Series AS3





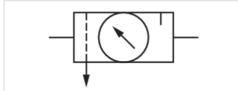




Air preparation unit, 2-part, Series AS3-ACD

- G 3/8 G 1/2
- filter porosity 5 µm
- lockable
- for padlocks
- with pressure gauge





Version

Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Nominal flow Qn

Regulator type

Regulator function Adjustment range min./max. Pressure

vlagus

Filter reservoir volume

Filter element

Lubricator reservoir volume

Type of filling

Weight

2-part, Can be assembled into blocks Filter pressure regulator, Lubricator vertical

See table below

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

3500 I/min

Diaphragm-type pressure regulator

with relieving air exhaust

0.5 ... 8 bar

single

49 cm³

exchangeable

80 cm³

Semi-automatic oil filling during operation

Manual oil filling

See table below

Technical data

Part No.	Port	filter porosity	Flow	Working pressure min./max.
			Qn	
R412007298	G 3/8	5 μm	3500 l/min	1.5 16 bar
R412007299	G 3/8	5 μm	3500 l/min	1.5 16 bar
R412007307	G 1/2	5 μm	3500 l/min	1.5 16 bar
R412007308	G 1/2	5 μm	3500 l/min	1.5 16 bar
R412007309	G 1/2	5 μm	3500 l/min	1.5 16 bar
R412007313	G 1/2	5 μm	3500 l/min	1.5 16 bar
R412007314	G 1/2	5 μm	3500 l/min	1.6 16 bar
R412007315	G 1/2	5 μm	3500 l/min	1.5 16 bar

Part No.	Condensate drain	Pressure gauge	Reservoir
R412007298	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
R412007299	fully automatic, open without pressure	with pressure gauge	Polycarbonate
R412007307	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
R412007308	fully automatic, open without pressure	with pressure gauge	Polycarbonate
R412007309	fully automatic, closed without pressure	with pressure gauge	Polycarbonate





Part No.	Condensate drain	Pressure gauge	Reservoir
R412007313	semi-automatic, open without pressure	with pressure gauge	Die cast zinc
R412007314	fully automatic, open without pressure	with pressure gauge	Die cast zinc
R412007315	fully automatic, closed without pressure	with pressure gauge	Die cast zinc

Part No.	Weight
R412007298	1.02 kg
R412007299	1.07 kg
R412007307	1.02 kg
R412007308	1.07 kg
R412007309	1.07 kg
R412007313	1.83 kg
R412007314	1.87 kg
R412007315	1.75 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 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C . Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180 $^{\circ}$ about the vertical axis. Please see the operating instructions for further details. 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

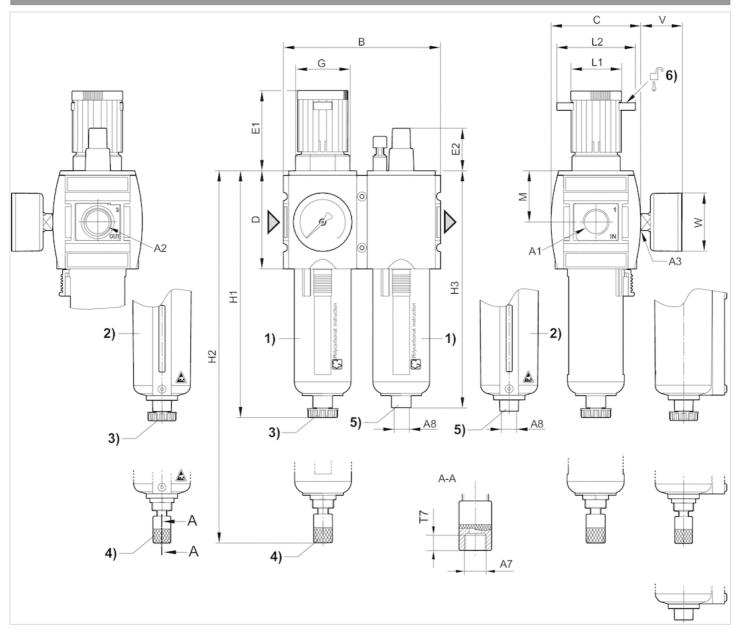
Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate Die cast zinc
Protective guard	Polyamide
Filter insert	Polyethylene





Dimensions

Dimensions



- A1 = input
- A2 = output
- A3 = pressure gauge connection
- A7 = condensate drain
- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with level indicator
- 3) Semi-automatic condensate drain
- 4) Fully automatic condensate drain
- 5) Port for semi-automatic oil filling 6) Mounting option for padlocks, max. shackle \varnothing 8

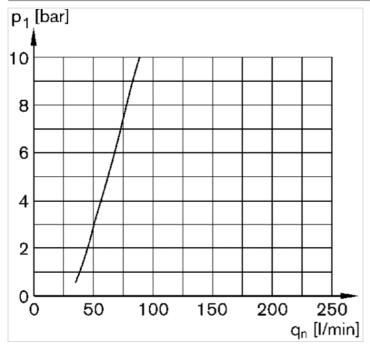
Dimensions in mm

A1	A2	A3	A7	A8	В	С	D	E1	E2	G	H1	H2	НЗ	М	L1	L2	T7	V	W
1	I				l					M42x1,5			l		l				1
G 1/2	G 1/2	G 1/4	G 1/8	G 1/8	126	74	80	63.5	27.5	M42x1,5	189.5	206	183	42.5	41	60	8.5	33	50



Diagrams

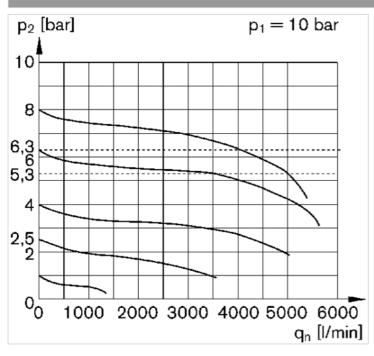
Lubricator activation margin



p1 = working pressure

qn = nominal flow

Flow rate characteristic (p2: 0,5 - 8 bar)



p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



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

Air preparation unit, 2-part, Series AS3-ACC

R412027671

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.



Technical data

Industry Industrial

Parts

Air preparation units Shut-off valve

Filter pressure regulator

Port G 3/8

Nominal flow Qn

5100 l/min

Filter porosity

5 µm

Condensate drain

semi-automatic, open without pressure

Pressure gauge with pressure gauge

Working pressure min.

1.5 bar

Working pressure max

16 bar

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C

Regulation range min.

0.5 bar

Regulation range max.

8 bar

Lock type lockable

lockable

for padlocks

Type 2-part

Type

Can be assembled into blocks

Pressure supply

single

Mounting orientation

vertical

Regulator type

Diaphragm-type pressure regulator



Regulator function with relieving air exhaust

Filter element exchangeable

Filter reservoir volume

49 cm³

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

6:7:-

Medium Compressed air Neutral gases

Weight 2.16 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material front plate

Acrylonitrile butadiene styrene

Material threaded bushing

Die cast zinc

Material reservoir

Polycarbonate

Material protective guard

Polyamide

Material filter insert

Polyethylene

Part No. R412027671

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

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

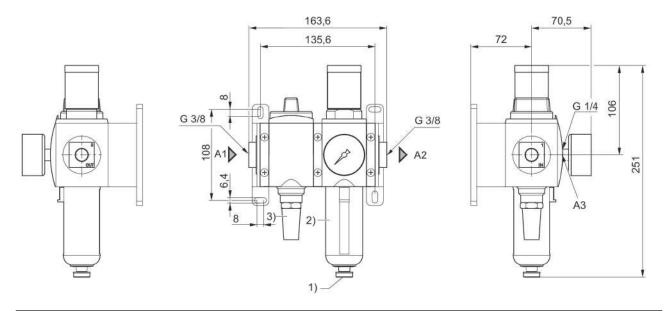
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

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

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

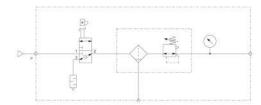


Dimensions



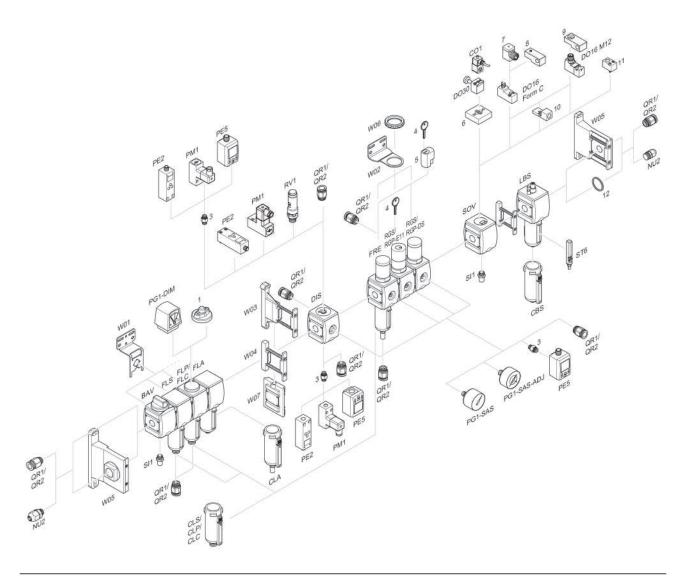
- A1 = input
 A2 = output
 A3 = pressure gauge connection
 1) Semi-automatic condensate drain
 2) Plastic reservoir and protective guard with window
 3) Silencer

Block diagram





Accessories overview



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



Air preparation unit, 2-part, Series AS3-ACC

R412027672

General series information Series AS3

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Technical data

Industry Industrial

Parts

Air preparation units Shut-off valve

Filter pressure regulator

Port G 1/2

Nominal flow Qn

5100 l/min

Filter porosity

5 µm

Condensate drain

semi-automatic, open without pressure

Pressure gauge with pressure gauge

Working pressure min.

1.5 bar

Working pressure max

16 bar

Min. ambient temperature

-10 °C

Max. ambient temperature

Regulation range min.

0.5 bar

Regulation range max.

8 bar

Lock type lockable

lockable

for padlocks

Type 2-part

Type

Can be assembled into blocks

Pressure supply

single

Mounting orientation

vertical

Regulator type

Diaphragm-type pressure regulator



Regulator function with relieving air exhaust

Filter element exchangeable

Filter reservoir volume

49 cm³

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

6:7:-

Medium Compressed air Neutral gases

Weight 2.11 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material front plate

Acrylonitrile butadiene styrene Material threaded bushing

Die cast zinc

Material reservoir

Polycarbonate

Material protective guard

Polyamide

Material filter insert

Polyethylene

Part No. R412027672

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

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

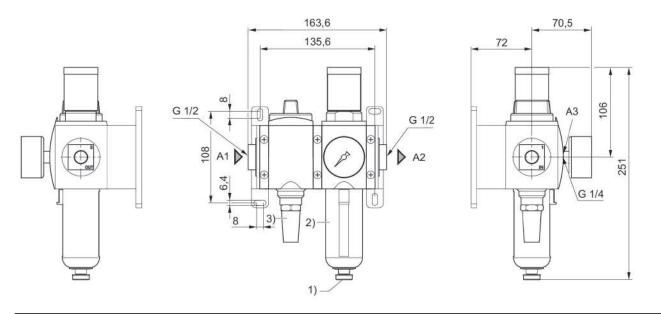
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

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

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



Dimensions in mm



- A1 = input
- A2 = output

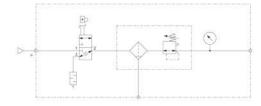
- A2 = pressure gauge connection

 1) Semi-automatic condensate drain

 2) Plastic reservoir and protective guard with window

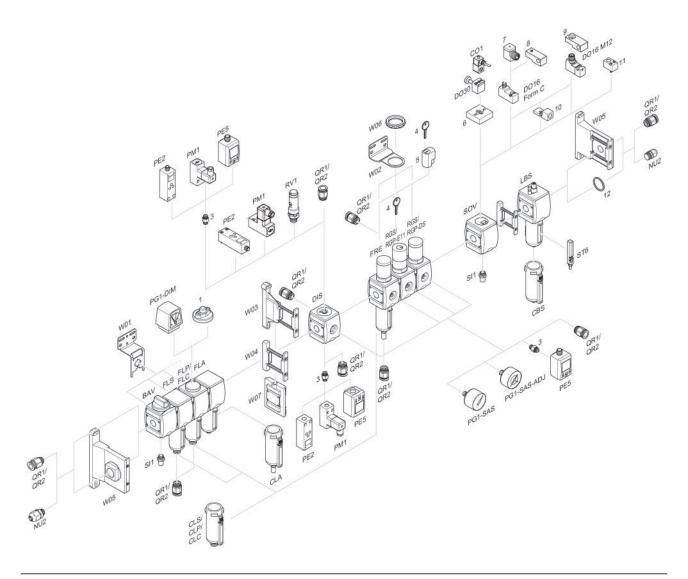
 3) Silencer

Block diagram





Accessories overview



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



Air preparation unit, 2-part, Series AS3-ACC

R412027673

General series information Series AS3

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Technical data

Industry Industrial

Parts

Air preparation units Shut-off valve

Filter pressure regulator

Port G 1/2

Nominal flow Qn

5100 l/min

Filter porosity

5 µm

Condensate drain

semi-automatic, open without pressure

Pressure gauge with pressure gauge

Working pressure min.

1.5 bar

Working pressure max

16 bar

Min. ambient temperature

-10 °C

Max. ambient temperature

Regulation range min.

0.5 bar

Regulation range max.

8 bar

Lock type lockable

lockable for padlocks

Type 2-part

Type

Can be assembled into blocks

Pressure supply

single

Mounting orientation

vertical

Regulator type

Diaphragm-type pressure regulator



Regulator function with relieving air exhaust

Filter element exchangeable

Filter reservoir volume

49 cm³

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

6:7:-

Medium Compressed air Neutral gases

Weight 1.45 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material front plate

Acrylonitrile butadiene styrene

Material threaded bushing

Die cast zinc

Material reservoir

Polycarbonate

Material protective guard

Polyamide

Material filter insert

Polyethylene

Part No. R412027673

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

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

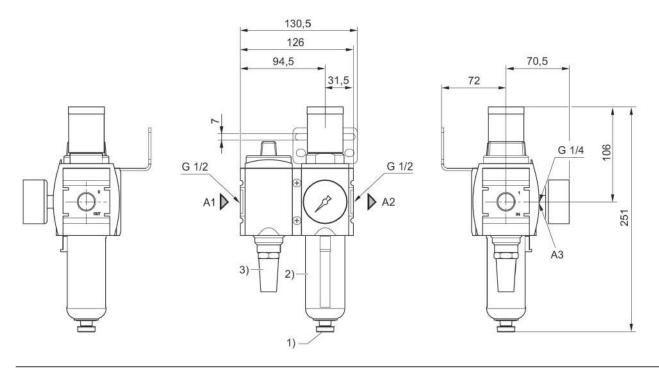
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

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

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



Dimensions in mm



A1 = input A2 = output

A3 = pressure gauge connection
1) Semi-automatic condensate drain

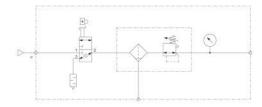
Plastic reservoir and protective guard with window
 Silencer

Dimensions in mm

Part No.	A1	A2	A3	В	С	G	H1	НЗ	L1
R412027673	G 1/2	G 1/2	G 1/2	130,5	72	126	251	7	31,5

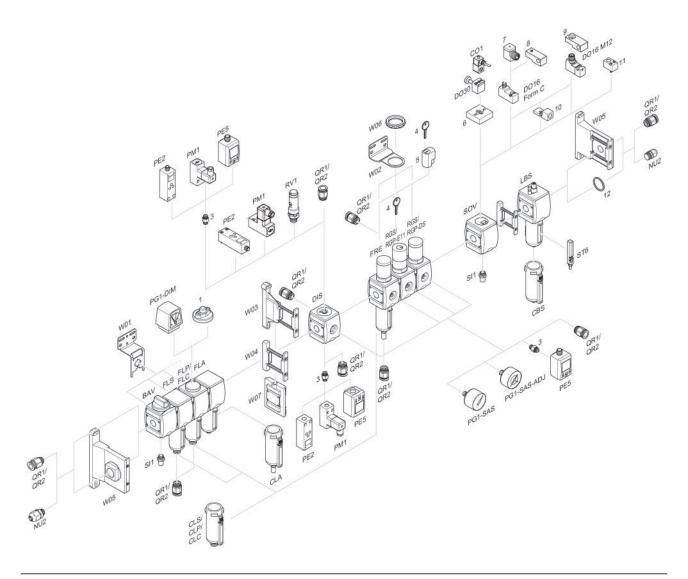
Part No.	L2	M	V	
R412027673	94,5	106	70,5	

Block diagram





Accessories overview



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



Air preparation unit, 2-part, Series AS3-ACC

R412027674

General series information Series AS3

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Technical data

Industry Industrial

Parts

Air preparation units Shut-off valve

Filter pressure regulator

Port G 1/2

Nominal flow Qn

5100 l/min

Filter porosity

5 µm

Condensate drain

fully automatic, open without pressure

Pressure gauge with pressure gauge

Working pressure min.

1.5 bar

Working pressure max

16 bar

Min. ambient temperature

-10 °C

Max. ambient temperature

Regulation range min.

0.5 bar

Regulation range max.

8 bar

Lock type lockable

lockable for padlocks

Type 2-part

Type

Can be assembled into blocks

Pressure supply

single

Mounting orientation

vertical

Regulator type

Diaphragm-type pressure regulator



Regulator function with relieving air exhaust

Filter element exchangeable

Filter reservoir volume

49 cm³

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

6:7:-

Medium Compressed air Neutral gases

Weight 2.15 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material front plate

Acrylonitrile butadiene styrene

Material threaded bushing

Die cast zinc

Material reservoir

Polycarbonate

Material protective guard

Polyamide

Material filter insert

Polyethylene

Part No.

R412027674

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

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

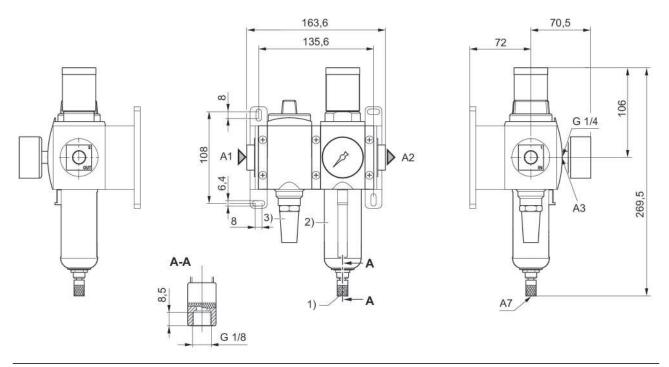
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

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

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

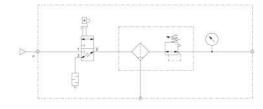


Dimensions in mm



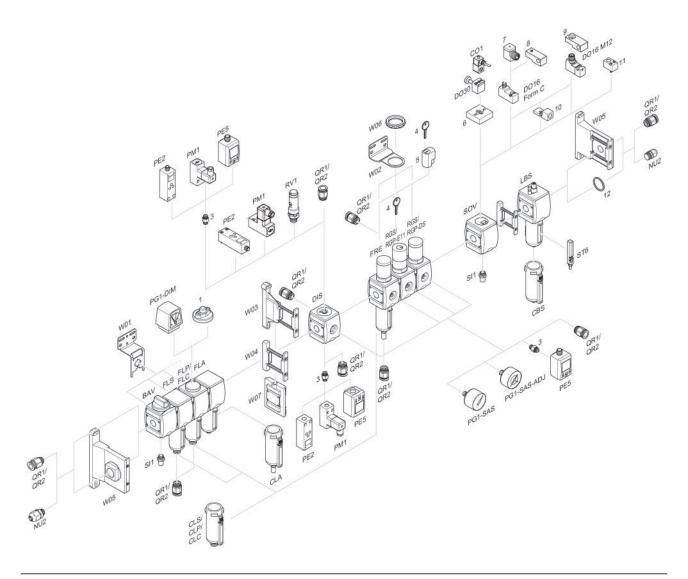
- A1 = input
- A2 = output
- A3 = pressure gauge connection
- A7 = condensate drain
- 1) Fully automatic condensate drain
- Plastic reservoir and protective guard with window
 Silencer

Block diagram





Accessories overview



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





Pressure regulator, Series AS3-RGS

- G 3/8 G 1/2
- Qn = 1600-5200 l/min
- Standard pressure regulator
- Activation Mechanical
- lockable
- for padlocks



Parts

Mounting orientation

Working pressure min./max.
Ambient temperature min./max.
Medium temperature min./max.
Medium
Regulator type

Regulator function Adjustment range min./max. Lock type Pressure supply 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 for padlocks

single
Mechanical
See table below

Technical data

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412007101	₽º	9	G 3/8	1600 l/min	0.1 16 bar	0.1 1 bar
R412007103	2 9	\bigcirc	G 3/8	4600 l/min	0.1 16 bar	0.1 2 bar
R412007105	2 9	9	G 3/8	5000 l/min	0.2 16 bar	0.2 4 bar
R412007107	P 9	\bigcirc	G 3/8	4300 l/min	0.5 16 bar	0.5 8 bar
R412007109	P	\odot	G 3/8	4300 l/min	0.5 16 bar	0.5 10 bar
R412007111	P	\bigcirc	G 3/8	3500 l/min	0.5 16 bar	0.5 16 bar
R412007100	7	_	G 3/8	1600 l/min	0.1 16 bar	0.1 1 bar
R412007102	\$	_	G 3/8	4600 l/min	0.1 16 bar	0.1 2 bar
R412007104	7	_	G 3/8	5000 l/min	0.2 16 bar	0.2 4 bar
R412007106		_	G 3/8	4300 l/min	0.5 16 bar	0.5 8 bar
R412007108		_	G 3/8	4300 l/min	0.5 16 bar	0.5 10 bar
R412007110		_	G 3/8	3500 l/min	0.5 16 bar	0.5 16 bar
R412007113	P	\bigcirc	G 1/2	1600 l/min	0.1 16 bar	0.1 1 bar
R412007115	P	\Diamond	G 1/2	4600 l/min	0.1 16 bar	0.1 2 bar
R412007117	P	\bigcirc	G 1/2	5000 l/min	0.2 16 bar	0.2 4 bar
R412007119	P	\Diamond	G 1/2	5200 l/min	0.5 16 bar	0.5 8 bar
R412007121	P	\bigcirc	G 1/2	5200 l/min	0.5 16 bar	0.5 10 bar
R412007123	P	\bigcirc	G 1/2	4000 l/min	0.5 16 bar	0.5 16 bar
R412007112		_	G 1/2	1600 l/min	0.1 16 bar	0.1 1 bar
R412007114		_	G 1/2	4600 l/min	0.1 16 bar	0.1 2 bar



Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412007116	#	_	G 1/2	5000 l/min	0.2 16 bar	0.2 4 bar
R412007118	#	_	G 1/2	5200 l/min	0.5 16 bar	0.5 8 bar
R412007120	#	_	G 1/2	5200 l/min	0.5 16 bar	0.5 10 bar
R412007122	#	_	G 1/2	4000 l/min	0.5 16 bar	0.5 16 bar

Part No.	Pressure gauge	Weight	
R412007101	with pressure gauge	0.6 kg	1)
R412007103	with pressure gauge	0.6 kg	1)
R412007105	with pressure gauge	0.6 kg	1)
R412007107	with pressure gauge	0.6 kg	1)
R412007109	with pressure gauge	0.6 kg	1)
R412007111	with pressure gauge	0.6 kg	1)
R412007100	-	0.528 kg	2)
R412007102	-	0.528 kg	2)
R412007104	-	0.528 kg	2)
R412007106	-	0.528 kg	2)
R412007108	-	0.528 kg	2)
R412007110	-	0.528 kg	2)
R412007113	with pressure gauge	0.6 kg	1)
R412007115	with pressure gauge	0.6 kg	1)
R412007117	with pressure gauge	0.6 kg	1)
R412007119	with pressure gauge	0.6 kg	1)
R412007121	with pressure gauge	0.6 kg	1)
R412007123	with pressure gauge	0.6 kg	1)
R412007112	-	0.528 kg	2)
R412007114	-	0.528 kg	2)
R412007116	-	0.528 kg	2)
R412007118	-	0.528 kg	2)
R412007120	-	0.528 kg	2)
R412007122	-	0.528 kg	2)

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

- 1) Pressure gauge enclosed separately.
- 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 .

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.

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

Relieving exhaust (≤ 0.3 bar over set pressure).

With rear exhaust (> 3 bar).



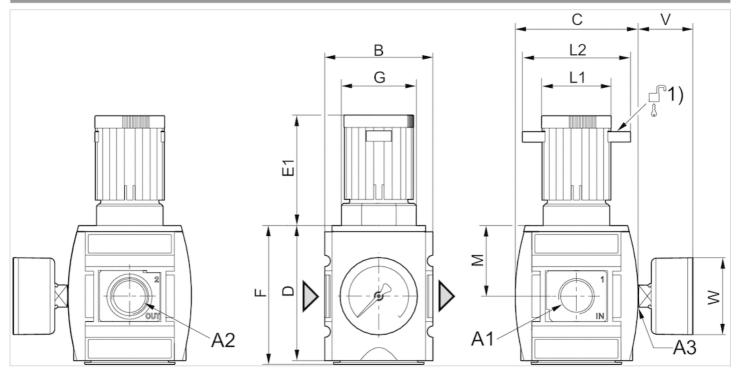


Technical information

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

Dimensions

Dimensions



A1 = input

A2 = output

A3 = pressure gauge connection

1) Mounting option for padlocks, max. shackle \varnothing 8

Dimensions in mm

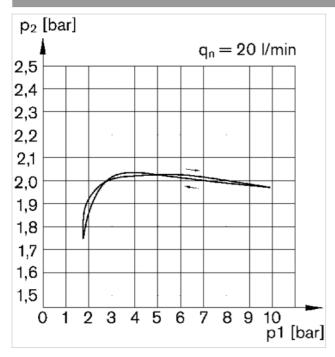
A1	A2	A3	В	С	D	E1	F	G	L1	L2	М	V	W
G 3/8	G 3/8	G 1/4	63	74	80	63.5	82	M42x1,5	41	60	42.5	33	50
G 1/2	G 1/2	G 1/4	63	74	80	63.5	82	M42x1,5	41	60	42.5	33	50





Diagrams

Pressure characteristics curve, Standard version

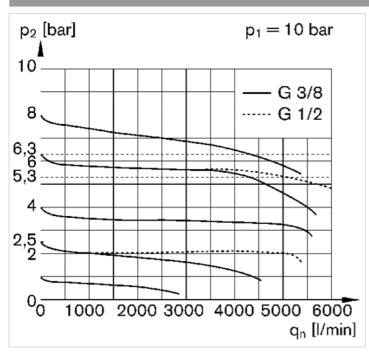


p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow

Flow rate characteristic (p2: 0,5 - 8 bar)



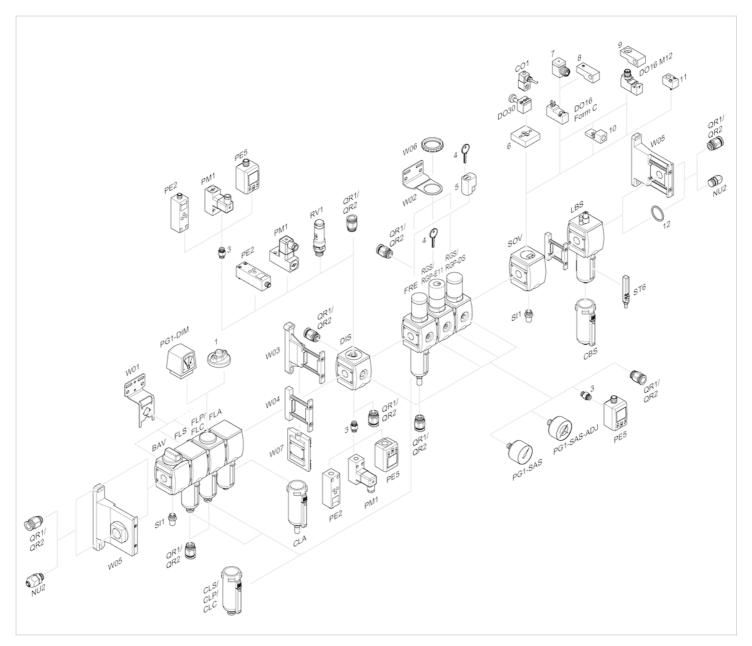
p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



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

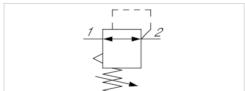




Pressure regulator, Series AS3-RGS-...-

- G 1/2
- Qn = 5200 l/min
- Standard pressure regulator
- Activation Mechanical
- lockable
- with E11 locking





Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Regulator type

Regulator function

Adjustment range min./max.

Lock type

Pressure supply

Activation

Weight

Pressure regulator

Any

0.5 ... 16 bar -10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

Diaphragm-type pressure regulator Can

be assembled into blocks

with relieving air exhaust

0.5 ... 10 bar

with E11 locking

single

Mechanical

0.528 kg

Technical data

Part No.	Port	Flow		
		Qn		
R412007099	G 1/2	5200 l/min		

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 .

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).

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

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

Relieving exhaust (≤ 0.3 bar over set pressure).

With rear exhaust (> 3 bar).

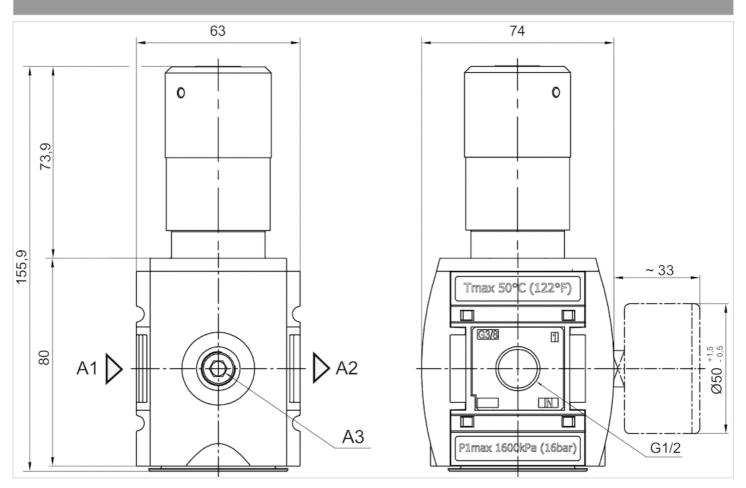


Technical information

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

Dimensions

Dimensions



A1 = input

A2 = output

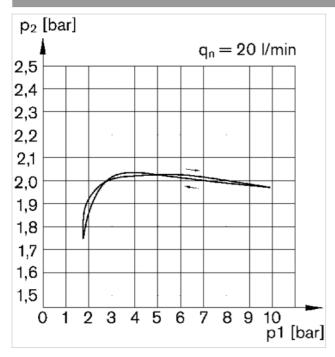
A3 = pressure gauge connection





Diagrams

Pressure characteristics curve, Standard version

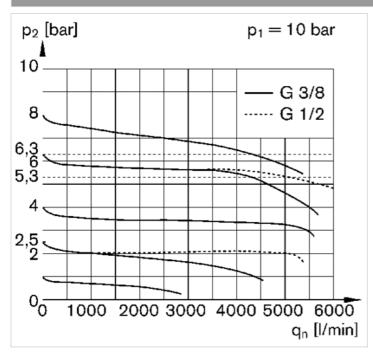


p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow

Flow rate characteristic (p2: 0,5 - 8 bar)



p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



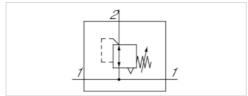
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Pressure regulator, Series AS3-RGS-...-DS

- G 3/8 G 1/2
- Qn = 1600-5200 l/min
- Standard pressure regulator
- Activation Mechanical
- with continuous pressure supply
- lockable
- for padlocks





Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Regulator type

Weight

Regulator function Adjustment range min./max. Lock type Pressure supply Activation 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 for padlocks

double Mechanical 0.528 kg

Technical data

Part No.	Part No. Port		Working pressure min./max.	Adjustment range min./max.		
		Qn				
R412007124	G 3/8	1600 l/min	0.1 16 bar	0.1 1 bar		
R412007125	G 3/8	4600 l/min	0.1 16 bar	0.1 2 bar		
R412007126	G 3/8	5000 l/min	0.2 16 bar	0.2 4 bar		
R412007127	G 3/8	4300 l/min	0.5 16 bar	0.5 8 bar		
R412007128	G 3/8	4300 l/min	0.5 16 bar	0.5 10 bar		
R412007129	G 3/8	3500 l/min	0.5 16 bar	0.5 16 bar		
R412007130	G 1/2	1600 l/min	0.1 16 bar	0.1 1 bar		
R412007131	G 1/2	4600 l/min	0.1 16 bar	0.1 2 bar		
R412007132	G 1/2	5000 l/min	0.2 16 bar	0.2 4 bar		
R412007133	G 1/2	5200 l/min	0.5 16 bar	0.5 8 bar		
R412007134	G 1/2	5200 l/min	0.5 16 bar	0.5 10 bar		
R412007135	G 1/2	4000 l/min	0.5 16 bar	0.5 16 bar		

Part No.	Max. pressure gauge Ø in blocked state
R412007124	50 mm



Part No.	Max. pressure gauge Ø in blocked state
R412007125	50 mm
R412007126	50 mm
R412007127	50 mm
R412007128	50 mm
R412007129	50 mm
R412007130	50 mm
R412007131	50 mm
R412007132	50 mm
R412007133	50 mm
R412007134	50 mm
R412007135	50 mm

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

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 .

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). Relieving exhaust (≤ 0.3 bar over set pressure).

With rear exhaust (> 3 bar).

Technical information

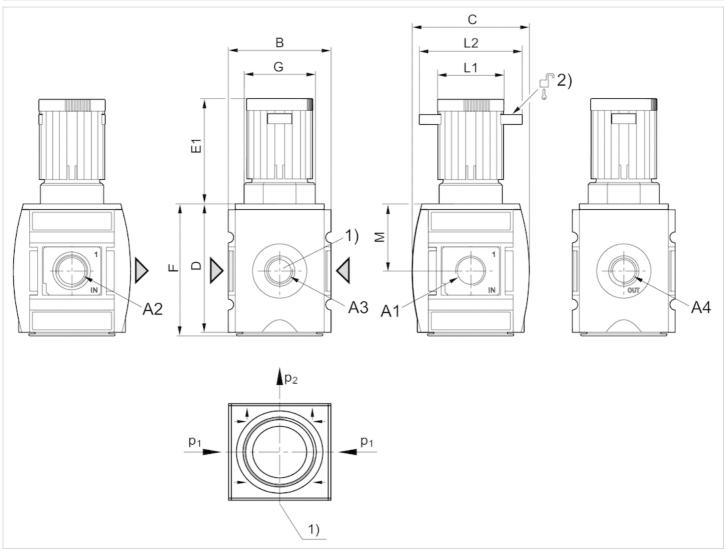
Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc





Dimensions

Dimensions



A1 = input

A2 = output

A3 = pressure gauge connection

A4 = output

1) Pressure gauge connection

2) Mounting option for padlocks, max. shackle \varnothing 8

Dimensions in mm

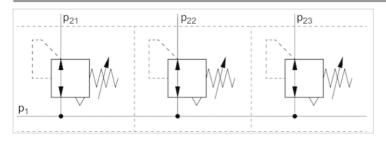
A1	A2	A3	A4	В	С	D	E1	F	G	L1	L2	М
G 3/8	G 3/8	G 1/4	G 3/8	63	74	80	63.5	82	M42x1,5	41	60	42.5
G 1/2	G 1/2	G 1/4	G 3/8	63	74	80	63.5	82	M42x1,5	41	60	42.5





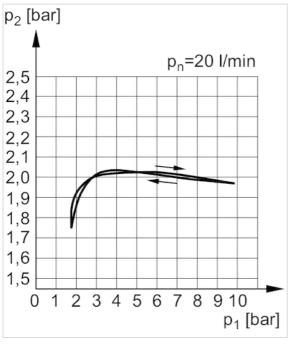
Diagrams

Application example



p1 = working pressure

Pressure characteristics curve

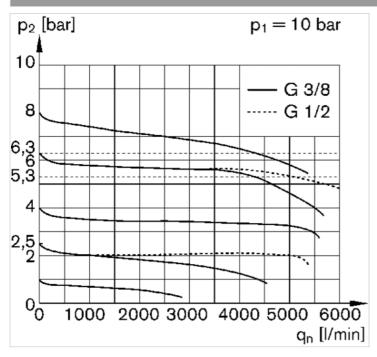


- p1 = Working pressure
- p2 = Secondary pressure
- qn = Nominal flow





Flow rate characteristic (p2: 0,5 - 8 bar)



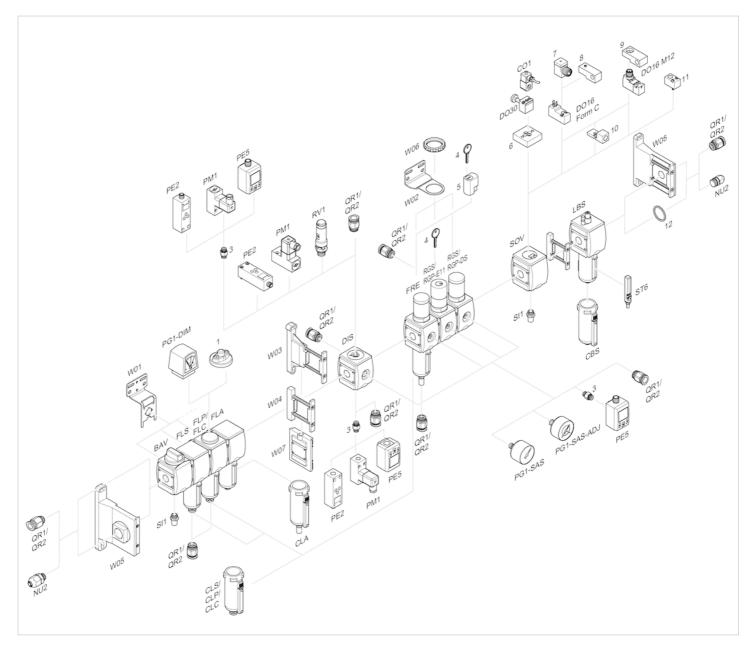
p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



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



Precision pressure regulator, Series AS3-RGP

- G 3/8 G 1/2
- Qn = 1600-5200 I/min
- Precision pressure regulator
- Activation Mechanical
- lockable
- for padlocks



Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Regulator type

Regulator function

Adjustment range min./max.

Lock type

Pressure supply

Activation

Internal air consumption qv max.

Weight

Precision 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 for padlocks

single

Mechanical

2.6 l/min

See table below

Technical data

Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max.
				Qn		
R412007136		_	G 3/8	1600 l/min	0.1 16 bar	0.1 1 bar
R412007137	P	\bigcirc	G 3/8	1600 l/min	0.1 16 bar	0.1 1 bar
R412007138		_	G 3/8	4600 l/min	0.1 16 bar	0.1 2 bar
R412007139	P	9	G 3/8	4600 l/min	0.1 16 bar	0.1 2 bar
R412007140		_	G 3/8	5000 l/min	0.2 16 bar	0.2 4 bar
R412007141	P	9	G 3/8	5000 l/min	0.2 16 bar	0.2 4 bar
R412007142		_	G 3/8	4300 l/min	0.5 16 bar	0.5 8 bar
R412007143	P	\bigcirc	G 3/8	4300 l/min	0.5 16 bar	0.5 8 bar
R412007144		_	G 3/8	4300 l/min	0.5 16 bar	0.5 10 bar
R412007145	P	9	G 3/8	4300 l/min	0.5 16 bar	0.5 10 bar
R412007148		_	G 1/2	1600 l/min	0.1 16 bar	0.1 1 bar
R412007149	P	9	G 1/2	1600 l/min	0.1 16 bar	0.1 1 bar
R412007150		_	G 1/2	4600 l/min	0.1 16 bar	0.1 2 bar
R412007151	P	9	G 1/2	4600 l/min	0.1 16 bar	0.1 2 bar
R412007152		_	G 1/2	5000 l/min	0.2 16 bar	0.2 4 bar
R412007153	P	9	G 1/2	5000 l/min	0.2 16 bar	0.2 4 bar
R412007154	7	_	G 1/2	5200 l/min	0.5 16 bar	0.5 8 bar
R412007155	7	\bigcirc	G 1/2	5200 l/min	0.5 16 bar	0.5 8 bar





Part No.			Port	Flow	Working pressure min./max.	Adjustment range min./max	
				Qn			
R412007156	#	_	G 1/2	5200 l/min	0.5 16 bar	0.5 10 bar	
R412007157	<u>_0</u>	9	G 1/2	5200 l/min	0.5 16 bar	0.5 10 bar	

Part No.	Pressure gauge	Weight	
R412007136	-	0.528 kg	1)
R412007137	with pressure gauge	0.6 kg	2)
R412007138	-	0.528 kg	1)
R412007139	with pressure gauge	0.6 kg	2)
R412007140	-	0.528 kg	1)
R412007141	with pressure gauge	0.6 kg	2)
R412007142	-	0.528 kg	1)
R412007143	with pressure gauge	0.6 kg	2)
R412007144	-	0.528 kg	1)
R412007145	with pressure gauge	0.6 kg	2)
R412007148	-	0.528 kg	1)
R412007149	with pressure gauge	0.6 kg	2)
R412007150	-	0.528 kg	1)
R412007151	with pressure gauge	0.6 kg	2)
R412007152	-	0.528 kg	1)
R412007153	with pressure gauge	0.6 kg	2)
R412007154	-	0.528 kg	1)
R412007155	with pressure gauge	0.6 kg	2)
R412007156	-	0.528 kg	1)
R412007157	with pressure gauge	0.6 kg	2)

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

- 1) Order pressure gauge separately.
- 2) Pressure gauge enclosed separately.

Technical information

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

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.

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

Recommended pre-filter: 5 µm

Technical information

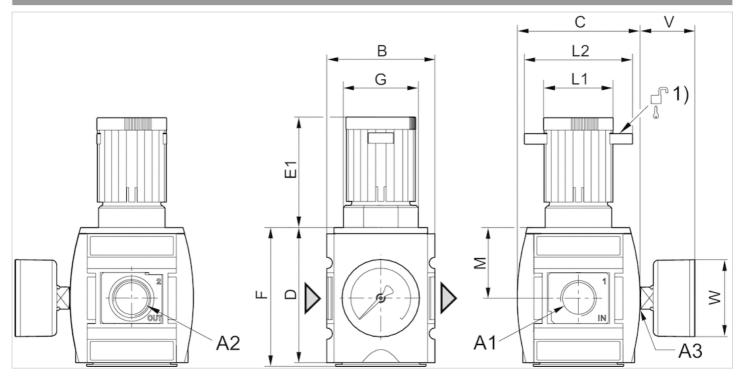
Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc





Dimensions

Dimensions



A1 = input

A2 = output

A3 = pressure gauge connection

1) Mounting option for padlocks, max. shackle \varnothing 8

Dimensions in mm

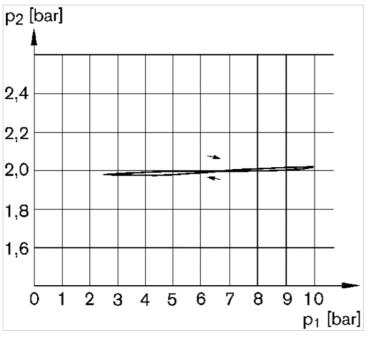
A1	A2	A3	В	С	D	E1	F	G	L1	L2	М	V	W
G 3/8	G 3/8	G 1/4	63	74	80	63.5	82	M42x1,5	41	60	42.5	33	50
G 1/2	G 1/2	G 1/4	63	74	80	63.5	82	M42x1,5	41	60	42.5	33	50





Diagrams

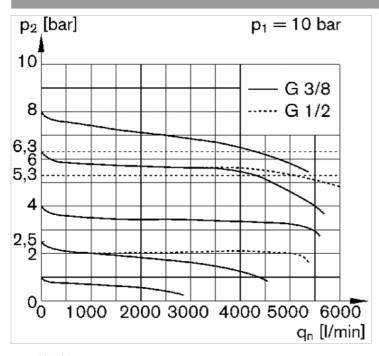
Pressure characteristics curve



p1 = working pressure

p2 = secondary pressure

Flow rate characteristic (p2: 0,5 - 8 bar)



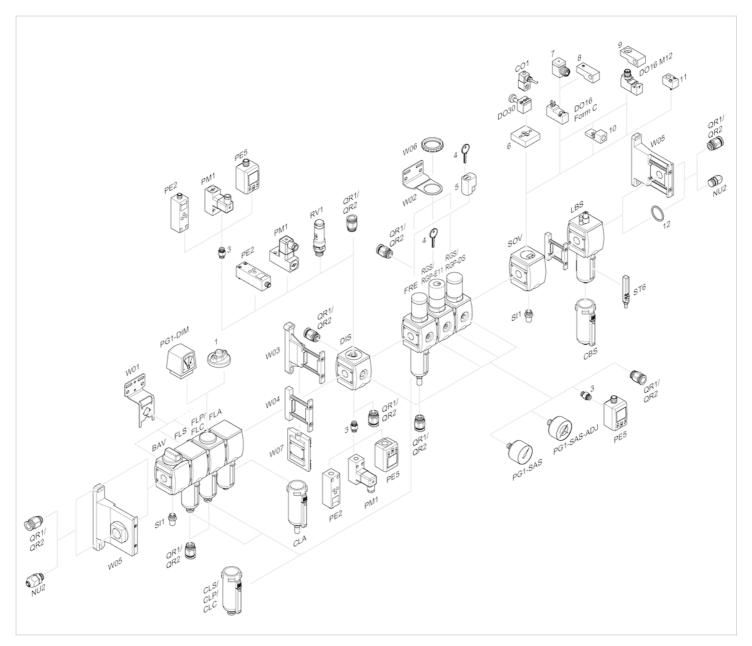
p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



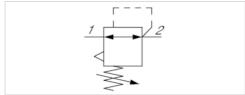
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Precision pressure regulator, Series AS3-RGP-...-E11

- G 1/2
- Qn = 5000 I/min
- Precision pressure regulator
- Activation Mechanical
- lockable
- with E11 locking





Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Regulator type

Regulator function

Adjustment range min./max.

Lock type

Pressure supply

Activation

Internal air consumption qv max.

Weight

Precision pressure regulator

Any

0.2 ... 16 bar

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

Diaphragm-type pressure regulator Can

be assembled into blocks

with relieving air exhaust

0.2 ... 4 bar

with E11 locking

single

Mechanical

2.6 l/min

0.528 kg

Technical data

Part No.	Port	Flow
		Qn
R412007158	G 1/2	5000 l/min

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 .

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).

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

Recommended pre-filter: 5 µm

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

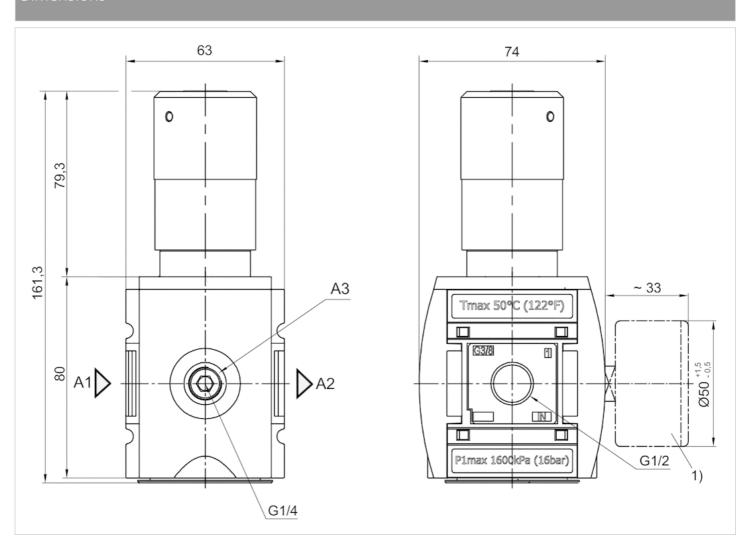


Technical information

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

Dimensions

Dimensions



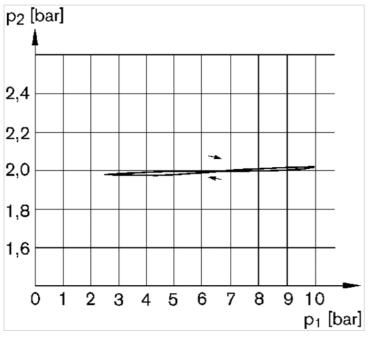
1) Order pressure gauge separately





Diagrams

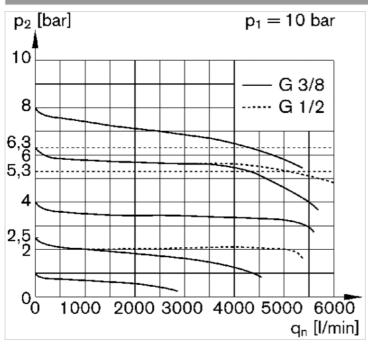
Pressure characteristics curve



p1 = working pressure

p2 = secondary pressure

Flow rate characteristic (p2: 0,5 - 8 bar)



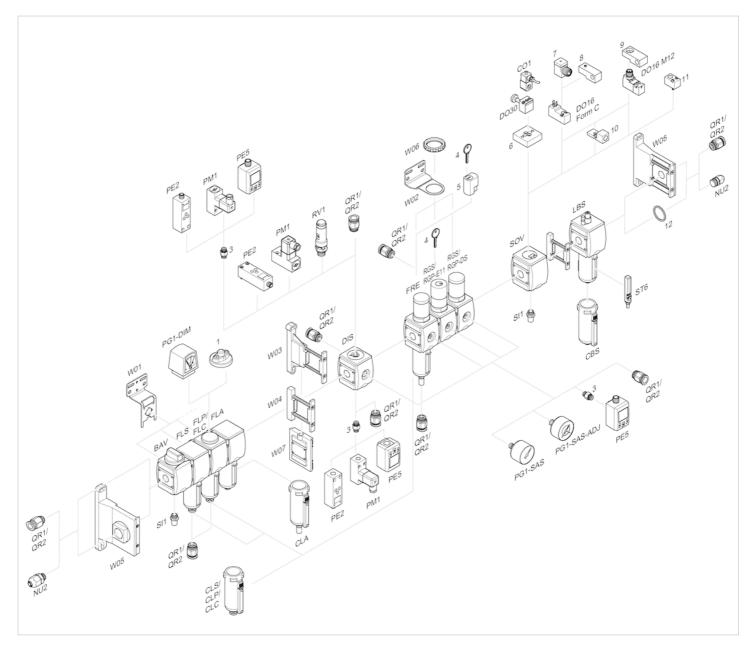
p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



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

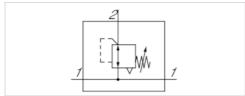




Precision pressure regulator, Series AS3-RGP-...-DS

- G 3/8 G 1/2
- Qn = 1600-5200 I/min
- Precision pressure regulator
- Activation Mechanical
- with continuous pressure supply
- lockable
- for padlocks





Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium Regulator type

Regulator function

Adjustment range min./max.

Lock type

Pressure supply

Activation

Internal air consumption qv max.

Weight

Precision 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 for padlocks double Mechanical 2.6 l/min

0.528 kg

Technical data

Part No.	Port	Flow	Working pressure min./max.	Adjustment range min./max.		
		Qn				
R412007160	G 3/8	1600 l/min	0.1 16 bar	0.1 1 bar		
R412007161	G 3/8	4600 l/min	0.1 16 bar	0.1 2 bar		
R412007162	G 3/8	5000 l/min	0.2 16 bar	0.2 4 bar		
R412007163	G 3/8	4300 l/min	0.5 16 bar	0.5 8 bar		
R412007164	G 3/8	4300 l/min	0.5 16 bar	0.5 10 bar		
R412007166	G 1/2	1600 l/min	0.1 16 bar	0.1 1 bar		
R412007167	G 1/2	4600 l/min	0.1 16 bar	0.1 2 bar		
R412007168	G 1/2	5000 l/min	0.2 16 bar	0.2 4 bar		
R412007169	G 1/2	5200 l/min	0.5 16 bar	0.5 8 bar		
R412007170	G 1/2	5200 l/min	0.5 16 bar	0.5 10 bar		

Part No.	Max. pressure gauge Ø in blocked state
R412007160	50 mm
R412007161	50 mm
R412007162	50 mm



Part No.	Max. pressure gauge Ø in blocked state
R412007163	50 mm
R412007164	50 mm
R412007166	50 mm
R412007167	50 mm
R412007168	50 mm
R412007169	50 mm
R412007170	50 mm

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

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 .

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).

Recommended pre-filter: 5 µm

Technical information

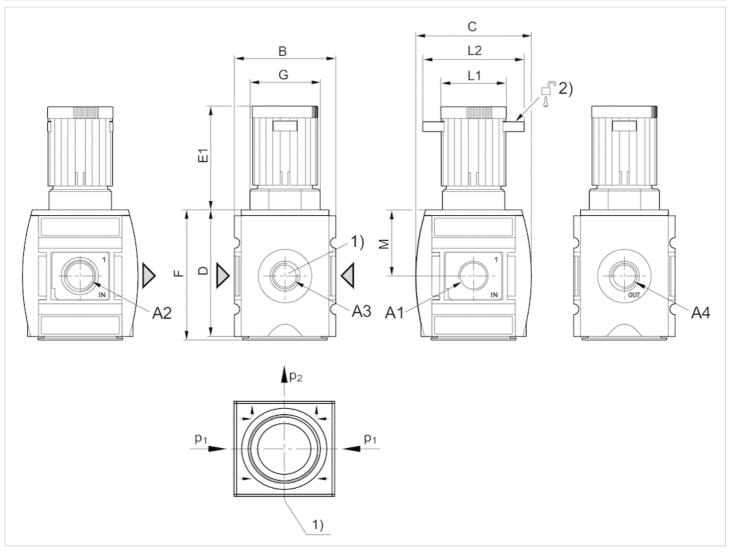
Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc





Dimensions

Dimensions



A1 = input

A2 = output

A3 = pressure gauge connection

A4 = output

- 1) Pressure gauge connection
- 2) Mounting option for padlocks, max. shackle \varnothing 8

Dimensions in mm

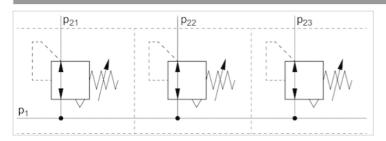
G 1/2	G 1/4	G 3/8	63	74	80	63.5	82	M42x1,5	41	60	42.5	R412007168
G 3/8	G 3/8	G 1/4	G 3/8	63	74	80	63.5	82	M42x1,5	41	60	42.5
G 1/2	G 1/2	G 1/4	G 3/8	63	74	80	63.5	82	M42x1,5	41	60	42.5





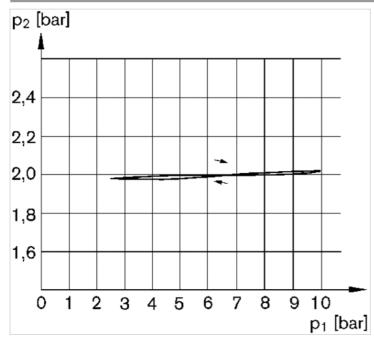
Diagrams

Application example



p1 = working pressure

Pressure characteristics curve



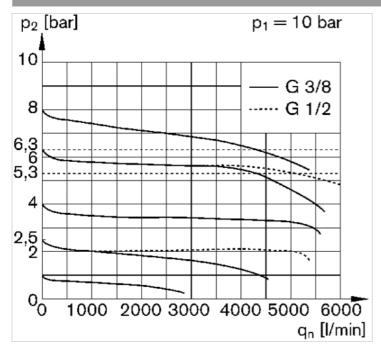
p1 = working pressure

p2 = secondary pressure





Flow rate characteristic (p2: 0,5 - 8 bar)



p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



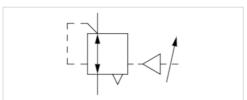
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Pressure regulator, Series AS3-RGS

- G 3/8 G 1/2
- Qn = 6500 l/min
- Standard pressure regulator
- Activation pneumatically





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

Any

0 ... 16 bar

0 ... 50 °C

0 ... 50 °C

Compressed air Neutral gases

Diaphragm-type pressure regulator Can

be assembled into blocks

with relieving air exhaust

0.5 ... 16 bar

single

pneumatically

0.579 kg

Technical data

Part No.	Port	Flow
		Qn
R412007094	G 3/8	6500 l/min
R412007095	G 1/2	6500 l/min

Control pressure: see diagram, Nominal flow Qn with secondary pressure p2 = 6 bar at $\Delta p = 1$ bar 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 .

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).

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

Relieving exhaust (≤ 0.3 bar over set pressure).

With rear exhaust (> 3 bar).

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene

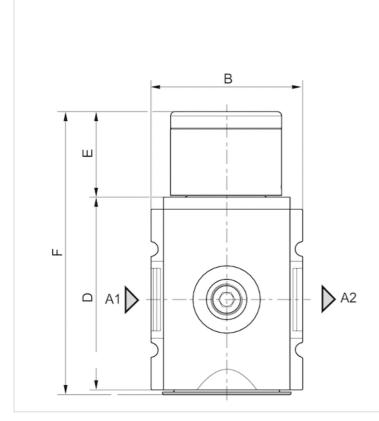


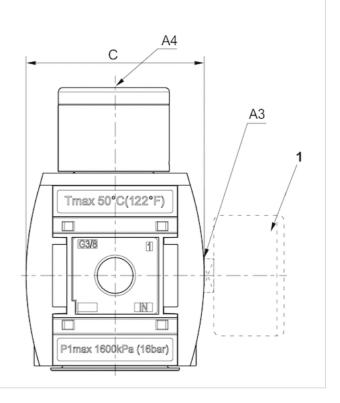


Material	
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc

Dimensions

Dimensions





A1 = input

A2 = output

A3 = pressure gauge connection

A4 = control pressure connection

1) Order pressure gauge separately

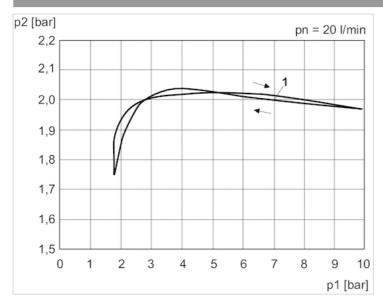
Dimensions in mm

A1	A2	A3	A4	В	С	D	Е	F
G 3/8	G 3/8	G 1/4	G 1/8	63	74	80	39.25	121
G 1/2	G 1/2	G 1/4	G 1/8	63	74	80	39.25	121



Diagrams

Pressure characteristics curve



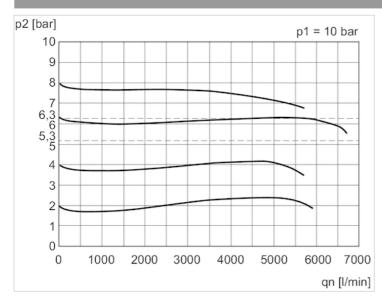
p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow

1) = Starting point

Flow rate characteristic (p2: 0,5 - 8 bar)



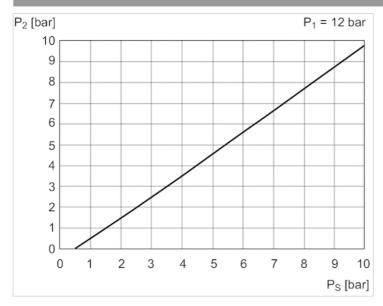
p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



control pressure characteristic



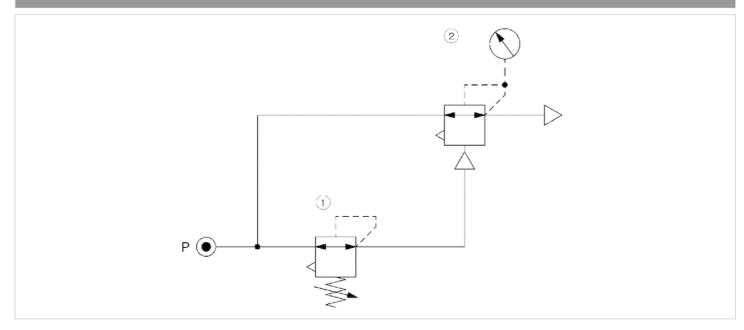
p1 = working pressure

p2 = secondary pressure

PS = control pressure

Circuit diagram

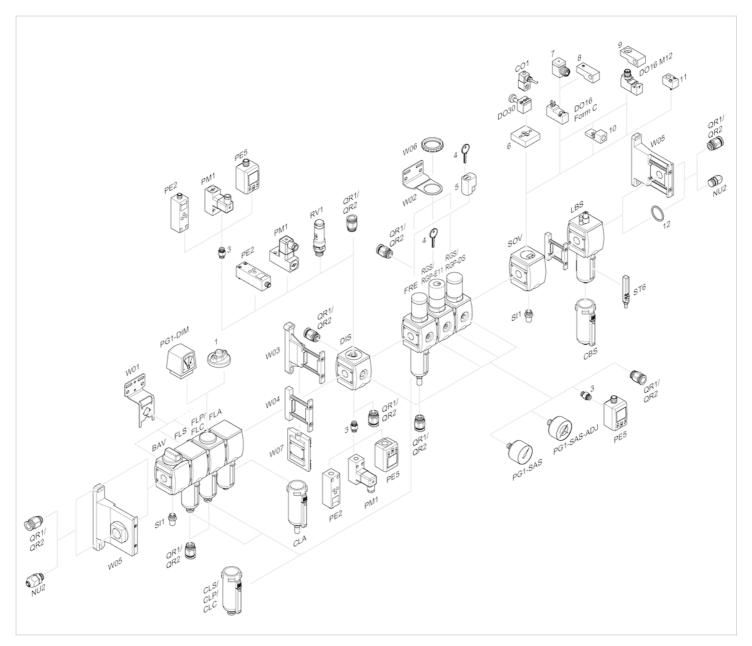
Application example



- 1) precision pressure regulator
- 2) pressure regulator valve, pneumatically operated



Accessories overview



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

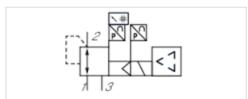




E/P pressure regulator, Series EV12

- Pressure supply, left, Display: display
- Qn = 6500 I/min
- Compressed air connection output G 1/2 G 3/8
- Electr. connection M12, 5-pin, A-coded
- serial control IO-Link
- Pilot valves





Version	Poppet valve
Ambient temperature min./max.	0 50 °C
Medium temperature min./max.	0 50 °C
Medium	Neutral gases
Max. particle size	50 μm
Oil content of compressed air	0 5 mg/m³
Nominal flow Qn	6500 l/min
DC operating voltage	24 V
Voltage tolerance DC	-20% / +30%
Hysteresis	0.12 bar
Permissible ripple	5%
Max. power consumption	220 mA
Weight	1.4 kg

Technical data

Part No.	Pressure setting range	Compressed air connection	
	min./max.	Input	
R414011386	0 10 bar	G 1/2	
R414011387	0 10 bar	G 1/2	
R414011389	0 10 bar	G 1/2	
R414011398	0 10 bar	G 3/8	
R414011399	0 10 bar	G 3/8	
R414011401	0 10 bar	G 3/8	

Part No.	Compressed air connection	Nominal input value	Actual output value	serial control
	Output	Min./max.	Min./max.	
R414011386	G 1/2	0 10 V	0 10 V	-
R414011387	G 1/2	4 20 mA	4 20 mA	-
R414011389	G 1/2	-	-	IO-Link
R414011398	G 3/8	0 10 V	0 10 V	-
R414011399	G 3/8	4 20 mA	0 20 mA	-
R414011401	G 3/8	-	-	IO-Link

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).

