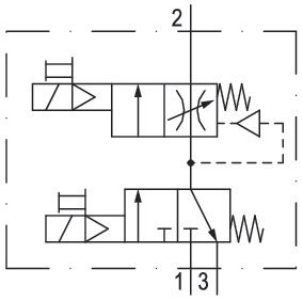
Filling unit, electrically operated, Series AS5-SSU

R412009381

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
Type	With electrical priority circuit, adjustable filling time. Increased flow rate 2#3
Activation	Electrically
Nominal flow Qn	8750 l/min
Compressed air connection	G 1
Working pressure min.	2.5 bar
Working pressure max	9 bar
DC operating voltage	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 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, exhaust	G 1/2
Nominal flow Qn 1 to 2	8750 l/min
Nominal flow Qn 2 to 3	3700 l/min
Operating voltage	24 V DC
Power consumption DC	2 W
Duty cycle	100 %
Protection class with connection	IP65
Electrical connection type 2	Plug
Electrical connection 2, 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.	R412009381

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 = 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.

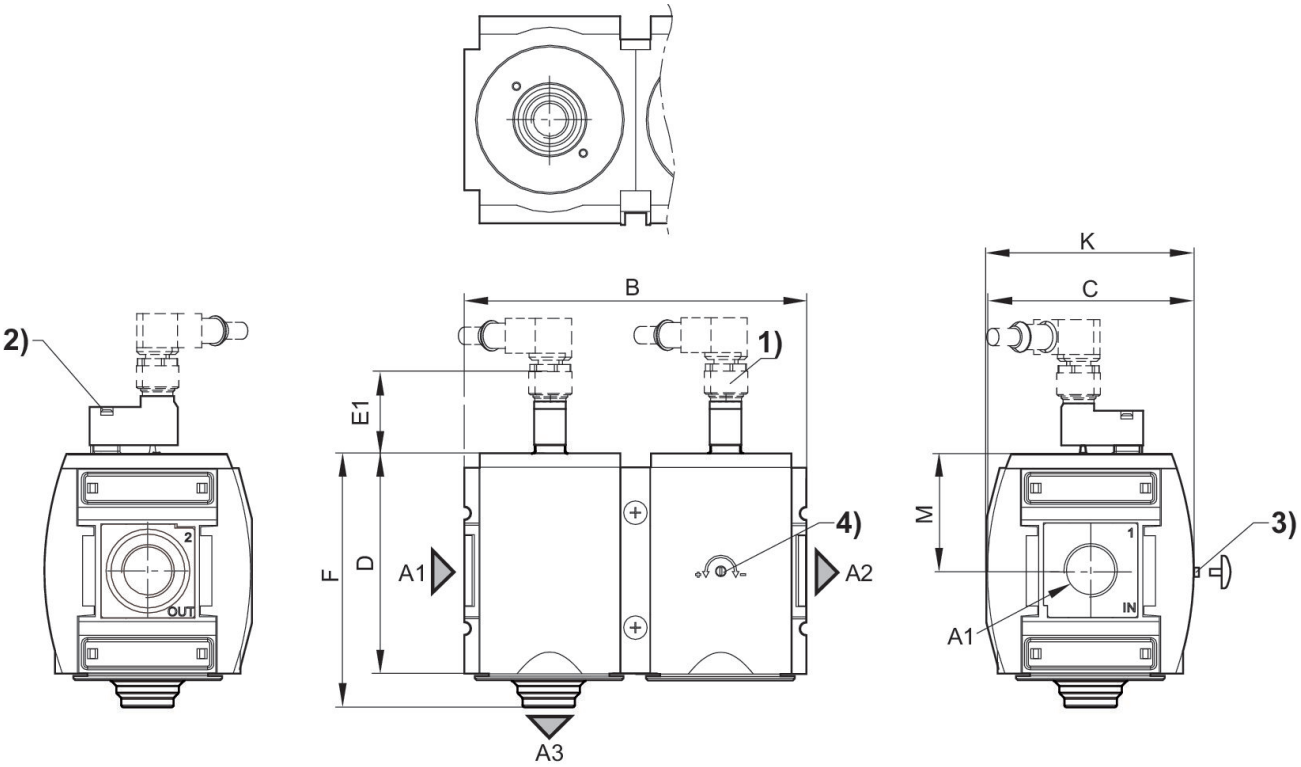
For unthrottled operation, the filling valve must be permanently electrically actuated.

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.

Rear exhaust flow rate 2#3 substantially increased.

Dimensions



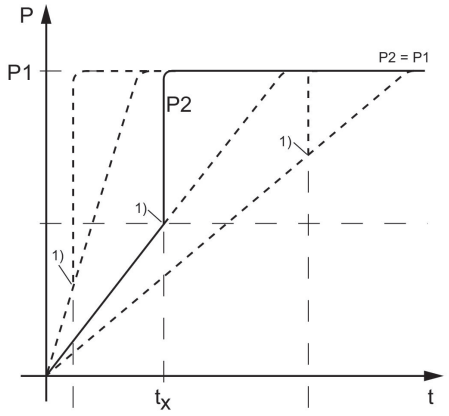
A1 = input A2 = output A3 = ventilation port
1) plug M12
2) Manual override
3) Adjustment screw lock
4) Adjustment screw for filling time

