

Filling unit, electrically operated, Series AS3-SSU

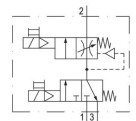
R412007395

Series AS3

2024-03-27

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

Type

With electrical priority circuit, adjustable filling time.

Activation

Electrically

Nominal flow Qn

3500 l/min

Compressed air connection

G 1/2

Min. working pressure

2.5 bar

Max. working pressure

10 bar

Operational voltage DC

24 V

Sealing principle

Soft seal

Pilot

Internal

Connection type

Pipe connection

Parts

3/2-directional valve

Filling valve

Can be assembled into blocks

Can be assembled into blocks

Basic valve equipment

Basic valve with pilot valve

Type

Poppet valve

Min. ambient temperature

-10 °C

Max. ambient temperature

50 °C

Medium

Compressed air

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	Neutral gases
Max. particle size	25 µm
Nominal flow Qn 1 to 2	3500 l/min
Nominal flow Qn 2 to 3	3200 l/min
Operating voltage	24 V DC
Power consumption DC	2 W
Duty cycle	100 %
Protection class with connection	IP65
Electrical connection 1, type	Plug
Electrical connection 1, thread size	M12x1
Weight	0.924 kg

Material

Housing material	Polyamide
Seal material	Acrylonitrile butadiene rubber
Material threaded bushing	Die cast zinc
Material front plate	Acrylonitrile butadiene styrene
Part No.	R412007395

Technical information

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

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.

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.

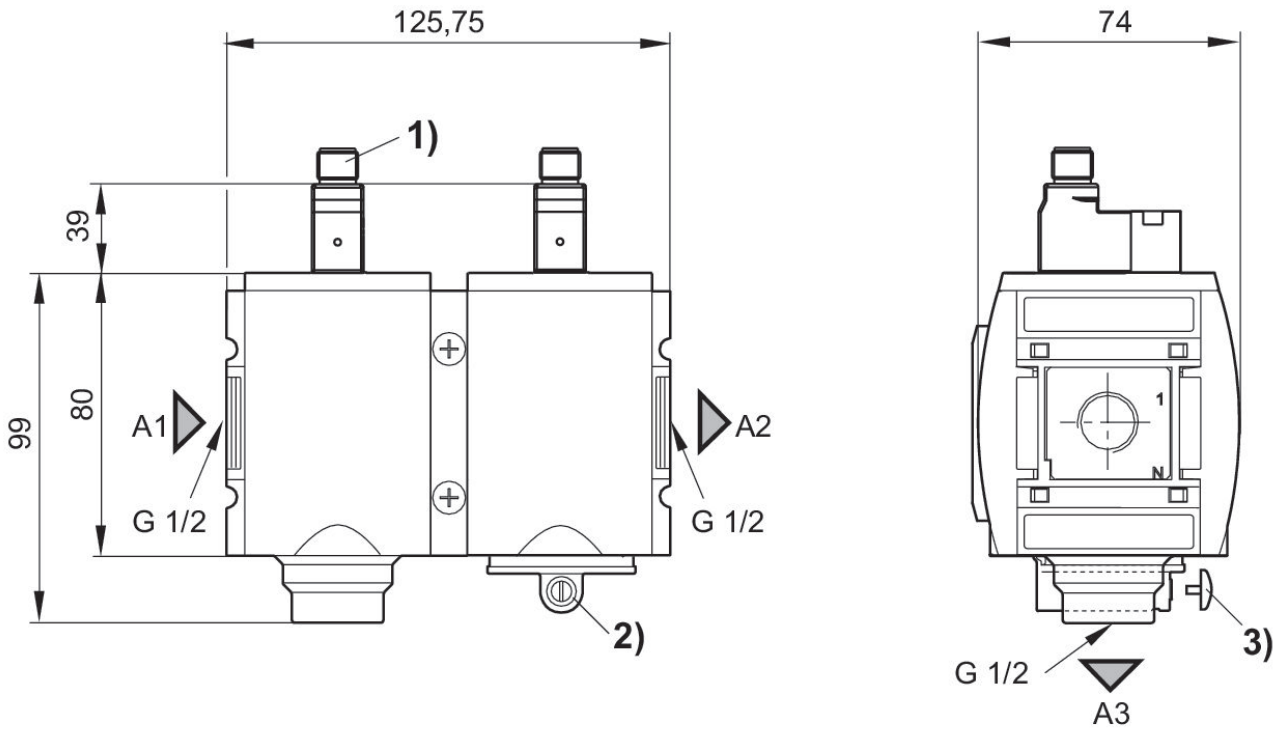
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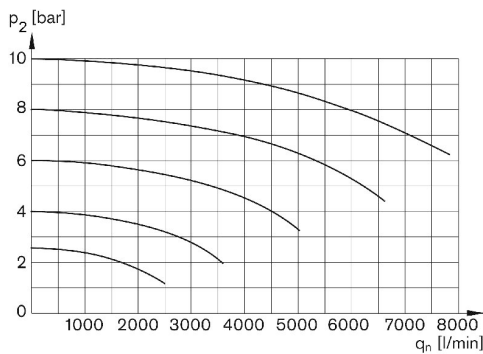
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Dimensions in mm

