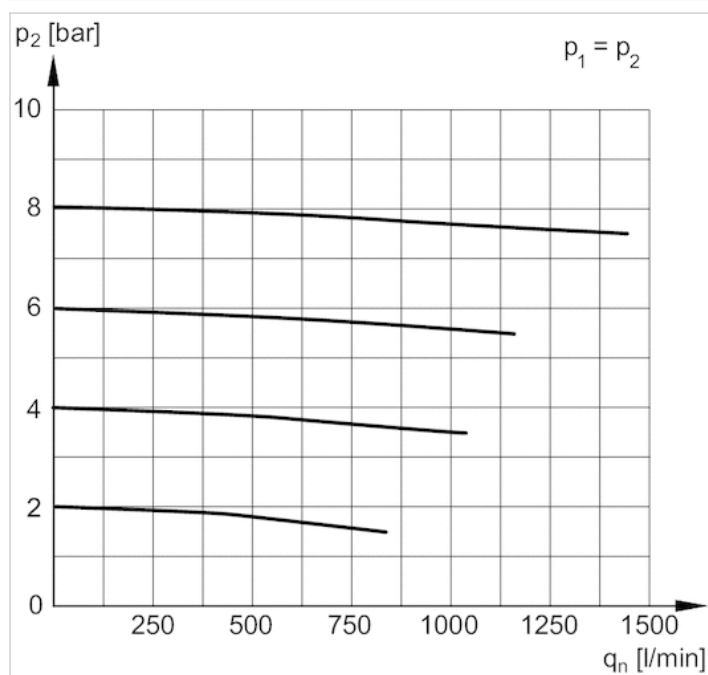
3) Fully automatic condensate drain

4) Reservoir: polycarbonate

Reservoir: metal

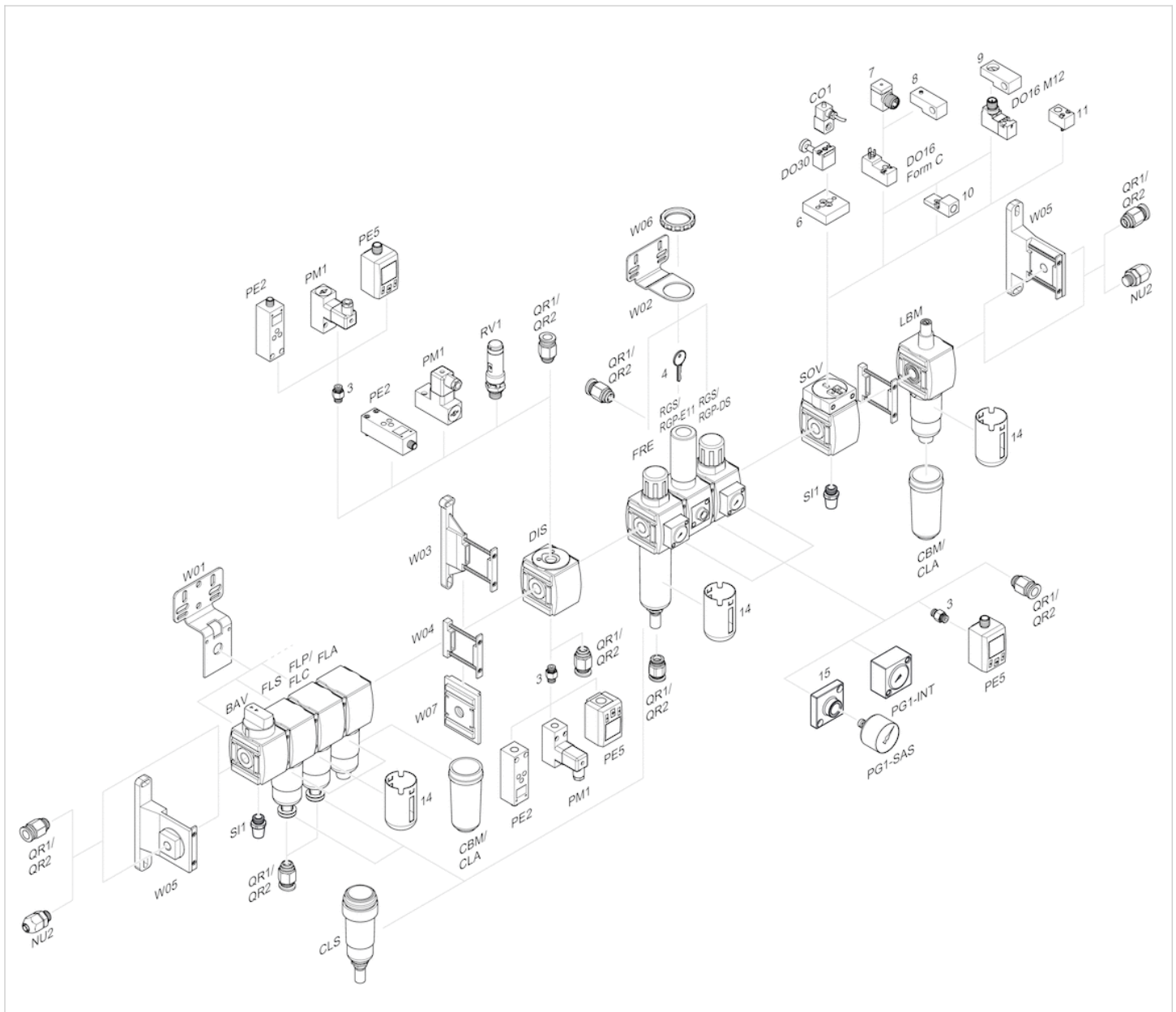
Diagrams

Flow rate characteristic



p1 = working pressure
p2 = secondary pressure
qn = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Active carbon filter, Series AS1-FLA

- G 1/4

- Air supply right



Version

Active carbon filter, Can be assembled into blocks

Parts

Active carbon filter

Mounting orientation

vertical

Working pressure min./max.

0 ... 12 bar

Ambient temperature min./max.

-10 ... 50 °C

Medium temperature min./max.

-10 ... 50 °C

Medium

Compressed air Neutral gases

Filter reservoir volume

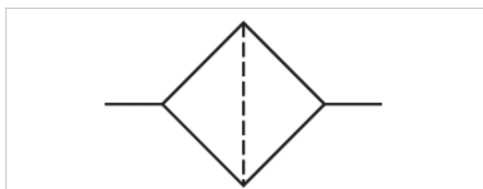
12 cm³

Filter element

exchangeable

Weight

See table below



Technical data

Part No.	Port	Flow Qn	Version
R412014699	G 1/4	350 l/min	reservoir, polycarbonate, without protective guard
R412014700	G 1/4	350 l/min	reservoir, polycarbonate, with metal protective guard
R412014701	G 1/4	350 l/min	Metal reservoir without window

Part No.	Weight
R412014699	0.171 kg
R412014700	0.204 kg
R412014701	0.232 kg

Nominal flow Qn with secondary pressure p₂ = 6 bar at Δp = 0.1 bar

Technical information

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

Recommended pre-filtering 0.01 μm

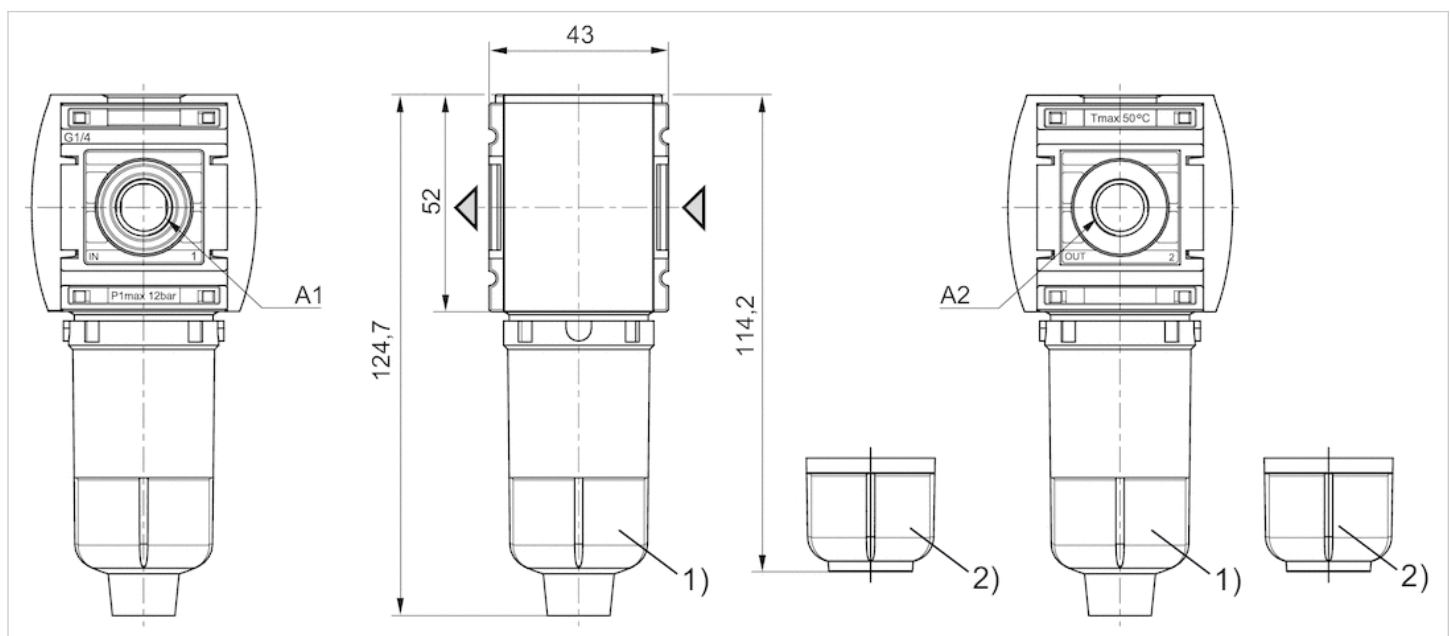
Max. achievable compressed air class acc. to ISO 8573-1:2010 - : - : 1

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate metal
Protective guard	metal
Filter insert	Active carbon

Dimensions

Dimensions in mm



A1 = input

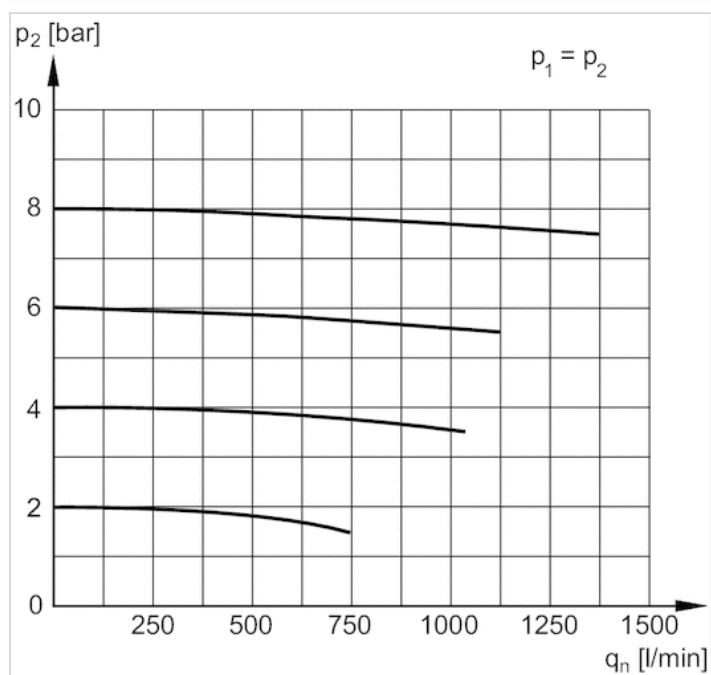
1) A2 = output

2) Reservoir: polycarbonate

Reservoir: metal

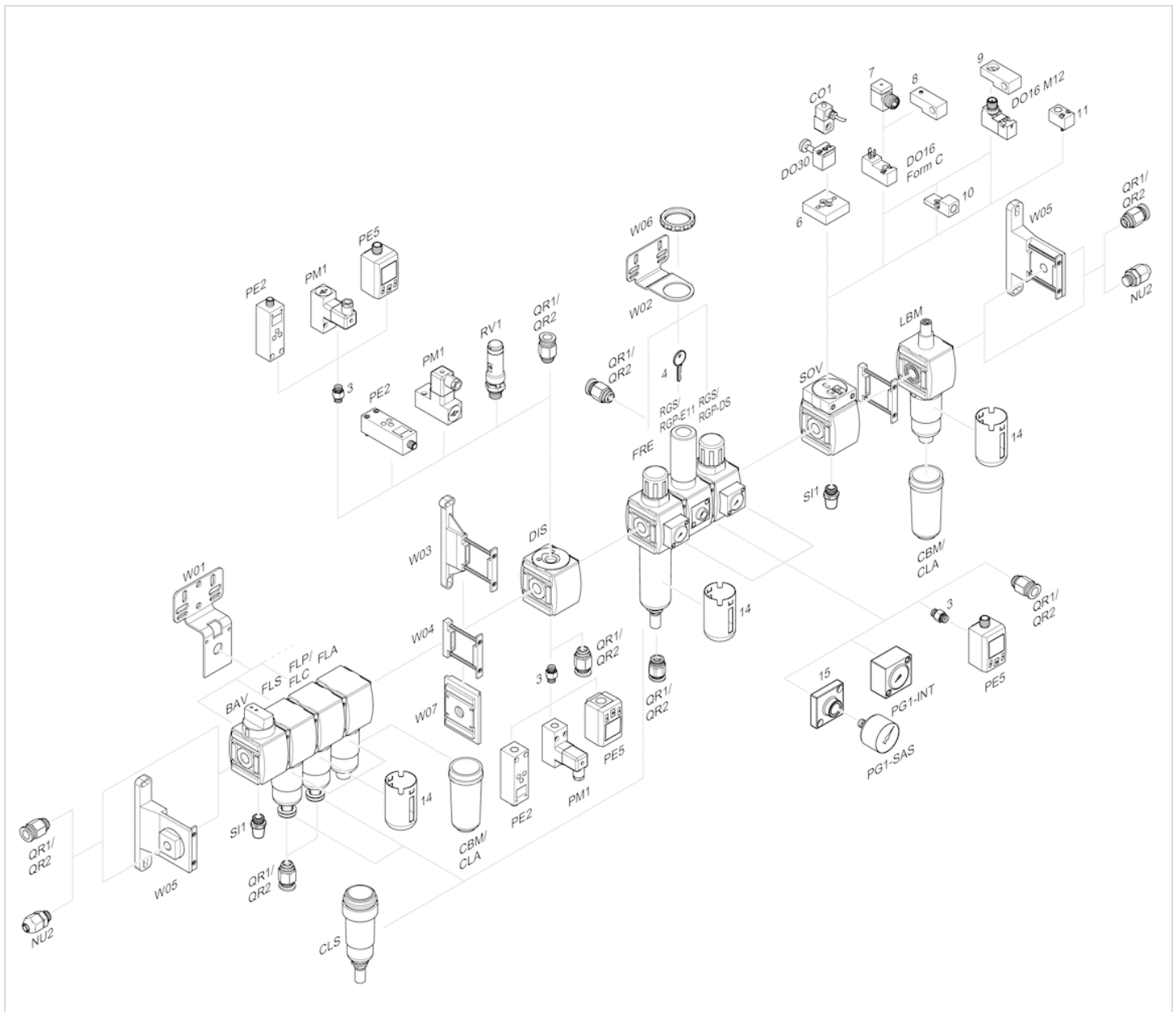
Diagrams

Flow rate characteristic



p_1 = working pressure
 p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



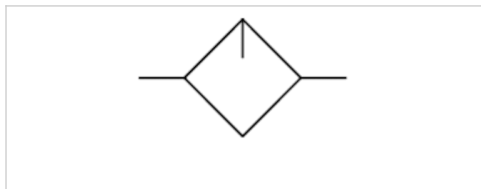
- 3 = Double nipple
- 4 = Key for E11 locking
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Micro oil-mist lubricator, Series AS1-LBM

- G 1/4
- Air supply right



Version	Micro oil-mist lubricator, Can be assembled into blocks
Parts	Micro oil-mist lubricator
Mounting orientation	vertical
Compressed air connection	G 1/4
Working pressure min./max.	0.8 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Lubricator reservoir volume	35 cm ³
Type of filling	Manual oil filling
Weight	See table below



Technical data

Part No.	Port	Nominal flow Qn	Material Reservoir	Protective guard
R412014702	G 1/4	1400 l/min	Polycarbonate	-
R412014703	G 1/4	1400 l/min	Polycarbonate	metal
R412014704	G 1/4	1400 l/min	Die cast zinc	-

Part No.	Reservoir	Weight
R412014702	reservoir, polycarbonate, without protective guard	0.187 kg
R412014703	reservoir, polycarbonate, with metal protective guard	0.22 kg
R412014704	Metal reservoir without window	0.248 kg

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
Only approx. 10% of the preset drip quantity enters the compressed air system.

oil filling not possible during operation.

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

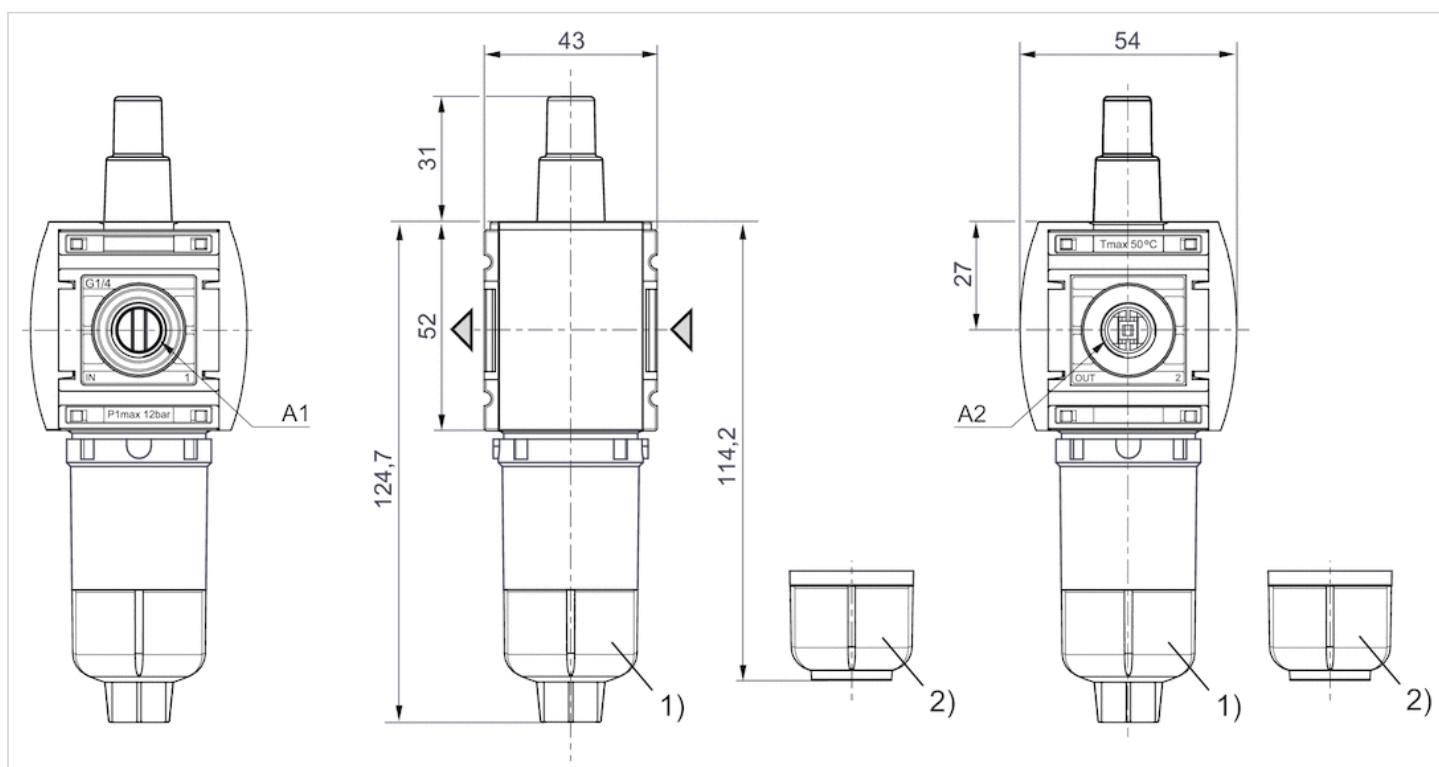
Oil dosing at 1000 l/min 10-20 drops

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Reservoir	Polycarbonate Die cast zinc
Protective guard	metal

Dimensions

Dimensions in mm



A1 = input

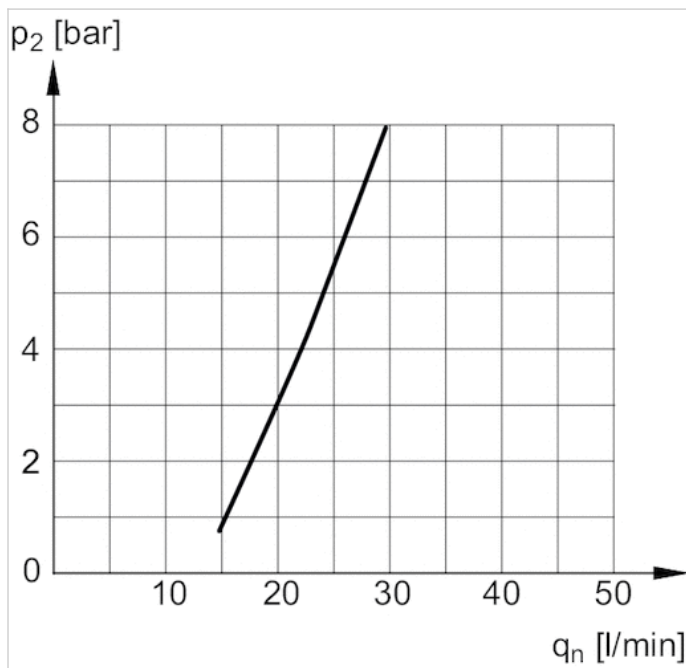
1) A2 = output

2) Reservoir: polycarbonate

Reservoir: metal

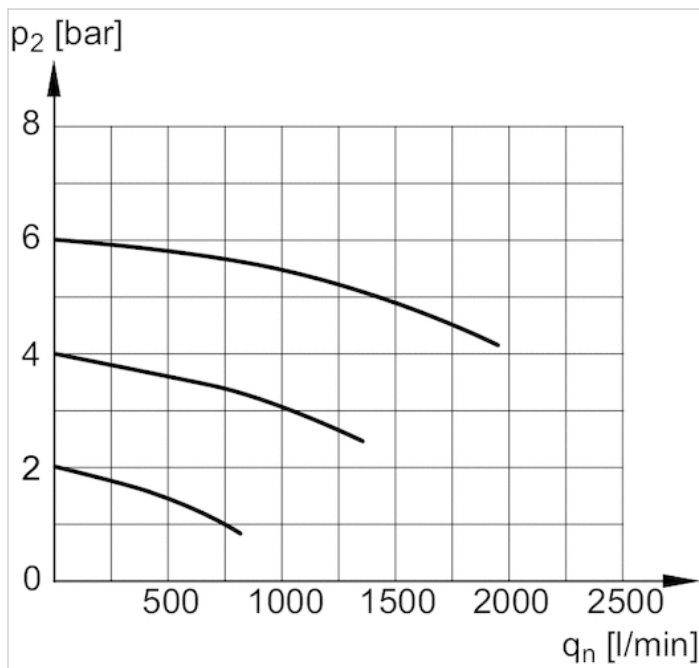
Diagrams

Lubricator activation margin



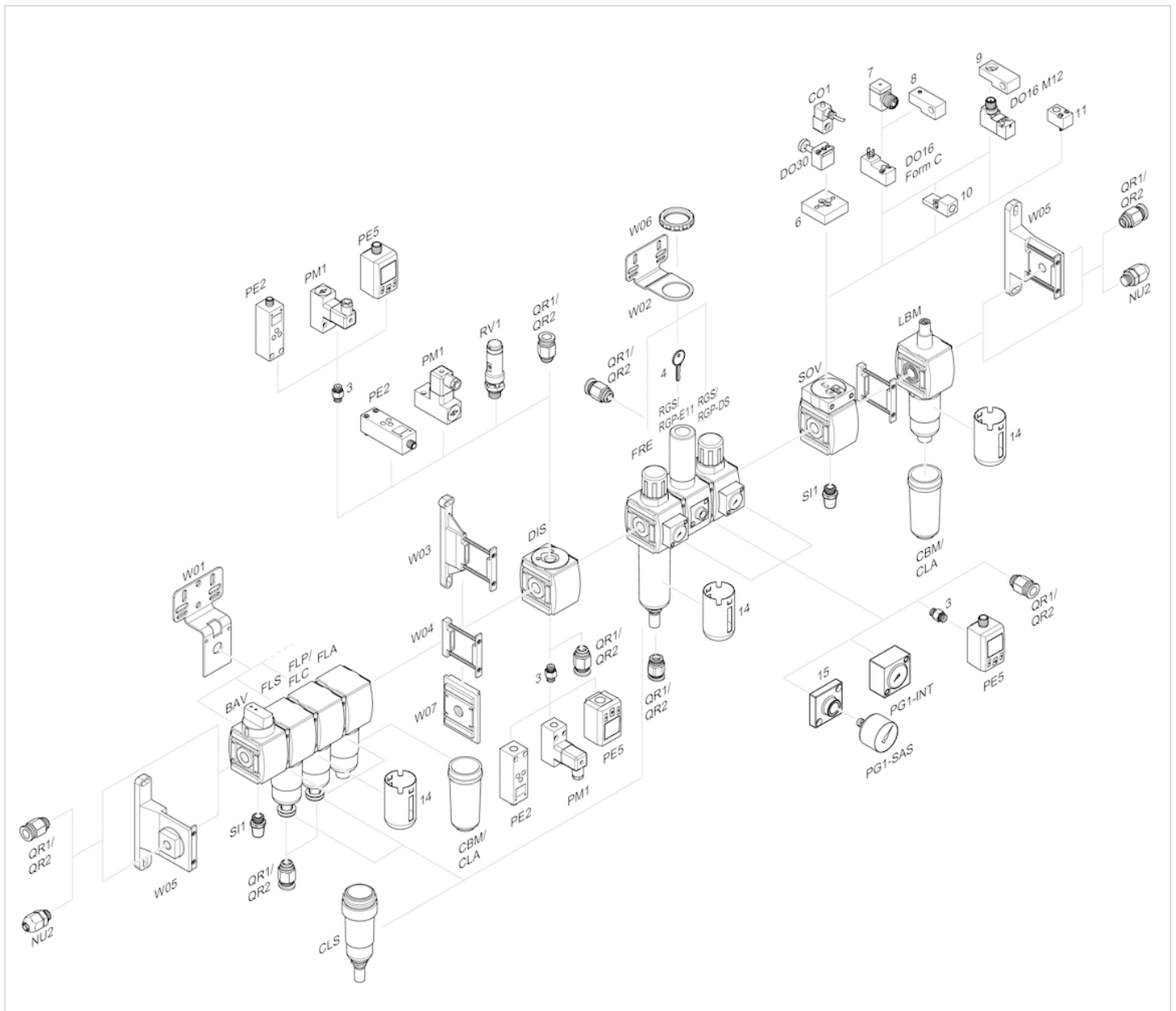
p_2 = secondary pressure
 q_n = nominal flow

Flow rate characteristic



p_2 = secondary pressure
 q_n = nominal flow

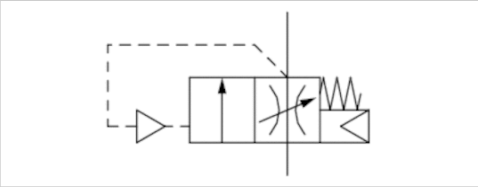
Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Filling valve, Series AS1-SSV

- adjustable filling time
- Compressed air connection G 1/4
- Air supply right
- Pipe connection



Version	Poppet valve, Can be assembled into blocks
Sealing principle	Soft sealing
Working pressure min./max.	0 ... 16 bar
Control pressure min./max.	2.5 ... 16 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Max. particle size	40 µm
Weight	0.134 kg

Technical data

Part No.	Port	Flow	Flow
		Qn	Qn 1►2
R412014749	G 1/4	2000 l/min	2000 l/min

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

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

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.

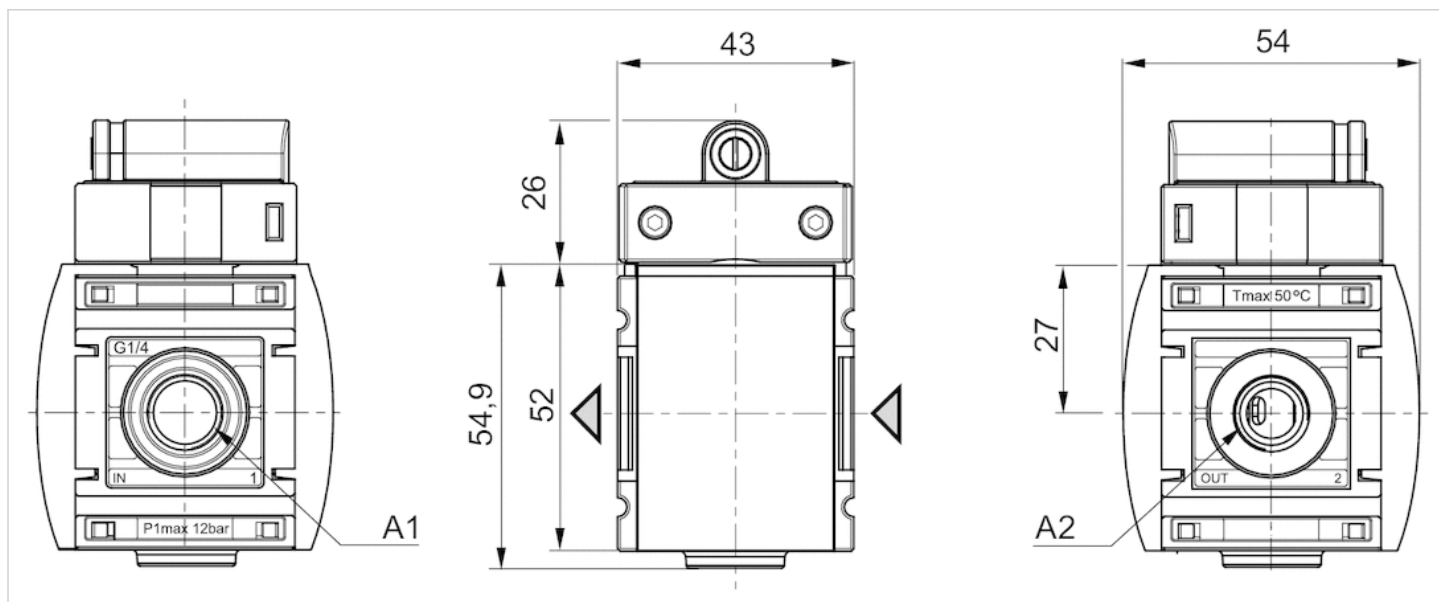
The filling valve builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a recommissioning after a mains pressure failure or avoids emergency OFF switching. This allows dangerous abrupt cylinder motions to be avoided.

Technical information

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

Dimensions

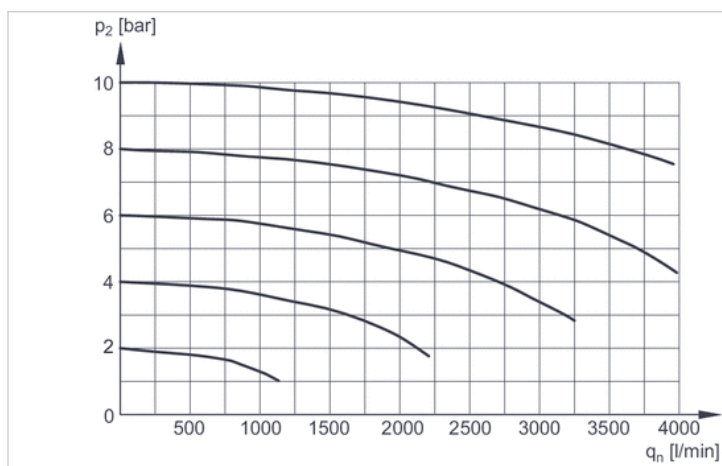
Dimensions in mm



A1 = input
A2 = output

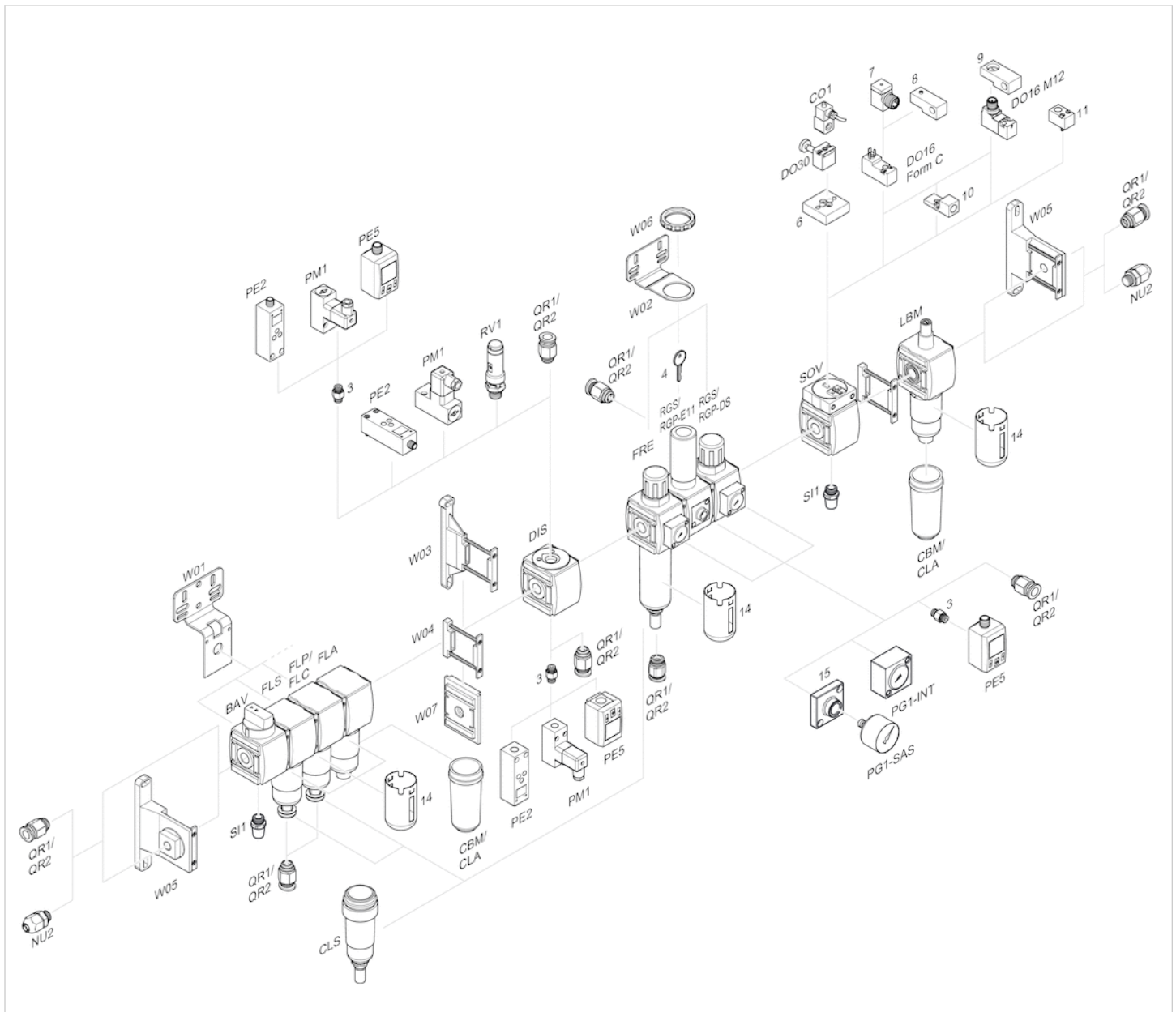
Diagrams

Flow rate characteristic



p_2 = secondary pressure
 q_n = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

3/2-directional valve, electrically operated, Series AS1-SOV

- Compressed air connection G 1/4
- Air supply right
- Pipe connection
- NC



Version

Parts

Nominal flow 1 ► 2

Nominal flow 2 ► 3

Working pressure min./max.

Medium

Medium temperature min./max.

Ambient temperature min./max.

Pilot

Sealing principle

Max. particle size

Oil content of compressed air

Protection class acc. to DIN EN 61140 with plug

Weight

Poppet valve, Can be assembled into blocks

3/2-directional valve, electrically operated

2000 l/min

380 l/min

See table below

Compressed air Neutral gases

-10 ... 50 °C

-10 ... 50 °C

Internal

Soft sealing

25 µm

0 ... 5 mg/m³

IP65

See table below

Technical data

Part No.				Compressed air connection input	Compressed air connection output	Exhaust
R412014747		—	NC	G 1/4	G 1/4	G 1/4
R412014748		—	NC	G 1/4	G 1/4	G 1/4
R412014744			NC	G 1/4	G 1/4	G 1/4
R412014746			NC	G 1/4	G 1/4	G 1/4
R412010681			NC	G 1/4	G 1/4	G 1/4

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
R412014747	-	-	-
R412014748	-	-	-
R412014744	24 V	-	-
R412014746	-	230 V	230 V
R412010681	24 V	-	-

Part No.	Power consumption	Holding power	Switch-on power	Switch-on power
	DC	AC 50 Hz	AC 50 Hz	AC 60 Hz
R412014747	-	-	-	-
R412014748	-	-	-	-
R412014744	2 W	-	-	-
R412014746	-	1.6 VA	3 VA	3 VA
R412010681	2 W	-	-	-

Part No.	Working pressure min./max.	Electrical connection	Connector standard
		Pilot valve	
R412014747	2 ... 12 bar	-	-
R412014748	2 ... 12 bar	-	-
R412014744	2 ... 10 bar	Plug, ISO 15217, form C	EN 175301-803, form C
R412014746	2 ... 10 bar	Plug, ISO 15217, form C	EN 175301-803, form C
R412010681	2 ... 10 bar	Plug, M12	-

Part No.	basic valve with electrical connector	Weight	Fig.
R412014747	Basic valve without pilot valve	0.196 kg	Fig. 1
R412014748	Basic valve without pilot valve, with CNOMO subbase	0.21 kg	Fig. 1
R412014744	Basic valve with pilot valve	0.215 kg	Fig. 2
R412014746	Basic valve with pilot valve	0.214 kg	Fig. 2
R412010681	Basic valve with pilot valve	0.232 kg	Fig. 3

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

Technical information

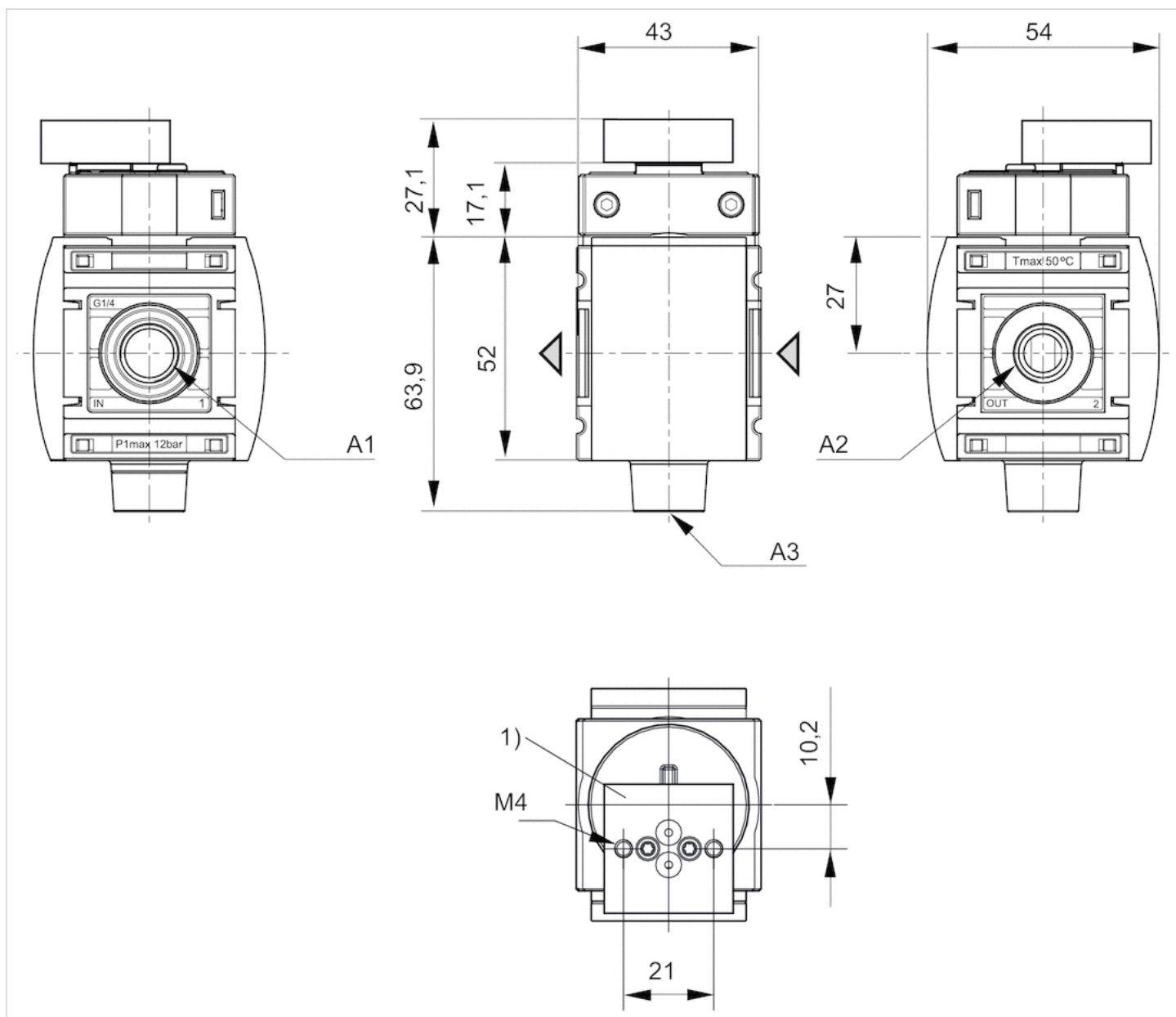
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions in mm, Fig. 1: 3/2-directional valve with transition plate for pilot valve series DO30



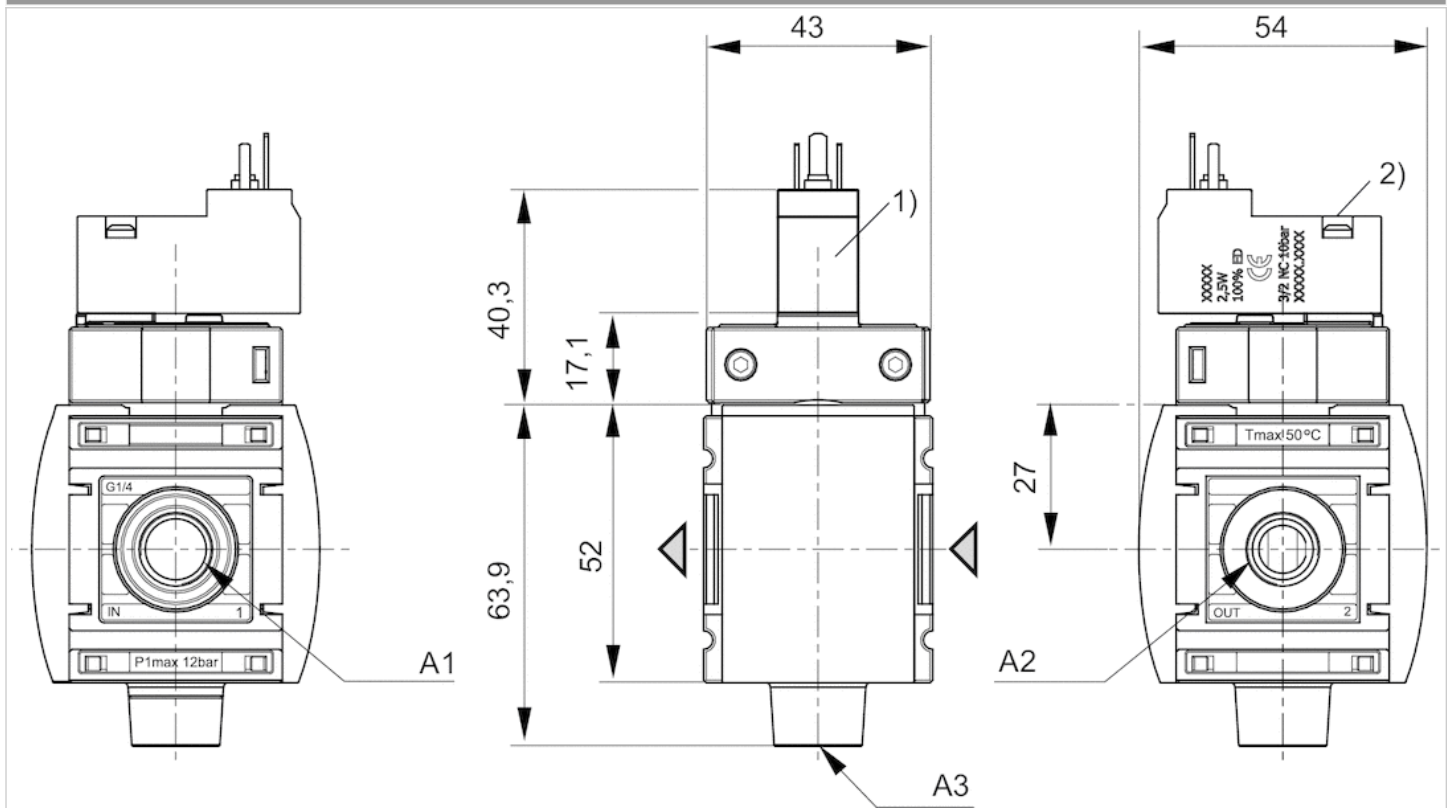
A1 = input

A2 = output

A3 = ventilation port

1) Transition plate with CNOMO porting configuration for pilot valve DO30

Dimensions in mm, Fig. 2: 3/2 directional valve with pilot valve and connection for valve plug connector form C



A1 = input

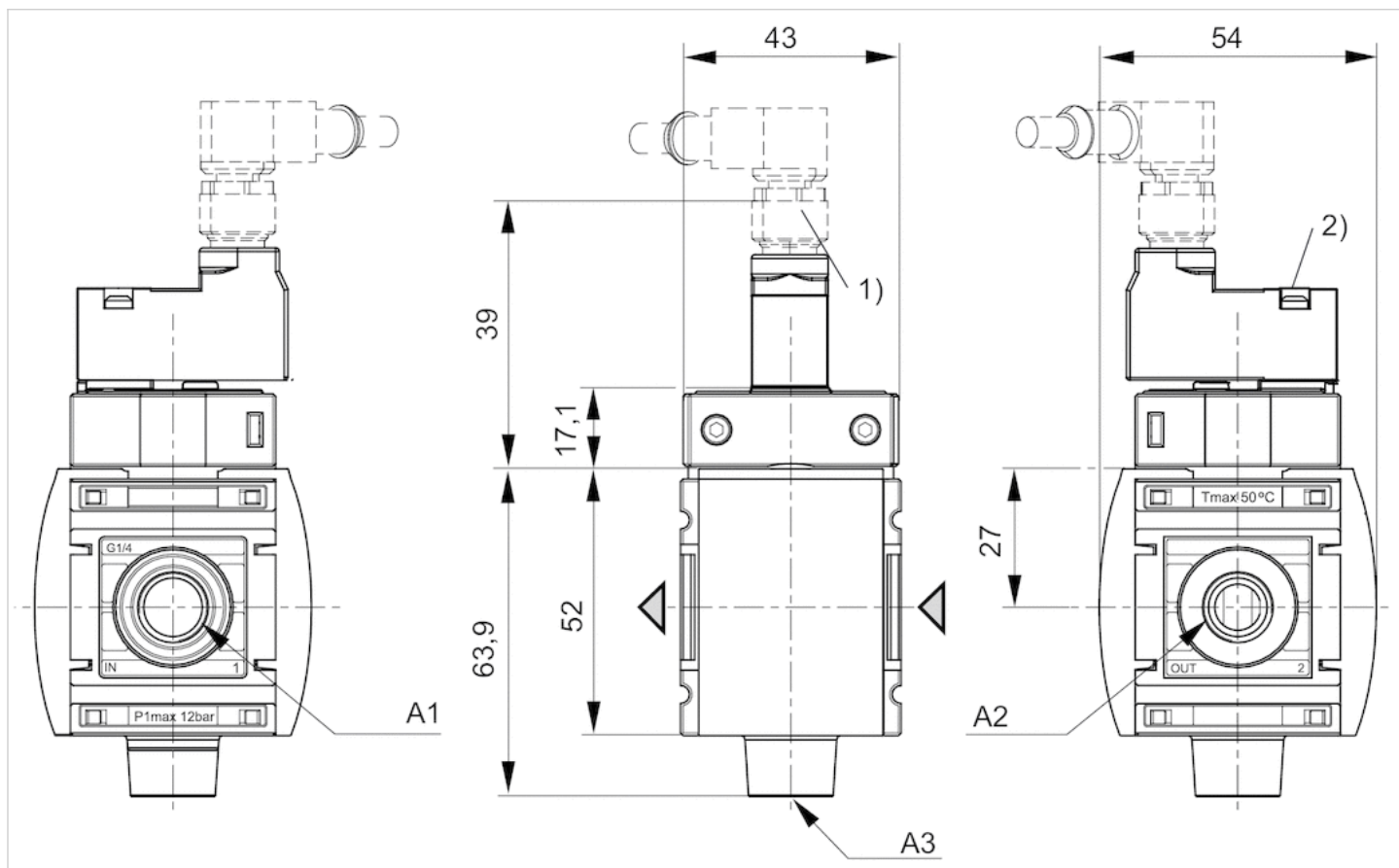
A2 = output

A3 = ventilation port

1) For valve plug connectors according to ISO 15217 (form C)