Dimensions in mm

Part No.	A1	A2	A3	B	C	D	E1	F	K
R412009381	G 1	G 1	G 1/2	170	103	109	39	125	103.5

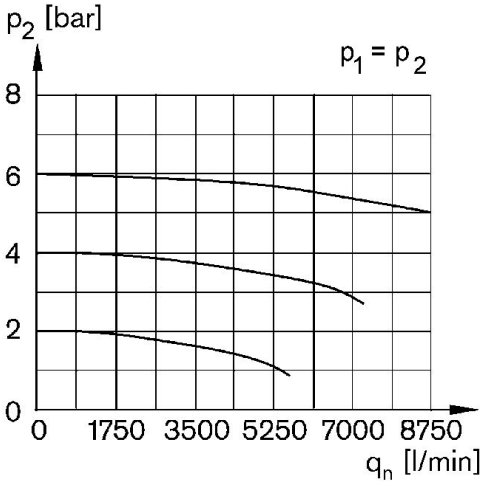
M
58

Secondary pressure while filling



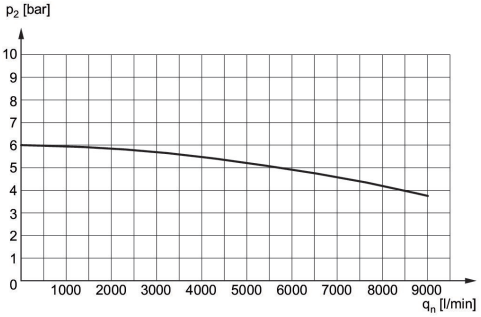
p1 = Working pressure
p2 = Secondary pressure
t = filling time
tx = switchover time
1) Electrically triggered switching point
Filling time adjustable via adjustment screw (throttle)

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



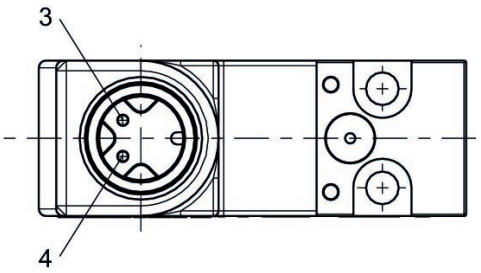
p1 = Working pressure p2 = Secondary pressure qn = Nominal flow

Rear exhaust
2 > 3



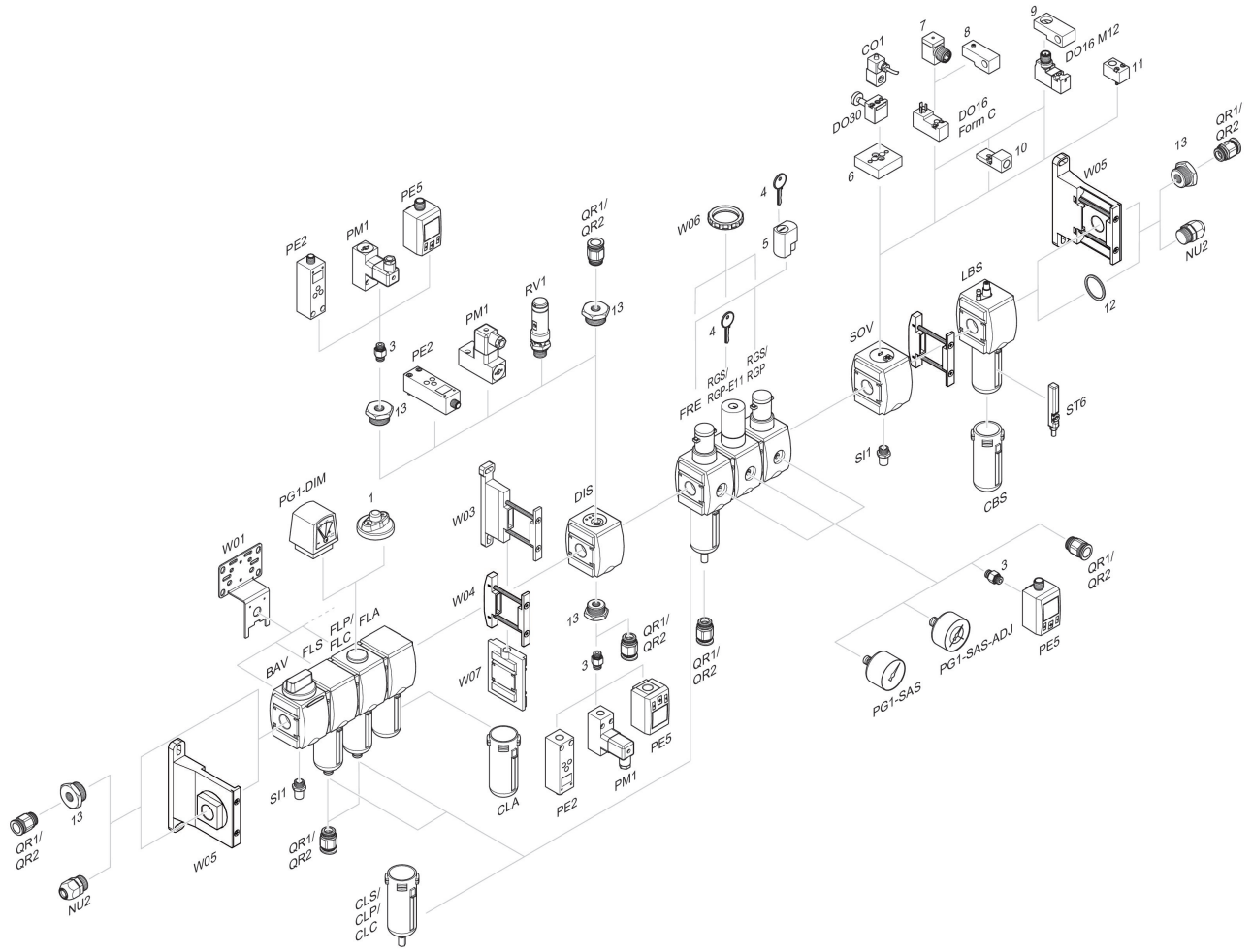
p2 = secondary pressure qn = nominal flow

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 13 = Reducing nipple