

# Filter pressure regulator, Series AS5-FRE

## R412009210

### General series information Series AS5

- The AVENTICS Series AS5 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**  
Filter pressure regulator

**Reservoir**  
reservoir, polycarbonate, with PA protective guard

**Port**  
G 1

**Nominal flow Q<sub>n</sub>**  
14000 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**  
50 °C

**Regulation range min.**  
0.5 bar

**Regulation range max.**  
8 bar

**Lock type**  
for padlocks

**Type**  
1-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

**Max. Internal air consumption**  
1.5 l/min

**Filter element**  
exchangeable

**Filter reservoir volume**  
87 cm<sup>3</sup>

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

6 : 7 : -

**Medium**  
Compressed air  
Neutral gases

**Weight**  
1.13 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.**  
R412009210

## 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".

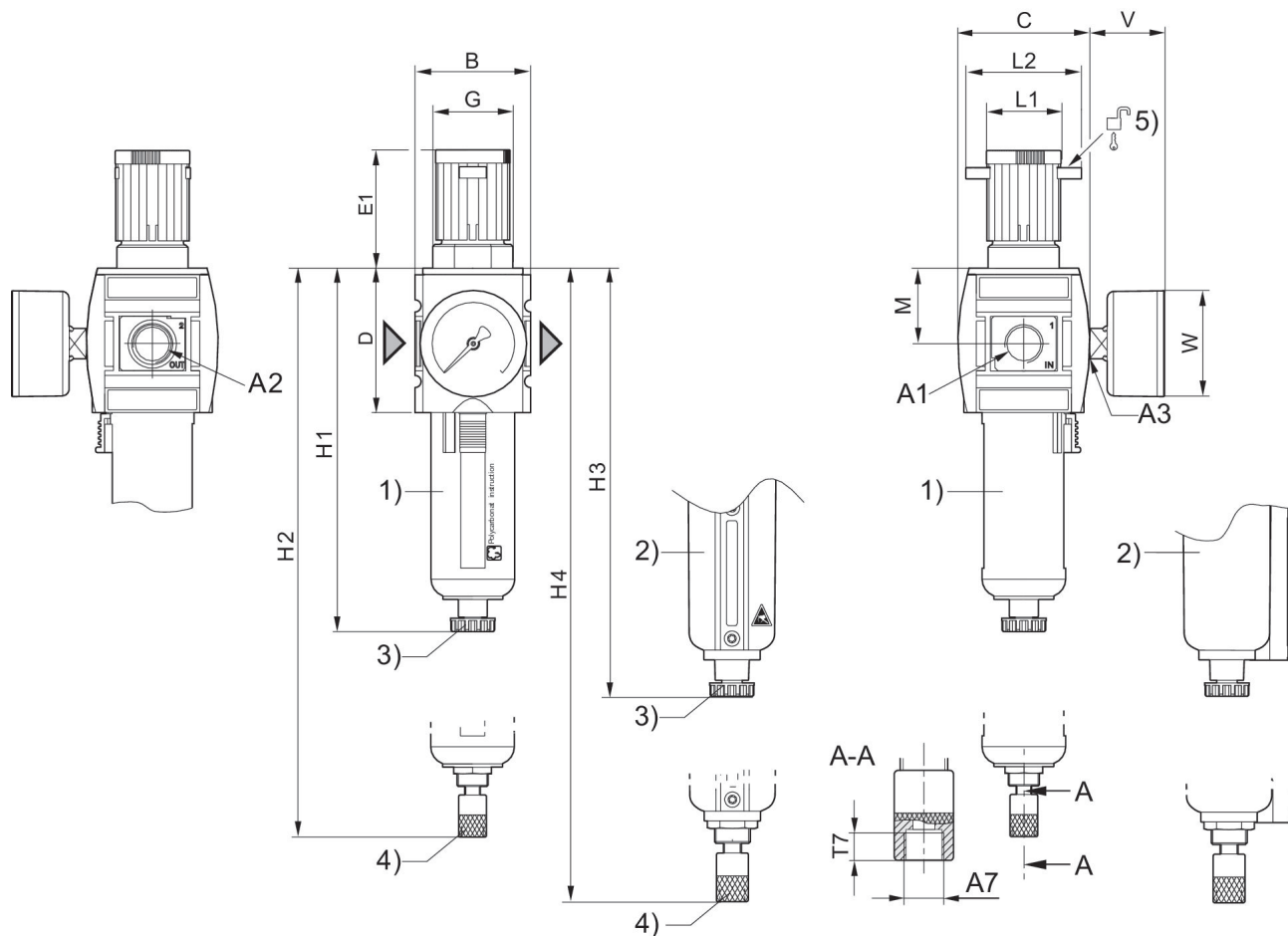
Nominal flow Qn with secondary pressure p2 = 6 bar at  $\Delta p = 1$  bar

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.