2) Manual override

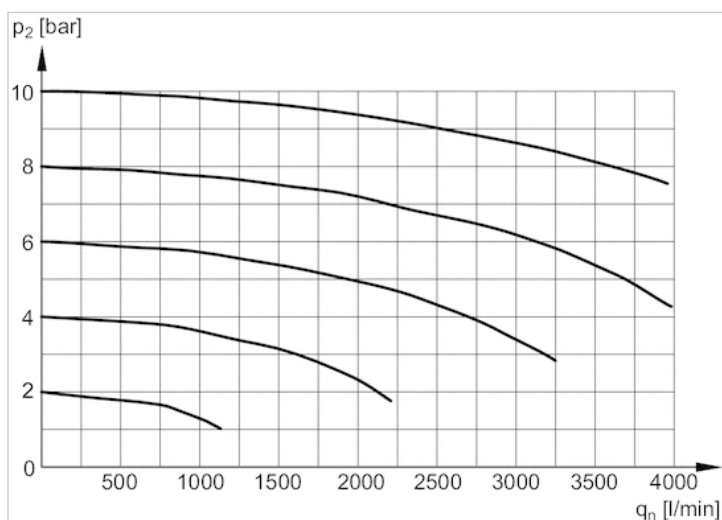
Dimensions in mm, Fig. 3: 3/2-directional valve with pilot valve, push-in fitting M12x1



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

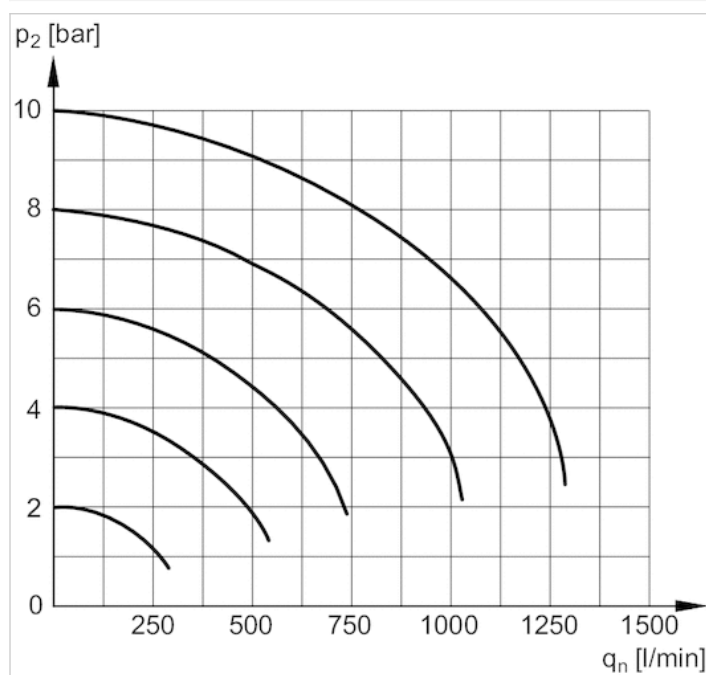
Diagrams

Flow rate characteristic



p2 = secondary pressure
 qn = nominal flow

Rear exhaust

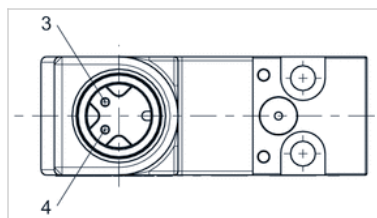


p_2 = secondary pressure

q_n = nominal flow

Pin assignments

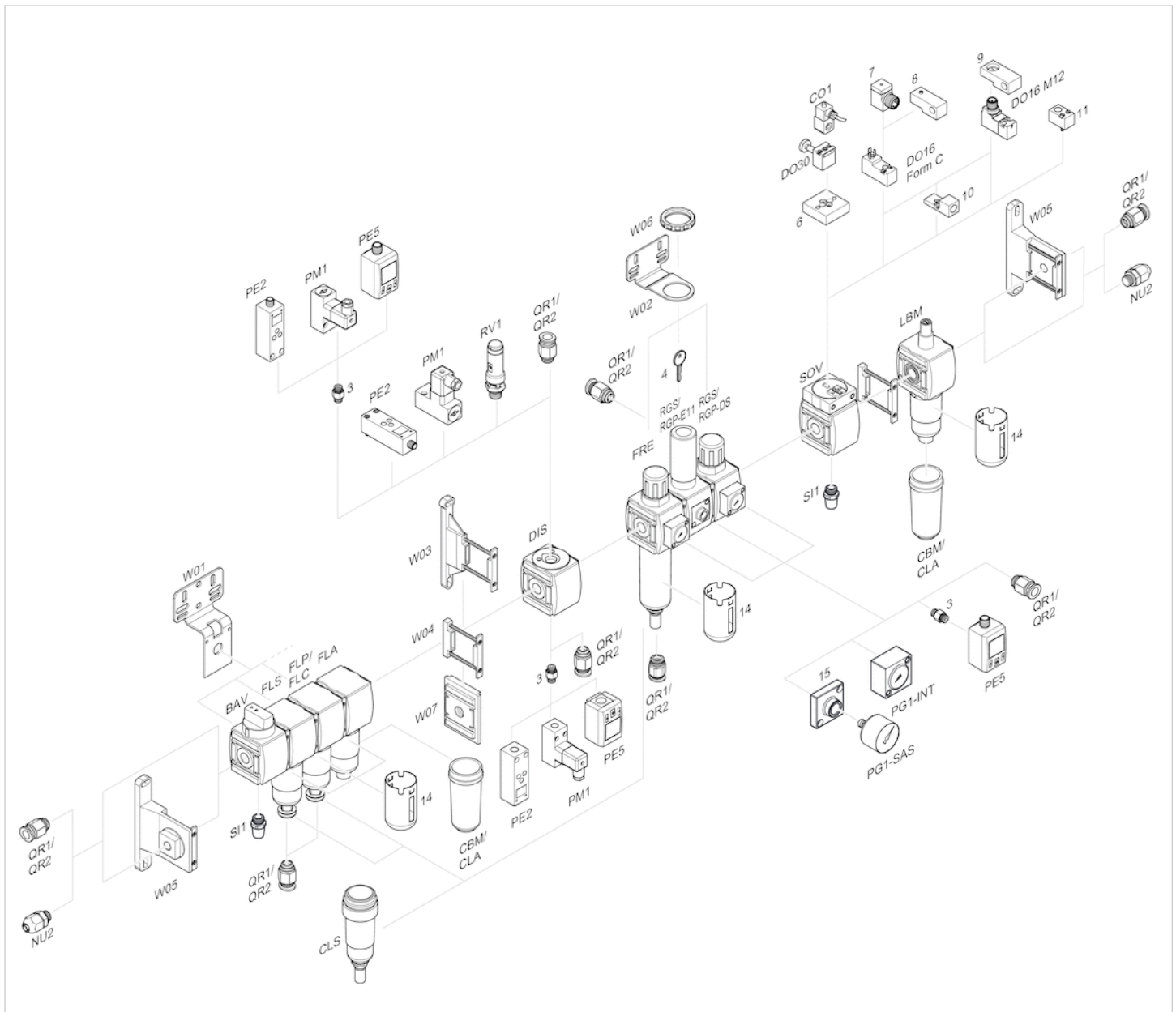
Pin assignment M12x1



3: +/-

4: +/-

Accessories overview



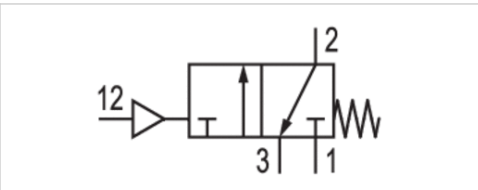
- 3 = Double nipple
- 4 = Key for E11 locking
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- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

3/2-directional valve, pneumatically operated, Series AS1-SOV

- Compressed air connection G 1/4
- Air supply right
- Pipe connection



Version	Poppet valve, Can be assembled into blocks
Sealing principle	Soft sealing
Working pressure min./max.	0 ... 16 bar
Control pressure min./max.	2.5 ... 16 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Weight	0.09 kg



Technical data

Part No.	Port	Pilot connection	Exhaust	Flow	Flow	Flow
				Qn	Qn 1→2	Qn 2→3
R412014743	G 1/4	G 1/8	G 1/4	2000 l/min	2000 l/min	380 l/min

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

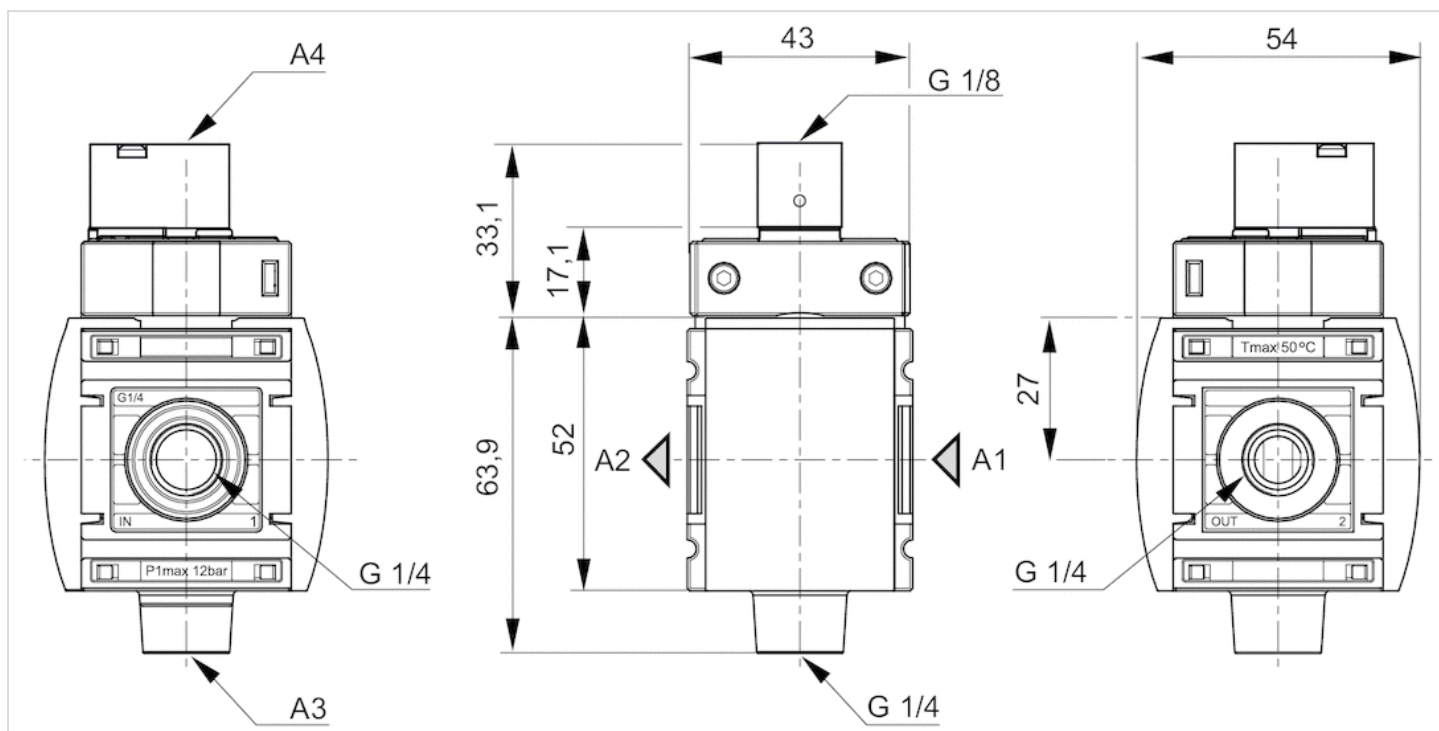
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

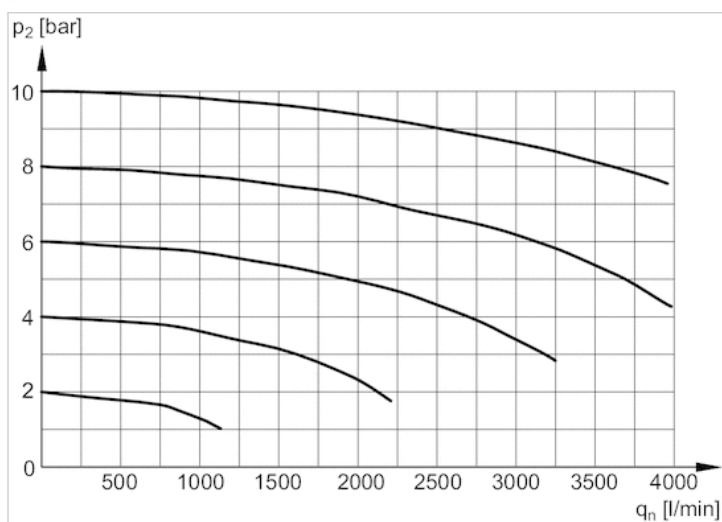
Dimensions in mm



- A1 = input
 A2 = output
 A3 = ventilation port
 A4 = control pressure connection

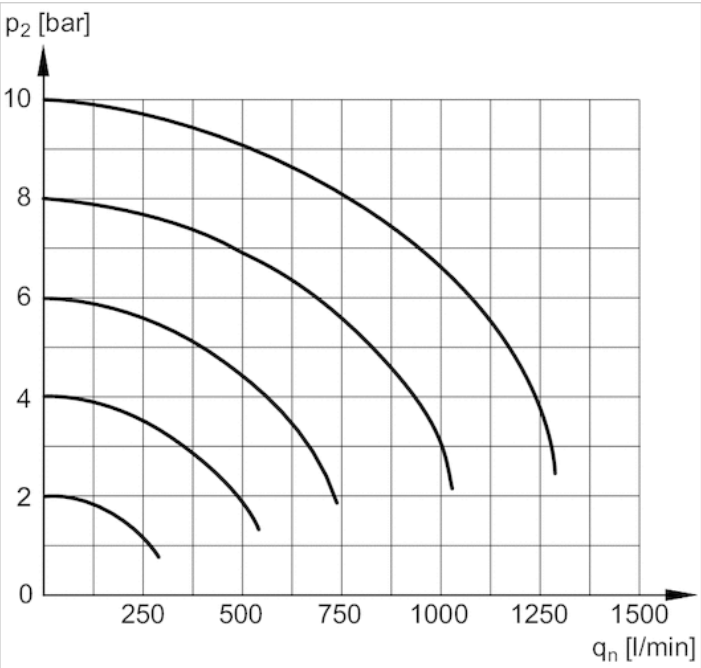
Diagrams

Flow rate characteristic



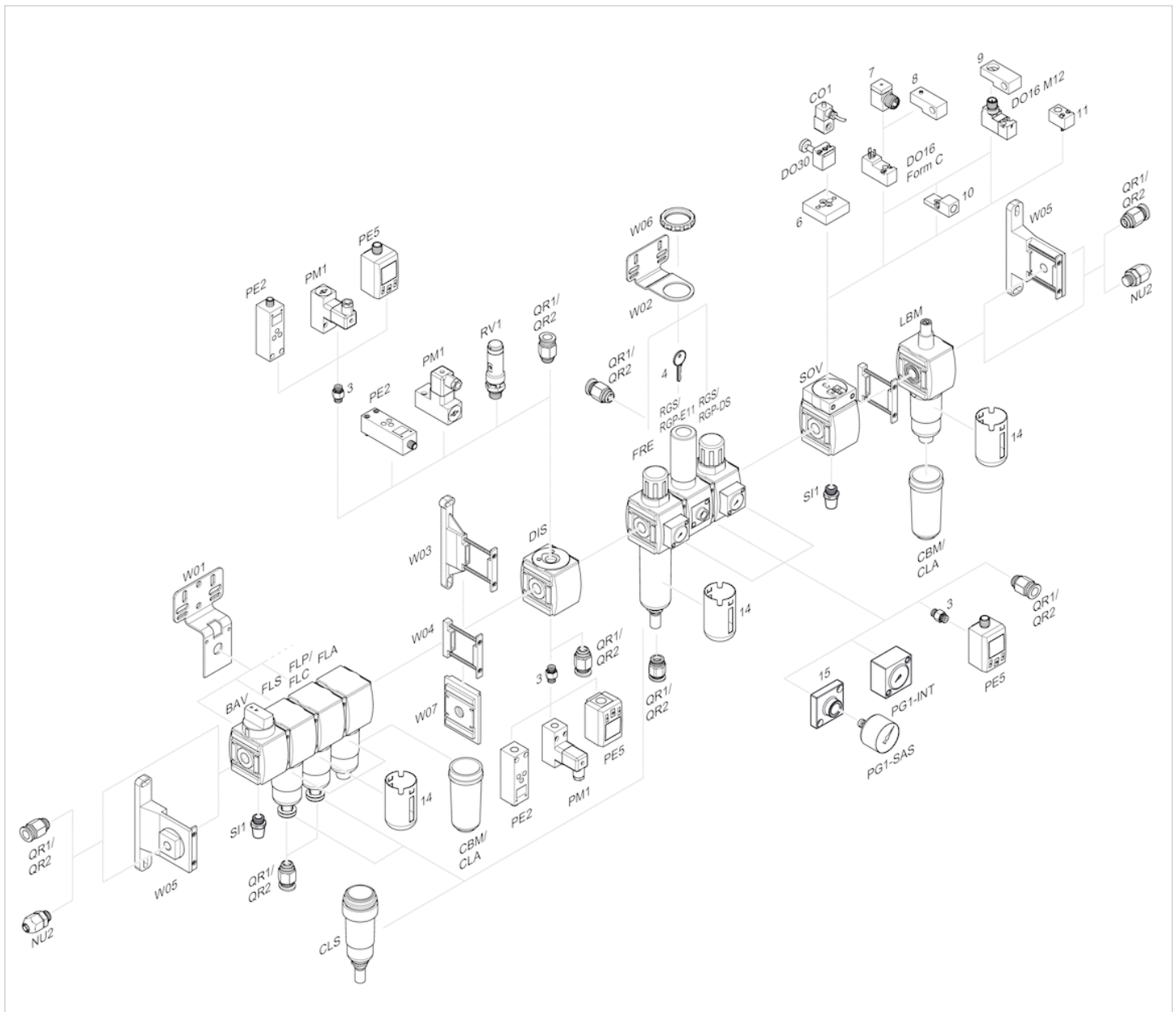
- p2 = secondary pressure
 qn = nominal flow

Rear exhaust



p2 = secondary pressure
qn = nominal flow

Accessories overview



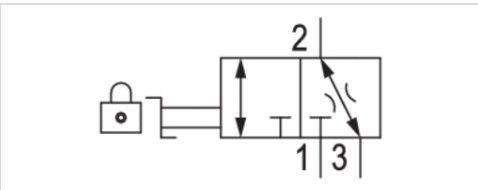
- 3 = Double nipple
- 4 = Key for E11 locking
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

3/2-shut-off valve, mechanically operated, Series AS1-BAV

- Qn 1►2 = 2600 l/min
- Qn 2►3 = 380 l/min
- Compressed air connection output G 1/4



Version	Ball valve
Activation	Mechanical
Lock type	lockable
Actuating element	rotary switch
Working pressure min./max.	0 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Max. particle size	25 µm
Weight	0.15 kg



Technical data

Part No.	Compressed air connection type	Compressed air connection Input	Compressed air connection Output	
R412014742	Internal thread	G 1/4	G 1/4	

Part No.	Compressed air connection Exhaust	Flow	Flow	Lock type
		Qn 1 ► 2	Qn 2 ► 3	
R412014742	G 1/4	2600 l/min	380 l/min	for padlocks

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

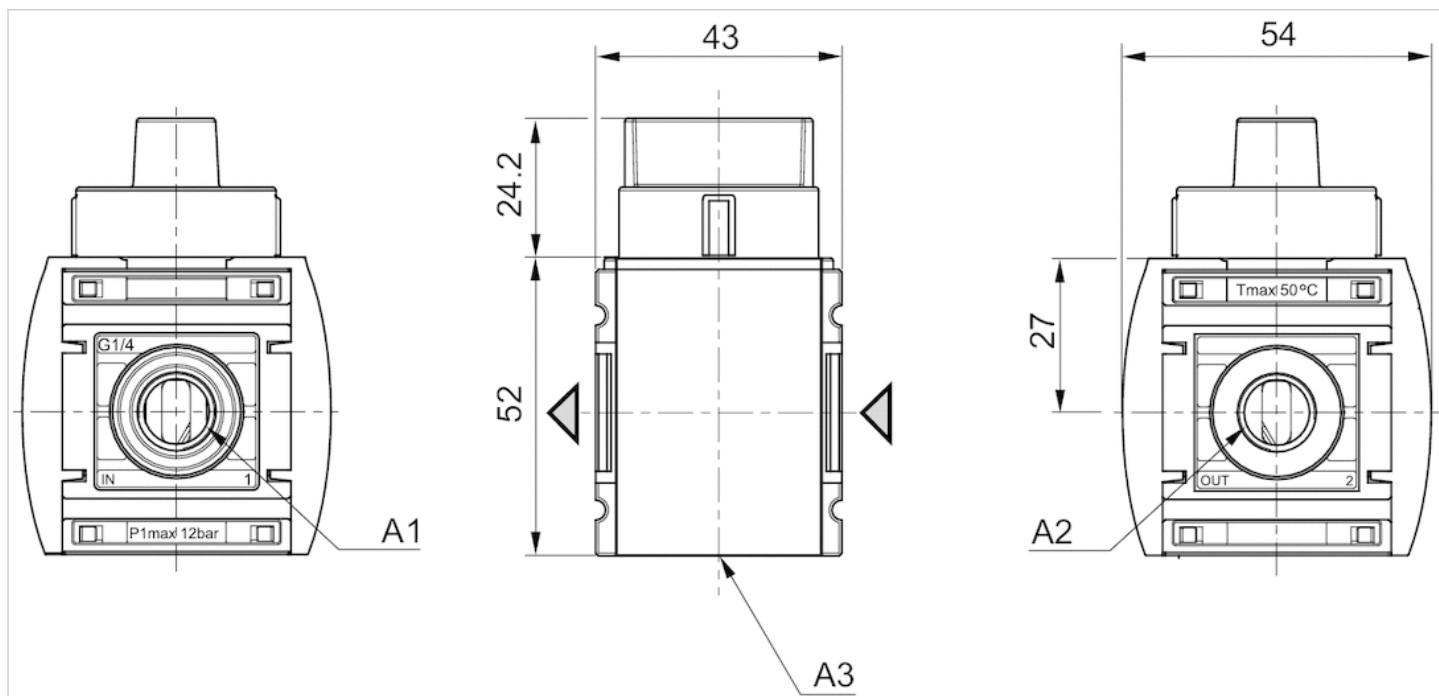
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Actuating element	Polyoxymethylene

Dimensions

Dimensions in mm



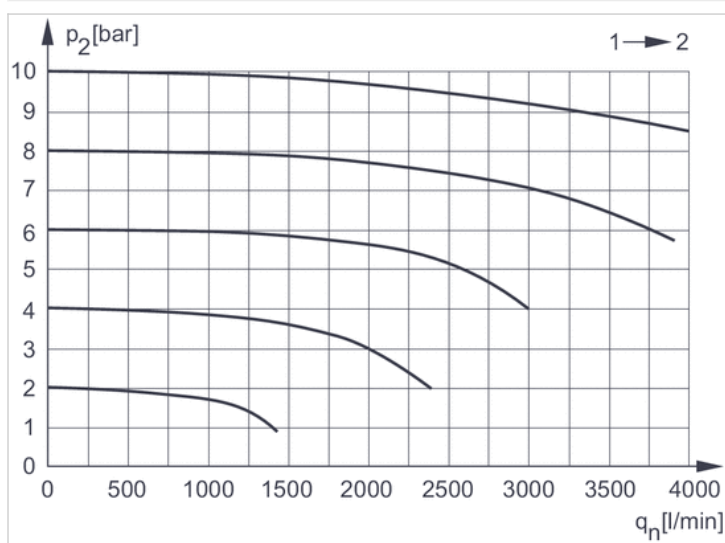
A1 = input

A2 = output

A3 = ventilation port

Diagrams

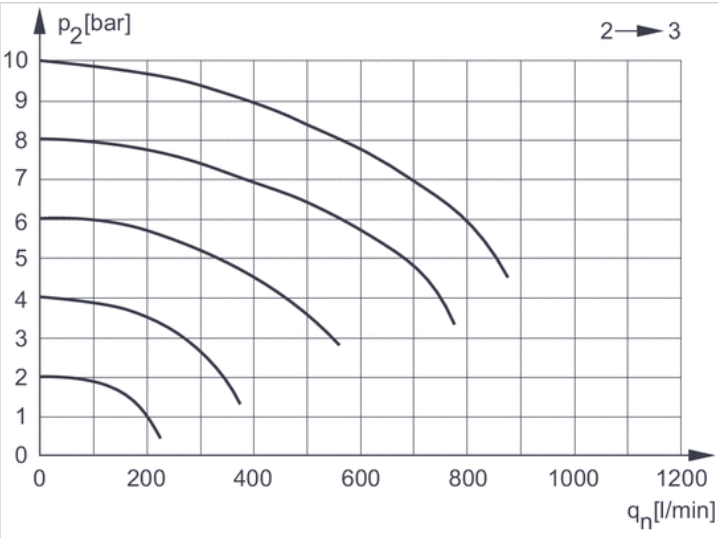
Flow rate characteristic



p_2 = secondary pressure

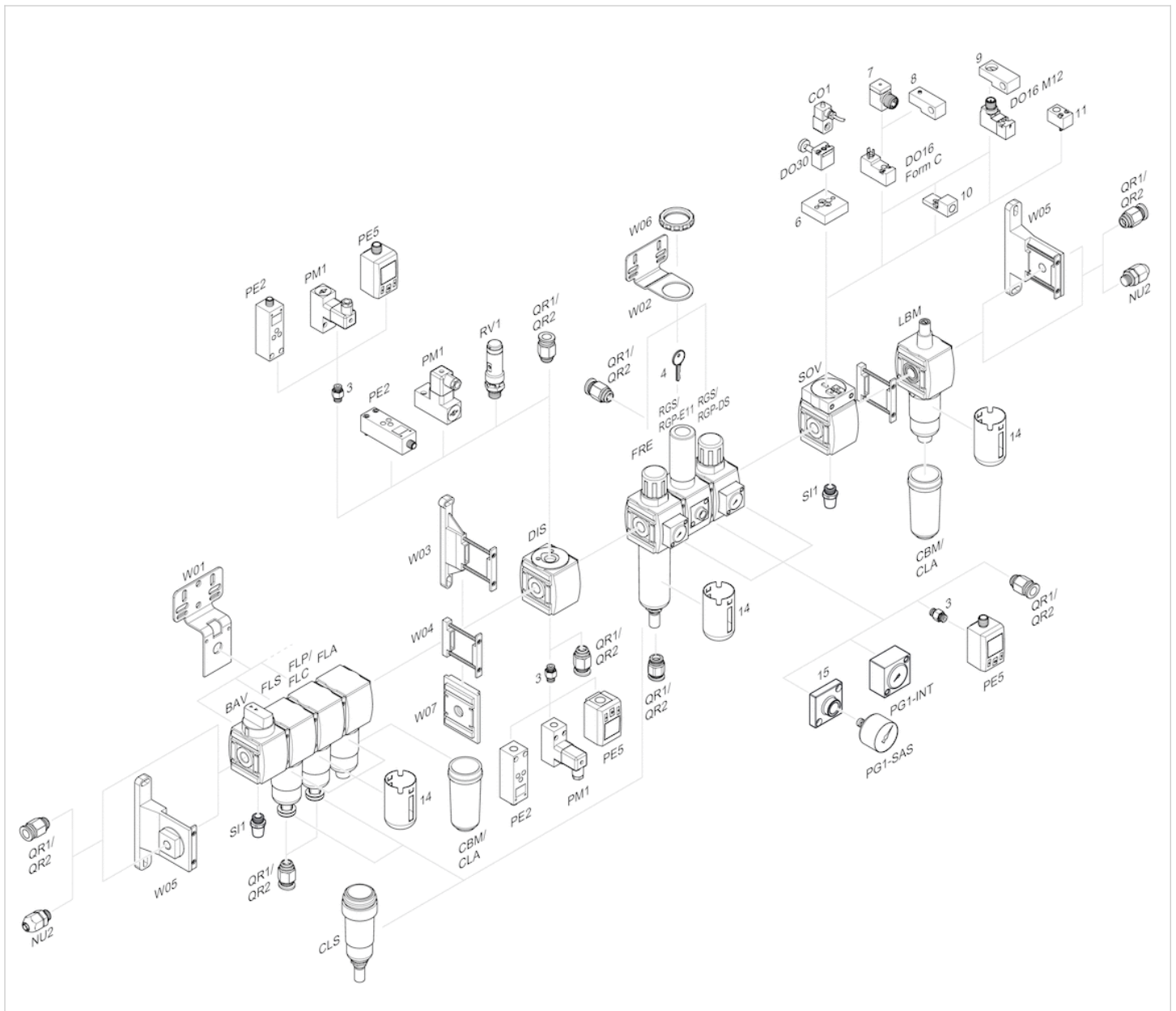
q_n = nominal flow

Rear exhaust



p_2 = secondary pressure
 q_n = nominal flow

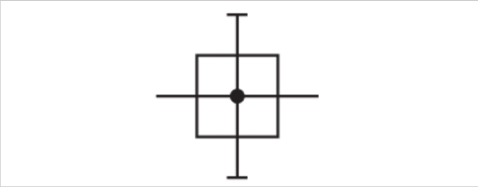
Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Distributor, Series AS1-DIS

- G 1/4
- Air supply right
- Distributor 2x
- Distributor



Version	Distributor, Can be assembled into blocks
Parts	Distributor
Mounting orientation	Any
Working pressure min./max.	0 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Weight	0.148 kg

Technical data

Part No.	Port	Nominal flow	Nominal flow	Nominal flow
		Qn 1►2	Qn 1►3	Qn 1►5
R412014740	G 1/4	2700 l/min	950 l/min	2000 l/min

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

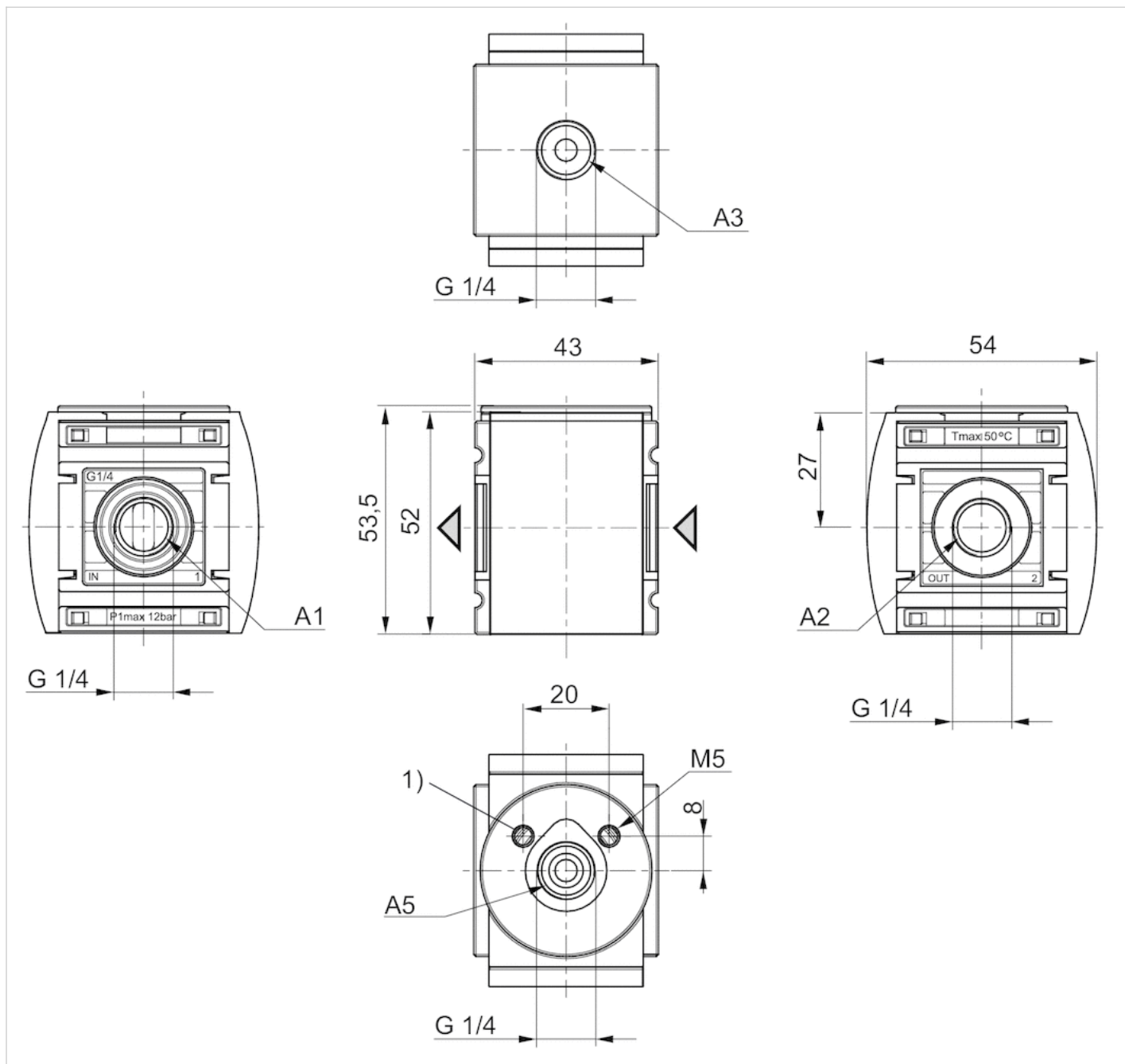
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

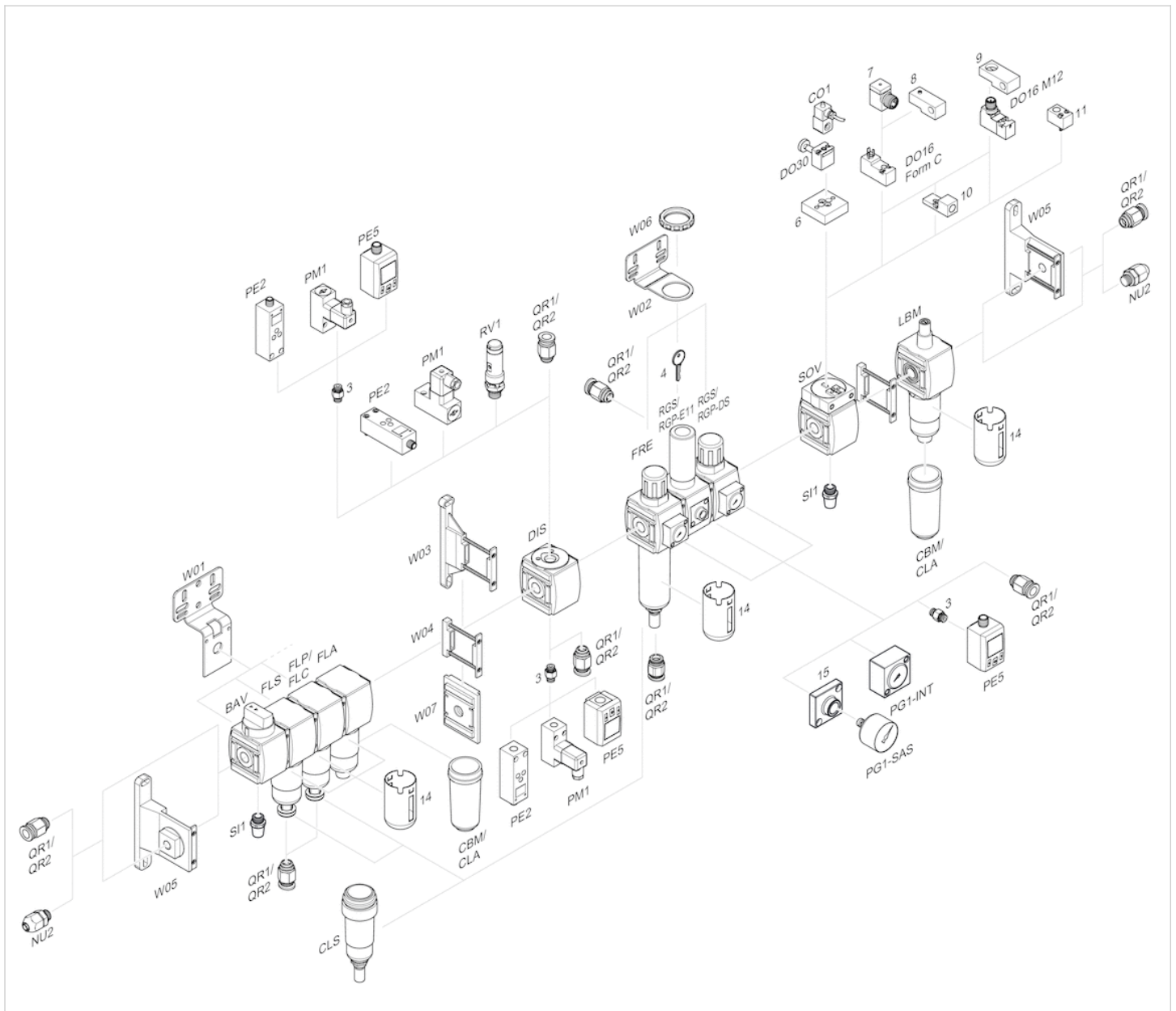
Dimensions

Dimensions in mm



- A1 = input
 A2 = output
 A3 = output
 A5 = output
 1) Mounting thread for pressure sensor

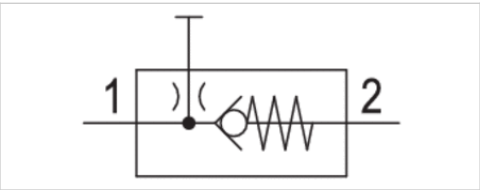
Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 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
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Distributor, Series AS1-DIN

- G 1/4
- Air supply right
- Distributor 1x
- Non-return valve



Version	Non-return valve, Can be assembled into blocks
Parts	Distributor
Mounting orientation	Any
Working pressure min./max.	0 ... 12 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Neutral gases
Weight	0.178 kg

Technical data

Part No.	Port	Nominal flow	Nominal flow
		Qn 1►2	Qn 1►3
R412014741	G 1/4	800 l/min	1000 l/min

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

Technical information

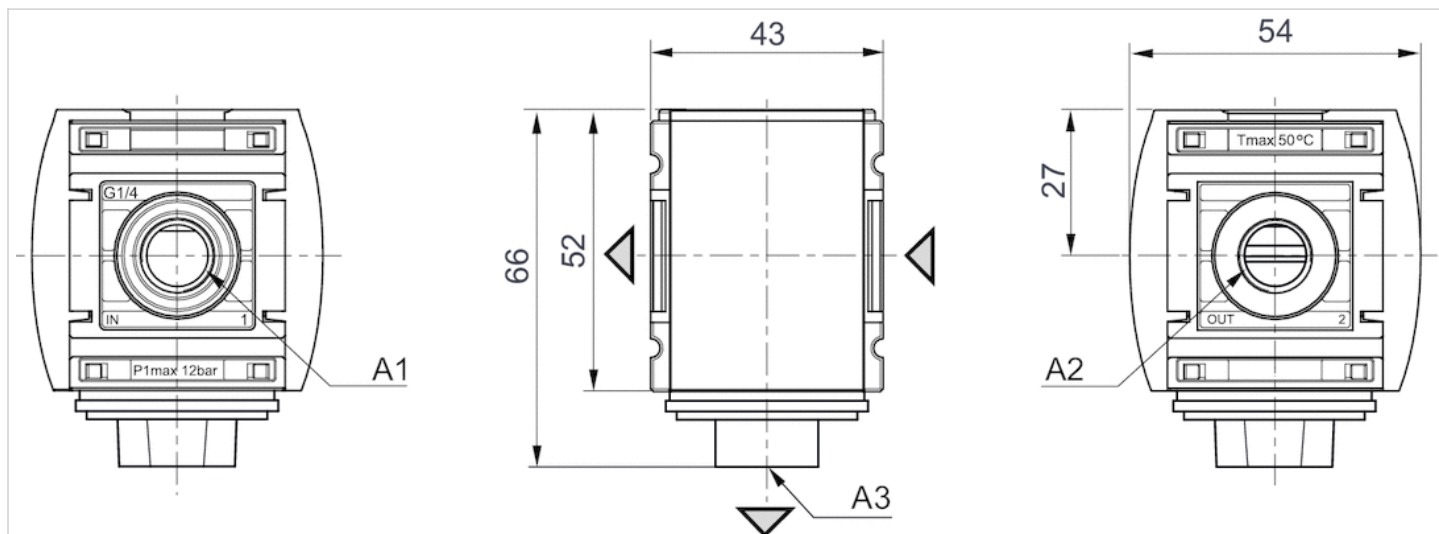
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

Dimensions

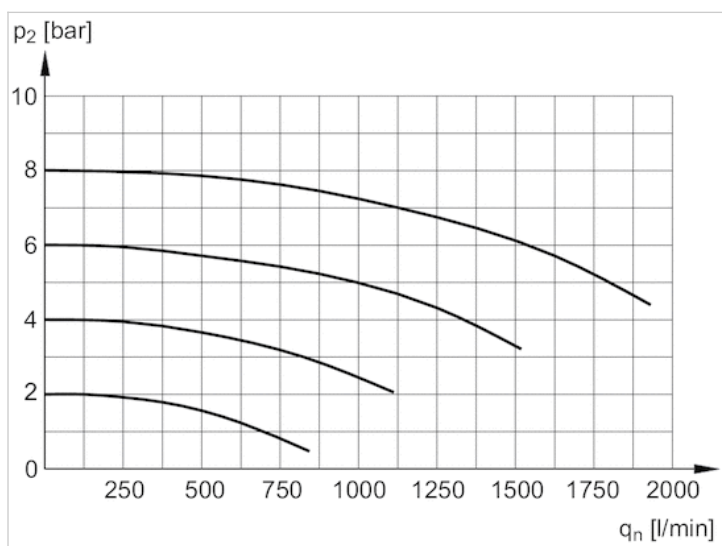
Dimensions in mm



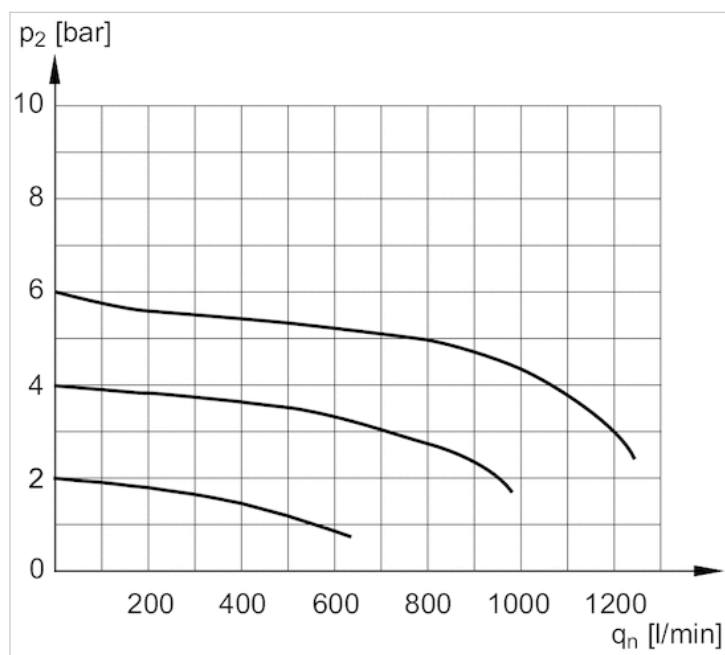
A1 = input
A2 = output
A3 = output

Diagrams

Flow rate characteristic



Nominal flow 1 ► 2
 p_2 = secondary pressure
 q_n = nominal flow

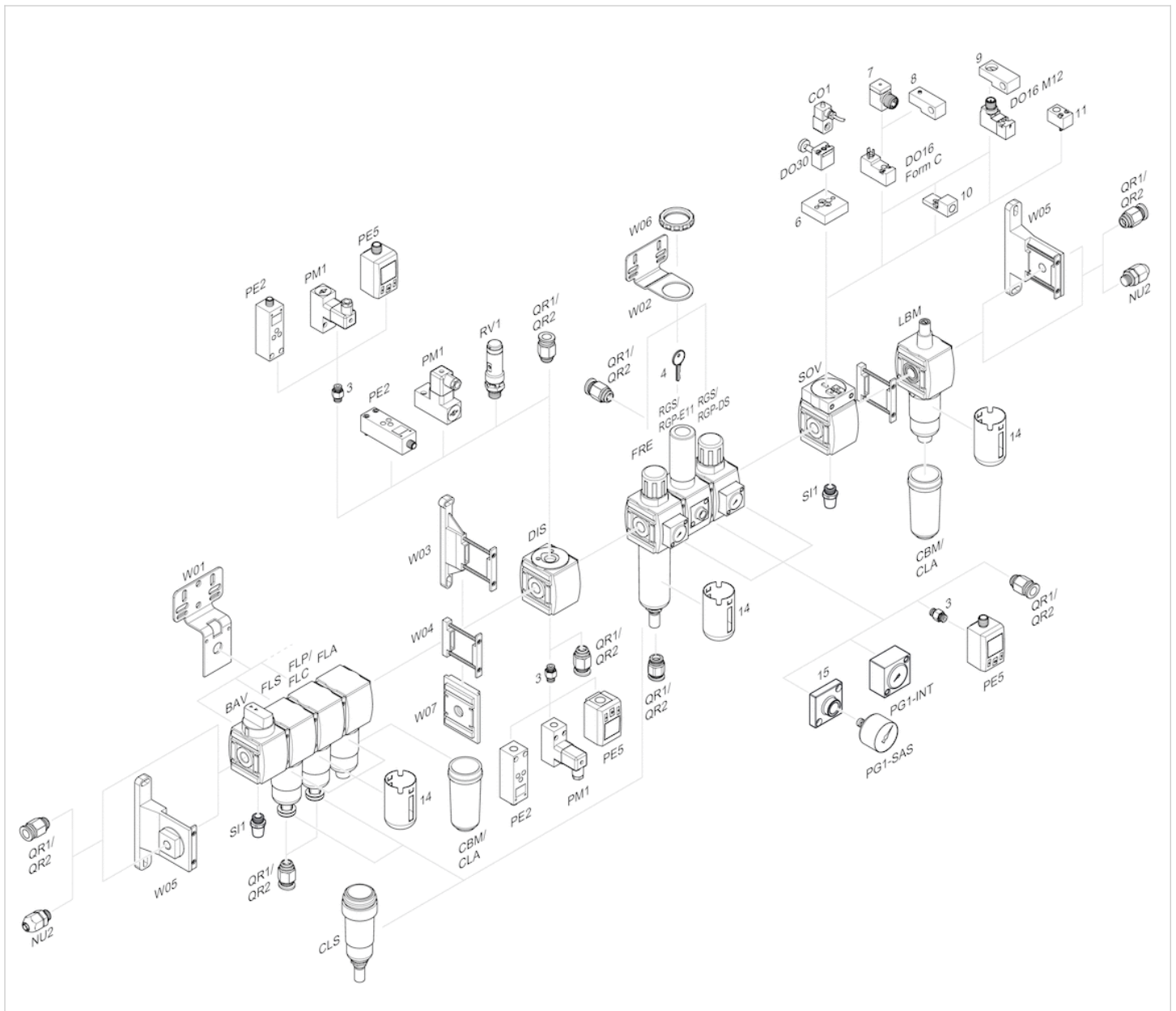


Nominal flow 1 ► 3

p_2 = secondary pressure

q_n = nominal flow

Accessories overview



- 3 = Double nipple
- 4 = Key for E11 locking
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
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- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 14 = Protective guard
- 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8

Reservoir, Series AS1-CLS

- Material Die cast zinc Polycarbonate



Version

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Filter reservoir volume

Weight

Reservoir

See table below

-10 ... 50 °C

-10 ... 50 °C

Compressed air

16 cm³

See table below

Technical data

Part No.	Condensate drain	Reservoir	Weight	Fig.	
R412014751	fully automatic, open without pressure	Die cast zinc	0.125 kg	Fig. 1	1)
1827009640	semi-automatic, open without pressure	Die cast zinc	0.153 kg	Fig. 2	-
1827009639	semi-automatic, open without pressure	Polycarbonate	0.085 kg	Fig. 3	1)

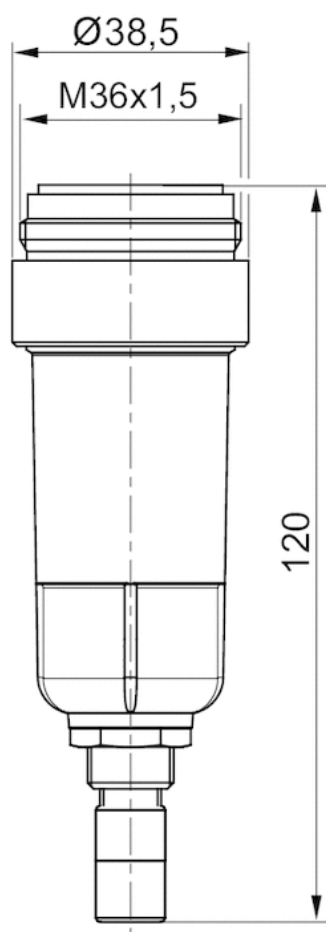
1) Suitable for use in Ex zones 1, 2, 21, 22.