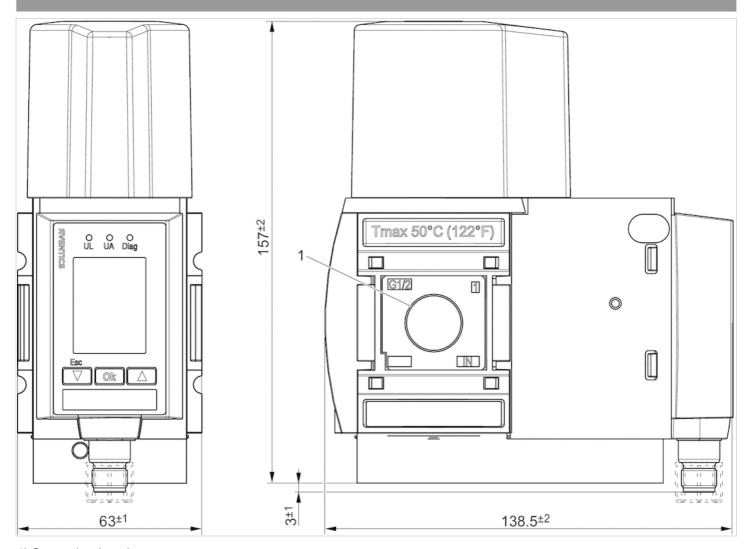
Power outage: maintain pressure

Technical information

Material	
Housing	Polyamide
Base plate	Aluminum
Seals	Nitrile butadiene rubber

Dimensions

Dimensions

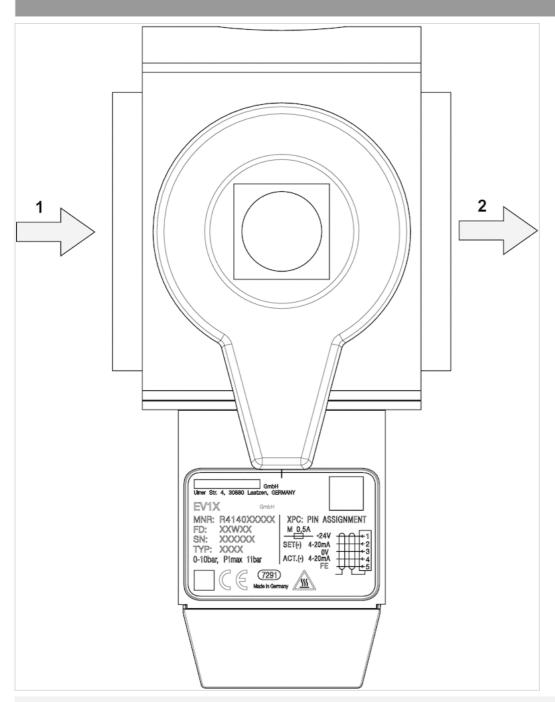


1) Connection thread



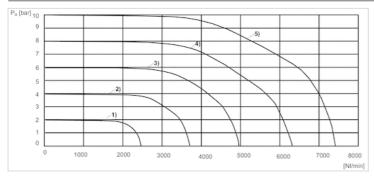


Pressure supply, left



Diagrams

Flow characteristic curve



1) Pv = 3 bar





2)Pv = 5 bar

3)Pv = 7 bar

4) Pv = 9 bar

5)Pv = 11 bar

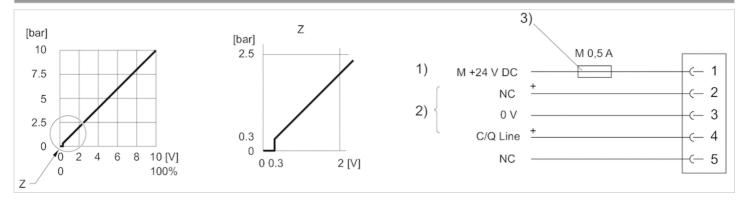
Pv = Supply pressure

Pa = Working pressure

Pv = Pa + 1

Circuit diagram

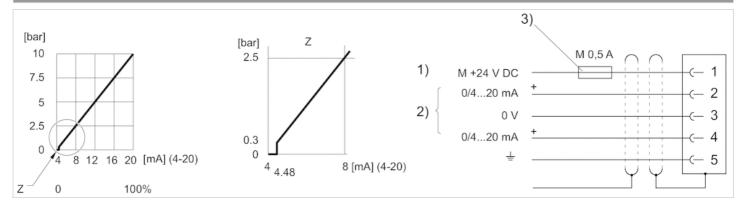
Characteristic curve and plug assignment for IO-Link version



- 1) power supply
- 2) C/Q Line (pin 4) Not connected (NC) (pin 2) are related to 0 V (pin 3).
- 3) The power supply must be protected by an external M 0.5 A fuse.

Connect the plug via a shielded cable to ensure EMC.

Characteristic and pin assignment for current control with actual output value



- 1) power supply
- 2) Actual value (pin 4) and nominal value (pin 2) are related to 0 V (pin 3).

Nominal input value (ohmic load 100 Ω), actual output value: external ohmic load 300 Ω . If the power supply is switched off, the nominal input value is high-ohmic.

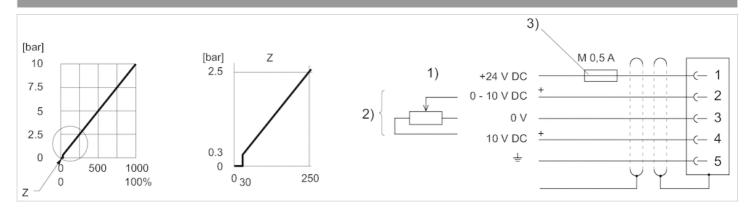
3) The power supply must be protected by an external M 0.5 A fuse.

Connect the plug via a shielded cable to ensure EMC.





Characteristic and pin assignment for voltage control with actual output value



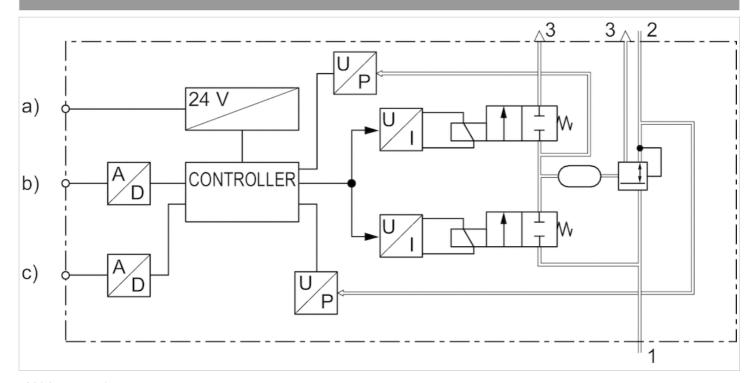
- 1) power supply
- 2) Actual value (pin 4) and nominal value (pin 2) are related to 0 V (pin 3).

Nominal input value (R = 1 $M\Omega$), actual output value: min. load resistance > 10 $K\Omega$. If the power supply is switched off, the nominal input value is high-ohmic.

3) The power supply must be protected by an external M 0.5 A fuse.

Connect the plug via a shielded cable to ensure EMC.

Functional diagram

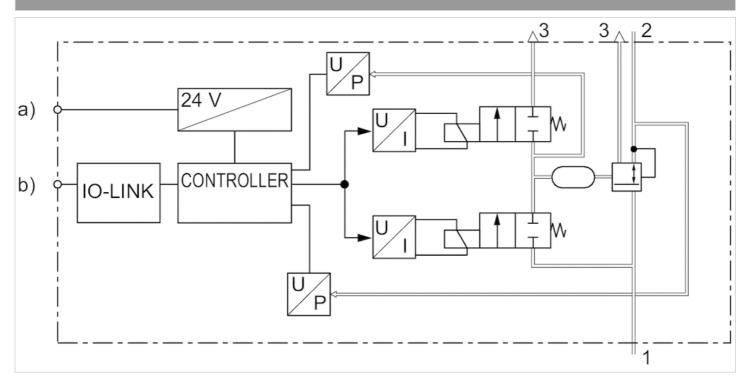


- a) Voltage supply
- b) Nominal value
- c) Actual output value





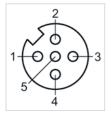
Functional diagram, 10-Link



- a) Supply Voltage
- b) C/Q Line

Pin assignments

Plug assignment



- 1) 24 V DC
- 2) Nominal input value
- 3) GND
- 4) Actual output value
- 5) Ground

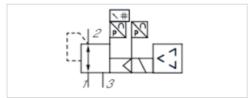




E/P pressure regulator, Series EV12

- Pressure supply, right, Display: display
- Qn = 6500 I/min
- Compressed air connection output G 1/2 G 3/8
- Electr. connection M12, 5-pin
- serial control IO-Link
- Pilot valves





Version Poppet valve Working pressure max 11 bar 0 ... 50 °C Ambient temperature min./max. Medium temperature min./max. 0 ... 50 °C Medium Compressed air Max. particle size 50 µm Oil content of compressed air 0 ... 5 mg/m³ Nominal flow Qn 6500 l/min DC operating voltage 24 V Voltage tolerance DC -20% / +30% 0.12 bar Hysteresis Permissible ripple 5% Max. power consumption 220 mA Weight

1.4 kg

Technical data

Part No.	Compressed air connection	Compressed air connection	Nominal input value
	Input	Output	Min./max.
R414011384	G 1/2	G 1/2	0 10 V
R414011385	G 1/2	G 1/2	4 20 mA
R414011388	G 1/2	G 1/2	-
R414011396	G 3/8	G 3/8	0 10 V
R414011397	G 3/8	G 3/8	4 20 mA
R414011400	G 3/8	G 3/8	-

Part No.	Actual output value	serial control
	Min./max.	
R414011384	0 10 V	-
R414011385	4 20 mA	-
R414011388	-	IO-Link
R414011396	0 10 V	-
R414011397	4 20 mA	-
R414011400	-	IO-Link

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).

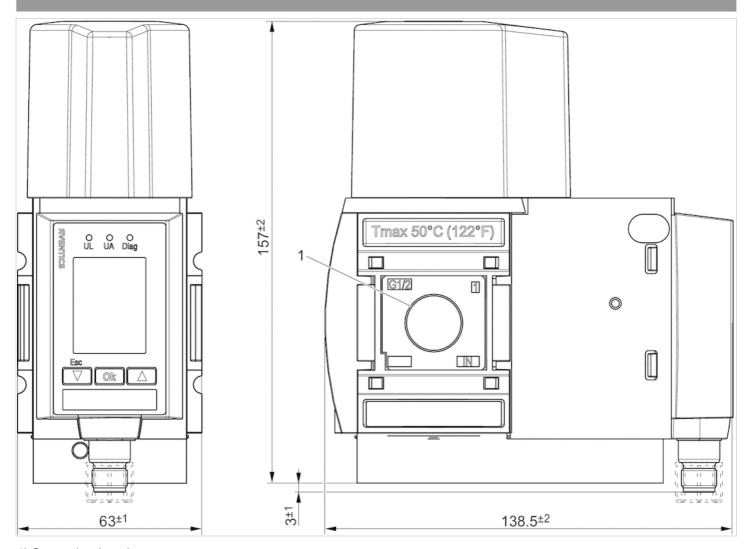
Power outage: maintain pressure

Technical information

Material	
Housing	Polyamide
Base plate	Aluminum
Seals	Nitrile butadiene rubber

Dimensions

Dimensions

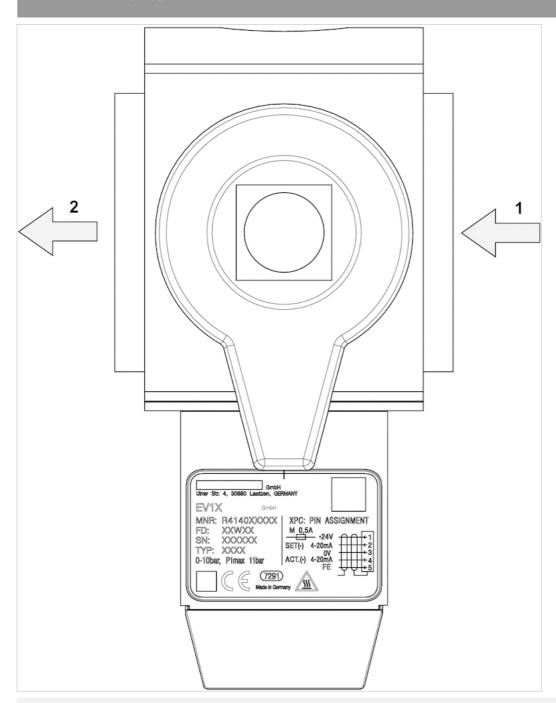


1) Connection thread



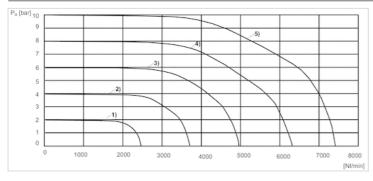


Pressure supply, right



Diagrams

Flow characteristic curve



1) Pv = 3 bar





2)Pv = 5 bar

3)Pv = 7 bar

4) Pv = 9 bar

5)Pv = 11 bar

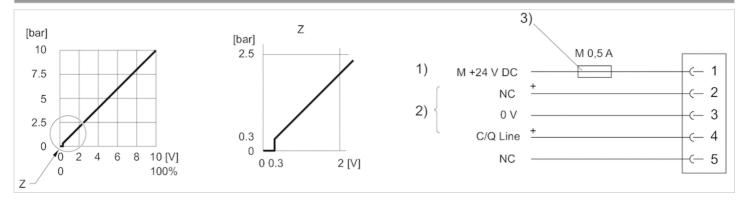
Pv = Supply pressure

Pa = Working pressure

Pv = Pa + 1

Circuit diagram

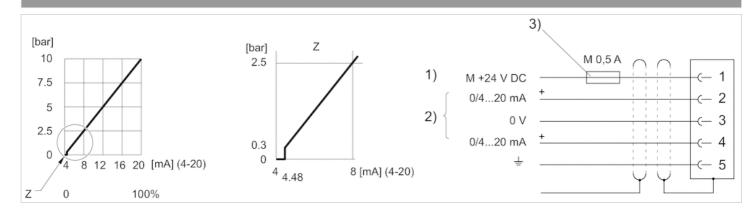
Characteristic curve and plug assignment for IO-Link version



- 1) power supply
- 2) C/Q Line (pin 4) Not connected (NC) (pin 2) are related to 0 V (pin 3).
- 3) The power supply must be protected by an external M 0.5 A fuse.

Connect the plug via a shielded cable to ensure EMC.

Characteristic and pin assignment for current control with actual output value



- 1) power supply
- 2) Actual value (pin 4) and nominal value (pin 2) are related to 0 V (pin 3).

Nominal input value (ohmic load 100 Ω), actual output value: external ohmic load 300 Ω . If the power supply is switched off, the nominal input value is high-ohmic.

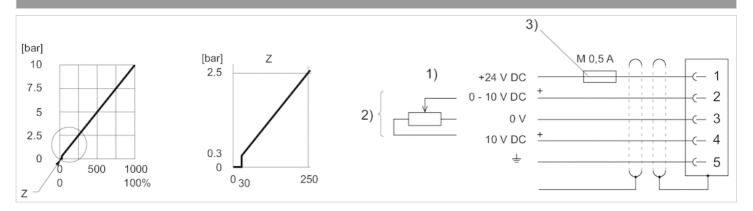
3) The power supply must be protected by an external M 0.5 A fuse.

Connect the plug via a shielded cable to ensure EMC.





Characteristic and pin assignment for voltage control with actual output value



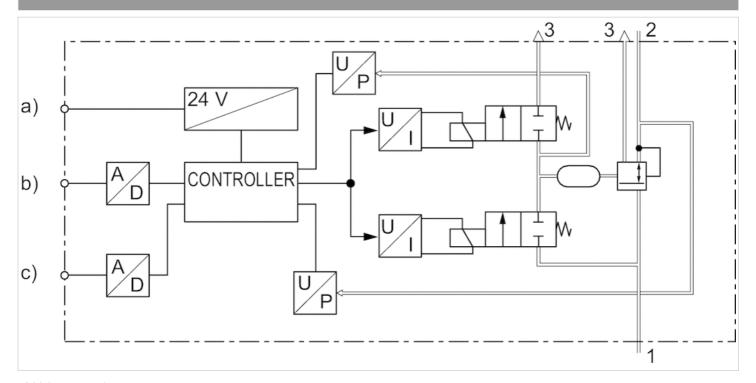
- 1) power supply
- 2) Actual value (pin 4) and nominal value (pin 2) are related to 0 V (pin 3).

Nominal input value (R = 1 $M\Omega$), actual output value: min. load resistance > 10 $K\Omega$. If the power supply is switched off, the nominal input value is high-ohmic.

3) The power supply must be protected by an external M 0.5 A fuse.

Connect the plug via a shielded cable to ensure EMC.

Functional diagram

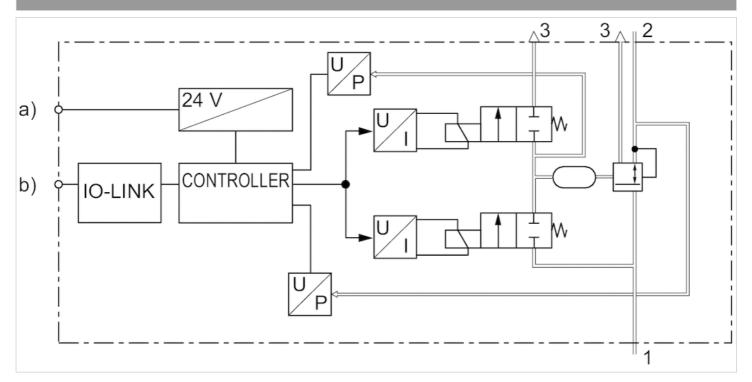


- a) Voltage supply
- b) Nominal value
- c) Actual output value





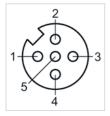
Functional diagram, 10-Link



- a) Supply Voltage
- b) C/Q Line

Pin assignments

Plug assignment



- 1) 24 V DC
- 2) Nominal input value
- 3) GND
- 4) Actual output value
- 5) Ground

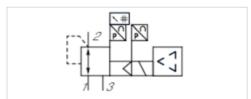




E/P pressure regulator, Series EV12

- Continuous pressure supply, Display: display
- Qn = 6500 I/min
- Compressed air connection output G 1/2 G 3/8
- Electr. connection M12, 5-pin, A-coded
- serial control IO-Link
- Pilot valves





Version	Poppet valve
Working pressure max	11 bar
Ambient temperature min./max.	0 50 °C
Medium temperature min./max.	0 50 °C
Max. particle size	50 μm
Oil content of compressed air	0 5 mg/m³
Nominal flow Qn	6500 l/min
DC operating voltage	24 V
Voltage tolerance DC	-20% / +30%
Hysteresis	0.12 bar 0.12 bar
Permissible ripple	5%
Max. power consumption	220 mA

1.4 kg

Technical data

Part No.	Compressed air connection	Compressed air connection	Nominal input value
	Input	Output	Min./max.
R414011390	G 1/2	G 1/2	0 10 V
R414011391	G 1/2	G 1/2	0 20 mA
R414011394	G 1/2	G 1/2	-
R414011402	G 3/8	G 3/8	0 10 V
R414011403	G 3/8	G 3/8	4 20 mA
R414011406	G 3/8	G 3/8	-

Weight

Part No.	Actual output value	serial control
	Min./max.	
R414011390	0 10 V	-
R414011391	4 20 mA	-
R414011394	-	IO-Link
R414011402	0 10 V	-
R414011403	4 20 mA	-
R414011406	-	IO-Link

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).

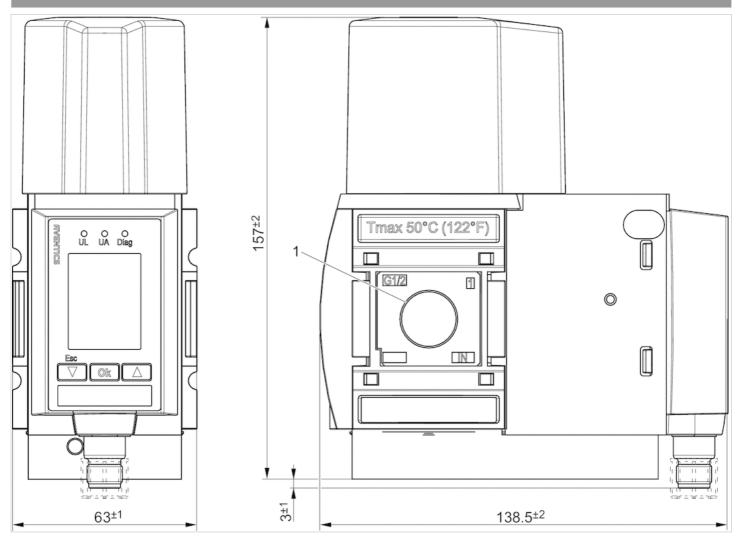
Power outage: maintain pressure

Technical information

Material		
Housing	Polyamide	
Base plate	Aluminum	
Seals	Nitrile butadiene rubber	

Dimensions

Dimensions

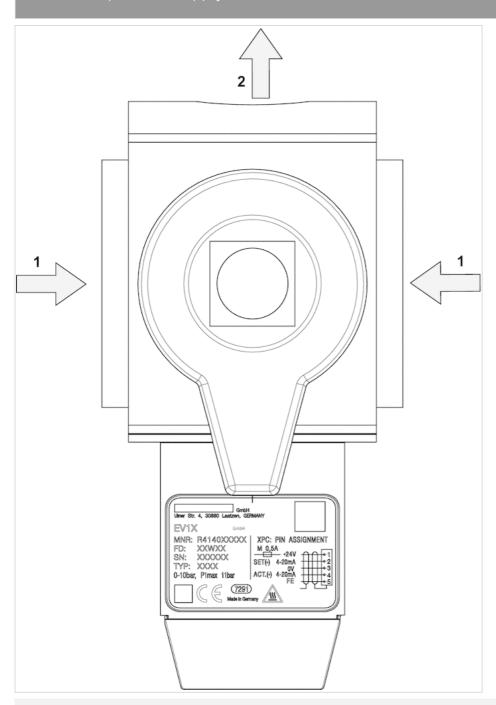


1) Connection thread



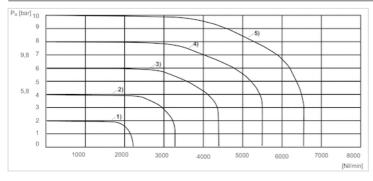


Continuous pressure supply



Diagrams

Flow characteristic curve



1) Pv = 3 bar





2)Pv = 5 bar

3)Pv = 7 bar

4) Pv = 9 bar

5)Pv = 11 bar

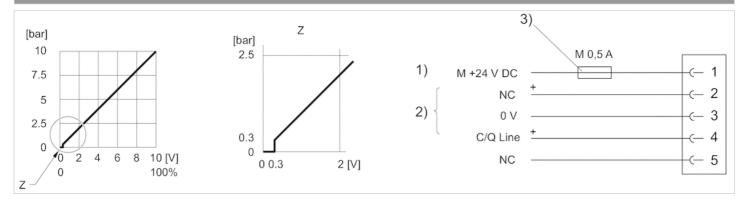
Pv = Supply pressure

Pa = Working pressure

Pv = Pa + 1

Circuit diagram

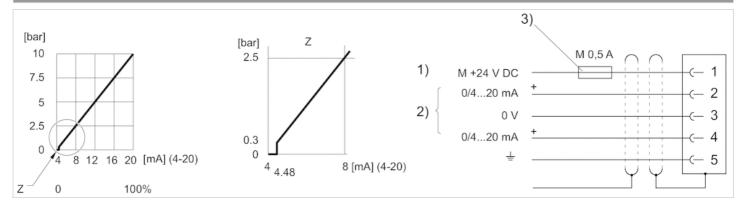
Characteristic curve and plug assignment for IO-Link version



- 1) power supply
- 2) C/Q Line (pin 4) Not connected (NC) (pin 2) are related to 0 V (pin 3).
- 3) The power supply must be protected by an external M 0.5 A fuse.

Connect the plug via a shielded cable to ensure EMC.

Characteristic and pin assignment for current control with actual output value



- 1) power supply
- 2) Actual value (pin 4) and nominal value (pin 2) are related to 0 V (pin 3).

Nominal input value (ohmic load 100 Ω), actual output value: external ohmic load 300 Ω . If the power supply is switched off, the nominal input value is high-ohmic.

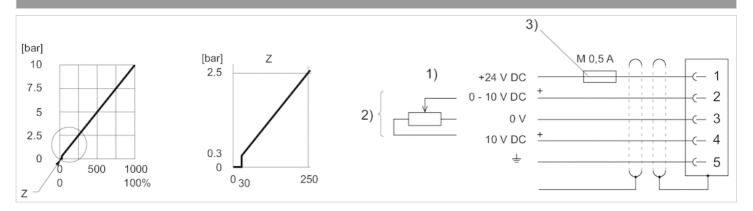
3) The power supply must be protected by an external M 0.5 A fuse.

Connect the plug via a shielded cable to ensure EMC.





Characteristic and pin assignment for voltage control with actual output value



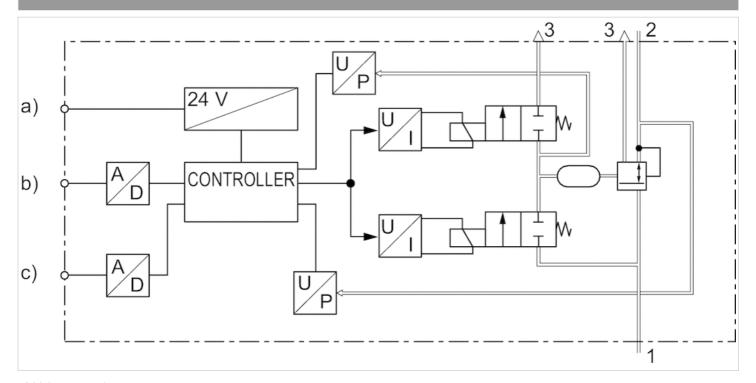
- 1) power supply
- 2) Actual value (pin 4) and nominal value (pin 2) are related to 0 V (pin 3).

Nominal input value (R = 1 $M\Omega$), actual output value: min. load resistance > 10 $K\Omega$. If the power supply is switched off, the nominal input value is high-ohmic.

3) The power supply must be protected by an external M 0.5 A fuse.

Connect the plug via a shielded cable to ensure EMC.

Functional diagram

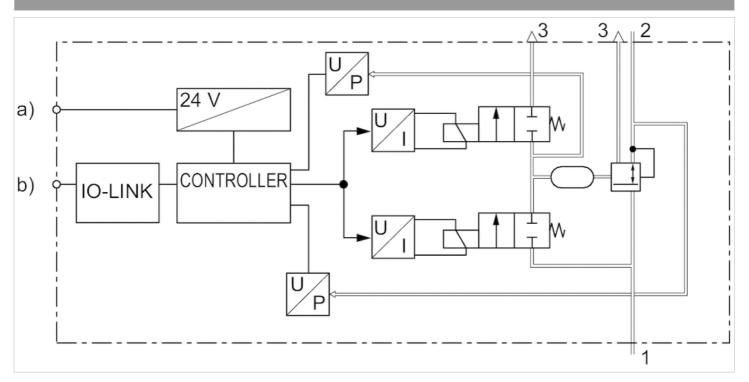


- a) Voltage supply
- b) Nominal value
- c) Actual output value





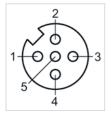
Functional diagram, IO-Link



- a) Supply Voltage
- b) C/Q Line

Pin assignments

Plug assignment



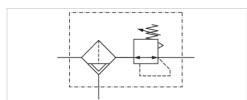
- 1) 24 V DC
- 2) Nominal input value
- 3) GND
- 4) Actual output value
- 5) Ground



Filter pressure regulator, Series AS3-FRE

- G 3/8 G 1/2
- filter porosity 5 µm
- lockable
- for padlocks





Version

Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Nominal flow Qn

Regulator type

Regulator function Adjustment

range min./max. Pressure

supply

Filter reservoir volume

Filter element

Weight

1-part, Can be assembled into blocks

Filter pressure regulator

vertical

1.5 ... 16 bar

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

5100 l/min

Diaphragm-type pressure regulator

with relieving air exhaust

See table below

single

49 cm³

exchangeable

See table below

Technical data

Part No.	Port	filter porosity	Flow	Adjustment range min./max.
r artivo.	1 011	inter peresity	Qn	Adjustment range min./max.
R412007175	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007193	G 3/8	5 μm	5100 l/min	0.5 10 bar
R412007176	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007177	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007194	G 3/8	5 μm	5100 l/min	0.5 10 bar
R412007195	G 3/8	5 μm	5100 l/min	0.5 10 bar
R412007181	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007182	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007183	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007184	G 1/2	5 μm	5100 l/min	0.5 8 bar
R412007196	G 1/2	5 μm	5100 l/min	0.5 10 bar
R412007190	G 1/2	5 μm	5100 l/min	0.5 8 bar
R412007240	G 1/2	5 μm	5100 l/min	0.5 16 bar
R412007185	G 1/2	5 μm	5100 l/min	0.5 8 bar
R412007186	G 1/2	5 μm	5100 l/min	0.5 8 bar
R412007197	G 1/2	5 μm	5100 l/min	0.5 10 bar
R412007198	G 1/2	5 μm	5100 l/min	0.5 10 bar
R412007238	G 1/2	5 μm	5100 l/min	0.5 16 bar





Part No.	Port	filter porosity	Flow Qn	Adjustment range min./max.
R412007192	G 1/2	5 μm	5100 l/min	0.5 8 bar
R412007191	G 1/2	5 μm	5100 l/min	0.5 8 bar
R412007241	G 1/2	5 μm	5100 l/min	0.5 16 bar
R412007242	G 1/2	5 μm	5100 l/min	0.5 16 bar

Part No.	Condensate drain	Reservoir	Protective guard	Weight
R412007175	semi-automatic, open without pressure	Polycarbonate	Polyamide	0.586 kg
R412007193	semi-automatic, open without pressure	Polycarbonate	Polyamide	0.818 kg
R412007176	fully automatic, open without pressure	Polycarbonate	Polyamide	0.635 kg
R412007177	fully automatic, closed without pressure	Polycarbonate	Polyamide	0.635 kg
R412007194	fully automatic, open without pressure	Polycarbonate	Polyamide	0.87 kg
R412007195	fully automatic, closed without pressure	Polycarbonate	Polyamide	0.87 kg
R412007181	fully automatic, closed without pressure	Die cast zinc	-	0.818 kg
R412007182	fully automatic, open without pressure	Die cast zinc	-	0.87 kg
R412007183	fully automatic, closed without pressure	Die cast zinc	-	0.87 kg
R412007184	semi-automatic, open without pressure	Polycarbonate	Polyamide	0.586 kg
R412007196	semi-automatic, open without pressure	Polycarbonate	Polyamide	0.586 kg
R412007190	semi-automatic, open without pressure	Die cast zinc	-	0.797 kg
R412007240	semi-automatic, open without pressure	Die cast zinc	-	0.797 kg
R412007185	fully automatic, open without pressure	Polycarbonate	Polyamide	0.635 kg
R412007186	fully automatic, closed without pressure	Polycarbonate	Polyamide	0.635 kg
R412007197	fully automatic, open without pressure	Polycarbonate	Polyamide	0.635 kg
R412007198	fully automatic, closed without pressure	Polycarbonate	Polyamide	0.635 kg
R412007238	fully automatic, closed without pressure	Polycarbonate	Polyamide	0.635 kg
R412007192	fully automatic, closed without pressure	Die cast zinc	-	0.85 kg
R412007191	fully automatic, open without pressure	Die cast zinc	-	0.85 kg
R412007241	fully automatic, open without pressure	Die cast zinc	-	0.85 kg
R412007242	fully automatic, closed without pressure	Die cast zinc	-	0.85 kg

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar 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". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details. 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

PDF creation date:

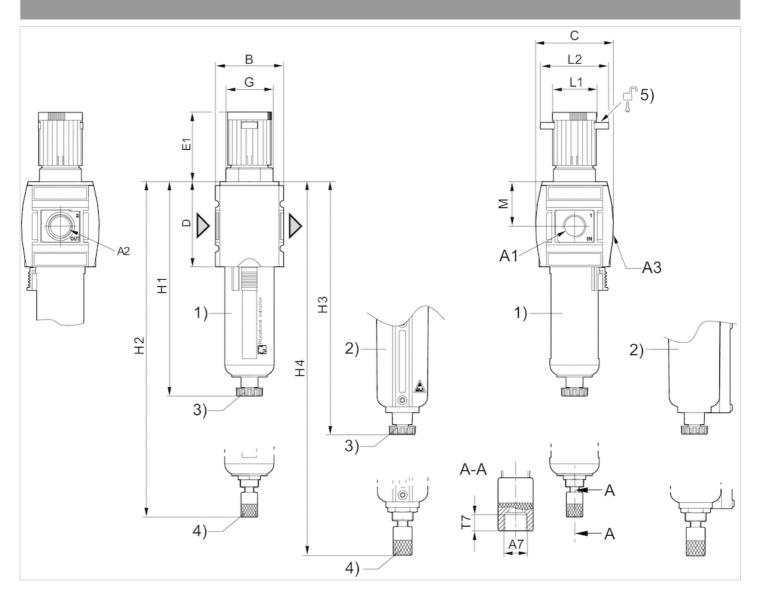




Material	
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate Die cast zinc
Protective guard	Polyamide
Filter insert	Polyethylene

Dimensions

Dimensions



- A1 = input
- A2 = output
- A3 = pressure gauge connection
- A7 = condensate drain
- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with level indicator
- 3) Semi-automatic condensate drain
- 4) Fully automatic condensate drain
- 5) Mounting option for padlocks, max. shackle Ø 8



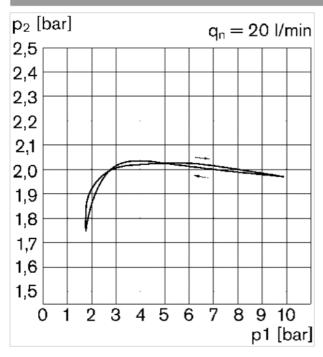


Dimensions in mm

A1	A2	A3	A7	В	С	D	E1	G	H1	H2	НЗ	H4	L1	L2	М
G 3/8	G 3/8	G 1/4	G 1/8	63	74	80	63.5	M42x1,5	189.5				41	60	42.5
G 3/8	G 3/8	G 1/4	G 1/8	63	74	80	63.5	M42x1,5		206			41	60	42.5
G 3/8	G 3/8	G 1/4	G 1/8	63	74	80	63.5	M42x1,5			193.5		41	60	42.5
G 3/8	G 3/8	G 1/4	G 1/8	63	74	80	63.5	M42x1,5				210.5	41	60	42.5
G 1/2	G 1/2	G 1/4	G 1/8	63	74	80	63.5	M42x1,5	189.5				41	60	42.5
G 1/2	G 1/2	G 1/4	G 1/8	63	74	80	63.5	M42x1,5			193.5		41	60	42.5
G 1/2	G 1/2	G 1/4	G 1/8	63	74	80	63.5	M42x1,5		206			41	60	42.5
G 1/2	G 1/2	G 1/4	G 1/8	63	74	80	63.5	M42x1,5				210.5	41	60	42.5

Diagrams

Pressure characteristics curve



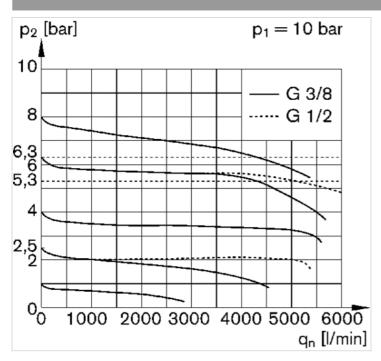
p1 = Working pressure

p2 = Secondary pressure





Flow rate characteristic (p2: 0,5 - 8 bar)



p1 = Working pressure

p2 = Secondary pressure



Accessories overview



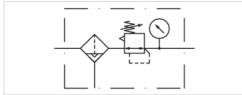
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Filter pressure regulator, Series AS3-FRE

- G 3/8 G 1/2
- filter porosity 5 µm
- lockable
- for padlocks
- with pressure gauge





Version

Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Nominal flow Qn

Regulator type

Regulator function Adjustment range min./max. Pressure

supply

Filter reservoir volume

Filter element

Weight

1-part, Can be assembled into blocks

Filter pressure regulator

vertical

1.5 ... 16 bar

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

5100 l/min

Diaphragm-type pressure regulator

with relieving air exhaust

See table below

single

49 cm³

exchangeable

See table below

Technical data

Part No.	Port	filter porosity	Flow	Adjustment range min./max.
			Qn	
R412007200	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007201	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007202	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007206	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007207	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007208	G 3/8	5 μm	5100 l/min	0.5 8 bar
R412007209	G 1/2	5 μm	5100 l/min	0.5 8 bar
R412007237	G 1/2	5 μm	5100 l/min	0.5 16 bar
R412007210	G 1/2	5 μm	5100 l/min	0.5 8 bar
R412007211	G 1/2	5 μm	5100 l/min	0.5 8 bar
R412007215	G 1/2	5 μm	5100 l/min	0.5 8 bar
R412007216	G 1/2	5 μm	5100 l/min	0.5 8 bar
R412007217	G 1/2	5 μm	5100 l/min	0.5 8 bar

Part No.	Condensate drain	Pressure gauge	Reservoir
R412007200	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
R412007201	fully automatic, open without pressure	with pressure gauge	Polycarbonate





Part No.	Condensate drain	Pressure gauge	Reservoir
R412007202	fully automatic, closed without pressure	with pressure gauge	Polycarbonate
R412007206	semi-automatic, open without pressure	with pressure gauge	Die cast zinc
R412007207	fully automatic, open without pressure	with pressure gauge	Die cast zinc
R412007208	fully automatic, closed without pressure	with pressure gauge	Die cast zinc
R412007209	semi-automatic, open without pressure	with pressure gauge	Polycarbonate
R412007237	fully automatic, open without pressure	with pressure gauge	Polycarbonate
R412007210	fully automatic, open without pressure	with pressure gauge	Polycarbonate
R412007211	fully automatic, closed without pressure	with pressure gauge	Polycarbonate
R412007215	semi-automatic, open without pressure	with pressure gauge	Die cast zinc
R412007216	fully automatic, open without pressure	with pressure gauge	Die cast zinc
R412007217	fully automatic, closed without pressure	with pressure gauge	Die cast zinc

Part No.	Protective guard	Weight
R412007200	Polyamide	0.658 kg
R412007201	Polyamide	0.707 kg
R412007202	Polyamide	0.707 kg
R412007206	-	0.89 kg
R412007207	-	0.943 kg
R412007208	-	0.943 kg
R412007209	Polyamide	0.658 kg
R412007237	Polyamide	0.658 kg
R412007210	Polyamide	0.707 kg
R412007211	Polyamide	0.707 kg
R412007215	-	0.87 kg
R412007216	-	0.922 kg
R412007217	-	0.922 kg

Pressure gauge enclosed 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".

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

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

PDF creation date: 20.06.2020

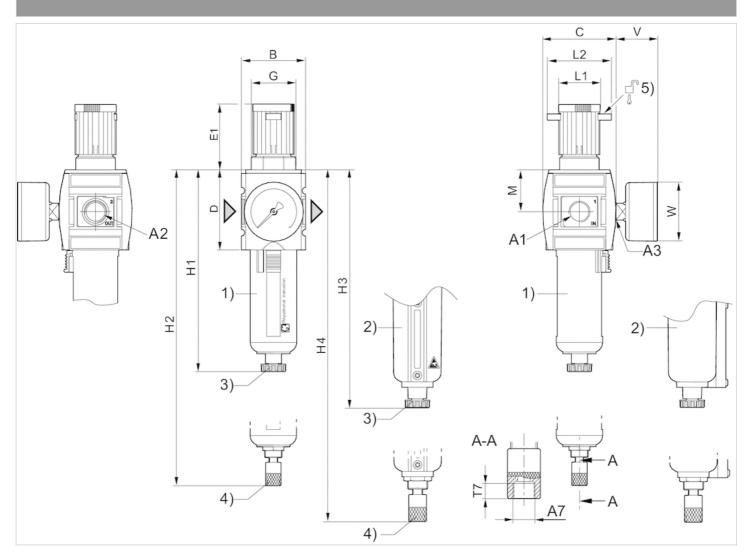




Material	
Reservoir	Polycarbonate Die cast zinc
Protective guard	Polyamide
Filter insert	Polyethylene

Dimensions

Dimensions



- A1 = input
- A2 = output
- A3 = pressure gauge connection
- A7 = condensate drain
- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with level indicator
- 3) Semi-automatic condensate drain
- 4) Fully automatic condensate drain
- 5) Mounting option for padlocks, max. shackle \varnothing 8



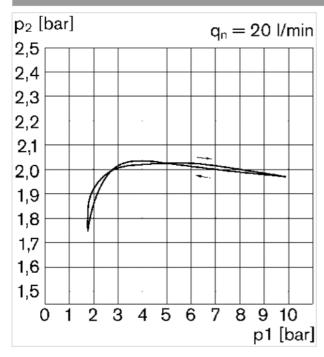


Dimensions in mm

A1	A2	A3	A7	В	С	D	E1	G	H1	H2	НЗ	H4	L1	L2	М	T7	V	W
G 3/8	G 3/8	G 1/4	G 1/8	63	74	80	63.5	M42x1,5	189.5				41	60	42.5	8.5	33	50
G 3/8	G 3/8	G 1/4	G 1/8	63	74	80	63.5	M42x1,5		206			41	60	42.5	8.5	33	50
G 3/8	G 3/8	G 1/4	G 1/8	63	74	80	63.5	M42x1,5			193.5		41	60	42.5	8.5	33	50
G 3/8	G 3/8	G 1/4	G 1/8	63	74	80	63.5	M42x1,5				210.5	41	60	42.5	8.5	33	50
G 1/2	G 1/2	G 1/4	G 1/8	63	74	80	63.5	M42x1,5	189.5				41	60	42.5	8.5	33	50
G 1/2	G 1/2	G 1/4	G 1/8	63	74	80	63.5	M42x1,5		206			41	60	42.5	8.5	33	50
G 1/2	G 1/2	G 1/4	G 1/8	63	74	80	63.5	M42x1,5			193.5		41	60	42.5	8.5	33	50
G 1/2	G 1/2	G 1/4	G 1/8	63	74	80	63.5	M42x1,5				210.5	41	60	42.5	8.5	33	50

Diagrams

Pressure characteristics curve



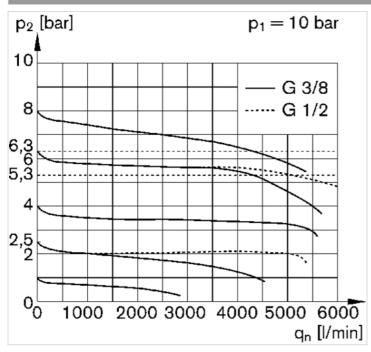
p1 = Working pressure

p2 = Secondary pressure





Flow rate characteristic (p2: 0,5 - 8 bar)



p1 = Working pressure

p2 = Secondary pressure



Accessories overview



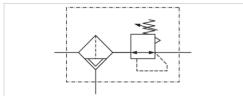
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Filter pressure regulator, Series AS3-FRE-...-E11

- G 1/2
- filter porosity 5 µm
- lockable
- with E11 locking





Version Parts

Mounting orientation
Working pressure min./max.
Ambient temperature min./max.
Medium temperature min./max.

Medium

Nominal flow Qn Regulator type Regulator function

Adjustment range min./max.

Pressure supply
Filter reservoir volume

Filter element
Condensate drain

Weight

1-part, Can be assembled into blocks

Filter pressure regulator

vertical

1.5 ... 16 bar -10 ... 50 °C -10 ... 50 °C

Compressed air Neutral gases

5100 l/min

Diaphragm-type pressure regulator

with relieving air exhaust

0.5 ... 10 bar single
49 cm³

exchangeable

fully automatic, closed without pressure

0.635 kg

Technical data

Part No.	Port	filter porosity	Flow Qn	Condensate drain
R412007203	G 1/2	5 μm	5100 l/min	fully automatic, closed without pressure

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 .

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

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

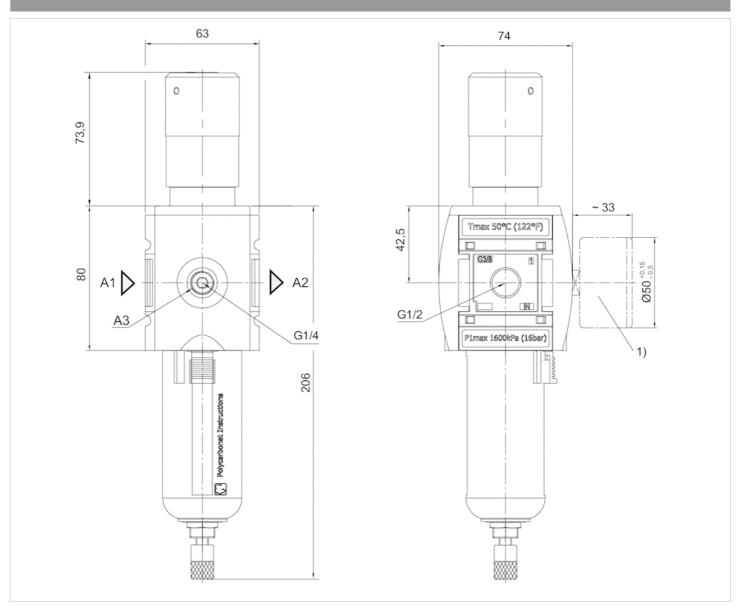




Material	
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
Protective guard	Polyamide
Filter insert	Polyethylene

Dimensions

Dimensions



A1 = input

A2 = output

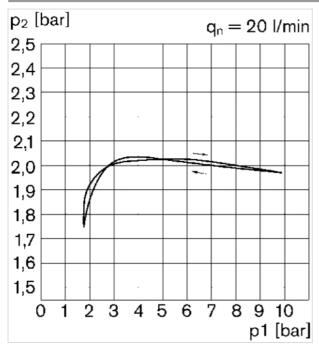
A3 = pressure gauge connection

1) Order pressure gauge separately



Diagrams

Pressure characteristics curve

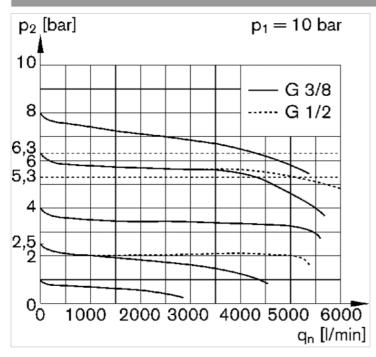


p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow

Flow rate characteristic (p2: 0,5 - 8 bar)



p1 = Working pressure

p2 = Secondary pressure



Accessories overview



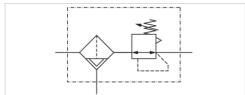
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Filter pressure regulator, Series AS3-FRE

- G 1/2
- filter porosity 25 µm
- lockable
- for padlocks





Version

Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Nominal flow Qn Regulator type

Regulator function Adjustment range min./max. Pressure

supply

Filter reservoir volume

Filter element
Condensate drain

Weight

1-part, Can be assembled into blocks

Filter pressure regulator

vertical

1.5 ... 16 bar -10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

5100 l/min

Diaphragm-type pressure regulator

with relieving air exhaust

0.5 ... 8 bar single 49 cm³

exchangeable

semi-automatic, open without pressure

0.797 kg

Technical data

Part No.	Port	filter porosity	Flow Qn	Condensate drain
R412007189	G 1/2	25 µm	5100 l/min	semi-automatic, open without pressure

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar 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". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

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

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

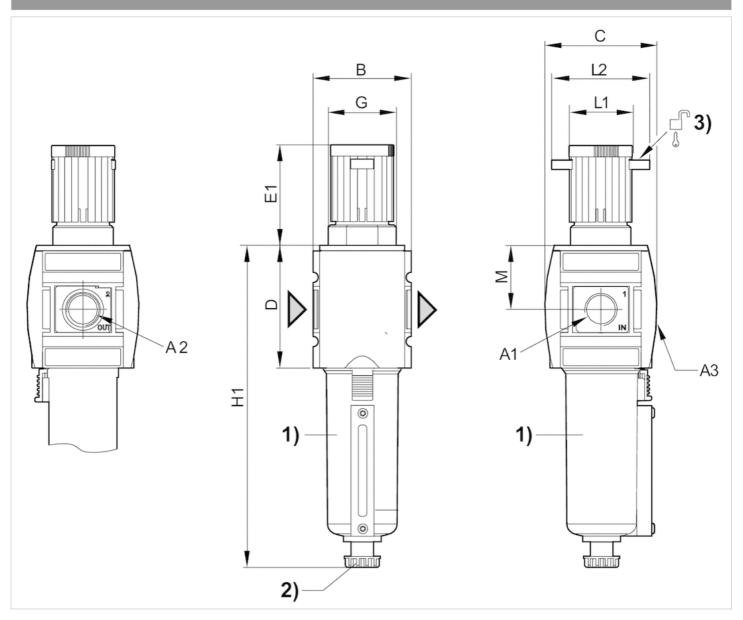


Technical information

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

Dimensions

Dimensions



A1 = input

A2 = output

A3 = pressure gauge connection





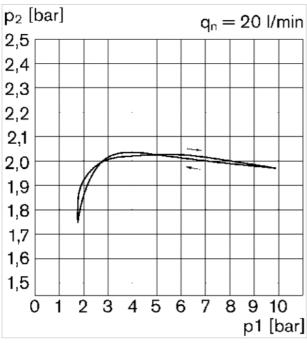
- 1) Metal reservoir with level indicator
- 2) Semi-automatic condensate drain
- 3) Mounting option for padlocks, max. shackle \varnothing 8

Dimensions in mm

A1	A2	A3	В	С	D	E1	G	H1	L1	L2	М
G 1/2	G 1/2	G 1/4	63	74	80	63.5	M42x1,5	193.5	41	60	42.5

Diagrams

Pressure characteristics curve



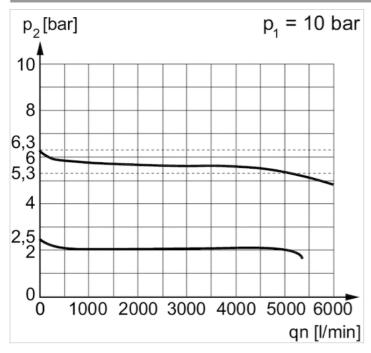
p1 = Working pressure

p2 = Secondary pressure





Flow rate characteristic (p2: 0,5 - 8 bar)

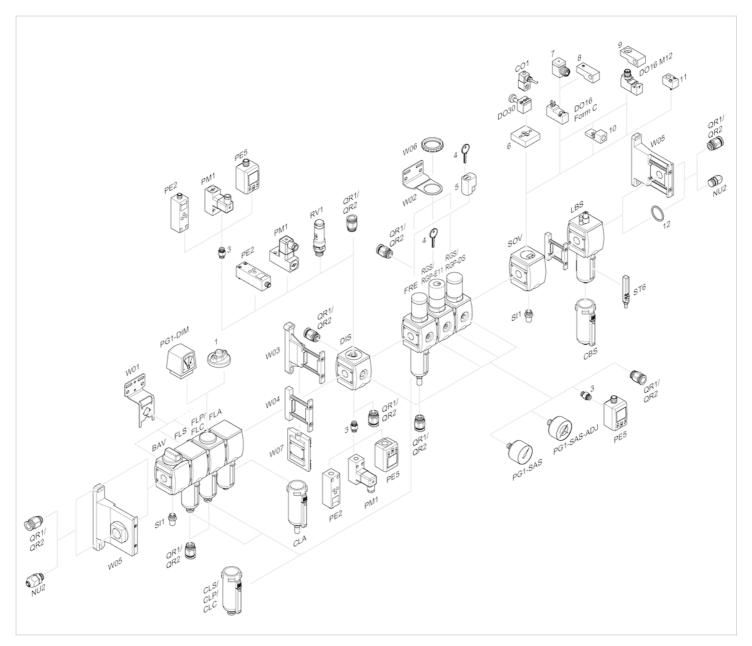


p1 = Working pressure

p2 = Secondary pressure



Accessories overview



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

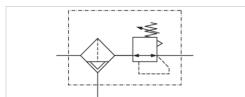




Filter pressure regulator, Series AS3-FRF

- G 3/8 G 1/2
- filter porosity 40 µm
- lockable
- for padlocks





Version

Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Nominal flow Qn

Regulator type

Regulator function Adjustment range min./max. Pressure

supply

Filter reservoir volume

Filter element

Weight

1-part, Can be assembled into blocks

Filter pressure regulator

vertical

1.5 ... 16 bar

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

5100 l/min

Diaphragm-type pressure regulator

with relieving air exhaust

0.5 ... 10 bar

single

49 cm³

exchangeable

See table below

Technical data

Part No.	Port	filter porosity	Flow	Condensate drain	Weight
			Qn		
R412007218	G 3/8	40 µm	5100 l/min	semi-automatic, open without pressure	0.586 kg
R412007219	G 3/8	40 µm	5100 l/min	fully automatic, open without pressure	0.635 kg
R412007220	G 3/8	40 µm	5100 l/min	fully automatic, closed without pressure	0.635 kg
R412007221	G 1/2	40 µm	5100 l/min	semi-automatic, open without pressure	0.586 kg
R412007222	G 1/2	40 µm	5100 l/min	fully automatic, open without pressure	0.635 kg
R412007223	G 1/2	40 μm	5100 l/min	fully automatic, closed without pressure	0.635 kg

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

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

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

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



Technical information

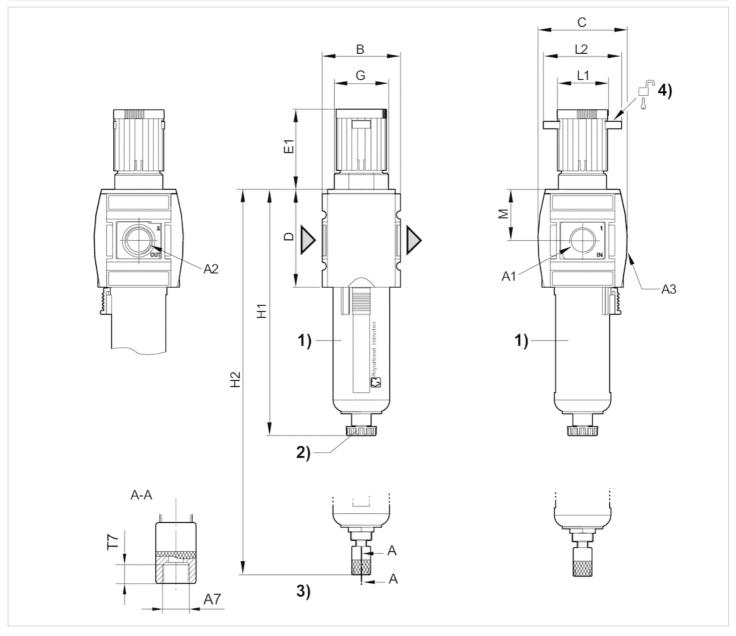
Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate
Protective guard	Polyamide
Filter insert	Polyethylene





Dimensions

Dimensions



A1 = input

A2 = output

A3 = pressure gauge connection

A7 = condensate drain

- 1) Plastic reservoir and protective guard with window
- 2) Semi-automatic condensate drain
- 3) Fully automatic condensate drain
- 4) Mounting option for padlocks, max. shackle \varnothing 8

Dimensions in mm

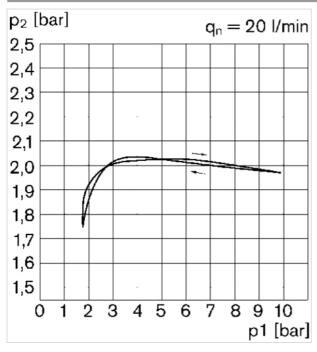
A1	A2	A3	A7	В	С	D	E1	G	H1	H2	L1	L2	Т7	М
G 3/8	G 3/8	G 1/4	G 1/8	63	74	80	63.5	M42x1,5	189.5	206	41	60	8.5	42.5
G 1/2	G 1/2	G 1/4	G 1/8	63	74	80	63.5	M42x1,5	189.5	206	41	60	8.5	42.5





Diagrams

Pressure characteristics curve

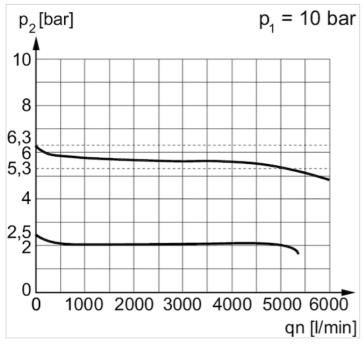


p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow

Flow rate characteristic (p2: 0,5 - 8 bar)

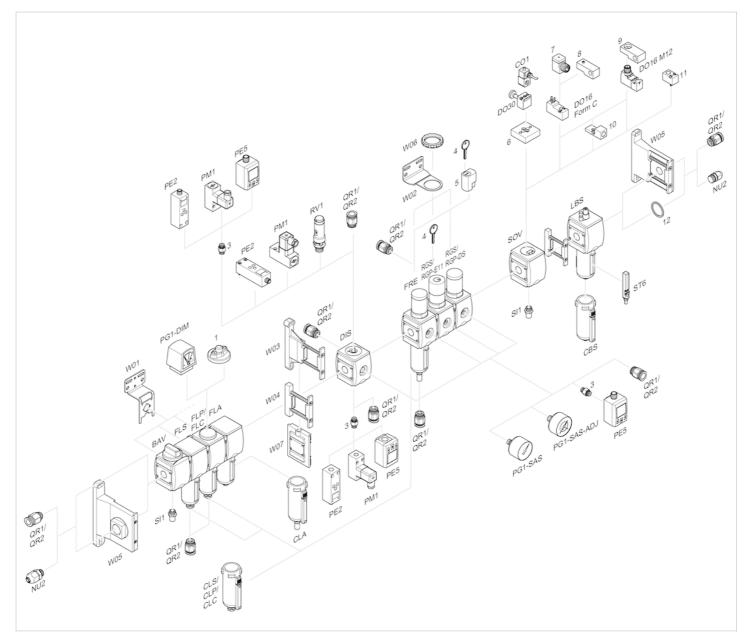


p1 = Working pressure

p2 = Secondary pressure



Accessories overview



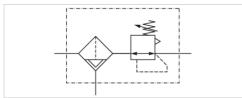
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Filter pressure regulator, Series AS3-FRE-...-E11

- G 1/2
- filter porosity 40 µm
- lockable
- with E11 locking





Version Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Nominal flow Qn Regulator type Regulator function

Adjustment range min./max.

Pressure supply
Filter reservoir volume

Filter element
Condensate drain

Weight

1-part, Can be assembled into blocks

Filter pressure regulator

vertical

1.5 ... 16 bar -10 ... 50 °C -10 ... 50 °C

Compressed air Neutral gases

5100 l/min

Diaphragm-type pressure regulator

with relieving air exhaust

0.5 ... 10 bar single 49 cm³

exchangeable

fully automatic, closed without pressure

0.635 kg

Technical data

Part No.	Port	filter porosity	Flow Qn	Condensate drain
R412007204	G 1/2	40 μm	5100 l/min	fully automatic, closed without pressure

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 .

