Filling unit, electrically operated, Series AS3-SSU

Series AS3 2024-03-28

R412007284

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 adjustable filling time

Activation Electrically

3500 I/min Nominal flow Qn

G 1/2 Compressed air connection

2.5 bar Min. working pressure

Max. working pressure 10 bar Operational voltage AC at 50 Hz 110 V

Operational voltage AC at 60 Hz Soft seal Sealing principle

Pilot Internal Connection type Pipe connection

3/2-directional valve **Parts**

Filling valve

110 V

Can be assembled into blocks Can be assembled into blocks

Basic valve equipment Basic valve with pilot valve

Type Poppet valve

-10 °C Min. ambient temperature Max. ambient temperature 50 °C

Medium Compressed air

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	Neutral gases
Max. particle size	25 μm
Compressed air connection, exhaust	G 1/2
Nominal flow Qn 1 to 2	3500 l/min
Nominal flow Qn 2 to 3	3200 l/min
Operating voltage	110 V AC
Holding power AC 50 Hz	1.6 VA
Holding power AC 60 Hz	1.4 VA
Switch-on power AC 50 Hz	2.2 VA
Switch-on power AC 60 Hz	1.6 VA
Duty cycle	100 %
Connector standard	ISO 15217
Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal
Electrical connection 1, type	Plug
Electrical connection 1, thread size	ISO 15217, form C
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. R412007284

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 Δp = 0,1 bar

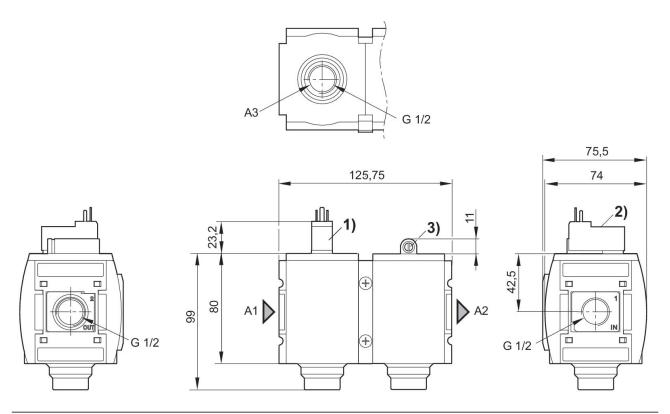
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

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.

R412007284

Dimensions in mm



A1 = input

A2 = output

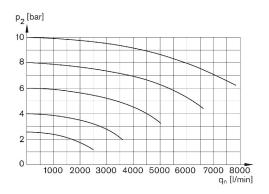
A3 = ventilation port

1) Connection for valve plug connector according to ISO 15217 (form C)

2) Manual override

3) Adjustment screw for filling time

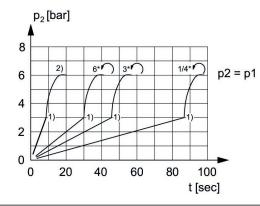
Flow rate characteristic, p2 = 0.05 - 7bar



p2 = Secondary pressure

qn = Nominal flow

Secondary pressure while filling



p1 = Working pressure

p2 = Secondary pressure

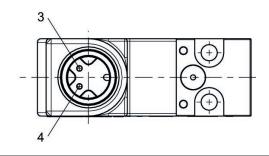
t = filling time, adjustable via adjustment screw (throttle)

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

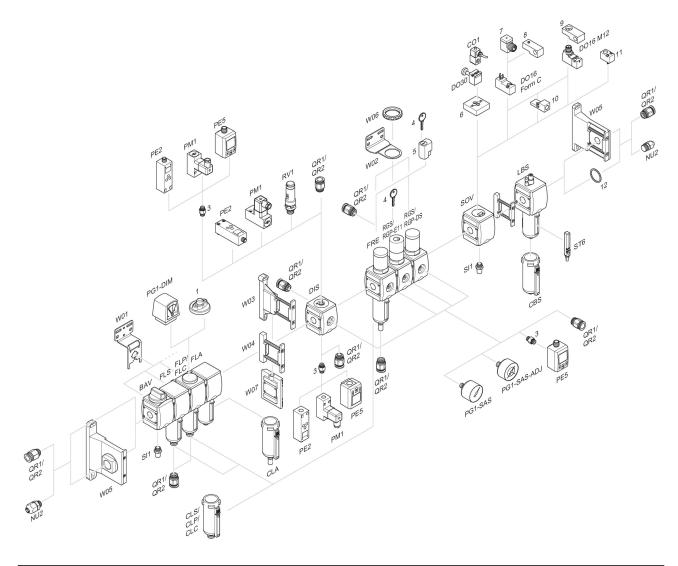
p1 (50%)

Throttle fully opened
Adjustment screw rotations

R412007284 Pin assignment M12x1



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