Technical information

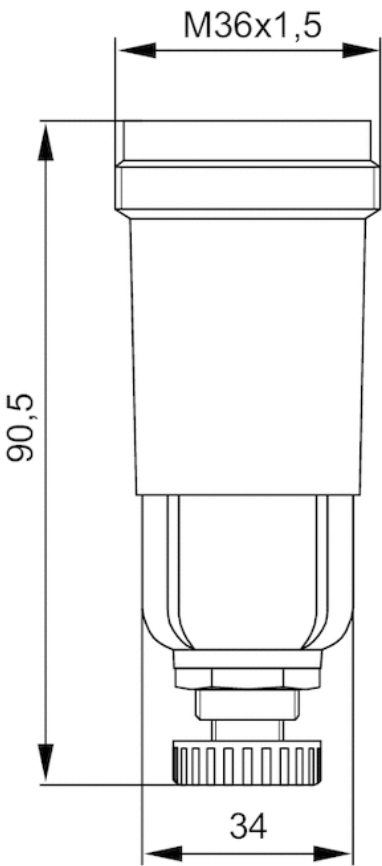
Material	
Reservoir	Die cast zinc Polycarbonate
Seal	Acrylonitrile butadiene rubber

Dimensions

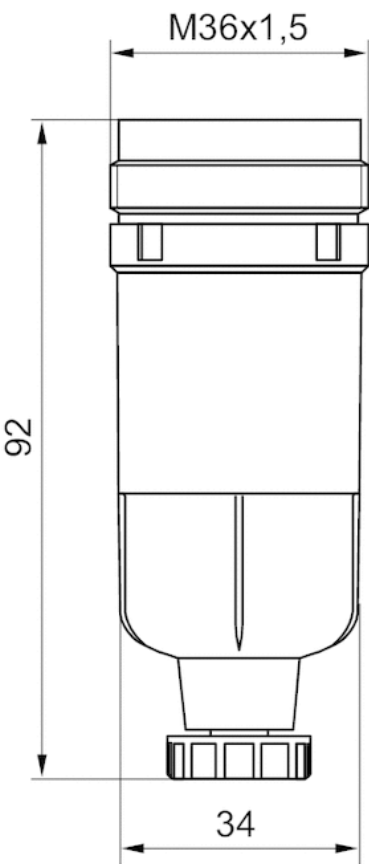
Dimensions in mm, Fig. 1



Dimensions in mm, Fig. 2



Dimensions in mm, Fig. 3



Reservoir, Series NL1/AS1-CBM/-CLA

- for active carbon filter and lubricator
- Material Polycarbonate Die cast zinc



Version	Reservoir
Certificates	suitable for ATEX
Working pressure min./max.	16 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air Oil
Filter reservoir volume	16 cm³
Weight	See table below

Technical data

Part No.	Reservoir	Weight	Fig.
1827009637	Polycarbonate	0.06 kg	Fig. 1
1827009638	Die cast zinc	0.125 kg	Fig. 2

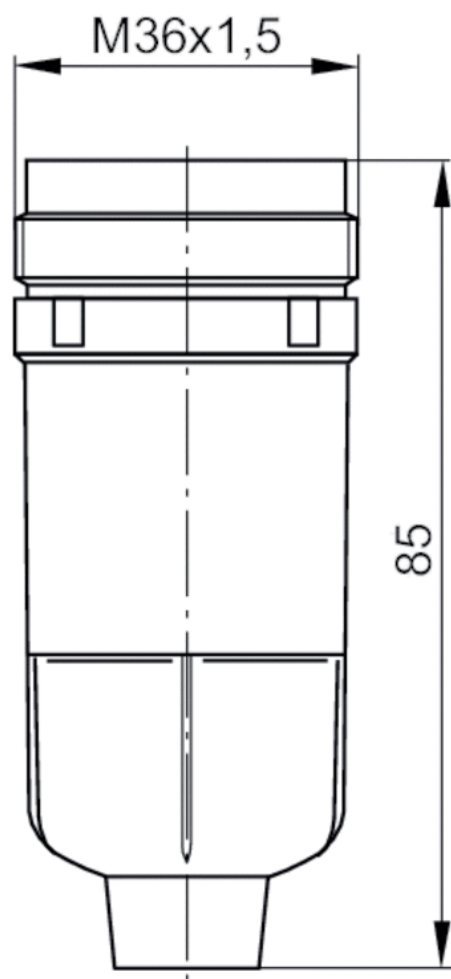
Suitable for use in Ex zones 1, 2, 21, 22.

Technical information

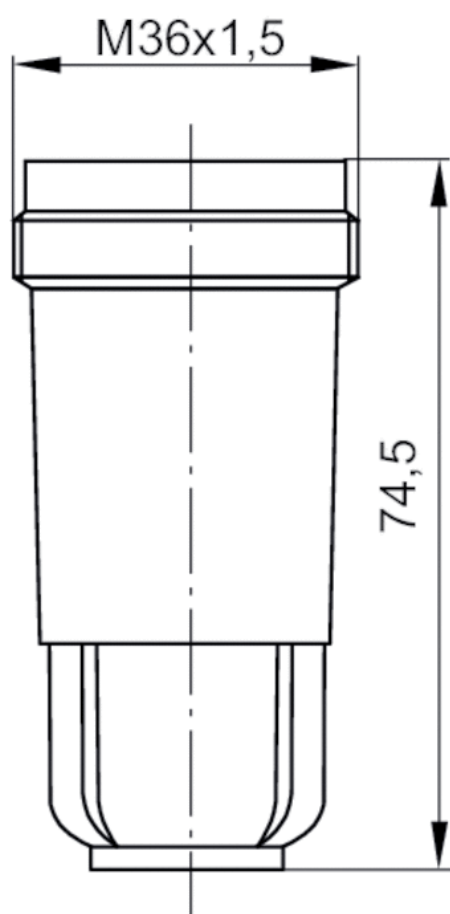
Material	
Reservoir	Polycarbonate Die cast zinc
Seal	Acrylonitrile butadiene rubber

Dimensions

Dimensions in mm, Fig. 1



Dimensions in mm, Fig. 2



Protective guard

- NL1
- Filter, Lubricator



Weight0.03 kg

Technical data

Part No.
1820507004

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

Technical information

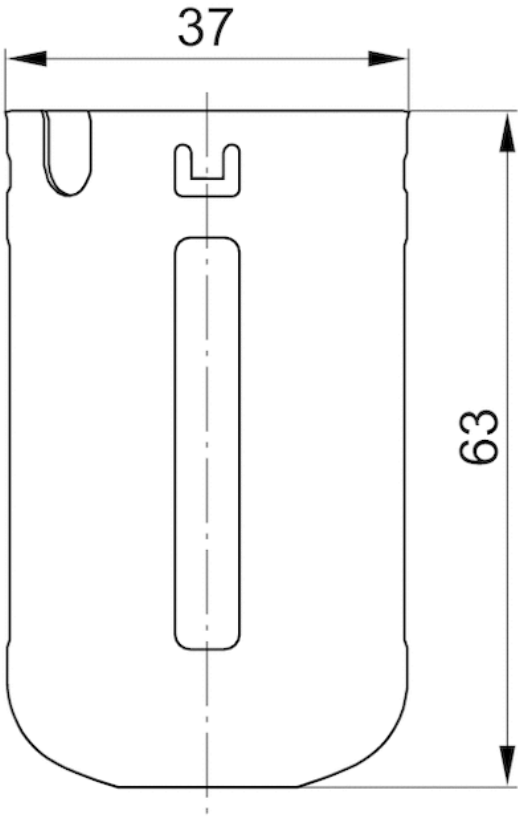
Can be retrofitted for PC reservoir

Technical information

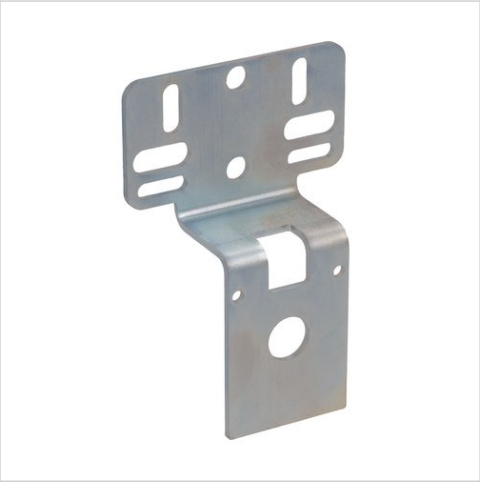
Material	
Material	Steel galvanized

Dimensions

Dimensions in mm



Mounting plate, Series AS1-MBR-...-



Ambient temperature min./max.
Weight

-10 ... 50 °C
0.07 kg

Technical data

Part No.
R412014755

Scope of delivery incl. 2 mounting screws 3x10 (Torx 10 IP) DIN EN ISO 10664

Technical information

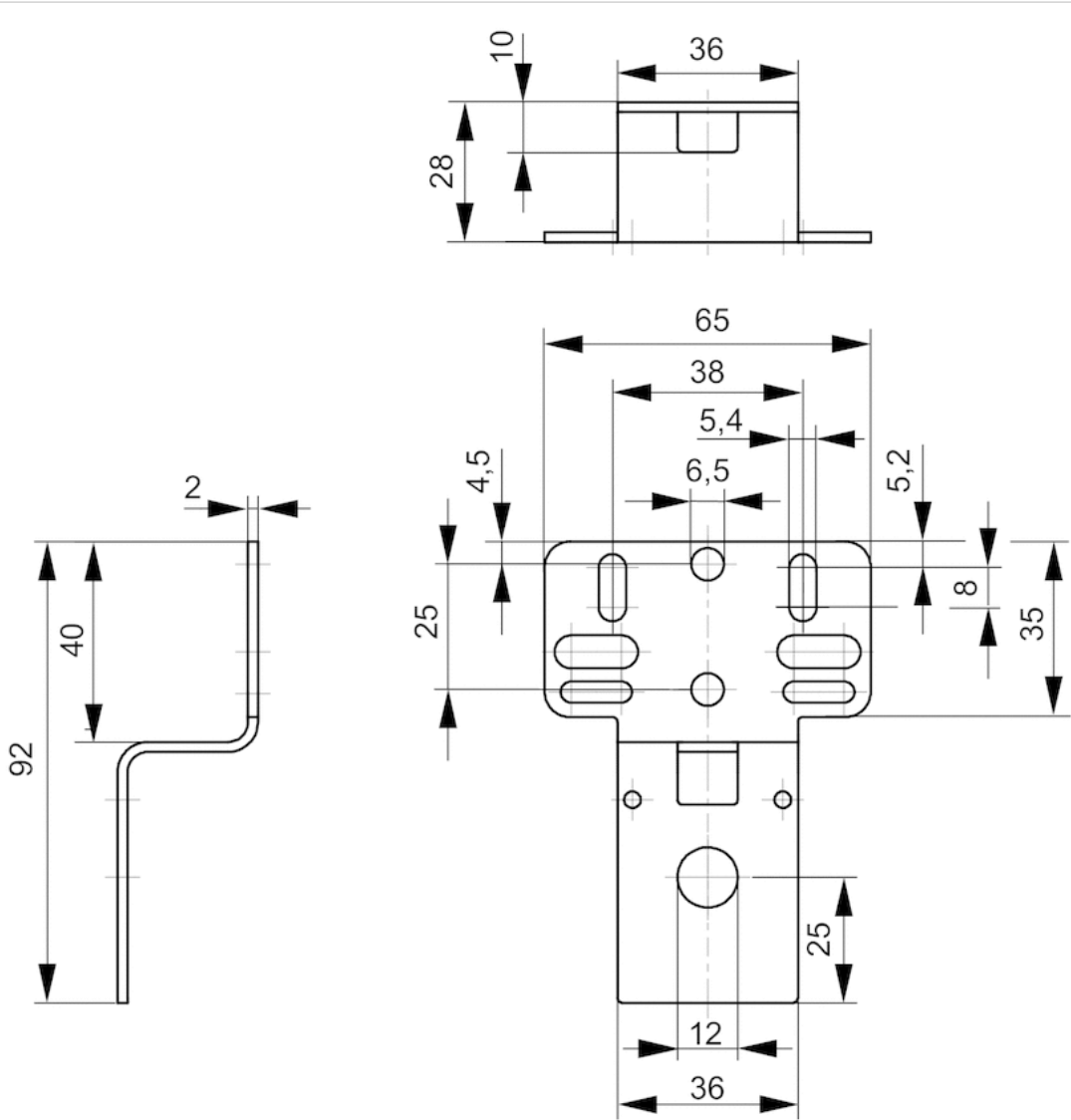
For assembly of the W01 mounting plate, the rear cover of the air preparation unit must be removed.

Technical information

Material	
Housing	Steel, galvanized

Dimensions

Dimensions in mm



For assembly of the W01 mounting plate, the rear cover of the air preparation unit must be removed.

Mounting bracket, Series AS1-MBR-...-W02



Ambient temperature min./max.
Weight

-10 ... 50 °C
0.059 kg

Technical data

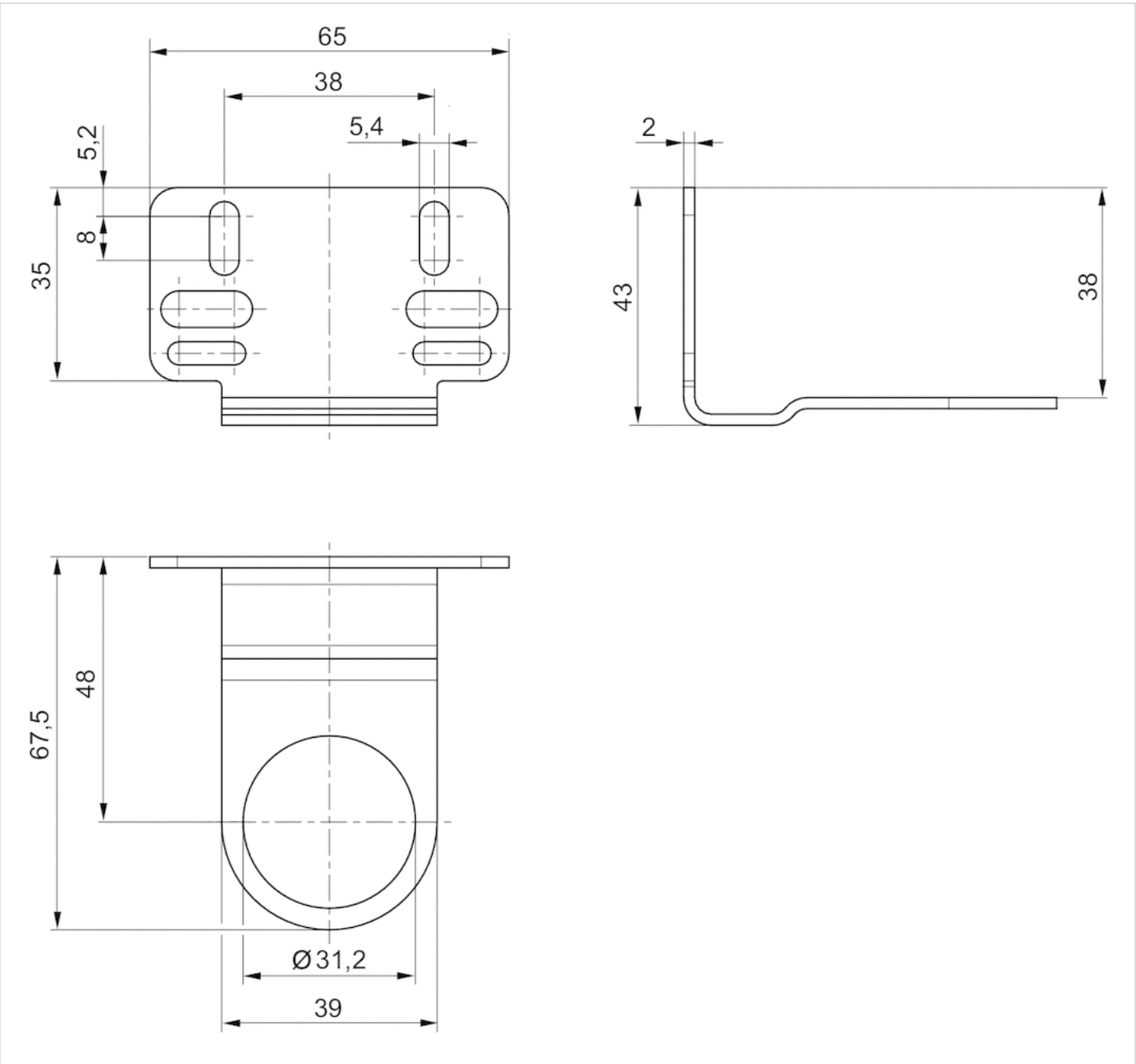
Part No.
R412014756

Technical information

Material	
Housing	Steel, galvanized

Dimensions

Dimensions in mm



Mounting clip, Series AS1-MBR-...-W03



Ambient temperature min./max.
 Weight

-10 ... 50 °C
 0.025 kg

Technical data

Part No.
R412014757

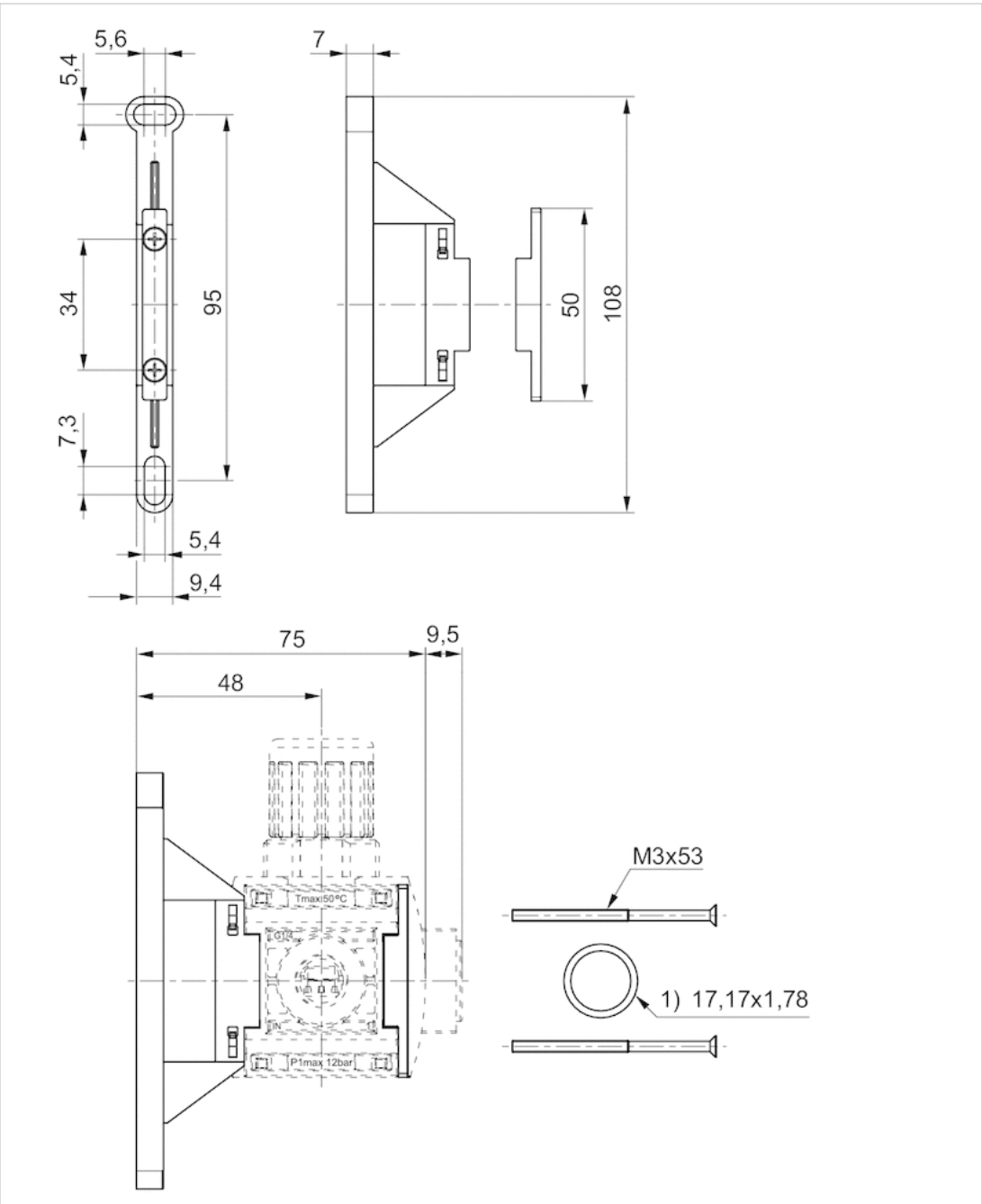
Scope of delivery incl. 2 mounting screws M3x53-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 1x O-ring

Technical information

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber

Dimensions

Dimensions in mm



Block assembly kit, Series AS1-MBR-...-W04



Ambient temperature min./max.
Weight

-10 ... 50 °C
0.014 kg

Technical data

Part No.
R412014758

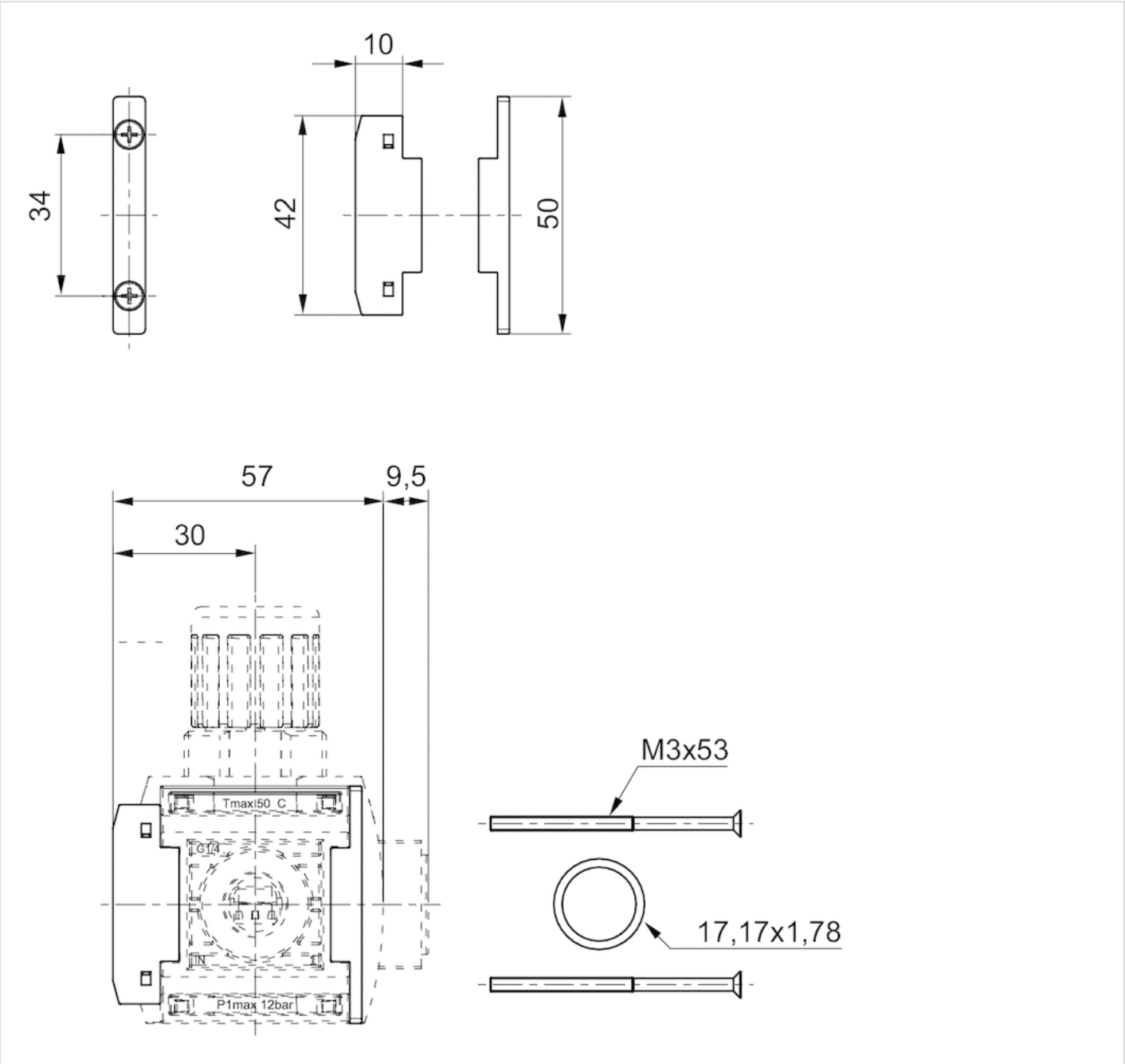
Scope of delivery incl. 2 mounting screws M3x53-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 1x O-ring

Technical information

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber

Dimensions

Dimensions in mm



Dimensions in mm

Part No.	A	B	C	D	E	F	G	H	I
R412014758	50	42	10	34	57	30	9.5	M3x53	17,17x1,78

Scope of delivery incl. 2 mounting screws M3x53-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 1x O-ring

Block assembly kit, Series AS1-MBR-...-W05



Ambient temperature min./max.

-10 ... 50 °C

Weight

0.403 kg

Technical data

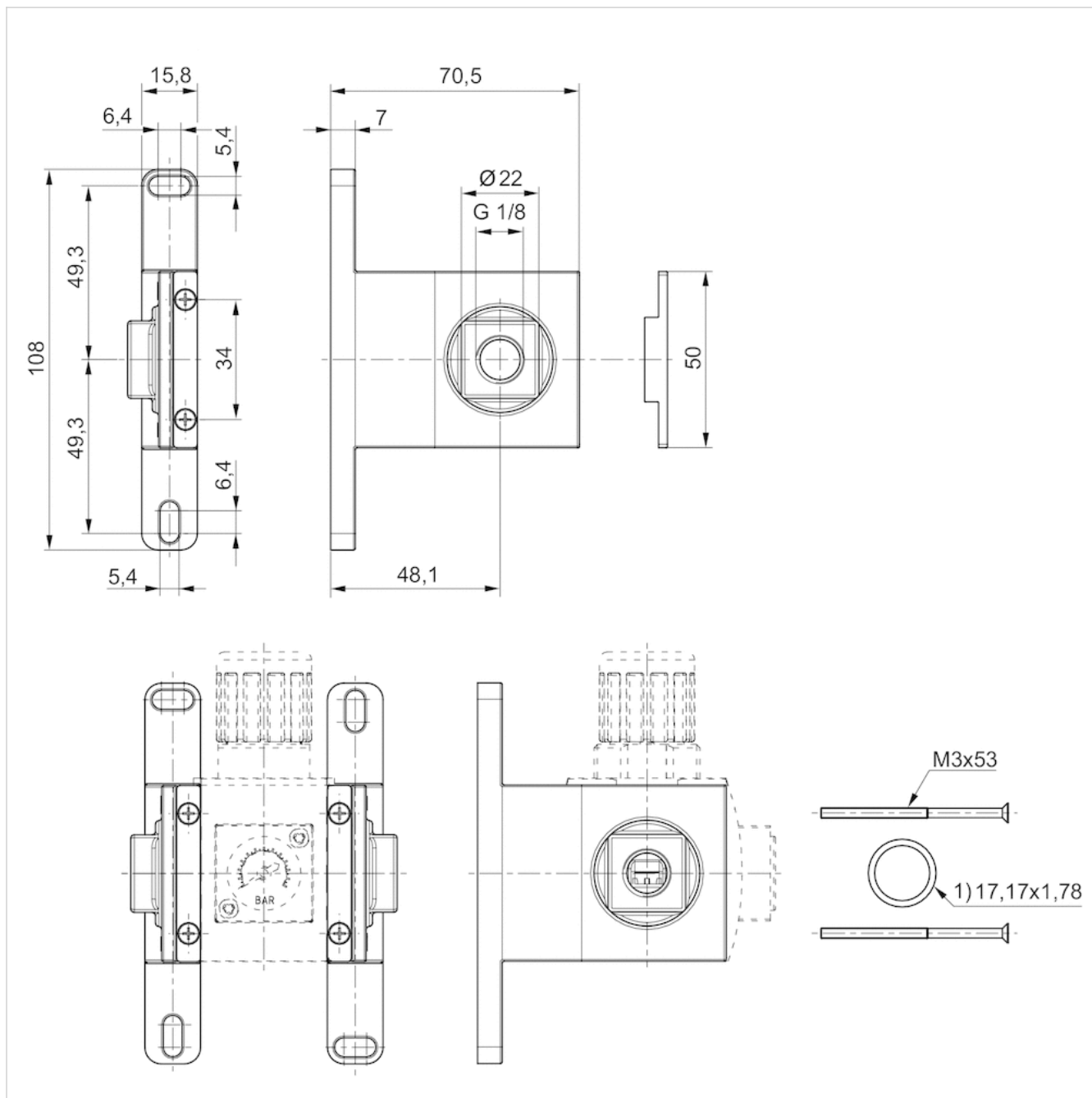
Part No.	Port	Fig.
R412014753	G 1/8	Fig. 1
R412014754	G 1/4	Fig. 2

Technical information

Material	
Housing	Die cast zinc, black painted
Seal	Acrylonitrile butadiene rubber

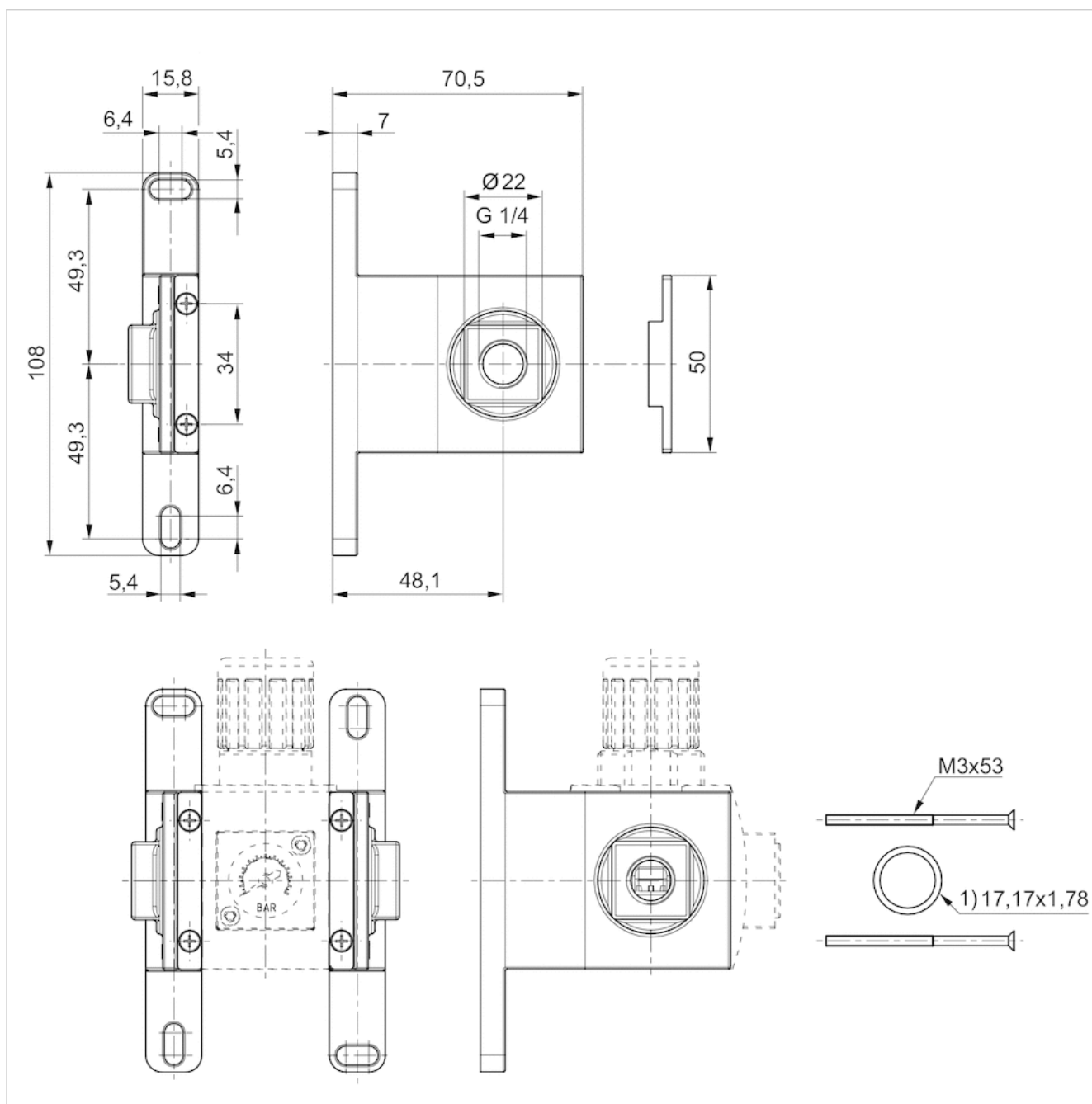
Dimensions

Dimensions in mm, Fig. 1



1) Scope of delivery incl. 4 mounting screws M3x53-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 2x O-ring

Dimensions in mm, Fig. 2



1) Scope of delivery incl. 4 mounting screws M3x53-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 2x O-ring

Block assembly kit, Series AS1/AS2-MBR-...-W07



Ambient temperature min./max.
Weight

-10 ... 50 °C
0.055 kg

Technical data

Part No.
R412014759

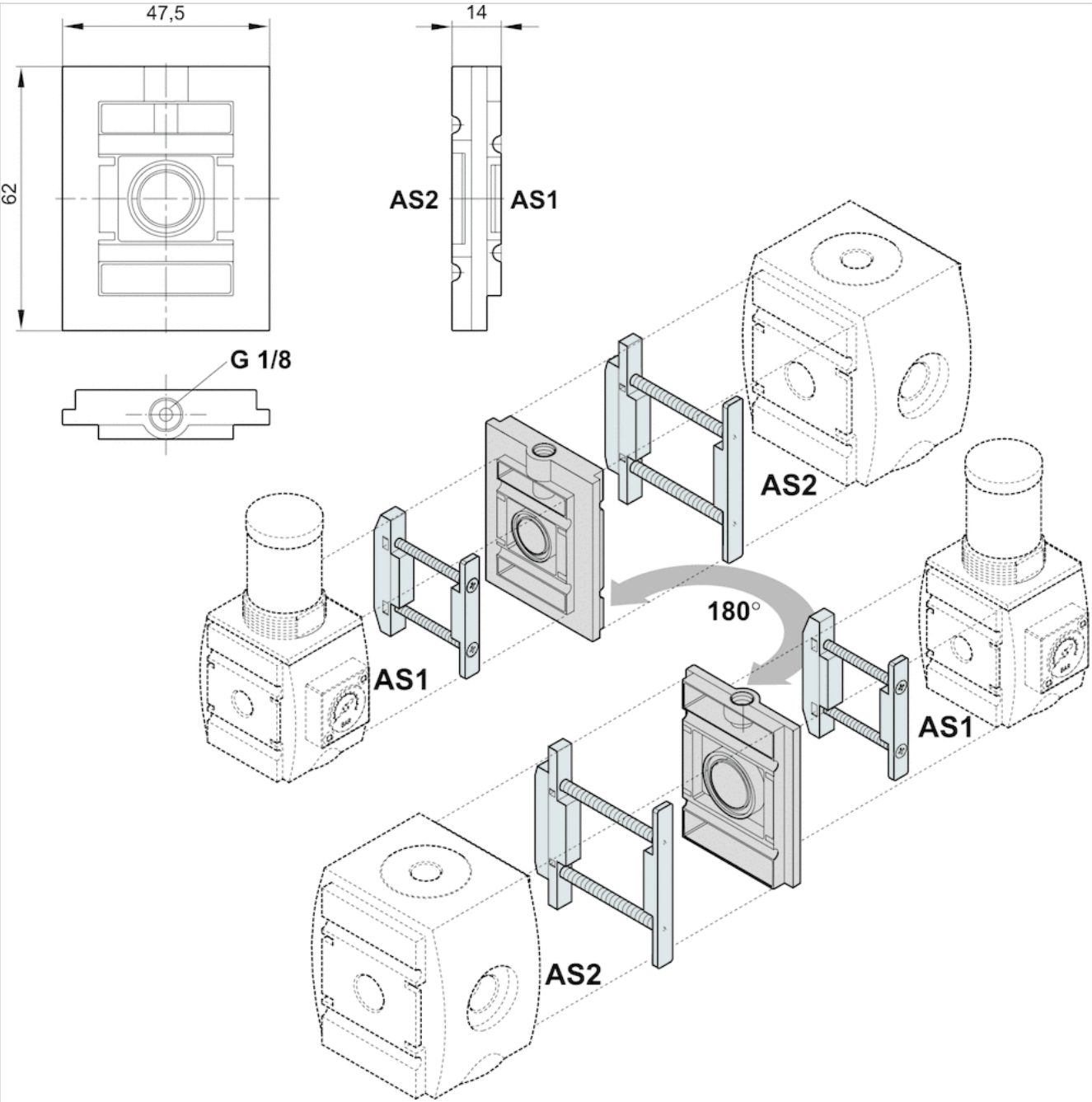
Scope of delivery incl. 1 blanking screw and 2 mounting strap kits

Technical information

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber

Dimensions

Dimensions in mm



Panel nut, Series AS-MBR-...-W06

- M30x1,5
- for AS1, NL1, NL2, MU1, PR2



Weight

0.013 kg
The delivered product may vary from that in the illustration.

Technical data

Part No.	Port	for	Scope of delivery
1829234070	M30x1,5	AS1, NL1, NL2, MU1, PR2	5 piece

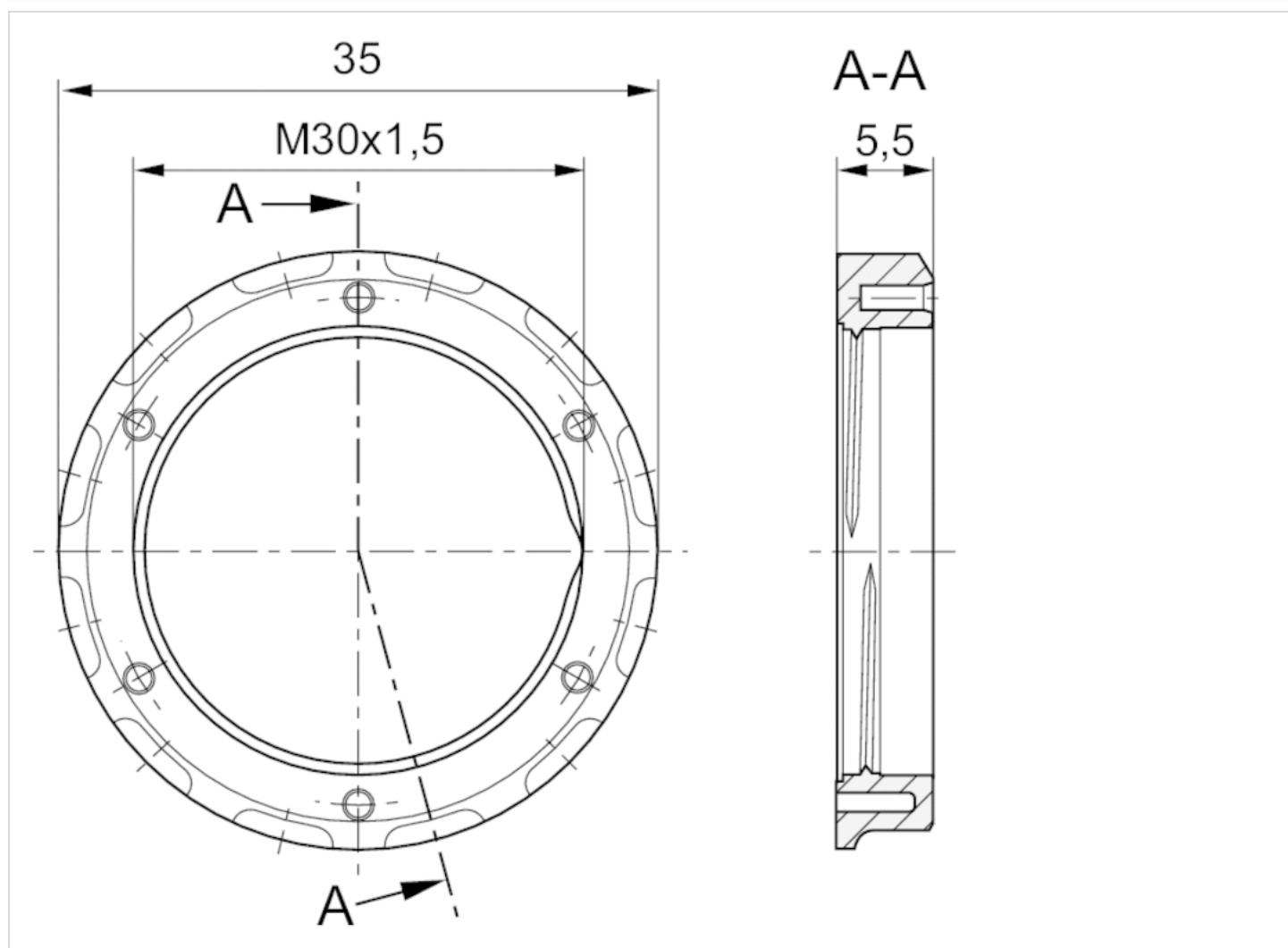
Suitable for use in Ex zones 1, 2, 21, 22.

Technical information

Material	
Housing	Brass

Dimensions

Dimensions in mm



Panel nut, Series AS-MBR-...-W06

- M30x1,5
- for AS1, NL1, NL2, PR2



Weight

0.006 kg
The delivered product may vary from that in the illustration.