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

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

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

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene

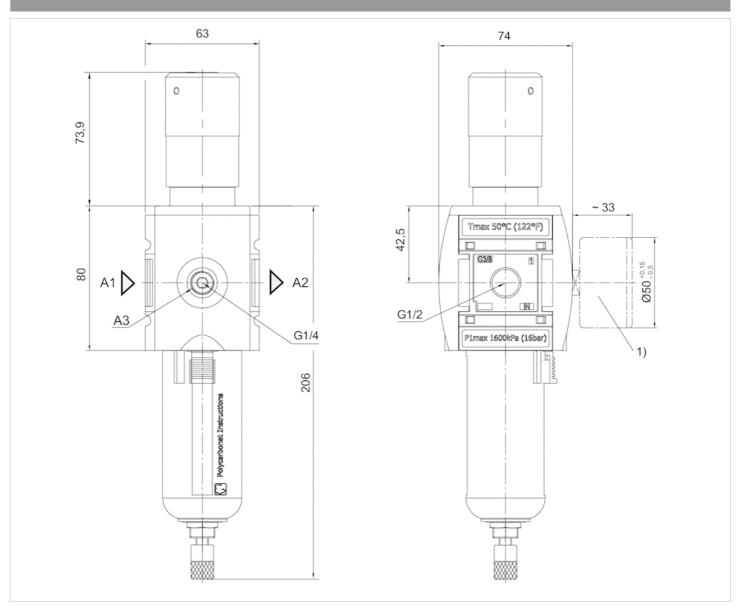




Material							
Seals	Acrylonitrile butadiene rubber						
Threaded bushing	Die cast zinc						
Reservoir	Polycarbonate						
Protective guard	Polyamide						
Filter insert	Polyethylene						

Dimensions

Dimensions



A1 = input

A2 = output

A3 = pressure gauge connection

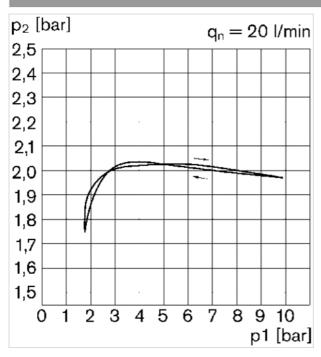
1) Order pressure gauge separately





Diagrams

Pressure characteristics curve

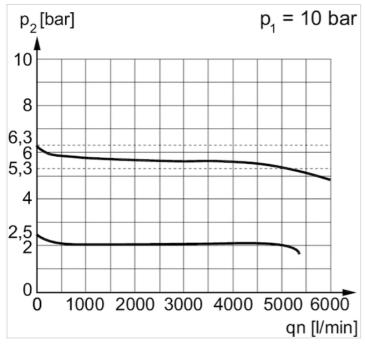


p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow

Flow rate characteristic (p2: 0,5 - 8 bar)

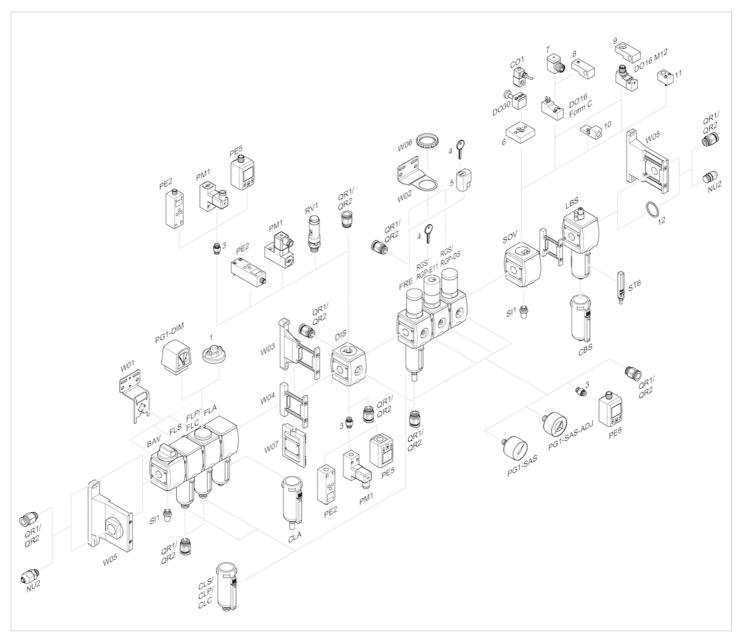


p1 = Working pressure

p2 = Secondary pressure



Accessories overview



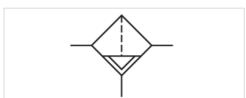
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Filter, Series AS3-FLS

- G 3/8 G 1/2
- 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

1.5 ... 16 bar

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

49 cm³

exchangeable

5 µm

See table below

See table below

Technical data

Part No.	Port	Port Flow Qn Condensate drain				
R412007000	G 3/8	3500 l/min	semi-automatic, open without pressure			
R412007001	G 3/8	3500 l/min	fully automatic, open without pressure			
R412007002	G 3/8	3500 l/min	fully automatic, closed without pressure			
R412007006	G 3/8	3500 l/min	semi-automatic, open without pressure			
R412007007	G 3/8	3500 l/min	fully automatic, open without pressure			
R412007008	G 3/8	3500 l/min	fully automatic, closed without pressure			
R412007009	G 1/2	3500 l/min	semi-automatic, open without pressure			
R412007010	G 1/2	3500 l/min	fully automatic, open without pressure			
R412007011	G 1/2	3500 l/min	fully automatic, closed without pressure			
R412007015	G 1/2	3500 l/min	semi-automatic, open without pressure			
R412007016	G 1/2	3500 l/min	fully automatic, open without pressure			
R412007017	G 1/2	3500 l/min	fully automatic, closed without pressure			

Part No.	Version	Weight
R412007000	reservoir, polycarbonate, with PA protective guard	0.361 kg
R412007001	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007002	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007006	-	0.723 kg
R412007007	-	0.79 kg
R412007008	-	0.79 kg
R412007009	reservoir, polycarbonate, with PA protective guard	0.361 kg





Part No.	Version	Weight
D440007040		0.441
R412007010	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007011	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007015	-	0.716 kg
R412007016	-	0.769 kg
R412007017	-	0.769 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". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details. 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:-

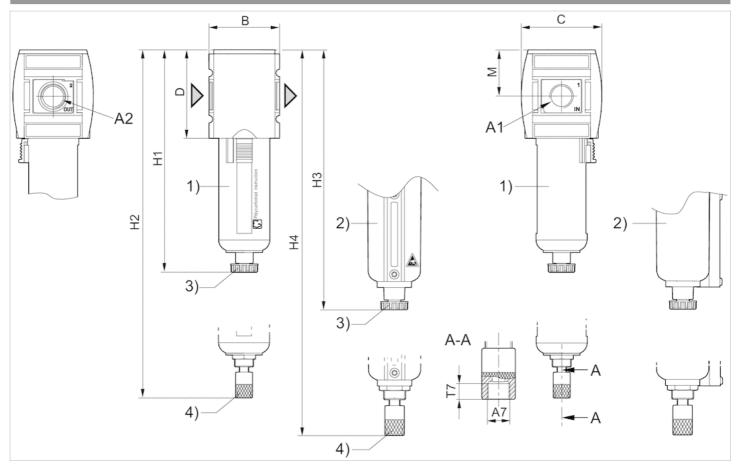
Technical information

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



Dimensions

Dimensions



A1 = input

A2 = output

A7 = condensate drain

- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with level indicator
- 3) Semi-automatic condensate drain
- 4) Fully automatic condensate drain

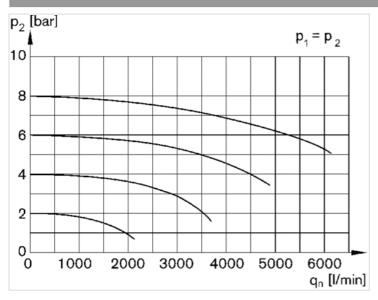
Dimensions in mm

A1	A2	A7	В	С	D	H1	H2	Н3	H4	М	T7
G 3/8	G 3/8	G 1/8	63	74	80	189.5	206	193.5	210.5	42.5	8.5
G 1/2	G 1/2	G 1/8	63	74	80	189.5	206	193.5	210.5	42.5	8.5



Diagrams

Flow rate characteristic



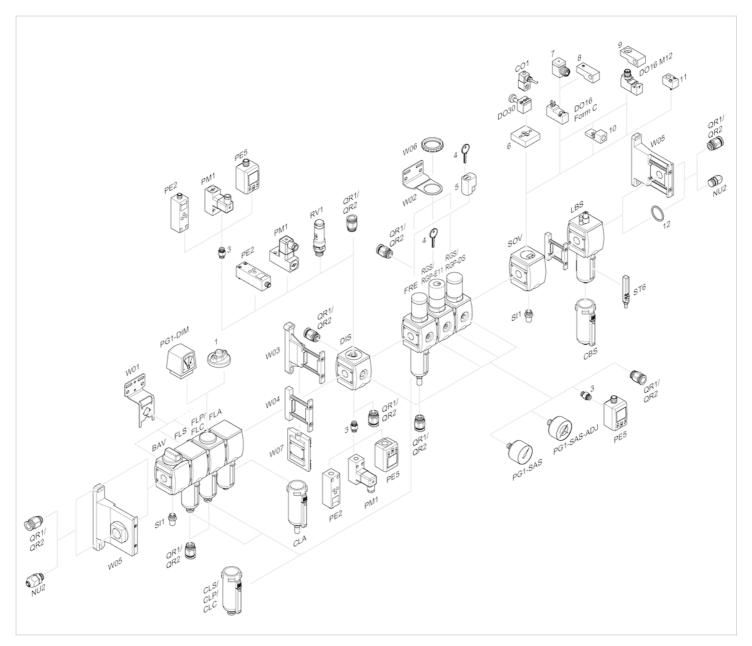
p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



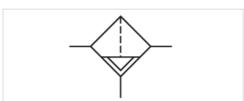
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Filter, Series AS3-FLS

- G 1/2
- filter porosity 25 µm





Standard filter, Can be assembled into Version

> blocks Filter

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

Parts

Filter reservoir volume

Filter element filter porosity

Condensate drain

Weight

Compressed air Neutral gases

49 cm³ exchangeable

25 µm

semi-automatic, open without pressure

0.361 kg

Technical data

Part No.	Port	Flow Qn
R412007090	G 1/2	3500 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 . Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

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

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

Technical information

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

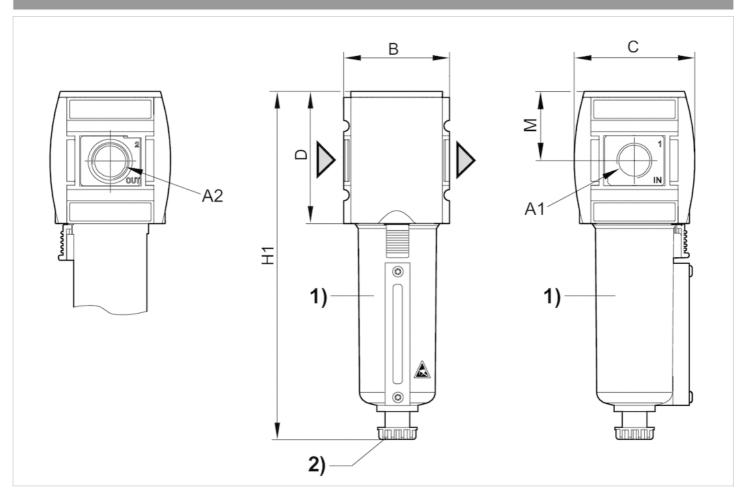




Material	
Threaded bushing	Die cast zinc
Reservoir	Die cast zinc
Protective guard	Polyamide
Filter insert	Polyethylene

Dimensions

Dimensions



A1 = input

A2 = output

- 1) Metal reservoir with level indicator
- 2) Semi-automatic condensate drain

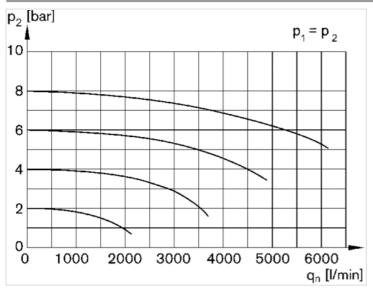
Dimensions in mm

A1	A2	В	С	D	H1	M
G 1/2	G 1/2	63	74	80	193.5	42.5



Diagrams

Flow rate characteristic



p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



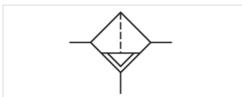
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Filter, Series AS3-FLS

- G 3/8 G 1/2
- filter porosity 40 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

1.5 ... 16 bar -10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

49 cm³

exchangeable

40 µm

See table below See table below

Technical data

Pa	rt No.	Port	Flow Qn	Condensate drain	Weight	Fig.
R412	007003	G 3/8	3500 l/min	semi-automatic, open without pressure	0.361 kg	Fig. 1
R412	007004	G 3/8	3500 l/min	fully automatic, open without pressure	0.41 kg	Fig. 2
R412	007005	G 3/8	3500 l/min	fully automatic, closed without pressure	0.41 kg	Fig. 2
R412	007012	G 1/2	3500 l/min	semi-automatic, open without pressure	0.361 kg	Fig. 3
R412	007013	G 1/2	3500 l/min	fully automatic, open without pressure	0.41 kg	Fig. 4
R412	007014	G 1/2	3500 l/min	fully automatic, closed without pressure	0.41 kg	Fig. 4

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". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details. Also suitable for separation of fluid oil or water due to the design.

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



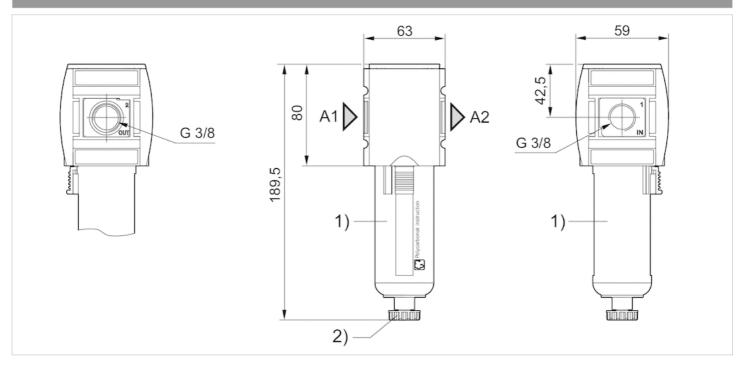


Technical information

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

Dimensions

Dimensions in mm, Fig. 1



A1 = input

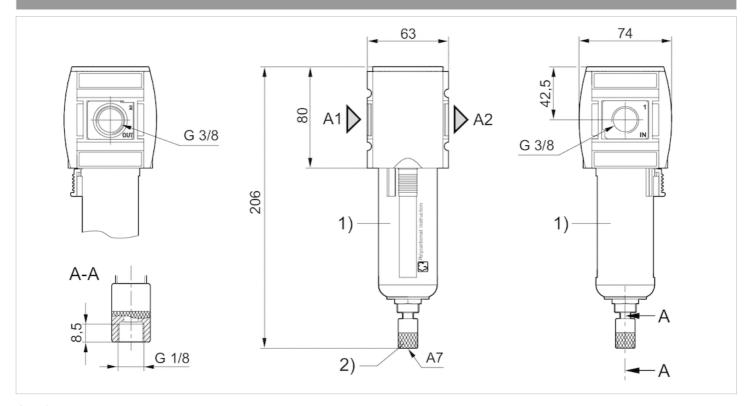
A2 = output

- 1) Plastic reservoir and protective guard with window
- 2) Semi-automatic condensate drain





Dimensions in mm, Fig. 2



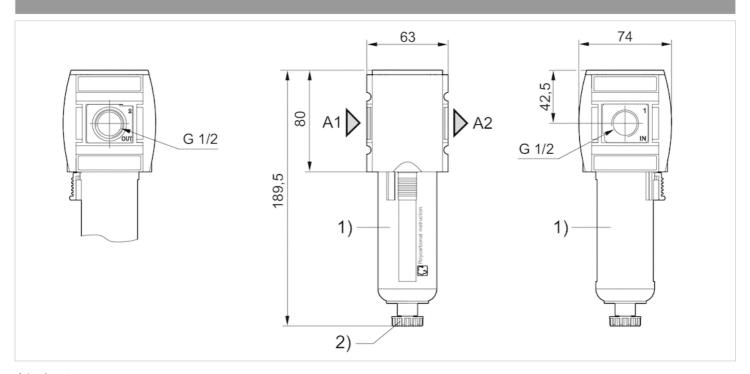
A1 = input

A2 = output

A7 = condensate drain

- 1) Plastic reservoir and protective guard with window
- 2) Fully automatic condensate drain

Dimensions in mm, Fig. 3



A1 = input

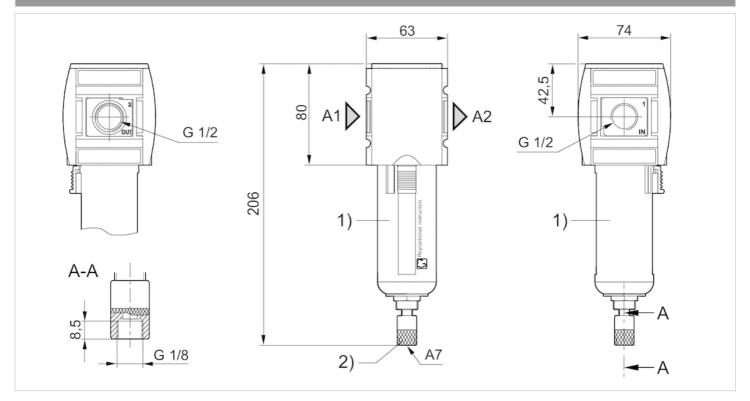
A2 = output

- 1) Plastic reservoir and protective guard with window
- 2) Semi-automatic condensate drain





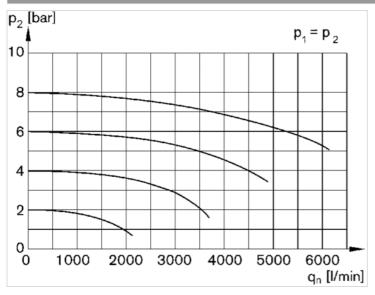
Dimensions in mm, Fig. 4



- A1 = input
- A2 = output
- A7 = condensate drain
- 1) Plastic reservoir and protective guard with window
- 2) Fully automatic condensate drain

Diagrams

Flow rate characteristic



- p1 = Working pressure
- p2 = Secondary pressure
- qn = Nominal flow



Accessories overview



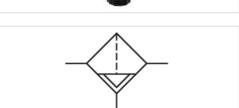
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Pre-filter, Series AS3-FLP

- G 3/8 G 1/2
- filter porosity 0.3 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

Pre-filter, Can be assembled into blocks

Pre-filter vertical

1.5 ... 16 bar

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

49 cm³

exchangeable

0.3 µm

See table below

See table below

Technical data

Part No.	Port	Flow Qn	Condensate drain
R412007018	G 3/8	900 l/min	semi-automatic, open without pressure
R412007019	G 3/8	900 I/min	fully automatic, open without pressure
R412007020	G 3/8	900 I/min	fully automatic, closed without pressure
R412007024	G 3/8	900 I/min	semi-automatic, open without pressure
R412007025	G 3/8	900 l/min	fully automatic, open without pressure
R412007026	G 3/8	900 I/min	fully automatic, closed without pressure
R412007027	G 1/2	900 l/min	semi-automatic, open without pressure
R412007028	G 1/2	900 I/min	fully automatic, open without pressure
R412007029	G 1/2	900 l/min	fully automatic, closed without pressure
R412007033	G 1/2	900 l/min	semi-automatic, open without pressure
R412007034	G 1/2	900 I/min	fully automatic, open without pressure
R412007035	G 1/2	900 l/min	fully automatic, closed without pressure

Part No.	Version	Weight
R412007018	reservoir, polycarbonate, with PA protective guard	0.361 kg
R412007019	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007020	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007024	-	0.778 kg
R412007025	-	0.831 kg
R412007026	-	0.831 kg
R412007027	reservoir, polycarbonate, with PA protective guard	0.361 kg





Part No.	Version	Weight
R412007028	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007029	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007033	-	0.757 kg
R412007034	-	0.81 kg
R412007035	-	0.81 kg

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 0.1 bar, Dust separation = 99.99%

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

Recommended pre-filtering 5 µm

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

Technical information

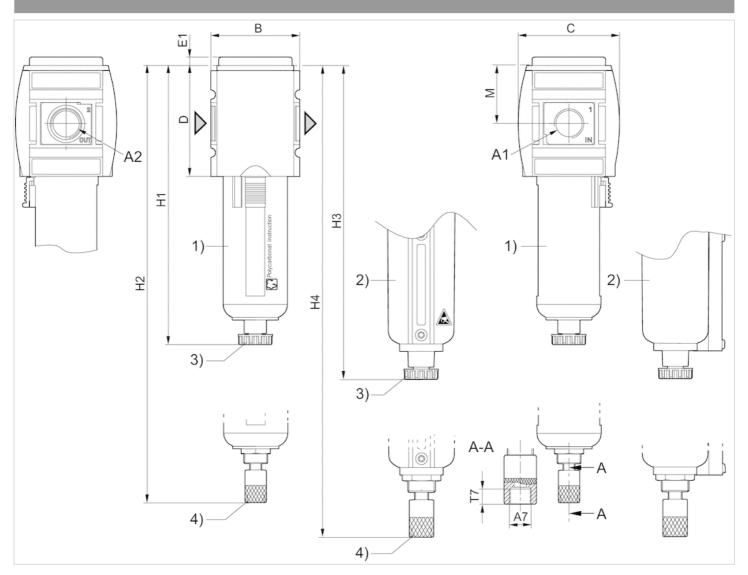
Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate Die cast zinc
Protective guard	Polyamide
Filter insert	Impregnated paper





Dimensions

Dimensions



- A1 = input
- A2 = output
- A7 = condensate drain
- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with inspection glass
- 3) Semi-automatic condensate drain
- 4) Fully automatic condensate drain

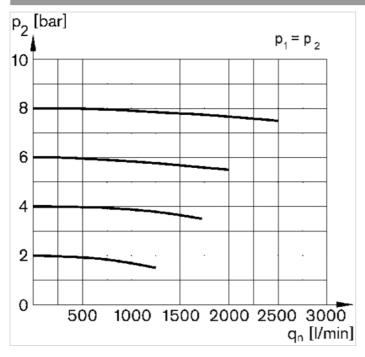
Dimensions in mm

A1	A2	A7	В	С	D	E1	H1	H2	H3	H4	М
G 3/8	G 3/8	G 1/8	63	74	80	5	189.5	206	193.5	210.5	42.5
G 1/2	G 1/2	G 1/8	63	74	80	5	189.5	206	193.5	210.5	42.5



Diagrams

Flow rate characteristic



p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



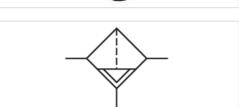
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Microfilter, Series AS3-FLC

- G 3/8 G 1/2
- filter porosity 0.01 μm





Version

Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Filter reservoir volume

Filter element filter porosity Condensate drain

Weight

Microfilter, Can be assembled into blocks

Microfilter

vertical

1.5 ... 16 bar

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

49 cm³

exchangeable

0.01 µm

See table below

See table below

Technical data

Part No.	Port	Flow Qn	Condensate drain
R412007036	G 3/8	700 l/min	semi-automatic, open without pressure
R412007037	G 3/8	700 l/min	fully automatic, open without pressure
R412007038	G 3/8	700 l/min	fully automatic, closed without pressure
R412007042	G 3/8	700 l/min	semi-automatic, open without pressure
R412007043	G 3/8	700 l/min	fully automatic, open without pressure
R412007044	G 3/8	700 l/min	fully automatic, closed without pressure
R412007045	G 1/2	700 l/min	semi-automatic, open without pressure
R412007046	G 1/2	700 l/min	fully automatic, open without pressure
R412007047	G 1/2	700 l/min	fully automatic, closed without pressure
R412007051	G 1/2	700 l/min	semi-automatic, open without pressure
R412007052	G 1/2	700 l/min	fully automatic, open without pressure
R412007053	G 1/2	700 l/min	fully automatic, closed without pressure

Part No.	Version	Weight
R412007036	reservoir, polycarbonate, with PA protective guard	0.361 kg
R412007037	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007038	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007042	-	0.78 kg
R412007043	-	0.833 kg
R412007044	-	0.833 kg
R412007045	reservoir, polycarbonate, with PA protective guard	0.361 kg





Part No.	Version	Weight
R412007046	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007047	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007051	-	0.759 kg
R412007052	-	0.812 kg
R412007053	-	0.733 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". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Recommended pre-filtering 0.3 µm

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

Technical information

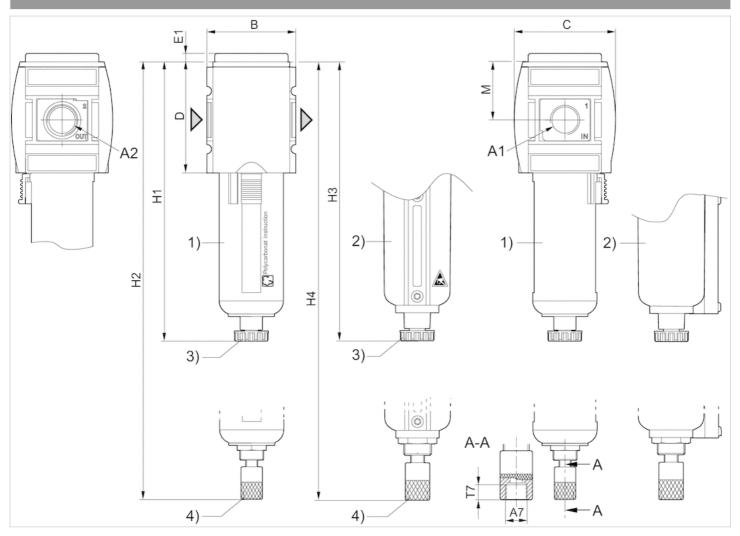
Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc
Reservoir	Polycarbonate Die cast zinc
Protective guard	Polyamide
Filter insert	Borosilicate glass fiber





Dimensions

Dimensions



A1 = input

A2 = output

A7 = condensate drain

- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with inspection glass
- 3) Semi-automatic condensate drain
- 4) Fully automatic condensate drain

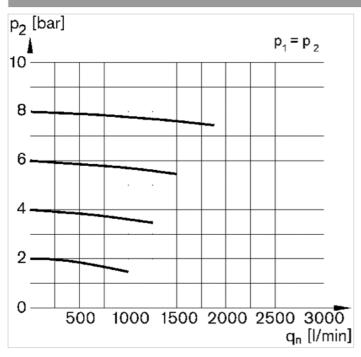
Dimensions in mm

A1	A2	A7	В	С	D	E1	H1	H2	НЗ	H4	М	T7
G 3/8	G 3/8	G 1/8	63	74	80	5	189.5	206	193.5	210.5	42.5	8.5
G 1/2	G 1/2	G 1/8	63	74	80	5	189.5	206	193.5	210.5	42.5	8.5



Diagrams

Flow rate characteristic



p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



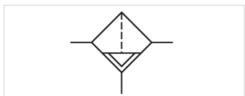
- 1 = contamination display
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- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic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



Microfilter, Series AS3-FLC

- G 3/8 G 1/2
- filter porosity 0.01 μm
- contamination display integrated





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

contamination display

Weight

Microfilter, Can be assembled into blocks

Microfilter

vertical

1.5 ... 16 bar

-10 ... 50 °C

-10 ... 50 °C

Compressed air Neutral gases

49 cm³

exchangeable

0.01 µm

See table below

integrated

See table below

Technical data

Part No.	Port	Flow Qn	Condensate drain
R412007054	G 3/8	700 l/min	semi-automatic, open without pressure
R412007055	G 3/8	700 l/min	fully automatic, open without pressure
R412007056	G 3/8	700 l/min	fully automatic, closed without pressure
R412007060	G 3/8	700 l/min	semi-automatic, open without pressure
R412007061	G 3/8	700 l/min	fully automatic, open without pressure
R412007062	G 3/8	700 l/min	fully automatic, closed without pressure
R412007063	G 1/2	700 l/min	semi-automatic, open without pressure
R412007064	G 1/2	700 l/min	fully automatic, open without pressure
R412007065	G 1/2	700 l/min	fully automatic, closed without pressure
R412007069	G 1/2	700 l/min	semi-automatic, open without pressure
R412007070	G 1/2	700 l/min	fully automatic, open without pressure
R412007071	G 1/2	700 l/min	fully automatic, closed without pressure

Part No.	Version	Weight
R412007054	reservoir, polycarbonate, with PA protective guard	0.361 kg
R412007055	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007056	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007060	-	0.783 kg
R412007061	-	0.757 kg
R412007062	-	0.757 kg





Part No.	Version	Weight
R412007063	reservoir, polycarbonate, with PA protective guard	0.361 kg
R412007064	reservoir, polycarbonate, with PA protective guard	0.41 kg
R412007065	reservoir, polycarbonate, with PA protective guard	0.762 kg
R412007069	-	0.762 kg
R412007070	-	0.736 kg
R412007071	-	0.736 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". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Recommended pre-filtering 0.3 µm

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

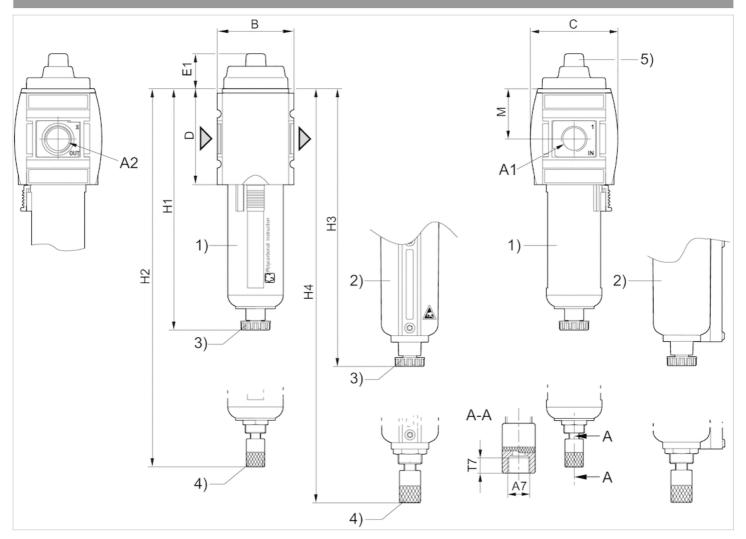
Technical information

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



Dimensions

Dimensions



A1 = input

A2 = output

A7 = condensate drain

- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with inspection glass
- 3) Semi-automatic condensate drain
- 4) Fully automatic condensate drain
- 5) contamination display

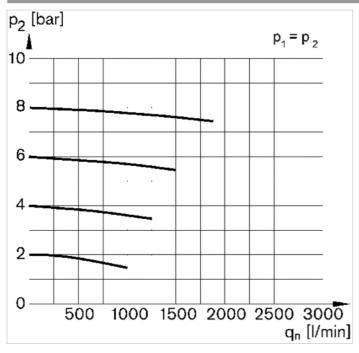
Dimensions in mm

A1	A2	A7	В	С	D	E1	H1	H2	Н3	H4	М	T7
G 3/8	G 3/8	G 1/8	63	74	80	23.7	189.5	206	193.5	210.5	42.5	8.5
G 1/2	G 1/2	G 1/8	63	74	80	23.7	189.5	206	193.5	210.5	42.5	8.5



Diagrams

Flow rate characteristic



p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow



Accessories overview



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



Active carbon filter, Series AS3-FLA

- G 3/8 G 1/2



Version

Parts

Mounting orientation

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Filter reservoir volume

Filter element
Condensate drain

Weight

Active carbon filter, Can be assembled

into blocks

Active carbon filter

vertical

0 ... 16 bar -10 ... 50 °C

-10 ... 50 °C

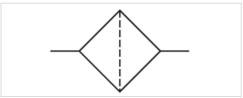
Compressed air Neutral gases

49 cm³

exchangeable

without

See table below



Technical data

Part No.	Port	Flow Qn	Version	Weight
R412007072	G 3/8	1000 l/min	reservoir, polycarbonate, with PA protective guard	0.375 kg
R412007074	G 3/8	1000 l/min	-	0.751 kg
R412007075	G 1/2	1000 l/min	reservoir, polycarbonate, with PA protective guard	0.375 kg
R412007077	G 1/2	1000 l/min	-	0.73 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". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Recommended pre-filtering 0.01 µm

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



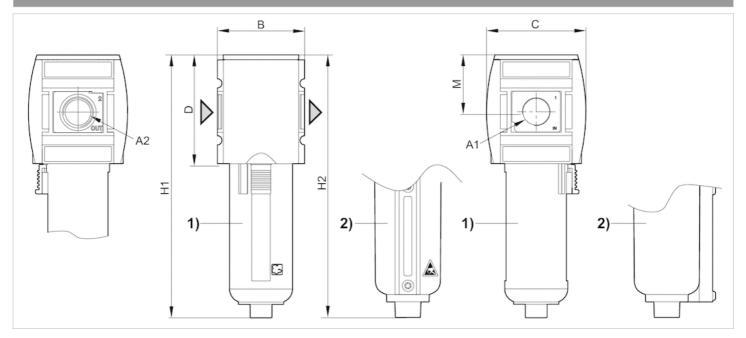


Technical information

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

Dimensions

Dimensions



- A1 = input
- A2 = output
- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with inspection glass

Dimensions in mm

A1	A2	В	С	D	H1	H2	M
G 3/8	G 3/8	63	74	80	183	187	42.5
G 1/2	G 1/2	63	74	80	183	187	42.5



Accessories overview



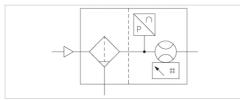
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Flow sensor, IO-Link, Series AF2

- 2 analog outputs, 2 switch outputs, 1 frequency output, 1 pulse output, IO-Link, With mounting
- Qn min. 8 l/min
- Qn max. 2445 I/min
- Electrical connection Plug, M12x1, 5-pin





Certificates CE declaration of conformity RoHS UL

(Underwriters Laboratories)

Working pressure min./max. 0 ... 16 bar

Ambient temperature min./max. -20 ... 60 °C

Medium temperature min./max. -20 ... 60 °C

Medium Compressed air Argon Nitrogen Helium

Carbon dioxide

 $\begin{array}{cc} \text{filter porosity} & 5 \ \mu\text{m} \\ \text{Display} & \text{OLED} \end{array}$

Flow display unit l/sec, l/min, m³/min, m³/h, ft³/s, m³/min

Pressure display unit bar, psi
Temperature display unit °C, °F
DC operating voltage min. 17 V DC
DC operating voltage max. 30 V DC
Max. power consumption *) 175 mA
Response time 10 ms

Protection class IP65, IP67 according to IEC 60529

Short circuit resistance short circuit resistant

Shock resistance max. 30 g, 11 ms

Vibration resistance 1 g (10 - 2000 Hz) IEC 60068 - 2-6
Reproducibility ± 1.5% of the measured value

Weight 1.97 kg

*) Current consumption without load

Technical data

Part No.	for series	Compressed air	Nominal flow Qn	Nominal flow Qn	Nominal flow Qn
		connection	Min., standard	Max., standard	Min., extended
R412026835	AS3	G 1/2	8 l/min	1630 l/min	1630 l/min

Part No.	Nominal flow Qn	
	Max., extended	
R412026835	2445 l/min	

Standard measurement range for flow measurement: compressed air 0.5 ... 100 m/s, extended measurement range: compressed air >100 ... 150 m/s, in accordance with ISO 8778, Flow display range: 0 ... 4890 l/min

Technical information



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

The protection class is only ensured when the plug is mounted properly. For detailed information, see operating instructions.

The device is designed to be installed in AS series air preparation units or to be fitted as a stand-alone device using a W05 block assembly kit.

Liquid oil or water must be separated via prefiltering. If it is not separated sufficiently, drifting may result.

Precision- Standard measurement range: ±3% of measured value, + 0.3% of final value- Extended measurement range: ±8% of measured value, + 1% of final value

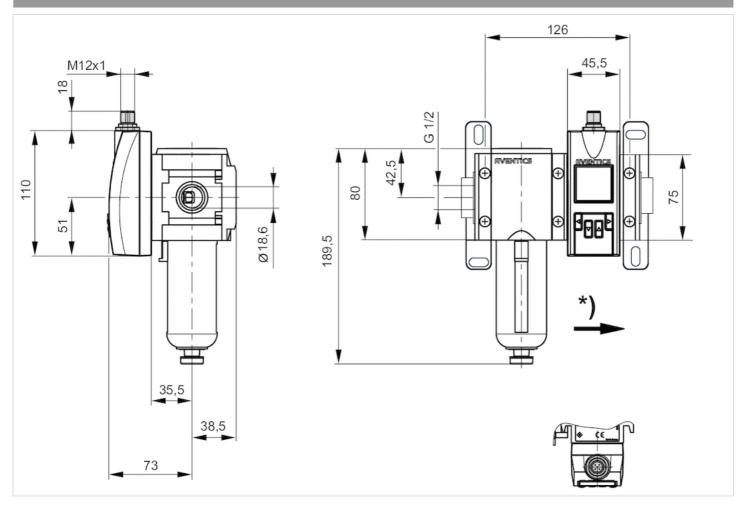
The IO-Link device description (IODD) for the AF2 flow rate sensor is available for download in the Media Center.

Technical information

Material	
Housing	Polyamide, Polycarbonate
Seals	Fluorocaoutchouc

Dimensions

Dimensions in mm

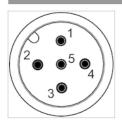


^{*} Flow direction



Pin assignments

Pin assignments, M12x1, 5-pin



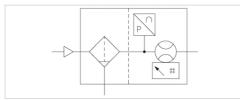
Pin	1		2	3
Allocation	L+	QA (o	output 4 20 mA)	m = mass
	4			5
C/Q1 (IO-Link/switch output)			Analog o	output 4 20 mA



Flow sensor, Ethernet, Series AF2

- Ethernet, With mounting
- Qn min. 8 l/min
- Qn max. 2445 I/min
- Electrical connection Plug, M12x1, 8-pin





Certificates CE declaration of conformity RoHS UL

(Underwriters Laboratories)

Working pressure min./max. 0 ... 16 bar

Ambient temperature min./max. -20 ... 60 °C

Medium temperature min./max. -20 ... 60 °C

Medium Compressed air Argon Nitrogen Helium

Carbon dioxide

 $\begin{array}{cc} \text{filter porosity} & 5 \ \mu\text{m} \\ \text{Display} & \text{OLED} \end{array}$

Flow display unit l/sec, l/min, m³/min, m³/h, ft³/s, m³/min

Pressure display unit bar, psi
Temperature display unit °C, °F
DC operating voltage max. 45 V DC
Power consumption max. 12 W
Response time 10 ms

Protection class IP65, IP67 according to IEC 60529

Shock resistance max. 30 g, 11 ms

Vibration resistance 1 g (10 - 2000 Hz) IEC 60068 - 2-6
Reproducibility ± 1.5% of the measured value

Weight 1.97 kg

Technical data

Part No.	for series	Compressed air	Nominal flow Qn	Nominal flow Qn	Nominal flow Qn
		connection	Min., standard	Max., standard	Min., extended
R412026838	AS3	G 1/2	8 l/min	1630 l/min	1630 l/min

Part No.	Nominal flow Qn		
	Max., extended		
R412026838	2445 l/min		

Standard measurement range for flow measurement: compressed air 0.5 ... 100 m/s, extended measurement range: compressed air >100 ... 150 m/s, in accordance with ISO 8778, Flow display range: 0 ... 4890 l/min

Technical information

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

The protection class is only ensured when the plug is mounted properly. For detailed information, see operating instructions.

The device is designed to be installed in AS series air preparation units or to be fitted as a stand-alone device using a W05 block assembly kit.

Liquid oil or water must be separated via prefiltering. If it is not separated sufficiently, drifting may result.

Precision- Standard measurement range: $\pm 3\%$ of measured value, $\pm 0.3\%$ of final value- Extended measurement range: $\pm 8\%$ of measured value, $\pm 1\%$ of final value



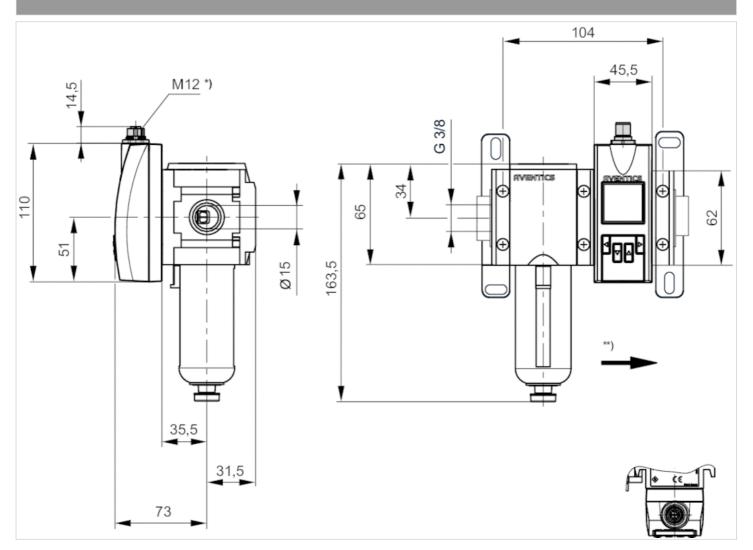


Technical information

Material	
Housing	Polyamide, Polycarbonate
Seals	Fluorocaoutchouc

Dimensions

Dimensions in mm



- * Internal thread
- ** Flow direction



Pin assignments

Pin assignments, M12, X-coded



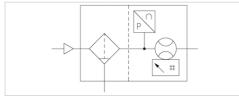
Pin	1	2	3	4	7	8	5
Color	WH / OG	OG	WH / GN	GN	WH / BU	BU	WH / BN
Function	TX(+) + POE	TX(-) + POE	RX(+) - POE	RX(-) - POE	POE+	POE+	POE-
	6						
	BN						
			POF-				



Flow sensor, IO-Link, Series AF2

- 2 analog outputs, 2 switch outputs, 1 frequency output, 1 pulse output, IO-Link, Without mounting
- Qn min. 8 l/min
- Qn max. 2445 I/min
- Electrical connection Plug, M12x1, 5-pin





Certificates CE declaration of conformity RoHS UL

(Underwriters Laboratories)

Working pressure min./max. 0 ... 16 bar

Ambient temperature min./max. -20 ... 60 °C

Medium temperature min./max. -20 ... 60 °C

Medium Compressed air Argon Nitrogen Helium

Carbon dioxide

 $\begin{array}{cc} \text{filter porosity} & 5 \ \mu\text{m} \\ \text{Display} & \text{OLED} \end{array}$

Flow display unit I/sec, I/min, m³/min, m³/h, ft³/s, m³/min

Pressure display unit bar, psi
Temperature display unit °C, °F
DC operating voltage min. 17 V DC
DC operating voltage max. 30 V DC
Max. power consumption *) 175 mA
Response time 10 ms

Protection class IP65, IP67 according to IEC 60529

Short circuit resistance short circuit resistant

Shock resistance max. 30 g, 11 ms

Vibration resistance 1 g (10 - 2000 Hz) IEC 60068 - 2-6
Reproducibility ± 1.5% of the measured value

Weight 1.25 kg

*) Current consumption without load

Technical data

Part No.	for series	Compressed air	Nominal flow Qn	Nominal flow Qn	Nominal flow Qn
		connection	Min., standard	Max., standard	Min., extended
R412027177	AS3	G 1/2	8 l/min	1630 l/min	1630 l/min

Part No.	Nominal flow Qn		
	Max., extended		
R412027177	2445 l/min		

Standard measurement range for flow measurement: compressed air 0.5 ... 100 m/s, extended measurement range: compressed air >100 ... 150 m/s, in accordance with ISO 8778, Flow display range: 0 ... 4890 l/min

Technical information



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

The protection class is only ensured when the plug is mounted properly. For detailed information, see operating instructions.

The device is designed to be installed in AS series air preparation units or to be fitted as a stand-alone device using a W05 block assembly kit.

Liquid oil or water must be separated via prefiltering. If it is not separated sufficiently, drifting may result.

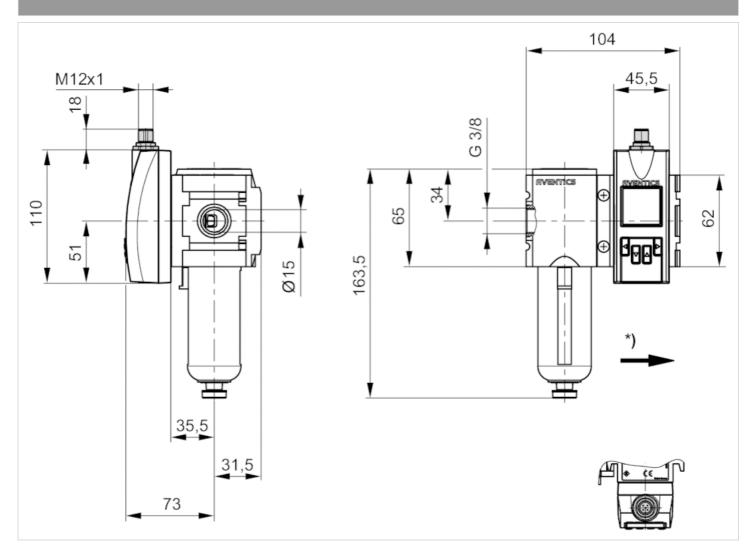
Precision- Standard measurement range: ±3% of measured value, + 0.3% of final value- Extended measurement range: ±8% of measured value, + 1% of final value

The IO-Link device description (IODD) for the AF2 flow rate sensor is available for download in the Media Center.

Technical information

Material	
Housing	Polyamide, Polycarbonate
Seals	Fluorocaoutchouc

Dimensions

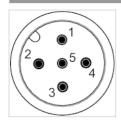


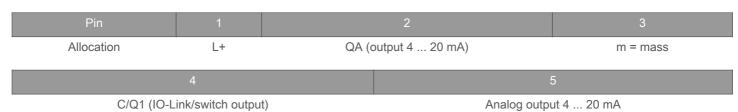
^{*} Flow direction



Pin assignments

Pin assignments, M12x1, 5-pin



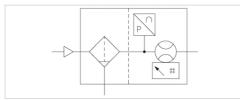




Flow sensor, Ethernet, Series AF2

- Ethernet, Without mounting
- Qn min. 8 l/min
- Qn max. 2445 I/min
- Electrical connection Plug, M12x1, 8-pin





Certificates CE declaration of conformity RoHS UL

(Underwriters Laboratories)

Working pressure min./max. 0 ... 16 bar

Ambient temperature min./max. -20 ... 60 °C

Medium temperature min./max. -20 ... 60 °C

Medium Compressed air Argon Nitrogen Helium

Carbon dioxide

 $\begin{array}{cc} \text{filter porosity} & 5 \ \mu\text{m} \\ \text{Display} & \text{OLED} \end{array}$

Flow display unit l/sec, l/min, m³/min, m³/h, ft³/s, m³/min

Pressure display unit bar, psi
Temperature display unit °C, °F
DC operating voltage max. 45 V DC
Power consumption max. 12 W
Response time 10 ms

Protection class IP65, IP67 according to IEC 60529

Shock resistance max. 30 g, 11 ms

Vibration resistance 1 g (10 - 2000 Hz) IEC 60068 - 2-6
Reproducibility ± 1.5% of the measured value

Weight 1.25 kg

Technical data

Part No.	for series	Compressed air	Nominal flow Qn	Nominal flow Qn	Nominal flow Qn
		connection	Min., standard	Max., standard	Min., extended
R412027180	AS3	G 1/2	8 l/min	1630 l/min	1630 l/min

Part No.	Nominal flow Qn
	Max., extended
R412027180	2445 l/min

Standard measurement range for flow measurement: compressed air 0.5 ... 100 m/s, extended measurement range: compressed air >100 ... 150 m/s, in accordance with ISO 8778, Flow display range: 0 ... 4890 l/min

Technical information

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

The protection class is only ensured when the plug is mounted properly. For detailed information, see operating instructions.

The device is designed to be installed in AS series air preparation units or to be fitted as a stand-alone device using a W05 block assembly kit.

Liquid oil or water must be separated via prefiltering. If it is not separated sufficiently, drifting may result.

Precision- Standard measurement range: $\pm 3\%$ of measured value, $\pm 0.3\%$ of final value- Extended measurement range: $\pm 8\%$ of measured value, $\pm 1\%$ of final value

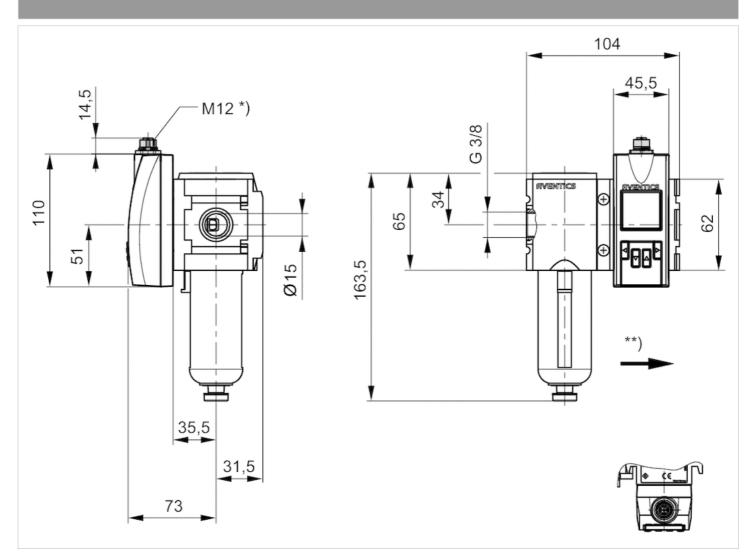




Technical information

Material	
Housing	Polyamide, Polycarbonate
Seals	Fluorocaoutchouc

Dimensions



- * Internal thread
- ** Flow direction



Pin assignments

Pin assignments, M12, X-coded



Pin	1	2	3	4	7	8	5
Color	WH / OG	OG	WH / GN	GN	WH / BU	BU	WH / BN
Function	TX(+) + POE	TX(-) + POE	RX(+) - POE	RX(-) - POE	POE+	POE+	POE-
			6				
			BN				
			POE-				

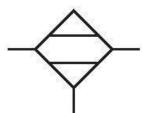
Diaphragm-type dryer, Series AS3-ADD

R412007078

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Parts

Diaphragm-type dryer

Type

Diaphragm-type dryer

Mounting orientation

vertical

Port

G 1/2

Nominal flow Qn

400 l/min

Recommended pre-filtering µm

5 μm 0.01 μm

Filter element

not exchangeable

Working pressure min.

4 bar

Working pressure max

12.5 bar

Min. ambient temperature

2°C

Max. ambient temperature

50 °C

Medium

Compressed air

Neutral gases

Weight

2.03 kg



Materials:

Housing Threaded bushing

Polyamide Die cast zinc
Front plate Reservoir
Acrylonitrile butadiene styrene Aluminum
Seal Part No.
Acrylonitrile butadiene rubber R412007078

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

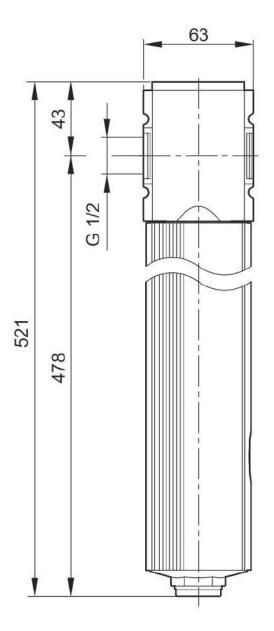
Notice: air may not contain condensate

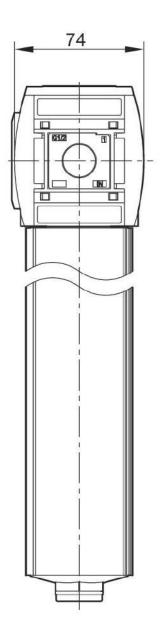
Purge air approx. 12 % of nominal flow Qn at 7 bar

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

Pressure dew point reduction: see diagram

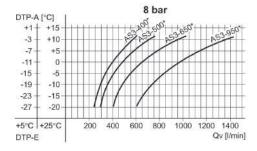






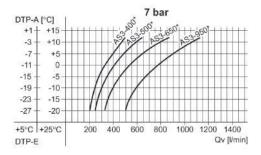


Performance charts



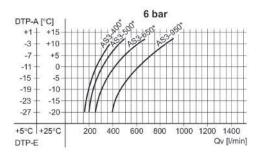
DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).

Performance charts



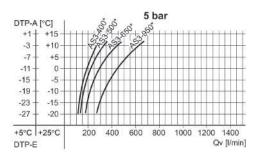
DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).

Performance charts



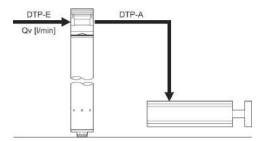
DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).

Performance charts



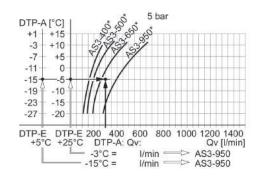
DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).

Example Wanted: Suitable membrane dryer



Example

Give values: Qv = 350 l/min, DTP-E = +5 (+25) °C, searched values: DTP-A = -15 (-3) °C a suitable membrane dryer

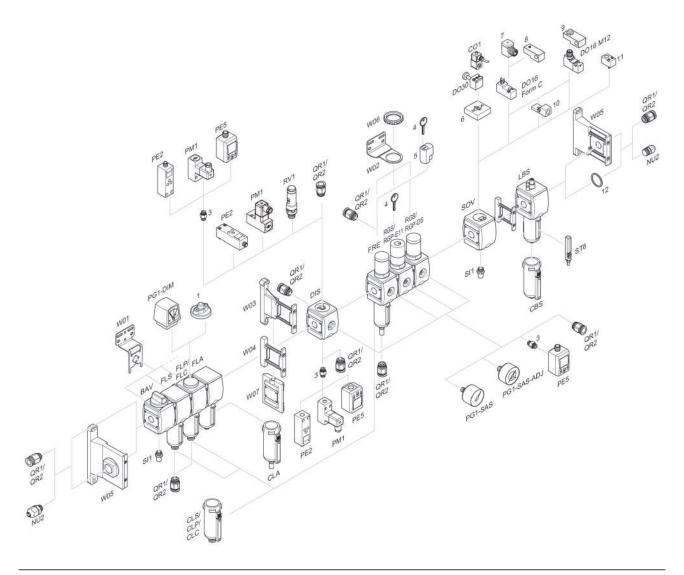


Result: membrane dryer series AS3-950 (with a Qn of 950 l/min), part no. R412007081



^{*} Nominal flow Qn

Accessories overview



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



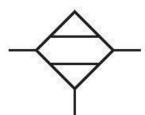
Diaphragm-type dryer, Series AS3-ADD

R412007079

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Parts

Diaphragm-type dryer

Type

Diaphragm-type dryer

Mounting orientation

vertical

Port

G 1/2

Nominal flow Qn

500 l/min

Recommended pre-filtering µm

5 µm

0.01 µm

Filter element not exchangeable

Working pressure min.

4 bar

Working pressure max

12.5 bar

Min. ambient temperature

2°C

Max. ambient temperature

50 °C

Medium

Compressed air

Neutral gases

Weight

3.26 kg



Materials:

Housing Threaded bushing

Polyamide Die cast zinc
Front plate Reservoir
Acrylonitrile butadiene styrene Aluminum
Seal Part No.
Acrylonitrile butadiene rubber R412007079

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

Notice: air may not contain condensate

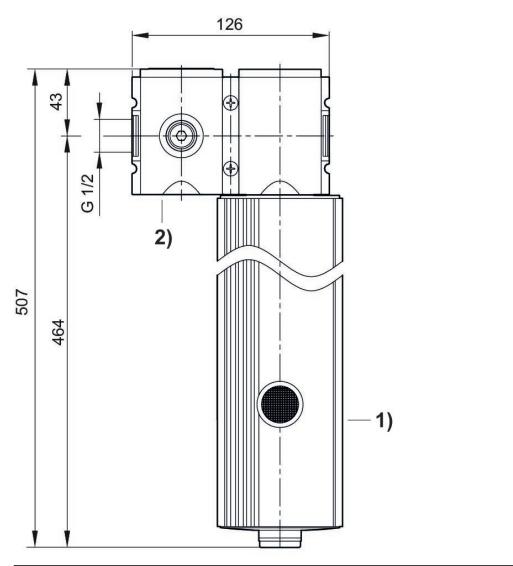
Purge air approx. 12 % of nominal flow Qn at 7 bar

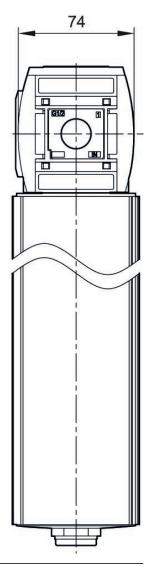
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Pressure dew point reduction: see diagram

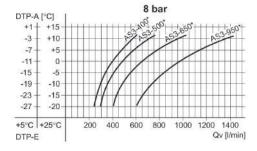


Dimensions in mm



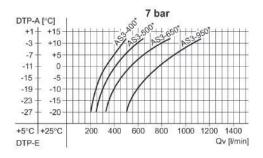


Performance charts



DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).

Performance charts



DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).
* Nominal flow Qn

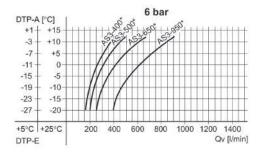


¹⁾ Diaphragm-type dryer

²⁾ Incl. second distributor

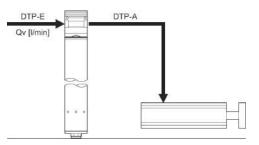
^{*} Nominal flow Qn

Performance charts

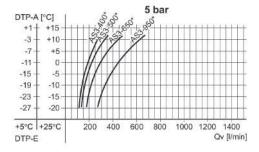


DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).
* Nominal flow Qn

Example Wanted: Suitable membrane dryer



Performance charts

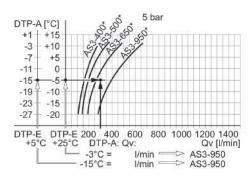


DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).

Example

Give values:

Qv = 350 l/min, DTP-E = +5 (+25) °C,searched values: DTP-A = -15 (-3) °C a suitable membrane dryer



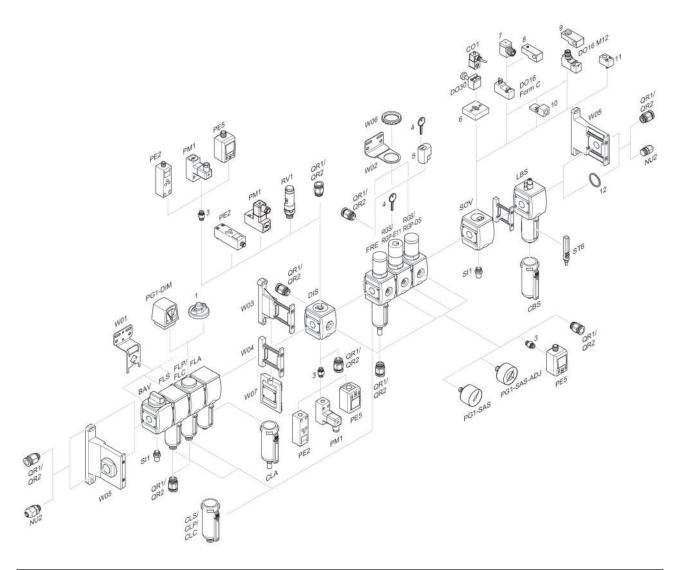
Result: membrane dryer series AS3-950 (with a Qn of 950 l/min), part no. R412007081



^{*} Nominal flow On

^{*} Nominal flow Qn

Accessories overview



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



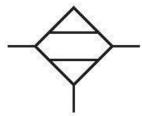
Diaphragm-type dryer, Series AS3-ADD

R412007080

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Parts

Diaphragm-type dryer

Type

Diaphragm-type dryer

Mounting orientation

vertical

Port

G 1/2

Nominal flow Qn

660 l/min

Recommended pre-filtering µm

5 μm 0.01 μm

Filter element

not exchangeable

Working pressure min.