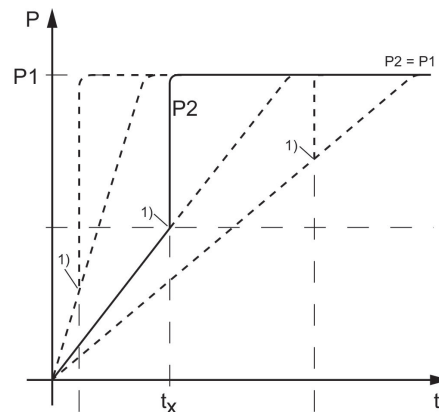


- A1 = input
- A2 = output
- A3 = ventilation port
- 1) Electr. connection: valve plug connector M12x1
- 2) Adjustment screw for filling time
- 3) Adjustment screw lock

Flow rate characteristic, $p_2 = 0,05 - 7$ bar Secondary pressure while filling



p_2 = Secondary pressure
 q_n = Nominal flow



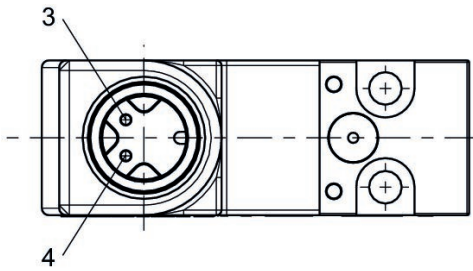
p_1 = Working pressure
 p_2 = Secondary pressure
 t = filling time
 t_x = switchover time
 1) Electrically triggered switching point
 Filling time adjustable via adjustment screw (throttle)

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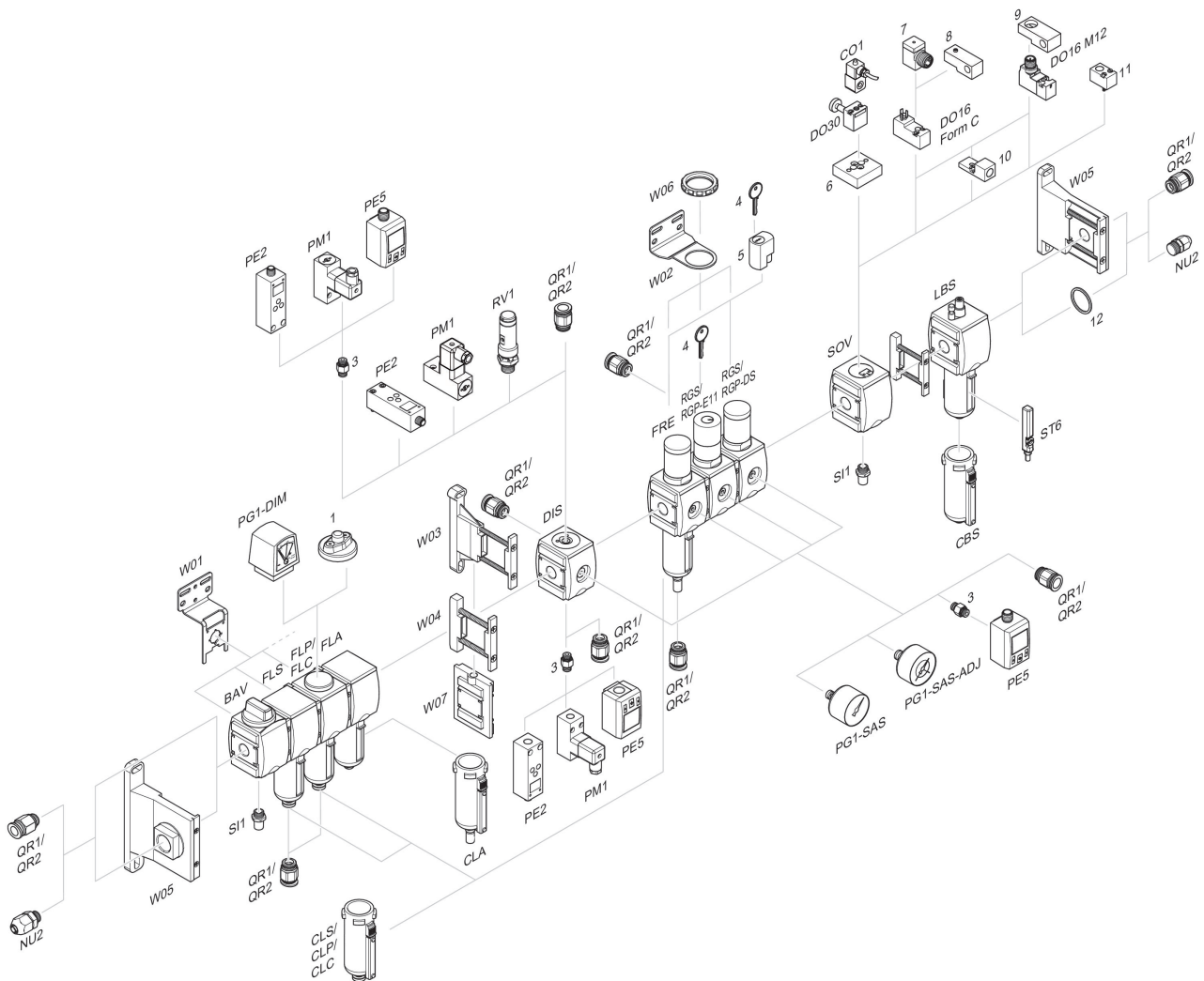
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Pin assignment M12x1



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