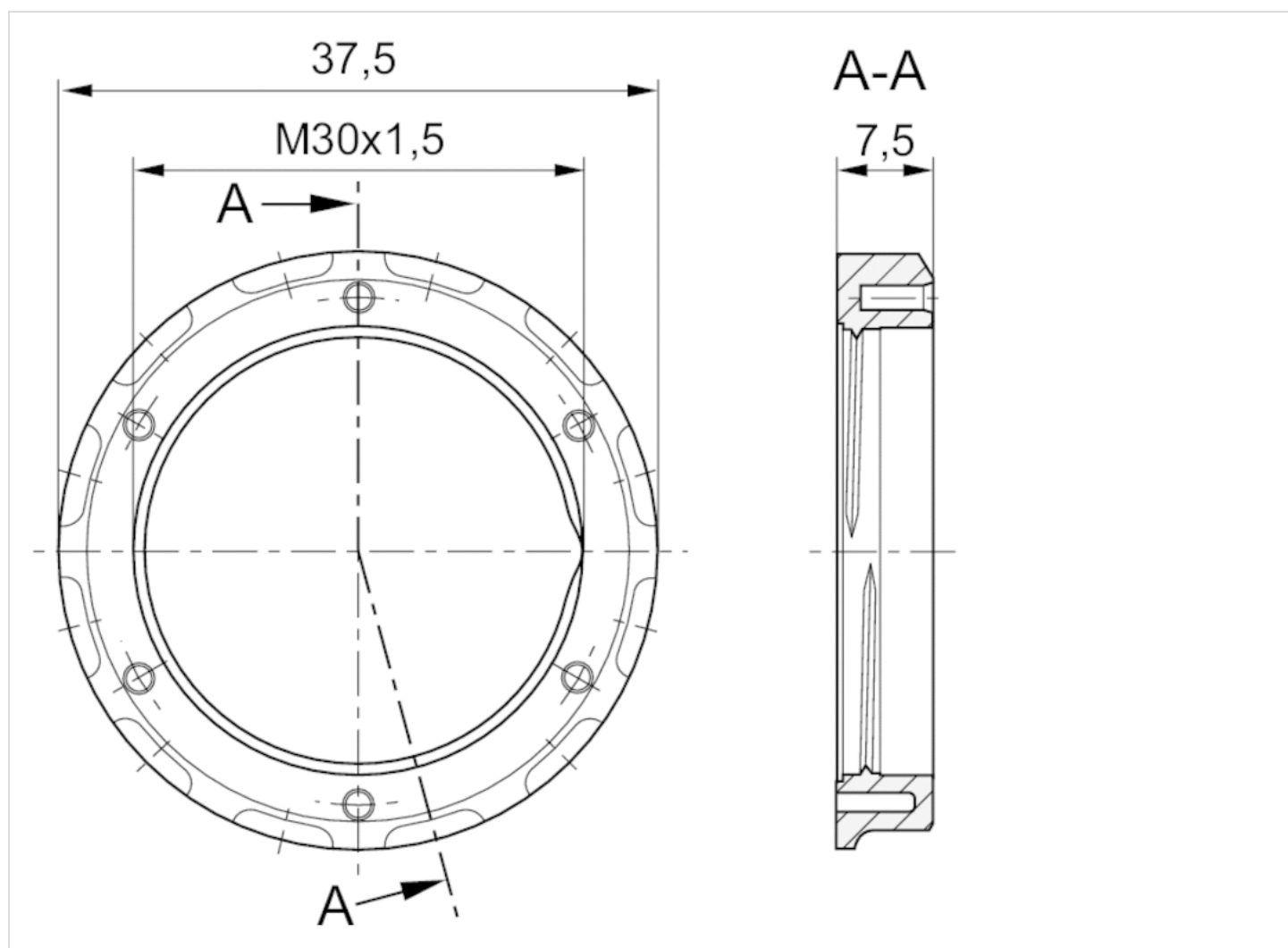
Technical data

Part No.	Port	for	Scope of delivery
1829234073	M30x1,5	AS1, NL1, NL2, PR2	5 piece

Technical information

Material	
Housing	Plastic

Dimensions

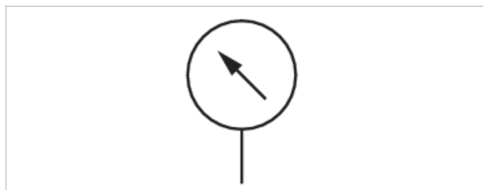


Pressure gauge, Series PG1-SAS

- Back port
- Background color Black
- Scale color White, Grey
- Viewing window Polystyrene
- Units bar
- Units psi



Version	Bourdon tube pressure gauge
Standardization	EN 837-1
Class	2,5
Ambient temperature min./max.	-40 ... 60 °C
Medium	Compressed air
Main scale unit (outside)	bar
Main scale color (outside)	White
Secondary scale unit (inside)	psi
Secondary scale color (inside)	Grey
Background color	Black
Pointer color	White
Weight	0.08 kg



Technical data

Part No.	Compressed air connection	Nominal diameter	Range of application	Display range	Operating pressure	Scale value
R412003853	G 1/8	40 mm	0 bar ... 1.2	0 bar ... 1.6	0 ... 1.6 bar	0.05
R412003854	G 1/8	40 mm	0 bar ... 2	0 bar ... 2.5	0 ... 2.5 bar	0.1
R412003855	G 1/8	40 mm	0 bar ... 3.2	0 bar ... 4	0 ... 4 bar	0.1
R412003856	G 1/8	40 mm	0 bar ... 4	0 bar ... 6	0 ... 6 bar	0.2
R412003857	G 1/8	40 mm	0 bar ... 8	0 bar ... 10	0 ... 10 bar	0.2
R412003858	G 1/8	40 mm	0 bar ... 12	0 bar ... 16	0 ... 16 bar	0.5

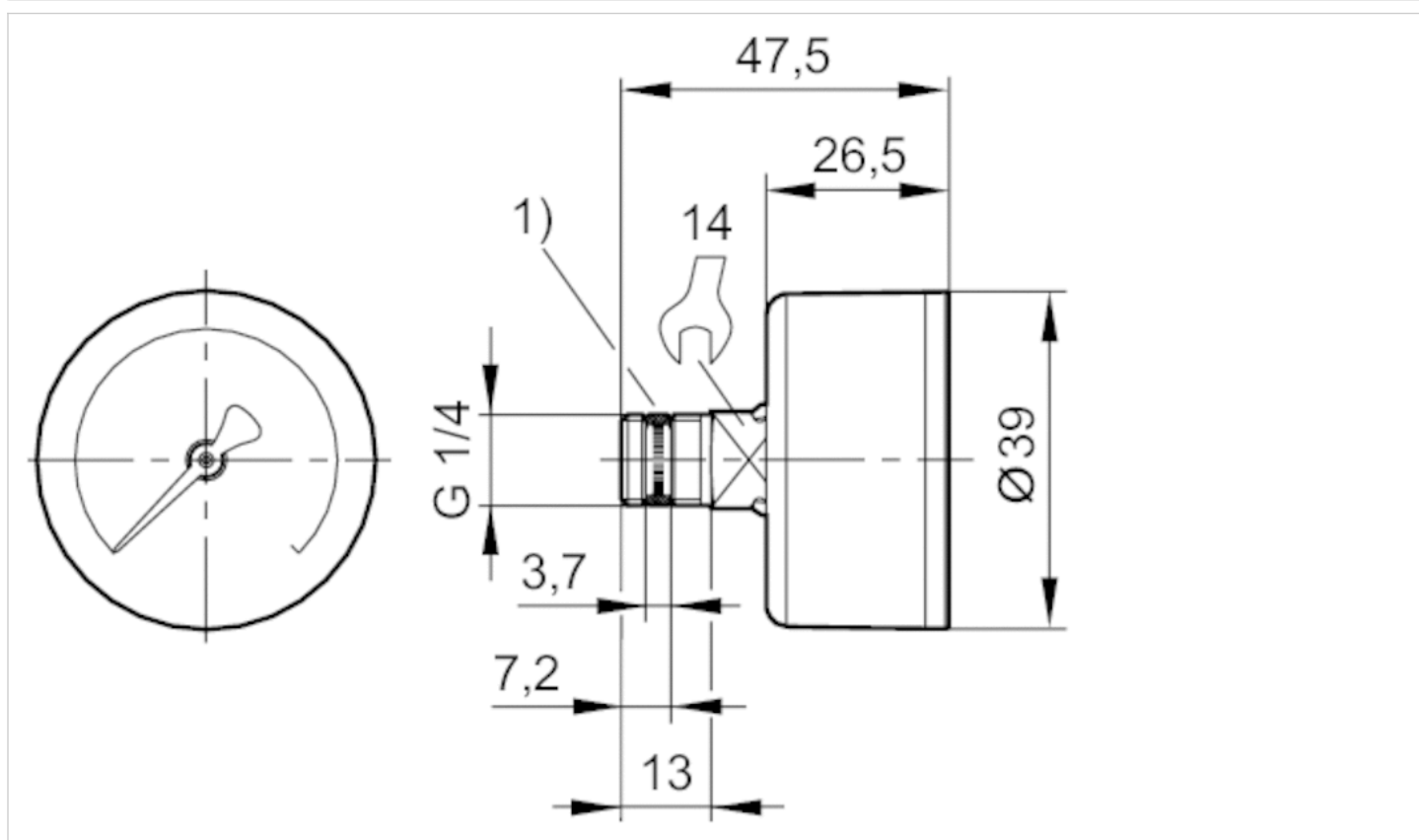
Part No.	Fig.
R412003853	Fig. 4
R412003854	Fig. 4
R412003855	Fig. 4
R412003856	Fig. 4
R412003857	Fig. 4
R412003858	Fig. 4

Technical information

Material	
Housing	Acrylonitrile butadiene styrene
Thread	Brass
Viewing window	Polystyrene
Seal	Polytetrafluorethylene

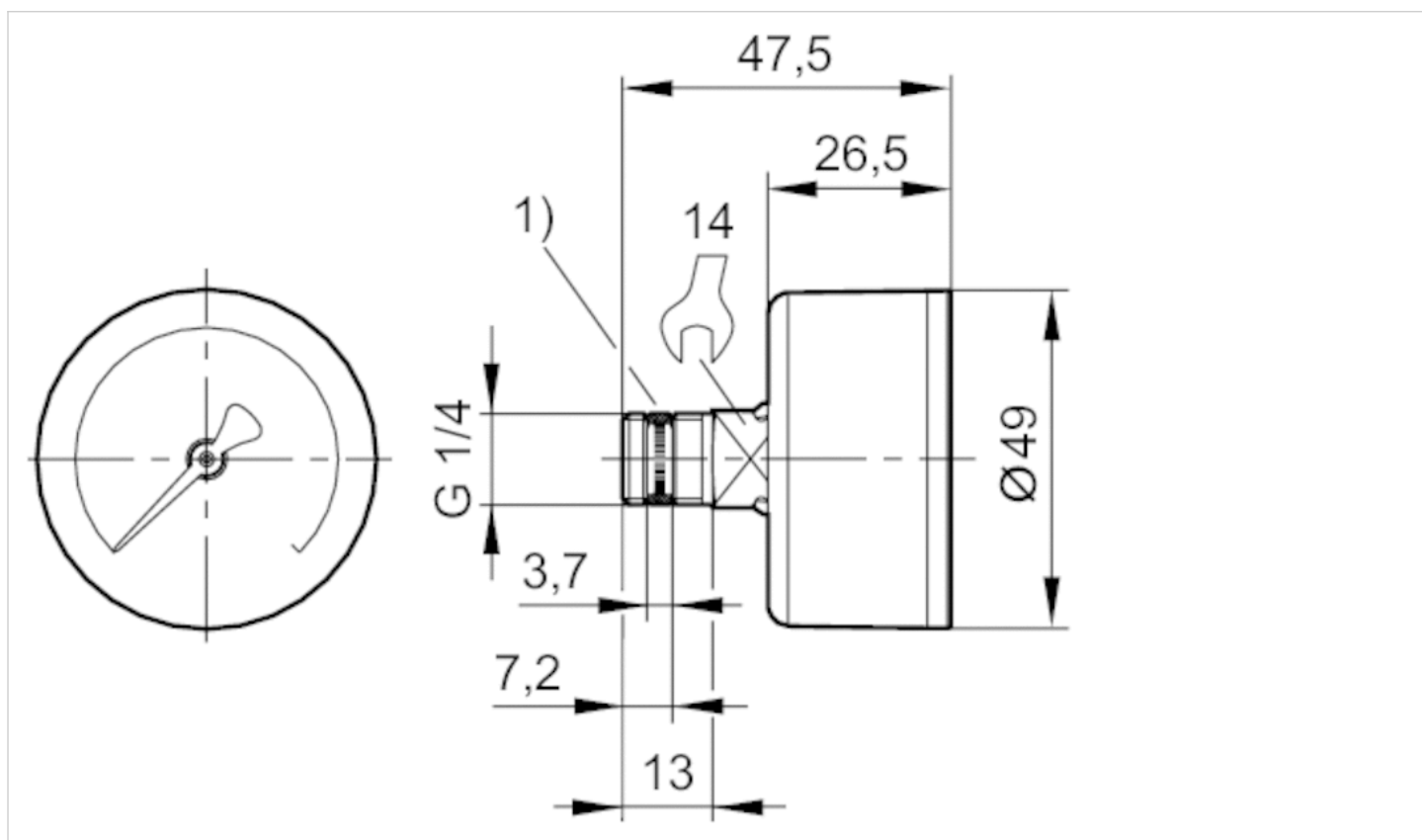
Dimensions

Dimensions in mm, Fig. 1



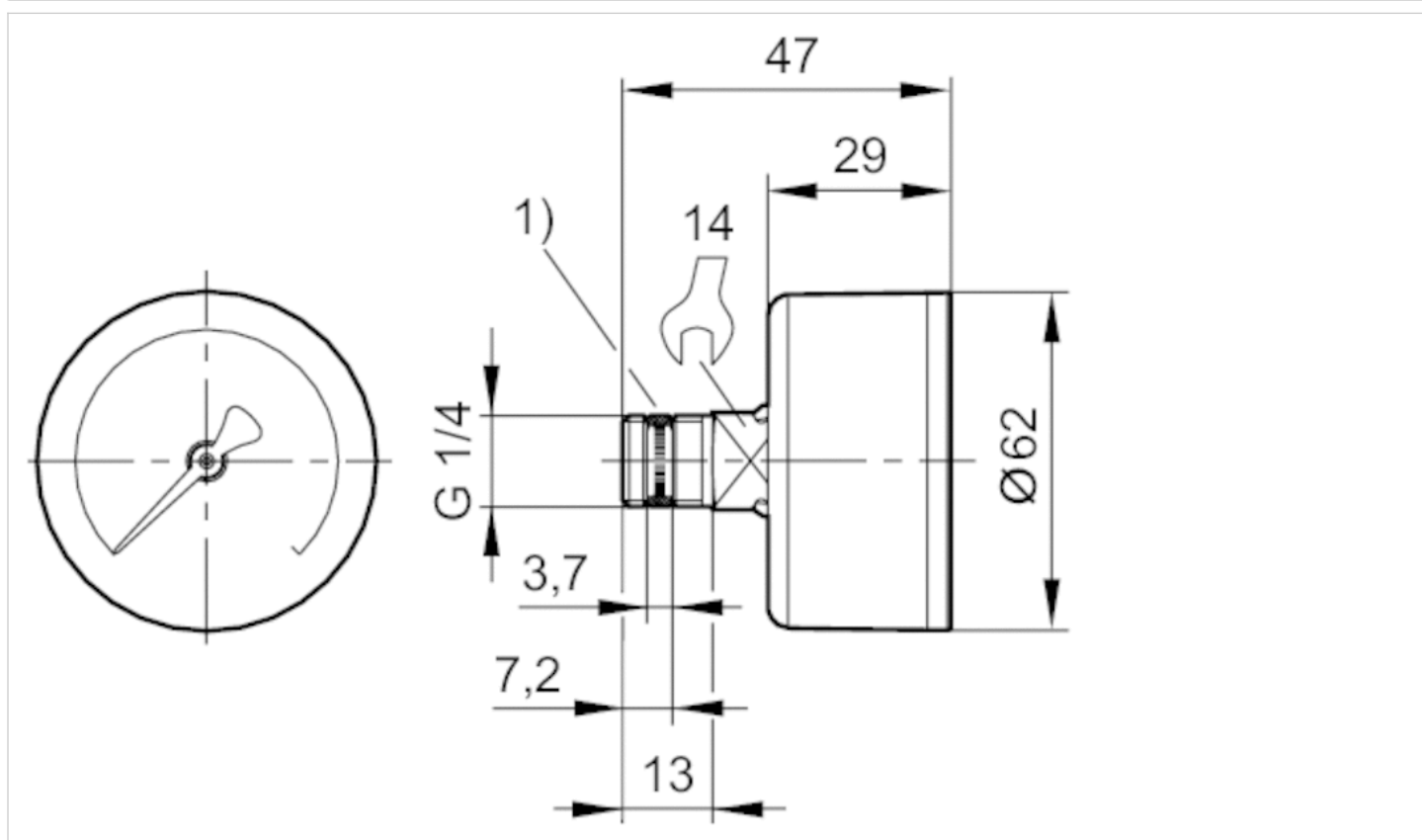
1) Gasket thread

Dimensions in mm, Fig. 2



1) Gasket thread

Dimensions in mm, Fig. 3



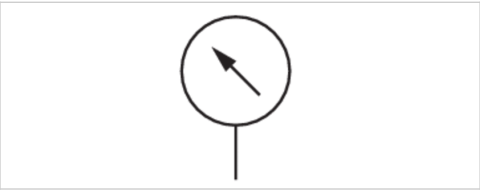
1) Gasket thread

Pressure gauge, Series PG1-INT

- flange version
- Background color White
- Scale color Black
- Viewing window Polycarbonate
- Units bar



Version	Diaphragm pressure gauge
Ambient temperature min./max.	0 ... 60 °C
Medium	Compressed air
Main scale unit (outside)	bar
Main scale color (outside)	Black
Background color	White
Pointer color	Black
Weight	0.024 kg



Technical data

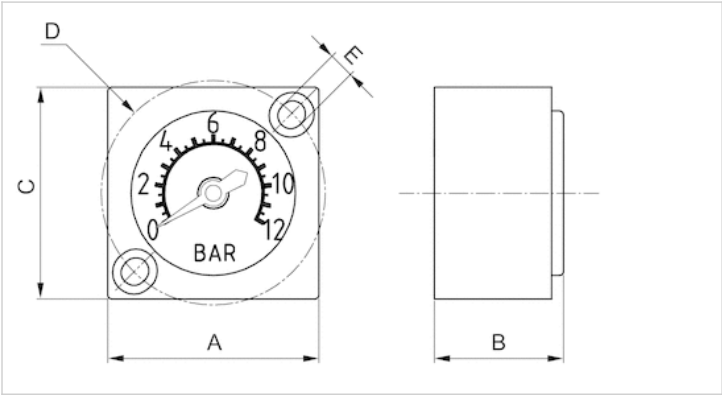
Part No.	Range of application	Display range	Operating pressure	Scale value
R412014760	0 bar ... 6	0 bar ... 6	0 ... 6 bar	0.25
R412014761	0 bar ... 12 bar	0 bar ... 12 bar	0 ... 12 bar	0.25

Technical information

Material	
Housing	Polyamide
Viewing window	Polycarbonate
Seal	Nitrile butadiene rubber

Dimensions

Dimensions



Dimensions in mm

Part No.	A	B	C	D	E
R412014760	27	16.5	27	28.3	3.3
R412014761	27	16.5	27	28.3	3.3

3/2-directional valve, Series DO16

- 3/2
- Plate connection
- Electrical connection : Plug, ISO 15217, form C
- Manual override : without detent with detent
- With spring return



Version	Poppet valve
Activation	Electrically
Sealing principle	Soft sealing
Working 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	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow 1 ▶ 2	See table below
Nominal flow 2 ▶ 3	See table below
Protection class acc. to DIN EN 61140	Class I
Electrically	
Protection class with connection	IP65
Duty cycle	100 %
Mounting on manifold strip	PRS strip
mounting screws	M3
Weight	0.035 kg

Technical data

Part No.		MO	Operational voltage	Operational voltage
			DC	AC 50 Hz
0820048002			24 V	-
0820048004			-	24 V
0820048005			-	-
0820048001			-	230 V
0820048026			24 V	-
0820048028			-	24 V
0820048101			-	230 V
0820048029			-	-
0820048025			-	230 V
0820048102			24 V	-
0820048126			24 V	-

Part No.	Operational voltage	Voltage tolerance		
		DC	AC 50 Hz	AC 60 Hz
0820048002	-	-10% / +15%	-	-
0820048004	-	-	-10% / +15%	-
0820048005	110 V	-	-	-10% / +15%
0820048001	-	-	-10% / +15%	-

Part No.	Operational voltage	Voltage tolerance	Voltage tolerance	Voltage tolerance
		DC	AC 50 Hz	AC 60 Hz
0820048026	-	-10% / +15%	-	-
0820048028	-	-	-10% / +15%	-
0820048101	-	-	-10% / +15%	-
0820048029	110 V	-	-	-10% / +15%
0820048025	-	-	-10% / +15%	-
0820048102	-	-10% / +15%	-	-
0820048126	-	-10% / +15%	-	-

Part No.	Power consumption	Holding power	Holding power	Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
0820048002	2 W	-	-	-
0820048004	-	1.6 VA	-	2.2 VA
0820048005	-	-	1.4 VA	-
0820048001	-	1.6 VA	-	2.2 VA
0820048026	2 W	-	-	-
0820048028	-	1.6 VA	-	2.2 VA
0820048101	-	1.6 VA	-	2.2 VA
0820048029	-	-	1.4 VA	-
0820048025	-	1.6 VA	-	2.2 VA
0820048102	2 W	-	-	-
0820048126	2 W	-	-	-

Part No.	Switch-on power	Nominal flow 1 ▶ 2	Nominal flow 2 ▶ 3	Working pressure min./max.
	AC 60 Hz			
0820048002	-	25 l/min	36 l/min	0 ... 10 bar
0820048004	-	25 l/min	36 l/min	0 ... 10 bar
0820048005	2 VA	25 l/min	36 l/min	0 ... 10 bar
0820048001	-	25 l/min	36 l/min	0 ... 10 bar
0820048026	-	25 l/min	36 l/min	0 ... 10 bar
0820048028	-	25 l/min	36 l/min	0 ... 10 bar
0820048101	-	16 l/min	19 l/min	0 ... 6 bar
0820048029	2 VA	25 l/min	36 l/min	0 ... 10 bar
0820048025	-	25 l/min	36 l/min	0 ... 10 bar
0820048102	-	20 l/min	26 l/min	0 ... 8 bar
0820048126	-	20 l/min	26 l/min	0 ... 8 bar

Nominal flow Q_n at 6 bar and Δp = 1 bar, MO = Manual override

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.

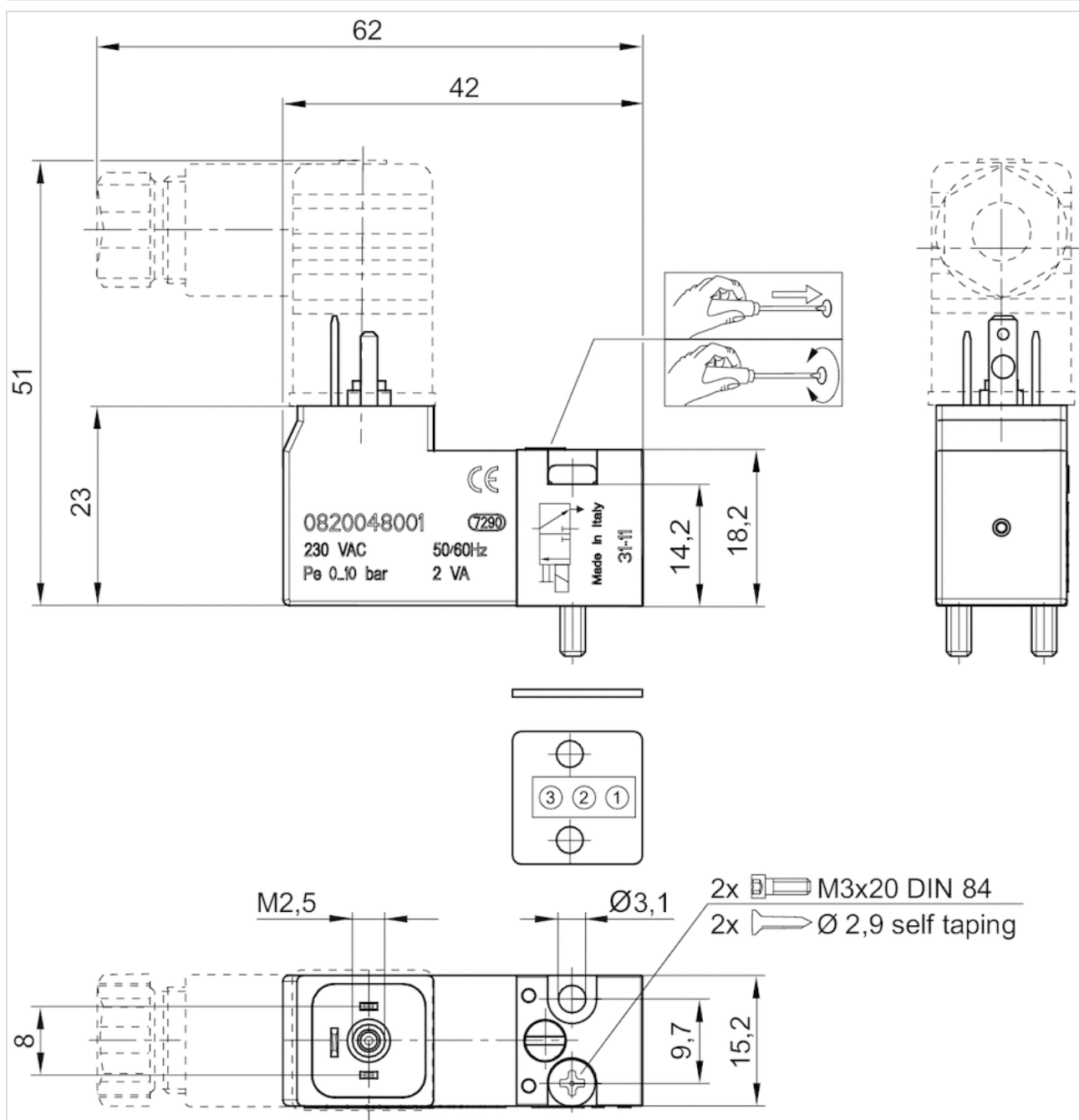
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	polyphenylene sulfide Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber

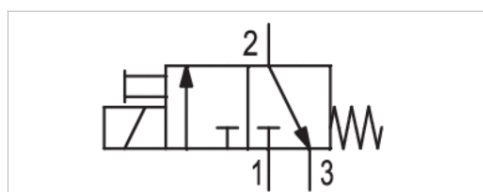
Dimensions

Dimensions



3/2-directional valve, Series DO16

- 3/2
- NC
- Plate connection
- Electrical connection : M12, 3-pin
- Manual override : without detent
- With spring return



Version	Poppet valve
Activation	Electrically
Sealing principle	Soft sealing
Working pressure min./max.	0 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow 1 ► 2	18 l/min
Nominal flow 2 ► 3	24 l/min
Protection class acc. to DIN EN 61140	Class I
Electrically	
Duty cycle	100 %
Mounting on manifold strip	PRS strip
Weight	0.035 kg

Technical data

Part No.	MO			Operational voltage	Power consumption	
				DC	DC	
R412013391		NC		24 V	1.5 W	1)
R412019226		NC		24 V	1.5 W	2)

1) Pilot valve only

2) Incl. pilot valve, seal, screws, and manual

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.

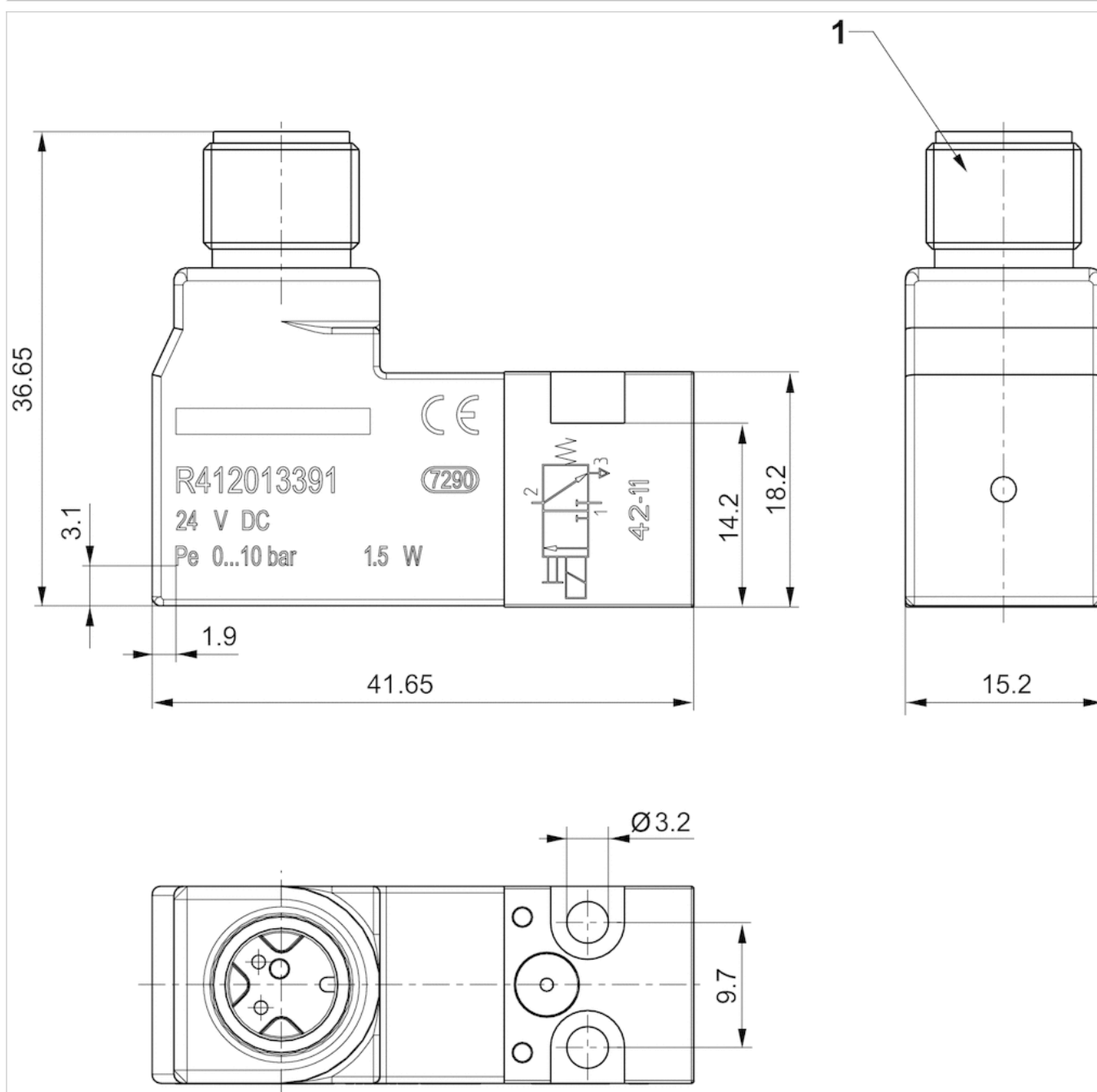
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	polyphenylene sulfide Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions



1) Port for plug M12x1

3/2-directional valve, Series DO30

- 3/2
- Pilot valve width : 30 mm
- Plate valve with pipe connection
- Compressed air connection output : CNOMO
- Electrical connection : Plug, EN 175301-803, form A
- Manual override : without detent with detent
- With spring return
- suitable for ATEX



Version	Poppet valve
Activation	Electrically
Sealing principle	Soft sealing
Standards	CNOMO / NFE 49-003-1
Working pressure min./max.	0 ... 10 bar
Ambient temperature min./max.	-10 ... 50 °C
Medium temperature min./max.	-10 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow 1 ► 2	See table below
Nominal flow 2 ► 3	See table below
Protection class with connection	IP65
Compatibility index	15
Duty cycle	100 %
Mounting on manifold strip	P-strip
mounting screws	M4
Weight	0.06 kg

Technical data

Part No.		MO	Compressed air connection	
			Input	Output
0820019985			CNOMO	CNOMO
0820019980			CNOMO	CNOMO

Part No.	Compressed air connection	Nominal flow 1 ► 2	Nominal flow 2 ► 3
	Exhaust		
0820019985	M5	68 l/min	90 l/min
0820019980	M5	65 l/min	80 l/min

Part No.	basic valve with electrical connector	Power consumption	ATEX
0820019985	Basic valve without coil	Higher voltage tolerance	suitable for ATEX
0820019980	Basic valve without coil	Higher voltage tolerance	suitable for ATEX

Nominal flow Q_n at 6 bar and Δp = 1 bar, MO = Manual override
pilot valve without coil

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).

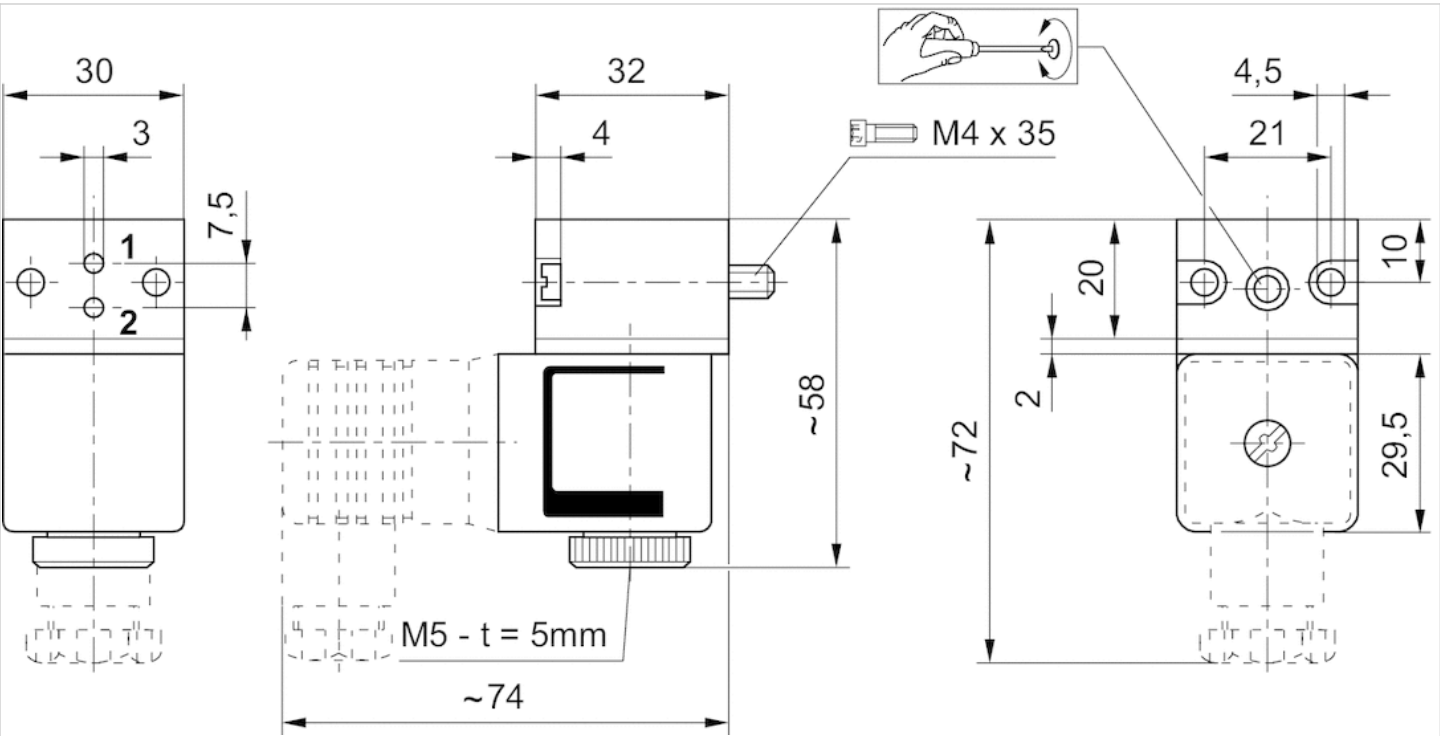
ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

Technical information

Material	
Housing	Plastic
Seals	Fluorocaoutchouc

Dimensions

Dimensions



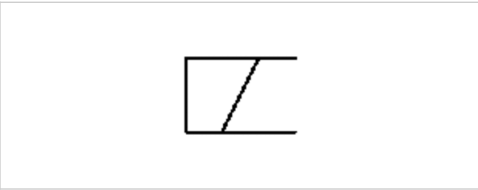
t = depth

Coil, Series CO1

- Cable with valve plug connector
- Coil width 30 mm
- Holding power AC 3 VA
- Switch-on power AC 3.1 VA
- ATEX



Certificates	ATEX
ATEX class G	II 2G Ex mb IIC T4 Gb
ATEX class D	II 2D Ex mb tb IIIC T130°C Db IP65
Ambient temperature min./max.	-20 ... 50 °C
Protection class	IP65
Duty cycle ED	100 %
Compatibility index	14
Weight	0.38 kg



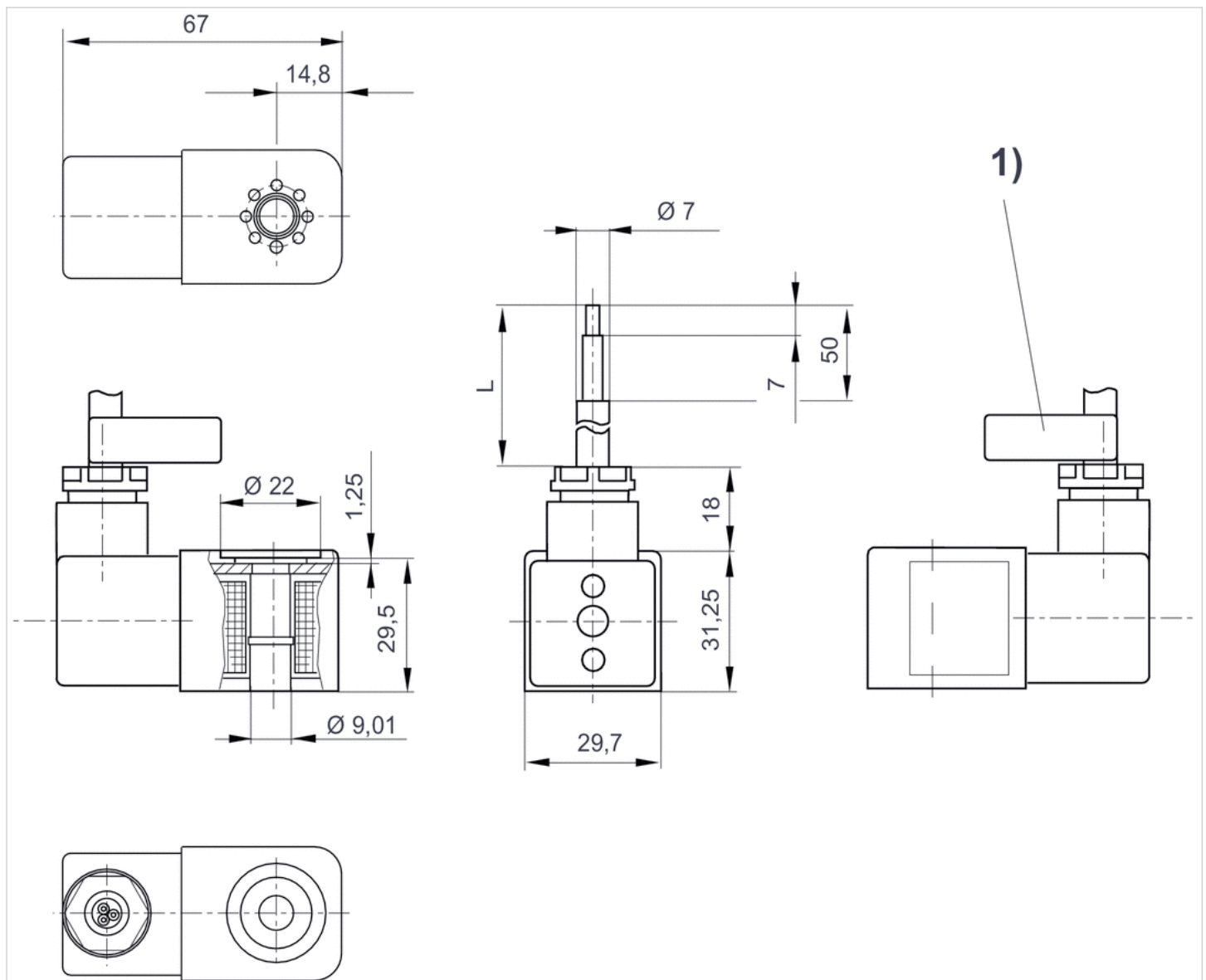
Technical data

Part No.	Operational voltage	Operational voltage	Voltage tolerance	Holding power
			AC 50 Hz	AC 50 Hz
1827414297	230 V	230 V	-10% / +10%	3 VA

Part No.	Switch-on power	Cable length
	AC 50 Hz	
1827414297	3.1 VA	3 m

Dimensions

Dimensions



L = cable length

1) Cable ID band with serial number

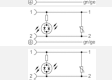
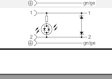
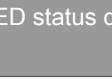
Valve plug connector, series CON-VP

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



Ambient temperature min./max.	-20 ... 80 °C
Operational voltage	See table below
Protection class	IP67
Wire cross-section	0.75 mm ²
Mounting screw tightening torque	0.4 Nm
Weight	See table below

Technical data

Part No.		Operational voltage	Max. current	Protective circuit	Contact assignment
1834484213		230 V AC/DC	6 A	-	2+E
1834484215		230 V AC/DC	6 A	-	2+E
1834484205		24 V AC/DC	6 A	Z-diode	2+E
1834484207		24 V AC/DC	6 A	Z-diode	2+E
1834484209		230 V AC/DC	6 A	Varistor	2+E
1834484211		230 V AC/DC	6 A	Varistor	2+E
1834484236		24 V AC/DC	6 A	Z-diode	2+E

Part No.	LED status display	Number of wires	Cable-Ø	Cable length	Weight	Fig.	
1834484213	-	3	5.9 mm	3 m	0.183 kg	Fig. 2	-
1834484215	-	3	5.9 mm	5 m	0.308 kg	Fig. 2	-
1834484205	Yellow	3	5.9 mm	3 m	0.185 kg	Fig. 2	1)
1834484207	Yellow	3	5.9 mm	5 m	0.298 kg	Fig. 2	1)
1834484209	Yellow	3	5.9 mm	3 m	0.194 kg	Fig. 2	1)
1834484211	Yellow	3	5.9 mm	5 m	0.285 kg	Fig. 2	1)
1834484236	Yellow	3	5.9 mm	10 m	0.571 kg	Fig. 2	1)

1) Scope of delivery incl. flat gasket

Technical information

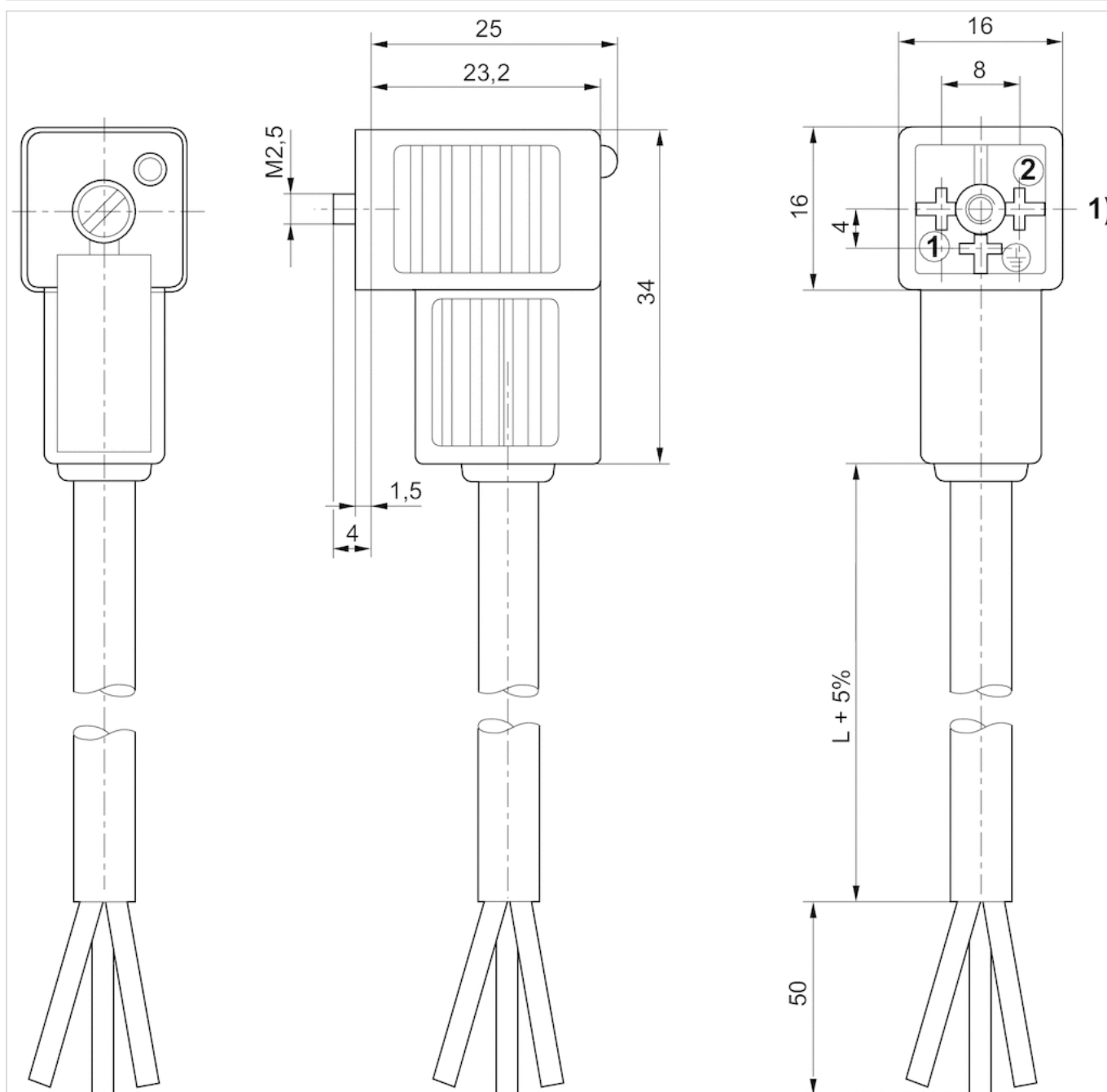
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Seals	caoutchouc/butadiene caoutchouc
Cable sheath	Polyvinyl chloride

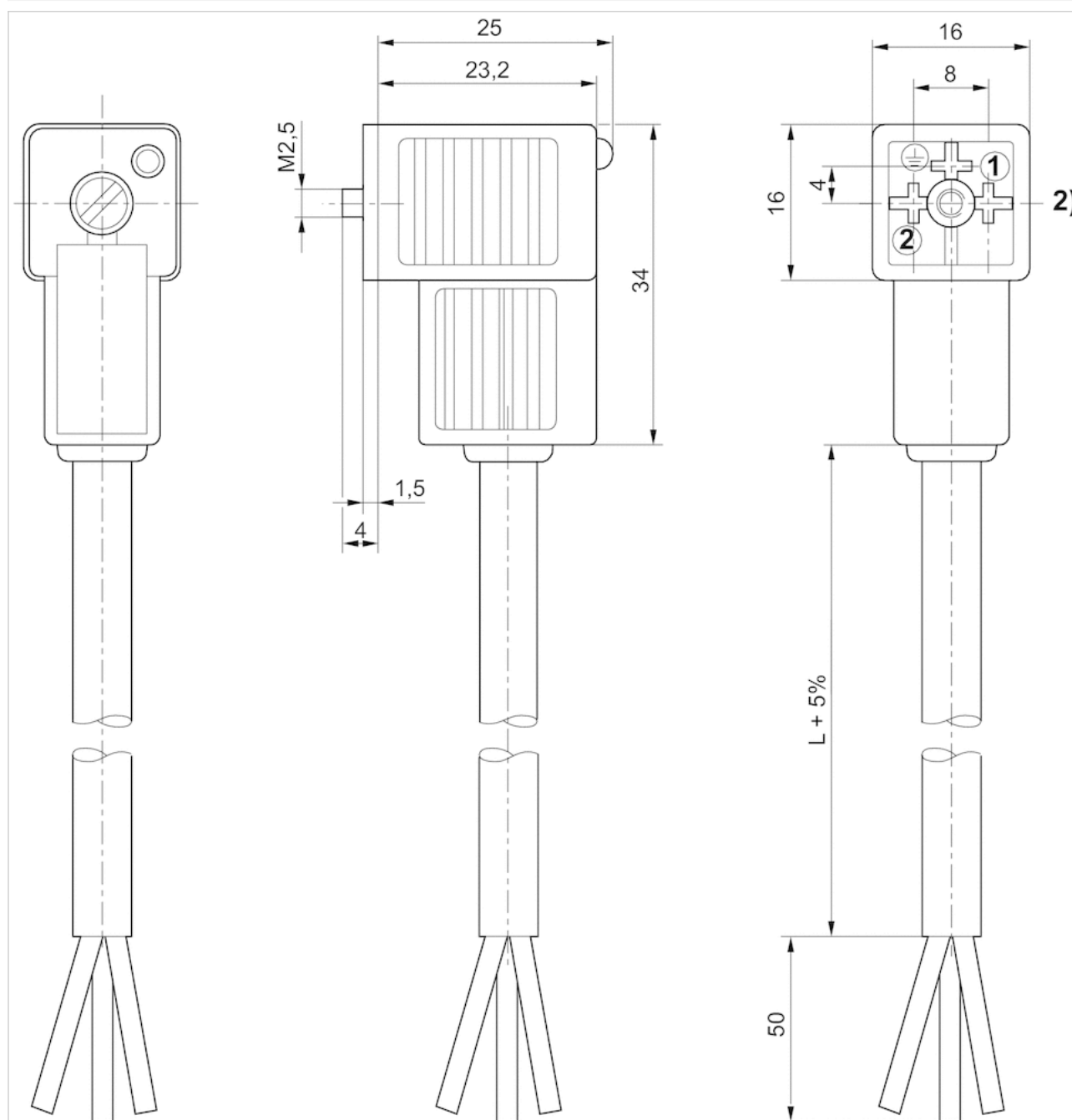
Dimensions

Fig. 1



1) 0° female insert

Fig. 2



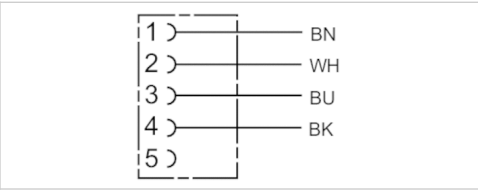
2) 180° female insert

Round plug connector, Series CON-RD

- Socket M12x1 5-pin A-coded angled 90°
- open cable ends
- for DeviceNet
- with cable
- unshielded



Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP65
Wire cross-section	0.34 mm²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
1834484259	4 A	4	5.2 mm	3 m	0.126 kg
1834484260	4 A	4	5.2 mm	5 m	0.195 kg
1834484261	4 A	4	5.2 mm	10 m	0.38 kg