4 bar

Working pressure max

12.5 bar

Min. ambient temperature

2°C

Max. ambient temperature

50 °C

Medium

Compressed air

Neutral gases

Weight

3.56 kg



Materials:

Housing Threaded bushing

Polyamide Die cast zinc
Front plate Reservoir
Acrylonitrile butadiene styrene Aluminum
Seal Part No.
Acrylonitrile butadiene rubber R412007080

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

Notice: air may not contain condensate

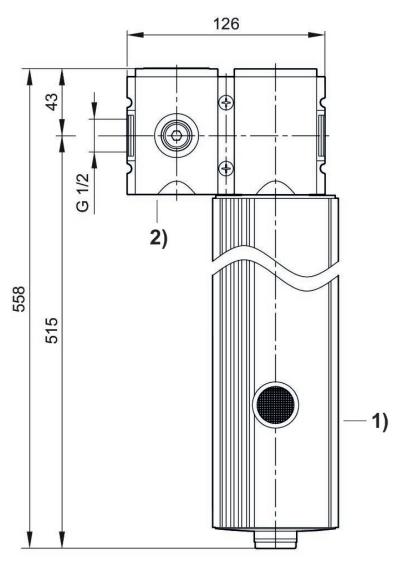
Purge air approx. 12 % of nominal flow Qn at 7 bar

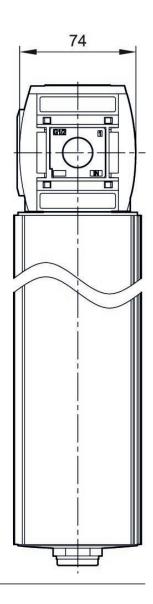
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Pressure dew point reduction: see diagram

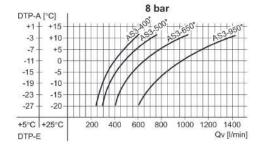


Dimensions in mm





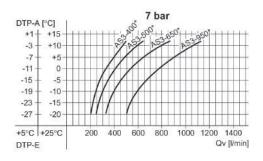
Performance charts



DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).

* Nominal flow Qn

Performance charts



DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).

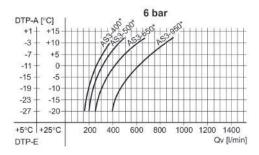


¹⁾ Diaphragm-type dryer

²⁾ Incl. second distributor

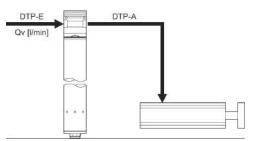
^{*} Nominal flow Qn

Performance charts

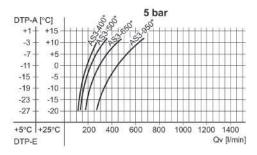


DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).
* Nominal flow Qn

Example Wanted: Suitable membrane dryer



Performance charts

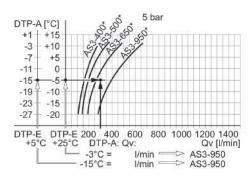


DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).

Example

Give values:

Qv = 350 l/min, DTP-E = +5 (+25) °C,searched values: DTP-A = -15 (-3) °C a suitable membrane dryer



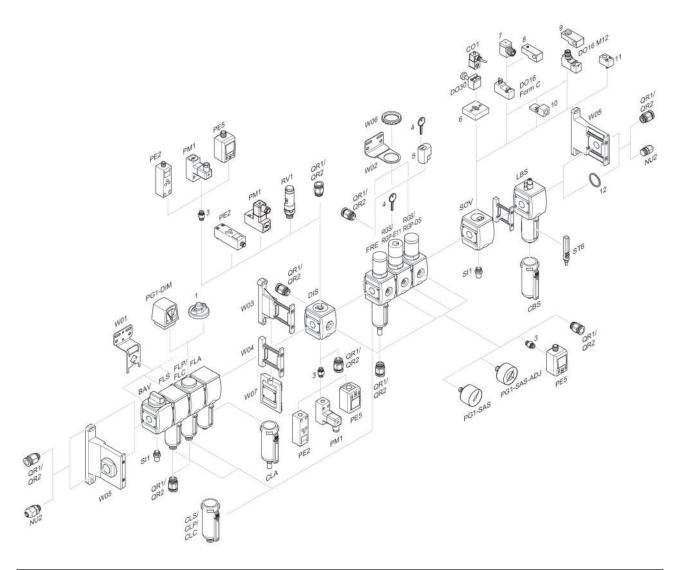
Result: membrane dryer series AS3-950 (with a Qn of 950 l/min), part no. R412007081



^{*} Nominal flow On

^{*} Nominal flow Qn

Accessories overview



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



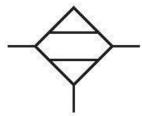
Diaphragm-type dryer, Series AS3-ADD

R412007081

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Parts

Diaphragm-type dryer

Type

Diaphragm-type dryer

Mounting orientation

vertical

Port

G 1/2

Nominal flow Qn

950 l/min

Recommended pre-filtering µm

5 μm 0.01 μm

Filter element

not exchangeable

Working pressure min.

4 bar

Working pressure max

12.5 bar

Min. ambient temperature

2°C

Max. ambient temperature

50 °C

Medium

Compressed air

Neutral gases

Weight

3.9 kg



Materials:

Housing Threaded bushing

Polyamide Die cast zinc
Front plate Reservoir
Acrylonitrile butadiene styrene Aluminum
Seal Part No.
Acrylonitrile butadiene rubber R412007081

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

Notice: air may not contain condensate

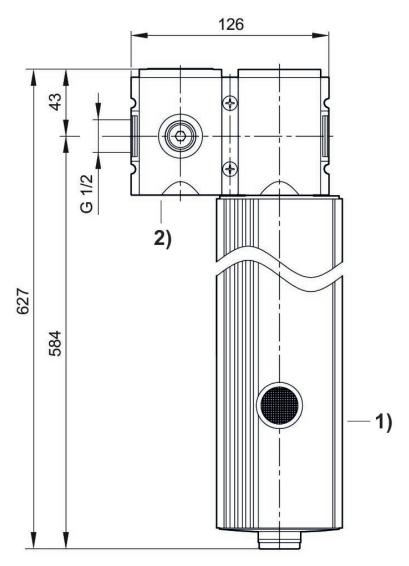
Purge air approx. 12 % of nominal flow Qn at 7 bar

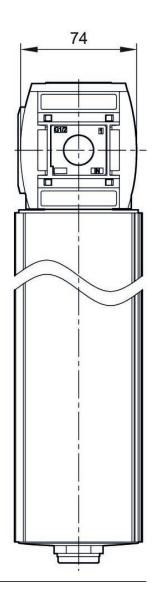
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Pressure dew point reduction: see diagram

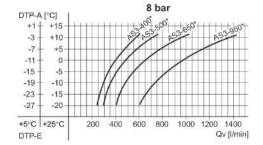


Dimensions in mm



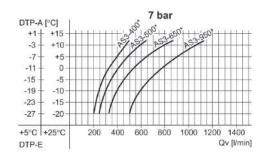


Performance charts



DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).
* Nominal flow Qn

Performance charts



DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).

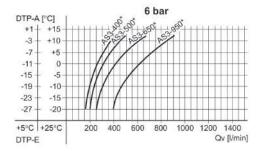


¹⁾ Diaphragm-type dryer

²⁾ Incl. second distributor

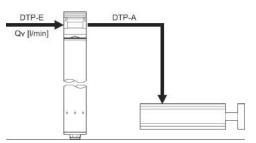
^{*} Nominal flow Qn

Performance charts

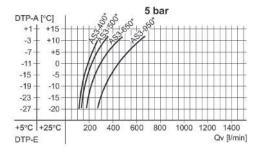


DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).
* Nominal flow Qn

Example Wanted: Suitable membrane dryer



Performance charts

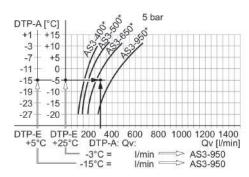


DTP-E: pressure dew point input, DTP-A: pressure dew point output, Qv: input flow rate (output flow rate + purge air).

Example

Give values:

Qv = 350 l/min, DTP-E = +5 (+25) °C,searched values: DTP-A = -15 (-3) °C a suitable membrane dryer



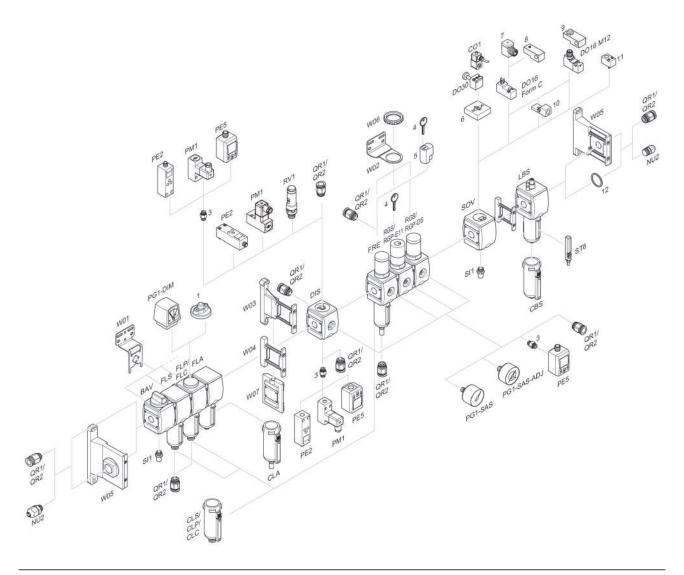
Result: membrane dryer series AS3-950 (with a Qn of 950 l/min), part no. R412007081



^{*} Nominal flow On

^{*} Nominal flow Qn

Accessories overview



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





Standard oil-mist lubricator, Series AS3-LBS

- G 3/8 G 1/2



Version

Parts

Mounting orientation

Working pressure min./max.
Ambient temperature min./max.
Medium temperature min./max.
Medium
Lubricator reservoir volume
Type of filling

Weight

Oil-mist lubricator, Can be assembled into

blocks

Standard oil-mist lubricator

vertical

0.5 ... 16 bar -10 ... 50 °C

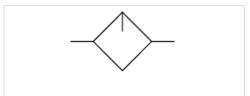
-10 ... 50 °C

Compressed air Neutral gases

80 cm³

Semi-automatic oil filling during operation

Manual oil filling See table below



Technical data

Part No.	Port	Nominal flow Qn	Material Reservoir	Protective guard
R412007225	G 3/8	8000 l/min	Polycarbonate	Polyamide
R412007226	G 3/8	8000 l/min	Polycarbonate	Polyamide
R412007229	G 3/8	8000 l/min	Die cast zinc with window	-
R412007231	G 1/2	8000 l/min	Polycarbonate	Polyamide
R412007232	G 1/2	8000 l/min	Polycarbonate	Polyamide
R412007235	G 1/2	8000 l/min	Die cast zinc with window	-

Part No.	Reservoir	Weight	
R412007225	reservoir, PA, with PA protective guard	0.343 kg	
R412007226	reservoir, PA, with PA protective guard	0.343 kg	1)
R412007229	reservoir, metal, standard, with inspection glass	0.749 kg	
R412007231	reservoir, PA, with PA protective guard	0.343 kg	
R412007232	reservoir, PA, with PA protective guard	0.343 kg	1)
R412007235	reservoir, metal, standard, with inspection glass	0.728 kg	

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

1) Electrical level detection.



Technical information

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

Electrical level detection only with ST6 sensor with reed contact, sensor holder included in the scope of the delivery.

Sensor not included in scope of delivery, sensor installation prepared.

The entire preset drip quantity enters the pressure system.

Manual oil filling possible during operation at a maximum operating pressure of 10 bar.

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information". A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

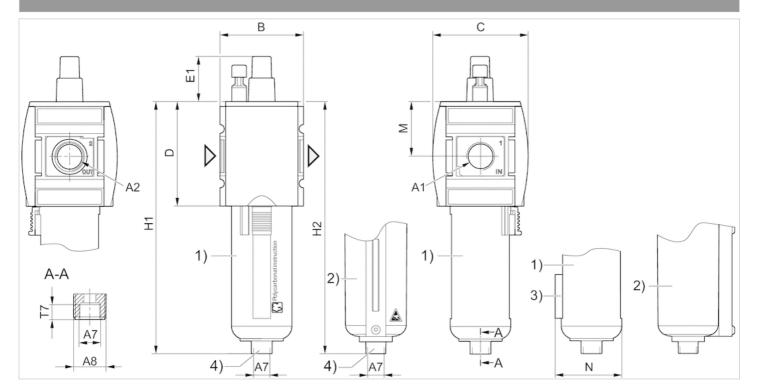
Oil dosing at 1000 l/min 1-2 drops

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	Polyamide

Dimensions

Dimensions



A1 = inputA2 = output





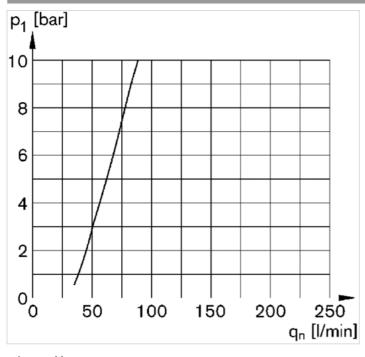
- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with inspection glass
- 3) Holder for sensor
- 4) Port for semi-automatic oil filling

Dimensions in mm

	A1	A2	A7	A8	В	С	D	E1	H1	H2	М	N	T7
	G 3/8	G 3/8	G 1/8	G 1/4	63	74	80	27.5	183	187	42.5	48	7
(G 1/2	G 1/2	G 1/8	G 1/4	63	74	80	27.5	183	187	42.5	48	7

Diagrams

Lubricator activation margin



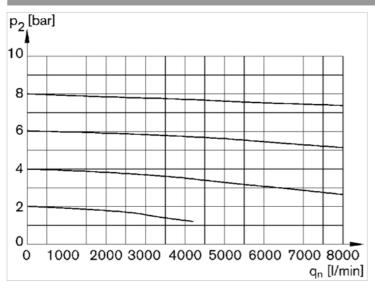
p1 = working pressure

qn = nominal flow





Flow rate characteristic



p2 = secondary pressure

qn = nominal flow



Accessories overview



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



Filling unit, electrically operated, Series AS3-SSU

- adjustable filling time
- Compressed air connection G 3/8 G 1/2
- Pipe connection



Version Poppet valve, Can be assembled into

blocks

Parts Filling valve, 3/2-directional valve,

electrically operated

Nominal flow 3500 l/min

Nominal flow 1 ▶ 2 3500 l/min

Nominal flow 2 ▶ 3 3200 l/min

Working pressure min./max. 2.5 ... 10 bar

Medium Compressed air Neutral gases

Medium temperature min./max. $-10 \dots 50 \,^{\circ}\text{C}$ Ambient temperature min./max. $-10 \dots 50 \,^{\circ}\text{C}$ Pilot Internal Sealing principle Soft sealing Max. particle size 25 μ m Protection class acc. to DIN EN 61140 IP65

with plug

Duty cycle 100 %

Weight See table below

Technical data

Part No.		Compressed air connection input	Compressed air connection output	Exhaust
R412007277	_	G 3/8	G 3/8	G 1/2
R412007282	_	G 1/2	G 1/2	G 1/2
R412007287	_	G 1/2	G 1/2	G 1/2
R412007278		G 3/8	G 3/8	G 1/2
R412007280		G 3/8	G 3/8	G 1/2
R412007394		G 1/2	-	G 1/2
R412007283		G 1/2	G 1/2	G 1/2
R412007284		G 1/2	G 1/2	G 1/2
R412007285		G 1/2	G 1/2	G 1/2

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
R412007277	-	-	-
R412007282	-	-	-
R412007287	-	-	-
R412007278	24 V	-	-
R412007280	-	220 V	230 V
R412007394	24 V	-	-
R412007283	24 V	-	-





Part No.	Operational voltage DC	Operational voltage AC 50 Hz	Operational voltage AC 60 Hz
R412007284	-	110 V	110 V
R412007285	-	220 V	230 V

Part No.	Power consumption	Holding power	Holding power	Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
R412007277	-	-	-	-
R412007282	-	-	-	-
R412007287	-	-	-	-
R412007278	2 W	-	-	-
R412007280	-	1.6 VA	1.4 VA	2.2 VA
R412007394	2 W	-	-	-
R412007283	2 W	-	-	-
R412007284	-	1.6 VA	1.4 VA	2.2 VA
R412007285	-	1.6 VA	1.4 VA	2.2 VA

Part No.	Switch-on power	Electrical connection	Connector standard
	AC 60 Hz	Pilot valve	
R412007277	-	-	-
R412007282	-	-	-
R412007287	-	-	-
R412007278	-	Plug, ISO 15217, form C	ISO 15217
R412007280	1.6 VA	Plug, ISO 15217, form C	ISO 15217
R412007394	-	Plug, M12x1	-
R412007283	-	Plug, ISO 15217, form C	ISO 15217
R412007284	1.6 VA	Plug, ISO 15217, form C	ISO 15217
R412007285	1.6 VA	Plug, ISO 15217, form C	ISO 15217

Part No.	basic valve with electrical connector
R412007277	Basic valve without pilot valve
R412007282	Basic valve without pilot valve
R412007287	Basic valve without pilot valve, with CNOMO subbase
R412007278	Basic valve with pilot valve
R412007280	Basic valve with pilot valve
R412007394	Basic valve with pilot valve
R412007283	Basic valve with pilot valve
R412007284	Basic valve with pilot valve
R412007285	Basic valve with pilot valve

Part No.	Reverse polarity protection	Weight	Fig.	
R412007277	-	0.889 kg	Fig. 1	
R412007282	-	0.889 kg	Fig. 1	
R412007287	-	0.895 kg	Fig. 2	
R412007278	Protected against polarity reversal	0.924 kg	Fig. 3	
R412007280	Protected against polarity reversal	0.924 kg	Fig. 3	
R412007394	Protected against polarity reversal	0.9 kg	Fig. 4	1)
R412007283	Protected against polarity reversal	0.924 kg	Fig. 3	
R412007284	Protected against polarity reversal	0.924 kg	Fig. 3	





Part No.	Reverse polarity protection	Weight	Fig.	
R412007285	Protected against polarity reversal	0.924 kg	Fig. 3	

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

1) With adjustment screw lock.

Technical information

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

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

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

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

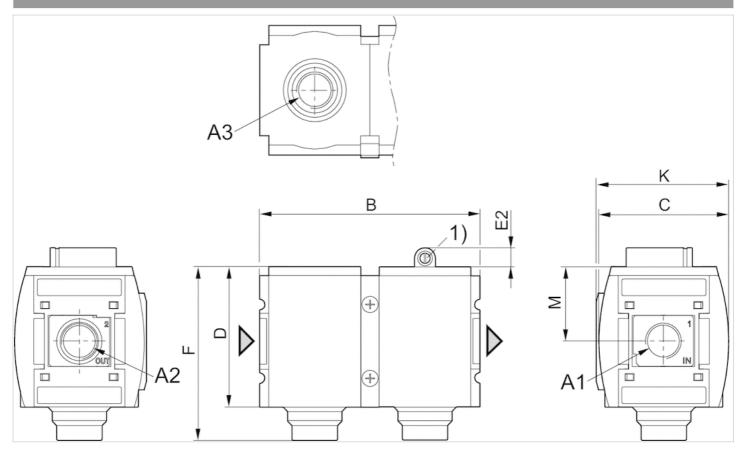
Technical information

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



Dimensions

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



A1 = input

A2 = output

A1	A2	A3	В	С	D	E2	F	К	М
G 3/8	G 3/8	G 1/2	125.75	74	80	11	99	75.5	42.5
G 1/2	G 1/2	G 1/2	125.75	74	80	11	99	75.5	42.5

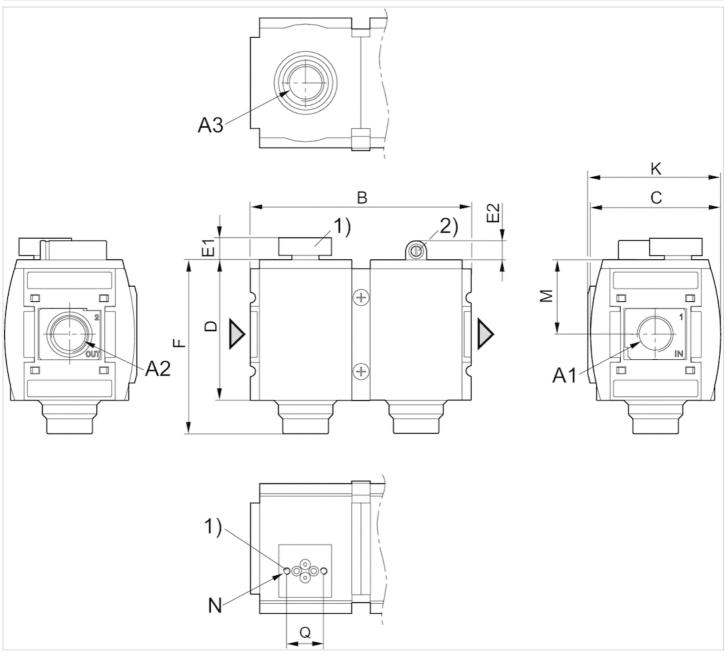
¹⁾ Adjustment screw for filling time





Dimensions

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



A1 = input

A2 = output

A3 = ventilation port

- 1) Transition plate with CNOMO porting configuration for pilot valve DO30
- 2) Adjustment screw for filling time

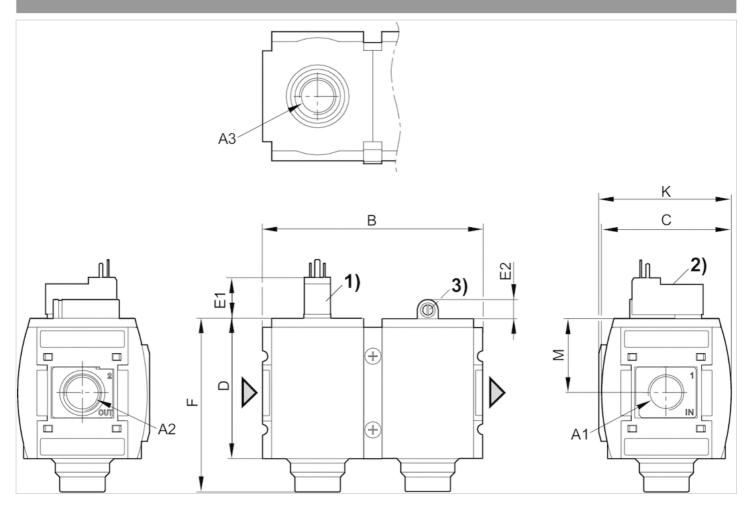
A1	A2	A3	В	С	D	E1	E2	F	K	М	N	Q
G 1/2	G 1/2	G 1/2	125.75	74	80	12.3	11	99	75.5	42.5	M4	21





Dimensions

Fig. 3: Filling unit with pilot valve and port for valve plug connector



A1 = input

A2 = output

A3 = ventilation port

- 1) Connection for valve plug connector according to ISO 15217 (form C)
- 2) Manual override
- 3) Adjustment screw for filling time

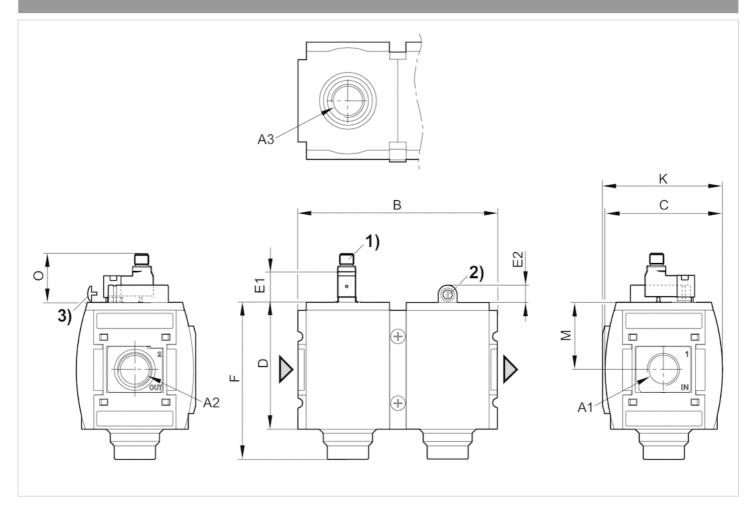
A1	A2	A3	В	С	D	E1	E2	F	К	М
G 3/8	G 3/8	G 1/2	125.75	74	80	23.2	11	99	75.5	42.5
G 1/2	G 1/2	G 1/2	125.75	74	80	23.2	11	99	75.5	42.5





Dimensions

Fig. 4: Filling unit with pilot valve and valve plug connector for plug



A1 = input

A2 = output

A3 = ventilation port

- 1) Port for plug M12x1
- 2) Adjustment screw for filling time
- 3) Adjustment screw lock

Dimensions in mm

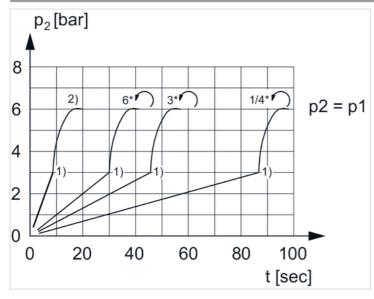
A1	A2	A3	В	С	D	E1	E2	F	K	М
G 1/2	G 1/2	G 1/2	125.75	74	80	39	11	99	75.5	42.5





Diagrams

Secondary pressure while filling



p1 = working pressure

p2 = secondary pressure

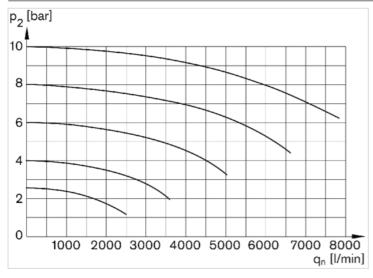
t = filling time, adjustable via adjustment screw (throttle)

1) Switching point: adjustable filling time, fixed change-over pressure $\approx 0.5 \text{ x p1}$ (50%)

2) Throttle fully opened

* Adjustment screw rotations

Flow rate characteristic



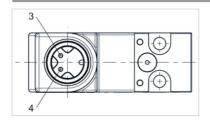
p2 = secondary pressure





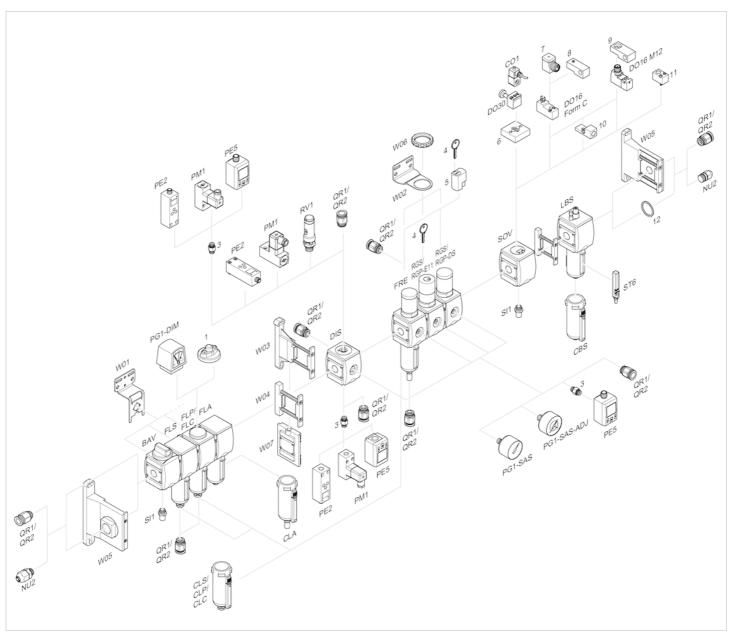
Pin assignments

Pin assignment M12x1



3: +/-

4: +/-



1 = contamination display



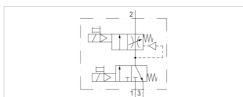
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Filling unit, electrically operated, Series AS3-SSU

- With electrical priority circuit, adjustable filling time.
- Compressed air connection G 1/2
- Pipe connection
- Electrical connection: Plug, M12x1





Version Poppet valve, Can be assembled into

blocks

Parts Filling valve, 3/2-directional valve,

electrically operated

Nominal flow 3500 l/min

Nominal flow 1 ▶ 2 3500 l/min

Nominal flow 2 ▶ 3 3200 l/min

Working pressure min./max. 2.5 ... 10 bar

Medium Compressed air Neutral gases

with plug

Duty cycle 100 % Weight 0.924 kg

Technical data

Part No.	Compressed air connection input	Compressed air connection output	Operational voltage
			DC
R412007395	G 1/2	G 1/2	24 V

	Part No.	Power consumption	Electrical connection	basic valve with electrical connector
ı		DC	Pilot valve	
	R412007395	2 W	Plug, M12x1	Basic valve with pilot valve

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 .

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

For unthrottled operation, the filling valve must be permanently electrically actuated.

Actuating the electric priority circuit disrupts the slow pressure build-up and pressure p1 is immediately applied.

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.



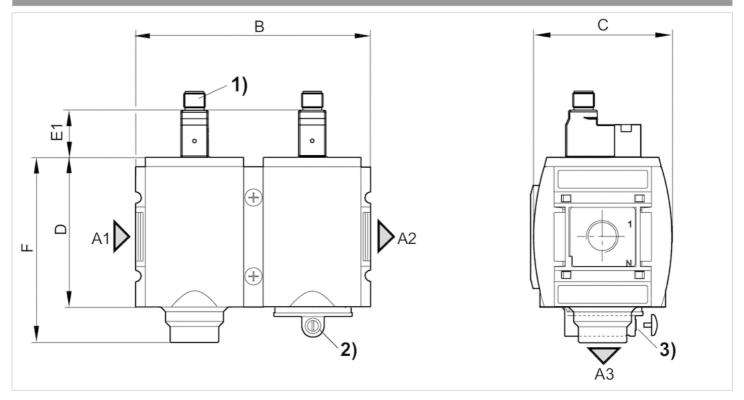


Technical information

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

Dimensions

Dimensions, With pilot valve, series DO16



A1 = input

A2 = output

A3 = ventilation port

- 1) Electr. connection: valve plug connector M12x1
- 2) Adjustment screw for filling time
- 3) Adjustment screw lock

Dimensions in mm

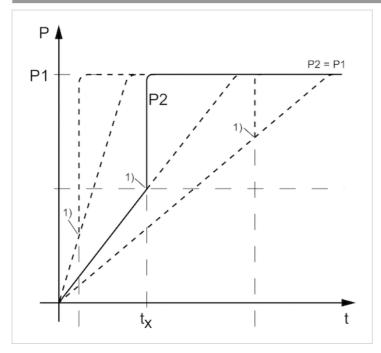
A1	A2	A3	В	С	D	E1	F
G 1/2	G 1/2	G 1/2	125.75	74	80	39	99





Diagrams

Secondary pressure while filling



p1 = working pressure

p2 = secondary pressure

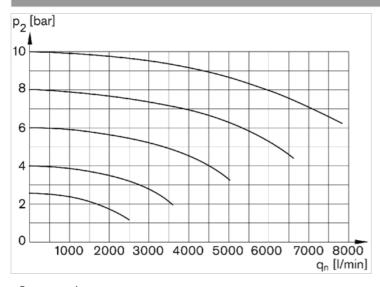
t = filling time

tx = switchover time

1) Electrically triggered switching point

Filling time adjustable via adjustment screw (throttle)

Flow rate characteristic



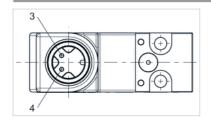
p2 = secondary pressure





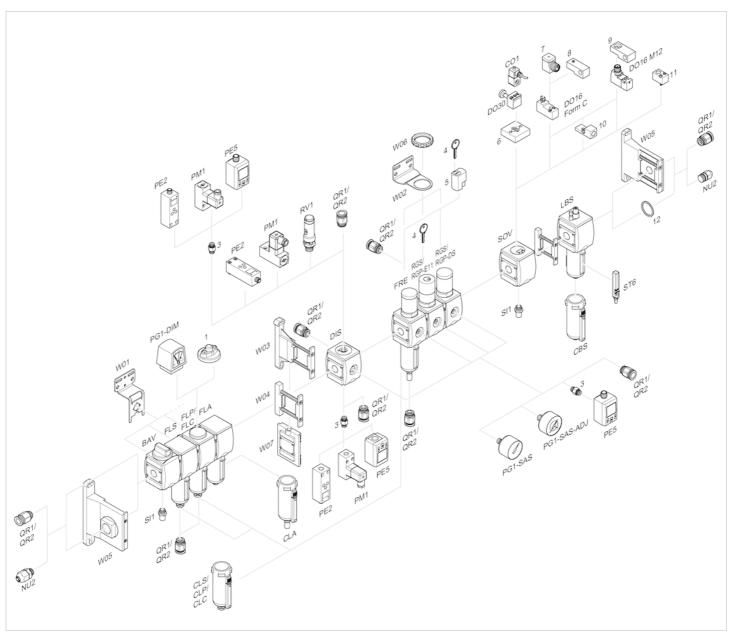
Pin assignments

Pin assignment M12x1



3: +/-

4: +/-



1 = contamination display



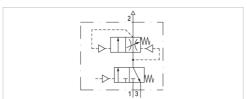
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Filling unit, pneumatically operated, Series AS3-SSU

- adjustable filling time
- Compressed air connection G 3/8 G 1/2
- Pipe connection





Version

Poppet valve, Can be assembled into

blocks

Pilot Internal

Sealing principle Soft sealing

Working pressure min./max. 0 ... 16 bar 2.5 ... 16 bar Control pressure min./max. 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 0.924 kg

> The delivered product varies from that in the illustration. See the drawing for an

exact description.

Technical data

Part No.	Port	Pilot connection	Exhaust	Flow	Flow	Flow	
				Qn	Qn 1▶2	Qn 2 ► 3	
R412007276	G 3/8	G 1/8	G 1/2	3500 l/min	3500 l/min	3200 l/min	-
R412007281	G 1/2	G 1/8	G 1/2	3500 l/min	3500 l/min	3200 l/min	-
R412007289	G 1/2	G 1/8	G 1/2	3500 l/min	3500 l/min	3200 l/min	1)

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

1) With adjustment screw lock

Technical information

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

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



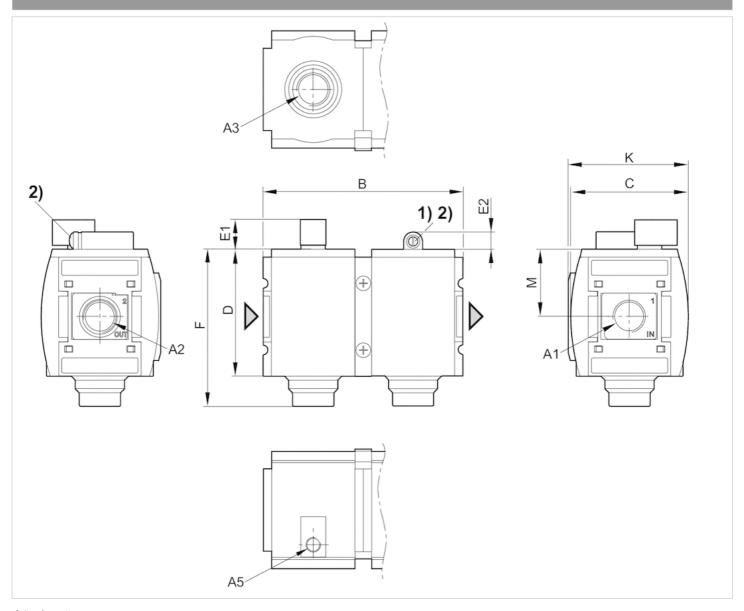


Technical information

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

Dimensions

Dimensions



A1 = input

A2 = output

A3 = ventilation port

A5 = control pressure connection

- 1) Adjustment screw for filling time
- 2) Adjustment screw lock



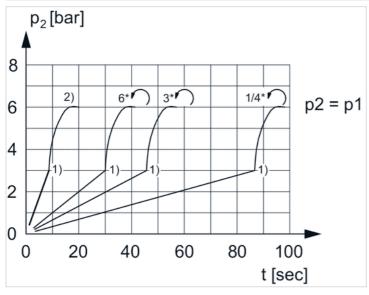


Dimensions in mm

A1	A2	A3	A5	В	С	D	E1	E2	F	K	M
G 3/8	G 3/8	G 1/2	G 1/8	125.75	74	80	18.5	11	99	75.5	42.5
G 1/2	G 1/2	G 1/2	G 1/8	125.75	74	80	18.5	11	99	75.5	42.5

Diagrams

Secondary pressure while filling



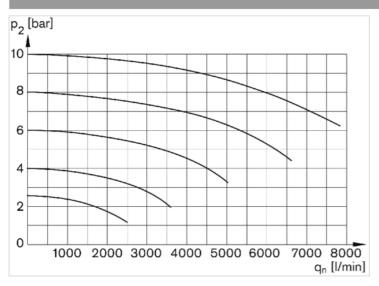
p1 = working pressure

p2 = secondary pressure

t = filling time, adjustable via adjustment screw (throttle)

- 1) Switching point: adjustable filling time, fixed change-over pressure $\approx 0.5 \text{ x p1}$ (50%)
- 2) Throttle fully opened
- * Adjustment screw rotations

Flow rate characteristic



p2 = secondary pressure





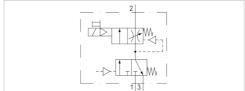
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Filling unit, pneumatically operated, Series AS3-SSU

- With electrical priority circuit, adjustable filling time.
- Compressed air connection G 1/2
- Pipe connection





Version Poppet valve, Can be assembled into

blocks
Pilot Internal
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 Compressed air Neutral gases

Max. particle size 25 µm

Duty cycle 100 %

Protection class according to EN IP65

60529:2000, without electrical connector

Medium temperature min./max.

Weight 0.924 kg

The delivered product varies from that in the illustration. See the drawing for an

exact description.

-10 ... 50 °C

Technical data

Part No.	Port	Exhaust	Flow	Flow	Flow
			Qn	Qn 1▶2	Qn 2▶3
R412007393	G 1/2	G 1/2	3500 l/min	3500 l/min	3200 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 . 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

Actuating the electric priority circuit disrupts the slow pressure build-up and pressure p1 is immediately applied.

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

Technical information

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



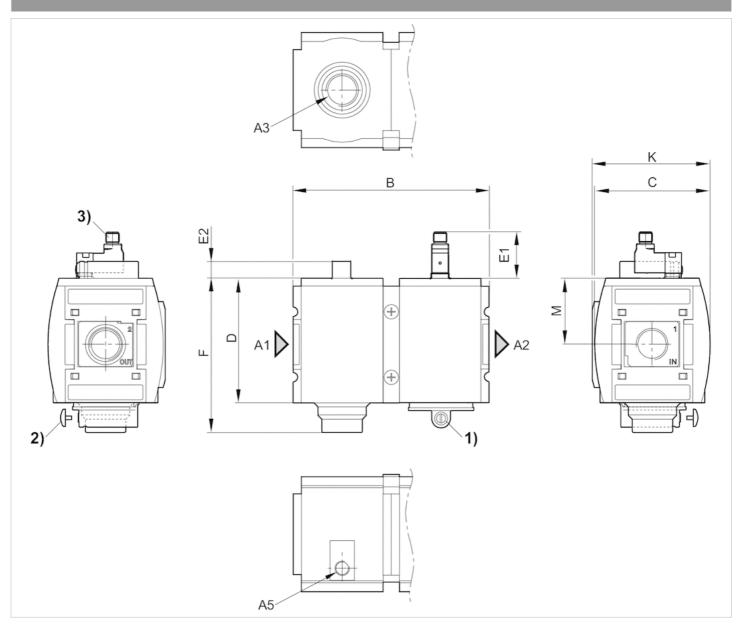


Material

Threaded bushing Die cast zinc

Dimensions

Dimensions



A1 = input

A2 = output

A3 = ventilation port

A5 = control pressure connection

- 1) Adjustment screw for filling time
- 2) Adjustment screw lock
- 3) For valve plug connectors M12x1



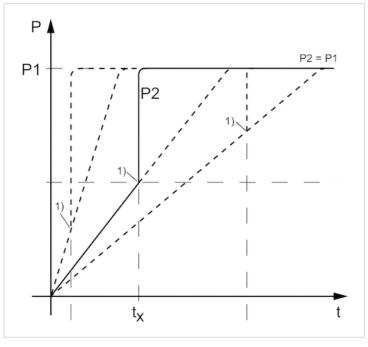


Dimensions in mm

A1	A2	A3	A5	В	С	D	E1	F	K	М
G 1/2	G 1/2	G 1/2	G 1/8	126	74	80	39	99	75.5	42.5

Diagrams

Secondary pressure while filling



p1 = working pressure

p2 = secondary pressure

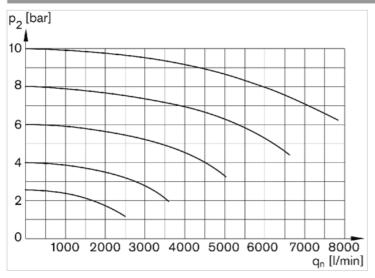
t = filling time

tx = switchover time

1) Electrically triggered switching point

Filling time adjustable via adjustment screw (throttle)

Flow rate characteristic

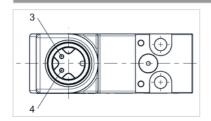


p2 = secondary pressure



Pin assignments

Pin assignment M12x1



3: +/-

4: +/-





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

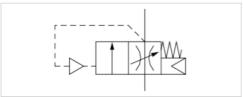


Filling valve, Series AS3-SSV

- adjustable filling time
- Compressed air connection G 3/8 G 1/2



Poppet valve, Can be assembled into Version blocks Sealing principle Soft sealing Working 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 0.43 kg



Technical data

Part No.	Port	Flow	
		Qn	
R412007272	G 3/8	4500 l/min	
R412007273	G 1/2	4500 l/min	
R412007275	G 1/2	4500 l/min	1)

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

1) With adjustment screw lock.

Technical information

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

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

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.



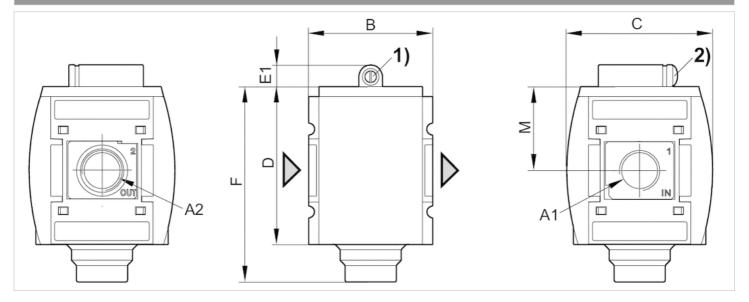


Technical information

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

Dimensions

Dimensions



- A1 = input
- A2 = output
- 1) Adjustment screw for filling time
- 2) Adjustment screw lock

Dimensions in mm

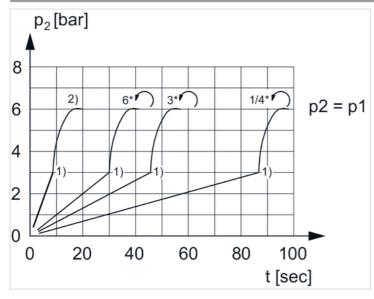
A1	A2	В	С	D	E1	F	M
G 3/8	G 3/8	63	74	80	11	99	42.5
G 1/2	G 1/2	63	74	80	11	99	42.5





Diagrams

Secondary pressure while filling



p1 = working pressure

p2 = secondary pressure

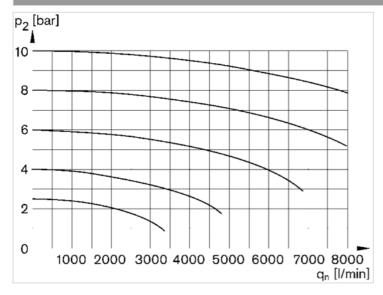
t = filling time, adjustable via adjustment screw (throttle)

1) Switching point: adjustable filling time, fixed change-over pressure $\approx 0.5 \text{ x p1}$ (50%)

2) Throttle fully opened

* Adjustment screw rotations

Flow rate characteristic



p2 = secondary pressure





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





Filling valve, pneumatically operated, Series AS3-SSV

- With pneumatic priority circuit, adjustable filling time.
- Compressed air connection G 3/8 G 1/2
- Pipe connection



Version Poppet valve, Can be assembled into

blocks

Sealing principle

Working pressure min./max.

Ambient temperature min./max.

Soft sealing

2.5 ... 16 bar

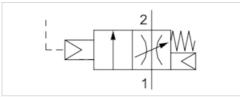
-10 ... 50 °C

Medium temperature min./max.

-10 ... 50 °C

Medium Compressed air Neutral gases

Max. particle size $40 \mu m$ Weight 0.49 kg



Technical data

Part No.	Port	Pilot connection	Flow	Flow
			Qn	Qn 1▶2
R412007311	G 3/8	G 1/8	4400 l/min	4400 l/min
R412007312	G 1/2	G 1/8	4400 l/min	4400 l/min

Nominal flow Qn at p1 = 6.3 bar and 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 .

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

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.

Actuating the electric priority circuit disrupts the slow pressure build-up and pressure p1 is immediately applied.

For unthrottled operation, the filling valve must be permanently electrically actuated.



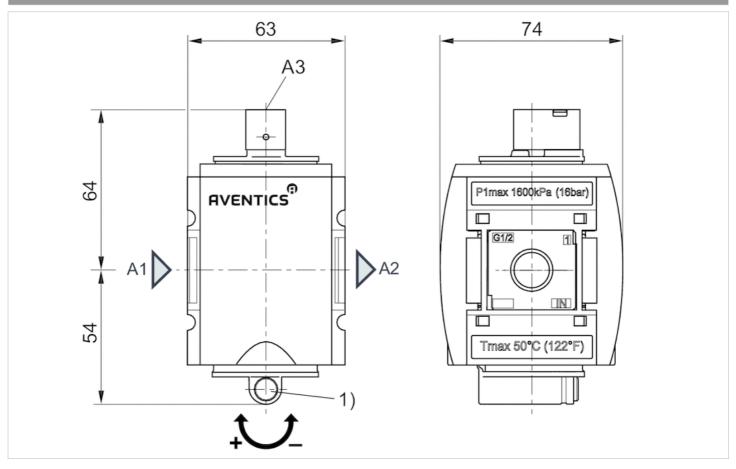


Technical information

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

Dimensions

Dimensions



A1 = input

A2 = output

A3 = control pressure connection

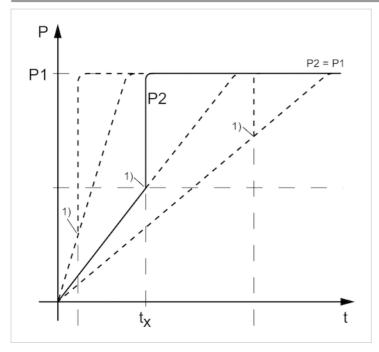
1) Adjustment screw for filling time





Diagrams

Secondary pressure while filling



p1 = working pressure

p2 = output pressure

t = filling time

tx = switchover time

1) Pneumatically triggered switching point

Filling time adjustable via adjustment screw (throttle)

control pressure characteristic



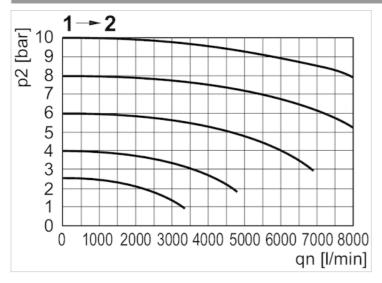
p1 = working pressure

PS = control pressure



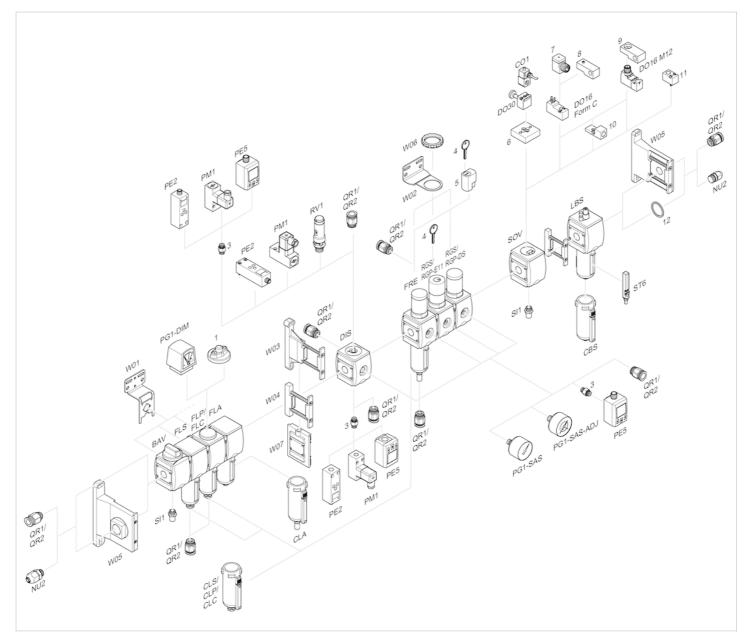


Flow rate characteristic



p2 = secondary pressure





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





Filling valve, mechanically adjustable, series AS3-SSV

- Adjustable filling time and change-over pressure.
- Compressed air connection G 1/2



Version Poppet valve, Can be assembled into

blocks

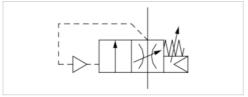
-10 ... 50 °C

Sealing principle Soft sealing
Working pressure min./max. 2.5 ... 16 bar
Ambient temperature min./max. -10 ... 50 °C

Medium Compressed air Neutral gases

Max. particle size $$40\ \mu m$$ Weight $$0.43\ kg$$

Medium temperature min./max.



Technical data

Part No.	Port	Pilot connection	Flow
			Qn
R412007246	G 1/2	G 3/8	4500 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 .

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.

Adjustable filling time and change-over pressure.

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.

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

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene

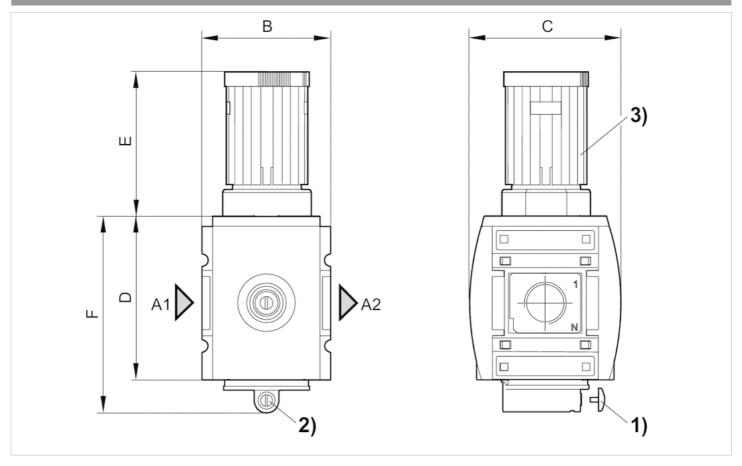




Material	
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc

Dimensions

Dimensions



A1 = input

A2 = output

- 1) Adjustment screw lock
- 2) Adjustment screw for filling time
- 3) hand wheel for change-over pressure, lockable

Dimensions in mm

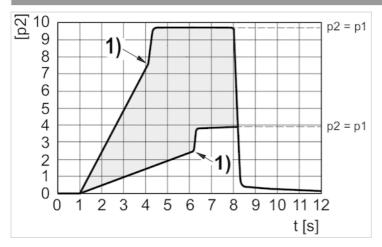
A1	A2	В	С	D	Е	F
G 1/2	G 1/2	63	74	80	63.5	96





Diagrams

Secondary pressure while filling



p1 = working pressure

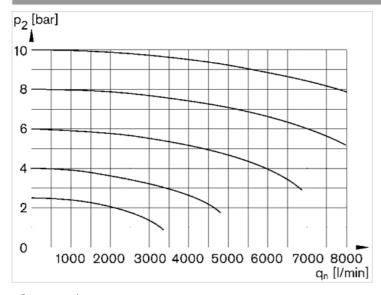
p2 = secondary pressure

t = filling time, adjustable via adjustment screw (throttle)

Change-over pressure individually adjustable via handwheel

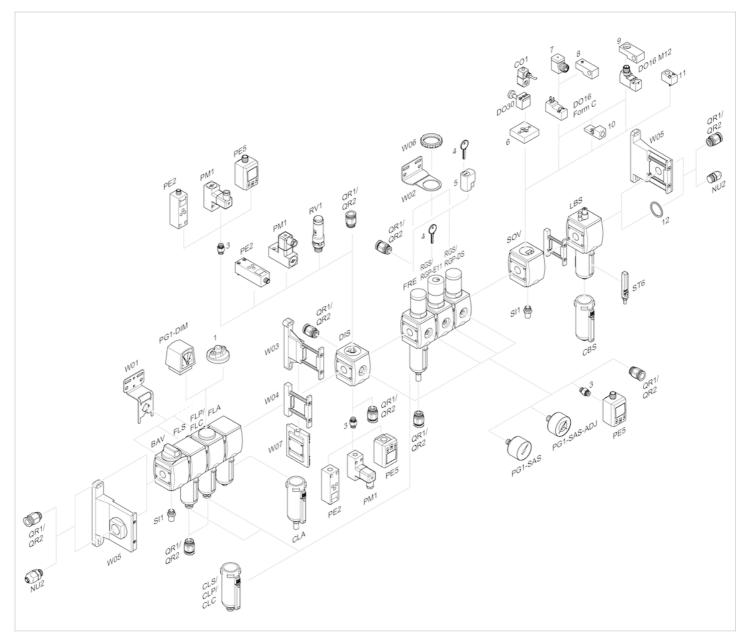
1) Switching point: adjustable filling time and change-over pressure

Flow rate characteristic



p2 = secondary pressure





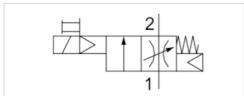
- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking
- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Filling valve, electrically operated, series AS3-SSV

- With electrical priority circuit, adjustable filling time.
- Compressed air connection G 1/2 G 3/8
- Pipe connection
- Electrical connection: Plug, M12x1





Version Pc	oppet valve with elect. priority o	circuit,
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Can be assembled into blocks

Parts Filling valve
Nominal flow 4500 l/min
Working pressure min./max. 2.5 ... 10 bar

Medium Compressed air Neutral gases

Medium temperature min./max. $-10 \dots 50 \,^{\circ}\text{C}$ Ambient temperature min./max. $-10 \dots 50 \,^{\circ}\text{C}$ Sealing principle Soft sealing
Max. particle size $25 \, \mu\text{m}$ Protection class acc. to DIN EN 61140 IP65

with plug

piug

Duty cycle 100 % Weight 0.43 kg

Technical data

Part No.	Compressed air connection input	Compressed air connection output	Operational
			voltage
			DC
R412007389	G 1/2	G 1/2	24 V
R412007390	G 3/8	G 3/8	24 V

Part No.	Electrical connection
	Pilot valve
R412007389	Plug, M12x1
R412007390	Plug, M12x1

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 .

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

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.

Actuating the electric priority circuit disrupts the slow pressure build-up and pressure p1 is immediately applied.

For unthrottled operation, the filling valve must be permanently electrically actuated.