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

Pressure gauge enclosed separately

## 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

Part No.	A1	A2	A3	A7	B	C	D	E1	G
R412009200	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009201	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009202	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009206	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009207	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009208	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009209	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009210	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009211	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009215	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009216	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5

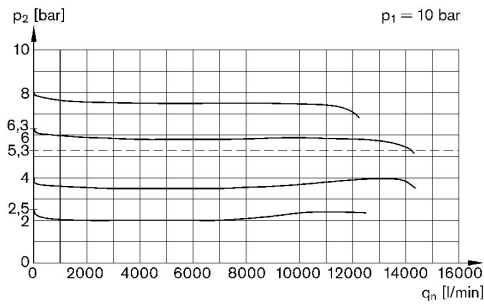
Part No.	A1	A2	A3	A7	B	C	D	E1	G
R412009217	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009175	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009176	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009177	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009193	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009194	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009195	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009181	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009182	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009183	G 3/4	G 3/4	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009184	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009185	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009186	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009192	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009191	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009190	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009196	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009197	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5
R412009198	G 1	G 1	G 1/4	G 1/8	85	103	109	75	M50x1,5

Part No.	H1	H2	H3	H4	L1	L2	M	T7	V
R412009200	250	206	193.5	210.5	41	60	58	8.5	38
R412009201	250	206	193.5	210.5	41	60	58	8.5	38
R412009202	250	206	193.5	210.5	41	60	58	8.5	38
R412009206	250	206	193.5	210.5	41	60	58	8.5	38
R412009207	250	206	193.5	210.5	41	60	58	8.5	38
R412009208	250	206	193.5	210.5	41	60	58	8.5	38
R412009209	250	206	193.5	210.5	41	60	58	8.5	38
R412009210	250	206	193.5	210.5	41	60	58	8.5	38
R412009211	250	206	193.5	210.5	41	60	58	8.5	38
R412009215	250	206	193.5	210.5	41	60	58	8.5	38
R412009216	250	206	193.5	210.5	41	60	58	8.5	38
R412009217	250	206	193.5	210.5	41	60	58	8.5	38
R412009175	250	206	193.5	210.5	41	60	58	8.5	38
R412009176	250	206	193.5	210.5	41	60	58	8.5	38
R412009177	250	206	193.5	210.5	41	60	58	8.5	38
R412009193	250	206	193.5	210.5	41	60	58	8.5	38
R412009194	250	206	193.5	210.5	41	60	58	8.5	38
R412009195	250	206	193.5	210.5	41	60	58	8.5	38
R412009181	250	206	193.5	210.5	41	60	58	8.5	38
R412009182	250	206	193.5	210.5	41	60	58	8.5	38
R412009183	250	206	193.5	210.5	41	60	58	8.5	38
R412009184	250	206	193.5	210.5	41	60	58	8.5	38
R412009185	250	206	193.5	210.5	41	60	58	8.5	38
R412009186	250	206	193.5	210.5	41	60	58	8.5	38
R412009192	250	206	193.5	210.5	41	60	58	8.5	38
R412009191	250	206	193.5	210.5	41	60	58	8.5	38

Part No.	H1	H2	H3	H4	L1	L2	M	T7	V
R412009190	250	206	193.5	210.5	41	60	58	8.5	38
R412009196	250	206	193.5	210.5	41	60	58	8.5	38
R412009197	250	206	193.5	210.5	41	60	58	8.5	38
R412009198	250	206	193.5	210.5	41	60	58	8.5	38

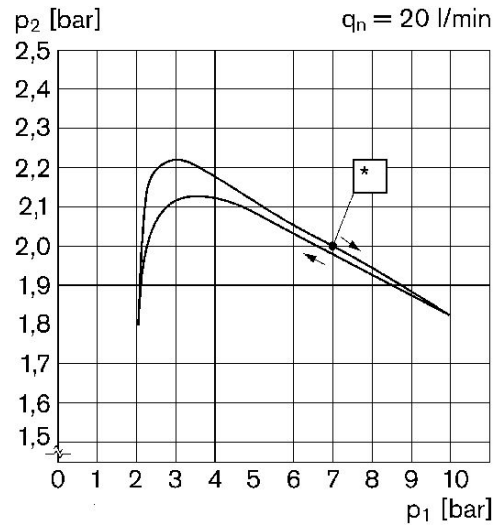
Part No.	W
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R412009201	63
R412009202	63
R412009206	63
R412009207	63
R412009208	63
R412009209	63
R412009210	63
R412009211	63
R412009215	63
R412009216	63
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R412009193	63
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R412009182	63
R412009183	63
R412009184	63
R412009185	63
R412009186	63
R412009192	63
R412009191	63
R412009190	63
R412009196	63
R412009197	63
R412009198	63