Technical information

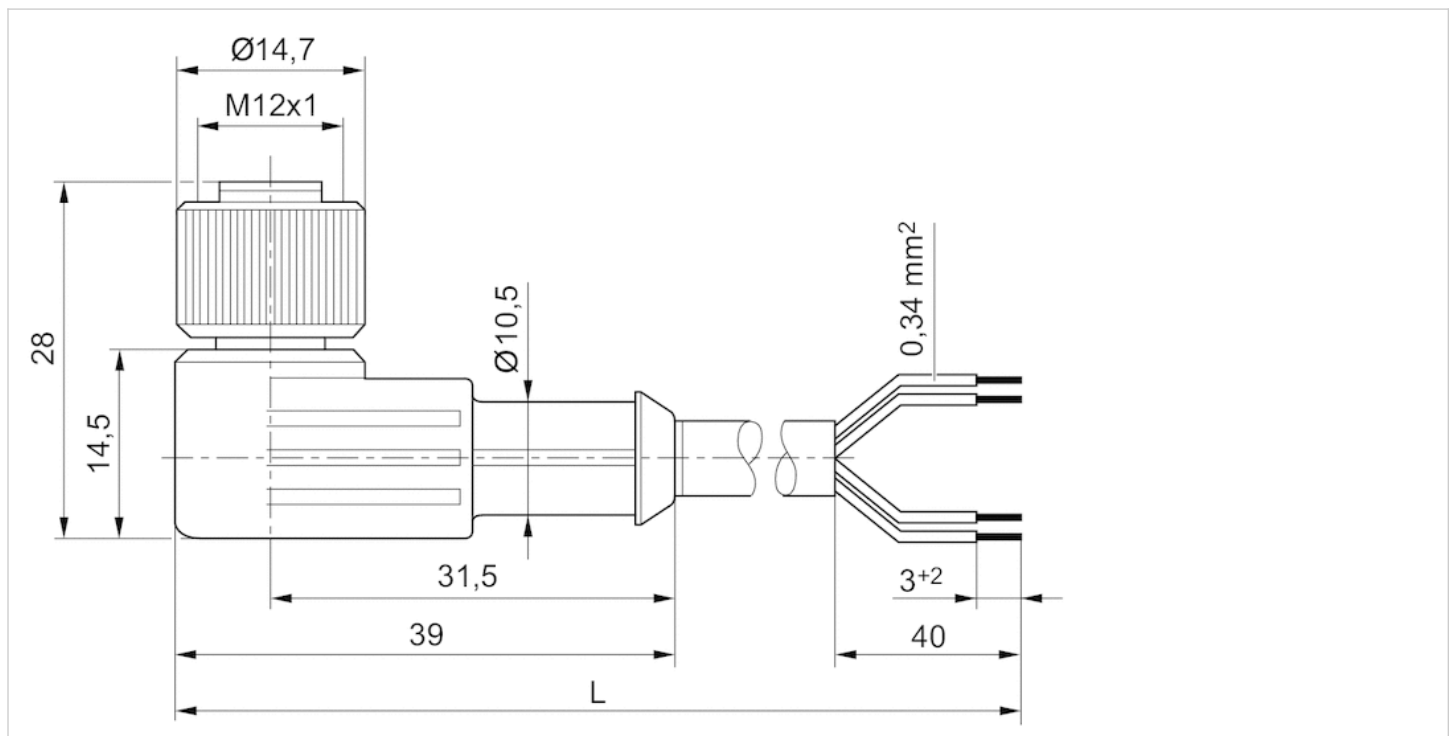
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Cable sheath	Polyurethane

Dimensions

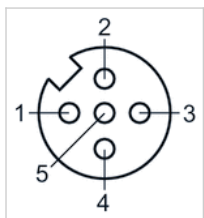
Dimensions



L = length

Pin assignments

Pin assignment, socket



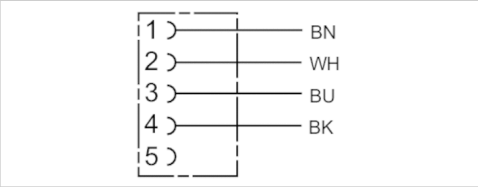
- (1) BN=brown
- (2) WH=white
- (3) BU=blue
- (4) BK=black
- (5) not assigned

Round plug connector, Series CON-RD

- Socket M12x1 5-pin A-coded straight 180°
- open cable ends
- with cable
- unshielded



Ambient temperature min./max.	-25 ... 70 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0.34 mm²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
1834484256	4 A	4	5.2 mm	3 m	0.122 kg
1834484257	4 A	4	5.2 mm	5 m	0.194 kg
1834484258	4 A	4	5.2 mm	10 m	0.373 kg

Technical information

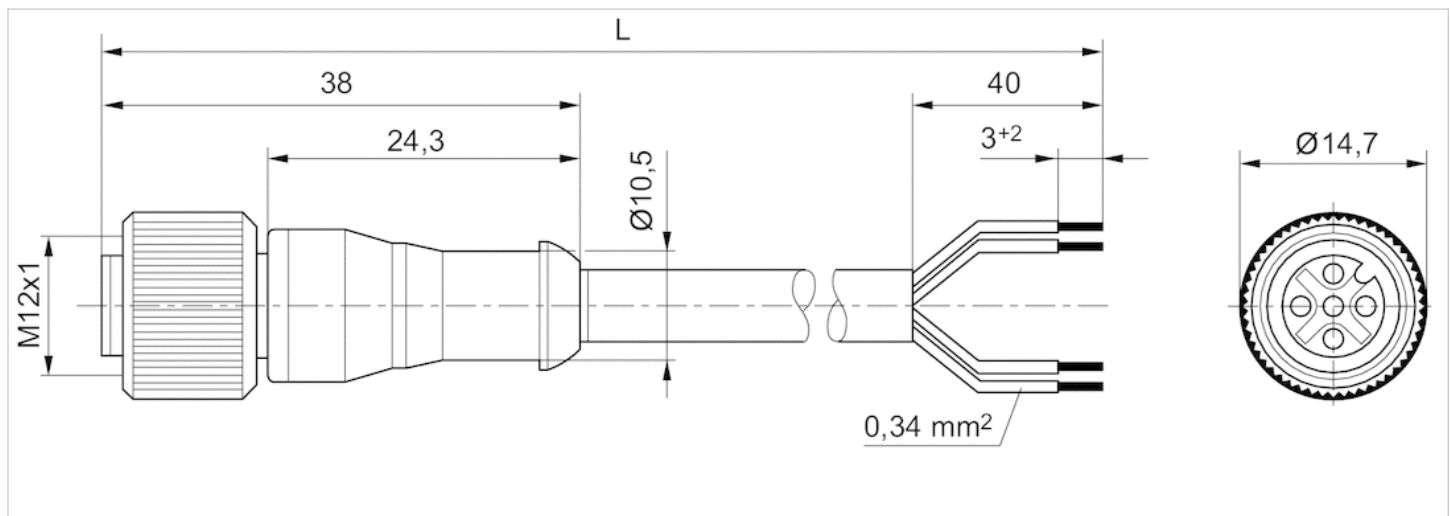
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Cable sheath	Polyurethane

Dimensions

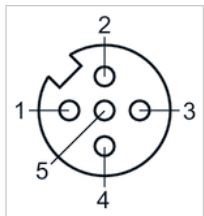
Dimensions



L = length

Pin assignments

Pin assignment, socket



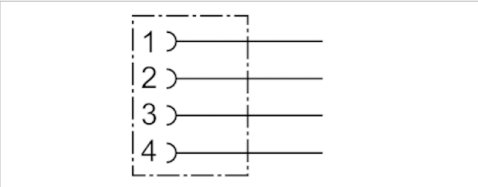
- (1) BN=brown
- (2) WH=white
- (3) BU=blue
- (4) BK=black
- (5) not assigned

Round plug connector, Series CON-RD

- Socket, M12x1, 4-pin, A-coded, straight, 180°
- UL (Underwriters Laboratories)
- unshielded



Connection type	Screws
Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Weight	0.015 kg



Technical data

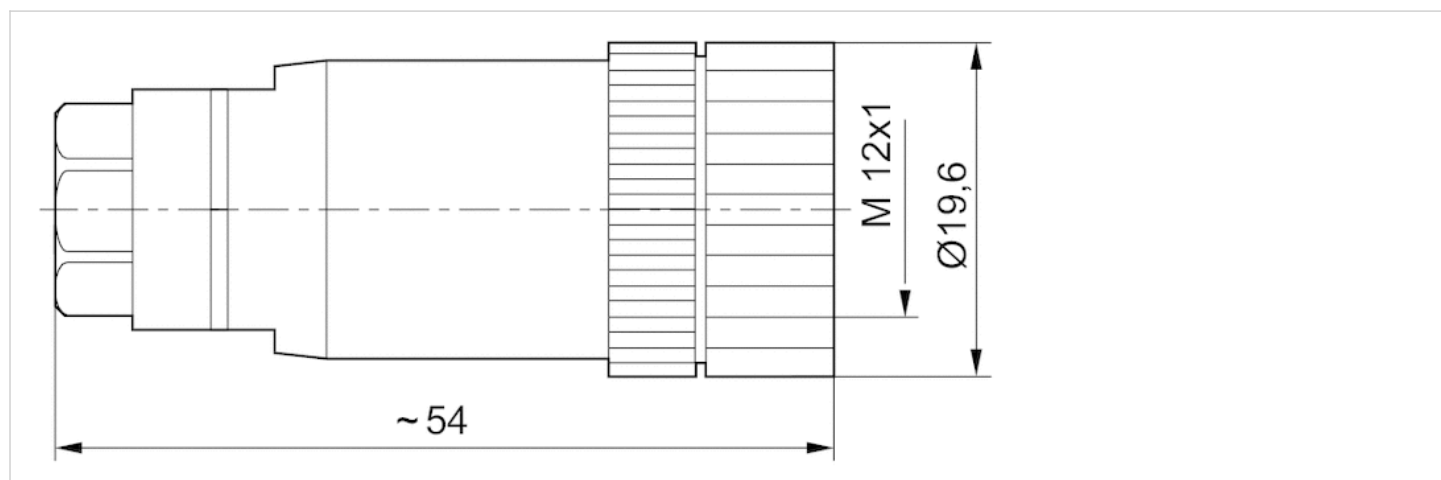
Part No.	Max. current	suitable cable-Ø min./max
1834484177	4 A	4 / 6 mm

Technical information

Material	
Housing	Polyamide

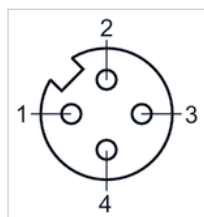
Dimensions

Dimensions



Pin assignments

Pin assignment, socket

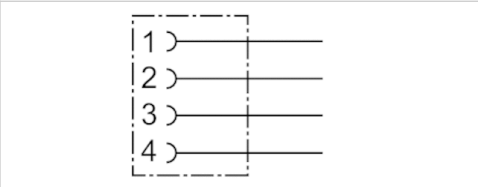


Round plug connector, Series CON-RD

- Socket, M12x1, 4-pin, A-coded, angled, 90°
- unshielded



Connection type	Screws
Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Weight	0.016 kg



Technical data

Part No.	Max. current	suitable cable-Ø min./max
1834484178	4 A	4 mm

Technical information

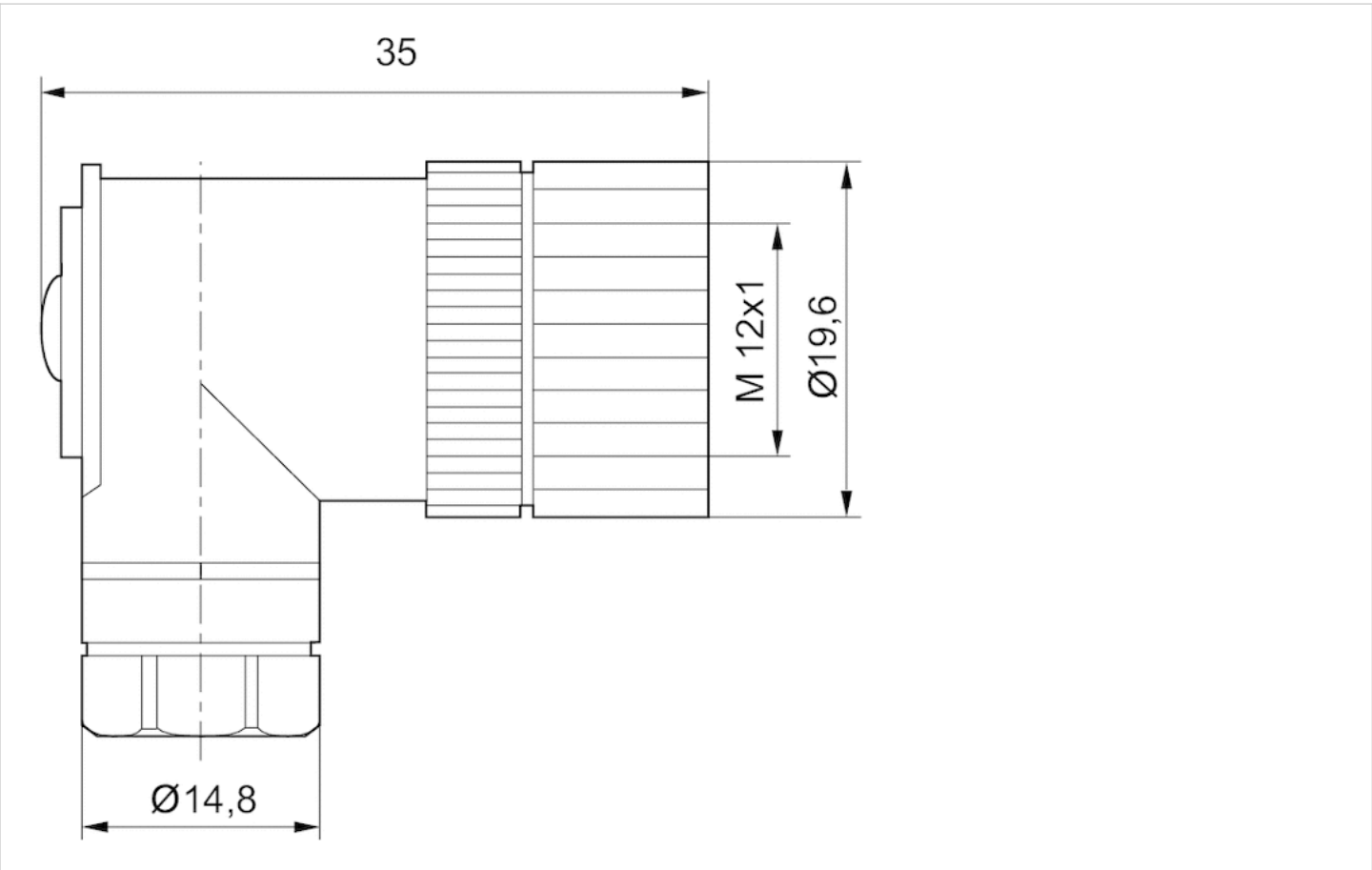
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

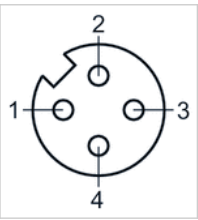
Dimensions

Dimensions



Pin assignments

Pin assignment, socket

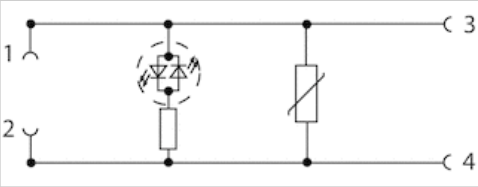


Adapter, Series CON-VP

- Socket, form C, 2+E, angled, 90°
- Plug, M12x1, 3-pin, A-coded, straight, 180°
- unshielded
- with LED Yellow



Ambient temperature min./max.	-10 ... 0 °C
Operational voltage	24 V DC
Protection class	IP65
Protective circuit	Varistor
Mounting screw tightening torque	0.6 Nm
Weight	0.013 kg



Technical data

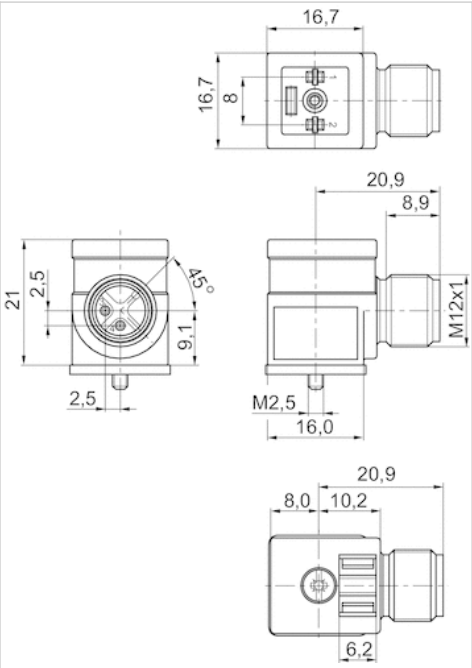
Part No.	Max. current	Protective circuit	Contact assignment	LED status display
R412009553	1 A	Varistor	2+E	Yellow

Technical information

Material	
Housing	Polyurethane

Dimensions

Dimensions



Adapter

- Adapter for connecting the control pressure to a AS series 3/2 directional shut-off valve without pilot control to realize pneumatic actuation■G 1/8
- G 1/8
- AS1, AS2, AS3, AS5



Weight

0.019 kg

Technical data

Part No.	Port G
R412006359	G 1/8

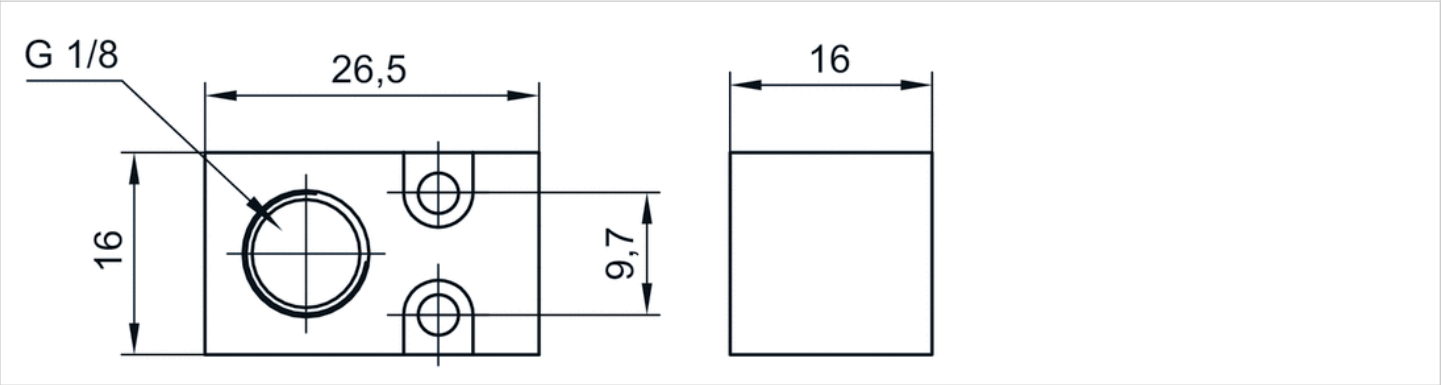
Delivery incl. 2 mounting screws M3x20, Flat gasket

Technical information

Material	
Material	Aluminum

Dimensions

Dimensions in mm



Transition plate, Series AS1, AS2, AS3, AS5

- Adapter plate for assembling a series DO30 pilot valve with CNOMO porting configuration on a 3/2-way shut-off valve without pilot



Weight0.025 kg

Technical data

Part No.
R412006360

Scope of delivery incl. 4 mounting screws, 2 O-rings

Technical information

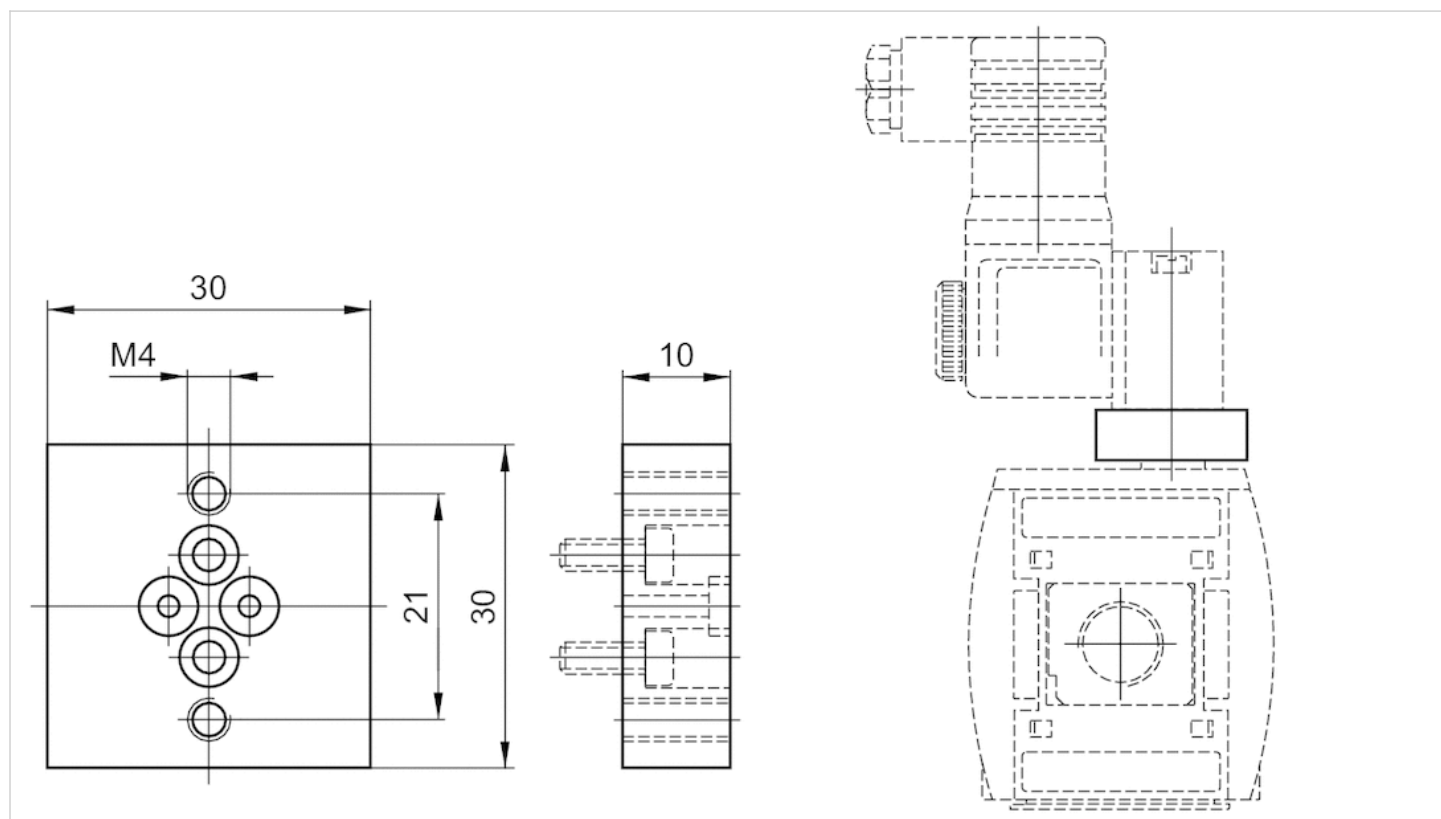
Adapter plate for assembling a series DO30 pilot valve with CNOMO porting configuration on a 3/2-way shut-off valve without pilot

Technical information

Material	
Material	Aluminum

Dimensions

Dimensions in mm



Transition plate, Series AS1

- Transition plate for assembling a pressure gauge with connection thread G 1/8



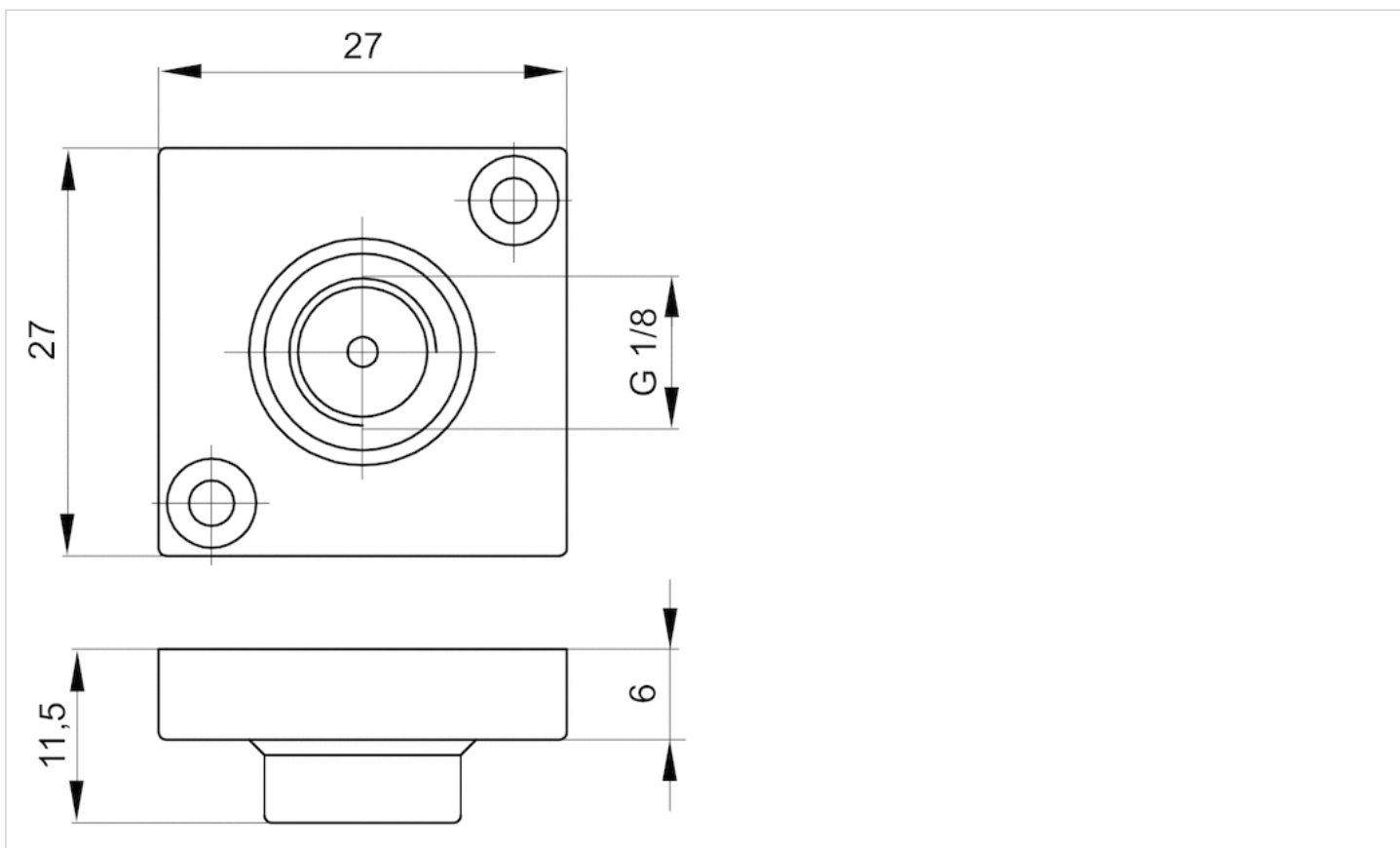
Technical data

Part No.

R412010538

Dimensions

Dimensions in mm



Mounting aid

- Assembly aid for permanent actuation of manual override ("press") on pilot valve DO16 with electrical push-in fitting, form C.



Technical data

Part No.
R412019278

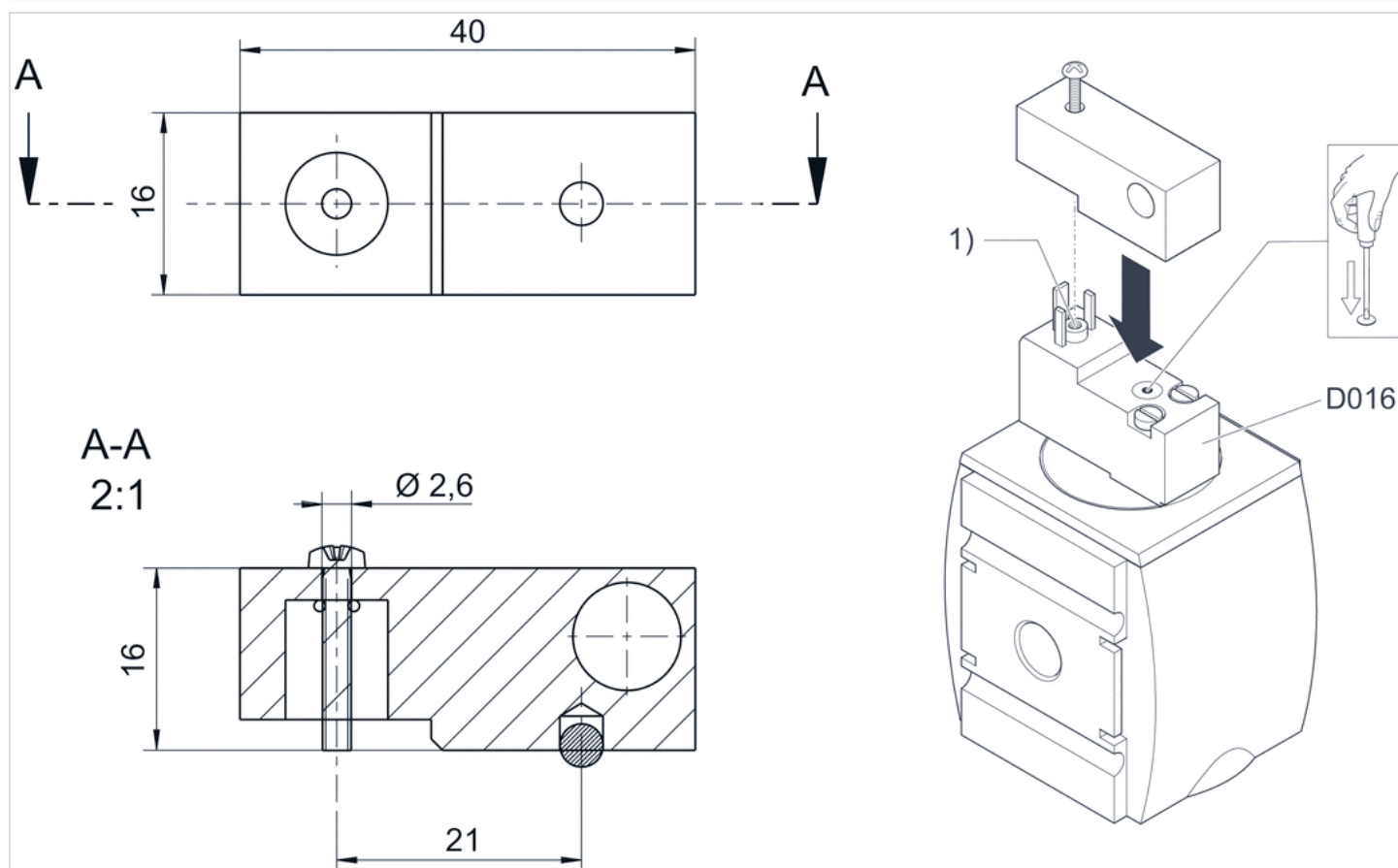
Scope of delivery incl. 1 mounting screw, 1 O-ring

Technical information

Material	
Housing	Aluminum

Dimensions

Dimensions in mm



1) ISO 15217, form C

Mounting aid

- Assembly aid for permanent actuation of manual override ("press") on pilot valve DO16 with electrical connection M12x1.



Weight0.023 kg

Technical data

Part No.
R412015193

Technical information

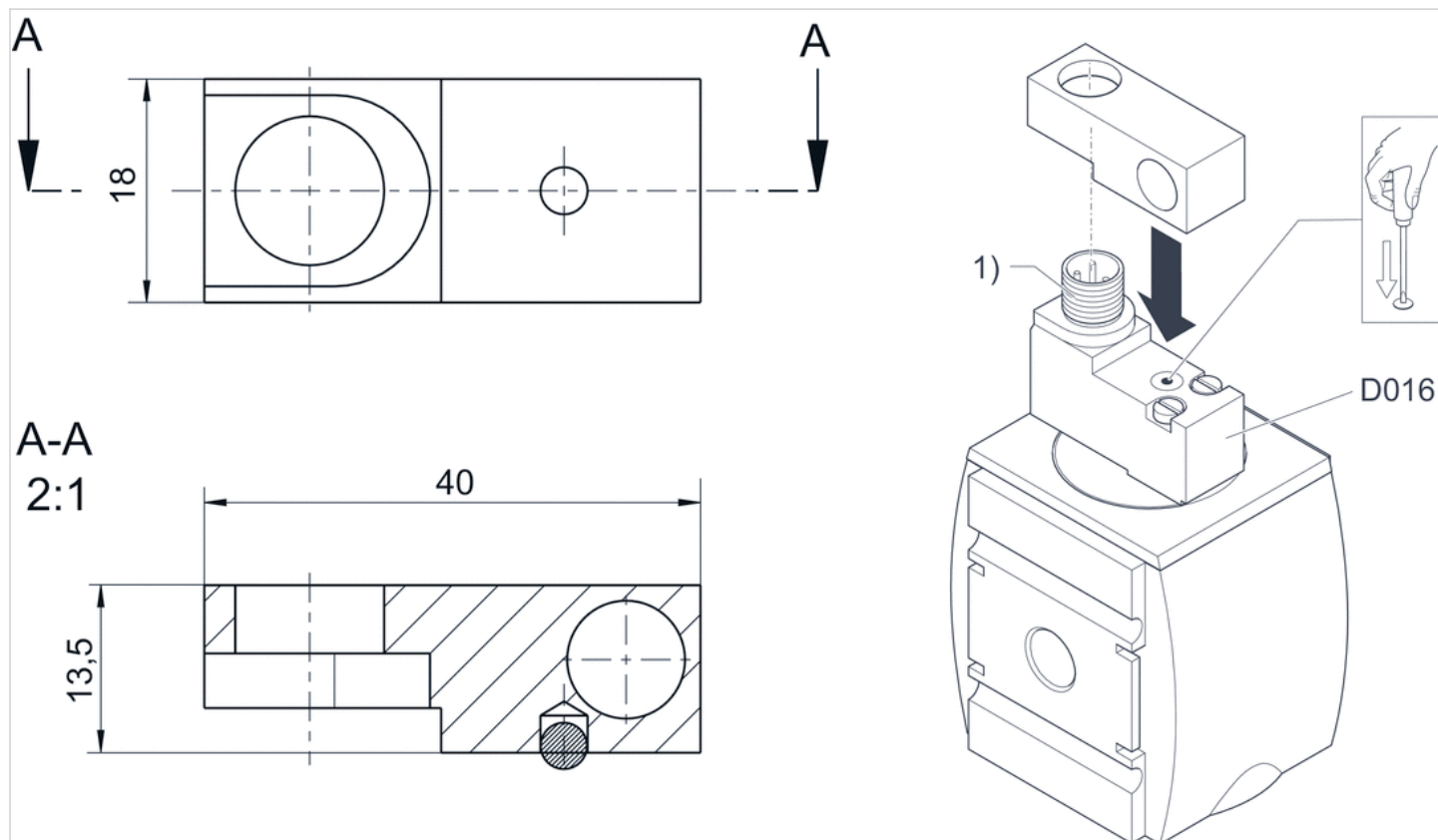
Mounting the assembly aid to the pilot valve using valve plug connector M12x1

Technical information

Material	
Housing	Aluminum

Dimensions

Dimensions in mm



1) M12x1

Key for E11 locking

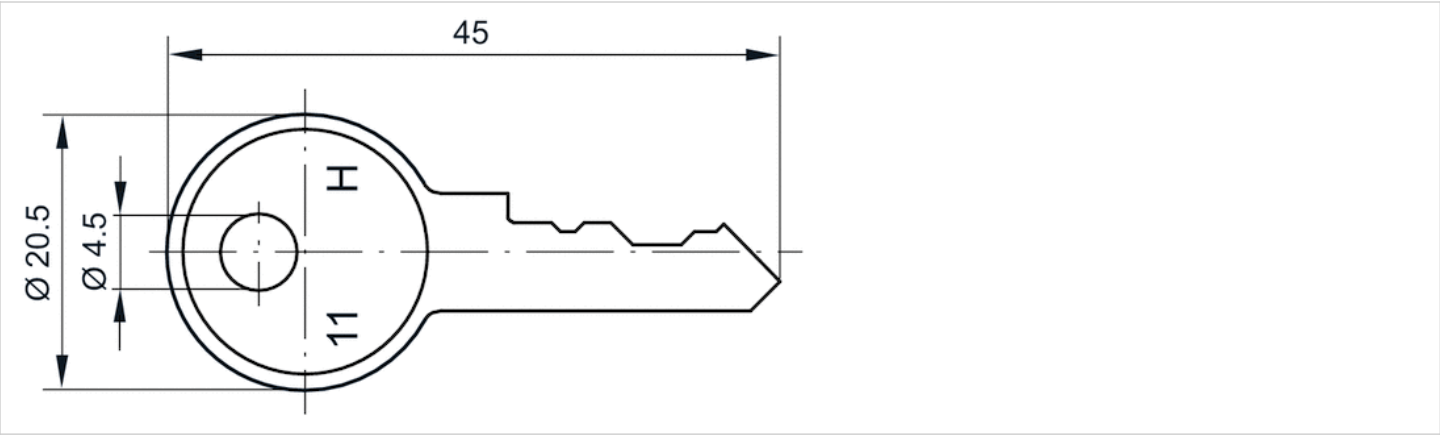


Technical data

Part No.	Delivery unit
R961403407	1 piece

Dimensions

Dimensions in mm



Pressure sensor, Series PE5

- Operating pressure -1 ... 0 -1 ... 1 0 ... 6 0 ... 10 0 ... 12 bar
- electronic
- Output signal analog 0 - 10 V DC, 4 - 20 mA
- Output signal digital 2 x PNP, NPN, Push-pull PNP, NPN, Push-pull PNP, NPN, push-pull, 1x IO-Link
- Electr. connection Plug M12x1 4-pin
- Compressed air connection Internal thread G 1/4



Type	electronic
Certificates	CE declaration of conformity cULus RoHS Conforms with REACH Free of substances that impair surface wetting in the coating process
Compressed air connection	Internal thread G 1/4
Ambient temperature min./max.	0 ... 60 °C
Medium temperature min./max.	0 ... 60 °C
Medium	Compressed air (max. 40 µm)
Max. oil content of compressed air	40 mg/m³
Measurement	Relative pressure
Display	LCD display, 4 digits, Color setting: green or red
Units displayed	bar psi kPa MPa inHg
Switching logic	NO/NC (adjustable)
Shock resistance max.	30 g
Vibration resistance	5 g (10 - 150 Hz)
Precision (% of full scale value)	±1.5% in temperature range of 10 - 30°C ± 2 % including temperature drift
Repeatability (% of full scale value)	± 0,2 %
Switching time	5 ms
Switching point	adjustable 0 ... 100%
Resetting point	adjustable 0 ... 100%
Hysteresis	adjustable
Delayed hysteresis	adjustable
Window function	adjustable
DC operating voltage min./max.	17 ... 30 V DC
Analog output	0 - 10 V DC, 4 - 20 mA
Quiescent current consumption	40 mA
Analog output linearity	± 0.5% of the final value
Maximum load (analog current output)	600 Ω
Short circuit resistance	Max. 600 ohms (current output) Min. 3K ohms (voltage output)
Mounting types	Directly on hat rail and wall mounting For panel installation using mounting kit via double nipple
Protection class	IP65 IP67 with connections assembled
Electr. connection	Plug M12x1 4-pin
Weight	0.04 kg

Technical data

Part No.		Operating pressure range	Protection against overpressure
		min./max.	
R412010761		-1 ... 0 bar	5 bar
R412010769		-1 ... 0 bar	5 bar
R412010775		-1 ... 0 bar	5 bar
R412010763		-1 ... 1 bar	5 bar
R412010771		0 ... 6 bar	15 bar
R412010765		0 ... 6 bar	15 bar
R412010777		0 ... 6 bar	15 bar
R412010773		0 ... 10 bar	15 bar
R412010767		0 ... 10 bar	15 bar
R412010779		0 ... 10 bar	15 bar
R412010782		0 ... 12 bar	16 bar
R412010806		0 ... 12 bar	16 bar

Part No.	Output signal	Output signal	Fig.	
	Analog	digital		
R412010761	-	2 x PNP, NPN, Push-pull	Fig. 1	-
R412010769	0 - 10 V DC-4 ... 20 mA	PNP, NPN, Push-pull	Fig. 1	-
R412010775	-	PNP, NPN, push-pull, 1x IO-Link	Fig. 1	1)
R412010763	-	2 x PNP, NPN, Push-pull	Fig. 1	-
R412010771	0 - 10 V DC-4 ... 20 mA	PNP, NPN, Push-pull	Fig. 1	-
R412010765	-	2 x PNP, NPN, Push-pull	Fig. 1	-
R412010777	-	PNP, NPN, push-pull, 1x IO-Link	Fig. 1	1)
R412010773	0 - 10 V DC-4 ... 20 mA	PNP, NPN, Push-pull	Fig. 1	-
R412010767	-	2 x PNP, NPN, Push-pull	Fig. 1	-
R412010779	-	PNP, NPN, push-pull, 1x IO-Link	Fig. 1	1)
R412010782	-	2 x PNP, NPN, Push-pull	Fig. 1	-
R412010806	-	PNP, NPN, push-pull, 1x IO-Link	Fig. 1	1)

1) The IO-Link device description (IODD) for the PE5 pressure sensor is available for download in the Media Centre.

Technical information

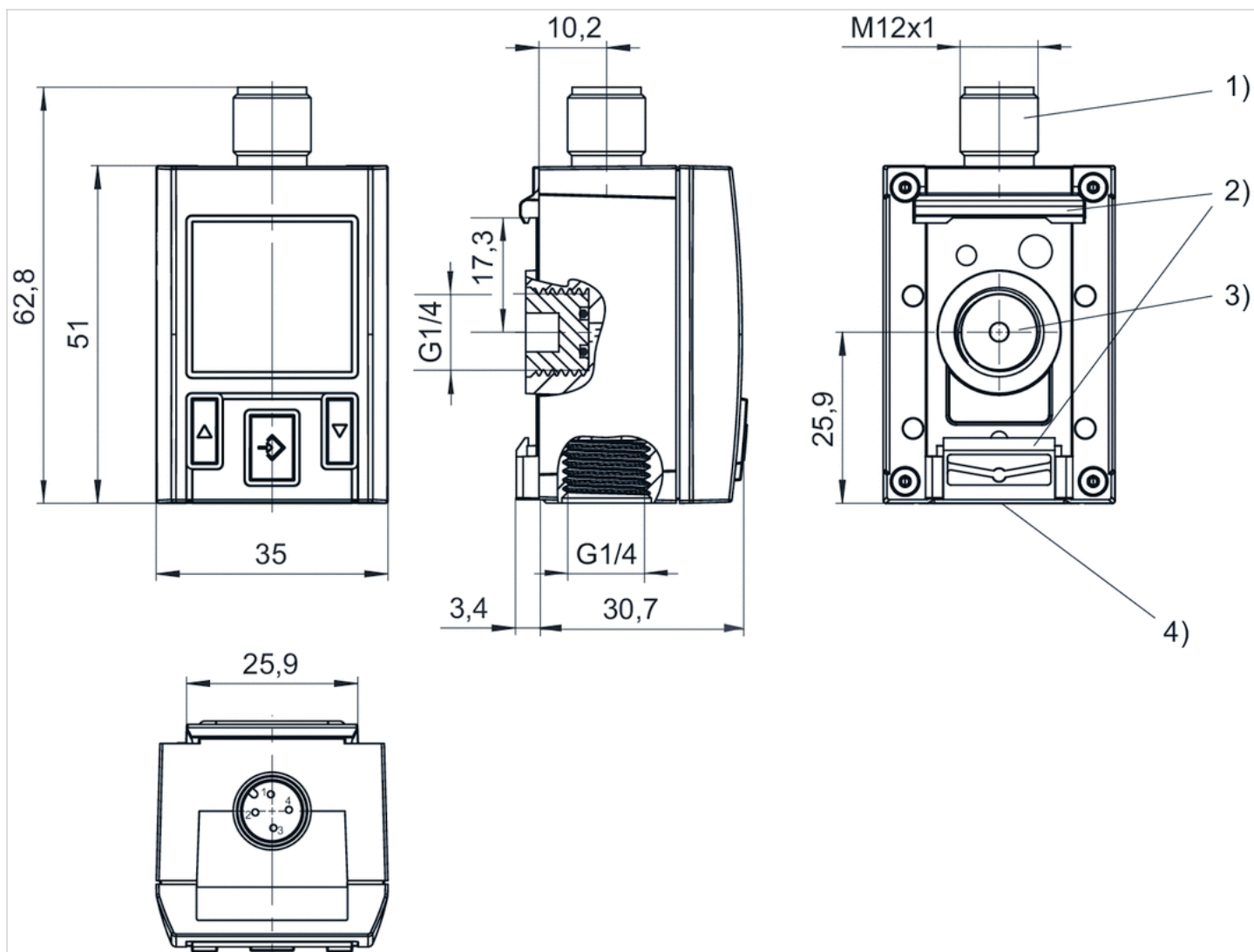
Alternative pressure connection (G1/4) on the rear side (closed with plug)
Display color selectable, red or green

Technical information

Material	
Housing	Polycarbonate
Seals	Acrylonitrile butadiene rubber
Blanking plug	Polyoxymethylene
Electr. connection	Aluminum, black anodized

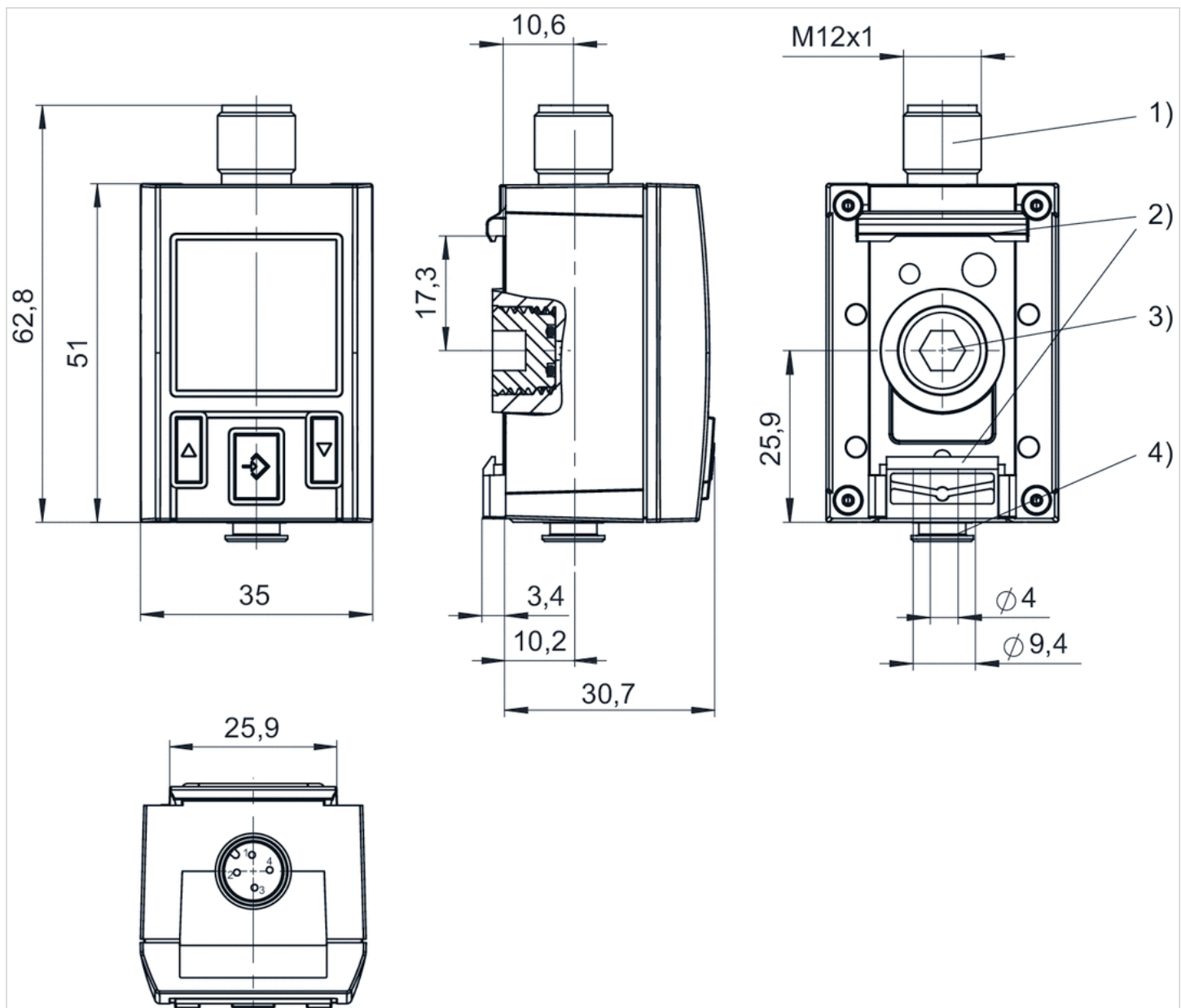
Dimensions

Fig. 1



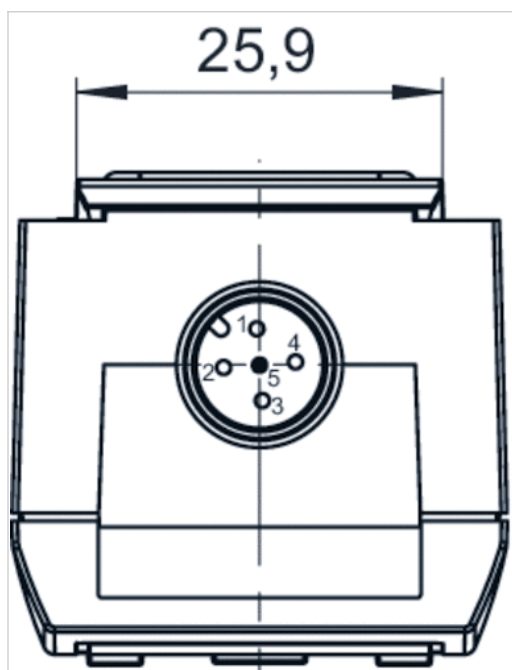
- 1) M12x1 electrical connection
- 2) Mounting for hat rail and wall mounting
- 3) Alternative pressure connection (G1/4) closed with plug
- 4) Pressure connection G1/4