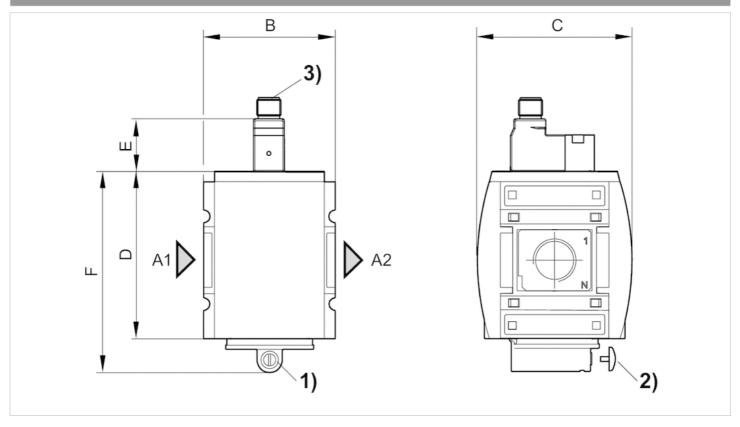


Technical information

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

Dimensions

Dimensions



A1 = input

A2 = output

- 1) Adjustment screw for filling time
- 2) Adjustment screw lock
- 3) For valve plug connectors M12x1

Dimensions in mm

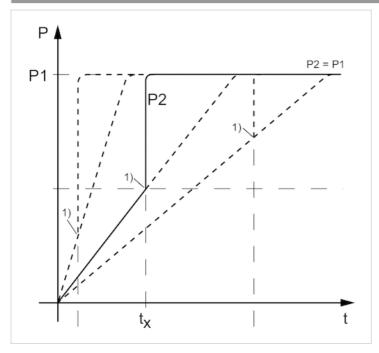
A1	A2	В	С	D	Е	F
G 1/2	G 1/2	63	74	80	39	96
G 3/8	G 3/8	63	74	80	39	96





Diagrams

Secondary pressure while filling



p1 = working pressure

p2 = secondary pressure

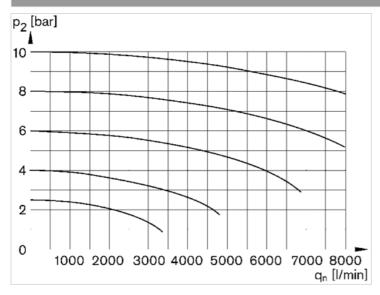
t = filling time

tx = switchover time

1) Electrically triggered switching point

Filling time adjustable via adjustment screw (throttle)

Flow rate characteristic



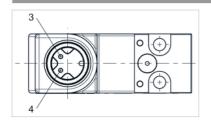
p2 = secondary pressure





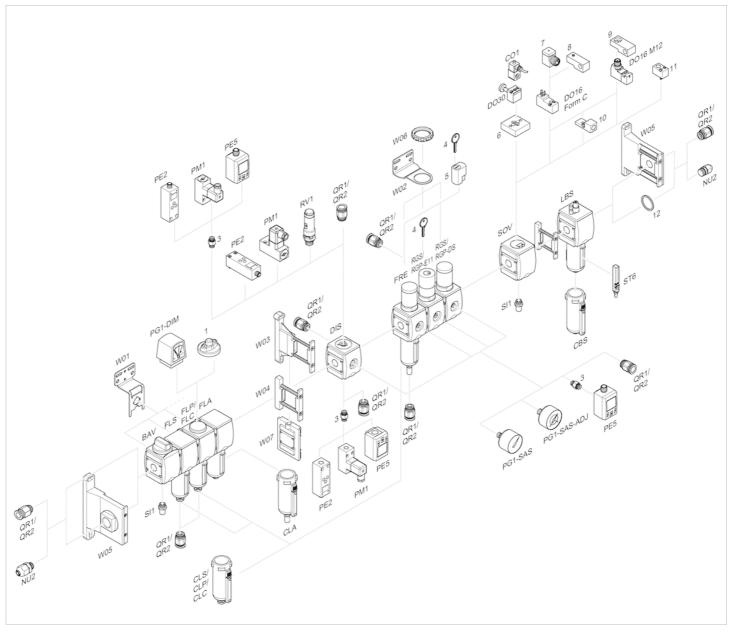
Pin assignments

Pin assignment M12x1



3: +/-

4: +/-



1 = contamination display



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



2/2-directional valve, electrically operated, Series AS3-SOV

- Compressed air connection G 1/2 G 3/8
- Pipe connection
- NC NO



Version Poppet valve, Can be assembled into

blocks

Parts 2/2-directional valve, electrically operated

Nominal flow 4500 l/min
Working pressure min./max. See table below

Medium Compressed air Neutral gases

Medium temperature min./max. $-10 \dots 50 \,^{\circ}\text{C}$ Ambient temperature min./max. $-10 \dots 50 \,^{\circ}\text{C}$ Sealing principle Soft sealing
Max. particle size 25 $\,\mu$ m
Protection class acc. to DIN EN 61140 IP65

with plug

Duty cycle 100 %

Weight See table below

Technical data

Part No.			Compressed air connection input	Compressed air connection output
R415011113	7 T	NC	G 1/2	G 1/2
R412007341	7 T	NC	G 3/8	G 3/8
R412007342	7 T	NC	G 3/8	G 3/8
R412007343	Z I	NC	G 1/2	G 1/2
R414012347	7 T NW	NO	G 1/2	G 1/2

Part No.	Operational voltage	Power consumption	Working pressure min./max.
	DC	DC	
R415011113	24 V	2 W	2.5 10 bar
R412007341	24 V	2 W	2.5 10 bar
R412007342	24 V	2 W	2.5 10 bar
R412007343	24 V	2 W	2.5 10 bar
R414012347	24 V	2 W	2.5 8 bar

Part No.	Electrical connection Pilot valve	basic valve with electrical connector
R415011113	Plug, ISO 15217, form C	Basic valve with pilot valve
R412007341	Plug, ISO 15217, form C	Basic valve with pilot valve
R412007342	Plug, M12	Basic valve with pilot valve
R412007343	Plug, M12	Basic valve with pilot valve
R414012347	Plug, ISO 15217, form C	Basic valve with pilot valve

Part No.	Reverse polarity protection	Weight	Fig.
R415011113	Protected against polarity reversal	0.459 kg	Fig. 1





Part No.	Reverse polarity protection	Weight	Fig.
R412007341	Protected against polarity reversal	0.609 kg	Fig. 1
R412007342	Protected against polarity reversal	0.61 kg	Fig. 2
R412007343	Protected against polarity reversal	0.6 kg	Fig. 2
R414012347	Protected against polarity reversal	0.53 kg	Fig. 3

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

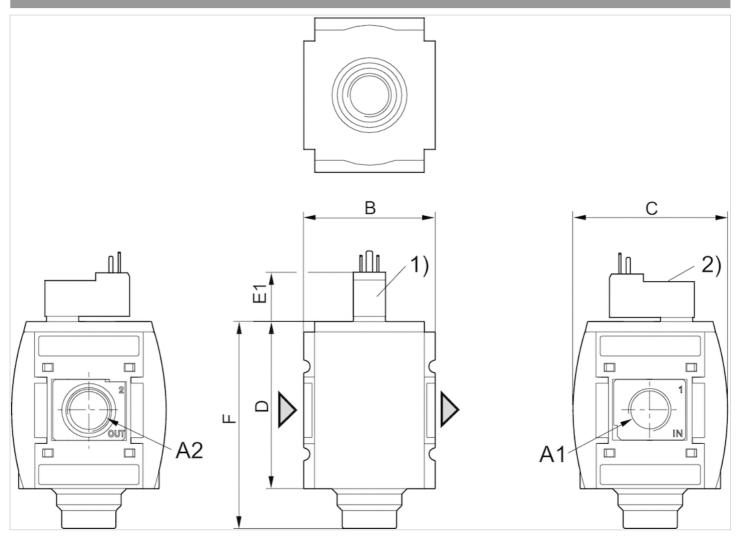
Technical information

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





Fig. 1: 2/2-directional valve with pilot valve and port for electrical connector form C



A1 = input

A2 = output

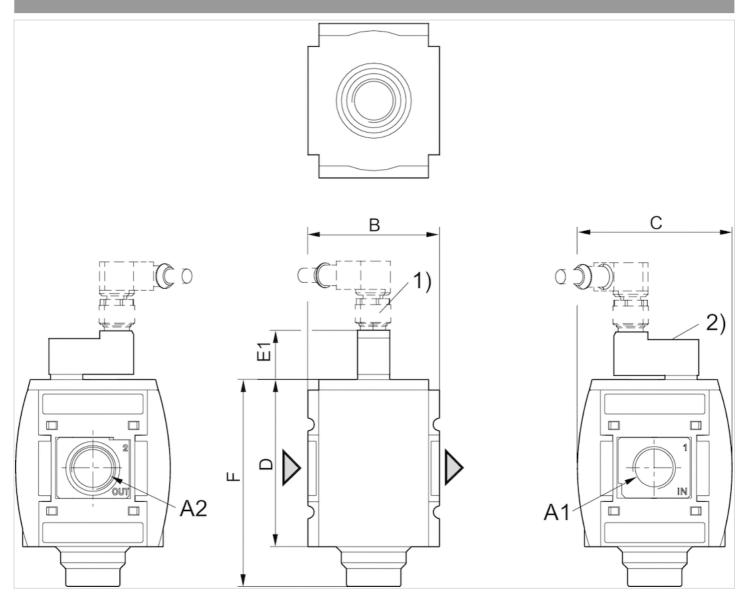
- 1) Connection for valve plug connector according to ISO 15217 (form C)
- 2) Manual override

A1	A2	В	С	D	E1	F
G 1/2	G 1/2	63	74	80	23.2	99
G 3/8	G 3/8	63	74	80	23.2	99





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



A1 = input

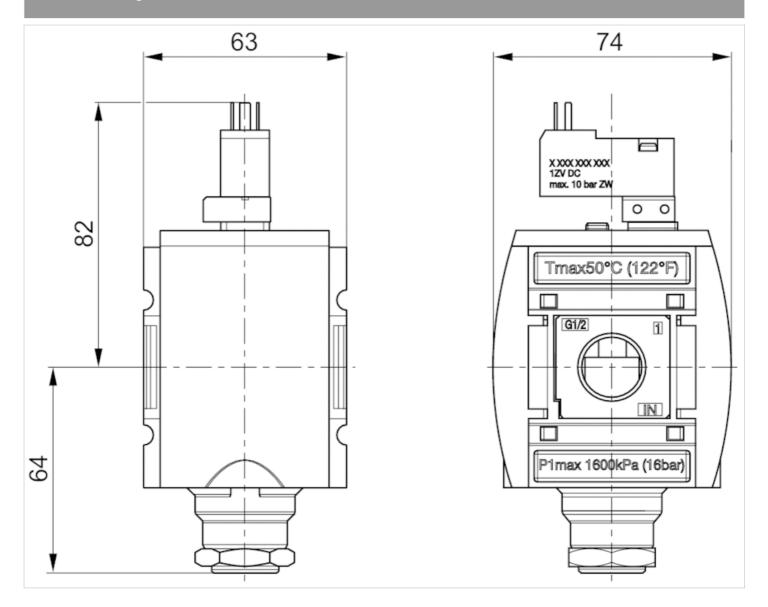
A2 = output

- 1) plug M12
- 2) Manual override

A1	A2	В	С	D	E1	F
G 3/8	G 3/8	63	74	80	23.2	99
G 1/2	G 1/2	63	74	80	23.2	99



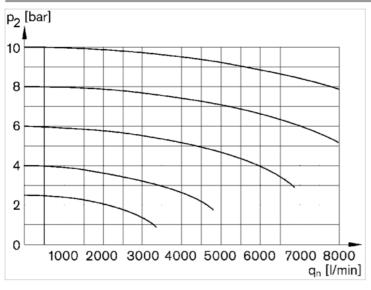
Dimensions, Fig. 3





Diagrams

Flow rate characteristic

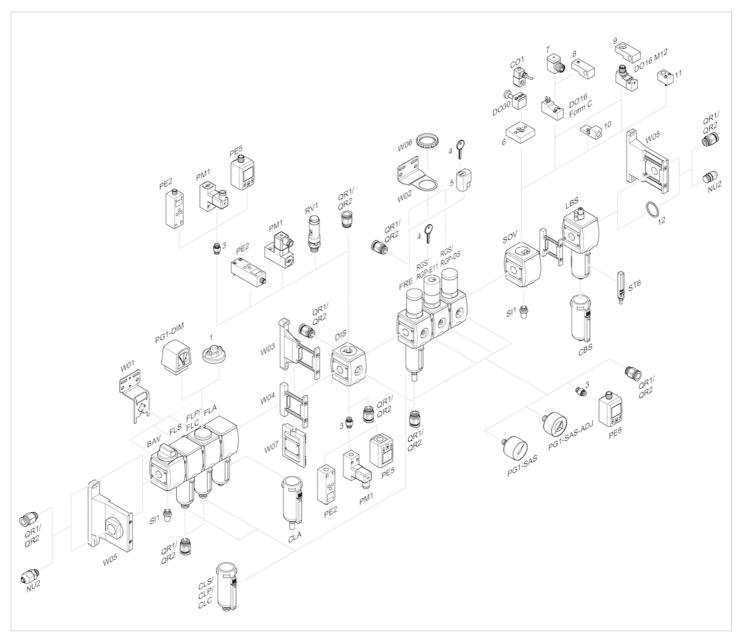


p2 = secondary pressure

qn = nominal flow



Accessories overview



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





3/2-directional valve, electrically operated, Series AS3-SOV

- Compressed air connection G 3/8, G 1/2
- Pipe connection



Version Poppet valve, Can be assembled into

blocks

IP65

Parts 3/2-directional valve, electrically operated

Nominal flow 4500 l/min

Nominal flow 1 ▶ 2 4500 l/min

Nominal flow 2 ▶ 3 3200 l/min

Working pressure min./max. See table below

Medium Compressed air Neutral gases

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

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

Sealing principle Soft sealing
Max. particle size 25 µm

Protection class acc. to DIN EN 61140

with plug

Weight 0.459 kg

Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
R412007265	2 1 1 3 M		G 3/8	G 3/8	G 1/2
R412007266	2 1 1 3 M		G 3/8	G 3/8	G 1/2
R412007267	2 13		G 3/8	G 3/8	G 1/2
R412007269	2 1 1 3 M		G 1/2	G 1/2	G 1/2
R412007270	2 13		G 1/2	G 1/2	G 1/2
R412007271	2 1 3 W		G 1/2	G 1/2	G 1/2
R412007258	2 1 1 3 W	_	G 3/8	G 3/8	G 1/2
R412007264	2 1 1 3 W	_	G 3/8	G 3/8	G 1/2
R412007259	2 1 1 3 W	_	G 1/2	G 1/2	G 1/2
R412007268	2 1 1 3 W	_	G 1/2	G 1/2	G 1/2
R412007391	2 1 1 3 W		G 1/2	G 1/2	G 1/2

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
R412007265	24 V	-	-
R412007266	-	110 V	110 V
R412007267	-	220 V	230 V
R412007269	24 V	-	-
R412007270	-	110 V	110 V
R412007271	-	220 V	230 V
R412007258	-	-	-



Part No.	Operational voltage DC	Operational voltage AC 50 Hz	Operational voltage AC 60 Hz
R412007264	-	-	-
R412007259	-	-	-
R412007268	-	-	-
R412007391	24 V	-	-

Part No.	Power consumption	Holding power	Holding power	Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
R412007265	2 W	-	-	-
R412007266	-	1.6 VA	1.4 VA	2.2 VA
R412007267	-	1.6 VA	1.4 VA	2.2 VA
R412007269	2 W	-	-	-
R412007270	-	1.6 VA	1.4 VA	2.2 VA
R412007271	-	1.6 VA	1.4 VA	2.2 VA
R412007258	-	-	-	-
R412007264	-	-	-	-
R412007259	-	-	-	-
R412007268	-	-	-	-
R412007391	2 W	-	-	-

Part No.	Switch-on power	Working pressure min./max.	Electrical connection
	AC 60 Hz		Pilot valve
R412007265	-	2.5 10 bar	Plug, ISO 15217, form C
R412007266	1.6 VA	2.5 10 bar	Plug, ISO 15217, form C
R412007267	1.6 VA	2.5 10 bar	Plug, ISO 15217, form C
R412007269	-	2.5 10 bar	Plug, ISO 15217, form C
R412007270	1.6 VA	2.5 10 bar	Plug, ISO 15217, form C
R412007271	1.6 VA	2.5 10 bar	Plug, ISO 15217, form C
R412007258	-	2.5 16 bar	-
R412007264	-	2.5 16 bar	-
R412007259	-	2.5 16 bar	-
R412007268	-	2.5 16 bar	-
R412007391	-	2.5 10 bar	Plug, M12x1

Part No.	Connector standard	basic valve with electrical connector
R412007265	ISO 15217	Basic valve with pilot valve
R412007266	ISO 15217	Basic valve with pilot valve
R412007267	ISO 15217	Basic valve with pilot valve
R412007269	ISO 15217	Basic valve with pilot valve
R412007270	ISO 15217	Basic valve with pilot valve
R412007271	ISO 15217	Basic valve with pilot valve
R412007258	-	Basic valve without pilot valve, with CNOMO subbase
R412007264	-	Basic valve without pilot valve
R412007259	-	Basic valve without pilot valve, with CNOMO subbase
R412007268	-	Basic valve without pilot valve





Part No.	Connector standard	basic valve with electrical connector
R412007391	EN 175301-803, form B	Basic valve with pilot valve

Part No.	Reverse polarity protection	Fig.	
R412007265	Protected against polarity reversal	Fig. 3	-
R412007266	Protected against polarity reversal	Fig. 3	-
R412007267	Protected against polarity reversal	Fig. 3	-
R412007269	Protected against polarity reversal	Fig. 3	-
R412007270	Protected against polarity reversal	Fig. 3	-
R412007271	Protected against polarity reversal	Fig. 3	-
R412007258	-	Fig. 2	-
R412007264	-	Fig. 1	-
R412007259	-	Fig. 2	-
R412007268	-	Fig. 1	-
R412007391	-	Fig. 4	1)

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

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C . A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180 $^{\circ}$ about the vertical axis. Please see the operating instructions for further details.

Technical information

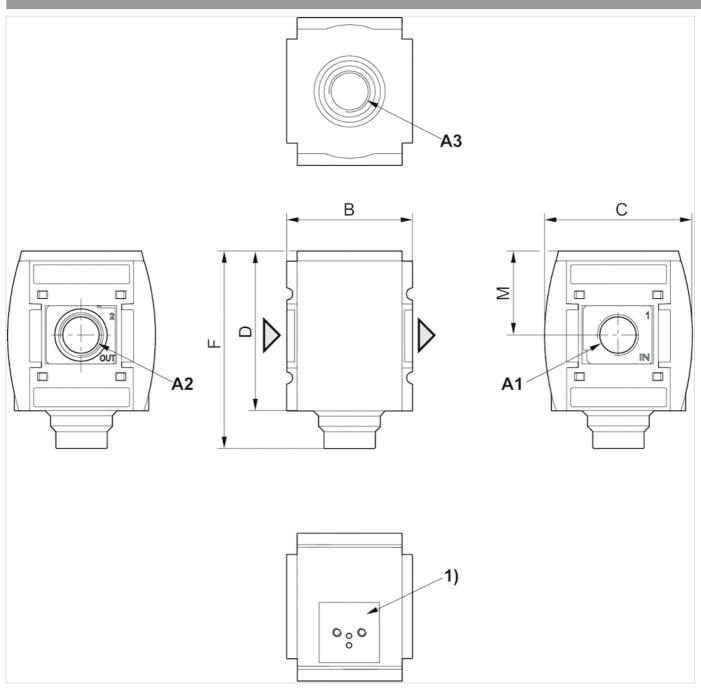
Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc

¹⁾ With valve plug connector, EN 175301-803, form B





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



A1 = input

A2 = output

A3 = ventilation port

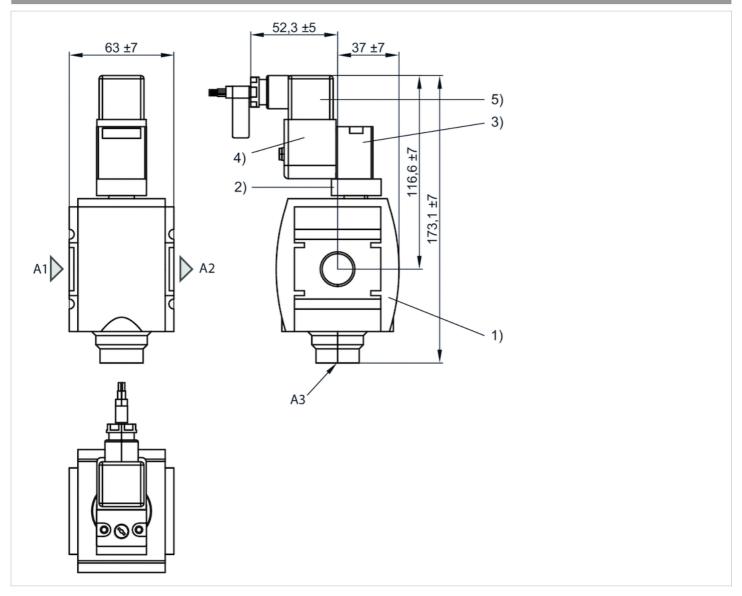
1) For pilot valve series DO16

A1	A2	A3	В	С	D	F	M
G 3/8	G 3/8	G 1/2	63	74	80	99	42.5
G 1/2	G 1/2	G 1/2	63	74	80	99	42.5





Fig. 2: 3/2 directional valve with transition plate



A1 = input

A2 = output

A3 = ventilation port

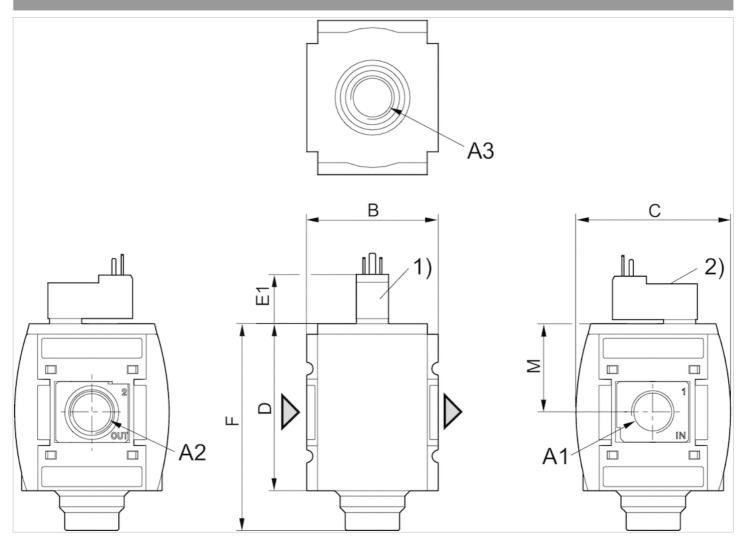
- 1) Shut-off valve
- 2) Transition plate
- 3) Pilot valve
- 4) Coil
- 5) Electrical connector

See accessories for pilot valve and coil





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



A1 = input

A2 = output

A3 = ventilation port

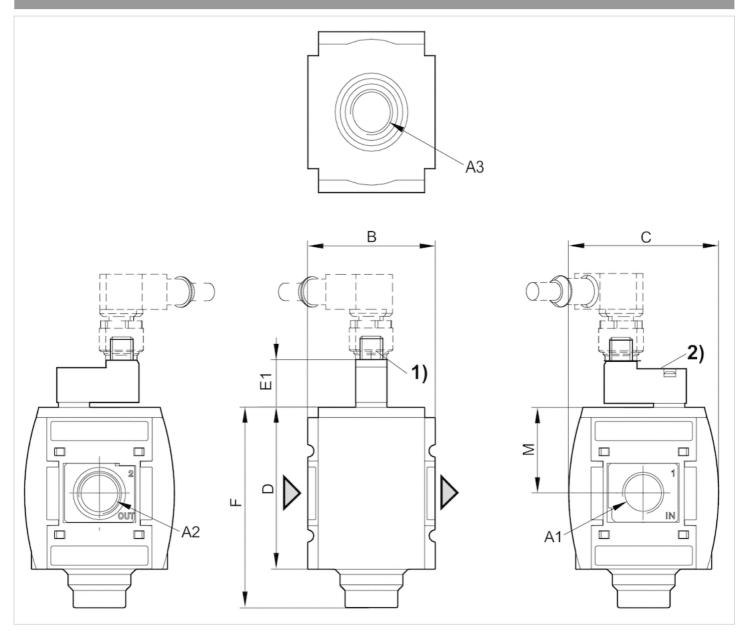
- 1) Connection for valve plug connector according to ISO 15217 (form C)
- 2) Manual override

A1	A2	A3	В	С	D	E1	F	М
G 3/8	G 3/8	G 1/2	63	74	80	23.2	99	42.5
G 1/2	G 1/2	G 1/2	63	74	80	23.2	99	42.5





Fig. 4: 3/2 directional valve with pilot valve and valve plug connector for plug



A1 = input

A2 = output

A3 = ventilation port

1) plug M12

2) Manual override

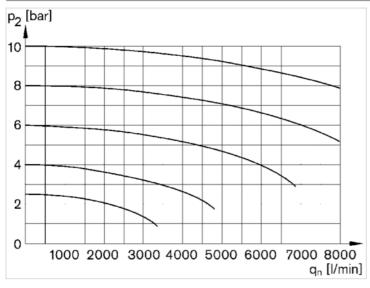
A2	A3	В	С	D	E1	F	М
G 3/8	G 1/2	63	74	80	23.2	99	42.5
G 1/2	G 1/2	63	74	80	23.2	99	42.5





Diagrams

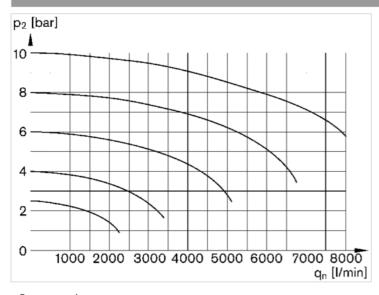
Flow rate characteristic



p2 = secondary pressure

qn = nominal flow

Rear exhaust



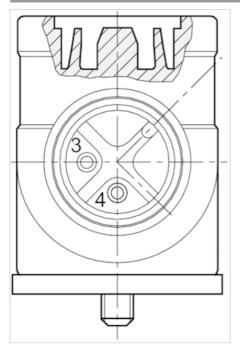
p2 = secondary pressure

qn = nominal flow





Pin assignment M12x1

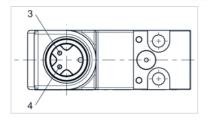


(3) • (1)

(4) ► (2)

Pin assignments

Pin assignment M12x1



3: +/-

4: +/-



Accessories overview



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

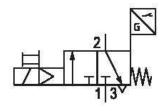
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007336

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

10 bai

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium

Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 3/8

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 I/min

Nominal flow Qn 2 to 3

3200 I/min

Power consumption DC

2 W

Protection class with connection

IP65

Electrical connection type 2

Plug

Electrical connection 2, thread size

ISO 15217, form C

Electrical connection for sensor

Plug

Electrical connection for sensor

...

Electrical connection for sensor

3-pin

Cable length sensor

0.3 m

Electrical connection for sensor

with knurled screw

Weight 0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate
Acrylonitrile butadiene styrene

Part No. R412007336

Technical information

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

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

Can be used in circuits with increased efficiency.

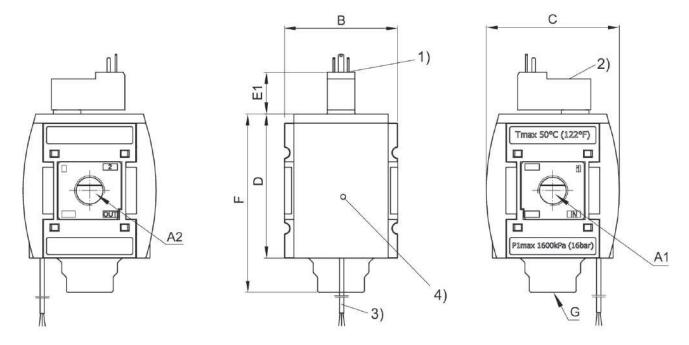
An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+





Part No.	A1	A2		С	D	E1		G	
R412007336	G3/8	G3/8	63	74	80	23.2	99	G1/2	



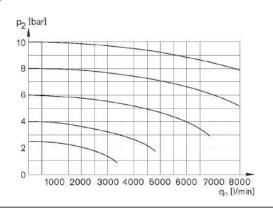
A1 = input A2 = output

¹⁾ Electr. connection: valve plug connector form C, ISO 15217

²⁾ Manual override

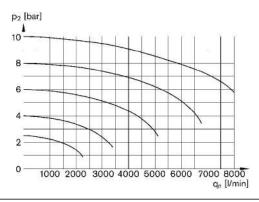
³⁾ Connection cable
4) Optical switch status indicator

Flow rate characteristic, p2 = 0,05 - 7 bar



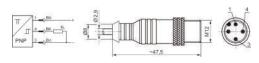
p2 = secondary pressure qn = nominal flow

Rear exhaust



p2 = secondary pressure qn = nominal flow

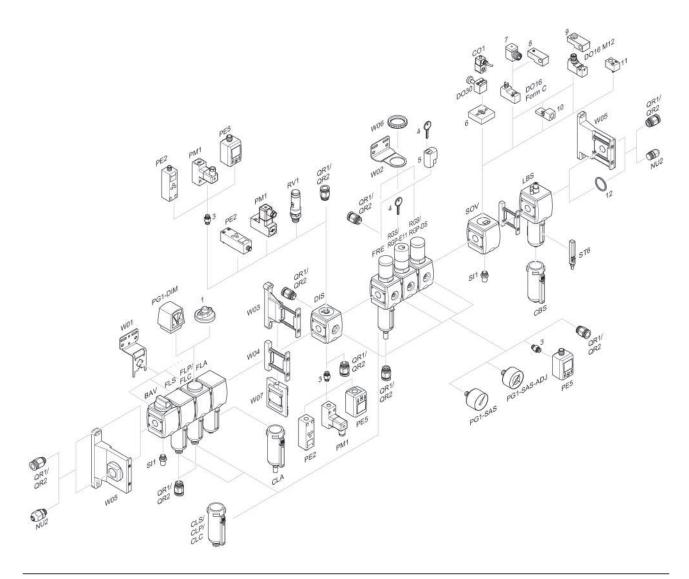
PIN assignment sensor, plug, M12



Pin assignment: 1 = (+) 3 = (-) 4 = (OUT)



Accessories overview



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



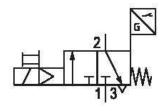
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007337

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

10 har

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium

Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 1/2

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 I/min

Nominal flow Qn 2 to 3

3200 I/min

Power consumption DC

2 W

Protection class with connection

IP65

Electrical connection type 2

Plug

Electrical connection 2, thread size

ISO 15217, form C

Electrical connection for sensor

Plug

Electrical connection for sensor

...

Electrical connection for sensor

3-pin

Cable length sensor

0.3 m

Electrical connection for sensor

with knurled screw

Weight 0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate
Acrylonitrile butadiene styrene

Part No. R412007337

Technical information

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

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

Can be used in circuits with increased efficiency.

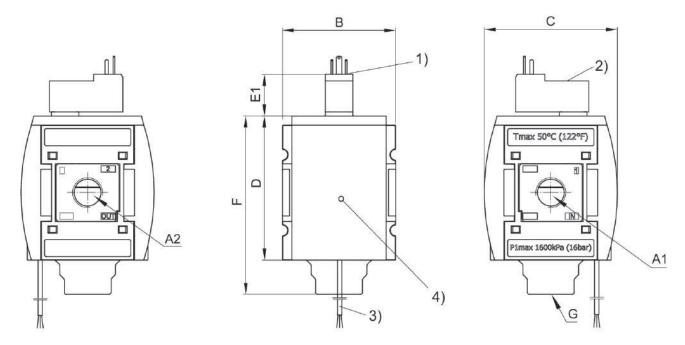
An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+





Part No.	A1	A2		С	D	E1		G	
R412007337	G1/2	G1/2	63	74	80	23.2	99	G1/2	



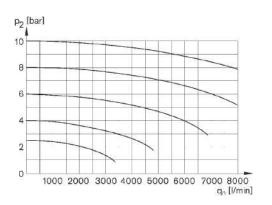
A1 = input A2 = output

¹⁾ Electr. connection: valve plug connector form C, ISO 15217

²⁾ Manual override

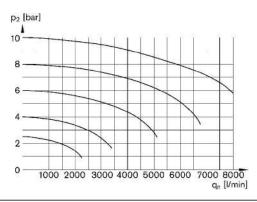
³⁾ Connection cable
4) Optical switch status indicator

Flow rate characteristic, p2 = 0,05 - 7 bar



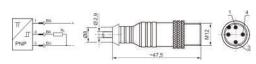
p2 = secondary pressure qn = nominal flow

Rear exhaust



p2 = secondary pressure qn = nominal flow

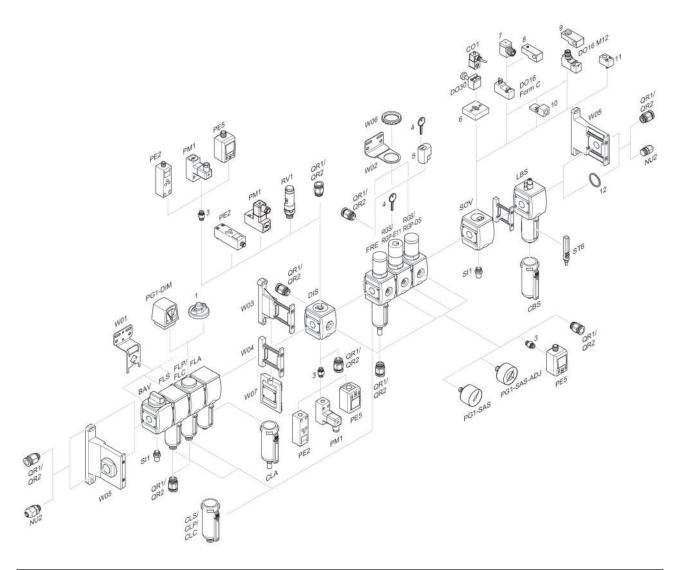
PIN assignment sensor, plug, M12



Pin assignment: 1 = (+) 3 = (-) 4 = (OUT)



Accessories overview



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



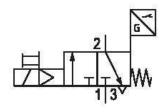
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007353

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

10 bar

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium

Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 3/8

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 I/min

Nominal flow Qn 2 to 3

3200 I/min

Power consumption DC

2 W

Protection class with connection

IP65

Electrical connection type 2

Socket

Electrical connection 2, thread size

M12x1

Electrical connection for sensor

Plug

Electrical connection for sensor

N/A

Electrical connection for sensor

3-pin

Cable length sensor

0.3 m

Electrical connection for sensor

with knurled screw

Weight 0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate
Acrylonitrile butadiene styrene

Part No. R412007353

Technical information

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

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

Can be used in circuits with increased efficiency.

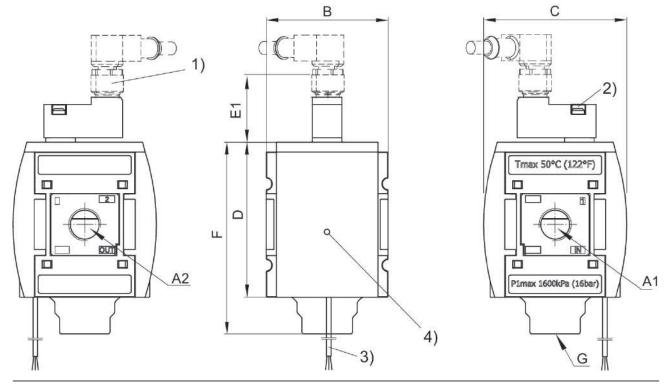
An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



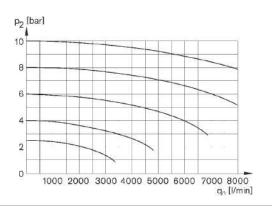


- A1 = input A2 = output 1) plug M12
- 2) Manual override 3) Connection cable
- 4) Optical switch status indicator

Part No.	A1	A2	В	С	D	E1		G
R412007353	G3/8	G3/8	63	74	80	39	99	G1/2

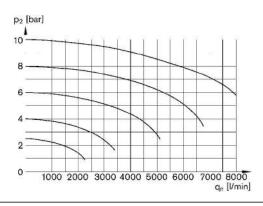


Flow rate characteristic, p2 = 0,05 - 7 bar



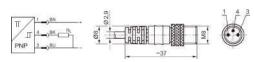
p2 = secondary pressure qn = nominal flow

Rear exhaust



p2 = secondary pressure qn = nominal flow

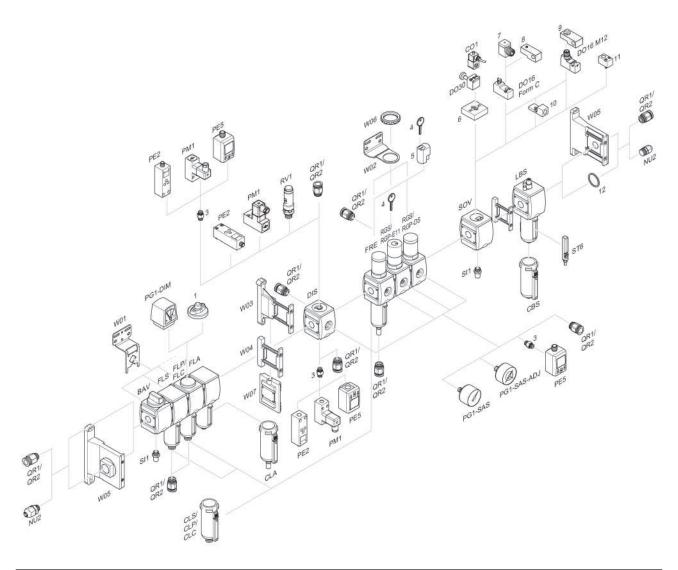
PIN assignment sensor, plug M8



Pin assignment: 1 = (+) 3 = (-) 4 = (OUT)



Accessories overview



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



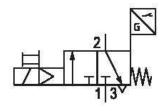
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007354

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

10 bar

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium

Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 1/2

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 I/min

Nominal flow Qn 2 to 3

3200 I/min

Power consumption DC

2 W

Protection class with connection

IP65

Electrical connection type 2

Socket

Electrical connection 2, thread size

M12x1

Electrical connection for sensor

Plug

Electrical connection for sensor

N/A

Electrical connection for sensor

3-pin

Cable length sensor

0.3 m

Electrical connection for sensor

with knurled screw

Weight 0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate
Acrylonitrile butadiene styrene

Part No. R412007354

Technical information

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

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

Can be used in circuits with increased efficiency.

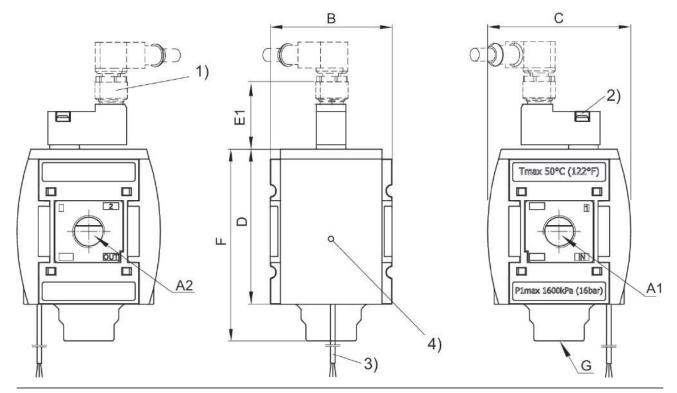
An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



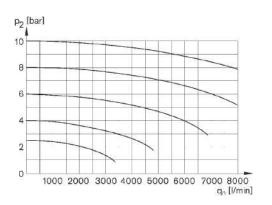


- A1 = input A2 = output 1) plug M12
- 2) Manual override 3) Connection cable
- 4) Optical switch status indicator

Part No.	A1	A2	В	С	D	E1		G
R412007354	G1/2	G1/2	63	74	80	39	99	G1/2

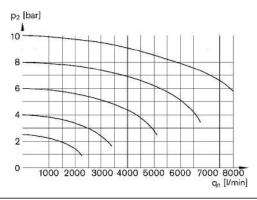


Flow rate characteristic, p2 = 0,05 - 7 bar



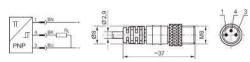
p2 = secondary pressure qn = nominal flow

Rear exhaust



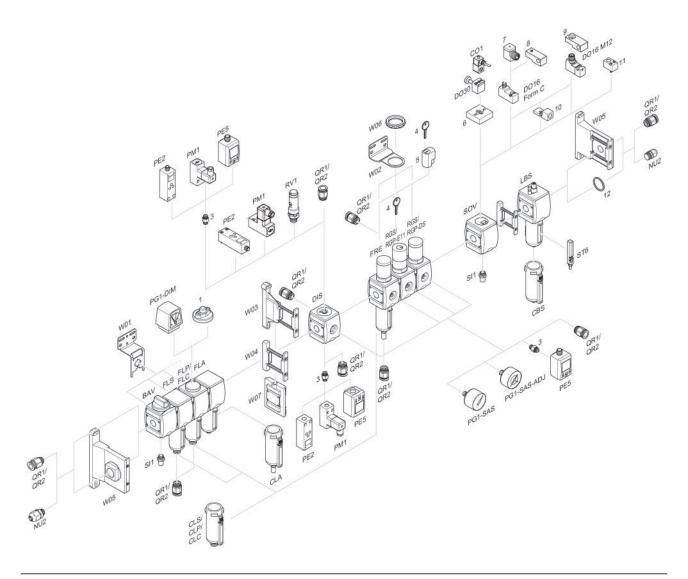
p2 = secondary pressure qn = nominal flow

PIN assignment sensor, plug M8



Pin assignment: 1 = (+) 3 = (-) 4 = (OUT)





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



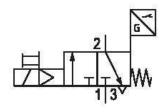
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007355

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

10 bar

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium

Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 3/8

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 I/min

Nominal flow Qn 2 to 3

3200 l/min

Power consumption DC

2 W

Electrical connection type 2

Socket

Electrical connection 2, thread size

M12x1

Electrical connection for sensor

Plug

Electrical connection for sensor

M12

Electrical connection for sensor

3-pin

Cable length sensor

0.3 m

Electrical connection for sensor

with knurled screw

Weight 0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate Acrylonitrile butadiene styrene

Part No. R412007355

Technical information

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

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

Can be used in circuits with increased efficiency.

An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

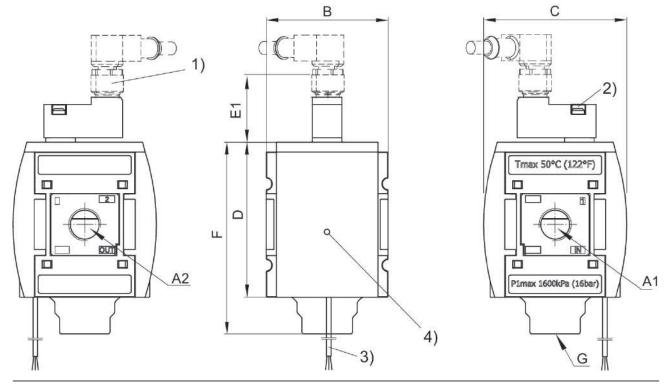
The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



Dimensions



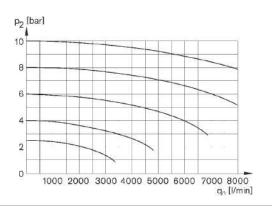
- A1 = input A2 = output 1) plug M12
- 2) Manual override 3) Connection cable
- 4) Optical switch status indicator

Dimensions in mm

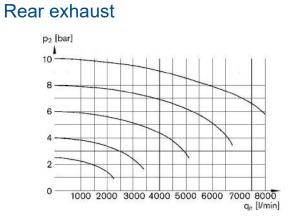
Part No.	A1	A2	В	С	D	E1		G
R412007355	G3/8	G3/8	63	74	80	39	99	G1/2



Flow rate characteristic, p2 = 0,05 - 7 bar

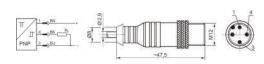


p2 = secondary pressure qn = nominal flow



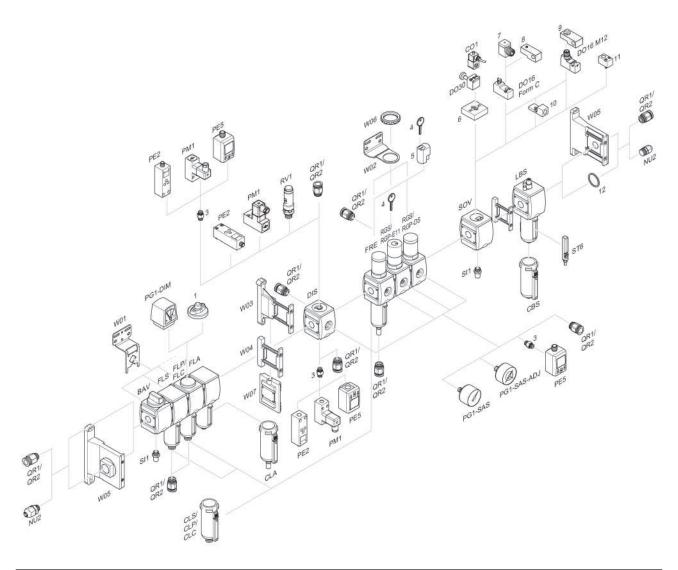
p2 = secondary pressure qn = nominal flow

PIN assignment sensor, plug, M12



Pin assignment: 1 = (+) 3 = (-) 4 = (OUT)





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



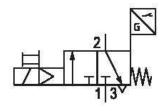
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007356

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

10 bai

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium

Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 1/2

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 I/min

Nominal flow Qn 2 to 3

3200 l/min

Power consumption DC

2 W

Protection class with connection

IP65

Electrical connection type 2

Socket

Electrical connection 2, thread size

M12x1

Electrical connection for sensor

Plug

Electrical connection for sensor

...

Electrical connection for sensor

3-pin

Cable length sensor

0.3 m

Electrical connection for sensor

with knurled screw

Weight 0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate
Acrylonitrile butadiene styrene

Part No. R412007356

Technical information

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

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

Can be used in circuits with increased efficiency.

An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

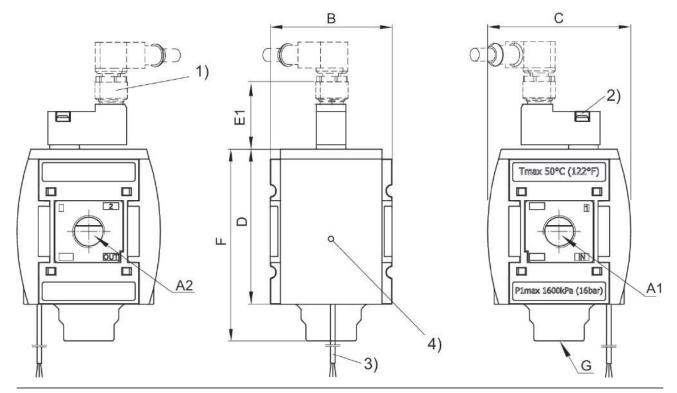
The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



Dimensions



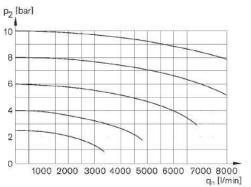
- A1 = input
 A2 = output
 1) plug M12
 2) Manual override
 3) Connection cable
- 4) Optical switch status indicator

Dimensions in mm

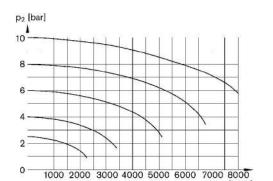
Part No.	A1	A2	В	С	D	E1		G
R412007356	G1/2	G1/2	63	74	80	39	99	G1/2



Flow rate characteristic, p2 = 0,05 - 7 bar

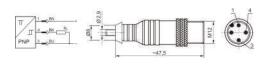


 $\begin{array}{c|c} & p2 = secondary \ pressure \\ \hline p2 = secondary \ pressure \\ \hline p2 = nominal \ flow \\ \hline p2 = nominal \ flow \\ \hline p3 = nominal \ flow \\ \hline p4 = nominal \ flow \\ \hline p5 = secondary \ pressure \\ \hline p6 = nominal \ flow \\ \hline p7 = nominal \ flow \\ \hline p8 = nominal \ flow \\ \hline p9 = nominal \ flow \\ \hline p$



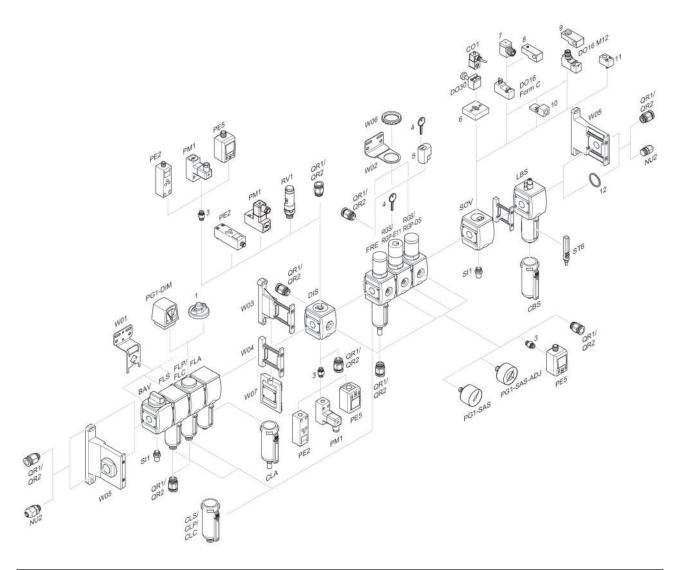
Rear exhaust

PIN assignment sensor, plug, M12



Pin assignment: 1 = (+) 3 = (-) 4 = (OUT)





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



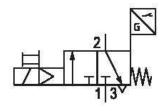
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007359

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

10 har

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium

Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 3/8

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 I/min

Nominal flow Qn 2 to 3

3200 I/min

Power consumption DC

2 W

Protection class with connection

IP65

Electrical connection type 2

Plug

Electrical connection 2, thread size

ISO 15217, form C

Electrical connection for sensor

Plug

Electrical connection for sensor

140

Electrical connection for sensor

3-pin

Cable length sensor

0.3 m

Electrical connection for sensor

with knurled screw

Weight 0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate
Acrylonitrile butadiene styrene

Part No. R412007359

Technical information

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

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

Can be used in circuits with increased efficiency.

An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

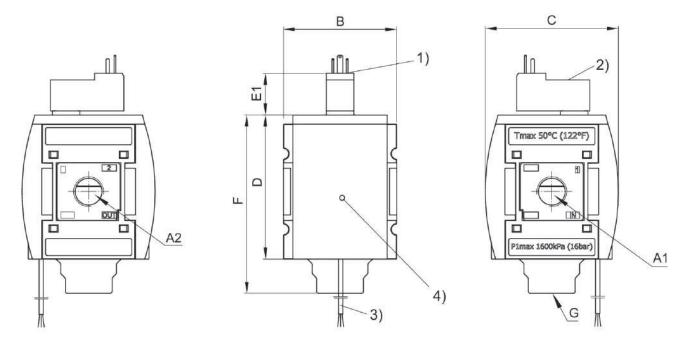
The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



Dimensions



Dimensions in mm

Part No.	A1	A2		С	D	E1		G	
R412007359	G1/2	G3/8	63	74	80	23.2	99	G1/2	



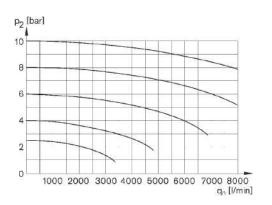
A1 = input A2 = output

¹⁾ Electr. connection: valve plug connector form C, ISO 15217

²⁾ Manual override

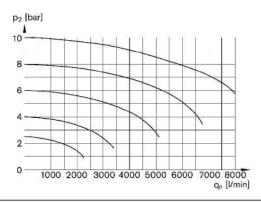
³⁾ Connection cable
4) Optical switch status indicator

Flow rate characteristic, p2 = 0,05 - 7 bar



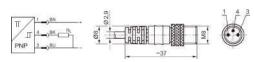
p2 = secondary pressure qn = nominal flow

Rear exhaust



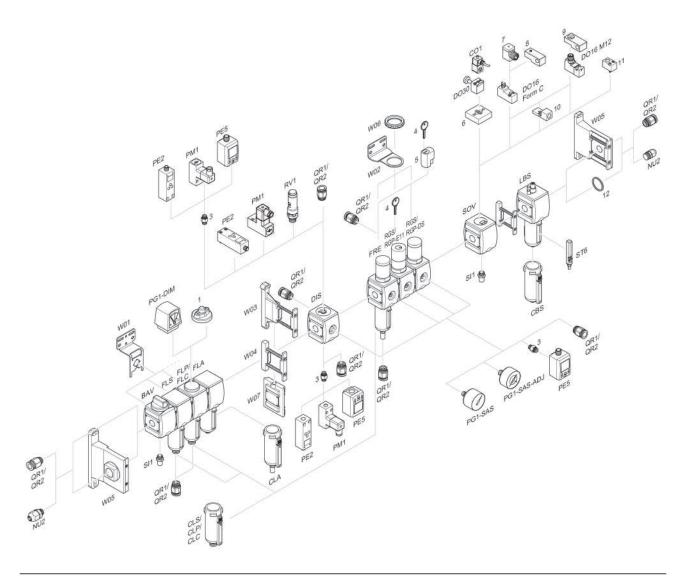
p2 = secondary pressure qn = nominal flow

PIN assignment sensor, plug M8



Pin assignment: 1 = (+) 3 = (-) 4 = (OUT)





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



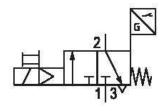
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007360

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

10 bar

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 1/2

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 l/min

Nominal flow Qn 2 to 3

3200 I/min

Power consumption DC

2 W

Protection class with connection

IP65

Electrical connection type 2

Plug

Electrical connection 2, thread size

ISO 15217, form C

Electrical connection for sensor

Plug

Electrical connection for sensor

N/A

Electrical connection for sensor

3-pin

Cable length sensor

0.3 m

Electrical connection for sensor

with knurled screw

Weight 0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate
Acrylonitrile butadiene styrene

Part No. R412007360

Technical information

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

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

Can be used in circuits with increased efficiency.

An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

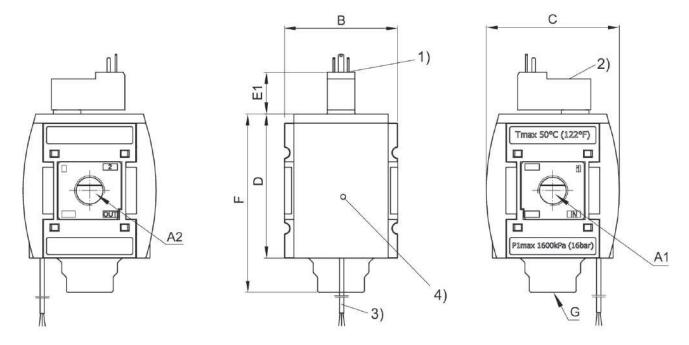
The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



Dimensions



Dimensions in mm

Part No.	A1	A2		С	D	E1		G	ì
R412007360	G1/2	G1/2	63	74	80	23.2	99	G1/2	1



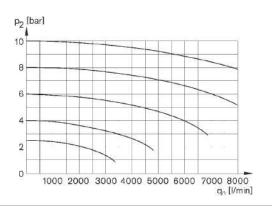
A1 = input A2 = output

¹⁾ Electr. connection: valve plug connector form C, ISO 15217

²⁾ Manual override

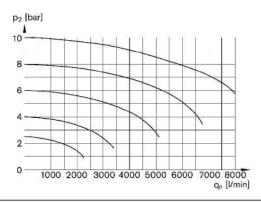
³⁾ Connection cable
4) Optical switch status indicator

Flow rate characteristic, p2 = 0,05 - 7 bar



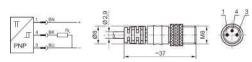
p2 = secondary pressure qn = nominal flow

Rear exhaust



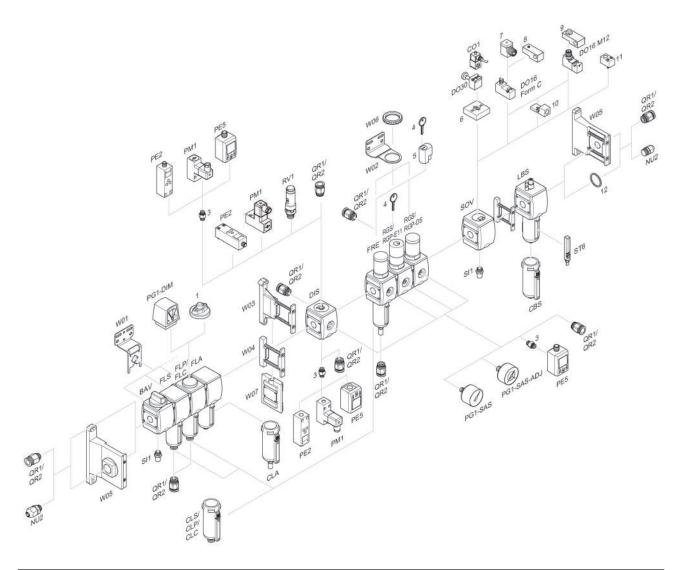
p2 = secondary pressure qn = nominal flow

PIN assignment sensor, plug M8



Pin assignment: 1 = (+) 3 = (-) 4 = (OUT)





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



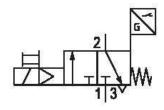
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007377

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

10 bar

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium

Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 3/8

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 I/min

Nominal flow Qn 2 to 3

3200 I/min

Power consumption DC

2 W

Protection class with connection

IP65

Electrical connection type 2

Plug

Electrical connection 2, thread size

ISO 15217, form C

Electrical connection for sensor without wire end ferrule, tin-plated

Cable length sensor

3 m

Weight 0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate Acrylonitrile butadiene styrene

Part No. R412007377

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

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

Can be used in circuits with increased efficiency.

An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

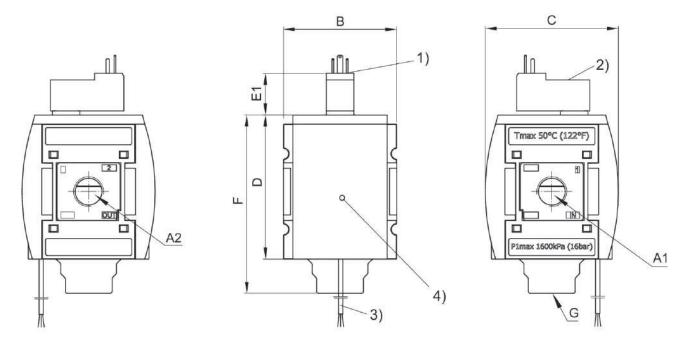
The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



Dimensions



Dimensions in mm

Part No.	A1	A2		С	D	E1		G	
R412007377	G3/8	G3/8	63	74	80	23.2	99	G1/2	



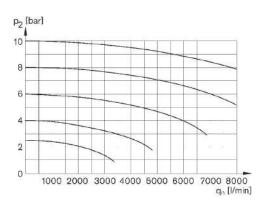
A1 = input A2 = output

¹⁾ Electr. connection: valve plug connector form C, ISO 15217

²⁾ Manual override

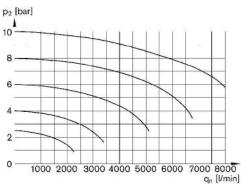
³⁾ Connection cable
4) Optical switch status indicator

Flow rate characteristic, p2 = 0,05 - 7 bar



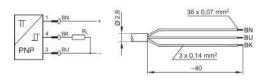
p2 = secondary pressure qn = nominal flow

Rear exhaust



p2 = secondary pressure qn = nominal flow

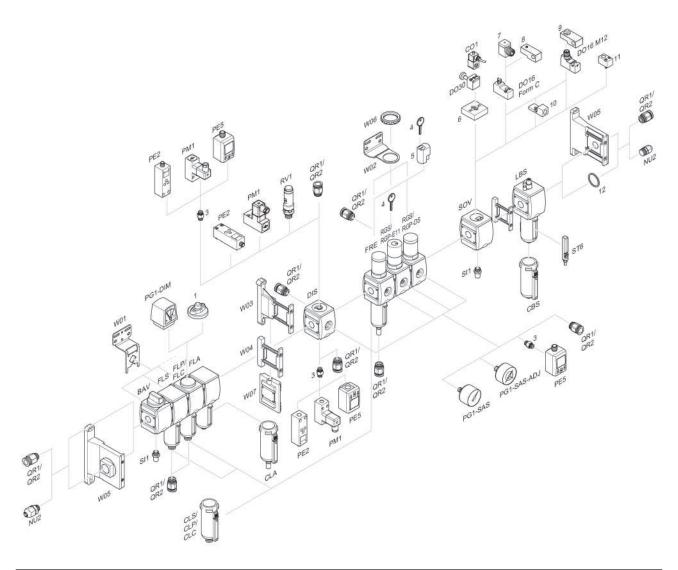
Sensor pin assignment, tin-plated wire ends



BN = brown

BK = black BU = blue





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



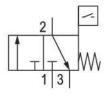
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007381

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 I/min

Working pressure min.

2.5 bar

Working pressure max

16 bar

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve without pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C

Medium

Compressed air

Neutral gases

Max. particle size

25 µm



Compressed air connection

G 3/8

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 l/min

Nominal flow Qn 2 to 3

3200 I/min

Electrical connection for sensor without wire end ferrule, tin-plated

Cable length sensor

3 m

Weight

0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate Acrylonitrile butadiene styrene

Part No. R412007381

Technical information

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

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

Can be used in circuits with increased efficiency.

An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

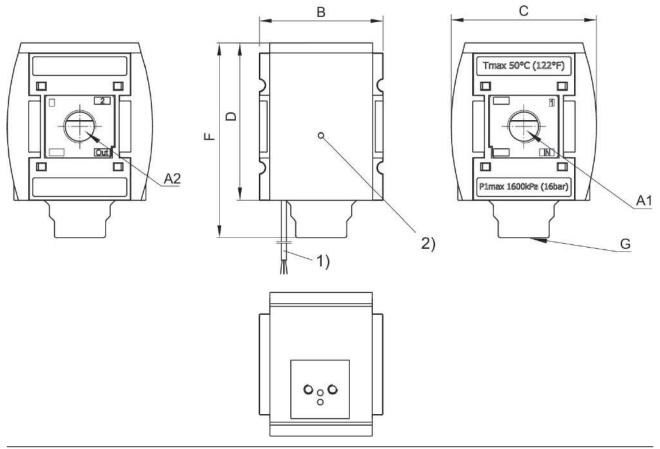
The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



Dimensions



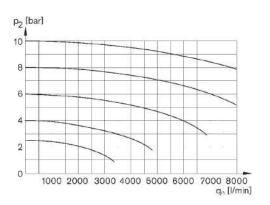
Dimensions in mm

Part No.	A1	A2		С	D	F	G
R412007381	G3/8	G3/8	63	74	80	99	G1/2



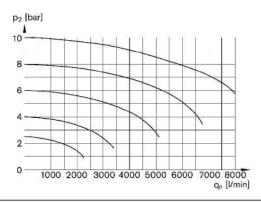
A1 = input A2 = output 1) Connection cable 2) Optical switch status indicator

Flow rate characteristic, p2 = 0,05 - 7 bar



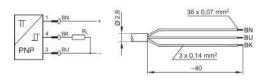
p2 = secondary pressure qn = nominal flow

Rear exhaust

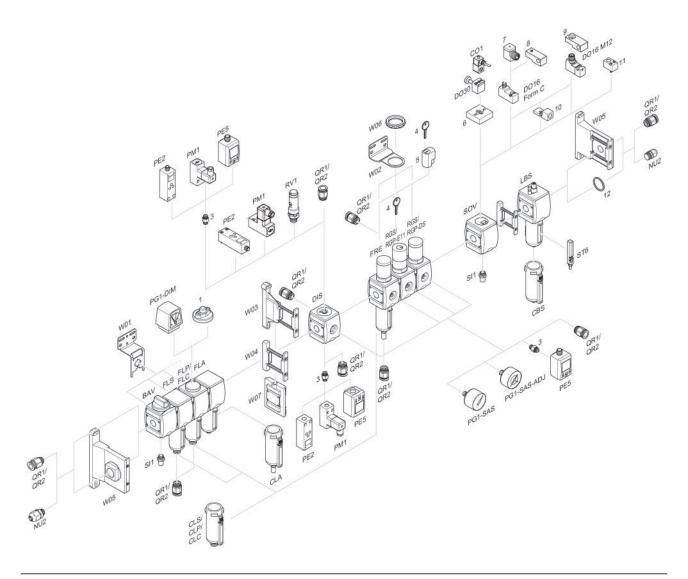


p2 = secondary pressure qn = nominal flow

Sensor pin assignment, tin-plated wire ends



BN = brown



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



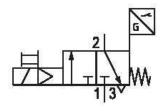
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007383

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

16 bar

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium

Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 1/2

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 l/min

Nominal flow Qn 2 to 3

3200 I/min

Power consumption DC

2 W

Protection class with connection

IP65

Electrical connection type 2

Plug

Electrical connection 2, thread size

ISO 15217, form C

Electrical connection for sensor without wire end ferrule, tin-plated

Cable length sensor

3 m

Weight 0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate
Acrylonitrile butadiene styrene

Part No. R412007383

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

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

Can be used in circuits with increased efficiency.

An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

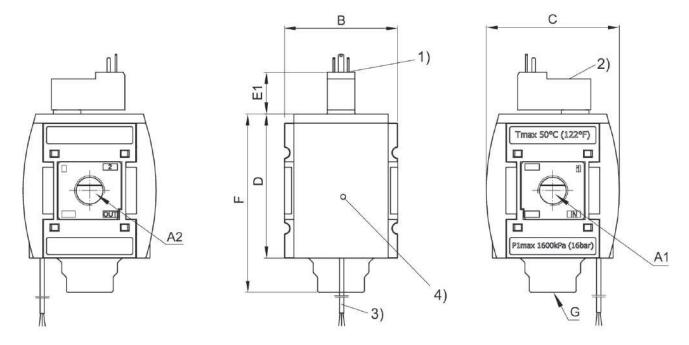
The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



Dimensions



Dimensions in mm

Part No.	A1	A2		С	D	E1		G	
R412007383	G1/2	G1/2	63	74	80	23.2	99	G1/2	



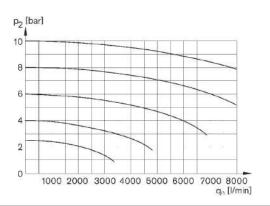
A1 = input A2 = output

¹⁾ Electr. connection: valve plug connector form C, ISO 15217

²⁾ Manual override

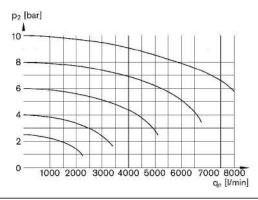
³⁾ Connection cable
4) Optical switch status indicator

Flow rate characteristic, p2 = 0,05 - 7 bar



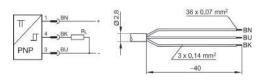
p2 = secondary pressure qn = nominal flow

Rear exhaust



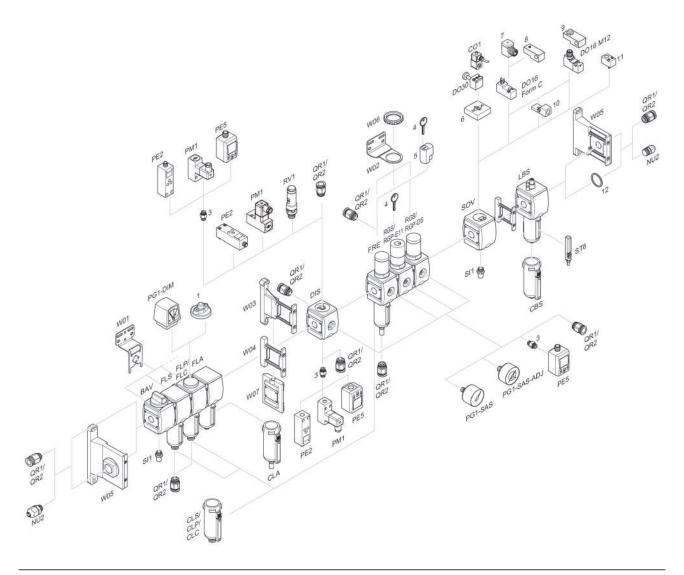
p2 = secondary pressure qn = nominal flow

Sensor pin assignment, tin-plated wire ends



BN = brown

BK = black BU = blue



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



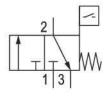
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007387

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 I/min

Working pressure min.