Flow rate characteristic (setting range p2: 0.5 - 8 bar)



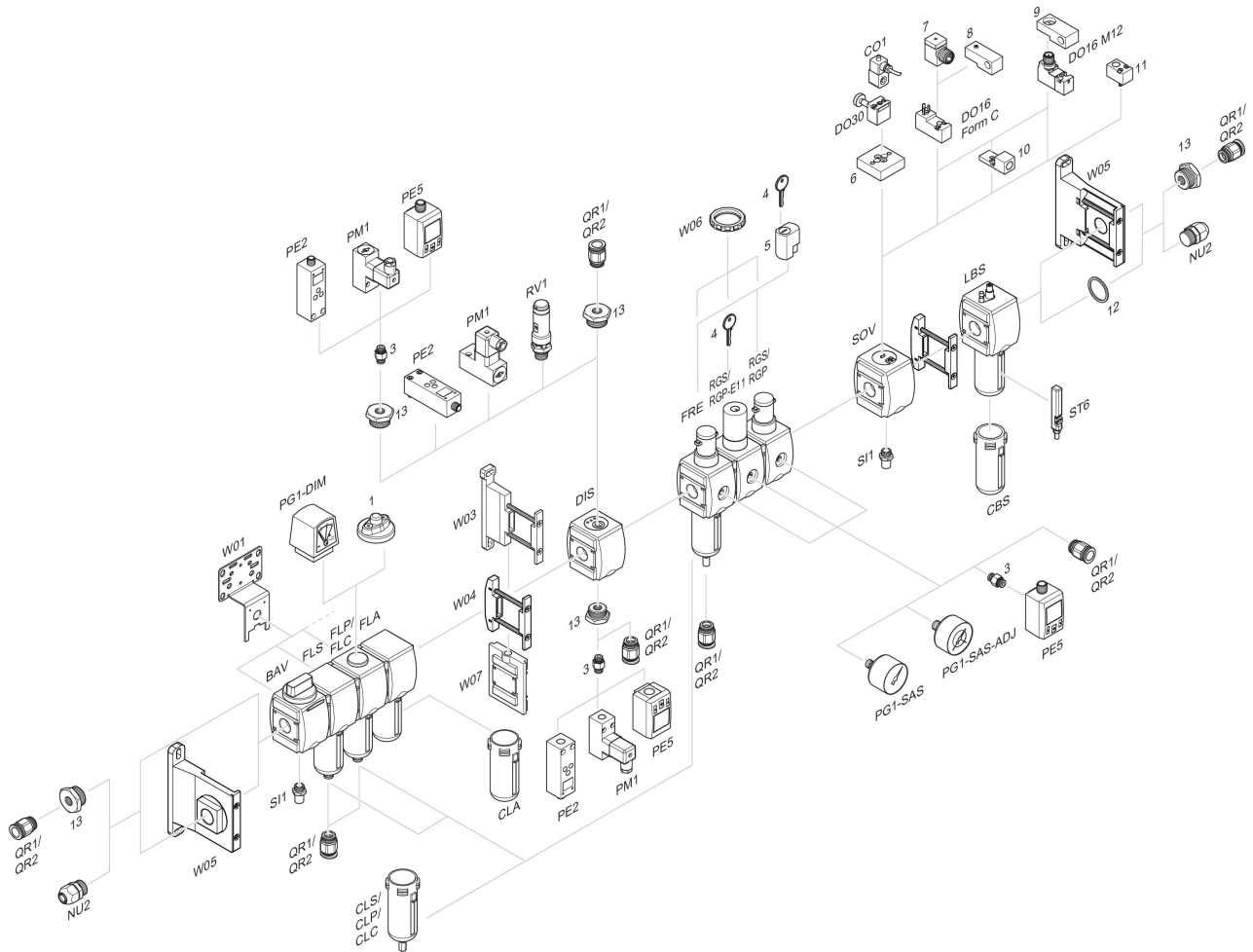
p1 = Working pressure  
p2 = Secondary pressure  
qn = Nominal flow

Pressure characteristics curve



p1 = Working pressure  
p2 = Secondary pressure  
qn = Nominal flow  
\* starting point

## Accessories overview



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