Fig. 2

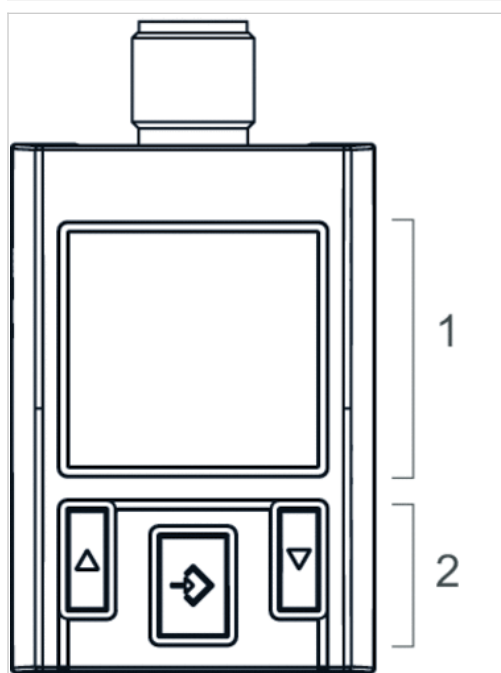


- 1) M12x1 electrical connection
- 2) Mounting for hat rail and wall mounting
- 3) Alternative pressure connection (G1/4) closed with plug
- 4) Pressure connection, tubing Ø 4 mm

Fig. 3, Electr. connection for leak test



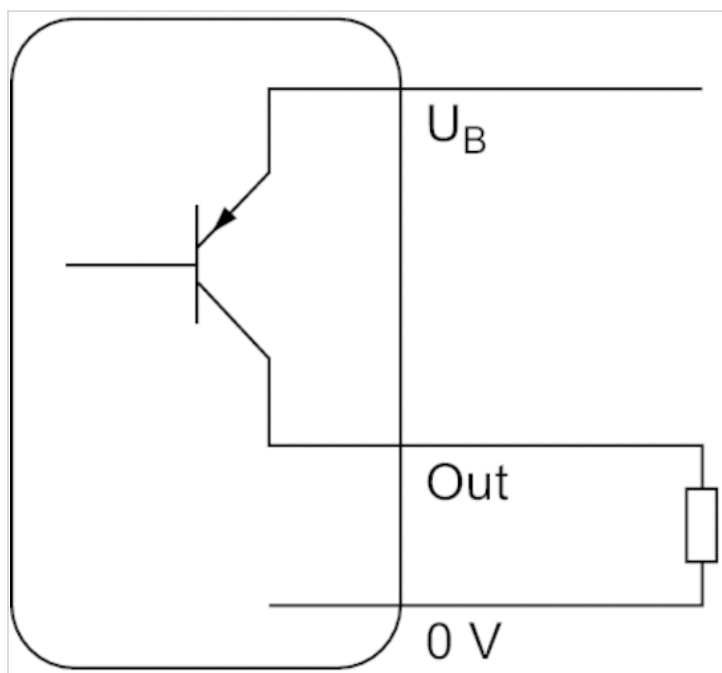
Display and operation area



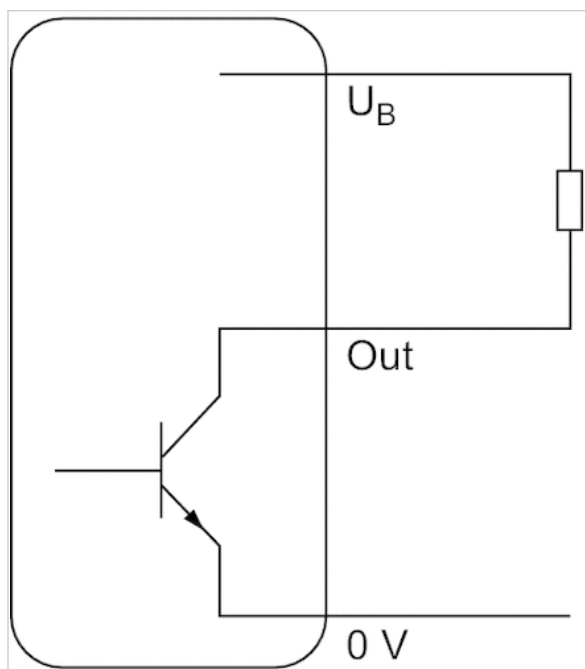
- 1) LCD display
- 2) Control panel with 3 buttons

Diagrams

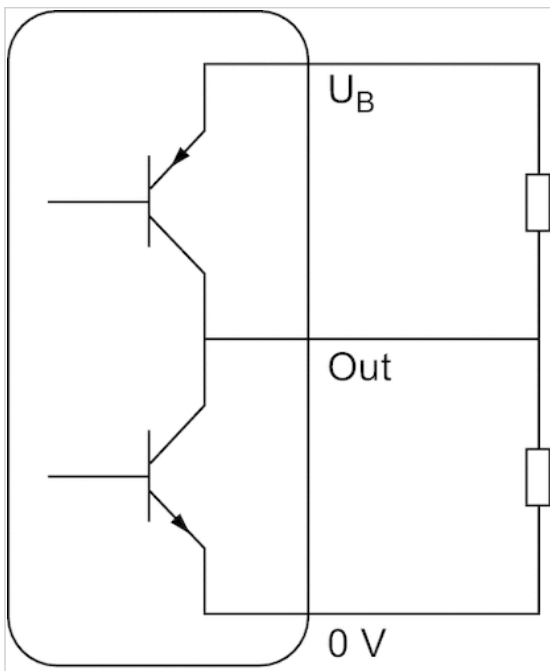
Operating mode, PNP



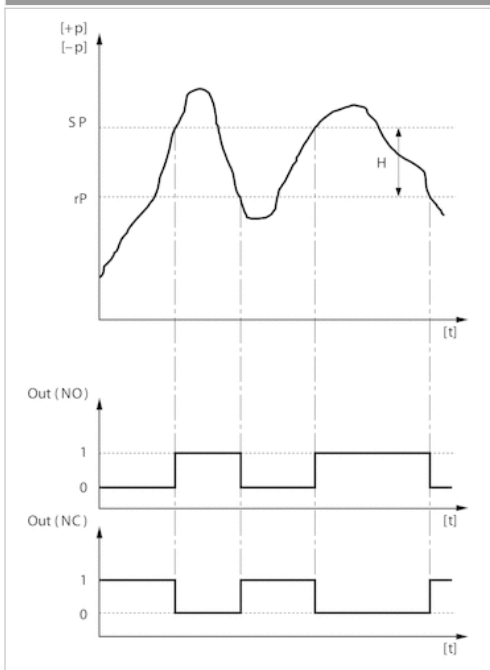
Operating mode, NPN



Operating mode, Push-pull



Hysteresis function: switching and resetting behavior dependent on pressure p and time t , in case of overpressure



H: Hysteresis

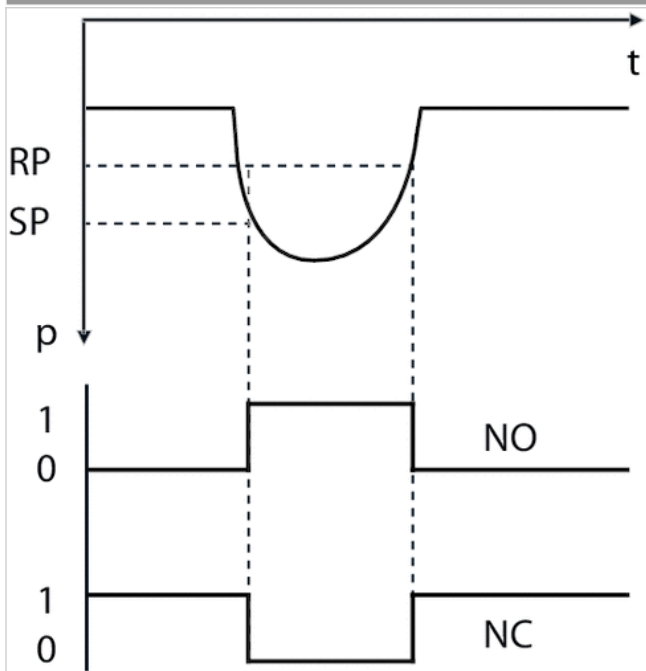
SP = switching point

RP = resetting point

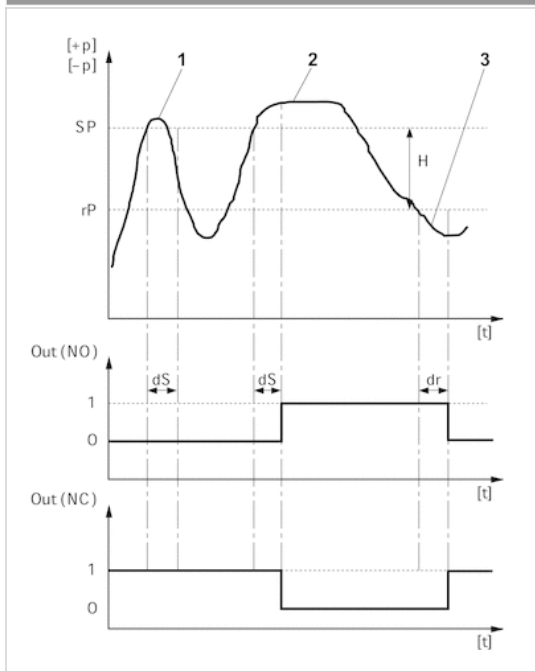
Out (NC): switch output, break contact

Out (NO): switch output, make contact

Hysteresis function: switching and resetting behavior dependent on pressure p and time t , in case of underpressure



Delayed hysteresis function: switching and resetting behavior depending on pressure p and time t



H: Hysteresis

SP = switching point

RP = resetting point

Out (NC): switch output, break contact

Out (NO): switch output, make contact

dS: switching delay

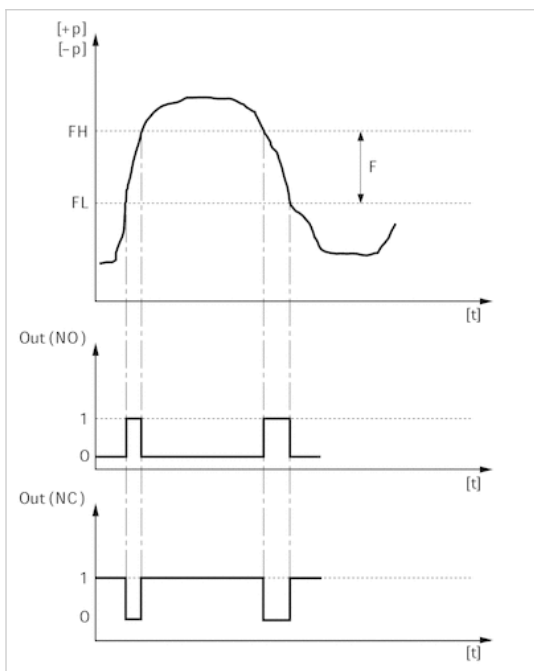
dR = reset delay

1) period of pressure over the switching point dS : pressure sensor does not switch

2) Period of pressure over the switching point $> dS$: pressure sensor switches

3) Period of pressure under the resetting point $> dR$: pressure sensor switches

Window function: switching and resetting behavior depending on pressure p and time t



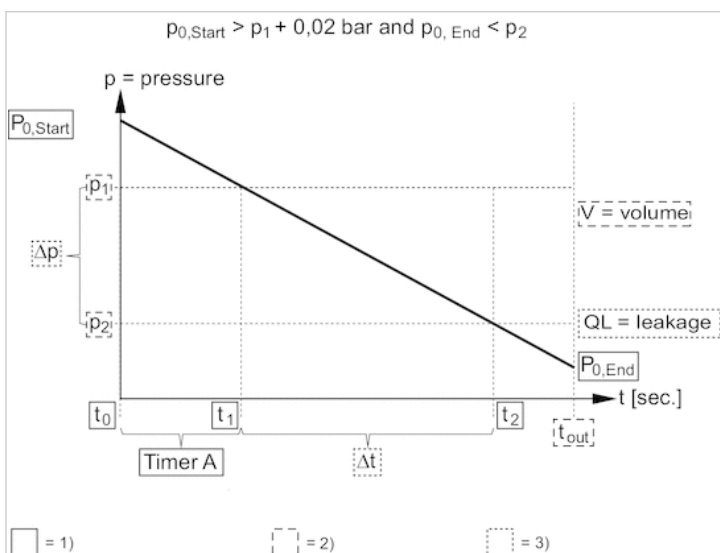
FH: pressure band, upper value

FL: pressure band, lower value

Out (NC): switch output, break contact

Out (NO): switch output, make contact

Leakage characteristic



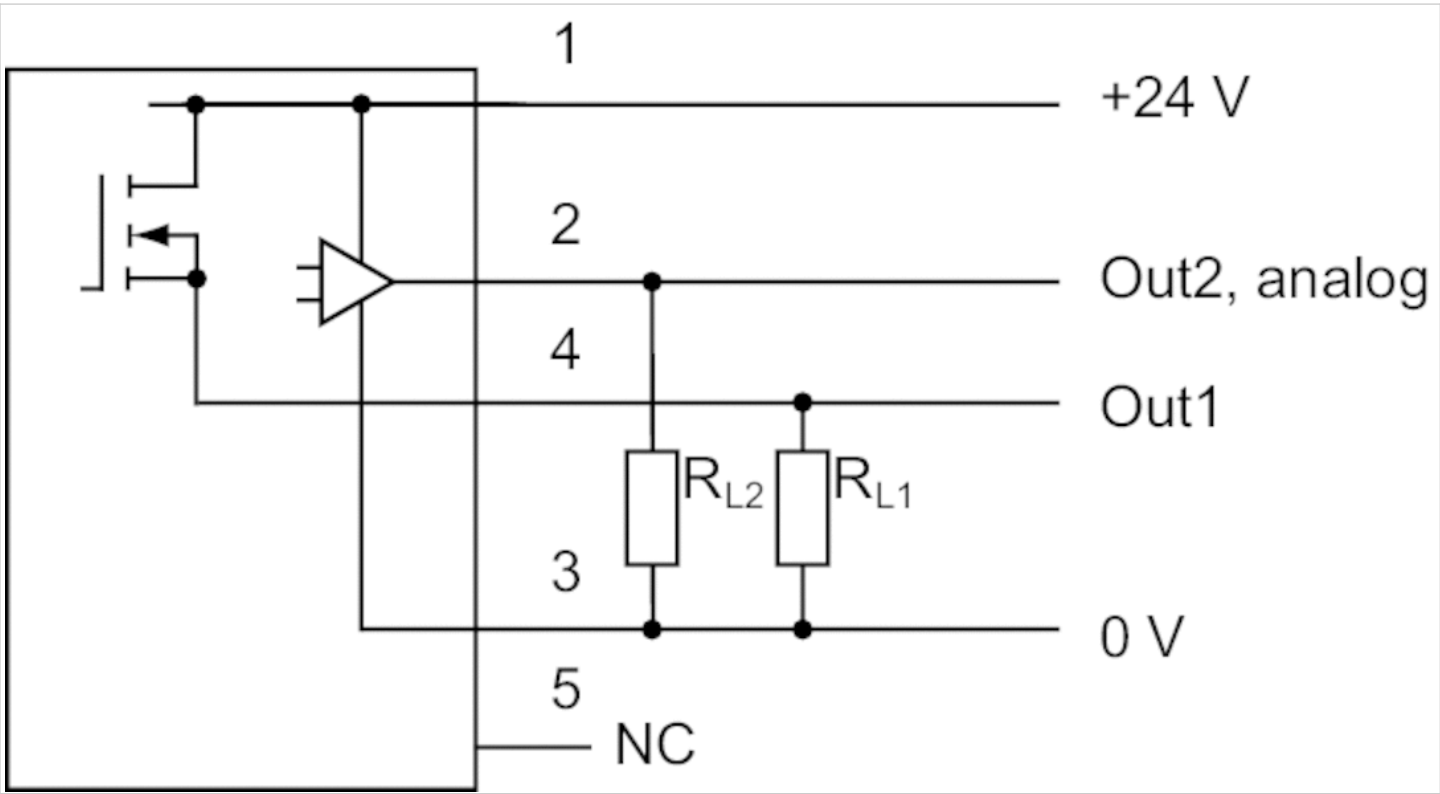
1) Internally stored parameter

2) Adjustable parameter

3) Output value

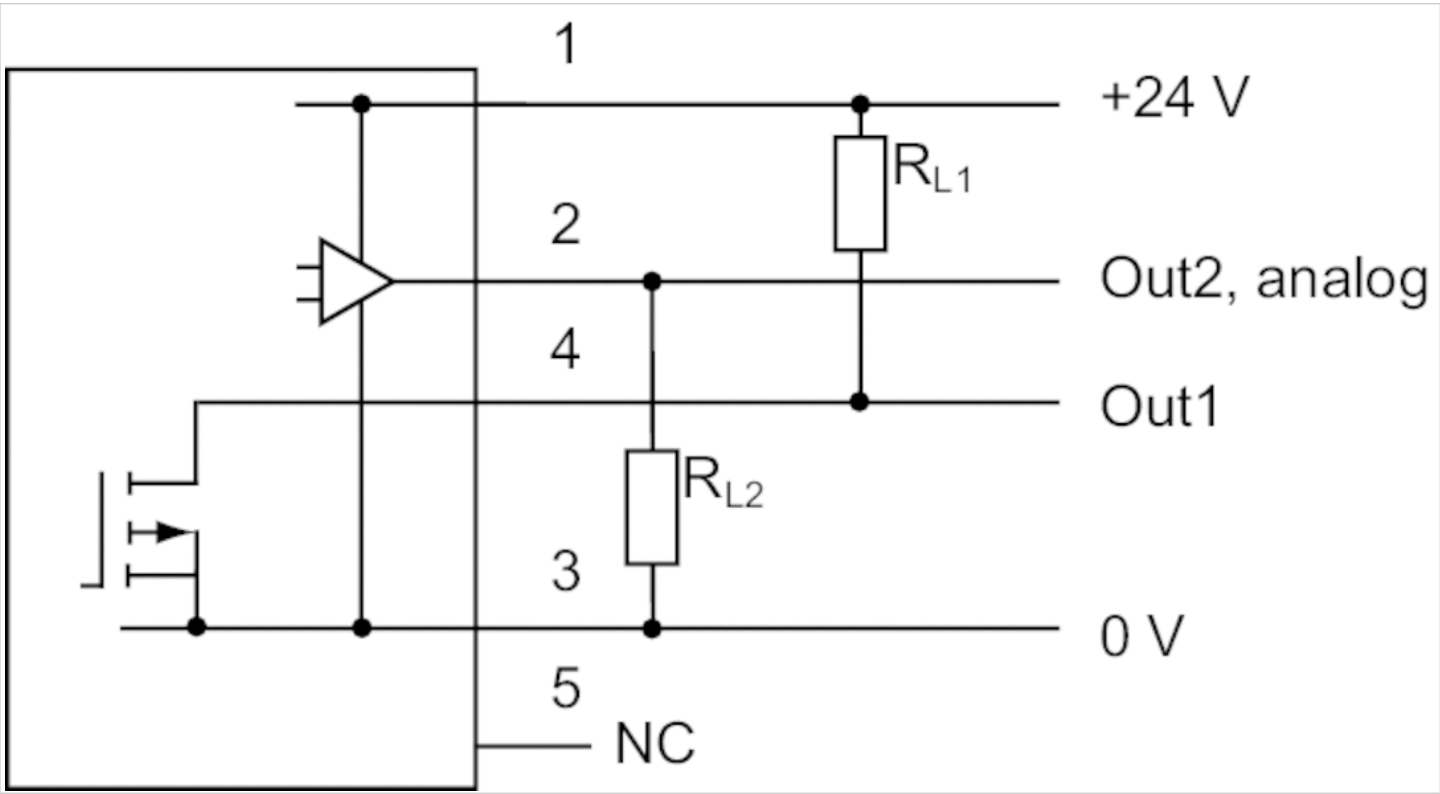
Circuit diagram

Block diagram, 1x PNP and 1x analog



RL = storable position

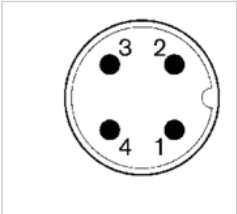
Block diagram, 1x NPN and 1x analog



RL = storable position

Pin assignments

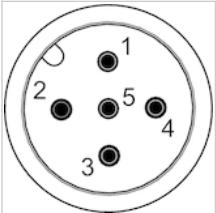
Pin assignments, M12x1, 4-pin



Pin	1
Allocation	operational voltage + UB
2	3
switch output Out2, analog: A or V, digital: PNP, NPN, push-pull	0 V
4	
switch output Out1, digital: PNP, NPN, push-pull	

Pin assignments

Pin assignments, M12x1, 5-pin



Pin	1	2	3
Allocation	Supply Voltage	Switch output PNP/NPN/push-pull, switchable	0 V
4			
Switch output PNP/NPN/push-pull/leakage mode, digital switch input PNP			
5			
Analog output (0 to 10 V DC, 4 to 20 mA)			

Pressure sensor, Series PE2

- Operating pressure -1 ... 1 0 ... 16 bar
- electronic
- Output signal analog 1 x PNP, 1 x analog 4-20 mA
- Electr. connection Plug M12x1 5-pin
- Compressed air connection Internal thread G 1/4 Flange with O-ring Ø 5x1,5



Type	electronic
Function	1 x PNP, 2 x PNP 1x PNP and 1x analog
Mounting orientation	Any
Certificates	CE declaration of conformity EMV
Working pressure min./max.	See table below
Ambient temperature min./max.	-10 ... 75 °C
Medium temperature min./max.	-10 ... 75 °C
Medium	Compressed air Neutral gases
Measurement	Relative pressure
Display	OLED
Units displayed	bar mbar psi kPa MPa %
Switching logic	Hysteresis function NO/NC (programmable) Window function NO/NC (programmable)
Operating pressure display	2 LED
Shock resistance max.	30 g
Vibration resistance	5 g (10 - 150 Hz)
Precision (% of full scale value)	± 1 % including temperature drift
Switching time	10 ms at loads 100 kΩ > 10 ms at loads > 100 kΩ
Switching point	Adjustable ≥ 0.5% ... 100% FS
Resetting point	Adjustable 0% FS to SP -0.5% FS (or +0.5% FS when SP 0)
Hysteresis	adjustable
Switching/reset delay	adjustable
DC operating voltage min./max.	15 ... 32 V DC
Analog output	1 x PNP, 1 x analog 4-20 mA
Quiescent current consumption	50 mA
Maximum load (analog current output)	600 Ω
Short circuit resistance	short circuit resistant
Mounting types	via through holes
Protection class	IP65
Electr. connection	Plug M12x1 5-pin
Weight	0.3 kg

Technical data

Part No.		Type	Operating pressure range
			min./max.
R412010848		PE2-P1-G014-V10-010-M012	-1 ... 1 bar
R412010849		PE2-P1-F001-V10-010-M012	-1 ... 1 bar
R412010853		PE2-P2-G014-V10-010-M012	-1 ... 1 bar
R412010856		PE2-PA-G014-V10-010-M012	-1 ... 1 bar
R412010850		PE2-P1-G014-000-160-M012	0 ... 16 bar
R412010851		PE2-P1-F001-000-160-M012	0 ... 16 bar
R412010854		PE2-P2-G014-000-160-M012	0 ... 16 bar
R412010855		PE2-P2-F001-000-160-M012	0 ... 16 bar
R412010857		PE2-PA-G014-000-160-M012	0 ... 16 bar
R412010858		PE2-PA-F001-000-160-M012	0 ... 16 bar

Part No.	Protection against overpressure	Output signal	Output signal	Compressed air connection
		Analog	digital	
R412010848	10 bar	-	1 x PNP	Internal thread, G 1/4
R412010849	10 bar	-	1 x PNP	Flange with O-ring, Ø 5x1,5
R412010853	10 bar	-	2 x PNP	Internal thread, G 1/4
R412010856	10 bar	4 ... 20 mA	1 x PNP	Internal thread, G 1/4
R412010850	40 bar	-	1 x PNP	Internal thread, G 1/4
R412010851	40 bar	-	1 x PNP	Flange with O-ring, Ø 5x1,5
R412010854	40 bar	-	2 x PNP	Internal thread, G 1/4
R412010855	40 bar	-	2 x PNP	Flange with O-ring, Ø 5x1,5
R412010857	40 bar	4 ... 20 mA	1 x PNP	Internal thread, G 1/4
R412010858	40 bar	4 ... 20 mA	1 x PNP	Flange with O-ring, Ø 5x1,5

Part No.	Fig.
R412010848	Fig. 1
R412010849	Fig. 2
R412010853	Fig. 1
R412010856	Fig. 1
R412010850	Fig. 1
R412010851	Fig. 2
R412010854	Fig. 1
R412010855	Fig. 2
R412010857	Fig. 1
R412010858	Fig. 2

Technical information

Menu navigation is based on the VDMA specification with an additional plain text menu.

Technical information

Material	
Housing	Aluminum, Vibration-ground
Seals	Fluorocautchouc
Electr. connection	Aluminum with polymer insert
flange connection	Nitrile butadiene rubber, Fluorocautchouc

Dimensions

Fig. 1

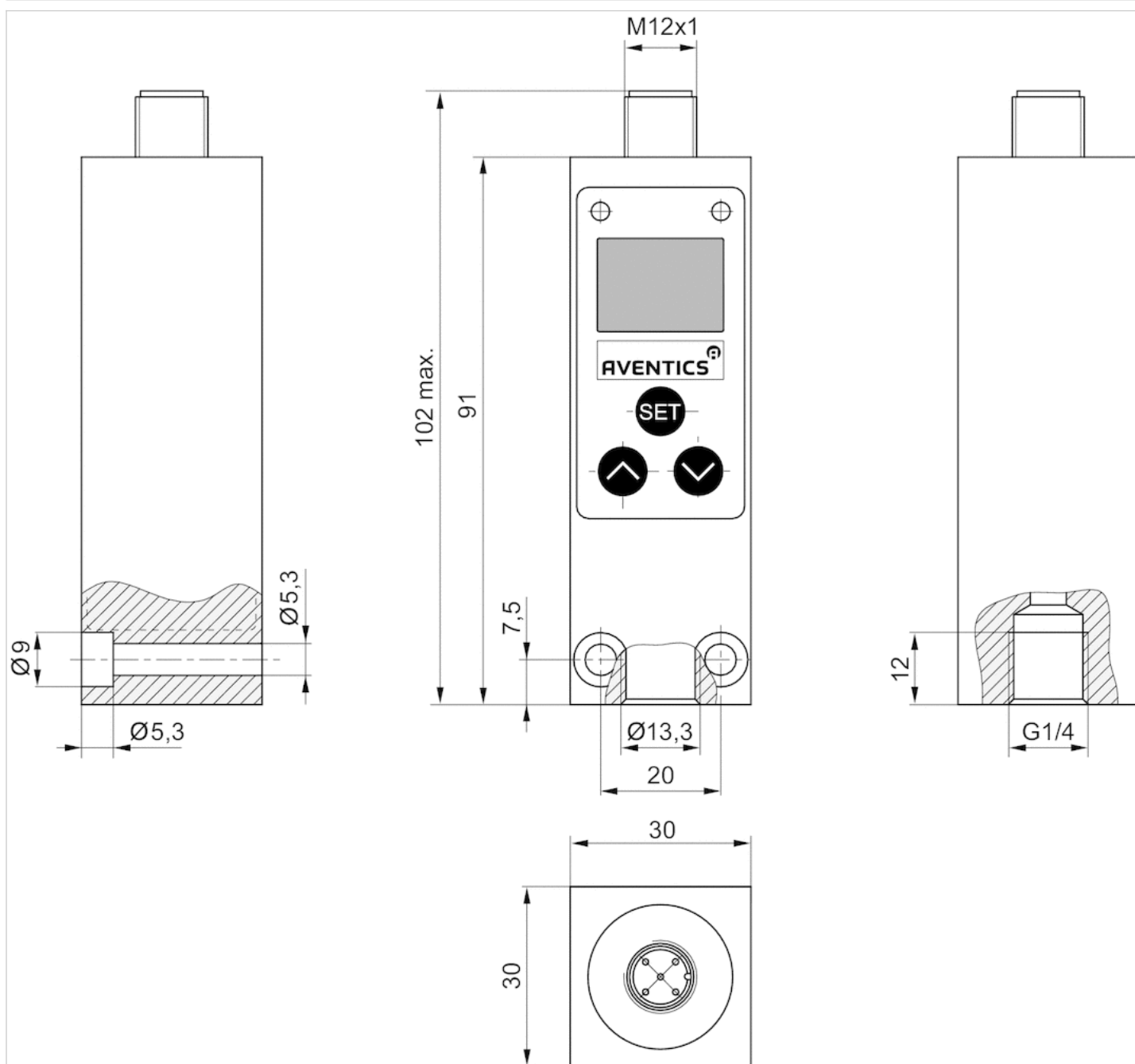
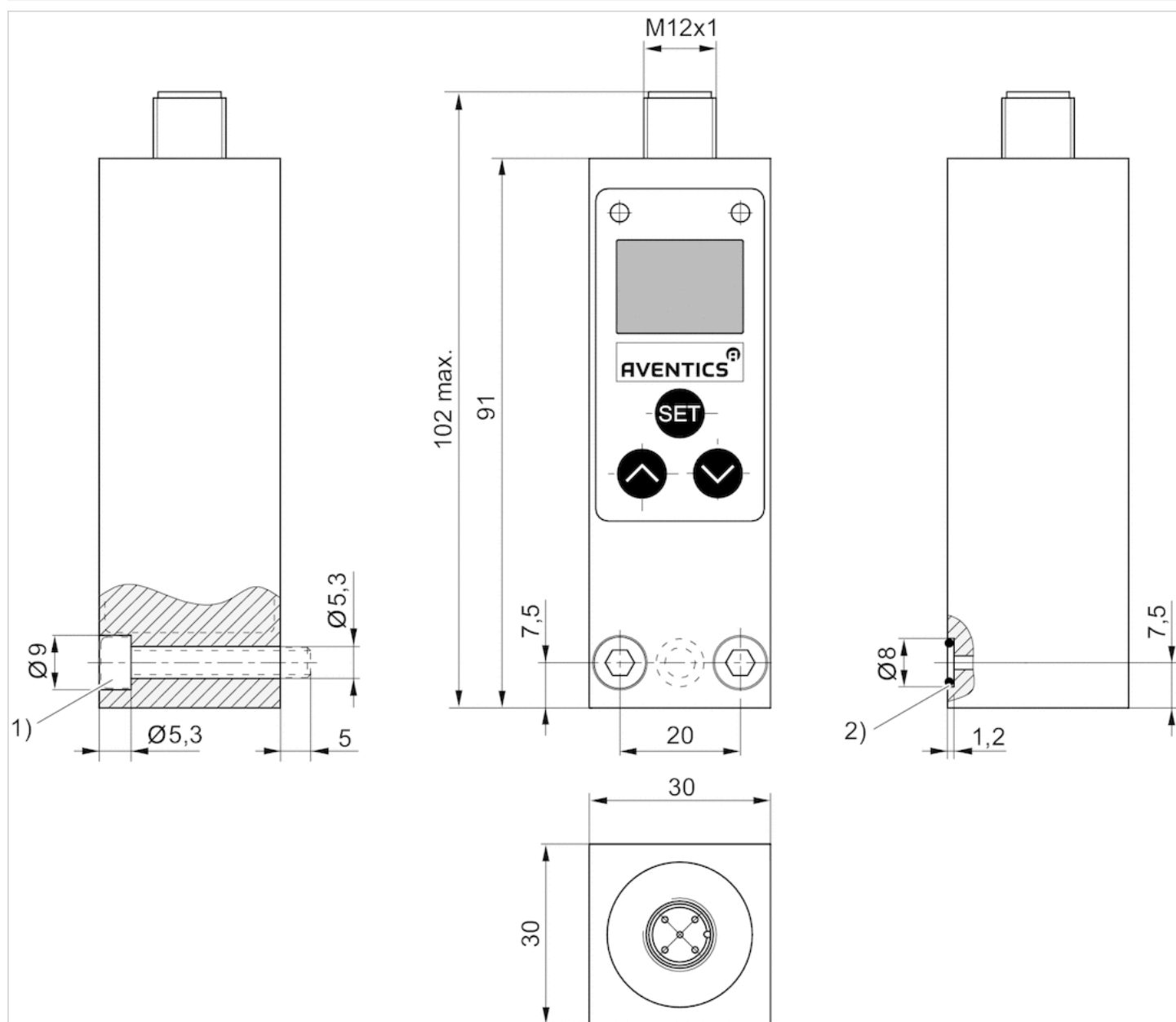


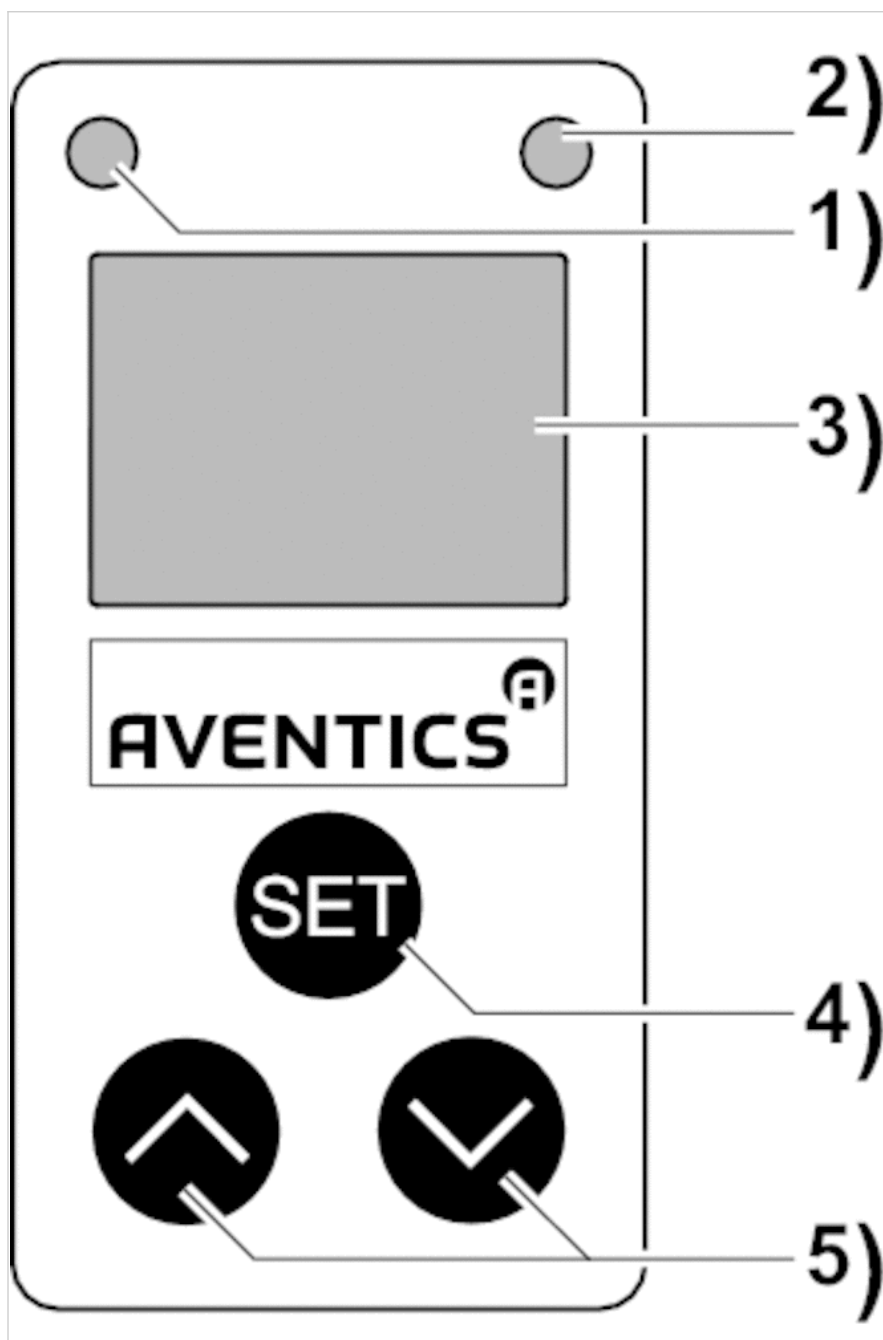
Fig. 2



1) cylinder screw M5x35 (included in scope of delivery)

2) O-ring $\varnothing 5 \times 1,5$ (included)

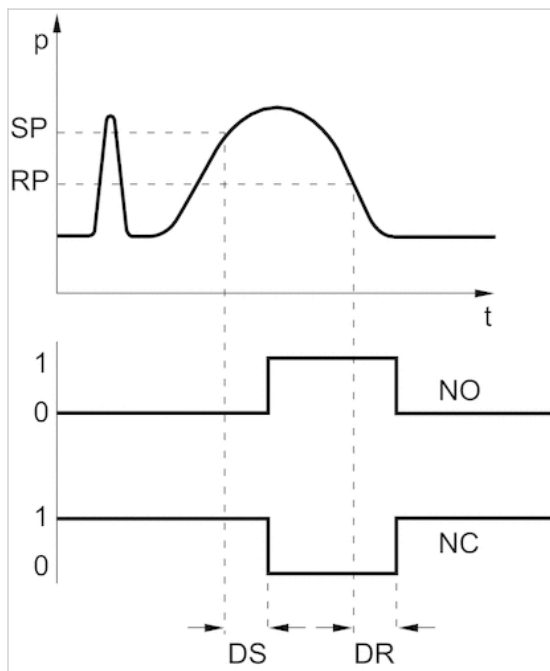
Display and operation area



- 1) LED for switch output 1
- 2) LED for switch output 2
- 3) Display (pressure, operating modes, navigation)
- 4) Confirm menu/menu item selection
- 5) Button for menu item/parameter change selection

Diagrams

Pressure-voltage characteristics curve



SP = switching point

RP = resetting point

NO = Switching function open

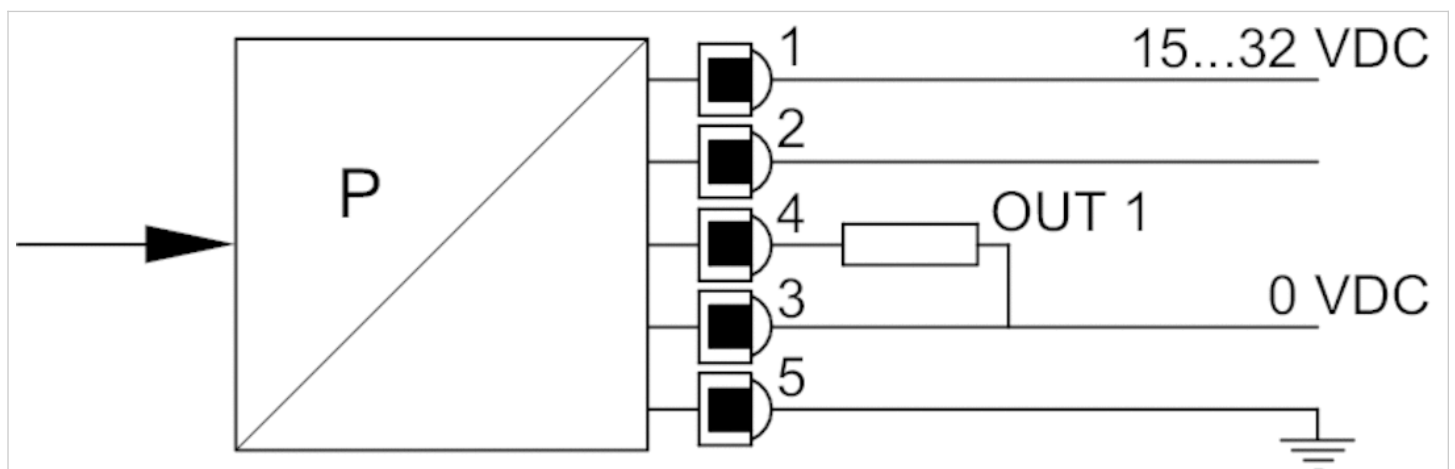
NC = Switching function closed without current

DS = Delay for the switching point

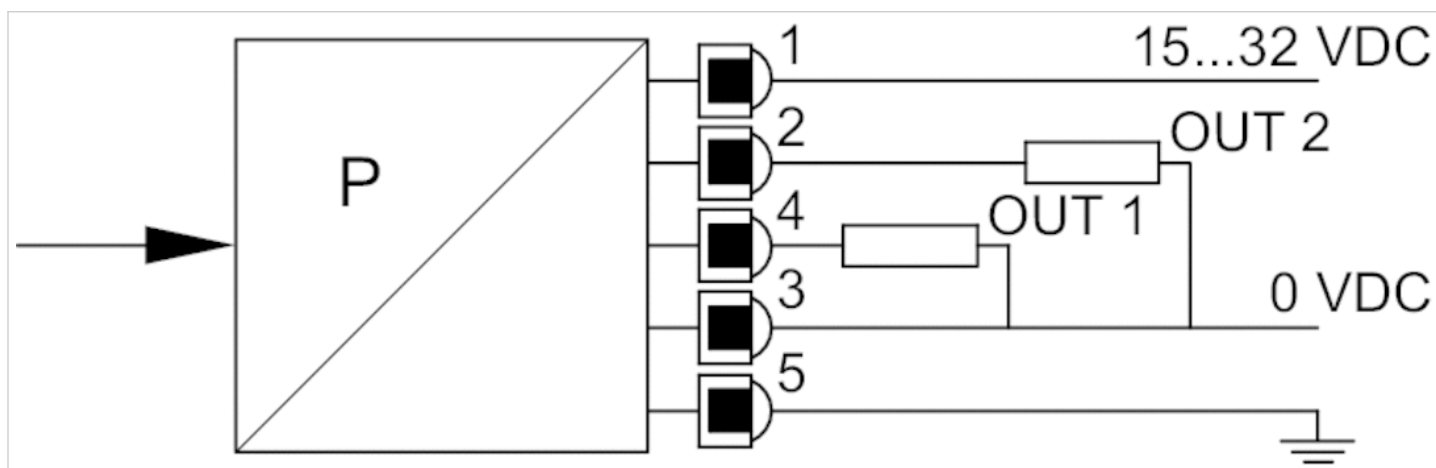
DR = Delay for the resetting point

Circuit diagram

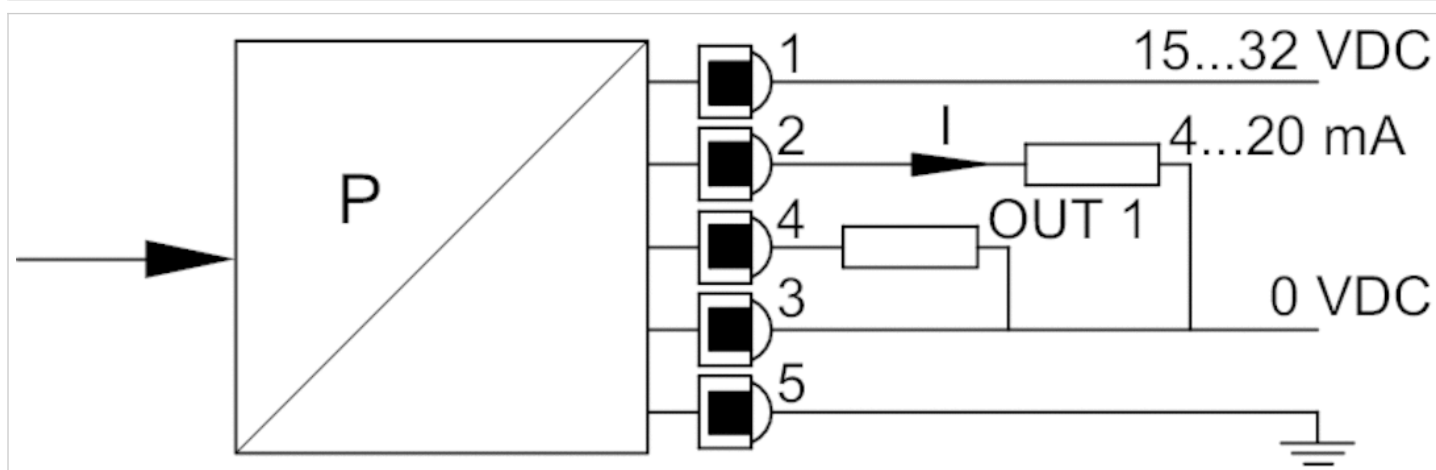
Block diagram, 1 x PNP



Block diagram, 2 x PNP

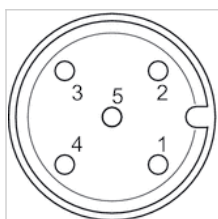


Block diagram, 1x PNP and 1x analog



Pin assignments

Pin assignments



pin 1: signal + UB, color: brown pin 2: signal: out 2 (PNP)/analog 4 - 20 mA, color: white pin 3: signal: 0 volt, color: blue pin 4: signal: out 1 (PNP), color: black pin 5: signal: FE, color: gray

Pressure Switches, Series PM1

- Operating pressure -0.9 ... 0 -0.9 ... 3 0.2 ... 16 bar
- Mechanical
- Spring-loaded bellows, adjustable
- Electr. connection Plug EN 175301-803, form A
- Compressed air connection Internal thread G 1/4 Flange with O-ring Ø 5x1,5



Type	Mechanical
Function	change-over contact (mechanical)
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-10 ... 80 °C
Medium	Compressed air Hydraulic oil
Measurement	Relative pressure
Switching element	microswitch (input/output)
Protection against overpressure	80 bar
Max. switching frequency	1,5 Hz
Shock resistance max.	15 g
Vibration resistance	10 g (60 - 500 Hz)
Repeatability (% of full scale value)	± 1 %
Switching point	adjustable
Hysteresis	max. switching pressure difference
DC operating voltage min./max.	12 ... 30 V DC
Operational voltage AC min./max.	12 ... 250 V AC
Mounting types	via through holes
Protection class	IP65
Electr. connection	Plug EN 175301-803, form A
Weight	0.16 kg

Technical data

Part No.		Type	Operating pressure range	Compressed air connection
			min./max.	
R412010711		PM1-M3-G014	-0.9 ... 0 bar	Internal thread, G 1/4
R412022752		PM1-M3-G014	-0.9 ... 3 bar	Internal thread, G 1/4
R412010712		PM1-M3-G014	0.2 ... 16 bar	Internal thread, G 1/4
R412010713		PM1-M3-G014	0.2 ... 16 bar	Internal thread, G 1/4
R412010714		PM1-M3-F001	-0.9 ... 0 bar	Flange with O-ring, Ø 5x1,5
R412010715		PM1-M3-F001	0.2 ... 16 bar	Flange with O-ring, Ø 5x1,5
R412010718		PM1-M3-F001	0.2 ... 16 bar	Flange with O-ring, Ø 5x1,5

Part No.	Scope of delivery	Fig.	
R412010711	With valve plug connector	Fig. 1	-
R412022752	Without valve plug connector	Fig. 1	-
R412010712	Without valve plug connector	Fig. 1	1)
R412010713	With valve plug connector	Fig. 1	1)
R412010714	With valve plug connector	Fig. 2	-
R412010715	Without valve plug connector	Fig. 2	1)

Part No.	Scope of delivery	Fig.	
R412010718	With valve plug connector	Fig. 2	1)

1) Min. switching pressure range 0.2 bar falling/0.5 bar rising

Technical information

Switching function increasing pressure: contact switches from 1-2 to 1-3.

Switching function decreasing pressure: contact switches from 1-3 to 1-2.

Notice:Too-high currents can damage contacts. Inductive or capacitive loads must be equipped with appropriate spark-quenching!

The microswitch has silver-plated contacts.