2.5 bar

Working pressure max

16 bar

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve without pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C

Medium

Compressed air

Neutral gases

Max. particle size

25 µm



Compressed air connection

G 1/2

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 l/min

Nominal flow Qn 2 to 3

3200 I/min

Electrical connection for sensor without wire end ferrule, tin-plated

Cable length sensor

3 m

Weight

0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate Acrylonitrile butadiene styrene

Part No. R412007387

Technical information

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

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

Can be used in circuits with increased efficiency.

An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

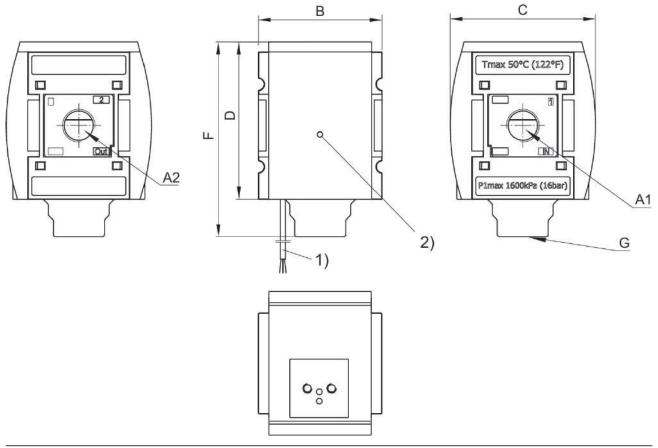
The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



Dimensions



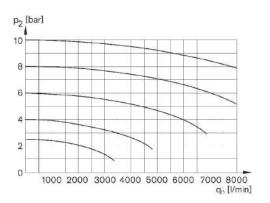
A1 = input
A2 = output
1) Connection cable
2) Optical switch status indicator

Dimensions in mm

Part No.	A1	A2		С	D		G
R412007387	G1/2	G1/2	63	74	80	99	G1/2

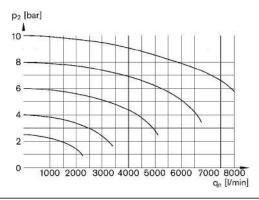


Flow rate characteristic, p2 = 0,05 - 7 bar



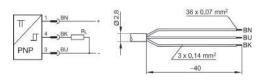
p2 = secondary pressure qn = nominal flow

Rear exhaust

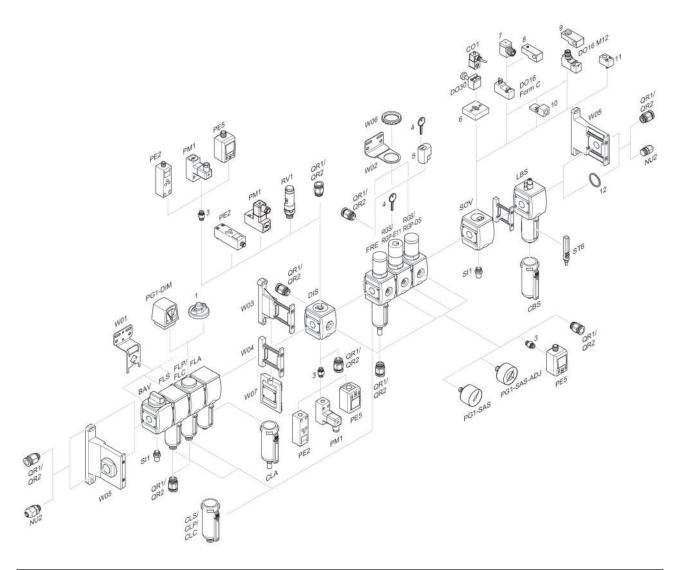


p2 = secondary pressure qn = nominal flow

Sensor pin assignment, tin-plated wire ends



BN = brown



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



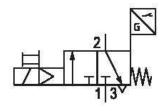
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007396

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

10 bai

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium

Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 3/8

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 I/min

Nominal flow Qn 2 to 3

3200 I/min

Power consumption DC

2 W

Electrical connection type 2

Socket

Electrical connection 2, thread size

M12x1

Electrical connection for sensor without wire end ferrule, tin-plated

Cable length sensor

3 m

Weight

0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate Acrylonitrile butadiene styrene

Part No. R412007396

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

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

Can be used in circuits with increased efficiency.

An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

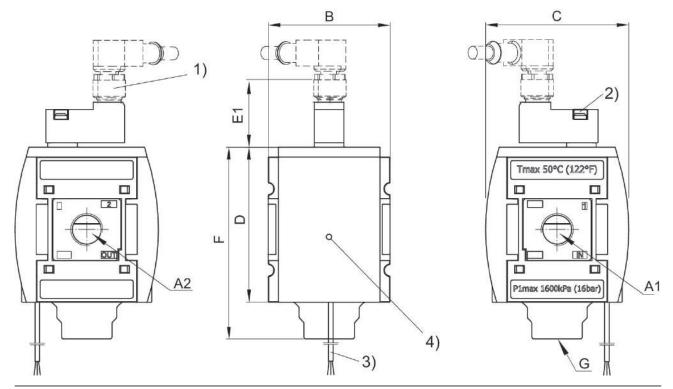
The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



Dimensions



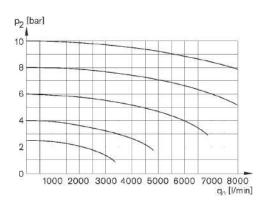
- A1 = input A2 = output 1) plug M12
- 2) Manual override 3) Connection cable
- 4) Optical switch status indicator

Dimensions in mm

Part No.	A1	A2	В	С	D	E1		G
R412007396	G3/8	G3/8	63	74	80	39	99	G1/2

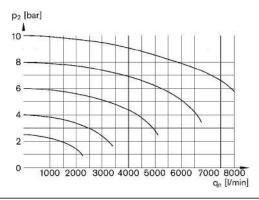


Flow rate characteristic, p2 = 0,05 - 7 bar



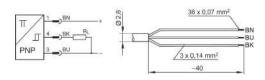
p2 = secondary pressure qn = nominal flow

Rear exhaust



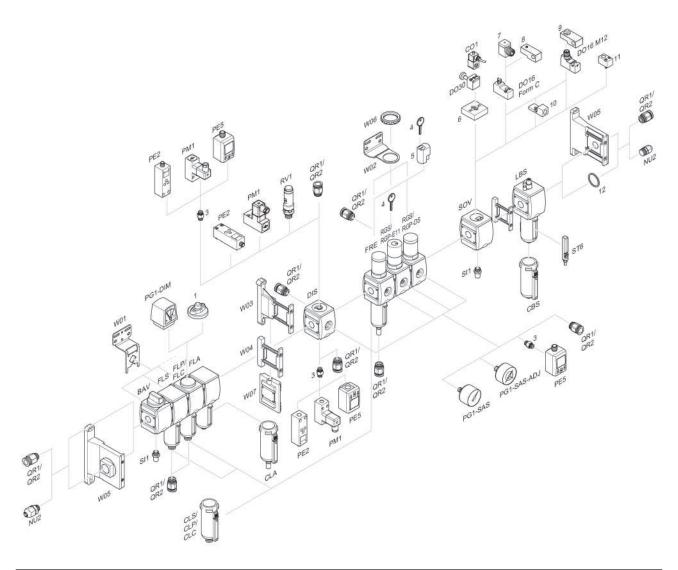
p2 = secondary pressure qn = nominal flow

Sensor pin assignment, tin-plated wire ends



BN = brown BK = black BU = blue





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



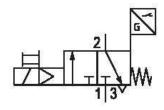
3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

R412007398

General series information Series AS3

■ The AVENTICS Series AS3 is a modular, versatile maintenance unit for universal application. This Series offers compact dimensions, is highly efficient, lightweight and easy-to-use. The AVENTICS Series AS guarantees reliability, safety, and efficiency with a simplified assembly and maintenance efforts.





Technical data

Industry

Industrial

Activation

Electrically

Nominal flow Qn

4500 l/min

Working pressure min.

2.5 bar

Working pressure max

10 bar

DC operating voltage

24 V

Sealing principle

Soft Seal

Connection type

Pipe connection

Parts

3/2-directional valve

Can be assembled into blocks

Can be assembled into blocks

basic valve with electrical connector

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C



Medium

Compressed air Neutral gases

Max. particle size

25 µm

Compressed air connection

G 1/2

Compressed air connection, exhaust

G 1/2

Nominal flow Qn 1 to 2

4500 I/min

Nominal flow Qn 2 to 3

3200 I/min

Power consumption DC

2 W

Protection class with connection

IP65

Electrical connection type 2

Socket

Electrical connection 2, thread size

M12x1

Electrical connection for sensor without wire end ferrule, tin-plated

Cable length sensor

3 m

Weight 0.459 kg

Material

Housing material

Polyamide

Seal material

Acrylonitrile butadiene rubber

Material threaded bushing

Die cast zinc

Material front plate Acrylonitrile butadiene styrene

Part No. R412007398

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C .

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

Can be used in circuits with increased efficiency.

An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

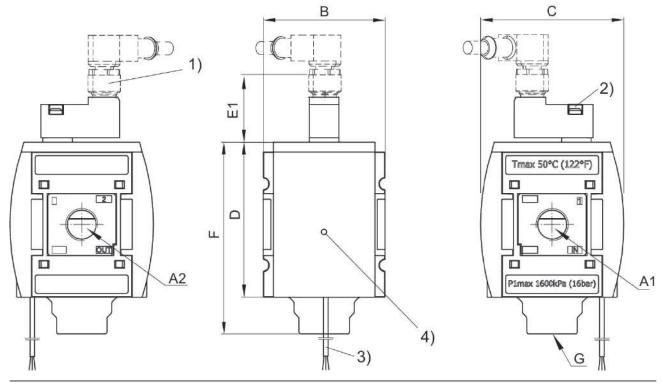
The sensor signal is visible on the front of the cover.

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

Electronic sensor included in scope of delivery (assembled).+



Dimensions



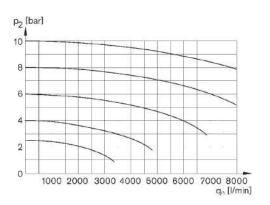
- A1 = input A2 = output 1) plug M12
- 2) Manual override 3) Connection cable
- 4) Optical switch status indicator

Dimensions in mm

Part No.	A1	A2		С	D	E1		G
R412007398	G1/2	G1/2	63	74	80	39	99	G1/2

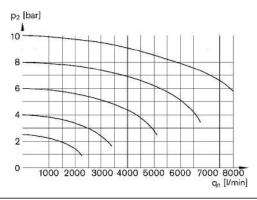


Flow rate characteristic, p2 = 0,05 - 7 bar



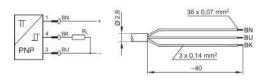
p2 = secondary pressure qn = nominal flow

Rear exhaust



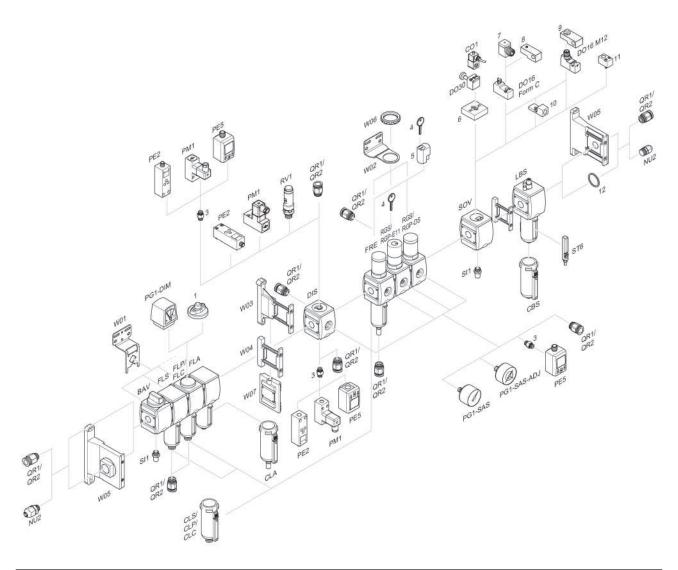
p2 = secondary pressure qn = nominal flow

Sensor pin assignment, tin-plated wire ends



BN = brown

BK = black BU = blue



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





3/2-directional valve, pneumatically operated, Series AS3-SOV

- Compressed air connection G 3/8 G 1/2
- Pipe connection



Version Poppet valve, Can be assembled into blocks

Sealing principle

Working pressure min./max.

Control pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Soft sealing

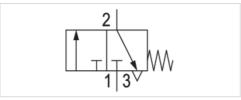
0 ... 16 bar

-10 ... 50 °C

-10 ... 50 °C

Medium Compressed air Neutral gases

Weight 0.459 kg



Technical data

Part No.	Port	Pilot connection	Exhaust	Flow	Flow	Flow
				Qn	Qn 1 ► 2	Qn 2 ► 3
R412007262	G 3/8	G 1/8	G 1/2	4500 l/min	4500 l/min	3200 l/min
R412007263	G 1/2	G 1/8	G 1/2	4500 l/min	4500 l/min	3200 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 $15\,^{\circ}\text{C}$ under ambient and medium temperature and may not exceed $3\,^{\circ}\text{C}$. A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by $180\,^{\circ}$ about the vertical axis. Please see the operating instructions for further details.

Technical information

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



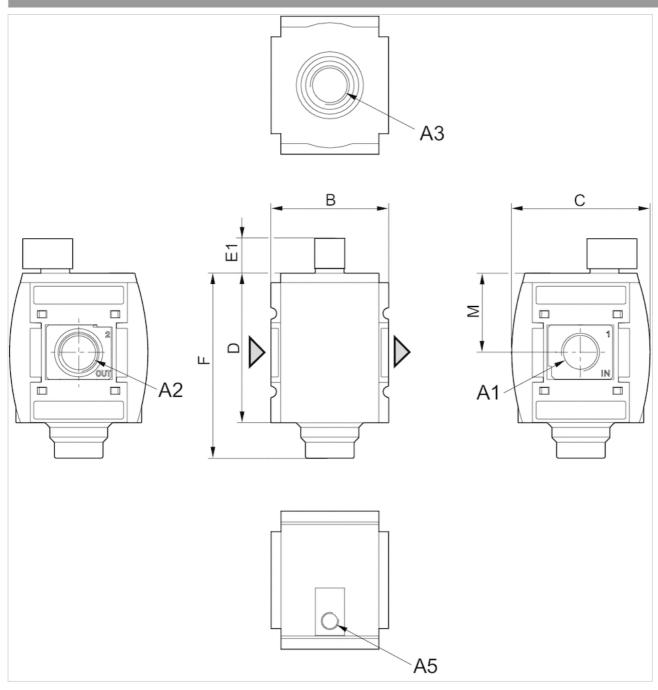


Material

Threaded bushing Die cast zinc

Dimensions

Dimensions



A1 = input

A2 = output

A3 = ventilation port

A5 = control pressure connection



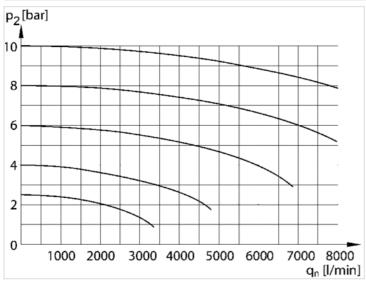


Dimensions in mm

A1	A2	A3	A5	В	С	D	E1	F	М
G 3/8	G 3/8	G 1/2	G 1/8	63	74	80	18.5	99	42.5
G 1/2	G 1/2	G 1/2	G 1/8	63	74	80	18.5	99	42.5

Diagrams

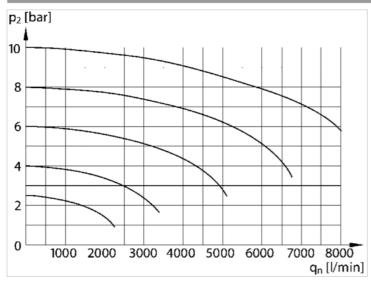
Flow rate characteristic



p2 = secondary pressure

qn = nominal flow

Rear exhaust



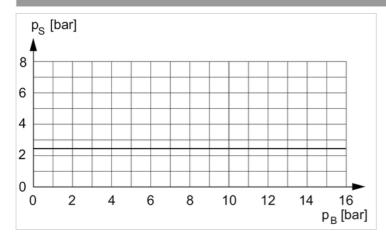
p2 = secondary pressure

qn = nominal flow





control pressure characteristic



minimum pilot pressure depending on working pressure

PS = control pressure

PB= Working pressure





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



3/2-shut-off valve, mechanically operated, Series AS3-BAV

- Qn 1▶2 = 11000 l/min
- Qn 2►3 = 130 l/min
- Compressed air connection output G 3/8 G 1/2



Version Ball valve
Activation Mechanical
Lock type lockable
Actuating element rotary switch
Sealing principle metal/metal sealing

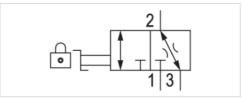
Working pressure min./max. 0 ... 16 bar

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

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

Medium Compressed air Neutral gases

Max. particle size $$25\,\mu m$$ Weight $$0.446\ kg$$



Technical data

Part No.	Compressed air connection type	Compressed air connection Input	Compressed air connection Output
R412007260	Internal thread	G 3/8	G 3/8
R412007261	Internal thread	G 1/2	G 1/2

Part No.	Compressed air connection Exhaust	Flow	Flow	Lock type	Locking base
		Qn 1 ▶ 2	Qn 2▶3		
R412007260	G 1/2	11000 l/min	130 l/min	for padlocks	Die cast zinc
R412007261	G 1/2	11000 l/min	130 l/min	for padlocks	Die cast zinc

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

Technical information

The pressure dew point must be at least 15 $^{\circ}$ C under ambient and medium temperature and may not exceed 3 $^{\circ}$ C . A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180 $^{\circ}$ about the vertical axis. Please see the operating instructions for further details.

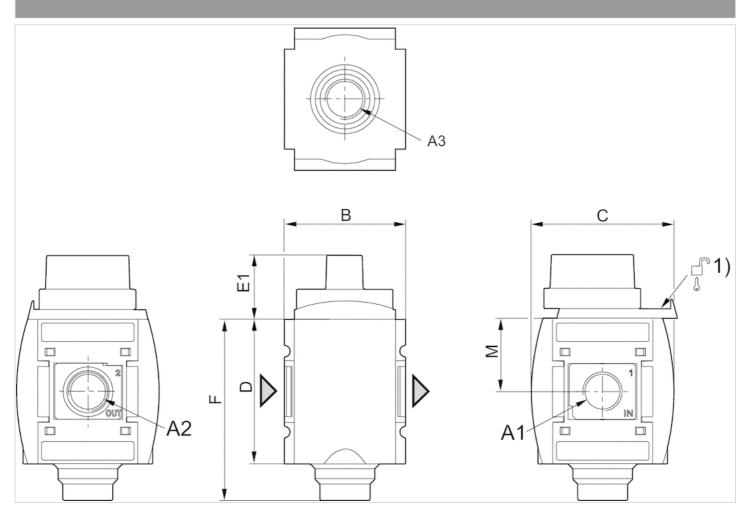


Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Polytetrafluorethylene
Threaded bushing	Die cast zinc
Actuating element	Polyoxymethylene
Locking base	Die cast zinc

Dimensions

Dimensions



A1 = input

A2 = output

A3 = ventilation port

1) Mounting option for padlocks, max. shackle Ø 8



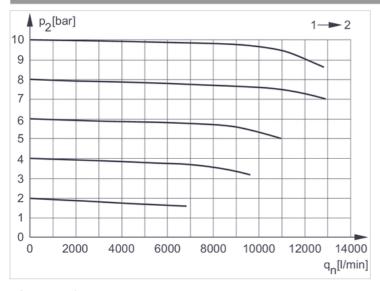


Dimensions in mm

A2	A3	В	С	D	E1	F	М
G 3/8	G 1/2	63	74	80	28	99	42.5
G 1/2	G 1/2	63	74	80	28	99	42.5

Diagrams

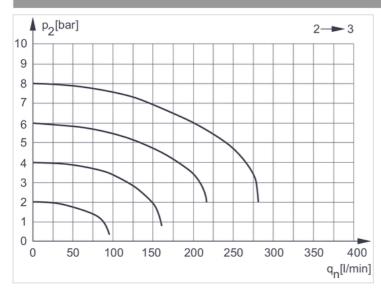
Flow rate characteristic



p2 = secondary pressure

qn = nominal flow

Rear exhaust



p2 = secondary pressure

qn = nominal flow





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



Compressed air Neutral gases

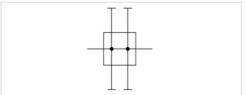
Distributor, Series AS3-DIS

- G 3/8 G 1/2
- Distributor 4x



Version Can be assembled into blocks
Parts Distributor
Mounting orientation Any
Working pressure min./max. 0 ... 16 bar
Ambient temperature min./max. -10 ... 50 °C
Medium temperature min./max. -10 ... 50 °C

Weight 0.32 kg



Technical data

Part No.	Port	Nominal flow	Nominal flow	Nominal flow	Nominal flow	Nominal flow
		Qn 1▶2	Qn 1 ► 3	Qn 1▶4	Qn 1 ▶ 5	Qn 1▶6
R412007250	G 3/8	7250 l/min	5500 l/min	2300 l/min	2250 l/min	2300 l/min
R412007251	G 1/2	7250 l/min	5500 l/min	2300 l/min	2250 l/min	2300 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 . Suitable for direct mounting of a PE2 and PM1 series pressure sensor (flange version).

Medium

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

Technical information

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

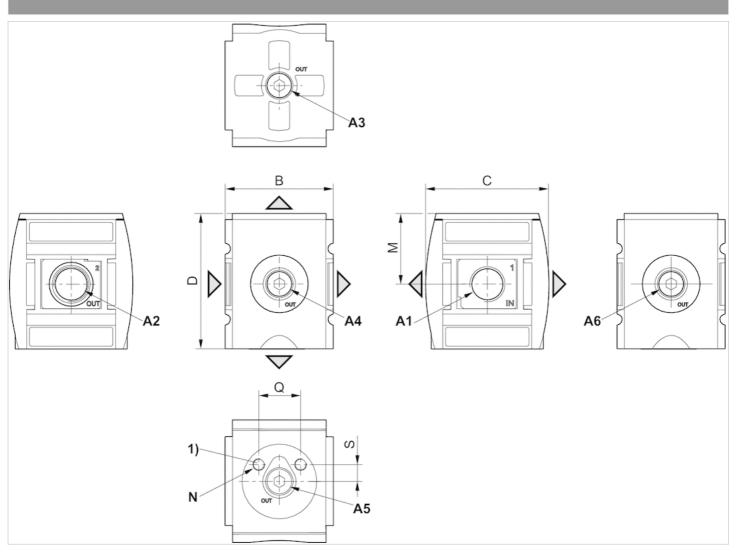
PDF creation date:





Dimensions

Dimensions



A1 = input

A2 = output

A3 = output

A4 = output

A5 = output

A6 = output

1) Mounting thread for pressure sensor

Dimensions in mm

A1	A2	A3	A4	A5	A6	В	С	D	M	N	Q	S
G 3/8	G 3/8	G 1/2	G 3/8	G 1/4	G 3/8	63	74	80.5	42.5	M5	20	8
G 1/2	G 1/2	G 1/2	G 3/8	G 1/4	G 3/8	63	74	80.5	42.5	M5	20	8





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



Distributor, Series AS3-DIN

- G 3/8 G 1/2
- Distributor 4x
- Non-return valve



Version Non-return valve, Can be assembled into blocks

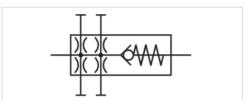
Parts Distributor

Mounting orientation Any

Working pressure min./max. 0.4 ... 16 bar Ambient temperature min./max. -10 ... 50 °C Medium temperature min./max. -10 ... 50 °C

Medium Compressed air Neutral gases

Weight 0.32 kg



Technical data

Part No.	Port	Nominal flow	Nominal flow	Nominal flow	Nominal flow	Nominal flow
		Qn 1▶2	Qn 1 ► 3	Qn 1▶4	Qn 1 ▶ 5	Qn 1▶6
R412007254	G 3/8	5100 l/min	3300 l/min	2250 l/min	2250 l/min	2250 l/min
R412007255	G 1/2	5100 l/min	3300 l/min	2250 l/min	2250 l/min	2250 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 . Suitable for direct mounting of a PE2 and PM1 series pressure sensor (flange version).

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

4 auxiliary air exits upstream of non-return valve.

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene

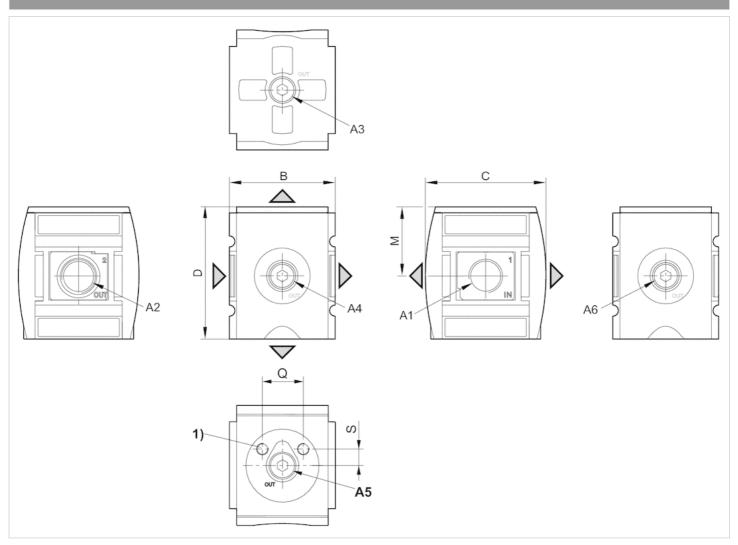




Material	
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc

Dimensions

Dimensions



A1 = input

A2 = output

A3 = output

A4 = output

A5 = output

A6 = output

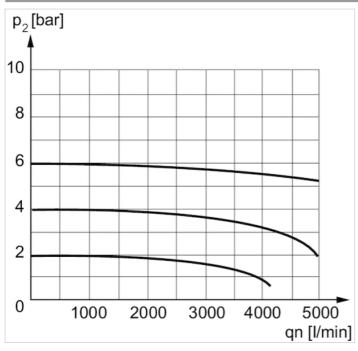
Dimensions in mm

A1	A2	A3	A4	A5	A6	В	С	D	M	Q
G 3/8	G 3/8	G 1/2	G 3/8	G 1/4	G 3/8	63	74	80	42.5	20
G 1/2	G 1/2	G 1/2	G 3/8	G 1/4	G 3/8	63	74	80	42.5	20

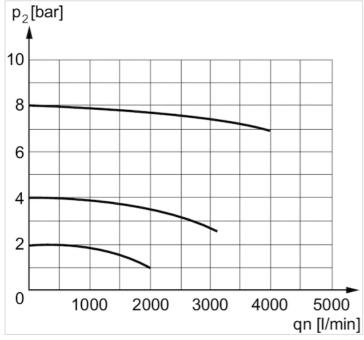


Diagrams

Flow rate characteristic



Nominal flow 1 ► 2 p2 = secondary pressure qn = nominal flow

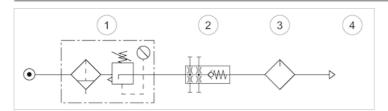


Nominal flow 1 ► 3 p2 = secondary pressure qn = nominal flow

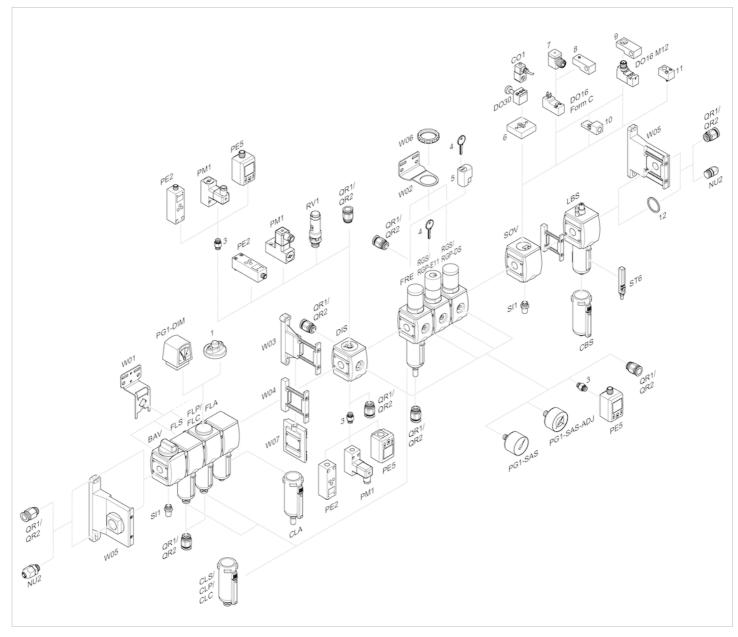




usage



- 1) Filter pressure regulator
- 2) Non-return valve
- 3) Lubricator
- 4) Compressed air



- 1 = contamination display
- 3 = Double nipple
- 4 = Key for E11 locking



- 5 = mortise lock
- 6 = Transition plate DO30
- 7 = Adapter, Series CON-VP
- 8 = Mounting aid DO16, form C
- 9 = Mounting aid DO16, M12
- 10 = Adapter for external pilot air
- 11 = Adapter pneumatic operation
- 12 = Sealing ring



Distributor, Series AS3-DIC

- G 1/2
- Distributor 4x
- Center infeed



Center infeed, Can be assembled into Version blocks

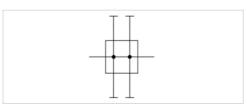
Distributor Parts

Mounting orientation Any

Working pressure min./max. 0 ... 16 bar Ambient temperature min./max. -10 ... 50 °C Medium temperature min./max. -10 ... 50 °C

Medium Compressed air Neutral gases

Weight 0.32 kg



Technical data

Part No.	Port	Nominal flow	Nominal flow	Nominal flow	Nominal flow	Nominal flow
		Qn 1▶2	Qn 1 ► 3	Qn 1▶4	Qn 1 ► 5	Qn 1 ► 6
R412007249	G 1/2	10300 l/min	10300 l/min	2300 l/min	2250 l/min	2300 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. Suitable for direct mounting of a PE2 and PM1 series pressure sensor (flange version).

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

Additional air supply possible at connections A4 and A5.

Technical information

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



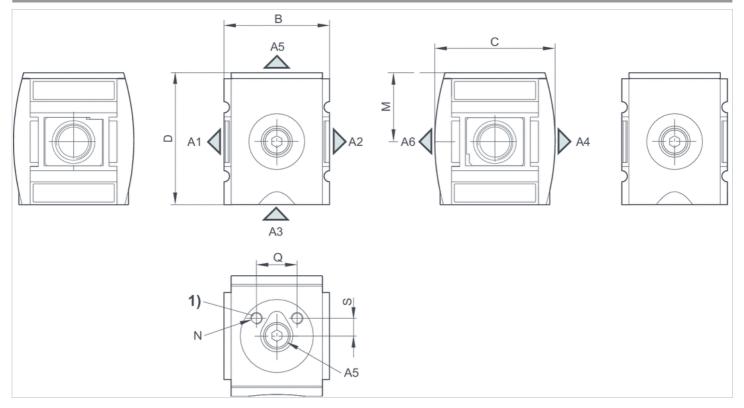


Material

Threaded bushing Die cast zinc

Dimensions

Dimensions



A1 = output

A2 = output

A3 = input/output

A4 = output

A5 = input/output

A6 = output

1) Mounting thread for pressure sensor

Dimensions in mm

A1	A2	A3	A4	A5	A6	В	С	D	М	N	Q	S
G 1/2	G 1/2	G 1/2	G 3/8	G 1/4	G 3/8	63	74	80.5	42.5	M5	20	8





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





Reservoir, Series AS3-CLS/-CLP/-CLC

- for filters, pre-filters and microfilters
- Material Polycarbonate Die cast zinc



Version Reservoir
Working pressure min./max. See table below
Ambient temperature min./max. -10 ... 50 °C
Medium temperature min./max. -10 ... 50 °C
Medium Compressed air
Filter reservoir volume 49 cm³
Weight See table below

Technical data

Part No.	Condensate drain	Reservoir		
R412007338	semi-automatic, open without pressure	Polycarbonate		
R412007339	fully automatic, open without pressure	Polycarbonate		
R412007340	fully automatic, closed without pressure	Polycarbonate		
R412007344	semi-automatic, open without pressure	Die cast zinc, with window		
R412007345	fully automatic, open without pressure	Die cast zinc, with window		
R412007346	fully automatic, closed without pressure	Die cast zinc, with window		

Part No.	Protective guard	Weight	Fig.
R412007338	Polyamide	0.086 kg	Fig. 1
R412007339	Polyamide	0.116 kg	Fig. 2
R412007340	Polyamide	0.116 kg	Fig. 2
R412007344	-	0.338 kg	Fig. 1
R412007345	-	0.39 kg	Fig. 2
R412007346	-	0.39 kg	Fig. 2

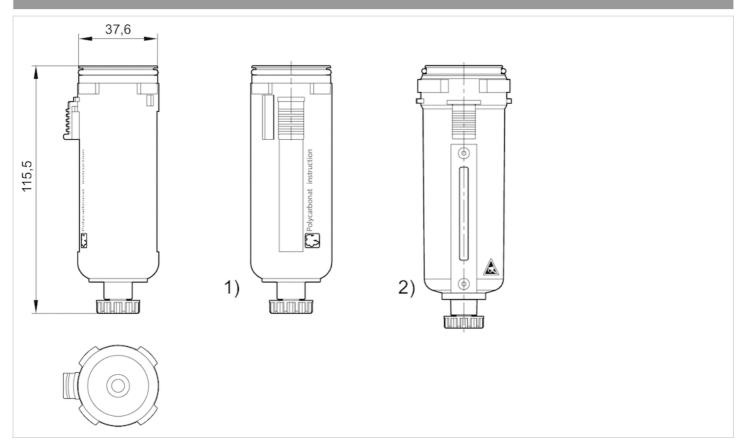
Technical information

Material	
Reservoir	Polycarbonate Die cast zinc
Protective guard	Polyamide
Seal	Acrylonitrile butadiene rubber





Dimensions in mm, Fig. 1



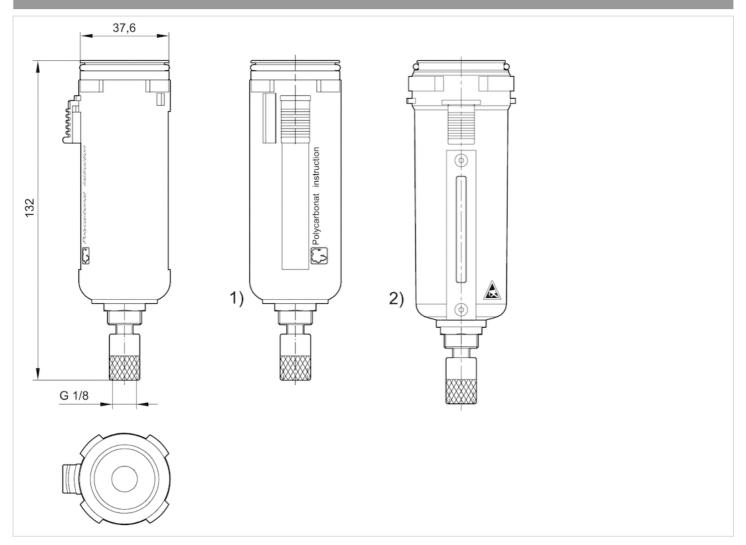
- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with inspection glass

Part No.		A	В
R412007338	G3/8 – G1/2	43.8	128.5
R412007344	G3/8 – G1/2	43.8	132.5





Dimensions in mm, Fig. 2



- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with inspection glass

Part No.	A4	A	В
R412007339	G 1/8	43.8	145
R412007340	G 1/8	43.8	145
R412007345	G 1/8	43.8	145
R412007346	G 1/8	43.8	145



See table below

Reservoir, Series AS3-CLA

- for active carbon filter
- Material Polycarbonate Die cast zinc



Version Reservoir

Working pressure min./max. 0 ... 16 bar

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

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

Medium Compressed air

Filter reservoir volume 49 cm³

Technical data

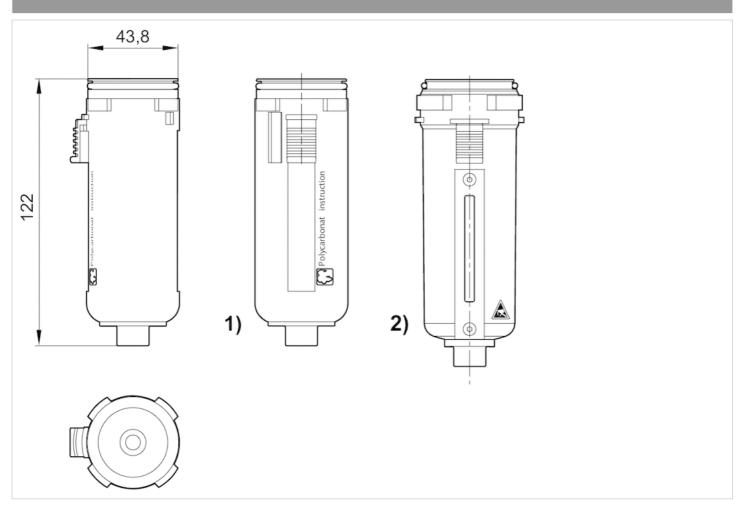
Part No.	Reservoir	Protective guard	Weight
R412007347	Polycarbonate	Polyamide	0.086 kg
R412007349	Die cast zinc, with window	-	0.338 kg

Weight

Material	
Reservoir	Polycarbonate Die cast zinc
Protective guard	Polyamide
Seal	Acrylonitrile butadiene rubber







- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with inspection glass





Reservoir, Series AS3-CBS

- for lubricator
- Material Polycarbonate Die cast zinc



Version Reservoir

Working pressure min./max. 0 ... 16 bar

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

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

Medium Compressed air Oil

Lubricator reservoir volume 80 cm³

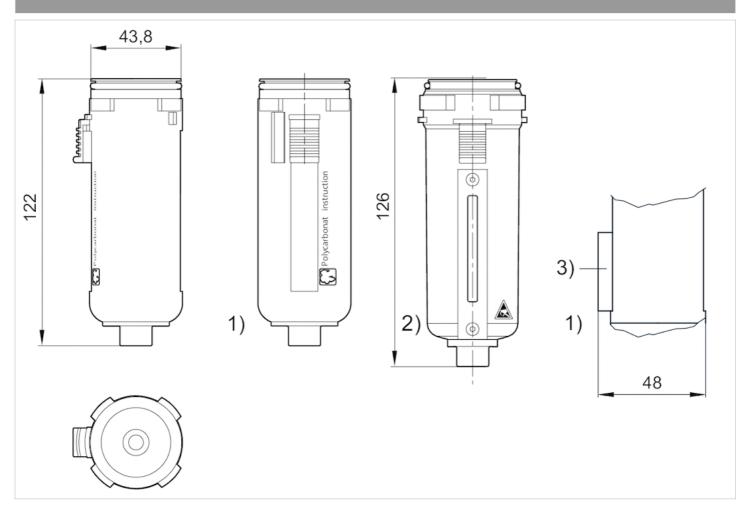
Weight See table below

Technical data

Part No.	Electrical level indicator	Reservoir	Protective guard	Weight
R412007352	-	Polycarbonate	Polyamide	0.086 kg
R412007358	-	Die cast zinc, with window	-	0.335 kg
R412007351	with external query	Polycarbonate	Polyamide	0.086 kg

Material	
Reservoir	Polycarbonate Die cast zinc
Protective guard	Polyamide
Seal	Acrylonitrile butadiene rubber





- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with inspection glass
- 3) with external query





Mounting plate, Series AS3-MBR-...-



Ambient temperature min./max. Weight

-10 ... 50 °C 0.13 kg

Technical data

Part No.

R412007368

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

Technical information

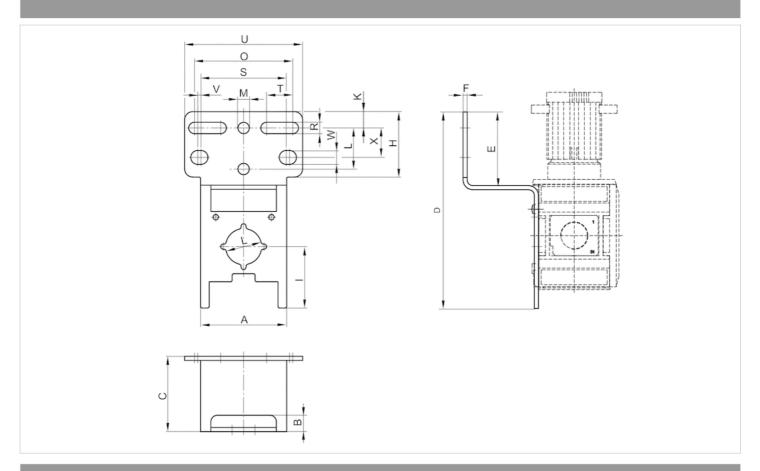
For assembly of the W01 mounting plate, the rear cover of the air preparation unit must be removed.

Material	
Housing	Steel, galvanized
Seal	Acrylonitrile butadiene rubber





Dimensions



Part No.	А	В	С	D	Е	F	Н		K	L	М	0	R	S	Т	U	V	W	Х
R412007368	52.5	10	46	120	45	2.5	40	37.5	10	25	6.5	60	7	52	16	72	2	8.5	18





Mounting bracket, Series AS3-MBR-...- W02



Ambient temperature min./max. $-10 \dots 50 \, ^{\circ}\text{C}$ Weight $0.13 \, \text{kg}$

Technical data

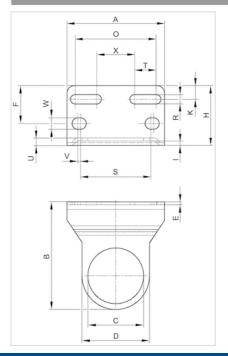
Part No.
R412007964

Technical information

Material	
Housing	Steel, galvanized

Dimensions

Dimensions







Part No.	А	В	С	D	Е	F	Н		K	0	R	S	Т	U	V	W	X
R412007964	72	98	43.2	52	2.5	28	44	4	10	60	7	52	16	6.5	2	8.5	28

Mounting clip, Series AS3-MBR-...-W03

R412007370

Series AS3

■ Qn = [[14500] I/min]



Technical data

Industry Industrial

Min. ambient temperature

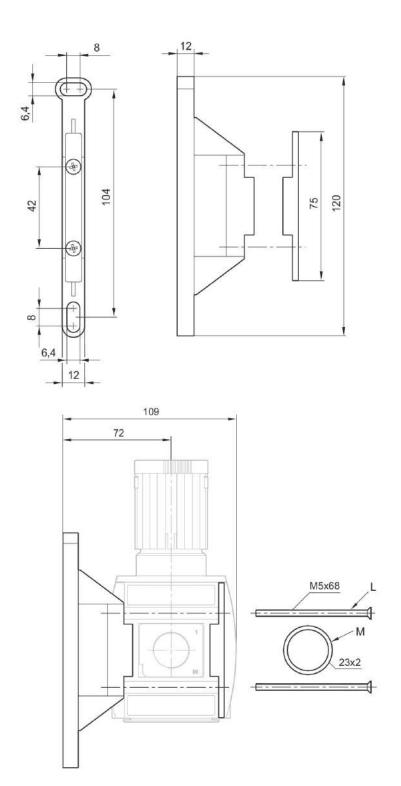
Max. ambient temperature 50 °C

Weight 0.055 kg

Housing material Polyamide

Seal material Acrylonitrile butadiene rubber R412007370











Mounting clip, Series AS3-MBR-...-W03-





Ambient temperature min./max. -10 ... 50 °C Weight 0.055 kg

Technical data

Part No.
R412007373

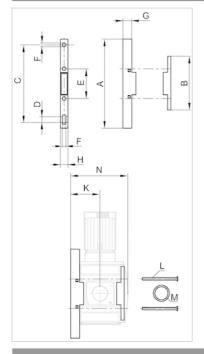
Scope of delivery incl. 2 mounting screws M5x68-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 1x Oring

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber





Dimensions



Part No.	А	В	С	D	Е	F	G	Н	K	L	М	N
R412007373	124	75	108	8	42	5.5	12.5	10	38.5	M5x68	23x2	75.5





Mounting clip, Series AS3-MBR-...-W03, Aluminum



Ambient temperature min./max. -10 ... 50 °C Weight 0.133 kg

Technical data

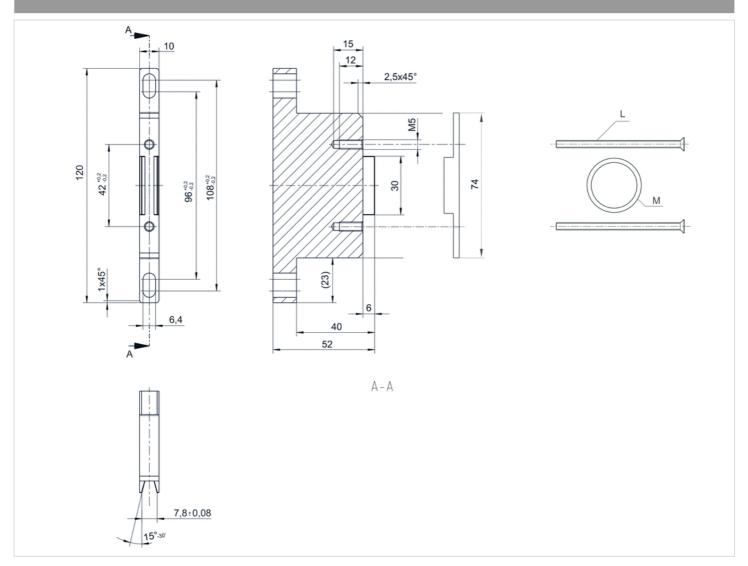
Part No.
R412026828

Scope of delivery incl. 2 mounting screws M5x68-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 1x Oring

Material	
Housing	Aluminum
Seal	Acrylonitrile butadiene rubber



Dimensions



L = Mounting screw

M = O-ring





Block assembly kit, Series AS3-MBR-...- W04



Ambient temperature min./max. $-10 \dots 50 \, ^{\circ}\text{C}$ Weight $0.032 \, \text{kg}$

Technical data

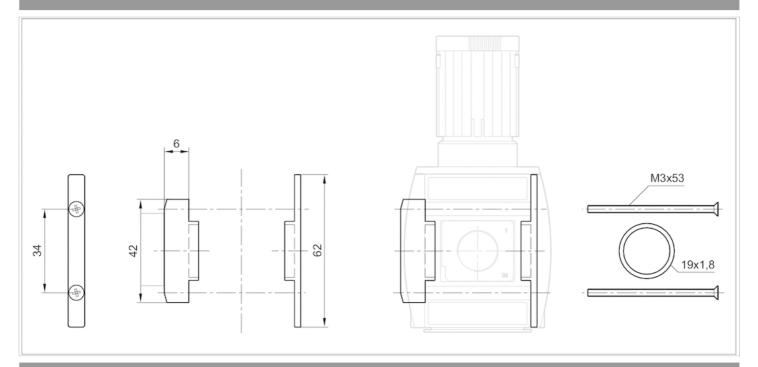
Part No.
R412007371

Scope of delivery incl. 2 mounting screws M5x68-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 1x O-ring

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber



Dimensions in mm



Part No.	А	В	С	D	L	M
R412007371	75	75	42	12.5	M5x68	23x2





Block assembly kit, Series AS3-MBR-...-W05

- G 3/8 - G 1/2



Ambient temperature min./max. $-10 \dots 50 \, ^{\circ}\text{C}$ Weight $0.825 \, \text{kg}$

Technical data

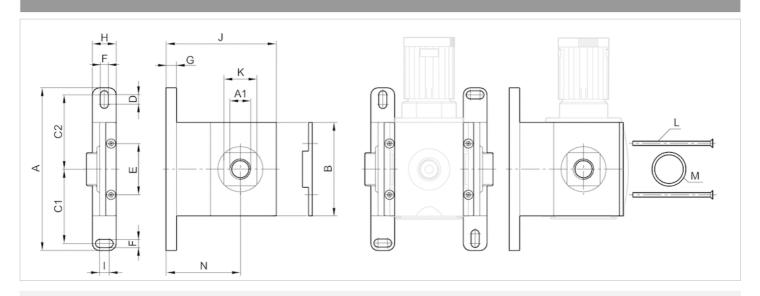
Part No.	Port
R412007366	G 3/8
R412007367	G 1/2

Scope of delivery incl. 4 mounting screws M5x68-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 2x O-ring

Material	
Housing	Die cast zinc, painted
Seal	Acrylonitrile butadiene rubber



Dimensions



Dimensions

Part No.	A1	А	В	C1	C2	D	Е	F	G	Н	Т	J	K	L	М	N
R412007366	G 3/8	120	75	54	54	8	42	6.4	7	20	8	102.5	30	M5x68	23x2	72
R412007367	G 1/2	120	75	54	54	8	42	6.4	7	20	8	102.5	30	M5x68	23x2	72





Block assembly kit, Series AS3/AS5-MBR-...-W07



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

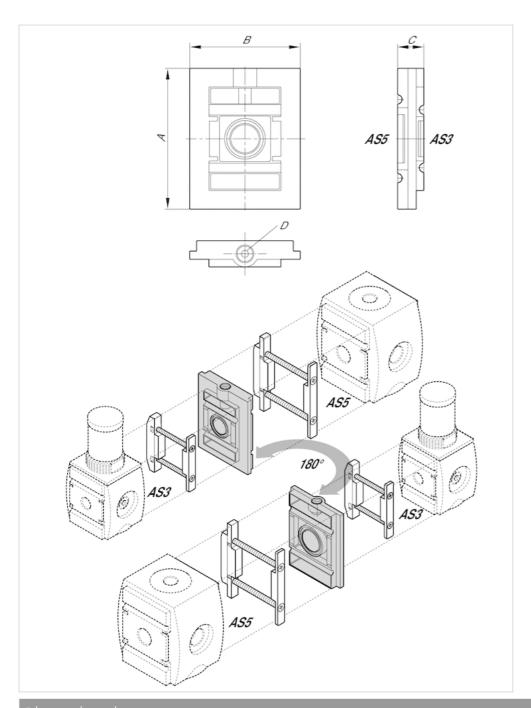
Technical data

Part No.	Port
R412010122	G 1/4

scope of delivery incl. seal

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber





Part No.	A	В	С	D
R412010122	102	80	18	G 1/4





Block assembly kit, Series AS2/AS3-MBR-...-W07



Ambient temperature min./max.

-10 ... 50 °C

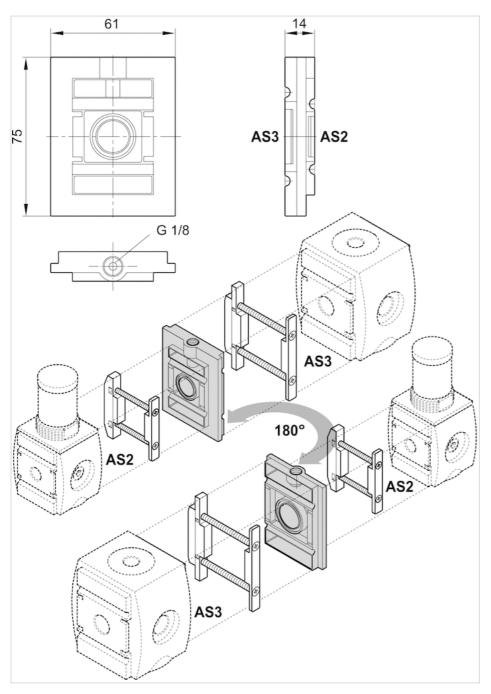
Technical data

Part No.	Port
R412010121	G 1/8

scope of delivery incl. seal

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber





scope of delivery incl. seal

Dimensions

Part No.	A	В	С	D
R412010121	75	61	14	G 1/8



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

- M42x1.5
- for AS3



Weight

0.02 kg

The delivered product may vary from that in the illustration.

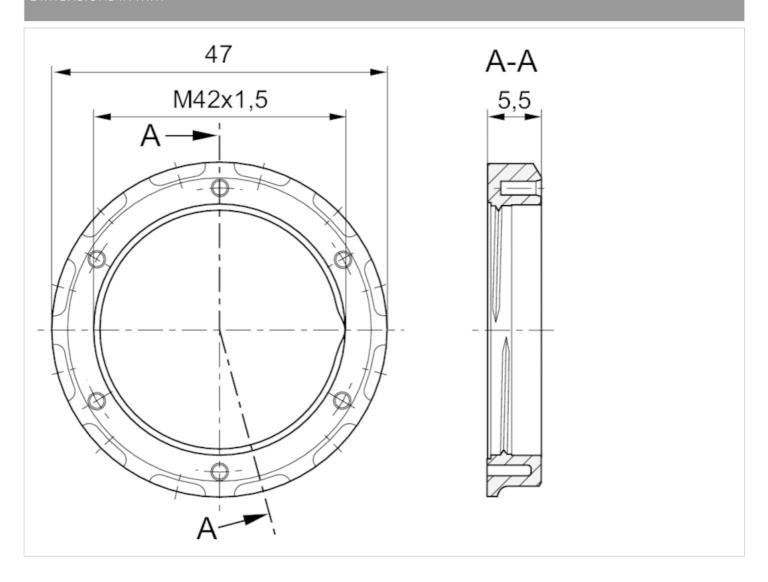
Technical data

Part No.	Port	for	Scope of delivery
1829234072	M42x1.5	AS3	5 piece

Material	
Housing	Brass









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

- M42x1.5
- for AS3



Ambient temperature min./max.

-10 ... 50 °C

The delivered product may vary from that in the illustration.

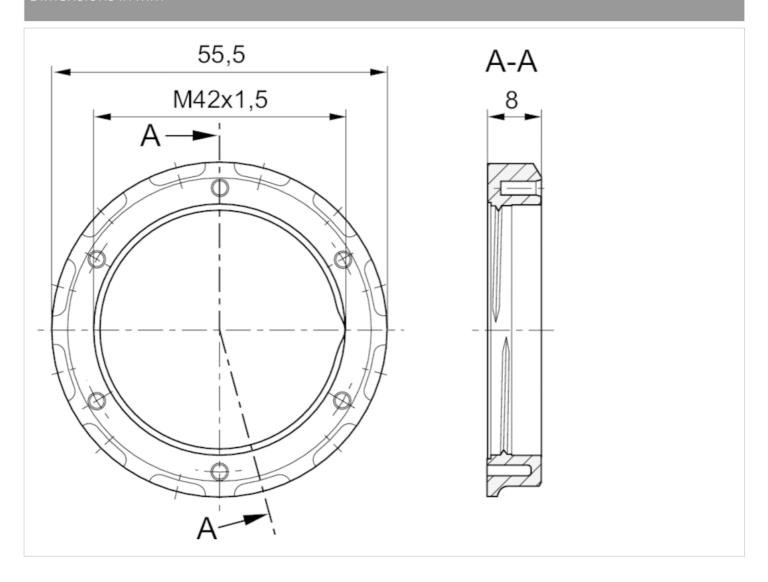
Technical data

Part No.	Port	for
R412007372	M42x1.5	AS3

Material	
Housing	Polyamide











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

- M42x1.5
- for AS3



Ambient temperature min./max.

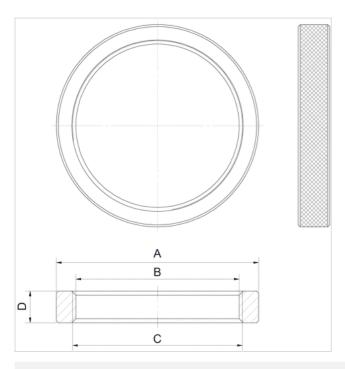
-10 ... 50 °C

Technical data

Part No.	Port	for
R412007363	M42x1.5	AS3

Material	
Housing	Brass





Dimensions

Part No.	für Serie	А	В	С	D	Material
R412007363	AS3	50	41,1	M42x1,5	7,8	Brass



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

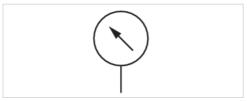
Class 2,5

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 See table below



Technical data

Part No.	Compressed air connection	Nominal diameter	Range of application	Display range	Operating pressure	Scale value
R412004407	G 1/4	40 mm	0 bar 1.2	0 bar 1.6	0 1.6 bar	0.05
R412004408	G 1/4	40 mm	0 bar 2	0 bar 2.5	0 2.5 bar	0.1
R412004409	G 1/4	40 mm	0 bar 3.2	0 bar 4	0 4 bar	0.1
R412004410	G 1/4	40 mm	0 bar 4	0 bar 6	0 6 bar	0.2
R412004411	G 1/4	40 mm	0 bar 8	0 bar 10	0 10 bar	0.2
R412004412	G 1/4	40 mm	0 bar 12	0 bar 16	0 16 bar	0.5
R412004413	G 1/4	50 mm	0 bar 1.2	0 bar 1.6	0 1.6 bar	0.05
R412004414	G 1/4	50 mm	0 bar 2	0 bar 2.5	0 2.5 bar	0.1
R412004415	G 1/4	50 mm	0 bar 3.2	0 bar 4	0 4 bar	0.1
R412004416	G 1/4	50 mm	0 bar 4	0 bar 6	0 6 bar	0.2
R412004417	G 1/4	50 mm	0 bar 8 bar	0 bar 10 bar	0 10 bar	0.2
R412004418	G 1/4	50 mm	0 bar 12	0 bar 16	0 16 bar	0.5
R412007898	G 1/4	50 mm	0 bar 20	0 bar 25	0 25 bar	1
R412004419	G 1/4	63 mm	0 bar 1.2	0 bar 1.6	0 1.6 bar	0.05
R412004420	G 1/4	63 mm	0 bar 2	0 bar 2.5	0 2.5 bar	0.1
R412004421	G 1/4	63 mm	0 bar 3.2	0 bar 4	0 4 bar	0.1
R412004422	G 1/4	63 mm	0 bar 4	0 bar 6	0 6 bar	0.2
R412004423	G 1/4	63 mm	0 bar 8	0 bar 10	0 10 bar	0.2
R412004424	G 1/4	63 mm	0 bar 12	0 bar 16	0 16 bar	0.5



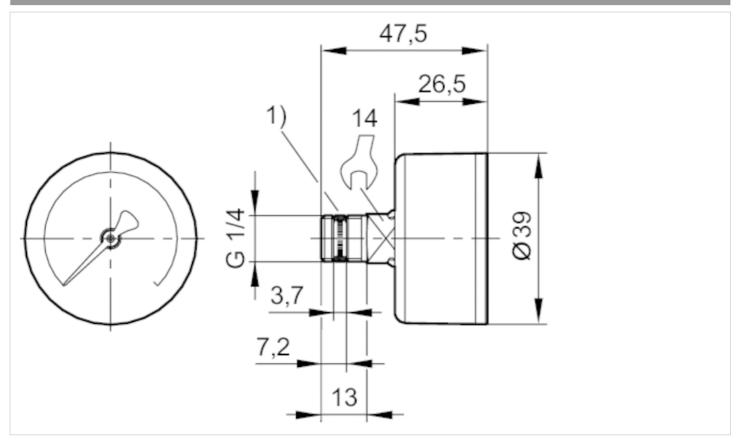


Part No.	Weight	Fig.	
R412004407	0.08 kg	Fig. 1	-
R412004408	0.08 kg	Fig. 1	-
R412004409	0.08 kg	Fig. 1	-
R412004410	0.08 kg	Fig. 1	-
R412004411	0.08 kg	Fig. 1	-
R412004412	0.08 kg	Fig. 1	-
R412004413	0.09 kg	Fig. 2	-
R412004414	0.09 kg	Fig. 2	-
R412004415	0.09 kg	Fig. 2	-
R412004416	0.09 kg	Fig. 2	-
R412004417	0.09 kg	Fig. 2	1)
R412004418	0.09 kg	Fig. 2	1)
R412007898	0.09 kg	Fig. 2	-
R412004419	0.1 kg	Fig. 3	-
R412004420	0.1 kg	Fig. 3	-
R412004421	0.1 kg	Fig. 3	-
R412004422	0.1 kg	Fig. 3	-
R412004423	0.1 kg	Fig. 3	-
R412004424	0.1 kg	Fig. 3	-

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



Dimensions in mm, Fig. 1

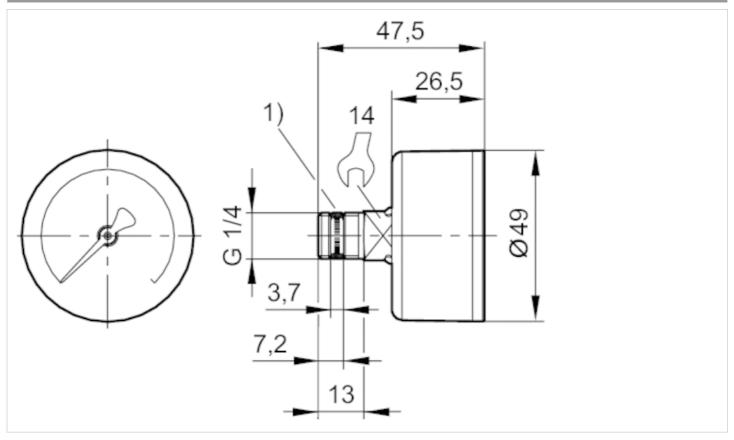


1) Gasket thread



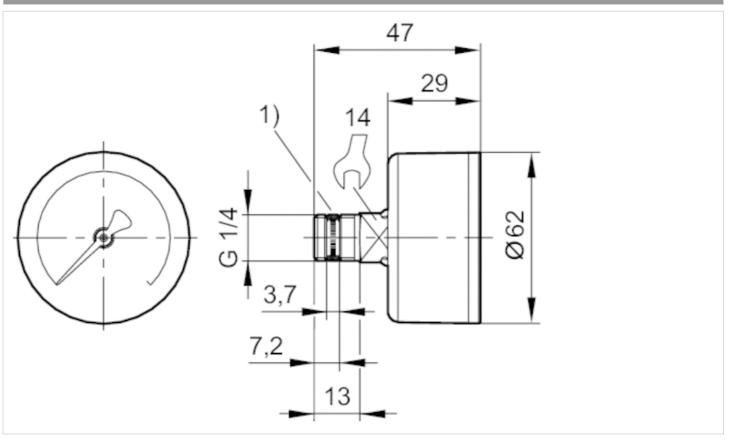


Dimensions in mm, Fig. 2



1) Gasket thread

Dimensions in mm, Fig. 3



1) Gasket thread







Pressure gauge, Series PG1-SAS-ADJ

- Back port
- with adjustable work area display
- Background color Black
- Scale color White, Grey
- Viewing window Polystyrene
- Units bar
- Units psi





Version Bourdon tube pressure gauge
Version with adjustable work area display

Standardization EN 837-1 Class 2,5

Ambient temperature min./max. -40 ... 60 °C

Medium Compressed air

Work area adjustable work area display

Work Area Display, Color Red Green

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 0.1 kg

Technical data

Part No.	Compressed air connection	Nominal diameter	Range of application	Display range	Operating pressure	Scale value
R412007867	G 1/4	50 mm	0 bar 1.2	0 bar 1.6	0 1.6 bar	0.05
R412007868	G 1/4	50 mm	0 bar 2	0 bar 2.5	0 2.5 bar	0.1
R412007869	G 1/4	50 mm	0 bar 3.2	0 bar 4	0 4 bar	0.1
R412007870	G 1/4	50 mm	0 bar 4	0 bar 6	0 6 bar	0.2
R412007871	G 1/4	50 mm	0 bar 8	0 bar 10	0 10 bar	0.2
R412007872	G 1/4	50 mm	0 bar 12	0 bar 16	0 16 bar	0.5

Technical information

To set the operating range, the cover (inspection glass) must be removed. To do this, carefully lift the inspection glass by inserting a pointed or flat object in the slot provided for this purpose on the housing circumference.

Technical information

Material	
Housing	Acrylonitrile butadiene styrene
Thread	Brass

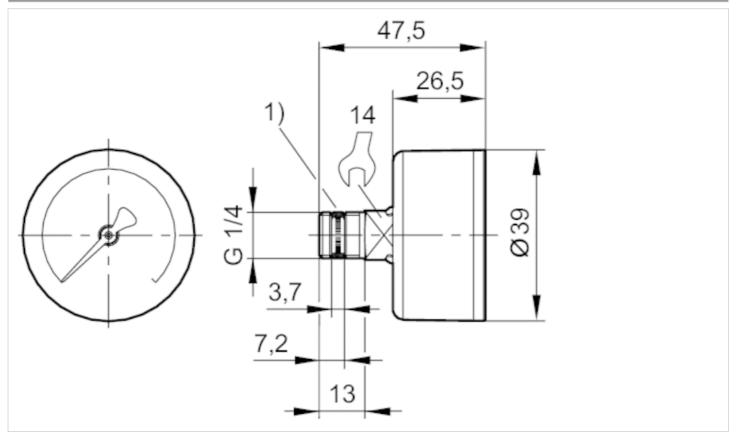
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Material	
Viewing window	Polystyrene
Seal	Polytetrafluorethylene

Dimensions in mm, Fig. 1



1) Gasket thread

Dimensions in mm

Compressed air connection	Nominal diameter	Ø A	В	С	D	Е	F	SW
G 1/4	50 mm	49	47.5	26.5	13	7.2	3.7	14



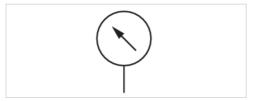


Pressure gauge, Series PG1-DIM

- for differential pressure measurement for prefilters and microfilters
- flange version
- Background color White
- Scale color Black
- Viewing window Polystyrene
- Units bar
- suitable for ATEX



Version Diaphragm pressure gauge Mounting orientation vertical Ambient temperature min./max. 0 ... 60 °C Medium Compressed air Color for differential pressure range Green Red Main scale unit (outside) bar Main scale color (outside) Black Background color White Pointer color Black Weight 0.127 kg



Technical data

Part No.	Range of application	Display range	Operating pressure	Scale value
1827231072	0 0.5 bar	0 0.5 bar	0 16 bar	0.1

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

Technical information

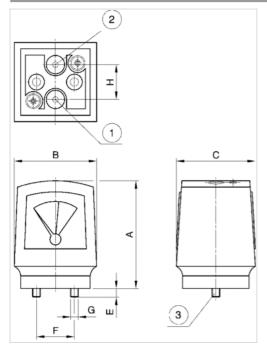
Suitable for use in Ex zones 1, 2, 21, 22.

Material	
Housing	Polyamide fiber-glass reinforced
Viewing window	Polystyrene
Seal	Acrylonitrile butadiene styrene





Dimensions



- 1) Input pressure p1
- 2) Output pressure p2
- 3) Mounting screw and 2 O-rings included in scope of delivery

Dimensions in mm

А	В	С	Е	F	G	Н
68	52	50	6	24	M5	22



contamination display

- for prefilters and microfilters



Weight 0.025 kg

Technical data

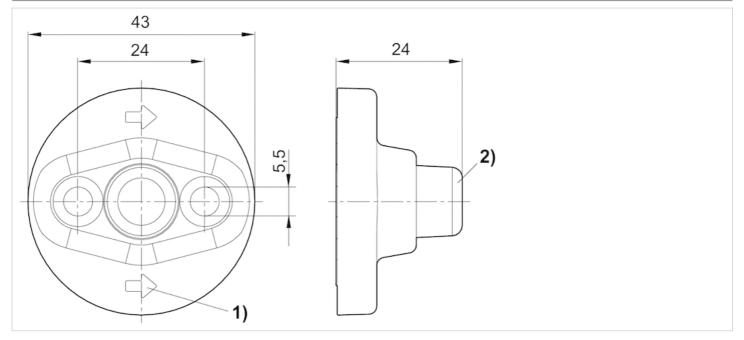
Part No.
R412006363

2 mounting screws and 2 O-rings supplied loose, Suitable for use in Ex zones 1, 2, 21, 22.

Material	
Material	Polyamide



Dimensions in mr



- 1) Flow direction
- 2) Display in initial state: green (= Δ p 0.35 bar)

Display turns red on contamination of the filter element (= $\Delta p \ge 0.35$ bar).





3/2-directional valve, Series DO16

- 3/2

- Plate connection

Electrical connection : Plug, ISO 15217, form CManual override : without detent with detent

- With spring return



Version Poppet valve Activation Electrically Sealing principle Soft sealing See table below Working pressure min./max. Ambient temperature min./max. -10 ... 50 °C -10 ... 50 °C Medium temperature min./max. 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 IP65 Protection class with connection Duty cycle 100 % Mounting on manifold strip PRS strip МЗ mounting screws Weight 0.035 kg

Technical data

Part No.		МО	Operational voltage	Operational voltage
			DC	AC 50 Hz
0820048002	2 1 1 3 M		24 V	-
0820048004	2 1 1 3 8		-	24 V
0820048005	2 1 1 3 M		-	-
0820048001	2 1 1 3 8		-	230 V
0820048026	Z N		24 V	-
0820048028	Z I		-	24 V
0820048101	2 NW		-	230 V
0820048029	#IIIM		-	-
0820048025	#IIIM	 	-	230 V
0820048102	713 W		24 V	-
0820048126	1 1 1 N	 	24 V	-

Part No.	Operational voltage	Voltage tolerance	Voltage tolerance	Voltage tolerance
	AC 60 Hz	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
	AC 60 Hz	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 Qn at 6 bar and $\Delta p = 1$ 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).



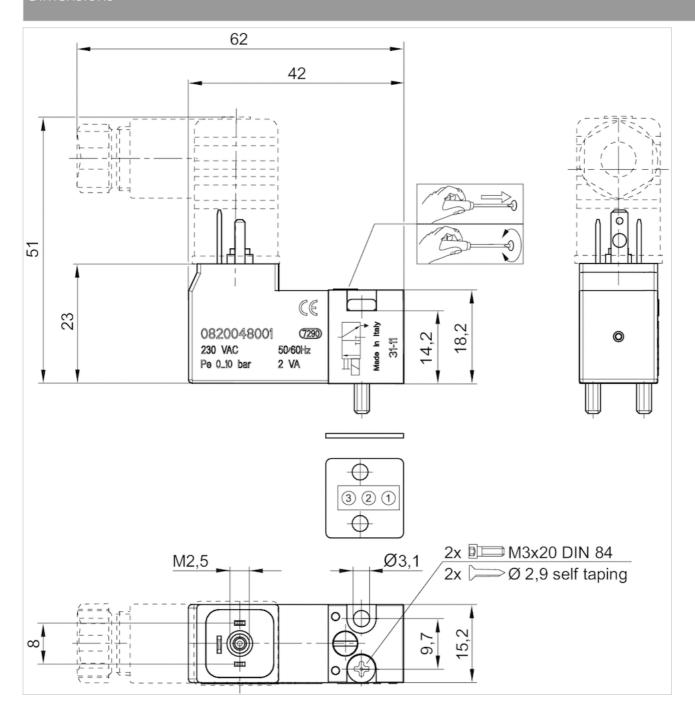


Technical information

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

Dimensions

Dimensions







3/2-directional valve, Series DO16

- 3/2

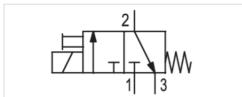
- NC

- Plate connection

Electrical connection : M12, 3-pinManual 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 $5 \mu m$

Oil content of compressed air

Nominal flow 1 ▶ 2

Nominal flow 2 ▶ 3

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	Power consumption	
			voltage		
			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).

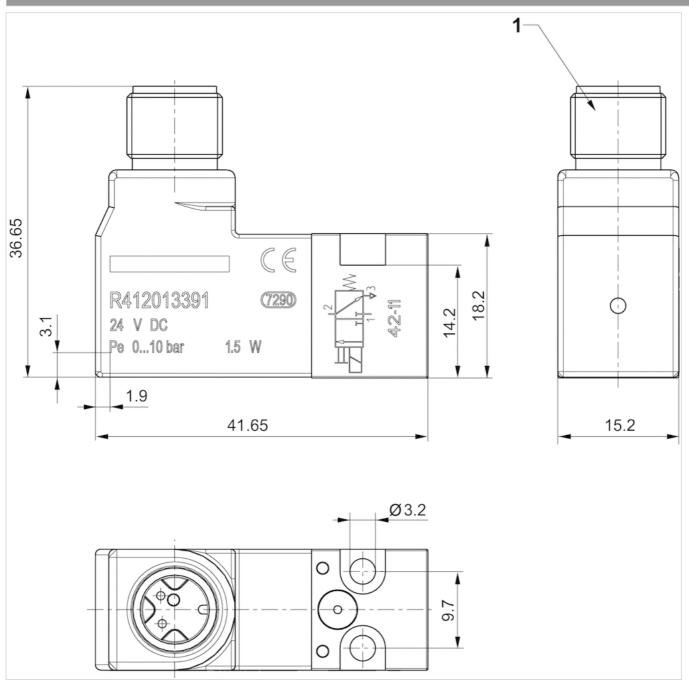


Technical information

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 returnsuitable 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 $0 \dots 5 \text{ mg/m}^3$ Nominal flow $1 \triangleright 2$ See table below Nominal flow $2 \triangleright 3$ 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	Compressed air connection
			Input	Output
0820019985	⊨I.		CNOMO	CNOMO
0820019980	2 13)W		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 Qn 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).

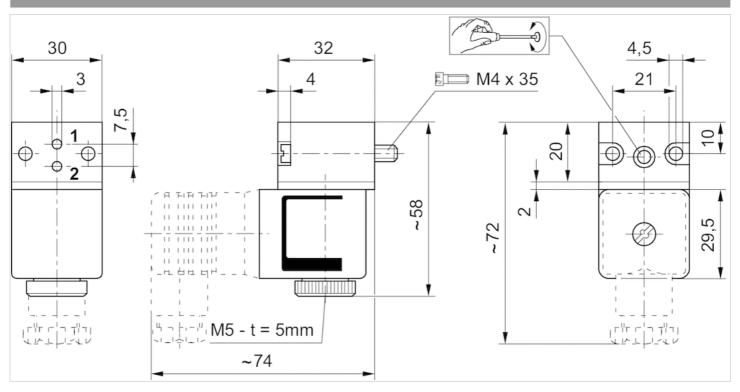
ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

Technical information

Material	
Housing	Plastic
Seals	Fluorocaoutchouc

Dimensions

Dimensions



t = depth



Coil, Series CO1

- Cable with valve plug connector
- Coil width 30 mm
- Power consumption DC 3.25 W
- Holding power AC 2.9-3 VA
- Switch-on power AC 3-3.1 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 See table below



Technical data

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
1827414297	-	230 V	230 V
1827414298	-	230 V	230 V
1827414299	-	110 V	110 V
1827414303	24 V	-	-
1827414304	24 V	-	-

Part No.	Voltage tolerance	Voltage tolerance	Power consumption	Holding power
	DC	AC 50 Hz	DC	AC 50 Hz
1827414297	-	-10% / +10%	-	3 VA
1827414298	-	-10% / +10%	-	3 VA
1827414299	-	-10% / +10%	-	2.9 VA
1827414303	-10% / +10%	-	3.25 W	-
1827414304	-10% / +10%	-	3.25 W	-

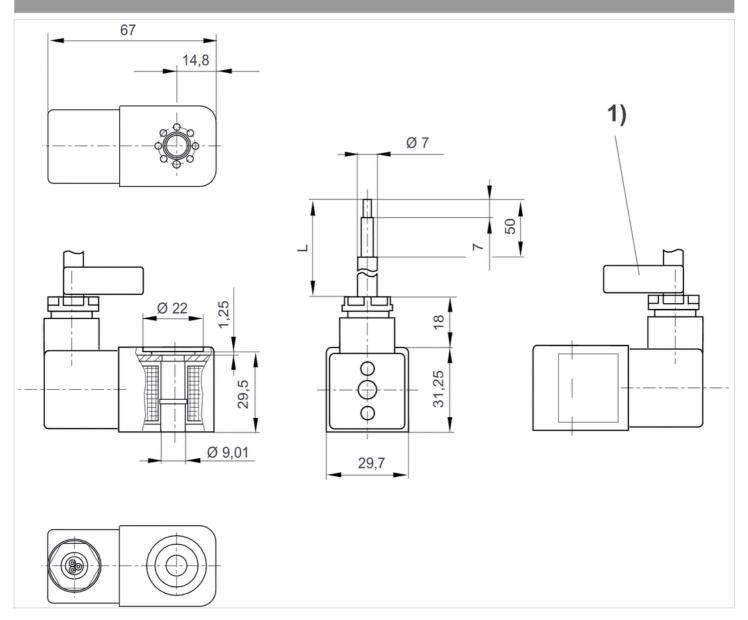
Part No.	Switch-on power AC 50 Hz	Cable length	Weight
1827414297	3.1 VA	3 m	0.38 kg
1827414298	3.1 VA	10 m	0.91 kg
1827414299	3 VA	3 m	0.38 kg





Part No.	Switch-on power AC 50 Hz	Cable length	Weight
1827414303	-	3 m	0.38 kg
1827414304	-	10 m	0.91 kg

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 See table below

voltage

Protection class IP67
Wire cross-section 0.75 mm²
Mounting screw tightening torque 0.4 Nm

Weight See table below

Technical data

Part No.		Operational	Max. current	Protective circuit	Contact assignment
		voltage			
1834484213	1)————————————————————————————————————	230 V AC/DC	6 A	-	2+E
1834484215	1)————1 2)—————2 ®)————————————————————————————	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	10 m = 1 m =	230 V AC/DC	6 A	Varistor	2+E
1834484211	2 () () () () () () () () () (230 V AC/DC	6 A	Varistor	2+E
1834484236	1)	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.



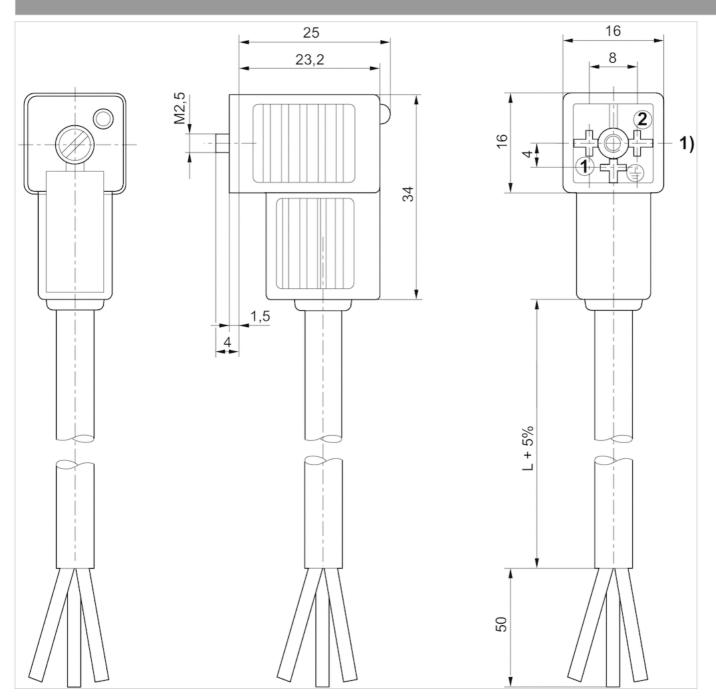


Technical information

Material	
Seals	caoutchouc/butadiene caoutchouc
Cable sheath	Polyvinyl chloride

Dimensions

Fig. 1

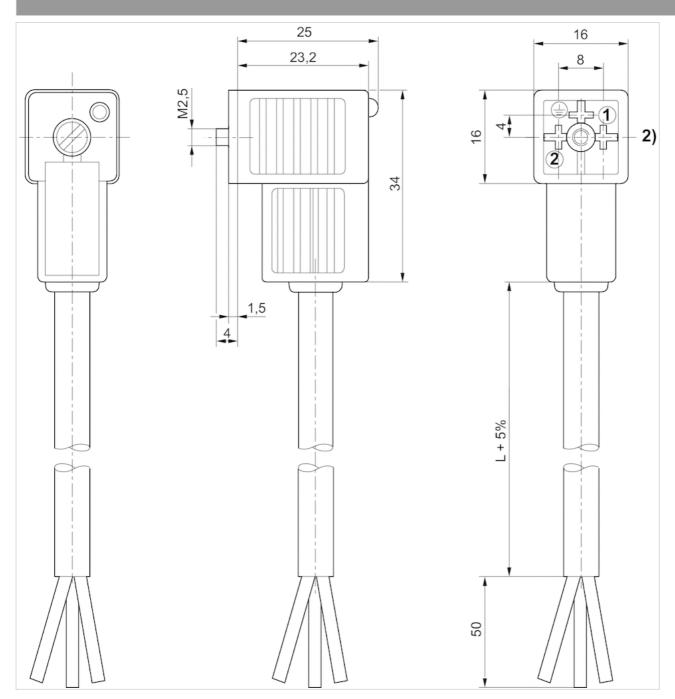


1) 0° female insert





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

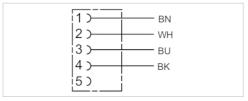


Ambient temperature min./max. $-40 \dots 85 \, ^{\circ}\mathrm{C}$ Operational $48 \, \mathrm{V} \, \mathrm{AC/DC}$

voltage

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

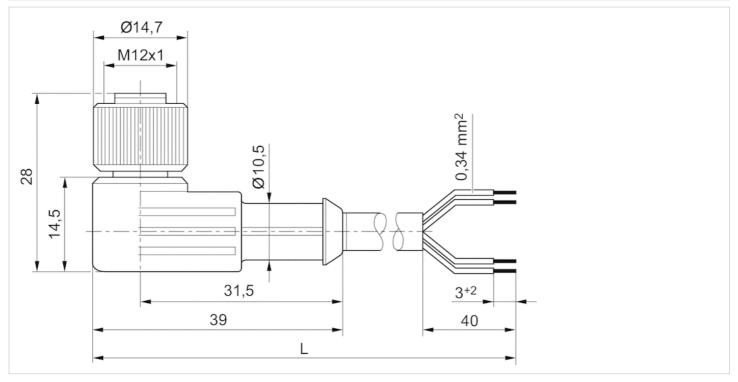
The specified protection class is only valid in assembled and tested state.

Material	
Cable sheath	Polyurethane





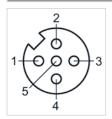
Dimensions



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 48 V AC/DC

voltage

Protection class IP67
Wire cross-section 0.34 mm²

Weight See table below

1)	– BN
2)	– WH
3)	– BU
4)	– BK

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

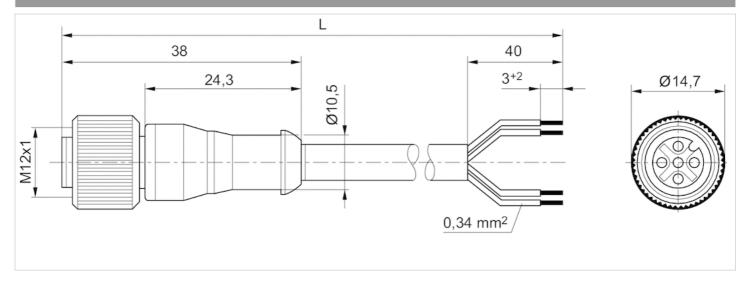
Technical information

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

Material	
Cable sheath	Polyurethane



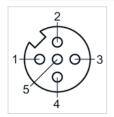
Dimensions



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 48 V AC/DC voltage

Protection class IP67

Weight 0.015 kg

[]	
1)	
2)	
3)	
14)	

Technical data

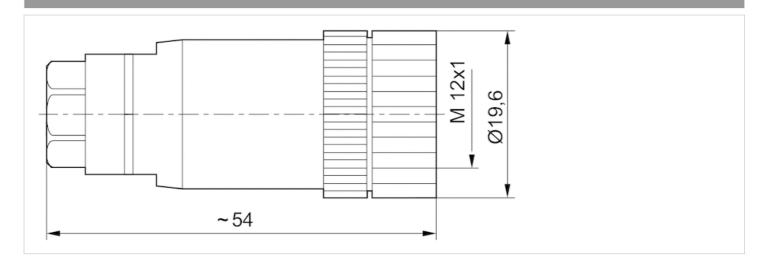
Part No.	Max. current	suitable cable-Ø min./max
1834484177	4 A	4 / 6 mm

Material	
Housing	Polyamide



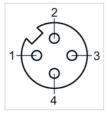


Dimensions



Pin assignments

Pin assignment, socket







Round plug connector, Series CON-RD

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



Connection type Screws

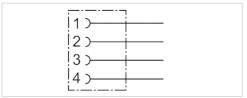
Ambient temperature min./max. -40 ... 85 °C

Operational 48 V AC/DC

voltage

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

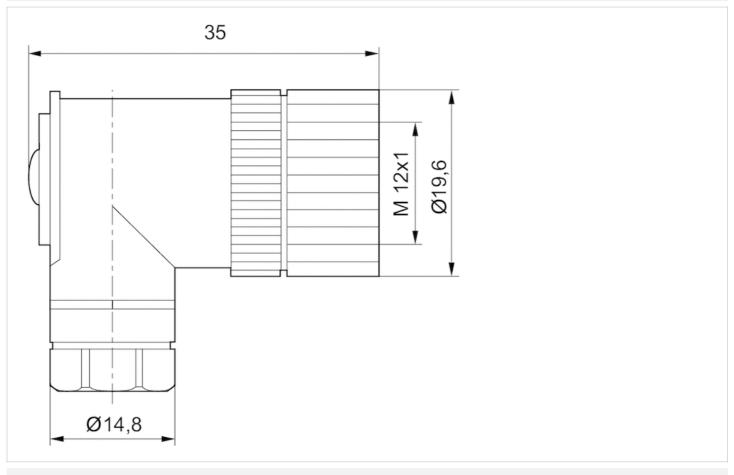
The specified protection class is only valid in assembled and tested state.

Material	
Housing	Polyamide



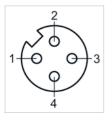


Dimensions



Pin assignments

Pin assignment, socket





0.013 kg



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

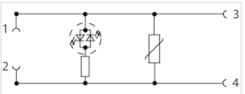
Operational 24 V DC

voltage

Protection class IP65

Protective circuit Varistor

Mounting screw tightening torque 0.6 Nm



Technical data

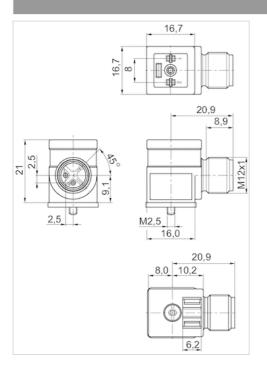
Part No.	Max. current	Protective circuit	Contact assignment	LED status display
R412009553	1 A	Varistor	2+E	Yellow

Weight

Material	
Housing	Polyurethane



Dimensions







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



Weight 0.025 kg

Technical data

Part No.
R412006360

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

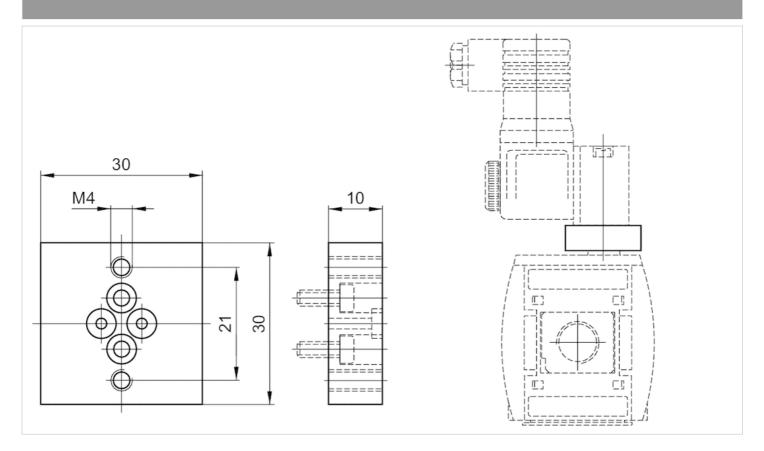
Technical information

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

Material		
	Material	Aluminum



Dimensions in mm







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

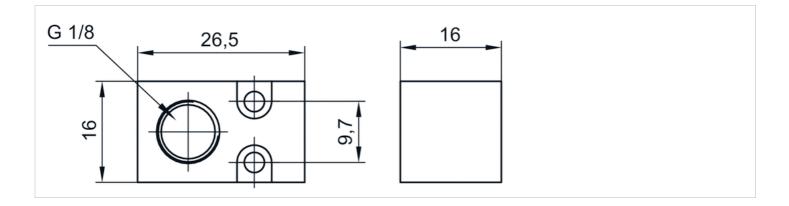
Delivery incl. 2 mounting screws M3x20, Flat gasket

Technical information

Material		
	Material	Aluminum

Dimensions

Dimensions in mm







Adapter for external pilot air



Ambient temperature min./max. Weight

50 °C 0.015 kg

Technical data

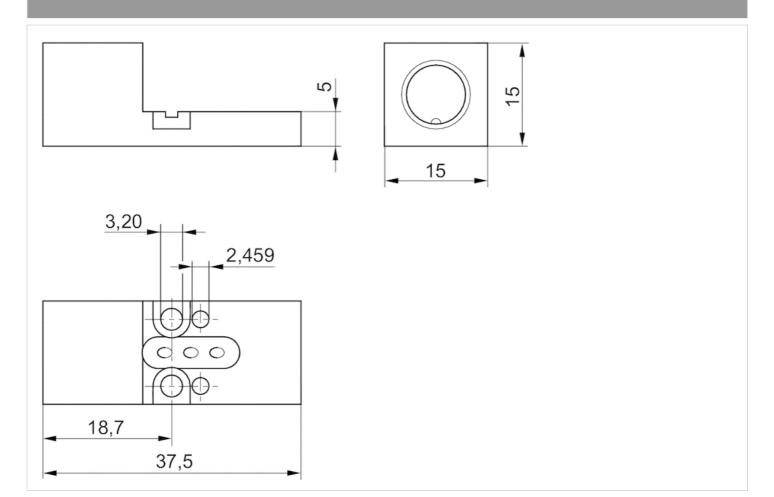
Part No.
R412025904

Delivery incl. 1 seal plate, 1 screw 3x10, 1 screw DIN 84-M3x18





Dimensions in mm







Mounting aid

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



Technical data

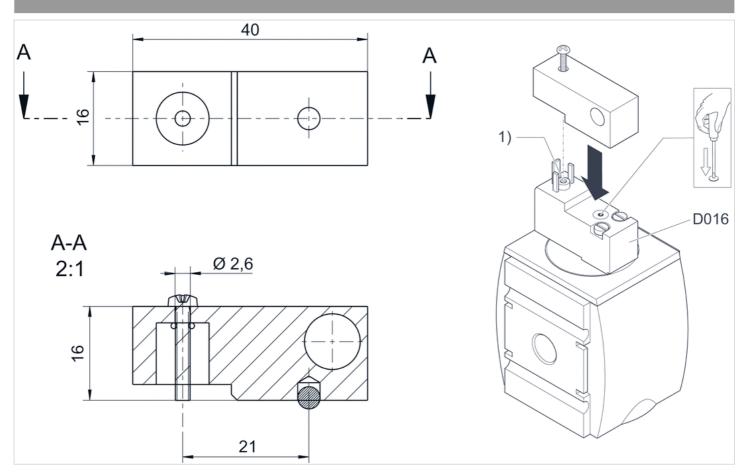
Part No.	
R412019278	

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

Material	
Housing	Aluminum



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.



Weight 0.023 kg

Technical data

Part No.
R412015193

Technical information

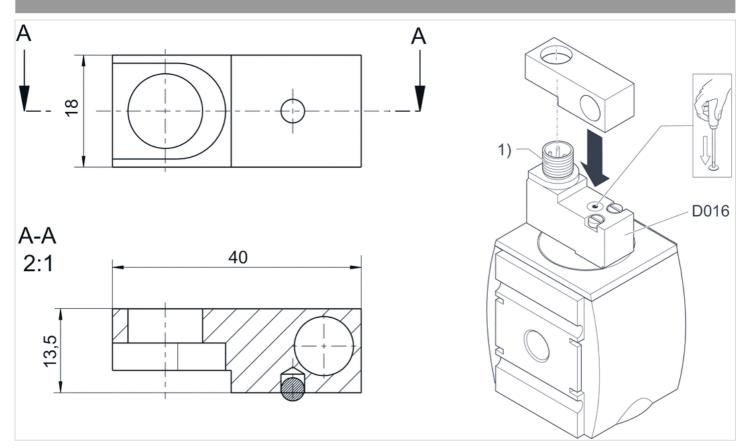
Mounting the assembly aid to the pilot valve using valve plug connector M12x1

Material	
Housing	Aluminum





Dimensions in mm



1) M12x1



mortise lock

- for AS2 AS3 AS5



Technical data

Part No.	Туре
R412007959	Standard locking, with key
R412006374	E11 locking, without key

Technical information

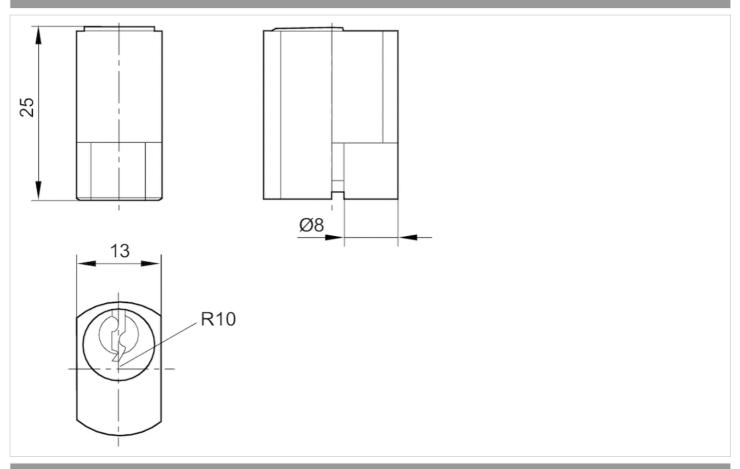
Material	
Housing	Steel



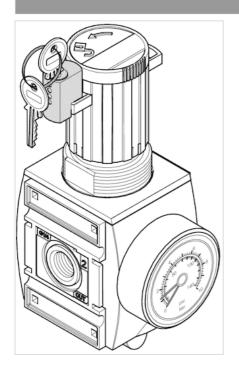


Dimensions

Dimensions in mm



Application example





Key for E11 locking

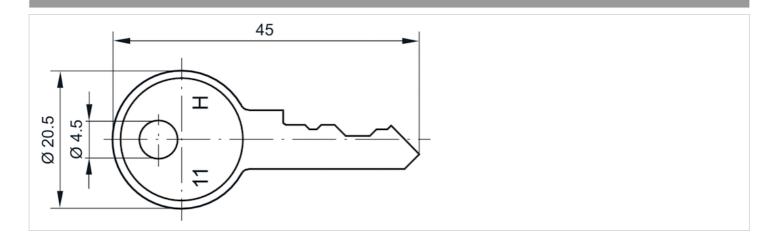


Technical data

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) \pm 0,2 % Switching time \pm 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 $\pm 0.5\%$ 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	- D P P	-1 0 bar	5 bar
R412010769	- N H	-1 0 bar	5 bar
R412010775	- D P P	-1 0 bar	5 bar
R412010763	- H	-1 1 bar	5 bar
R412010771		0 6 bar	15 bar
R412010765	- D- P2	0 6 bar	15 bar
R412010777	- D P P	0 6 bar	15 bar
R412010773	- D- P	0 10 bar	15 bar
R412010767		0 10 bar	15 bar
R412010779	- D- P2	0 10 bar	15 bar
R412010782	- D P P	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

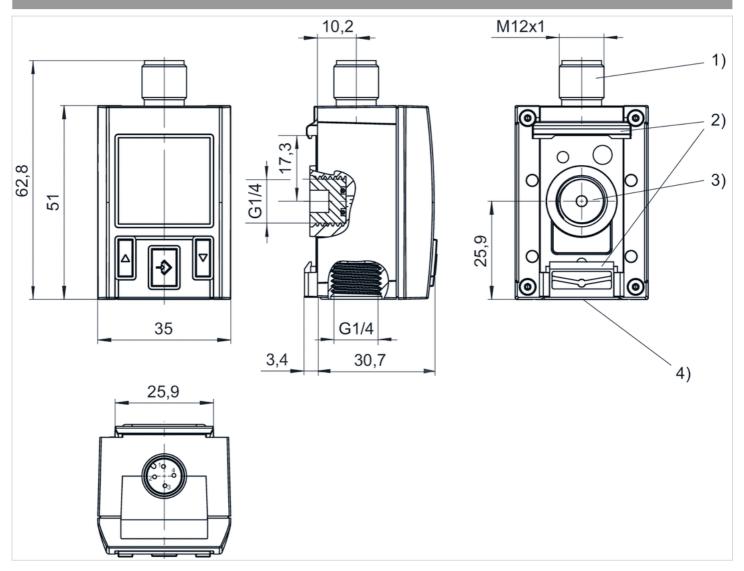
Alternative pressure connection (G1/4) on the rear side (closed with plug) Display color selectable, red or green

Technical information

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

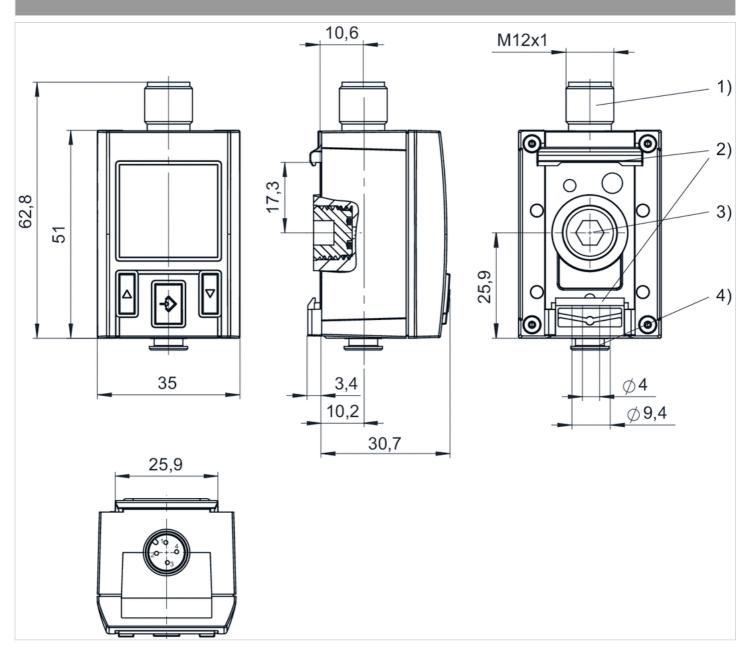


Dimensions



- 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



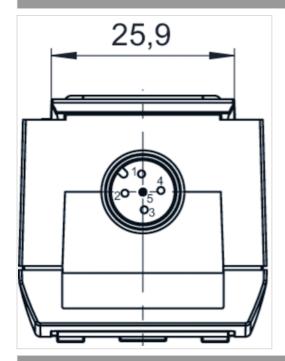


- 1) M12x1 electrical connection
- 2) Mounting for hat rail and wall mounting
- 3) Alternative pressure connection (G1/4) closed with plug
- 4) Pressure connection, tubing Ø 4 mm

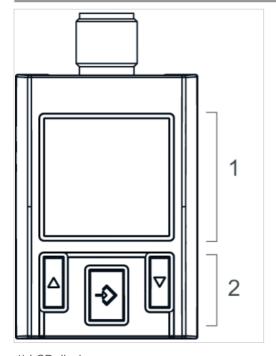




Fig. 3, Electr. connection for leak test



Display and operation area



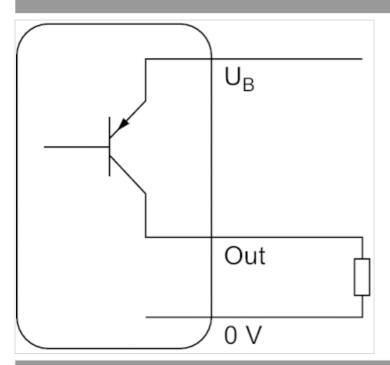
- 1) LCD display
- 2) Control panel with 3 buttons



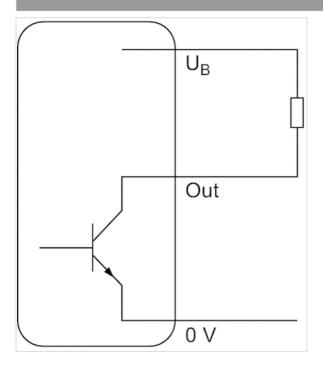


Diagrams

Operating mode, PNP

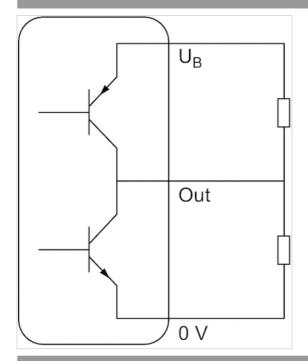


Operating mode, NPN

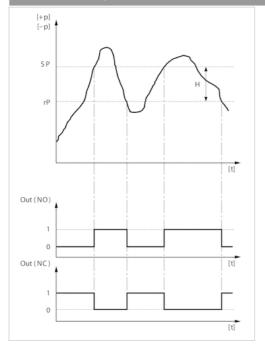




Operating mode, Push-pull



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



H: Hysteresis

SP = switching point

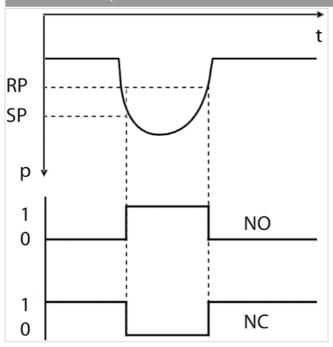
RP = resetting point

Out (NC): switch output, break contact Out (NO): switch output, make contact

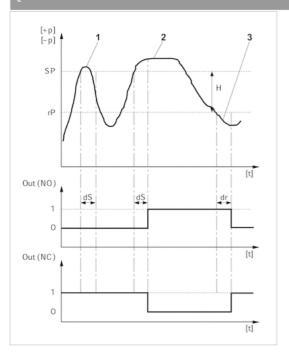




Hysteresis function: switching and resetting behavior dependent on pressure p and time t, In case of underpressure



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

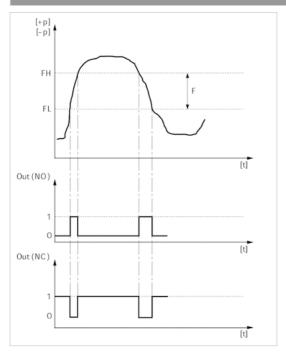
dS: switching delay

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

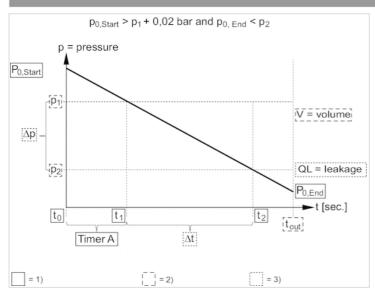


Window function: switching and resetting behavior depending on pressure p and time t



FH: pressure band, upper value FL: pressure band, lower value Out (NC): switch output, break contact Out (NO): switch output, make contact

Leakage characteristic



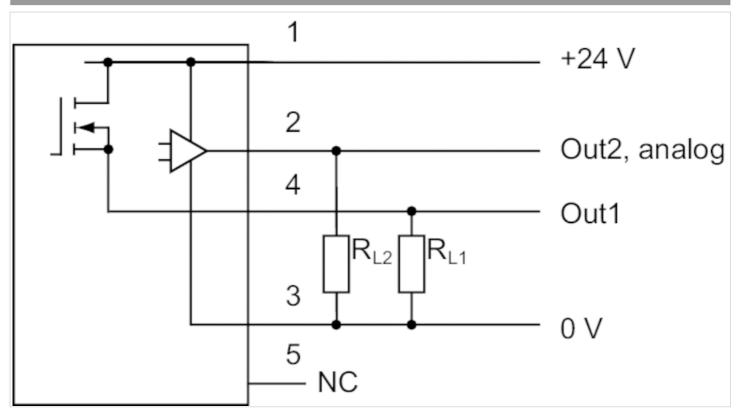
- 1) Internally stored parameter
- 2) Adjustable parameter
- 3) Output value





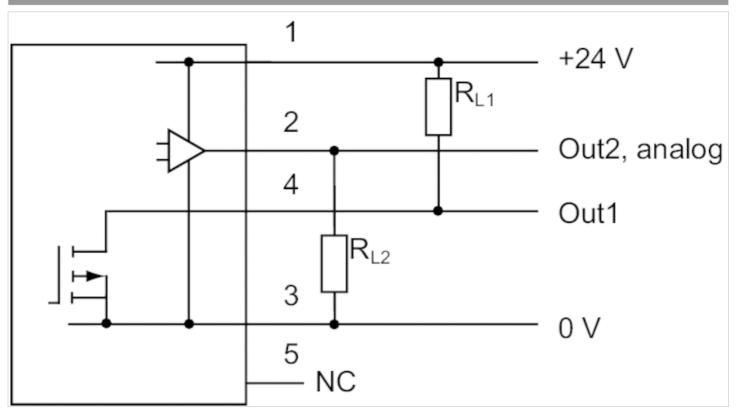
Circuit diagram

Block diagram, 1x PNP and 1x analog



RL = storable postion

Block diagram, 1x NPN and 1x analog

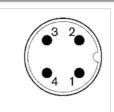


RL = storable postion



Pin assignments

Pin assignments, M12x1, 4-pin



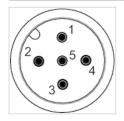
Pin	1	
Allocation	operational voltage + UB	
2		3
switch output Out2, analog: A or V, digital: PNP, NPN, push-pull		0 V

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 k Ω > 10 ms at loads >

 $100\;k\Omega$

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.		Туре	Operating pressure range
			min./max.
R412010848	- N H	PE2-P1-G014-V10-010-M012	-1 1 bar
R412010849	- N H	PE2-P1-F001-V10-010-M012	-1 1 bar
R412010853		PE2-P2-G014-V10-010-M012	-1 1 bar
R412010856	- N H	PE2-PA-G014-V10-010-M012	-1 1 bar
R412010850	- N H	PE2-P1-G014-000-160-M012	0 16 bar
R412010851	- N H	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	Fluorocaoutchouc
Electr. connection	Aluminum with polymer insert
flange connection	Nitrile butadiene rubber, Fluorocaoutchouc

Dimensions

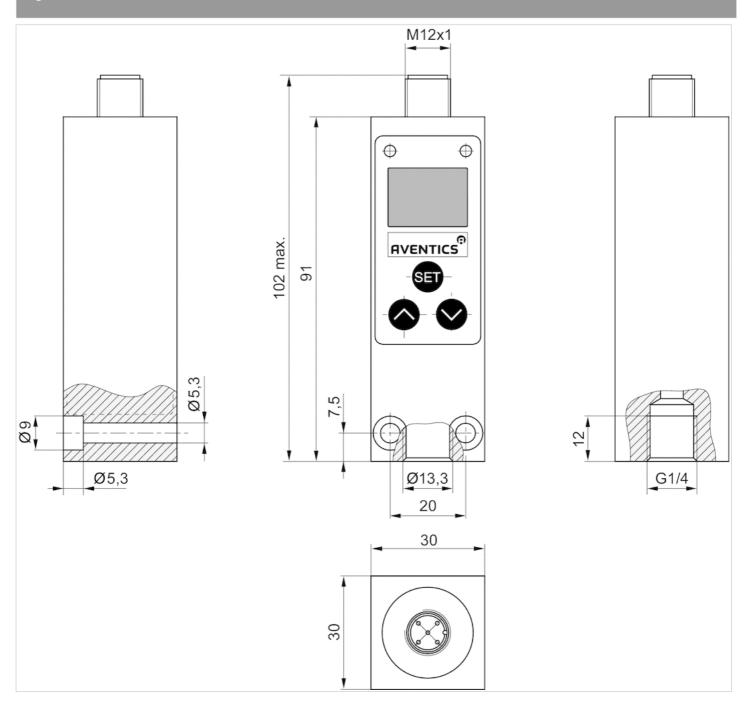
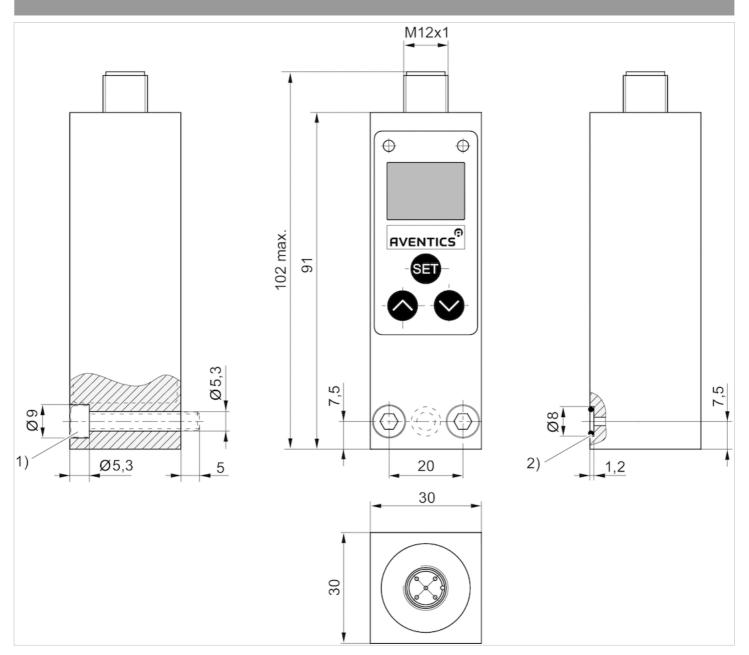






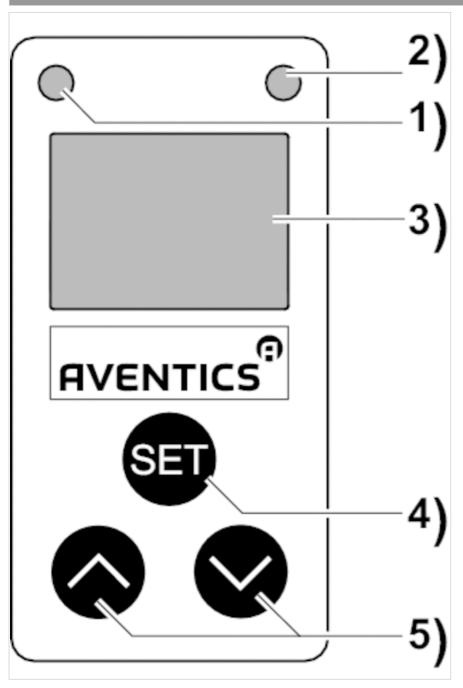
Fig. 2



- 1) cylinder screw M5x35 (included in scope of delivery)
- 2) O-ring Ø5x1,5 (included)



Display and operation area



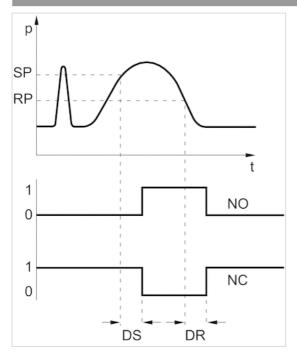
- 1) LED for switch output 1
- 2) LED for switch output 2
- 3) Display (pressure, operating modes, navigation)
- 4) Confirm menu/menu item selection
- 5) Button for menu item/parameter change selection





Diagrams

Pressure-voltage characteristics curve



SP = switching point

RP = resetting point

NO = Switching function open

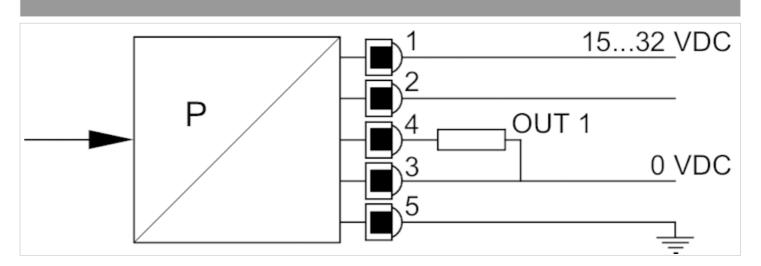
NC = Switching function closed without current

DS = Delay for the switching point

DR = Delay for the resetting point

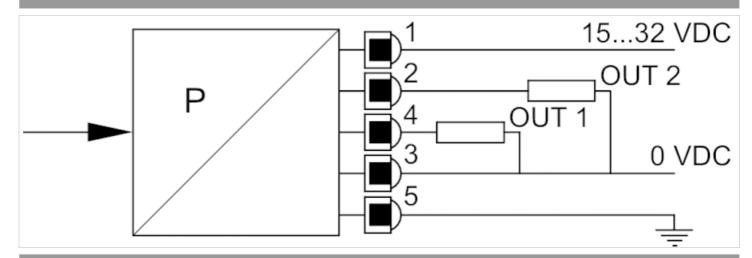
Circuit diagram

Block diagram, 1 x PNP

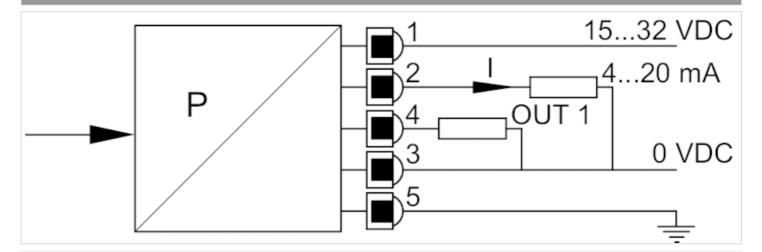




Block diagram, 2 x PNP

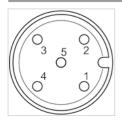


Block diagram, 1x PNP and 1x analog



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 bellow, 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.		Туре	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	->W	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	->W	PM1-M3-F001	0.2 16 bar	Flange with O-ring, Ø 5x1,5
R412010718	->W	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)

PDF creation date:





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.

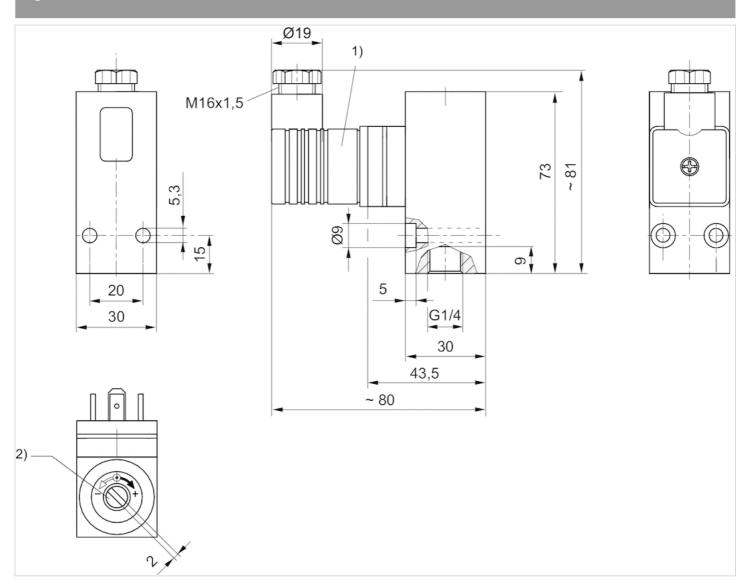
Technical information

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





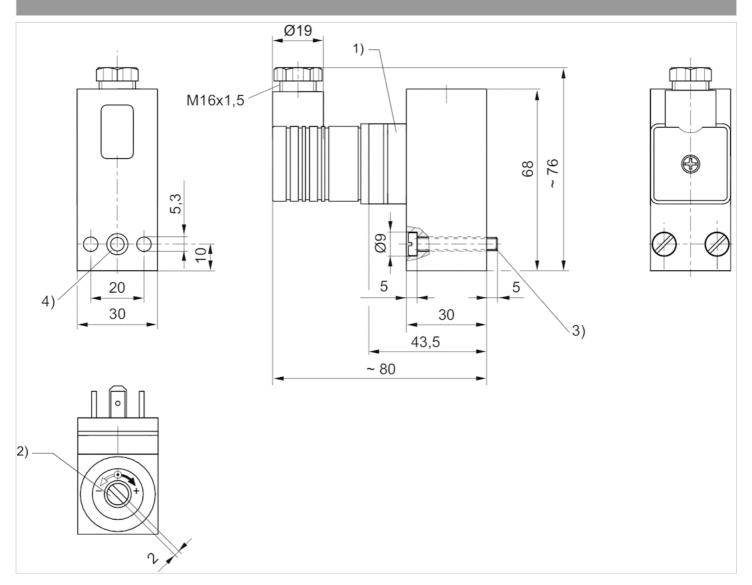
Dimensions



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







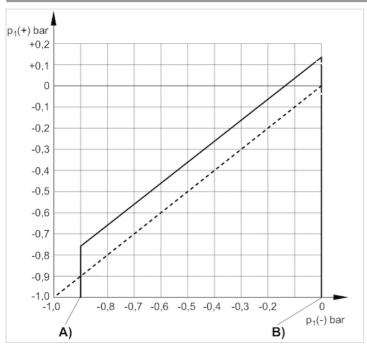
- 1) Valve plug connector
- 2) Adjustment screw, self-holding
- 3) cylinder screw M5x30 (included in scope of delivery)
- 4) O-ring Ø5x1,5 (included)





Diagrams

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



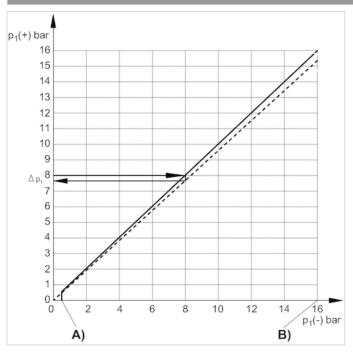
A) p1 (-), min.

B) p1 (-), max.

p1 (+) = upper switching pressure with increasing pressure

p1 (-) = lower switching pressure with decreasing pressure

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



A) p1 (-), min.

B) p1 (-), max.

p1 (+) = upper switching pressure with increasing pressure

p1 (-) = lower switching pressure with decreasing pressure

 Δ p1 = max. operating pressure difference or hysteresis Example:





p1 (+) = 8 bar > p1(-) = 7.6 bar Δ p1 = 0.4 bar

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

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

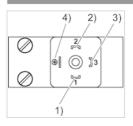
2) DC

3) $cos \approx 0.7^{\circ}$

4) L/R ≈ 10 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. switc

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.		Туре	Operating pressure range	Compressed air connection
			min./max.	
R412010716		PM1-M3-G014	-0.9 0 bar	Internal thread, G 1/4
R412010717	→\n\	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	->W	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.

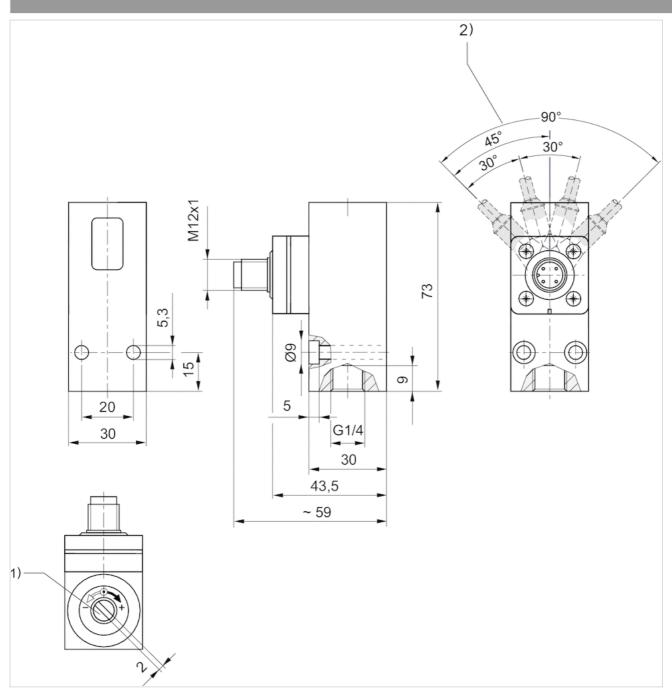
Notice:Too-high currents can damage contacts. Inductive or capacitive loads must be equipped with appropriate spark-quenching! The microswitch has silver-plated contacts.

Technical information

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



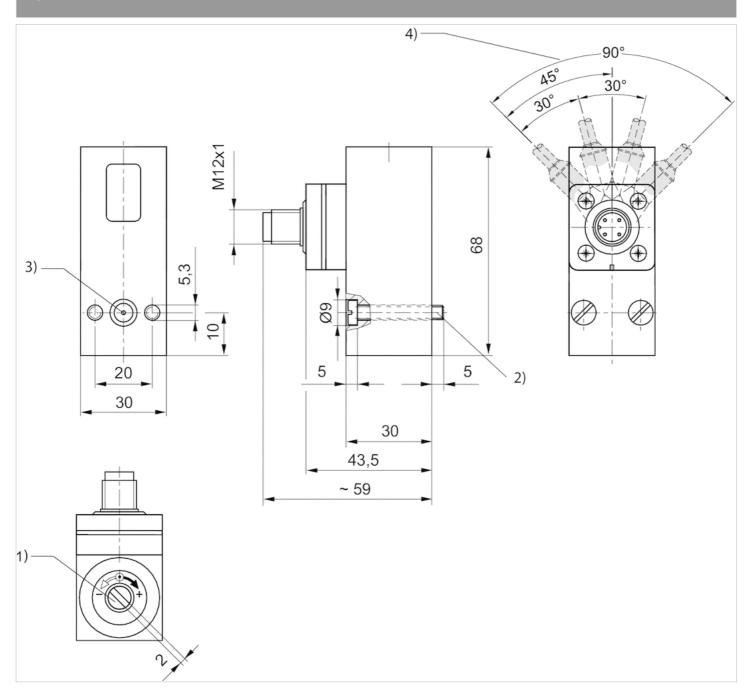
Dimensions



- 1) Adjustment screw, self-holding
- 2) Detent position







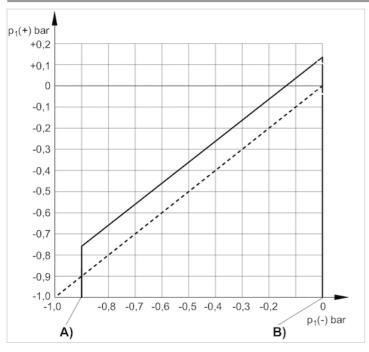
- 1) Adjustment screw, self-holding
- 2) cylinder screw M5x30 (included in scope of delivery)
- 3) O-ring Ø5x1,5 (included)
- 4) Detent position





Diagrams

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



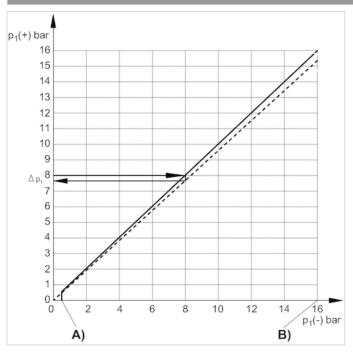
A) p1 (-), min.