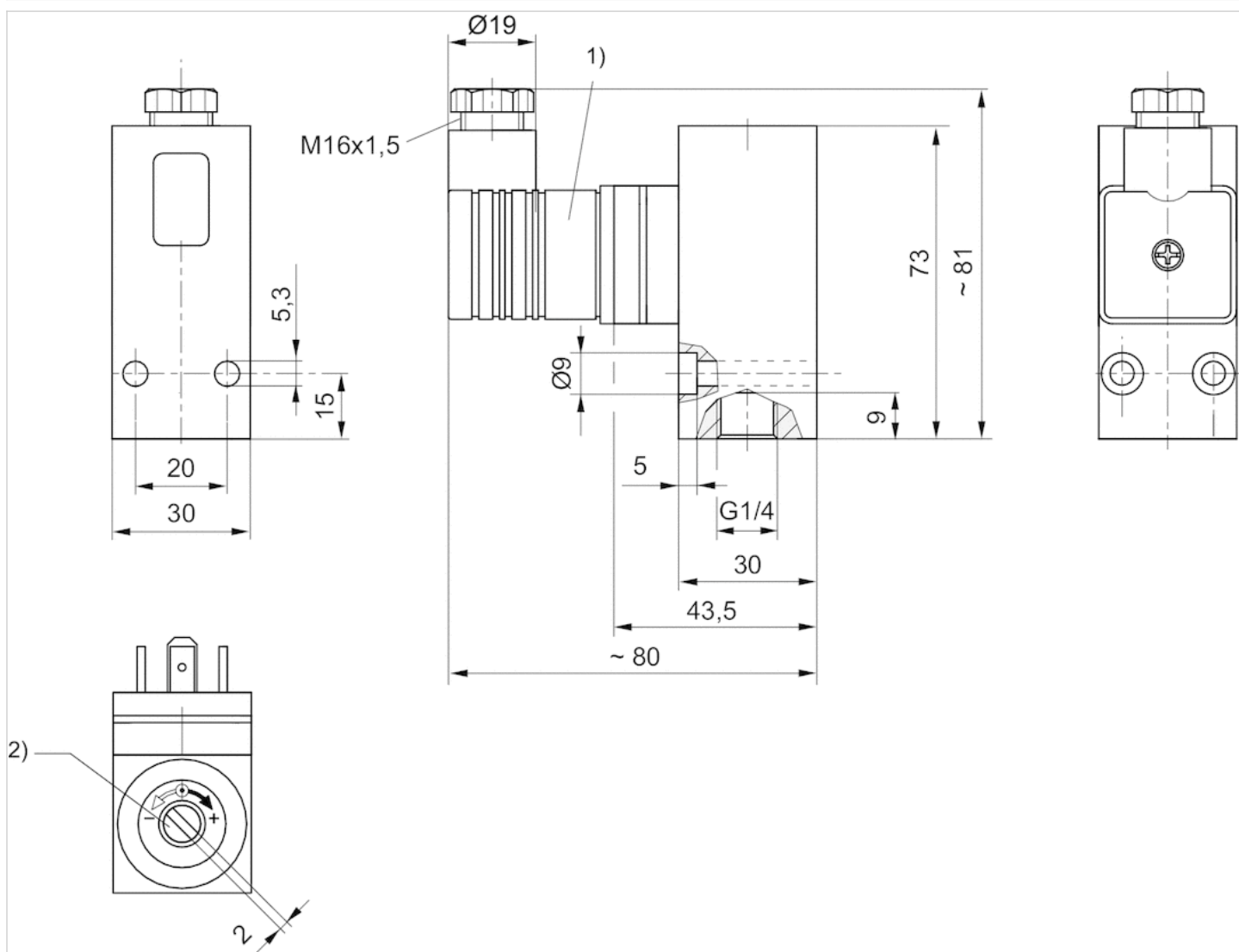
Please observe the pin assignment when selecting plug connectors.

Technical information

Material	
Housing	Aluminum
Seals	Acrylonitrile butadiene rubber
Electr. connection	Brass, nickel-plated

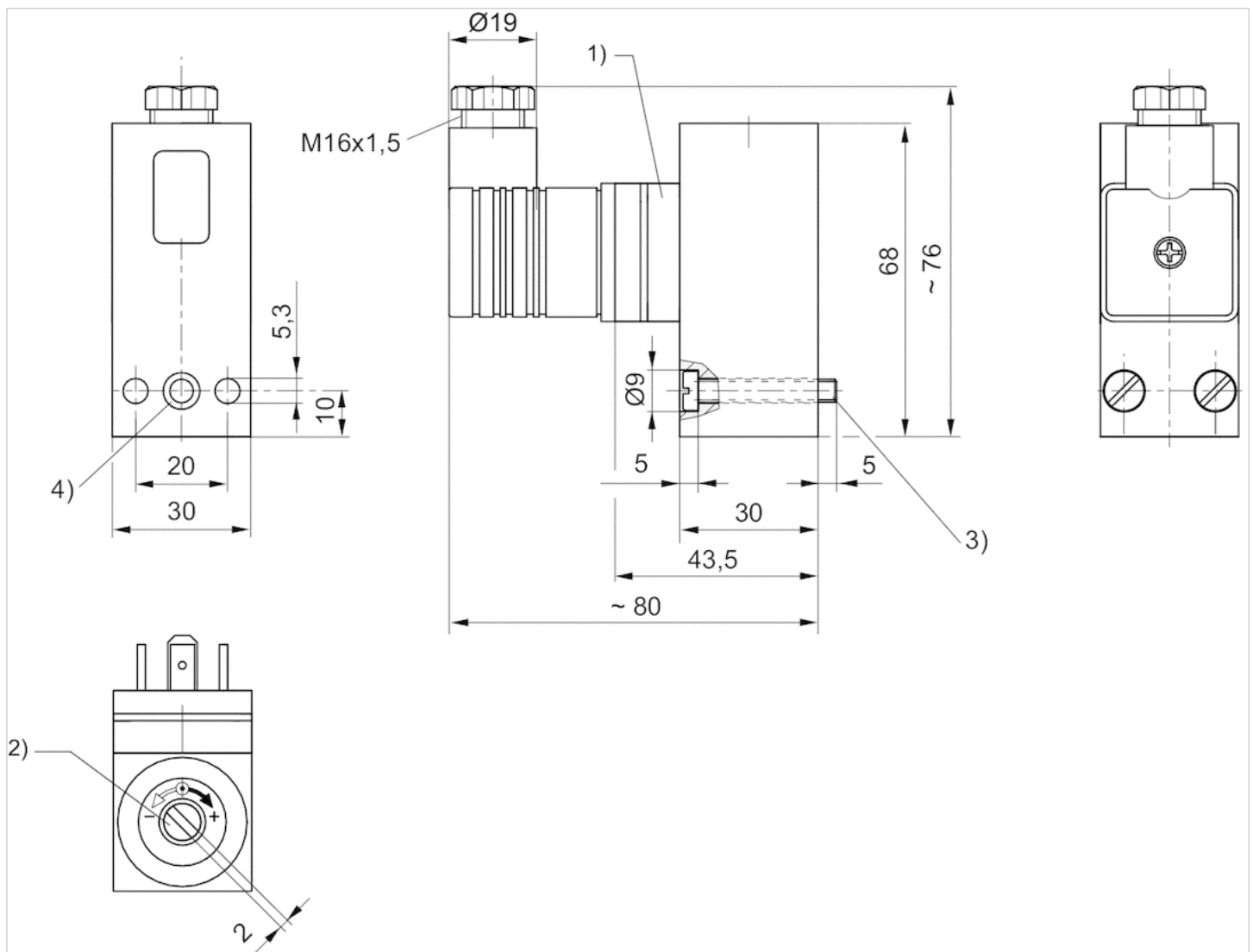
Dimensions

Fig. 1



- 1) Valve plug connector
2) Adjustment screw, self-holding

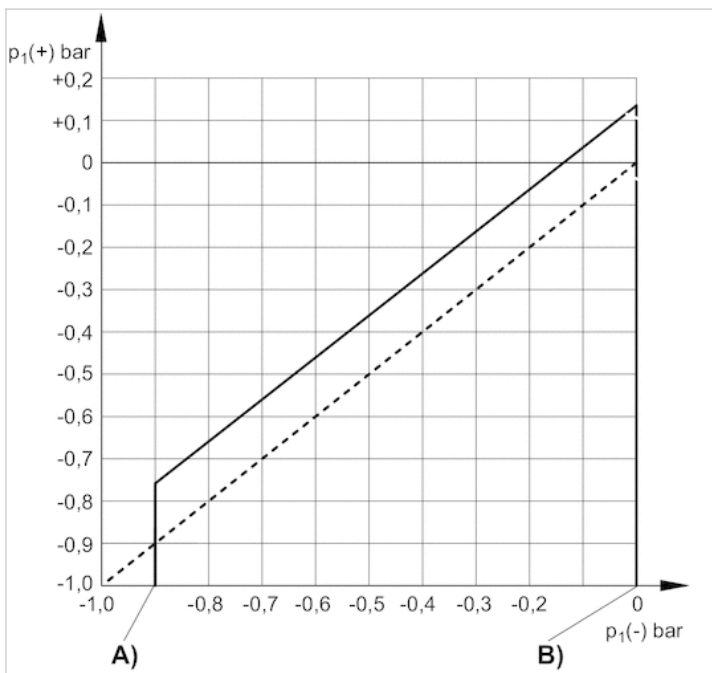
Fig. 2



- 1) Valve plug connector
- 2) Adjustment screw, self-holding
- 3) cylinder screw M5x30 (included in scope of delivery)
- 4) O-ring $\varnothing 5 \times 1,5$ (included)

Diagrams

differential switching pressure characteristic curve (-0,9 - 0 bar)



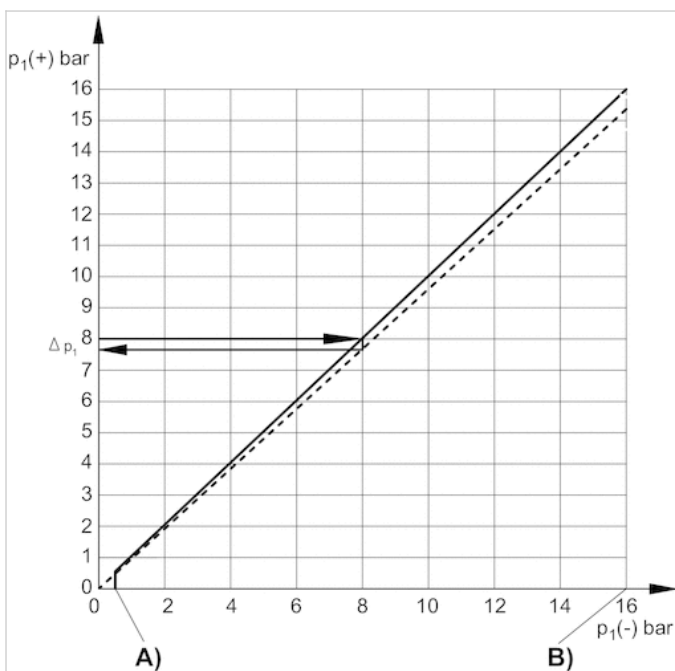
A) $p_1(-)$, min.

B) $p_1(-)$, max.

$p_1(+)$ = upper switching pressure with increasing pressure

$p_1(-)$ = lower switching pressure with decreasing pressure

differential switching pressure characteristic curve (0,2 - 16 bar)



A) $p_1(-)$, min.

B) $p_1(-)$, max.

$p_1(+)$ = upper switching pressure with increasing pressure

$p_1(-)$ = lower switching pressure with decreasing pressure

Δp_1 = max. operating pressure difference or hysteresis

Example:

$p_1 (+) = 8 \text{ bar} > p_1 (-) = 7.6 \text{ bar}$
 $\Delta p_1 = 0.4 \text{ bar}$

max. permissible continuous current I max. [A] with ohmic load

U [V]	I [A] 1)	I [A] 2)
30	5	3
48	5	1,2
60	5	0,8
125	5	0,4
250	5	–

reference cycle: 30/min., reference temperature: + 30 °C

- 1) AC
- 2) DC

max. permissible continuous current I max. [A] with inductive load

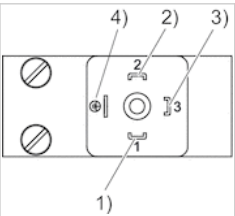
U [V]	I [A] 1) 3)	I [A] 2) 4)
30	3	2
48	3	0.55
60	3	0.4
125	3	0.15
250	3	–

reference cycle: 30/min., reference temperature: + 30 °C

- 1) AC
- 2) DC
- 3) $\cos \approx 0,7^\circ$
- 4) $L/R \approx 10 \text{ ms}$

Pin assignments

PIN assignment for valve plug connectors



Pin	1	2	3	4
Allocation	+UB	break contact	NO (make contact)	GND

Pressure Switches, Series PM1

- Operating pressure -0.9 ... 0 0.2 ... 16 bar
- Mechanical
- Spring-loaded bellow, adjustable
- Electr. connection Plug M12x1
- Compressed air connection Internal thread G 1/4 Flange with O-ring Ø 5x1,5



Type	Mechanical
Function	change-over contact (mechanical)
Mounting orientation	Any
Working pressure min./max.	See table below
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-10 ... 80 °C
Medium	Compressed air Hydraulic oil
Measurement	Relative pressure
Switching element	microswitch (input/output)
Protection against overpressure	80 bar
Max. switching frequency	1,5 Hz
Shock resistance max.	15 g
Vibration resistance	10 g (60 - 500 Hz)
Repeatability (% of full scale value)	± 1 %
Switching point	adjustable
Hysteresis	max. switching pressure difference
DC operating voltage min./max.	12 ... 30 V DC
Operational voltage AC min./max.	12 ... 30 V AC
Mounting types	via through holes
Protection class	IP67
Electr. connection	Plug M12x1
Weight	0.15 kg

Technical data

Part No.		Type	Operating pressure range	Compressed air connection
			min./max.	
R412010716		PM1-M3-G014	-0.9 ... 0 bar	Internal thread, G 1/4
R412010717		PM1-M3-G014	0.2 ... 16 bar	Internal thread, G 1/4
R412010719		PM1-M3-F001	-0.9 ... 0 bar	Flange with O-ring, Ø 5x1,5
R412010720		PM1-M3-F001	0.2 ... 16 bar	Flange with O-ring, Ø 5x1,5

Part No.	Fig.	
R412010716	Fig. 1	-
R412010717	Fig. 1	1)
R412010719	Fig. 2	-
R412010720	Fig. 2	1)

1) Min. switching pressure range 0.2 bar falling/0.5 bar rising

Technical information

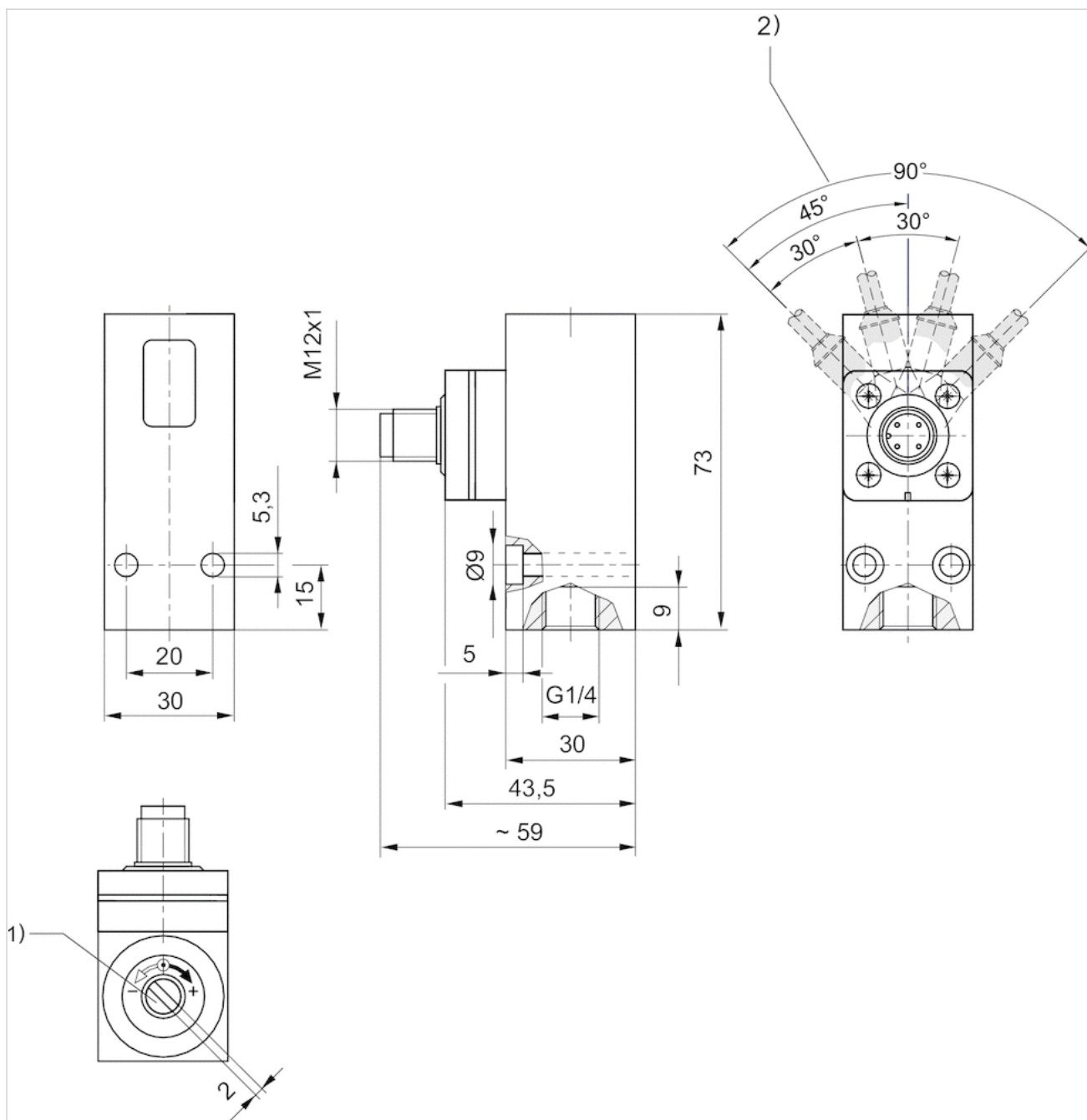
Switching function increasing pressure: contact switches from 1-2 to 1-3.
Switching function decreasing pressure: contact switches from 1-3 to 1-2.
Notice: Too-high currents can damage contacts. Inductive or capacitive loads must be equipped with appropriate spark-quenching!
The microswitch has silver-plated contacts.

Technical information

Material	
Housing	Aluminum
Seals	Acrylonitrile butadiene rubber
Electr. connection	Brass, nickel-plated

Dimensions

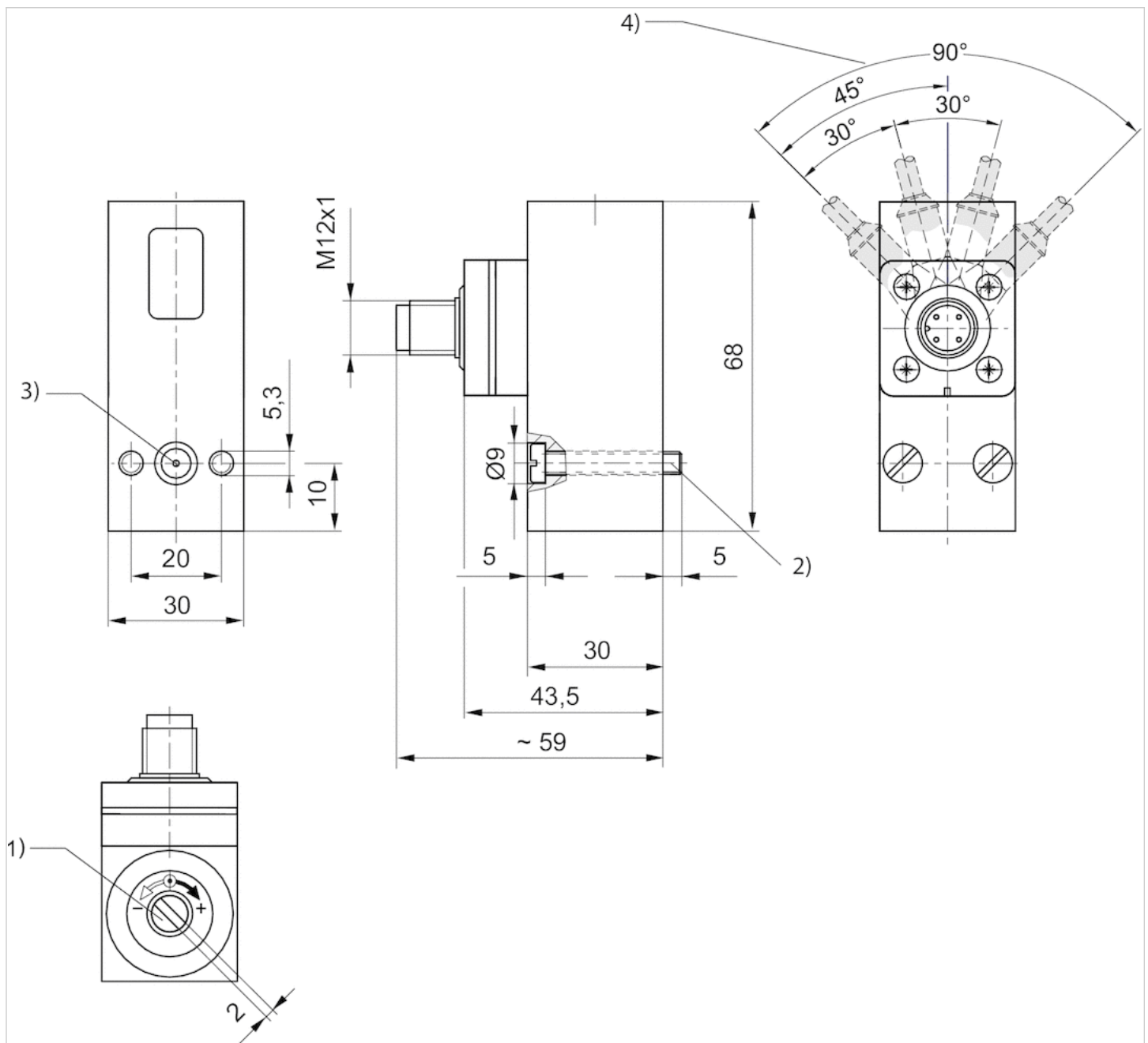
Fig. 1



1) Adjustment screw, self-holding

2) Detent position

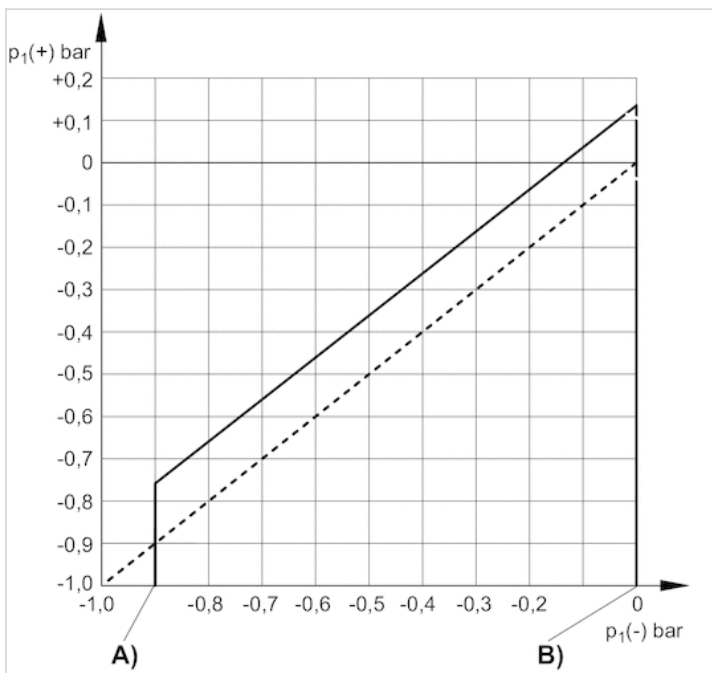
Fig. 2



- 1) Adjustment screw, self-holding
- 2) cylinder screw M5x30 (included in scope of delivery)
- 3) O-ring Ø5x1,5 (included)
- 4) Detent position

Diagrams

differential switching pressure characteristic curve (-0,9 - 0 bar)



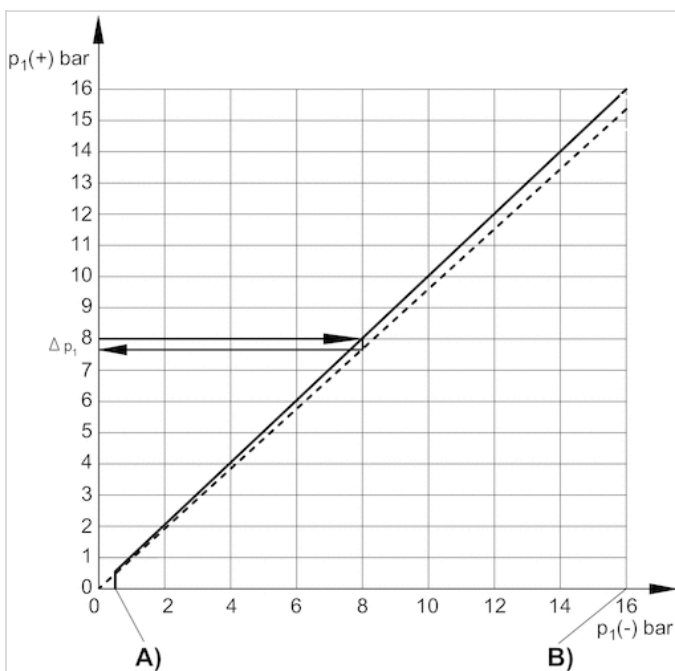
A) $p_1(-)$, min.

B) $p_1(-)$, max.

$p_1(+)$ = upper switching pressure with increasing pressure

$p_1(-)$ = lower switching pressure with decreasing pressure

differential switching pressure characteristic curve (0,2 - 16 bar)



A) $p_1(-)$, min.

B) $p_1(-)$, max.

$p_1(+)$ = upper switching pressure with increasing pressure

$p_1(-)$ = lower switching pressure with decreasing pressure

Δp_1 = max. operating pressure difference or hysteresis

Example:

$p_1 (+) = 8 \text{ bar} > p_1 (-) = 7.6 \text{ bar}$
 $\Delta p_1 = 0.4 \text{ bar}$

max. permissible continuous current $I_{\text{max.}}$ [A] with ohmic load

U [V]	I [A] 1)	I [A] 2)
30-250	3A	
30 / 48 / 60 / 125		3 / 1,2 / 0,8 / 0,4

reference cycle: 30/min., reference temperature: + 30 °C

1) AC

2) DC

max. permissible continuous current $I_{\text{max.}}$ [A] with inductive load

U [V]	I [A] 1) 3)	I [A] 2) 4)
30-250	3A	
30 / 48 / 60 / 125		2 / 0,55 / 0,4 / 0,2

reference cycle: 30/min., reference temperature: + 30 °C

1) AC

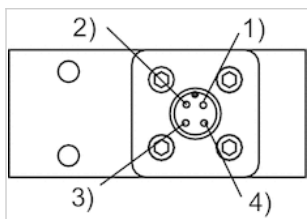
2) DC

3) $\cos \approx 0,7^\circ$

4) $L/R \approx 10 \text{ ms}$

Pin assignments

Pin assignments



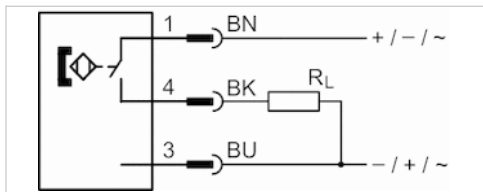
Pin	1	2	3	4
Allocation	+UB	break contact	No function	NO (make contact)

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M12, 4-pin, with knurled screw
- UL certification
- Reed
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, RPC, ICS-D2, ICM, KHZ, TRR



Certificates	CE declaration of conformity cULus RoHS
Ambient temperature min./max.	-30 ... 80 °C
Protection class	IP65 IP67
Switching point precision	±0,1 mT
Min./max. DC operating voltage	10 ... 30 V DC
Min./max. AC operating voltage	10 ... 30 V AC
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
Switching capacity	Reed, 3-pin: max. 6 W
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Cable length L	0.3 m



Technical data

Part No.	for	Type of contact	Cable length L
R412022876	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	0.3 m

Part No.	Voltage drop U at I _{max}	DC switching current, max.
R412022876	≤ 0,1 V	0.3 A

Part No.	AC switching current, max.	Max. switching frequency
R412022876	0.5 A	400 Hz

Part No.	Version
R412022876	Protected against polarity reversal

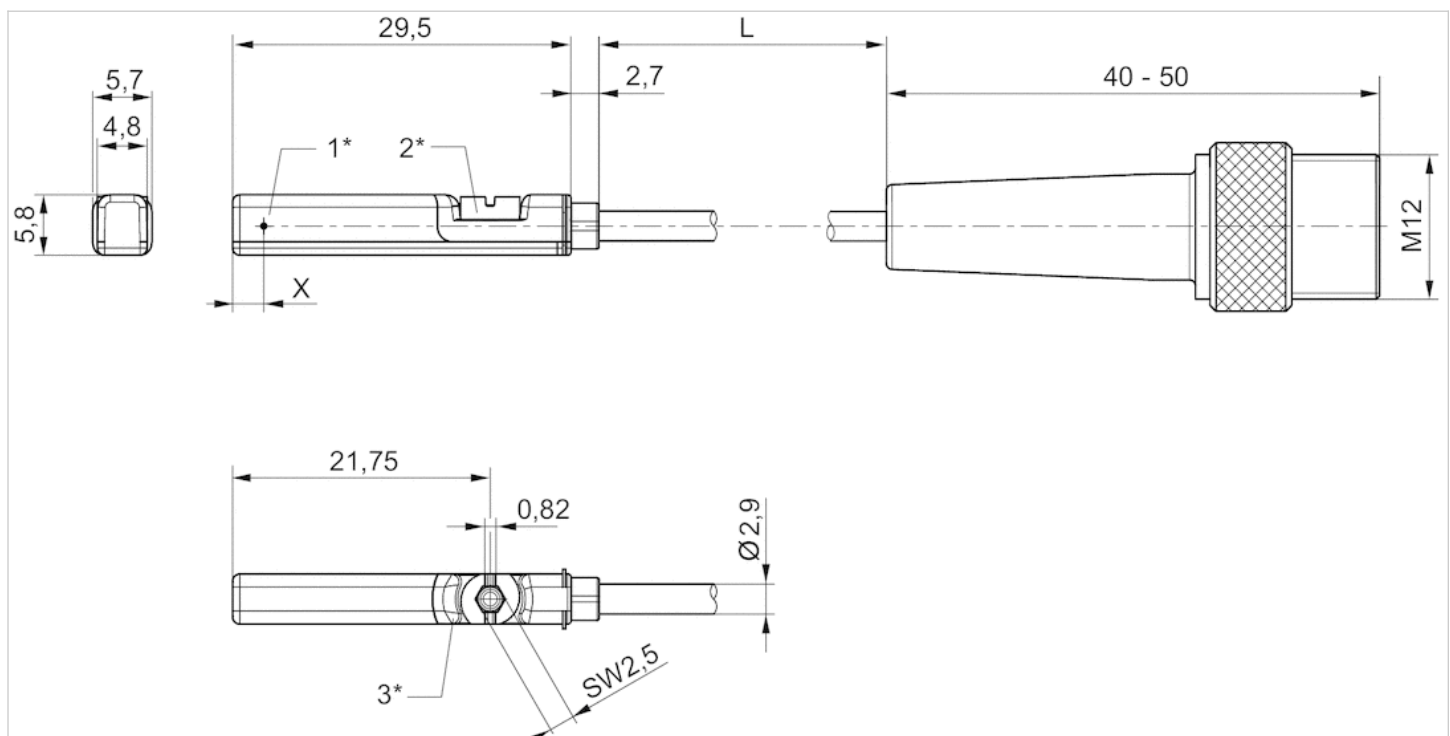
The product of operating voltage and continuous current must not exceed the maximum switching capacity.

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Dimensions

Dimensions



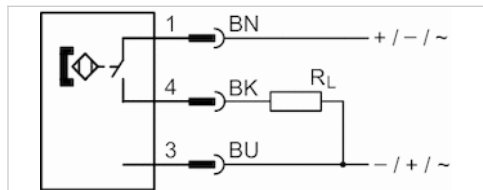
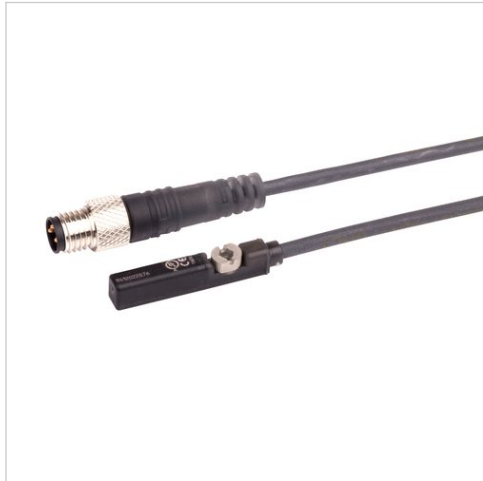
1* = switching point 2* = locking screw 3* = LED window, transparent

L = cable length

X = PNP: 11,6 mm, reed: 8,3 mm

Sensor, Series ST6

- 6 mm T-slot
- with cable
- Plug, M8, 3-pin, with knurled screw
- UL certification
- Reed
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, RPC, ICS-D2, ICM, KHZ, TRR



Certificates	CE declaration of conformity cULus RoHS
Ambient temperature min./max.	-30 ... 80 °C
Protection class	IP65 IP67
Switching point precision	±0,1 mT
Min./max. DC operating voltage	10 ... 30 V DC
Min./max. AC operating voltage	10 ... 30 V AC
Hysteresis	≥ 0,2 mT
Switching logic	NO (make contact)
Switching capacity	Reed, 3-pin: max. 6 W
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Cable length L	0.3 0.5 m

Technical data

Part No.	for	Type of contact	Cable sheath
R412022873	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	Polyurethane
R412022875	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	Polyvinyl chloride
R412022874	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	Polyurethane

Part No.	Cable length L	Voltage drop U at I _{max}	DC switching current, max.
R412022873	0.3 m	I*Rs	0.3 A
R412022875	0.3 m	I*Rs	0.3 A
R412022874	0.5 m	I*Rs	0.3 A

Part No.	AC switching current, max.	Max. switching frequency
R412022873	0.5 A	400 Hz
R412022875	0.5 A	400 Hz
R412022874	0.5 A	400 Hz

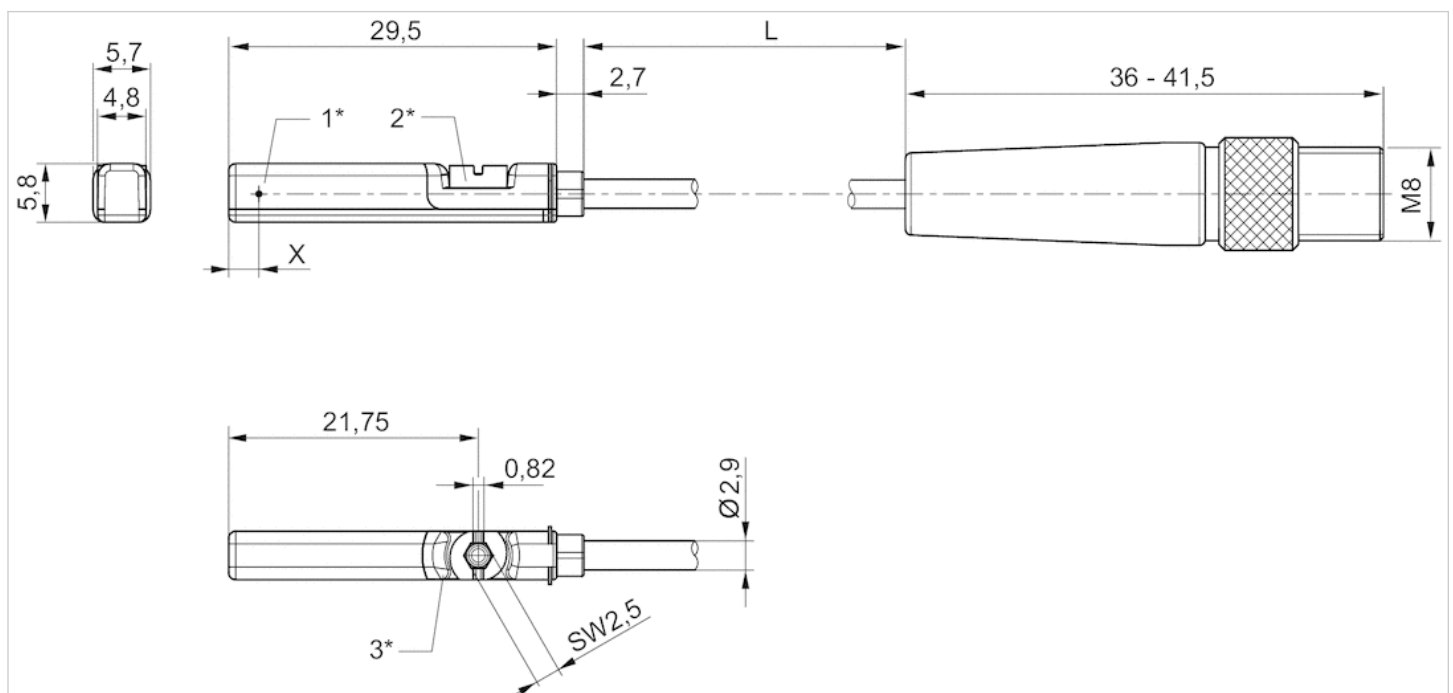
Part No.	Version
R412022873	Protected against polarity reversal
R412022875	Protected against polarity reversal
R412022874	Protected against polarity reversal

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane Polyvinyl chloride
Locking screw	Stainless steel

Dimensions

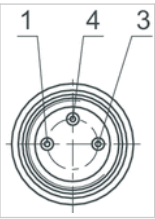
Dimensions



1* = switching point 2* = locking screw 3* = LED window, transparent
 L = cable length
 X = electronic: 11,6 mm, Reed: 8,3 mm

Pin assignments

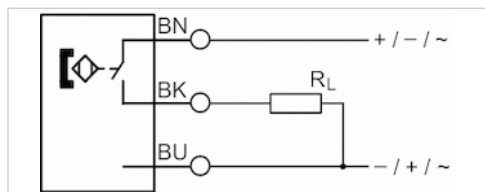
Pin assignments



Pin	1	3	4
Allocation	(+)	(-)	(OUT)

Sensor, Series ST6

- 6 mm T-slot
- with cable
- open cable ends, 3-pin
- UL certification
- Reed
- Direct mounting for series PRA, PRE, CCI, KPZ, SSI, GPC, CVI
- Indirect mounting for series TRB, ITS, CCL-IS, MNI, CSL-RD, RPC, ICS-D2, ICM, KHZ, TRR



Certificates

Ambient temperature min./max.

Protection class

Switching point precision

Min./max. DC operating voltage

Min./max. AC operating voltage

Hysteresis

Switching logic

Switching capacity

LED status display

Vibration resistance

Shock resistance

Cable length L

CE declaration of conformity cULus RoHS

-30 ... 80 °C

IP65 IP67 IP69K

±0,1 mT

10 ... 30 V DC

10 ... 30 V AC

≥ 0,2 mT

NO (make contact)

Reed, 3-pin: max. 6 W

Yellow

10 - 55 Hz, 1 mm

30 g / 11 ms

3 5 10 m

Technical data

Part No.	for	Type of contact	Cable length L
R412022869	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	3 m
R412022870	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	5 m
R412022871	PRA, PRE, CCI, KPZ, SSI, GPC, CVI	Reed	10 m

Part No.	Voltage drop U at I _{max}	DC switching current, max.
R412022869	I [*] R _s	0.3 A
R412022870	≤ 0,1 V	0.3 A
R412022871	I [*] R _s	0.3 A

Part No.	AC switching current, max.	Max. switching frequency
R412022869	0.5 A	400 Hz
R412022870	0.5 A	400 Hz
R412022871	0.5 A	400 Hz

Part No.	Version	Fig.
R412022869	Protected against polarity reversal	Fig. 2
R412022870	Protected against polarity reversal	Fig. 2
R412022871	Protected against polarity reversal	Fig. 2

open cable ends, 3-pin, The product of operating voltage and continuous current must not exceed the maximum switching capacity.

Technical information

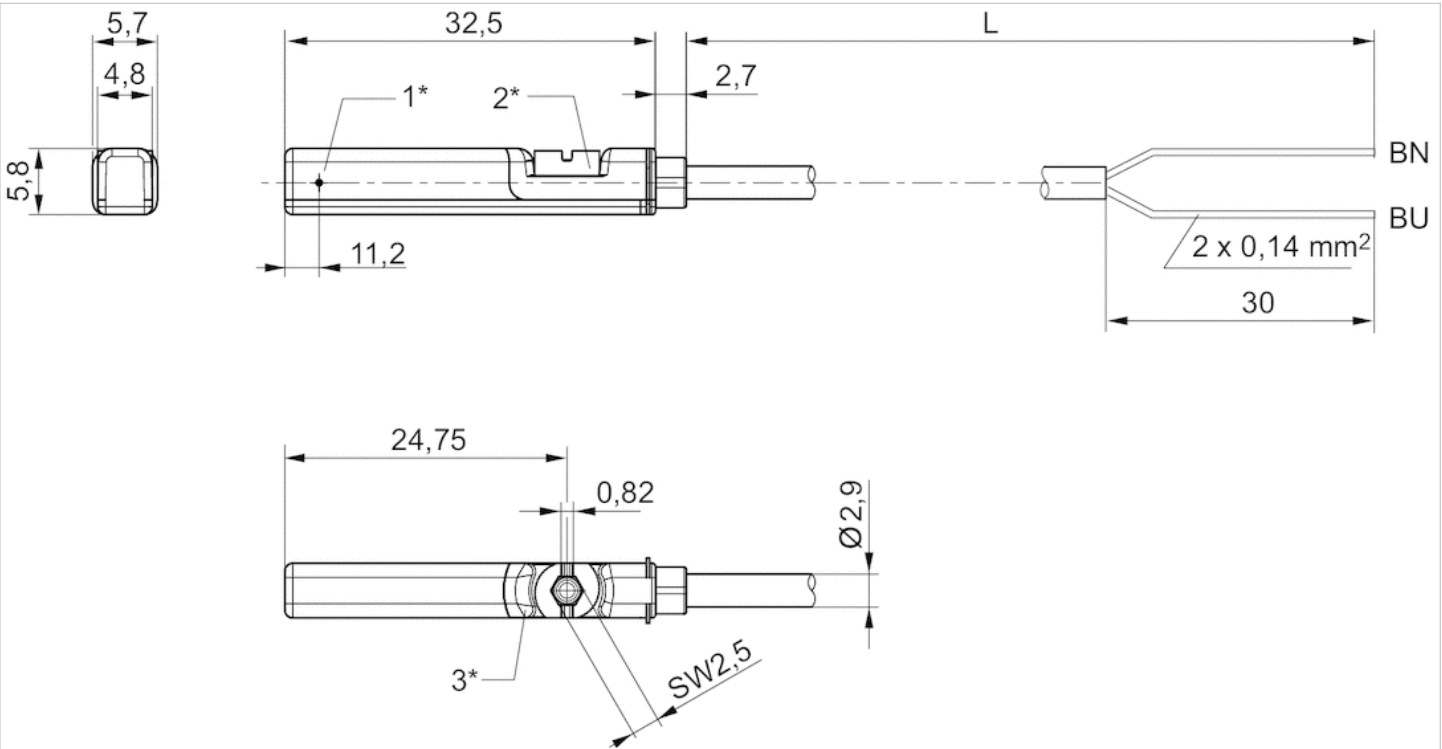
No cULus certification for 230 V variant.

Technical information

Material	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

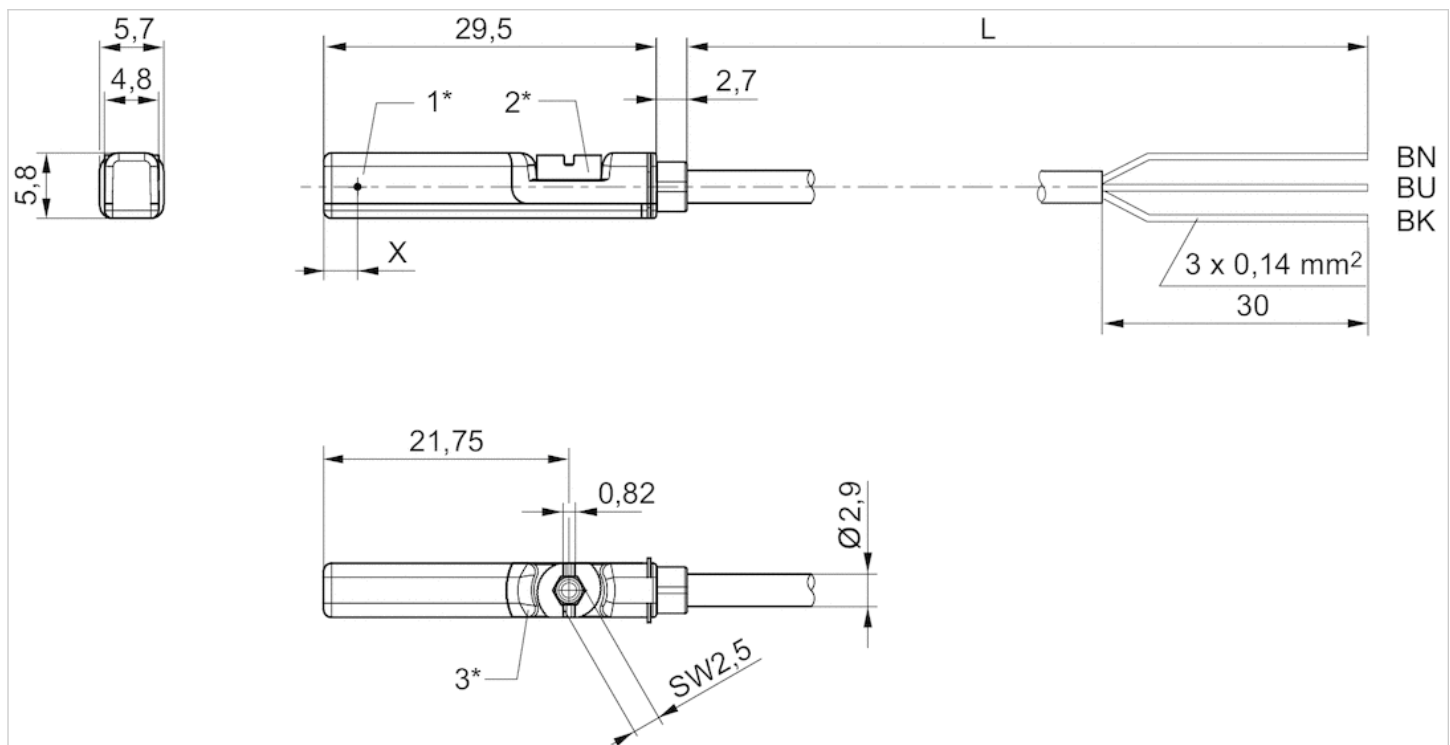
Dimensions

Fig. 1



1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
BN=brown, BU=blue

Fig. 2



1* = switching point 2* = locking screw 3* = LED window, transparent

L = cable length

BN = brown, BK = black, BU = blue

X = electronic: 11.6 mm

QR1-S-RPN standard series

- Straight fitting
- External thread
- G 1/8 G 1/4
- push-in fitting
- Ø 4 Ø 6 Ø 8 Ø 10 Ø 12
- QR1-S-RPN



Working pressure min./max.

-0.95 ... 10 bar

Ambient temperature min./max.

0 ... 60 °C

Weight per piece

See table below

Technical data

Part No.	Port G	Port D	Delivery unit	Weight per piece
2121004180	G 1/8	Ø 4	10 piece	0.014 kg
2121006180	G 1/8	Ø 6	10 piece	0.016 kg
2121008180	G 1/8	Ø 8	10 piece	0.022 kg
R412005002	G 1/8	Ø 10	10 piece	0.024 kg
R412005003	G 1/8	Ø 12	10 piece	0.036 kg
2121004140	G 1/4	Ø 4	10 piece	0.02 kg
2121006140	G 1/4	Ø 6	10 piece	0.021 kg
2121008140	G 1/4	Ø 8	10 piece	0.024 kg
2121010140	G 1/4	Ø 10	10 piece	0.026 kg
2121012140	G 1/4	Ø 12	10 piece	0.039 kg

Technical information

The series QR1 (plastic) and QR2 (metal) can not be combined
Thread seal with captive O-ring

For further information about assembling and tolerances of adaptable tubing can be found in the "Technical information" document (available in the MediaCentre).

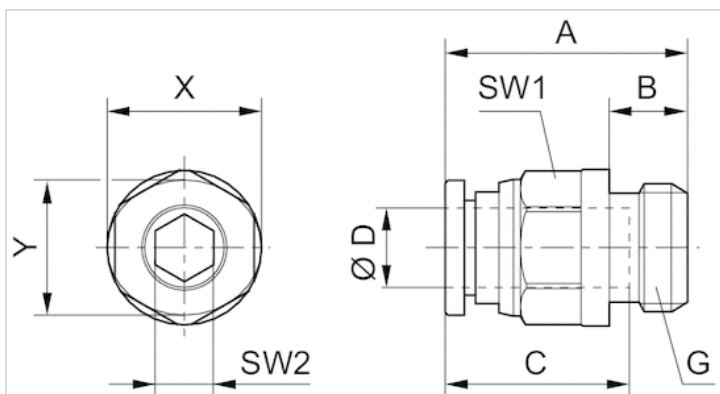
Technical information

Material	
Material	nickel-plated
Housing	Brass, nickel-plated

Material	
Seal	Acrylonitrile butadiene rubber
Tooth lock washer	Stainless steel
Release ring	Polyoxymethylene
Release ring holder	Die cast zinc Brass, nickel-plated
Thread	Brass, nickel-plated

Dimensions

Dimensions



Dimensions

Part No.	Port D	Port G	A	B	C	SW1	SW2	X	Y
2121004180	Ø 4	G 1/8	20.1	5	16	10	3	12	10
2121006180	Ø 6	G 1/8	24.6	5	17	12	4	14	12
2121008180	Ø 8	G 1/8	26.5	5	18.5	14	5	16	14
R412005002	Ø 10	G 1/8	28.9	5	21	17	4	19	17
R412005003	Ø 12	G 1/8	33.5	5	22.5	21	4	23	21
2121004140	Ø 4	G 1/4	19.1	6	16	10	3	12	10
2121006140	Ø 6	G 1/4	21.6	6	17	12	4	14	12
2121008140	Ø 8	G 1/4	22.4	6	18.5	14	6	16	14
2121010140	Ø 10	G 1/4	29.9	6	21	17	7	19	17
2121012140	Ø 12	G 1/4	33.4	6	22.5	21	7	23	21

QR1-S-RVT standard series

- Elbow fitting
- External thread
- G 1/8 G 1/4
- push-in fitting
- Ø 4 Ø 6 Ø 8 Ø 10 Ø 12
- QR1-S-RVT



Working pressure min./max.

-0.95 ... 10 bar

Ambient temperature min./max.

0 ... 60 °C

Weight per piece

See table below

Technical data

Part No.	Port G	Port D	Delivery unit	Weight per piece
2122004180	G 1/8	Ø 4	10 piece	0.012 kg
2122006180	G 1/8	Ø 6	10 piece	0.013 kg
2122008180	G 1/8	Ø 8	10 piece	0.015 kg
R412005094	G 1/8	Ø 10	10 piece	0.028 kg
R412005095	G 1/8	Ø 12	10 piece	0.039 kg
2122004140	G 1/4	Ø 4	10 piece	0.017 kg
2122006140	G 1/4	Ø 6	10 piece	0.019 kg
2122008140	G 1/4	Ø 8	10 piece	0.023 kg
2122010140	G 1/4	Ø 10	10 piece	0.029 kg
2122012140	G 1/4	Ø 12	10 piece	0.042 kg

Technical information

The series QR1 (plastic) and QR2 (metal) can not be combined
Thread seal with captive O-ring

For further information about assembling and tolerances of adaptable tubing can be found in the "Technical information" document (available in the MediaCentre).

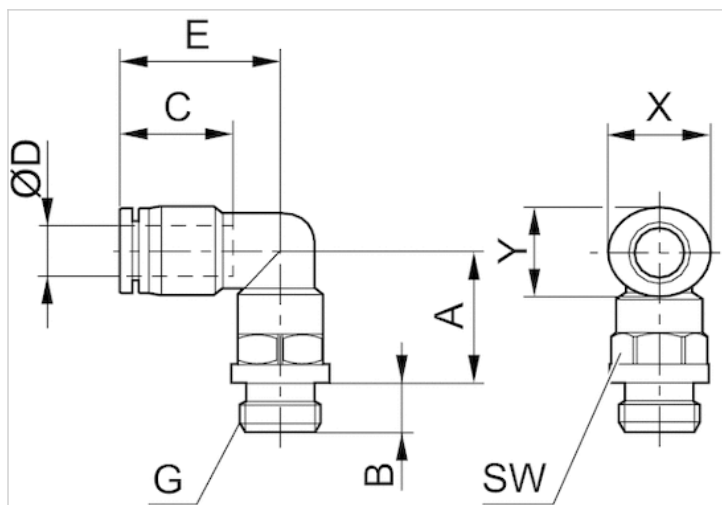
Technical information

Material	
Material	nickel-plated
Housing	Polybutyleneterephthalate

Material	
Seal	Acrylonitrile butadiene rubber
Tooth lock washer	Stainless steel
Release ring	Polyoxymethylene
Release ring holder	Die cast zinc Brass, nickel-plated
Thread	Brass, nickel-plated

Dimensions

Dimensions



Dimensions

Part No.	Port D	Port G	A	B	C	E	SW	X	Y
2122004180	Ø 4	G 1/8	9.5	5	16	18.5	13	12	10
2122006180	Ø 6	G 1/8	10.7	5	17	20.3	13	14	12
2122008180	Ø 8	G 1/8	14.4	5	18.5	22.6	13	16	14
R412005094	Ø 10	G 1/8	16.5	5	21	27	16	19	17
R412005095	Ø 12	G 1/8	18.2	5	22.5	29.2	16	23	21
2122004140	Ø 4	G 1/4	9.5	6	16	18.5	16	12	10
2122006140	Ø 6	G 1/4	10.7	6	17	20.3	16	14	12
2122008140	Ø 8	G 1/4	11.5	6	18.5	22.6	16	16	14
2122010140	Ø 10	G 1/4	16.5	6	21	27	16	19	17
2122012140	Ø 12	G 1/4	18.3	6	22.5	29.2	16	23	21

Series QR2-S-RPN standard

- Straight fitting
- External thread
- G 1/8 G 1/4
- push-in fitting
- Ø 4 Ø 5 Ø 6 Ø 8 Ø 10 Ø 12
- QR2-S-RPN



Working pressure min./max.

-0.95 ... 16 bar

Ambient temperature min./max.

-20 ... 80 °C

Weight per piece

See table below

Technical data

Part No.	Port G	Port D	Delivery unit	Weight per piece	Fig.
1823373041	G 1/8	Ø 4	25 piece	0.005 kg	Fig. 1
1823373042	G 1/8	Ø 5	10 piece	0.01 kg	Fig. 1
1823373043	G 1/8	Ø 6	25 piece	0.011 kg	Fig. 1
1823373044	G 1/8	Ø 8	25 piece	0.012 kg	Fig. 1
1823373045	G 1/4	Ø 4	25 piece	0.012 kg	Fig. 1
1823373046	G 1/4	Ø 5	10 piece	0.013 kg	Fig. 1
1823373047	G 1/4	Ø 6	25 piece	0.015 kg	Fig. 1
1823373048	G 1/4	Ø 8	10 piece	0.016 kg	Fig. 1
1823373049	G 1/4	Ø 10	10 piece	0.026 kg	Fig. 1
1823391809	G 1/4	Ø 12	10 piece	0.031 kg	Fig. 1
R412004708	G 1/4	Ø 12	10 piece	0.022 kg	Fig. 2

Technical information

The series QR1 (plastic) and QR2 (metal) can not be combined
Thread seal with captive O-ring

For further information about assembling and tolerances of adaptable tubing can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Brass, nickel-plated
Seal	Acrylonitrile butadiene rubber
Tooth lock washer	Stainless steel
Release ring	Brass, nickel-plated
Thread	Brass, nickel-plated

Dimensions

Fig. 1

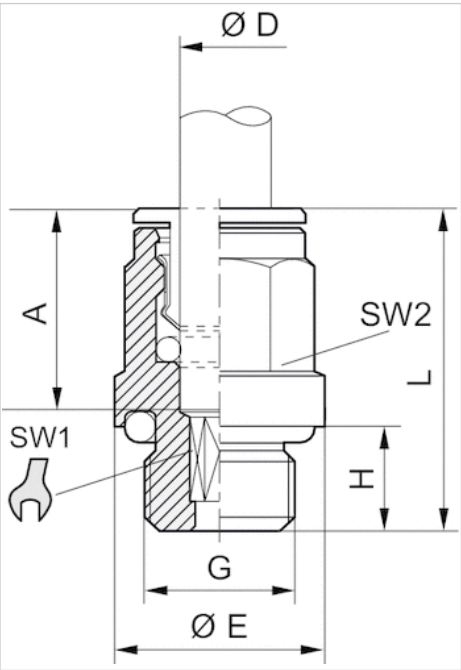
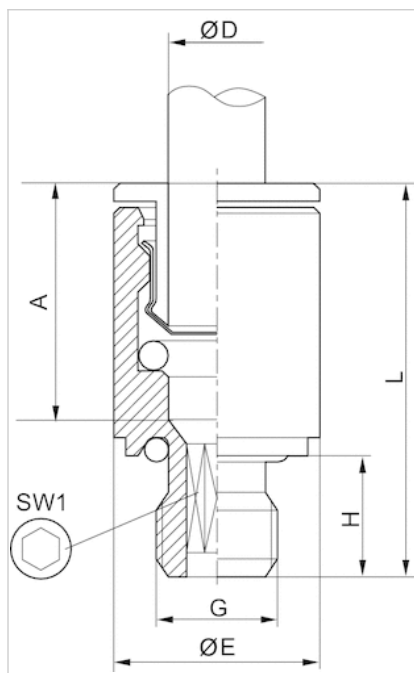


Fig. 2



Dimensions

Part No.	Port D	Port G	Ø E	H	L	A Insertion depth	SW 1	SW 2	Fig.
1823373041	Ø 4	G 1/8	13.5	6	20	15	2.5	9	Fig. 1
1823373042	Ø 5	G 1/8	13.5	6	22	16	4	10	Fig. 1
1823373043	Ø 6	G 1/8	13.5	6	24	16	4	11	Fig. 1
1823373044	Ø 8	G 1/8	13	6	26.5	18	5	13	Fig. 1
1823373045	Ø 4	G 1/4	17	8	21	15	2.5	9	Fig. 1
1823373046	Ø 5	G 1/4	17	8	22	16	4	10	Fig. 1
1823373047	Ø 6	G 1/4	17	6.5	22.5	16	4	11	Fig. 1
1823373048	Ø 8	G 1/4	17	8	25	18	6	13	Fig. 1
1823373049	Ø 10	G 1/4	16	8	29.5	19	7	16	Fig. 1
1823391809	Ø 12	G 1/4	16	6.5	30	20	7	18	Fig. 1
R412004708	Ø 12	G 1/4	17	8.3	31	7	-	-	Fig. 2

Series QR2-S-RVT standard

- Elbow fitting, rotatable
- External thread
- G 1/8 G 1/4
- push-in fitting
- Ø 4 Ø 6 Ø 8 Ø 10 Ø 12
- QR2-S-RVT



Working pressure min./max.

-0.95 ... 16 bar

Ambient temperature min./max.

-20 ... 80 °C

Weight per piece

See table below

Technical data

Part No.	Port G	Port D	Delivery unit	Weight per piece
1823391710	G 1/8	Ø 4	10 piece	0.018 kg
1823391711	G 1/8	Ø 6	10 piece	0.02 kg
1823391712	G 1/8	Ø 8	10 piece	0.022 kg
R412007687	G 1/8	Ø 10	5 piece	0.032 kg
1823391713	G 1/4	Ø 4	10 piece	0.024 kg
1823391714	G 1/4	Ø 6	10 piece	0.025 kg
1823391715	G 1/4	Ø 8	10 piece	0.027 kg
1823391718	G 1/4	Ø 10	5 piece	0.031 kg
1823391843	G 1/4	Ø 12	5 piece	0.042 kg

Technical information

The series QR1 (plastic) and QR2 (metal) can not be combined

Thread seal with captive O-ring

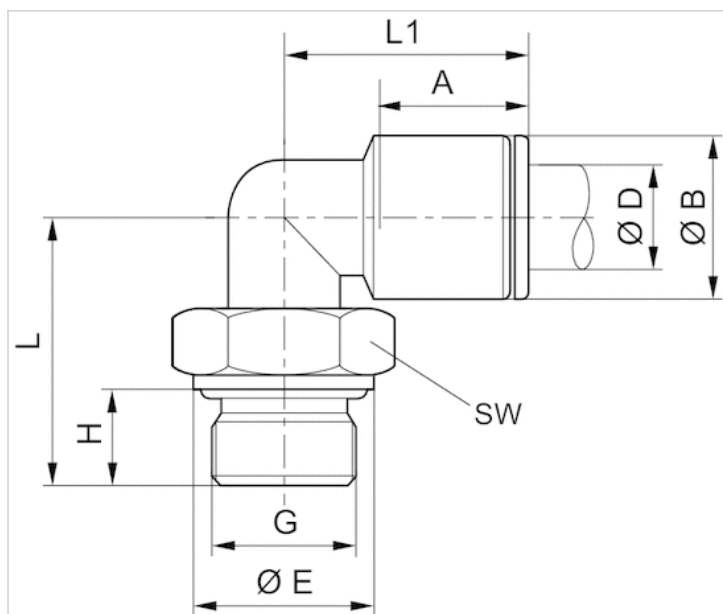
For further information about assembling and tolerances of adaptable tubing can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Brass, nickel-plated
Seal	Acrylonitrile butadiene rubber
Tooth lock washer	Stainless steel

Material	
Release ring	Brass, nickel-plated
Thread	Brass, nickel-plated

Dimensions



Dimensions

Part No.	Port D	Port G	ØB	ØE	H	L	L1	A Insertion depth	SW
1823391710	Ø 4	G 1/8	9	13	6	20	19	15	13
1823391711	Ø 6	G 1/8	11	13	6	20	21	16	13
1823391712	Ø 8	G 1/8	13	13	6	20	24	18	13
R412007687	Ø 10	G 1/8	15	13	6	24	27	19	13
1823391713	Ø 4	G 1/4	9	16	8	24	19	15	13
1823391714	Ø 6	G 1/4	11	16	8	24	21	16	13
1823391715	Ø 8	G 1/4	13	16	8	24	24	18	13
1823391718	Ø 10	G 1/4	15	16	8	24	27	19	16
1823391843	Ø 12	G 1/4	17	16	8	30.5	29	20	16

Series NU2

- Swivel banjo connection 1-fold
- External thread
- G 1/4
- plug-in with tube nut
- Ø 6 Ø 8 Ø 9
- NU2-S-RW1



Working pressure min./max.

-0.95 ... 10 bar

Ambient temperature min./max.

-10 ... 60 °C

Weight per piece

See table below

Technical data

Part No.	Port G	Port D	Delivery unit	Weight per piece
1823391294	G 1/4	Ø 6	2 piece	0.034 kg
1823391295	G 1/4	Ø 8	2 piece	0.044 kg
R412010658	G 1/4	Ø 9	2 piece	0.276 kg

Technical information

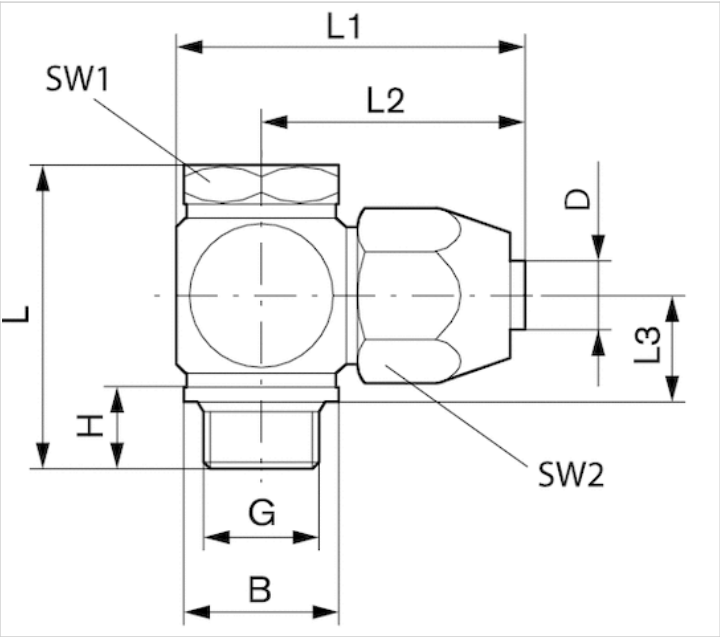
For further information about assembling and tolerances of adaptable tubing can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Aluminum, anodized
Seal	Polyvinyl chloride

Dimensions

Dimensions



for fabric-reinforced plastic tubing

Dimensions

Part No.	Port D	Port G	B	H	L	L1	L2	L3	SW1	SW2
1823391294	Ø 6	G 1/4	18	12.5	39	39.5	30	14.5	17	19
1823391295	Ø 8	G 1/4	18	12.5	42	42	32.5	16	17	22
R412010658	Ø 9	G 1/4	18.9	7.9	40	42	32.5	15.6	17	24

Connection D = inside diameter of the tubing to be used

Double nipple, Series PE5

- External thread



Weight per piece

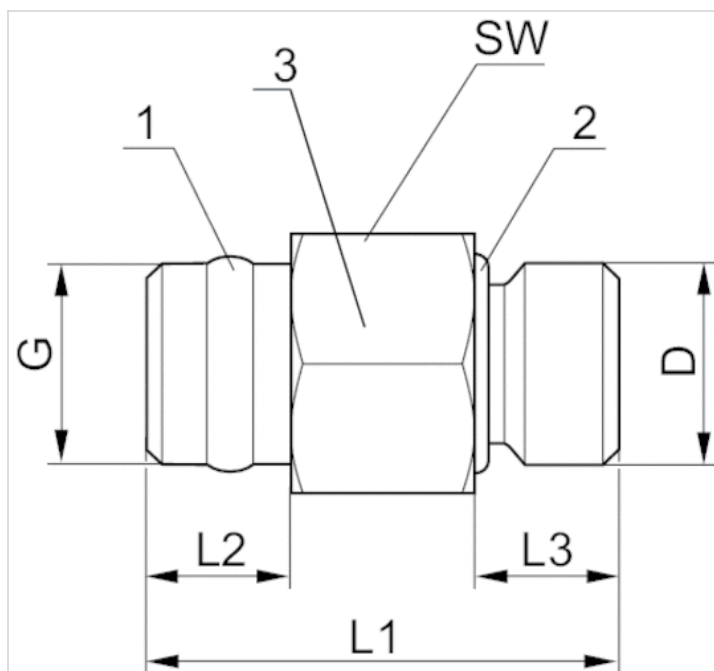
0.04 kg

Technical data

Part No.	Port G	Port D	Delivery unit
R412010015	G 1/4	G 1/8	2 piece
R412010016	G 1/4	G 1/4	2 piece

Dimensions

Dimensions



- 1) sealing ring Polytetrafluorethylen
- 2) O-ring - acrylonitrile butadiene rubber
- 3) Housing - brass, nickel-plated

Dimensions

Part No.	Port G	Port D	L1	L2	L3	SW
R412010015	G 1/4	G 1/8	30	10	8.5	17
R412010016	G 1/4	G 1/4	30	10	8.5	17

Blanking screw

- External thread
- G 1/8
- FPT-S-RIO



Working pressure min./max.

0 ... 16 bar

Ambient temperature min./max.

-20 ... 80 °C

Technical data

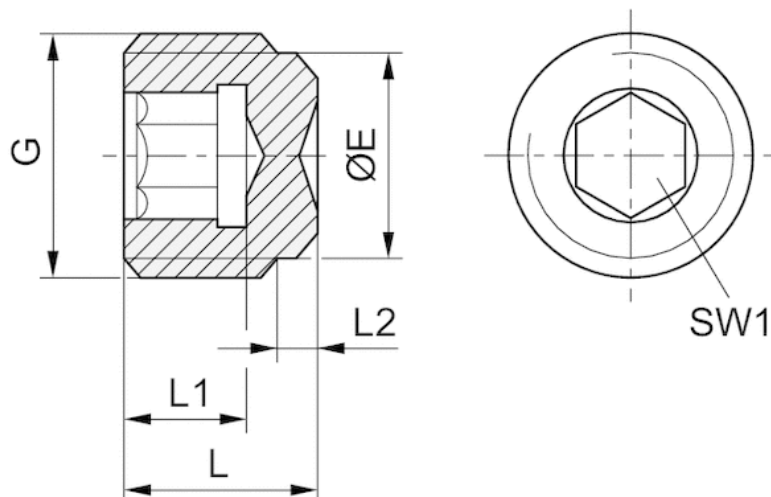
Part No.	Port G	Delivery unit
1823462004	G 1/8	10 piece

Technical information

Material	
Material	Brass

Dimensions

Dimensions



Dimensions in mm

Port G	ØE	L	L1	L2	SW1
G 1/8	8	8	5	2	5

Blanking screw, gasket

- G 1/8
- FPT-S-RBI



Working pressure min./max.
Ambient temperature min./max.

0 ... 16 bar

-20 ... 80 °C

The delivered product may vary from that in the illustration.

Technical data

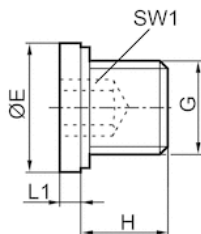
Part No.	Port G	Delivery unit
1823462028	G 1/8	25 piece

Technical information

Material	
Material	Steel, galvanized
Seal	Polyvinyl chloride, hard

Dimensions

Dimensions



Dimensions

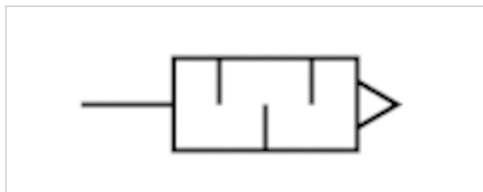
Port G	Ø E	H	L1	SW1
G 1/8	14	8	3	5

Silencers, series SI1

- G 1/4
- Sintered bronze



Working pressure min./max.	0 ... 10 bar
Ambient temperature min./max.	-25 ... 80 °C
Medium	Compressed air
Sound pressure level	See table below
Weight	See table below
Comment	Flow characteristic curves can be found under "Diagrams".



Technical data

Part No.	Compressed air connection	Sound pressure level	Flow	Delivery unit	Weight
			Qn		
R412004817	G 1/4	-	5950 l/min	10 piece	0.013 kg
1827000001	G 1/4	79 dB	3390 l/min	10 piece	0.02 kg

Weight per piece

Nominal flow Qn at p1 = 6 bar (absolute) freely discharged. Sound pressure level measured at 6 bar against atmosphere at 1 m distance.

Technical information

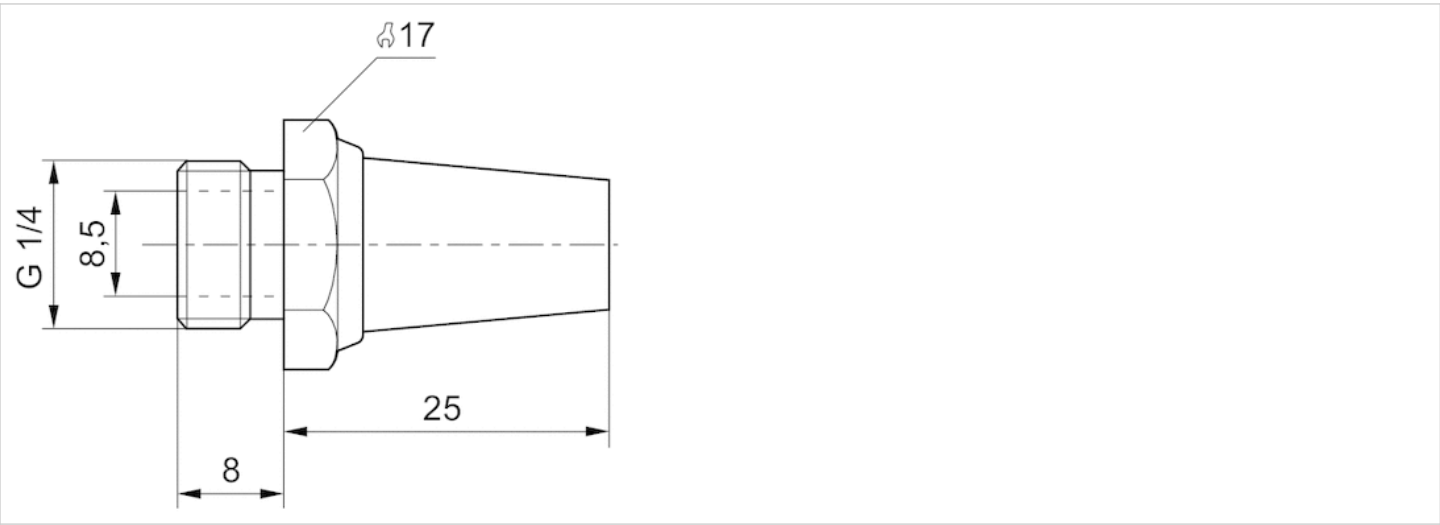
Material	
Silencer	Sintered bronze
Thread	Brass

Dimensions

Dimensions in mm



Dimensions in mm

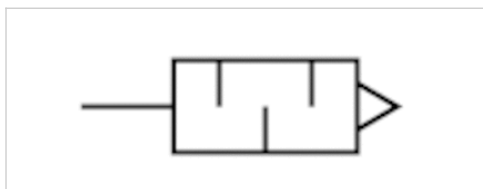


Silencers, series SI1

- G 1/4
- Stainless steel



Working pressure min./max.	0 ... 12 bar
Ambient temperature min./max.	-20 ... 150 °C
Medium	Compressed air
Sound pressure level	93 dB
Weight	0.021 kg
Comment	Flow characteristic curves can be found under "Diagrams".



Technical data

Part No.	Compressed air connection	Flow	Delivery unit
		Qn	
R412010082	G 1/4	1852 l/min	1 piece

Weight per piece

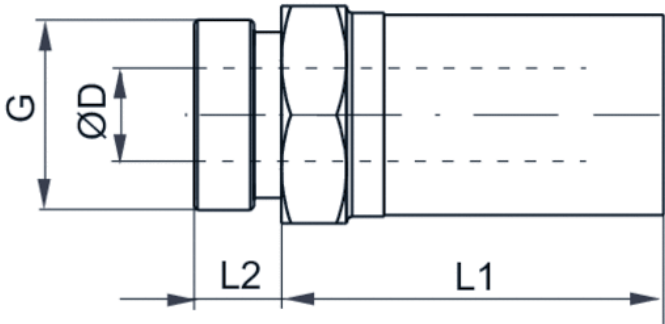
Nominal flow Qn at p1 = 6 bar (absolute) freely discharged. Sound pressure level measured at 6 bar against atmosphere at 1 m distance.

Technical information

Material	
Silencer	Stainless steel
Thread	Stainless steel

Dimensions

Dimensions

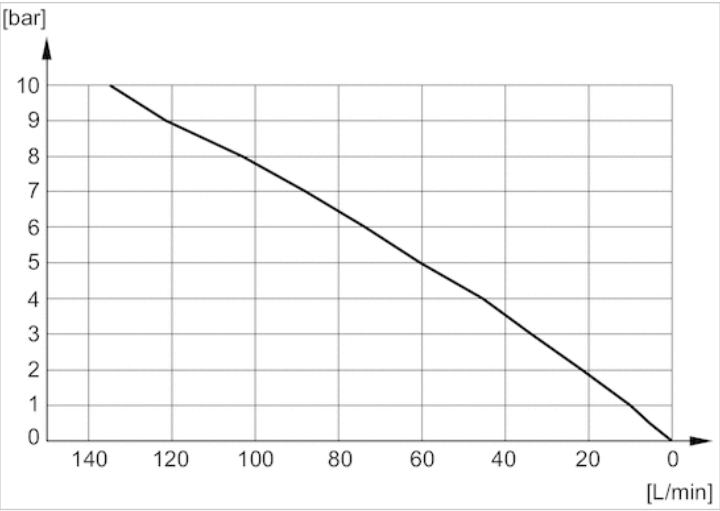


Dimensions

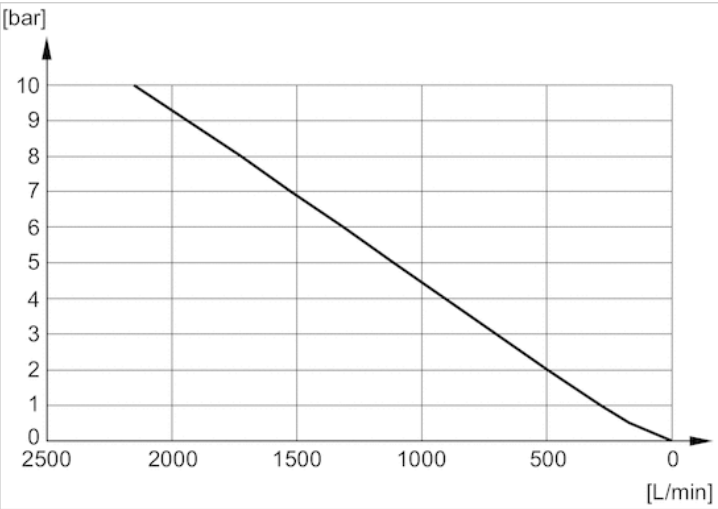
Part No.	Port G	SW	Ø D	L1	L2
R412010082	G 1/4	16	8.6	29.5	7.5

Diagrams

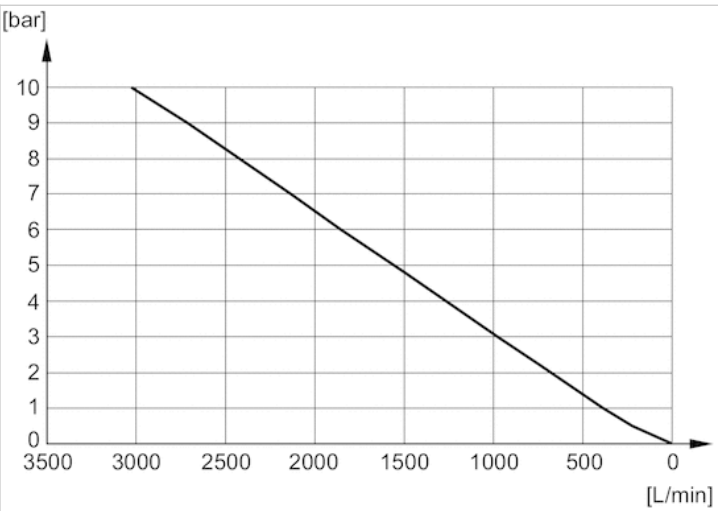
Flow diagram, R412010090



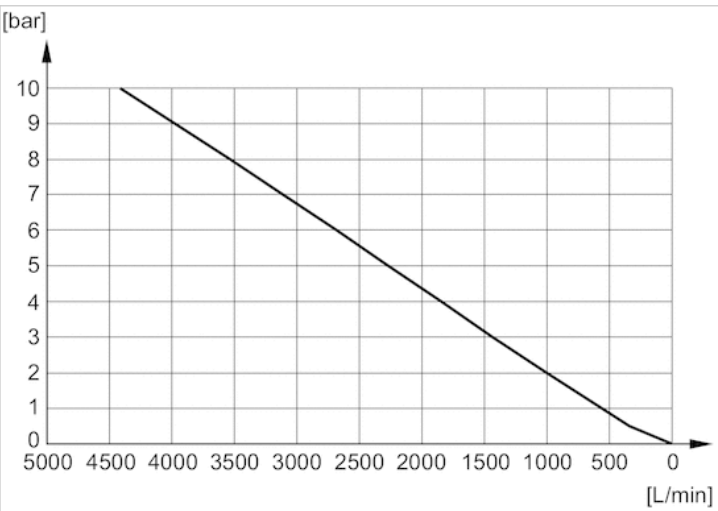
Flow diagram, R412010081



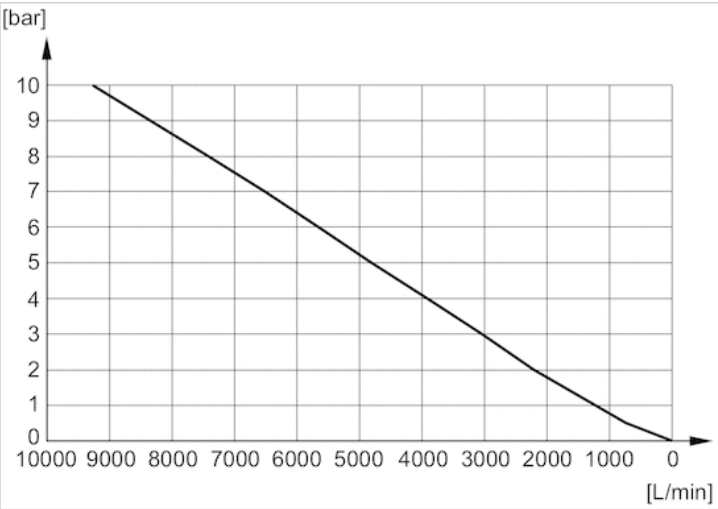
Flow diagram, R412010082



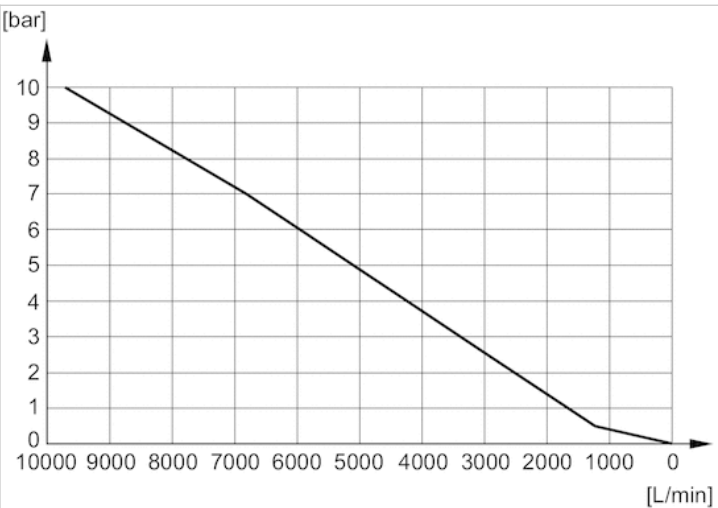
Flow diagram, R412010083



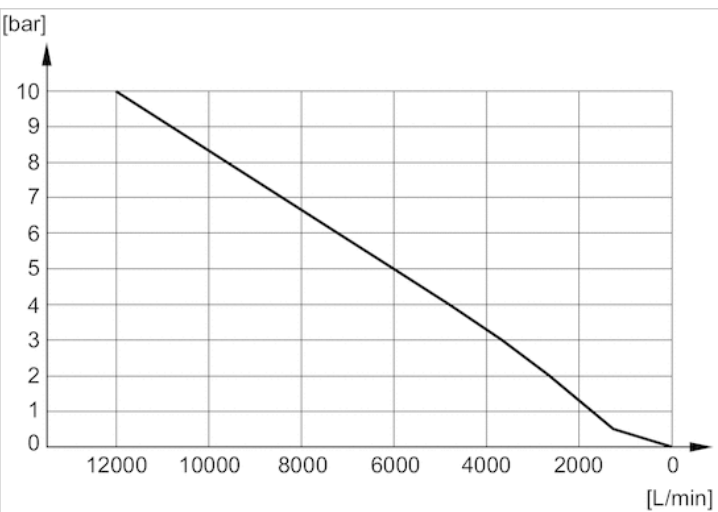
Flow diagram, R412010084



Flow diagram, R412010085



Flow diagram, R412010086

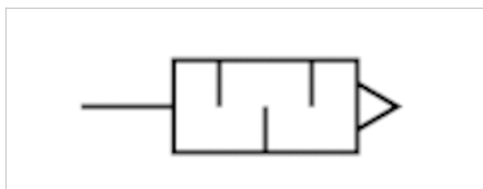


Silencers, series SI1

- G 1/4
- Polyethylene



Working pressure min./max.	0 ... 10 bar
Ambient temperature min./max.	-25 ... 80 °C
Medium	Compressed air
Sound pressure level	80 dB
Weight	0.003 kg



Technical data

Part No.	Compressed air connection	Flow	Delivery unit
		Qn	
1827000020	G 1/4	3447 l/min	5 piece

Weight per piece

Nominal flow Qn at p1 = 6 bar (absolute) freely discharged. Sound pressure level measured at 6 bar against atmosphere at 1 m distance.

Technical information

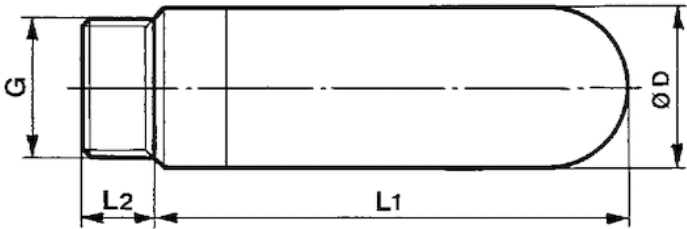
Flow characteristic curves can be found under "Diagrams".

Technical information

Material	
Silencer	Polyethylene
Thread	Polyethylene

Dimensions

Dimensions

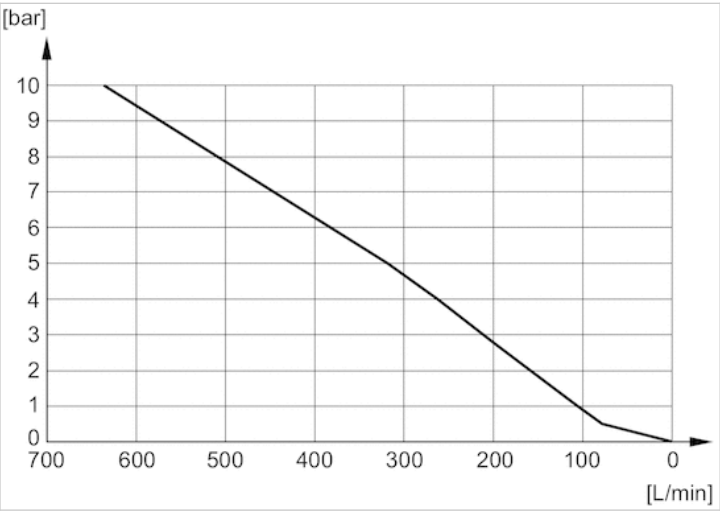


Dimensions

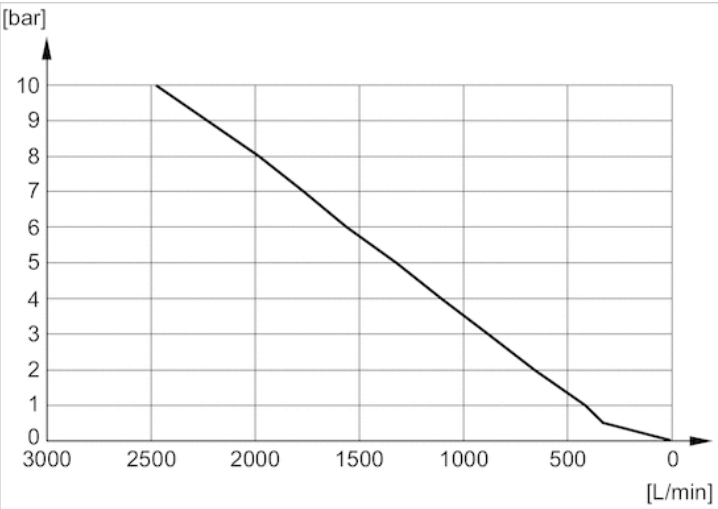
Part No.	Port G	Ø D	L1	L2
1827000020	G 1/4	15.5	34.5	8

Diagrams

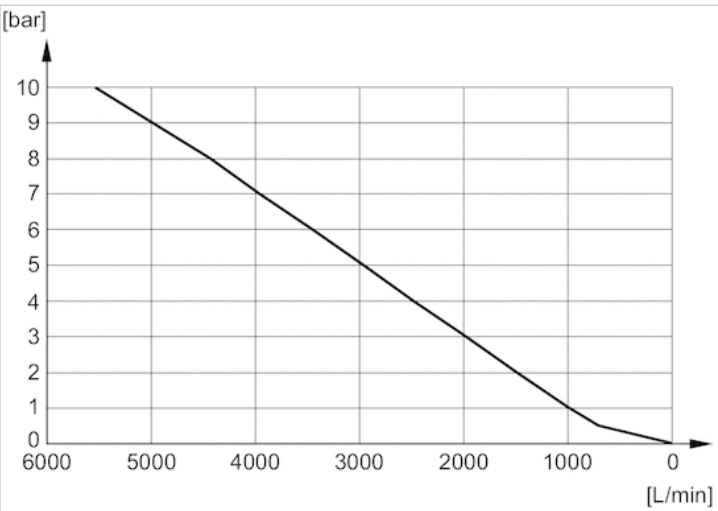
Flow diagram, 1827000018



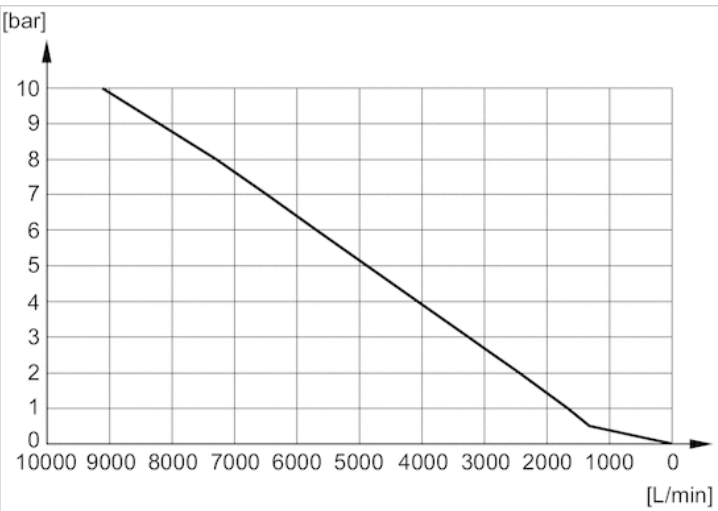
Flow diagram, 1827000019



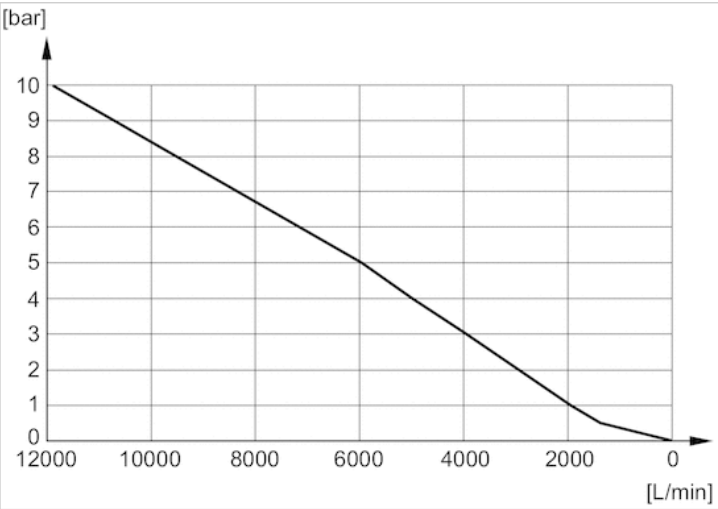
Flow diagram, 1827000020



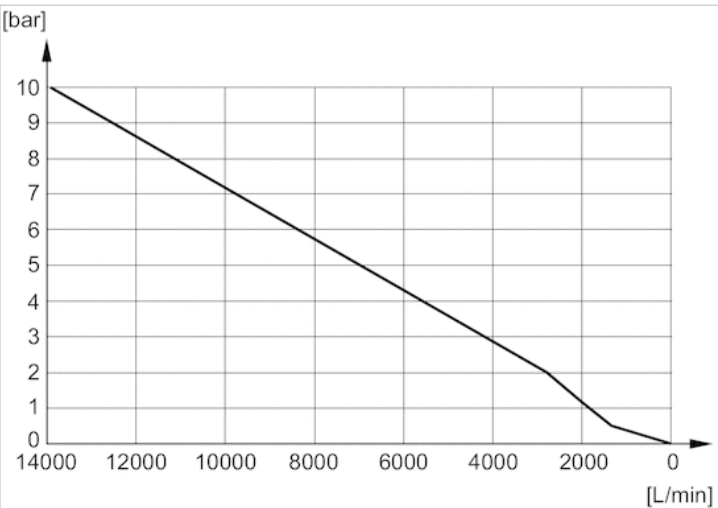
Flow diagram, 1827000021



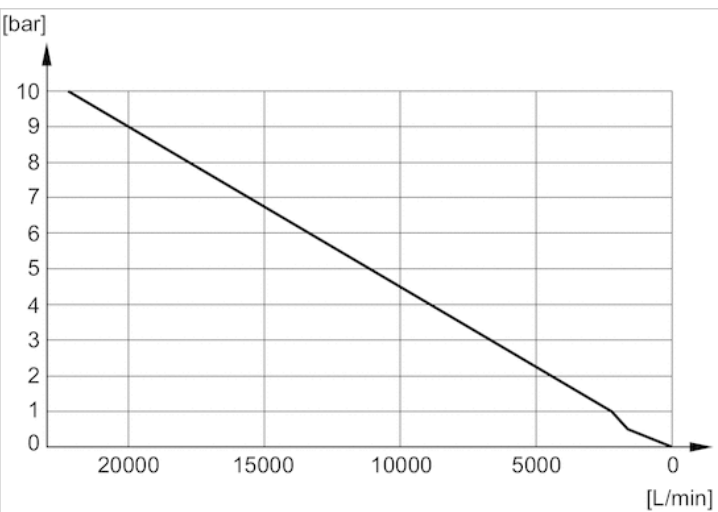
Flow diagram, 1827000022



Flow diagram, 1827000023



Flow diagram, 1827000024



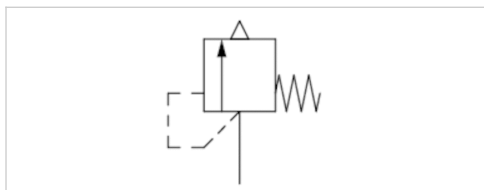
Series RV1

- Qn 1►2 = 676-7179 l/min
- thread-in
- External thread
- G 1/4
- Uncollected



Version
 Certificates
 Working pressure min./max.
 Opening pressure of valve
 Ambient temperature min./max.
 Medium

Poppet valve
 CE declaration of conformity
 0 ... 20 bar
 See table below
 -20 ... 100 °C
 Compressed air



Technical data

Part No.	Port 1	Opening pressure of valve	Flow
			Qn 1►2
R412007521	G 1/4	0.8 bar	676 l/min
R412007522	G 1/4	1.5 bar	996 l/min
R412007523	G 1/4	2 bar	1219 l/min
R412007524	G 1/4	3.5 bar	1872 l/min
R412007525	G 1/4	4 bar	2084 l/min
R412007526	G 1/4	4.8 bar	2424 l/min
R412007527	G 1/4	6 bar	2933 l/min
R412007528	G 1/4	8 bar	3783 l/min
R412007529	G 1/4	10 bar	4632 l/min
R412007530	G 1/4	11 bar	5056 l/min
R412007531	G 1/4	15 bar	6755 l/min
R412007532	G 1/4	16 bar	7179 l/min

Technical information

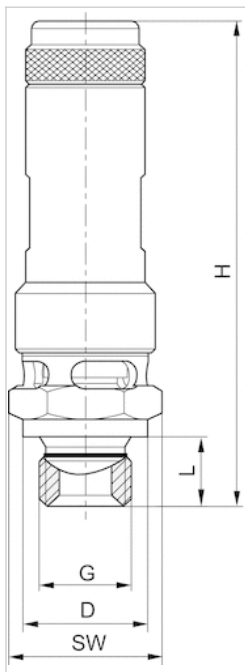
The specified performance values are achieved at a 10% (PE 1 bar , 0.1 bar) pressure increase, measured with compressed air at 20 °C .

Technical information

Material	
Housing	Brass
Seals	Fluorocaoutchouc

Dimensions

Dimensions



G = connection 1

Dimensions

Part No.	Port G	Ø D	H	L	SW	T [Nm]	NW
R412007521	G 1/4	18	69	10	19	30	8
R412007522	G 1/4	18	69	10	19	30	8
R412007523	G 1/4	18	69	10	19	30	8
R412007524	G 1/4	18	69	10	19	30	8
R412007525	G 1/4	18	69	10	19	30	8
R412007526	G 1/4	18	69	10	19	30	8
R412007527	G 1/4	18	69	10	19	30	8
R412007528	G 1/4	18	69	10	19	30	8
R412007529	G 1/4	18	69	10	19	30	8
R412007530	G 1/4	18	69	10	19	30	8
R412007531	G 1/4	18	69	10	19	30	8
R412007532	G 1/4	18	69	10	19	30	8

T = maximum torque

NW = nominal width

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