B) p1 (-), max.

p1 (+) = upper switching pressure with increasing pressure

p1 (-) = lower switching pressure with decreasing pressure

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



A) p1 (-), min.

B) p1 (-), max.

p1 (+) = upper switching pressure with increasing pressure

p1 (-) = lower switching pressure with decreasing pressure

 Δ p1 = max. operating pressure difference or hysteresis Example:





p1 (+) = 8 bar > p1(-) = 7.6 bar Δ p1 = 0.4 bar

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

U [V]	l [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

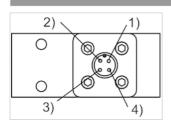
2) DC

3) $\cos \approx 0.7^{\circ}$

4) L/R ≈ 10 ms

Pin assignments

Pin assignments



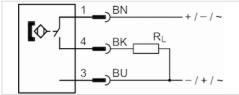
Pin	1	2	3	4
Allocation	+UB	break contact	No function	NO (make contact)



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. $-30 \dots 80 \,^{\circ}\text{C}$ Protection class IP65, IP67

Switching point precision $\pm 0,1 \,\text{mT}$ Min./max. DC operating voltage $10 \dots 30 \,\text{V}$ DC

Min./max. AC operating voltage $10 \dots 30 \,\text{V}$ AC

Hysteresis $\geq 0,2 \,\text{mT}$

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 Imax	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.



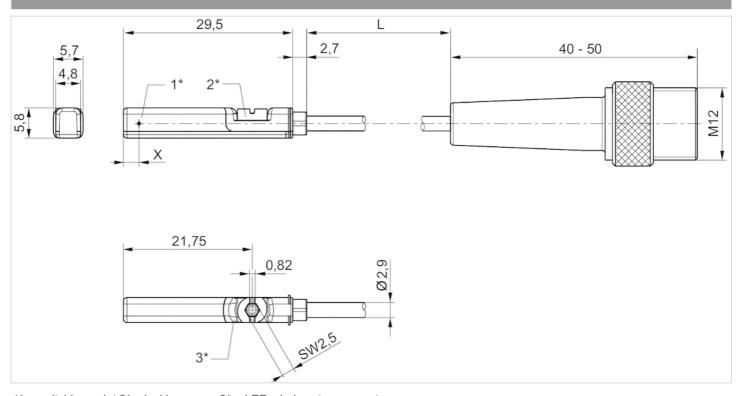


Technical information

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

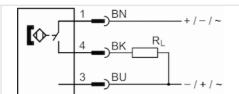
X = PNP: 11,6 mm, reed: 8,3 mm



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 Imax	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





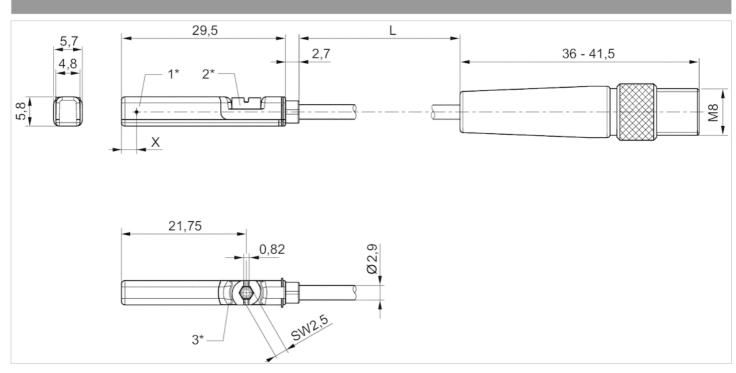
Part No.	Version
R412022873	Protected against polarity reversal
R412022875	Protected against polarity reversal
R412022874	Protected against polarity reversal

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

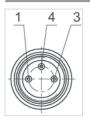
L = cable length

X = electronic: 11,6 mm, Reed: 8,3 mm



Pin assignments

Pin assignments



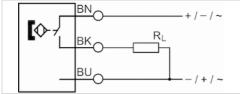
Pin		3	4
Allocation	(+)	(-)	(OUT)



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 Imax	DC switching current, max.
R412022869	I*Rs	0.3 A
R412022870	≤ 0,1 V	0.3 A
R412022871	I*Rs	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

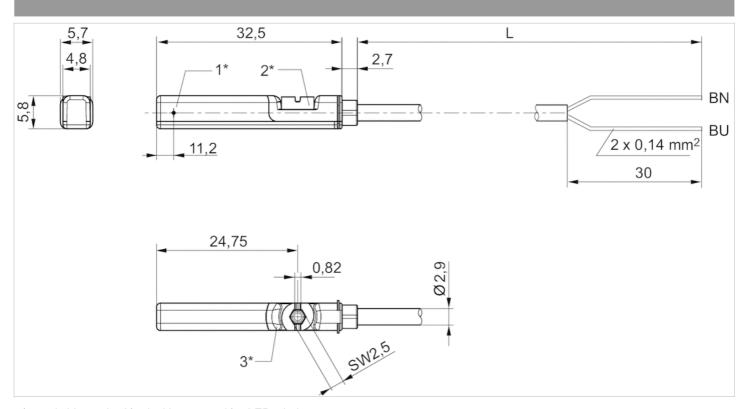
No cULus certification for 230 V variant.

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

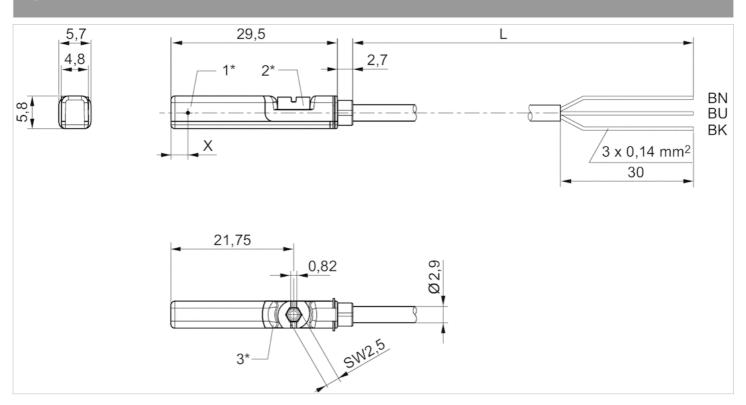
L = cable length

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 1/4 G 3/8 G 1/2
- push-in fitting
- Ø 4 Ø 6 Ø 8 Ø 10 Ø 12 Ø 14 Ø16
- 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
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
R412005000	G 3/8	Ø6	10 piece	0.032 kg
2121008380	G 3/8	Ø 8	10 piece	0.035 kg
2121010380	G 3/8	Ø 10	10 piece	0.042 kg
2121012380	G 3/8	Ø 12	10 piece	0.045 kg
2121014380	G 3/8	Ø 14	10 piece	0.046 kg
R412005005	G 3/8	Ø16	10 piece	0.058 kg
R412005001	G 1/2	Ø 8	10 piece	0.052 kg
2121010120	G 1/2	Ø 10	10 piece	0.058 kg
2121012120	G 1/2	Ø 12	10 piece	0.057 kg
2121014120	G 1/2	Ø 14	10 piece	0.064 kg
R412005006	G 1/2	Ø16	10 piece	0.067 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).



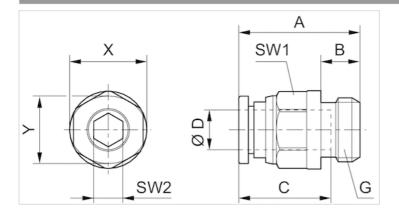


Technical information

Material	
Material	nickel-plated
Housing	Brass, nickel-plated
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



Part No.	Port D	Port G	А	В	С	SW1	SW2	Х	Y
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
R412005000	Ø 6	G 3/8	21.6	7	17	12	4	14	12
2121008380	Ø 8	G 3/8	23.2	7	18.5	14	6	16	14
2121010380	Ø 10	G 3/8	25.9	7	21	17	8	19	17
2121012380	Ø 12	G 3/8	33.5	7	23	21	9	23	21
2121014380	Ø 14	G 3/8	30.1	7	24.6	22	9	25	23
R412005005	Ø16	G 3/8	35.3	7	25.5	24	8	27	24
R412005001	Ø 8	G 1/2	25.7	8.5	18.5	14	6	16	14
2121010120	Ø 10	G 1/2	27.4	8.5	21	17	8	19	17
2121012120	Ø 12	G 1/2	29.5	8.5	23	21	10	23	21
2121014120	Ø 14	G 1/2	25.6	8.5	24.6	24	11	25	23
R412005006	Ø16	G 1/2	36.3	8.5	25.5	24	10	27	24





QR1-S-RVT standard series

- Elbow fitting
- External thread
- G 1/4 G 3/8 G 1/2
- push-in fitting
- Ø 4 Ø 6 Ø 8 Ø 10 Ø 12 Ø 14 Ø16
- 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
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
R412005092	G 3/8	Ø 6	10 piece	0.031 kg
2122008380	G 3/8	Ø 8	10 piece	0.033 kg
2122010380	G 3/8	Ø 10	10 piece	0.04 kg
2122012380	G 3/8	Ø 12	10 piece	0.044 kg
2122014380	G 3/8	Ø 14	5 piece	0.048 kg
R412005097	G 3/8	Ø16	5 piece	0.061 kg
R412005093	G 1/2	Ø 8	10 piece	0.049 kg
2122010120	G 1/2	Ø 10	10 piece	0.05 kg
2122012120	G 1/2	Ø 12	10 piece	0.056 kg
2122014120	G 1/2	Ø 14	5 piece	0.066 kg
R412005098	G 1/2	Ø16	5 piece	0.076 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).



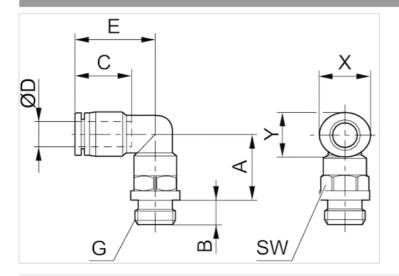


Technical information

Material	
Material	nickel-plated
Housing	Polybutyleneterephthalate
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



Part No.	Port D	Port G	А	В	С	Е	SW	Х	Y
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
R412005092	Ø 6	G 3/8	11.2	7	17	20.3	20	14	12
2122008380	Ø 8	G 3/8	11.5	7	18.5	22.6	20	16	14
2122010380	Ø 10	G 3/8	13.6	7	21	27	20	19	16
2122012380	Ø 12	G 3/8	15.3	7	22.5	29.2	20	23	21
2122014380	Ø 14	G 3/8	23.1	7	24.6	32.1	20	25	23
R412005097	Ø16	G 3/8	24.2	7	24.8	33.3	20	27	24
R412005093	Ø 8	G 1/2	12.5	8.5	18.5	22.6	24	16	14
2122010120	Ø 10	G 1/2	14.1	8.5	21	27	24	19	14
2122012120	Ø 12	G 1/2	15.8	8.5	22.5	29.2	24	23	21
2122014120	Ø 14	G 1/2	17.1	8.5	24.6	32.1	24	25	23





Part No.	Port D	Port G	А	В	С	Е	SW	Х	Υ
R412005098	Ø16	G 1/2	18.2	8.5	24.8	33.3	24	27	24





Series QR2-S-RPN standard

- Straight fitting
- External thread
- G 1/4 G 3/8 G 1/2
- push-in fitting
- Ø 4 Ø 5 Ø 6 Ø 8 Ø 10 Ø 12 Ø 14 Ø16
- 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.
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
1823373050	G 3/8	Ø 8	10 piece	0.021 kg	Fig. 1
1823373051	G 3/8	Ø 10	10 piece	0.028 kg	Fig. 1
1823373052	G 3/8	Ø 12	5 piece	0.038 kg	Fig. 1
1823373053	G 3/8	Ø 14	5 piece	0.059 kg	Fig. 1
1823373054	G 1/2	Ø 12	5 piece	0.048 kg	Fig. 1
1823373055	G 1/2	Ø 14	5 piece	0.064 kg	Fig. 1
R412007955	G 1/2	Ø16	1 piece	0.072 kg	Fig. 1

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

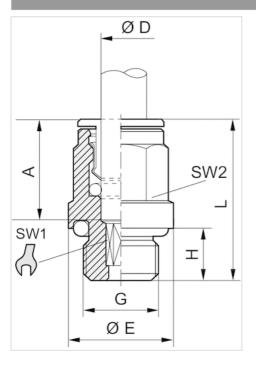
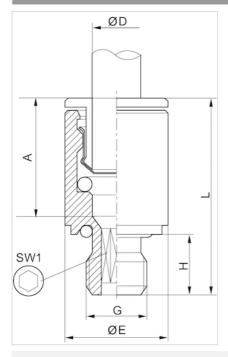




Fig. 2



Part No.	Port D	Port G	ØE	Н	L	A Insertion depth	SW 1	SW 2	Fig.
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
1823373050	Ø 8	G 3/8	20	9	25	18	6	13	Fig. 1
1823373051	Ø 10	G 3/8	21	9	29.5	19	8	16	Fig. 1
1823373052	Ø 12	G 3/8	21	9	31	20	10	18	Fig. 1
1823373053	Ø 14	G 3/8	21	9	34	22	10	21	Fig. 1
1823373054	Ø 12	G 1/2	24	11	31	20	10	18	Fig. 1
1823373055	Ø 14	G 1/2	24	11	34	22	12	21	Fig. 1
R412007955	Ø16	G 1/2	24	11	37	12	24	-	Fig. 1



Series QR2-S-RVT standard

- Elbow fitting, rotatable
- External thread
- G 1/4 G 3/8 G 1/2
- push-in fitting
- Ø 4 Ø 6 Ø 8 Ø 10 Ø 12 Ø 14 Ø16
- 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
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
1823391716	G 3/8	Ø 8	5 piece	0.042 kg
1823391717	G 3/8	Ø 10	5 piece	0.042 kg
1823391838	G 3/8	Ø 12	5 piece	0.045 kg
1823391839	G 3/8	Ø 14	5 piece	0.062 kg
R412010182	G 3/8	Ø16	1 piece	0.072 kg
R412007589	G 1/2	Ø 10	5 piece	0.046 kg
1823391840	G 1/2	Ø 12	5 piece	0.065 kg
1823391841	G 1/2	Ø 14	5 piece	0.07 kg
R412007956	G 1/2	Ø16	1 piece	0.084 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).

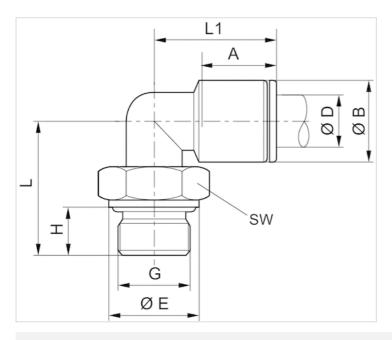




Technical information

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

Dimensions



Part No.	Port D	Port G	ØB	ØE	Н	L	L1	A Insertion depth	SW
1823391713	Ø 4	G 1/4	9	16	8	24	19	15	13
1823391714	Ø6	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
1823391716	Ø8	G 3/8	13	20	9	25.5	24	18	13
1823391717	Ø 10	G 3/8	15	20	9	28	27	19	16
1823391838	Ø 12	G 3/8	17	20	9	28.5	28	20	20
1823391839	Ø 14	G 3/8	20	20	9	28.5	31	22	20
R412010182	Ø16	G 3/8	23	20	9	33.5	33	23.5	20
R412007589	Ø 10	G 1/2	15	25	11	30	27	19	16
1823391840	Ø 12	G 1/2	17	25	11	33.5	28	20	20
1823391841	Ø 14	G 1/2	20	25	11	33.5	31	22	20
R412007956	Ø16	G 1/2	23	25	11	38	33	23.5	20



Series NU2

- Swivel banjo connection 1-fold
- External thread
- G 3/8 G 1/2
- plug-in with tube nut
- Ø 8 Ø 13
- 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
1823391296	G 3/8	Ø8	2 piece	0.056 kg
R412007839	G 3/8	Ø 13	2 piece	0.079 kg
R412007838	G 1/2	Ø 13	2 piece	0.098 kg

Technical information

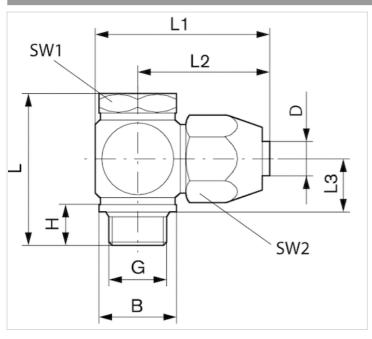
For further information about assembling and tolerances of adaptable tubing can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Aluminum, anodized
Seal	Polyvinyl chloride



Dimensions



for fabric-reinforced plastic tubing

Dimensions

Part No.	Port D	Port G	В	Н	L	L1	L2	L3	SW1	SW2
1823391296	Ø 8	G 3/8	21	12.5	43	47	35	15.5	22	22
R412007839	Ø 13	G 3/8	22.9	12.5	47	49	37	18.5	22	30
R412007838	Ø 13	G 1/2	22.9	14	49.5	55	40	18.5	27	30

Connection D = inside diameter of the tubing to be used





Double nipple, Series PE5

- External thread

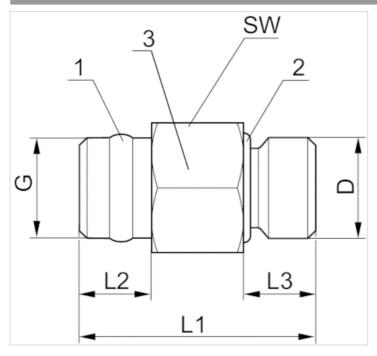


Weight per piece 0.04 kg

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



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





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 G 1/4
- FPT-S-RIO



Working pressure min./max. 0 ... 16 bar Ambient temperature min./max. -20 ... 80 °C

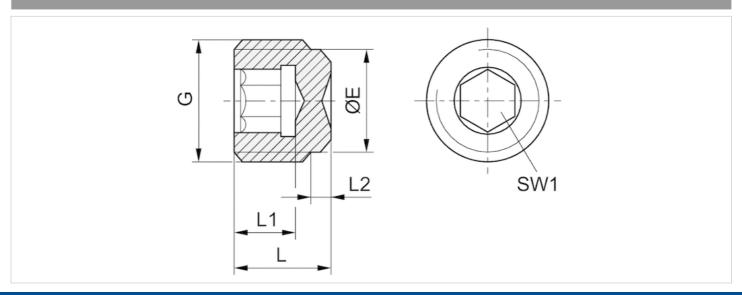
Technical data

Part No.	Port G	Delivery unit
1823462004	G 1/8	10 piece
1823462003	G 1/4	10 piece

Technical information

Material	
Material	Brass

Dimensions







Port G	ØE	L	L1	L2	SW1
G 1/8	8	8	5	2	5
G 1/4	11	11	7	3.5	6





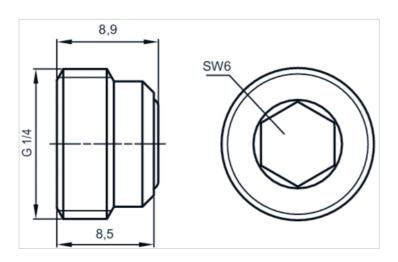


Technical data

Part No.	Туре	Suitable for	Delivery unit
R412010124	plugs	Pressure gauge connection: G 1/4	10 piece

Technical information

Material	
Housing	Polyamide
Seal	Acrylonitrile butadiene rubber





Reducing nipple

- External thread
- G 3/8 G 1/2
- Internal thread
- G 1/4 G 3/8
- FPT-S-RDZ



Working pressure min./max. 0 ... 60 bar Ambient temperature min./max. -20 ... 70 °C

Technical data

Part No.	Port G	Port D	Delivery unit
1823391013	G 3/8	G 1/4	10 piece
1823391300	G 1/2	G 1/4	5 piece
1823391014	G 1/2	G 3/8	5 piece

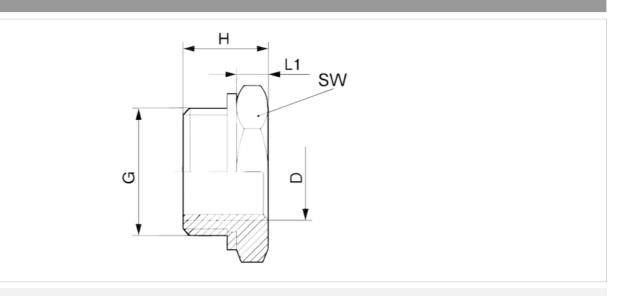
Technical information

Material	
Material	Brass, nickel-plated
Seal	Polyvinyl chloride, hard





Dimensions



Part No.	Port D	Port G	Н	L1	SW
1823391013	G 1/4	G 3/8	15	5	19
1823391300	G 1/4	G 1/2	15.5	5.5	24
1823391014	G 3/8	G 1/2	15.5	5.5	24



Sealing ring

- Acrylonitrile butadiene styrene



Working pressure min./max. $-0.95 \dots 16$ bar Ambient temperature min./max. $-10 \dots 60$ °C

Technical data

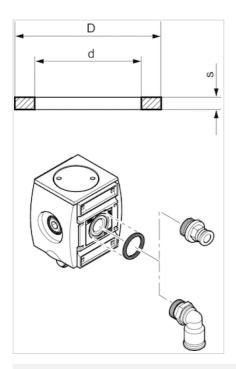
Part No.	Port G	Delivery unit
R412010148	G 3/8	10 piece
R412010149	G 1/2	10 piece
R412010150	G 1	10 piece

For inserting into the O-ring groove when using series QR1 and QR2 fittings.

Technical information

Material	
Material	Acrylonitrile butadiene styrene





Part No.	usage	Туре		D	S
R412010148	AS2	For compressed air connection G 3/8	18.5	22.8	2.0
R412010149	AS3	For compressed air connection G 1/2	22.4	26.4	2.0
R412010150	AS5	For compressed air connection G 1	36.9	41.9	2.0



Silencers, series SI1

- G 1/2
- Sintered bronze



Working pressure min./max. 0 ... 10 bar

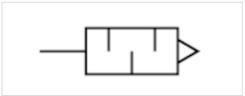
Ambient temperature min./max. -25 ... 80 °C

Medium Compressed air

Sound pressure level 90 dB
Weight 0.08 kg

Comment Flow characteristic curves can be found

under "Diagrams".



Technical data

Part No.	Compressed air connection	Flow	Delivery unit	
		Qn		
1827000003	G 1/2	7223 l/min	2 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.

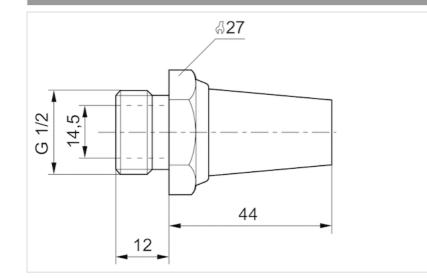
Technical information

Material	
Silencer	Sintered bronze
Thread	Brass

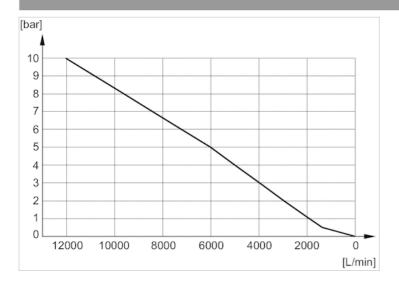




Dimensions in mm



Diagrams





Silencers, series SI1

- G 1/2
- Sintered bronze



Working pressure min./max. 0 ... 10 bar

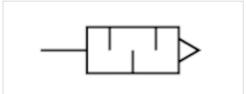
Ambient temperature min./max. -25 ... 80 °C

Medium Compressed air

Sound pressure level 85 dB
Weight 0.035 kg

Comment Flow characteristic curves can be found

under "Diagrams".



Technical data

Part No.	Compressed air connection	Flow	Delivery unit	
		Qn		
1827000035	G 1/2	2568 l/min	2 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.

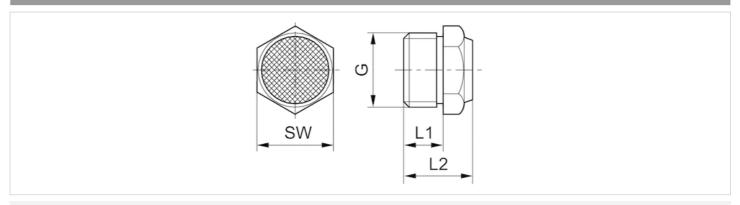
Technical information

Material		
	Silencer	Sintered bronze
	Thread	Brass





Dimensions

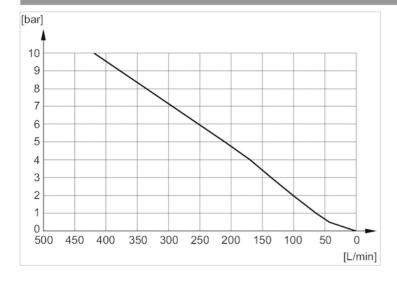


Dimensions

Part No.	Port G	L1	L2	SW
1827000035	G 1/2	12	19.5	27

Sound pressure level measured at 6 bar at 1 m distance

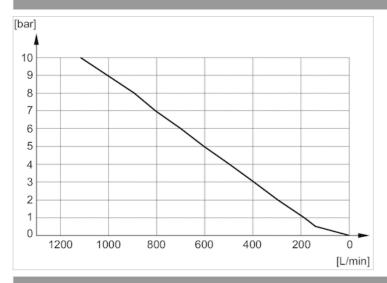
Diagrams



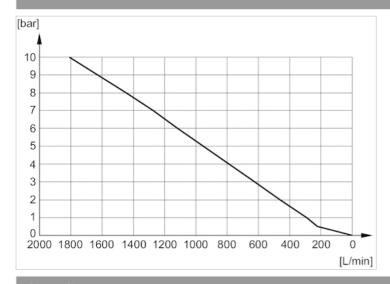


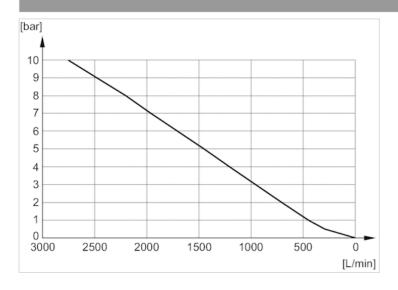


Flow diagram, 182700003°



Flow diagram, 1827000033

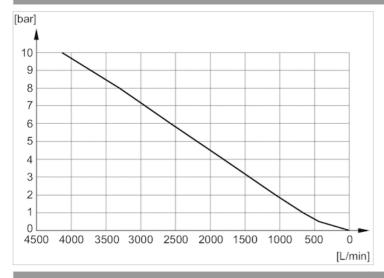




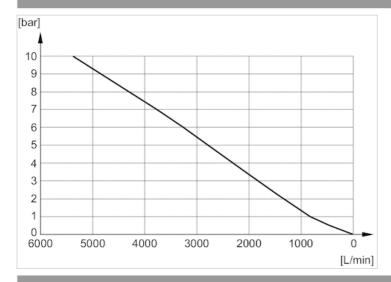


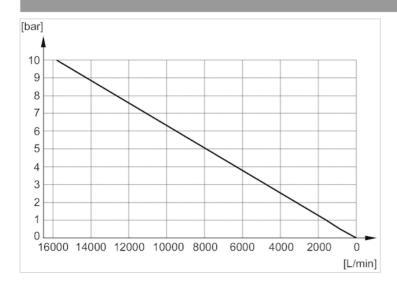


Flow diagram, 1827000035



Flow diagram, 8145003400









Silencers, series SI1

- G 1/2
- Polyethylene



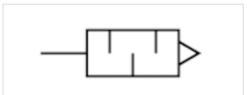
Working pressure min./max. 0 ... 10 bar

Ambient temperature min./max. -25 ... 80 °C

Medium Compressed air

Sound pressure level 88 dB

Weight 0.013 kg



Technical data

Part No.	Compressed air connection	Flow	Delivery unit	
		Qn		
1827000022	G 1/2	7142 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

Flow characteristic curves can be found under "Diagrams".

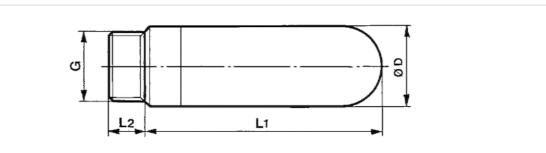
Technical information

Material	
Silencer	Polyethylene
Thread	Polyethylene





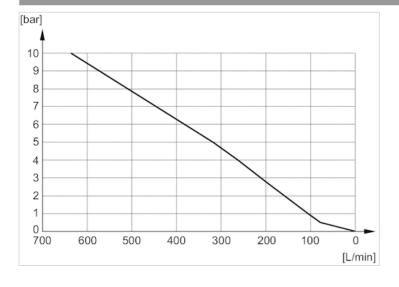
Dimensions



Dimensions

Part No.	Port G	ØD	L1	L2
1827000022	G 1/2	23.3	66.5	11

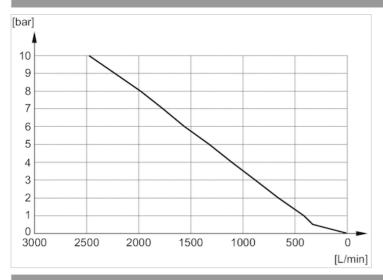
Diagrams



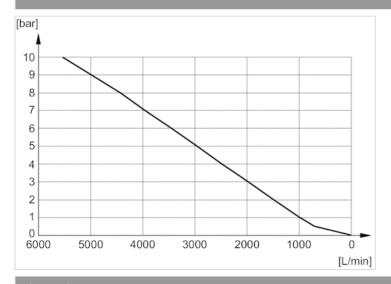


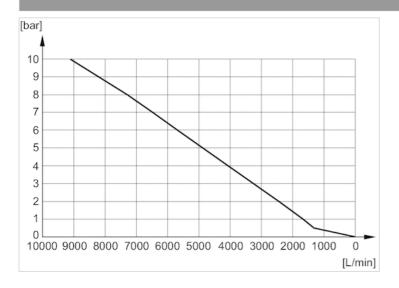


Flow diagram, 1827000019



Flow diagram, 1827000020

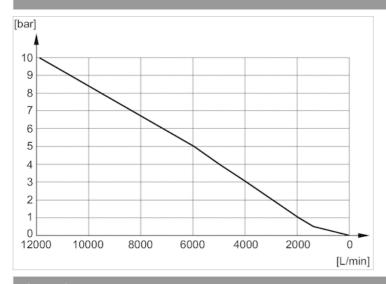




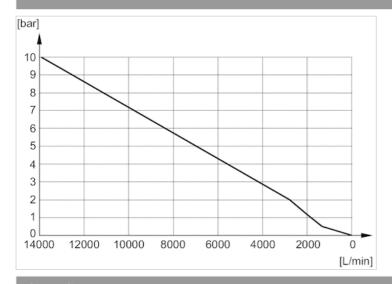


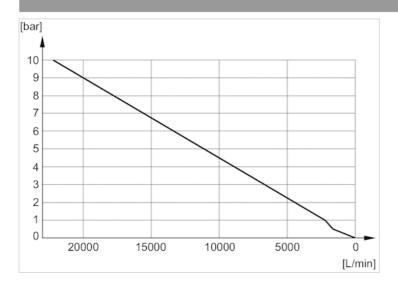


Flow diagram, 1827000022



Flow diagram, 1827000023





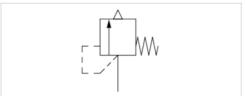


Series RV1

- Qn 1▶2 = 676-16037 I/min
- thread-in
- External thread
- G 1/4 G 3/8 G 1/2
- Uncollected



Version Poppet valve
Certificates CE declaration of conformity
Working pressure min./max. 0 ... 20 bar
Opening pressure of valve See table below
Ambient temperature min./max. -20 ... 100 °C
Medium 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 I/min
R412007526	G 1/4	4.8 bar	2424 I/min
R412007527	G 1/4	6 bar	2933 I/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 I/min
R412007531	G 1/4	15 bar	6755 I/min
R412007532	G 1/4	16 bar	7179 l/min
R412007533	G 3/8	2 bar	2194 l/min
R412007534	G 3/8	3.7 bar	3567 l/min
R412007535	G 3/8	4 bar	3799 l/min
R412007721	G 3/8	5 bar	4573 l/min
R412007536	G 3/8	6 bar	5347 l/min
R412007537	G 3/8	6.8 bar	5966 I/min
R412007538	G 3/8	8 bar	6895 I/min
R412007539	G 3/8	10 bar	8443 l/min



Part No.	Port 1	Opening pressure of valve	Flow
			Qn 1 ► 2
R412007540	G 3/8	11 bar	9217 l/min
R412007541	G 3/8	16 bar	13087 l/min
R412007542	G 1/2	0.4 bar	1115 l/min
R412007720	G 1/2	2.9 bar	3613 l/min
R412007690	G 1/2	3.5 bar	4182 l/min
R412007691	G 1/2	4 bar	4656 l/min
R412007692	G 1/2	5 bar	5604 l/min
R412007699	G 1/2	5.5 bar	6142 l/min
R412007696	G 1/2	6 bar	6553 l/min
R412007702	G 1/2	6.5 bar	7101 l/min
R412007698	G 1/2	7 bar	7501 l/min
R412007697	G 1/2	8 bar	8449 l/min
R412007693	G 1/2	8.5 bar	9018 l/min
R412007694	G 1/2	9 bar	9398 l/min
R412007700	G 1/2	10 bar	10346 l/min
R412007701	G 1/2	10.5 bar	10934 l/min
R412007695	G 1/2	11 bar	11295 l/min
R412007703	G 1/2	12 bar	12243 l/min
R412007543	G 1/2	16 bar	16037 l/min

Technical information

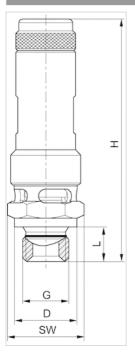
The specified performance values are achieved at a 10% (PE 1 bar , 0.1 bar) pressure increase, measured with compressed air at 20 $^{\circ}$ C .

Material	
Housing	Brass
Seals	Fluorocaoutchouc





Dimensions



G = connection 1

Dimensions

5 (1)	5 / 6	~ 5			0111		
Part No.	Port G	ØD	Н	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
R412007533	G 3/8	22	75	10	24	40	10
R412007534	G 3/8	22	75	10	24	40	10
R412007535	G 3/8	22	75	10	24	40	10
R412007721	G 3/8	22	75	10	24	40	10
R412007536	G 3/8	22	75	10	24	40	10
R412007537	G 3/8	22	75	10	24	40	10
R412007538	G 3/8	22	75	10	24	40	10
R412007539	G 3/8	22	88	10	24	40	10
R412007540	G 3/8	22	88	10	24	40	10
R412007541	G 3/8	22	88	10	24	40	10
R412007542	G 1/2	26	78	12	27	50	15





Part No.	Port G	ØD	Н	L	SW	T [Nm]	NW
R412007720	G 1/2	26	78	12	27	50	15
R412007690	G 1/2	26	78	12	27	50	15
R412007691	G 1/2	26	78	12	27	50	15
R412007692	G 1/2	26	78	12	27	50	15
R412007699	G 1/2	26	78	12	27	50	15
R412007696	G 1/2	26	78	12	27	50	15
R412007702	G 1/2	26	78	12	27	50	15
R412007698	G 1/2	26	78	12	27	50	15
R412007697	G 1/2	26	77.5	12	27	50	15
R412007693	G 1/2	26	91	12	27	50	15
R412007694	G 1/2	26	91	12	27	50	15
R412007700	G 1/2	26	91	12	27	50	15
R412007701	G 1/2	26	91	12	27	50	15
R412007695	G 1/2	26	91	12	27	50	15
R412007703	G 1/2	26	91	12	27	50	15
R412007543	G 1/2	26	91	12	27	50	15

T = maximum torque NW = nominal width





- Socket M12x1 5-pin A-coded angled 90°
- open cable ends
- with cable
- shielded



Ambient temperature min./max. -25 ... 80 °C
Operational 48 V AC/DC

voltage

Protection class IP67
Wire cross-section 0.34 mm²

Weight See table below

1)	- BN
2)	- WH
3)	- BU
4)	- BK
5)	- GY

Technical data

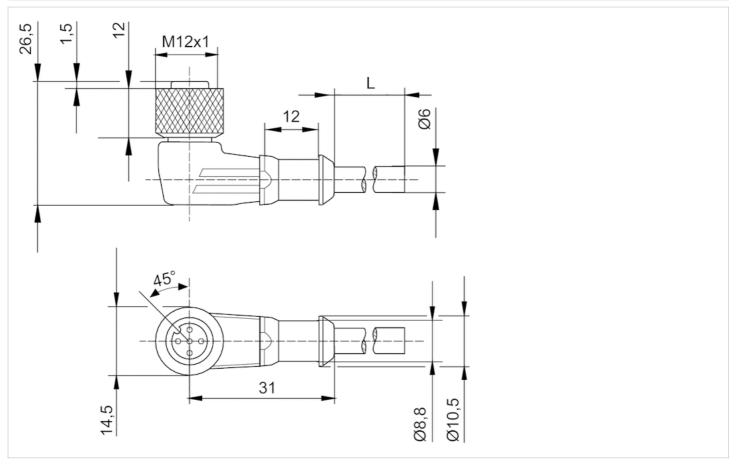
Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
R419800109	4 A	5	6 mm	2.5 m	0.145 kg
R419800110	4 A	5	6 mm	5 m	0.27 kg
R419800546	4 A	5	6 mm	10 m	0.514 kg

Material	
Housing	Thermoplastic elastomer
Cable sheath	Polyurethane





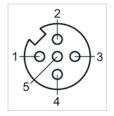
Dimensions



L = length

Pin assignments

Pin assignment, socket



- (1) BN=brown
- (2) WH=white
- 3) BU=blue
- (4) BK=black
- (5) GY=grey





Round plug connectors with cable, Series CON-RD

- Plug M12x1 8-pin X-coded angled 90°
- Plug RJ45 8-pin X-coded straight
- shielded



Ambient temperature min./max. -25 ... 85 °C

Protection class IP66K

Wire cross-section 0.14 mm²



Technical data

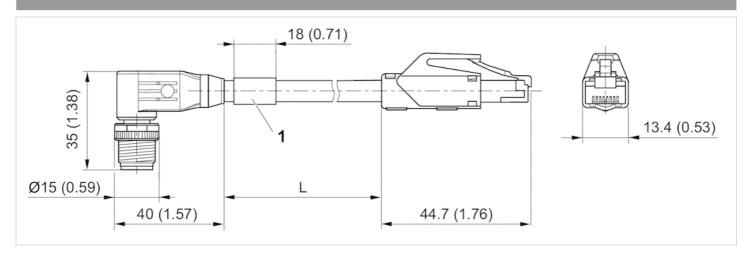
Part No.	Max. current	Cable length
R412027647	0.5 A	5 m

Material	
Cable sheath	Polyurethane





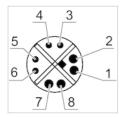
Dimensions



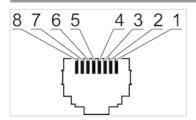
1) Name plate

Pin assignments

Plug pin assignment



Plug pin assignment







- Socket M12x1 5-pin A-coded angled 90°
- open cable ends
- with cable
- shielded



Ambient temperature min./max. $-25 \dots 80 \,^{\circ}\text{C}$ Operational $48 \,^{\circ}\text{V} \,^{\circ}\text{C}$

voltage

Protection class IP67
Wire cross-section 0.34 mm²

Weight See table below

1) BN
2 > wh
3 > BU
4
5) GY

Technical data

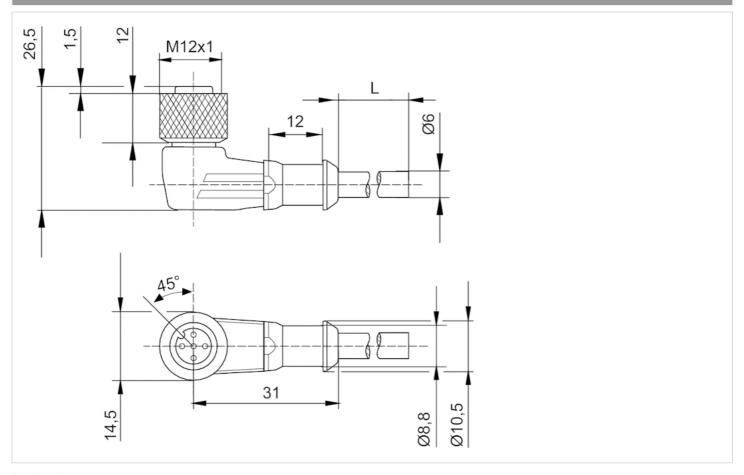
Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
R419800109	4 A	5	6 mm	2.5 m	0.145 kg
R419800110	4 A	5	6 mm	5 m	0.27 kg
R419800546	4 A	5	6 mm	10 m	0.514 kg

Material		
Housing	Thermoplastic elastomer	
Cable sheath	Polyurethane	





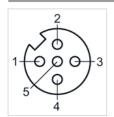
Dimensions



L = length

Pin assignments

Pin assignment, socket



- (1) BN=brown
- (2) WH=white
- 3) BU=blue
- (4) BK=black
- (5) GY=grey





- Socket, M12x1, 5-pin, A-coded, angled, 90°
- for CANopen
- UL (Underwriters Laboratories)
- shielded



Connection type Screws

Ambient temperature min./max. -40 ... 85 °C

Operational 48 V AC/DC

voltage

Protection class IP67

Weight 0.072 kg

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Technical data

Part No.	Max. current	suitable cable-Ø min./max
1824484029	4 A	6 / 8 mm

Technical information

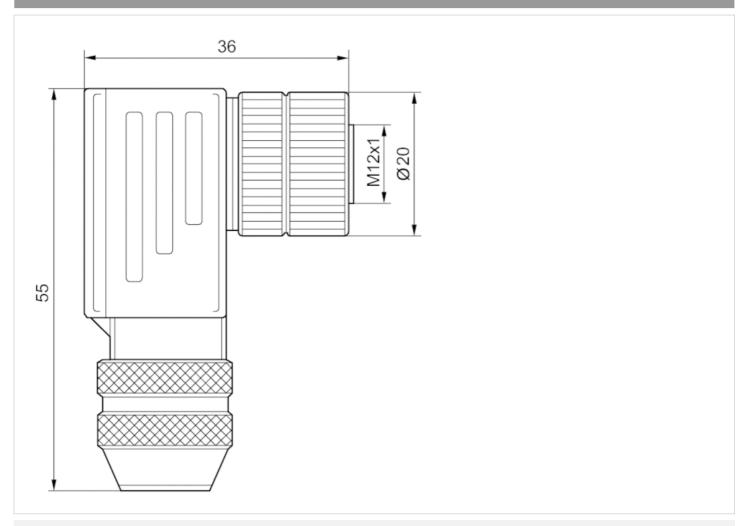
The specified protection class is only valid in assembled and tested state.

Material	
Housing	Die cast zinc



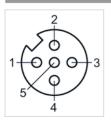


Dimensions



Pin assignments

Pin assignment, socket







- Socket M12x1 5-pin A-coded angled 90°
- open cable ends
- with cable
- shielded



Ambient temperature min./max. -25 ... 80 °C
Operational 48 V AC/DC

voltage

Protection class IP67
Wire cross-section 0.34 mm²

Weight See table below

1)	- BN
2)	- WH
3)	- BU
4)	- BK
5)	- GY

Technical data

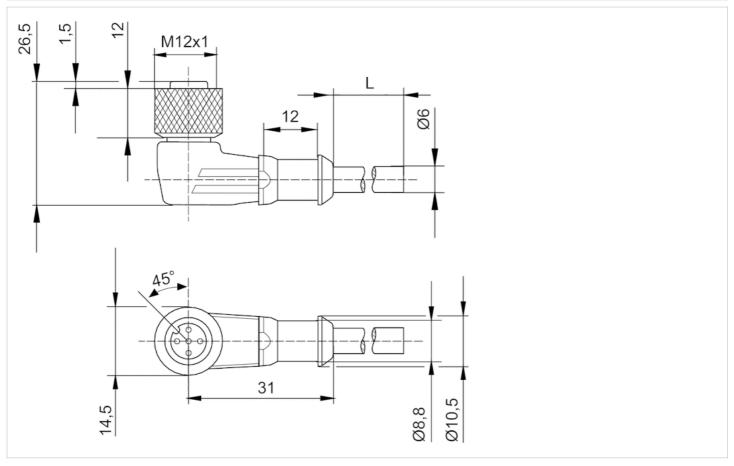
Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
R419800109	4 A	5	6 mm	2.5 m	0.145 kg
R419800110	4 A	5	6 mm	5 m	0.27 kg
R419800546	4 A	5	6 mm	10 m	0.514 kg

Material		
Housing	Thermoplastic elastomer	
Cable sheath	Polyurethane	





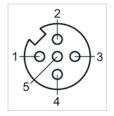
Dimensions



L = length

Pin assignments

Pin assignment, socket



- (1) BN=brown
- (2) WH=white
- 3) BU=blue
- (4) BK=black
- (5) GY=grey





- Socket, M12x1, 5-pin, A-coded, straight, 180°
- for DeviceNet
- unshielded



Connection type Screws

Ambient temperature min./max. -40 ... 85 °C

Operational 48 V AC/DC

voltage

Protection class IP67
Weight 0.016 kg

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<u>i5) </u>	

Technical data

Part No.	Max. current	suitable cable-Ø min./max
4407230020	4 A	4 mm

Technical information

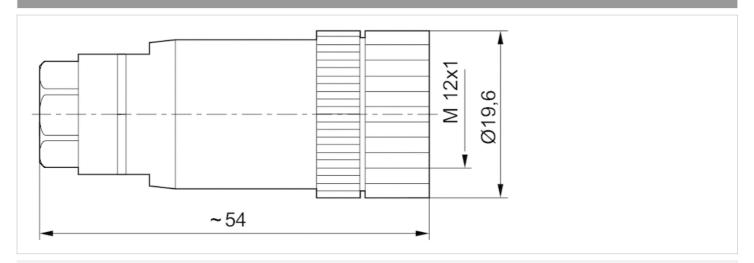
The specified protection class is only valid in assembled and tested state.

Material	
Housing	Polyamide



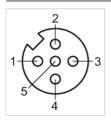


Dimensions



Pin assignments

Pin assignment, socket







- Socket, M12x1, 5-pin, A-coded, angled, 90°
- for CANopen
- UL (Underwriters Laboratories)
- shielded



Connection type Screws

Ambient temperature min./max. -40 ... 85 °C

Operational 48 V AC/DC

voltage

Protection class IP67

Weight 0.072 kg

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5
5)

Technical data

Part No.	Max. current	suitable cable-Ø min./max
1824484029	4 A	6 / 8 mm

Technical information

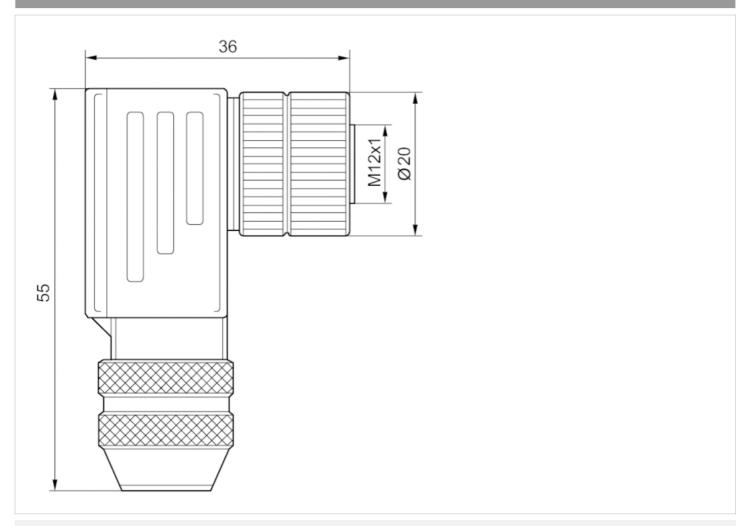
The specified protection class is only valid in assembled and tested state.

Material	
Housing	Die cast zinc



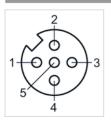


Dimensions



Pin assignments

Pin assignment, socket







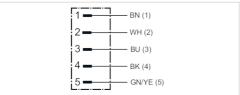
- Plug M12x1 5-pin A-coded straight 180°
- open cable ends 5-pin
- with cable
- unshielded



Protection class Weight IP68

See table below

The delivered product may vary from that in the illustration.



Technical data

Part No.	Number of wires	Cable length	Weight
8946203432	5	2 m	0.102 kg
8946203442	5	5 m	0.238 kg

with self-clinching screw

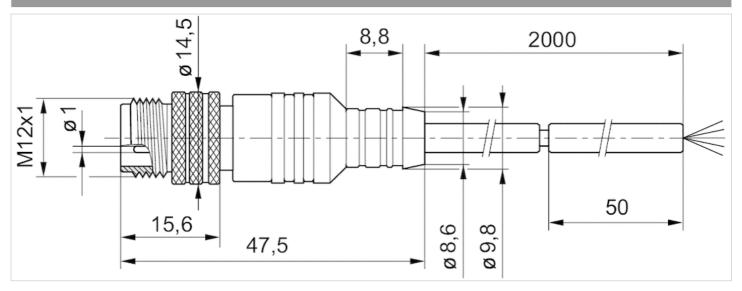
Technical information

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

Material	
Cable sheath	Polyvinyl chloride



Dimensions



L = length

Pin assignments

Plug pin assignment



- (1) BN=brown
- (2) WH=white
- (3) BU=blue
- (4) BK=black
- (5) GRN-Y=green-yellow





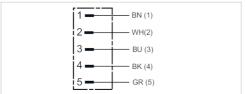
- Plug M12x1 5-pin A-coded angled 90°
- open cable ends 5-pin
- with cable
- suitable for dynamic laying
- unshielded



Ambient temperature min./max.

See table below
Operational 48 V AC/DC
voltage
Protection class IP68
Wire cross-section 0.34 mm²
Mounting screw tightening torque 0.8 Nm

Weight See table below



Technical data

Part No.	Ambient temperature min./max.	Max. current	Number of wires	Bending radius min.	Cable-Ø	Cable length
R412021691	-40 85 °C	4 A	5	50 mm	5 mm	2 m
R412021692	-40 85 °C	4 A	5	50 mm	5 mm	5 m
R412021693	-25 85 °C	4 A	5	50 mm	5 mm	10 m

Part No.	Weight
R412021691	0.093 kg
R412021692	0.2 kg
R412021693	0.381 kg

suitable for dynamic laying

Technical information

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



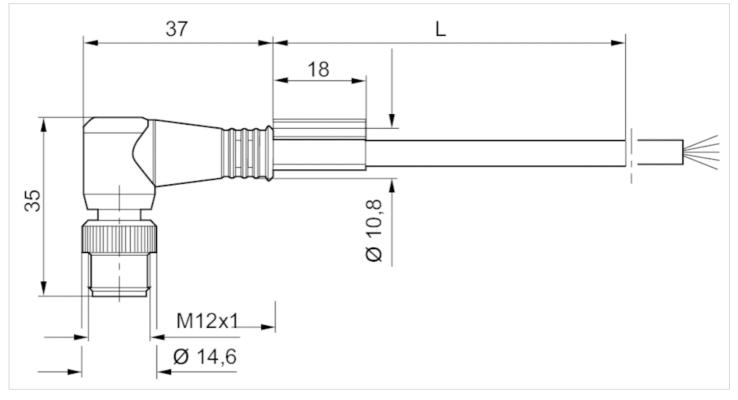


Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

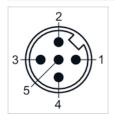
Dimensions



L = length

Pin assignments

Plug pin assignment



- (1) BN=brown
- (2) WH=white
- 3) BU=blue
- (4) BK=black
- (5) GY=grey



0.48 kg



Round plug connector, Series CON-RD

Weight

- Plug, M12x1, 5-pin, A-coded, straight, 180°
- for CANopen, DeviceNet
- UL (Underwriters Laboratories)
- shielded



Connection type Screws

Ambient temperature min./max. -40 ... 85 °C

Operational 48 V AC/DC voltage

Protection class IP67

1 =
3 -
4 - 5 - -

Technical data

Part No.	Max. current	suitable cable-Ø min./max
8942051612	4 A	6 / 8 mm

Technical information

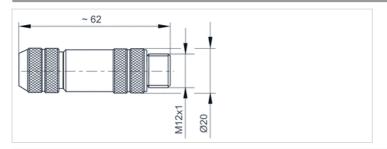
The specified protection class is only valid in assembled and tested state.

Material	
Housing	Brass, nickel-plated



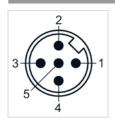


Dimensions



Pin assignments

Plug pin assignment







- Plug, M12x1, 5-pin, A-coded, angled, 90°
- for CANopen
- UL (Underwriters Laboratories)
- shielded



Connection type Screws

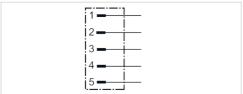
Ambient temperature min./max. -40 ... 85 °C

Operational 48 V AC/DC

voltage

Protection class IP67

Weight 0.068 kg



Technical data

Part No.	Max. current	suitable cable-Ø min./max
1824484028	4 A	6 / 8 mm

Technical information

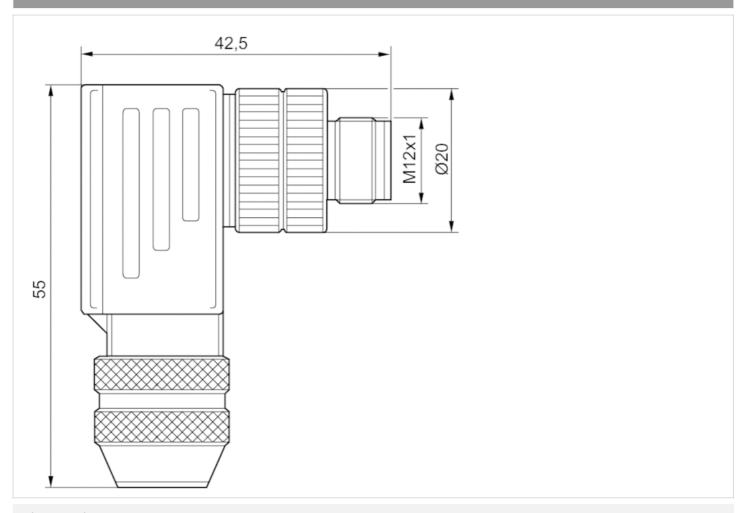
The specified protection class is only valid in assembled and tested state.

Material	
Housing	Brass, nickel-plated



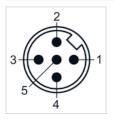


Dimensions



Pin assignments

Plug pin assignment







Mounting clip, Series AS3-MBR-...-W03, Aluminum



Ambient temperature min./max. $-10 \dots 50 \, ^{\circ}\text{C}$ Weight $0.133 \, \text{kg}$

Technical data

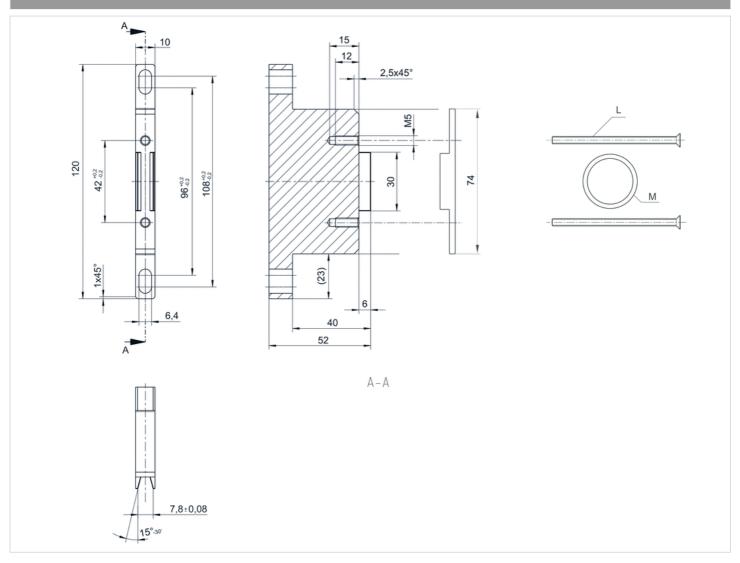
Part No.
R412026828

Scope of delivery incl. 2 mounting screws M5x68-4.8-A2R according to EN ISO 7046-1 (countersunk screw with type H X-slot), 1x Oring

Material	
Housing	Aluminum
Seal	Acrylonitrile butadiene rubber



Dimensions



L = Mounting screw

M = O-ring



Silencers, series SI1

- G 1
- Metal braiding



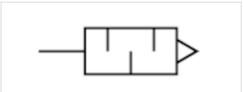
Working pressure min./max. 0 ... 15 bar

Ambient temperature min./max. -10 ... 150 °C

Medium Compressed air

Sound pressure level 104 dB

Comment Flow characteristic curves can be found under "Diagrams".



Technical data

Part No.	Compressed air connection	Flow	Delivery unit	
		Qn		
R412010249	G 1	10642 l/min	2 piece	

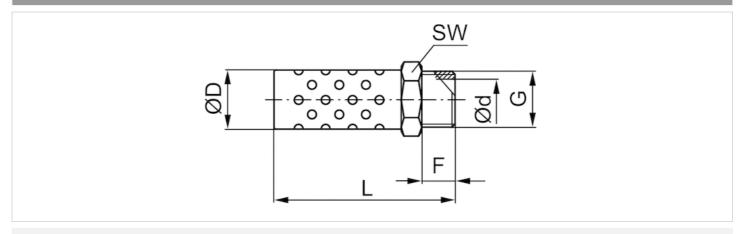
Nominal flow Qn at p1 = 6 bar (absolute) freely discharged. Sound pressure level measured at 6 bar against atmosphere at 1 m distance.

Material	
Silencer	Metal braiding
Thread	Aluminum





Dimensions



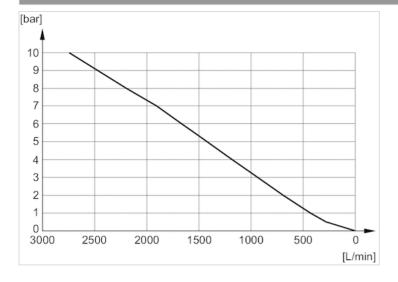
Dimensions

Part No.	Port G	L	F	D	d	SW
R412010249	G 1	91	15.5	32.3	26	34

Sound pressure level measured at 6 bar at 1 m distance

Diagrams

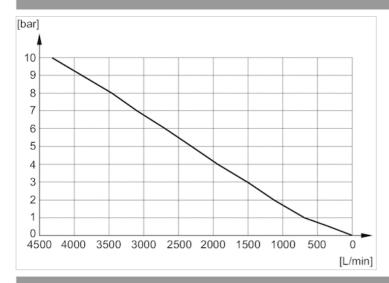
Flow diagram, R412010283



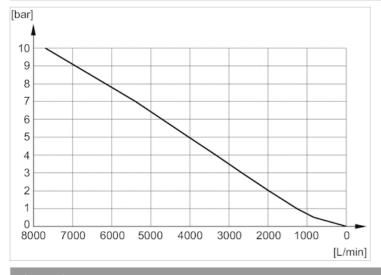




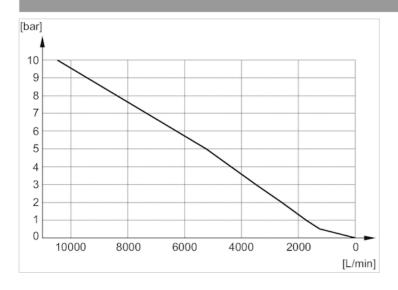
Flow diagram, R412010245



Flow diagram, R412010246

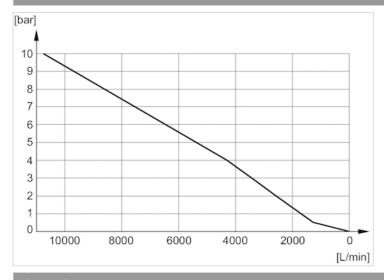


Flow diagram, R412010247

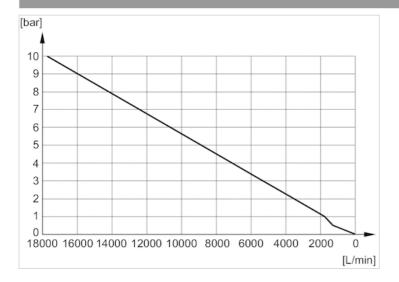




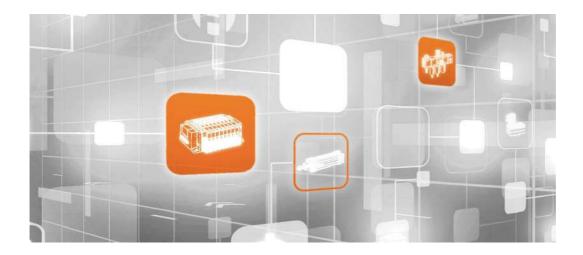
Flow diagram, R412010248



Flow diagram, R412010249



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