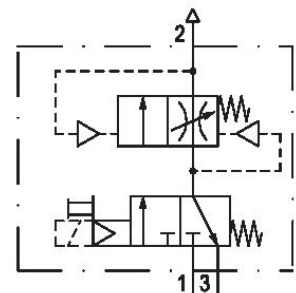


Filling unit, electrically operated, Series AS1-SSU

R412010682

General series information Series AS1

- The AVENTICS Series AS1 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 |
| Nominal flow Qn | 1300 l/min |
| Compressed air connection | G 1/4 |
| Working pressure min. | 2.5 bar |
| Working pressure max | 10 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 basic valve with electrical connector | Can be assembled into blocks 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 1/4 |
| Air supply | left |
| Nominal flow Qn 1 to 2 | 1300 l/min |
| Nominal flow Qn 2 to 3 | 380 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 | 0.377 kg |

Material

| | |
|---------------------------|---------------------------------|
| Housing material | Polyamide |
| Seal material | Acrylonitrile butadiene rubber |
| Material threaded bushing | Die cast zinc |
| Material front plate | Acrylonitrile butadiene styrene |
| Part No. | R412010682 |

Technical information

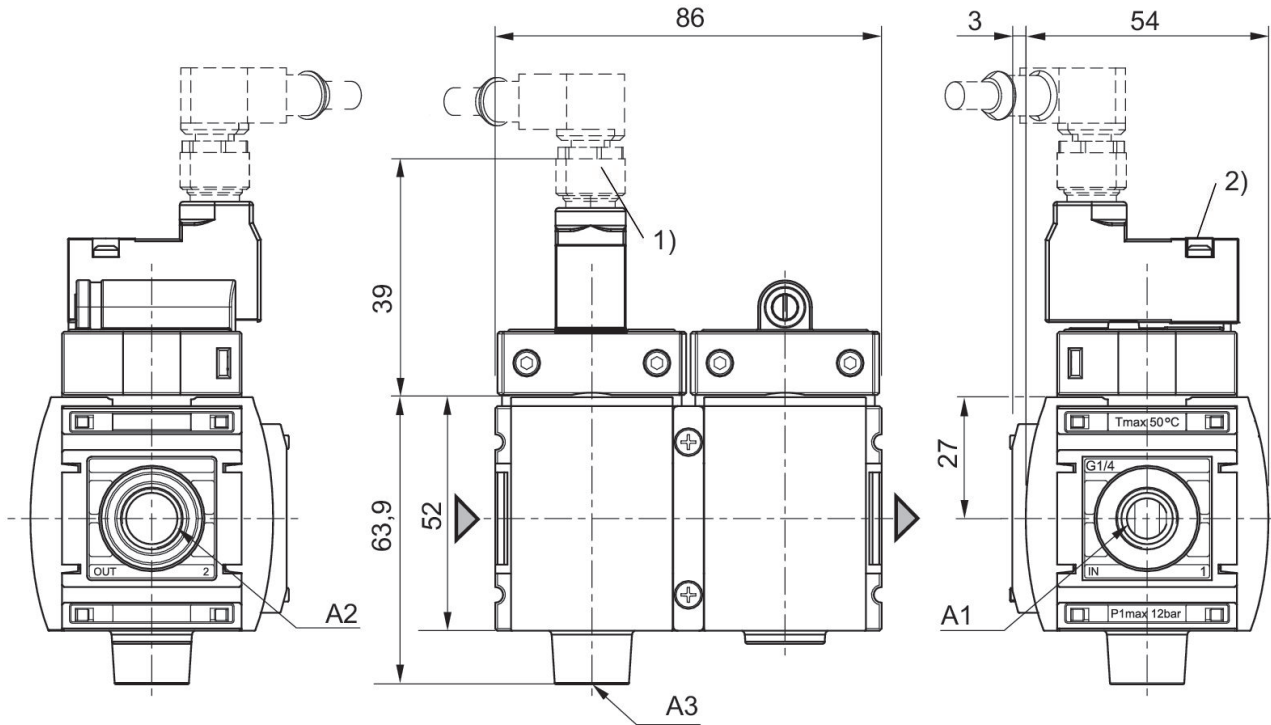
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

Nominal flow Qn with secondary pressure $p_2 = 6$ bar at $\Delta p = 1$ bar

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.

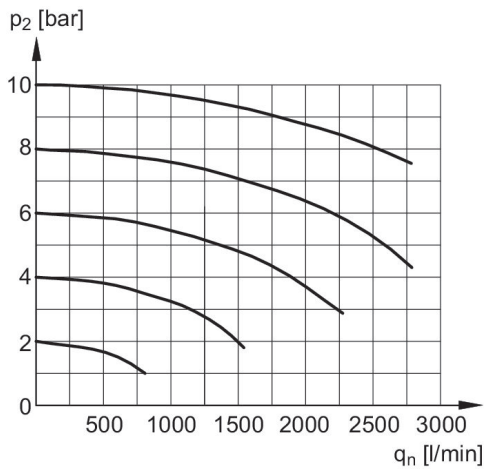
Do not position filling valves or filling units upstream of open consumers, such as nozzles, air barriers, air curtains, since these may prevent through connection of components.

Dimensions in mm



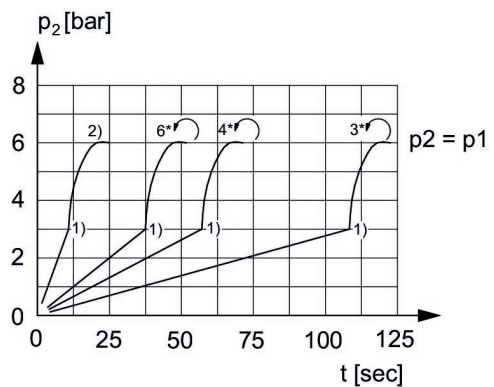
- A1 = input
- A2 = output
- A3 = ventilation port
- 1) plug M12
- 2) Manual override

Flow rate characteristic, $p_2 = 0,05 - 7$ bar



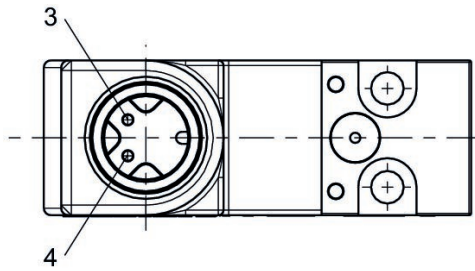
p_2 = Secondary pressure
 q_n = Nominal flow

Secondary pressure while filling



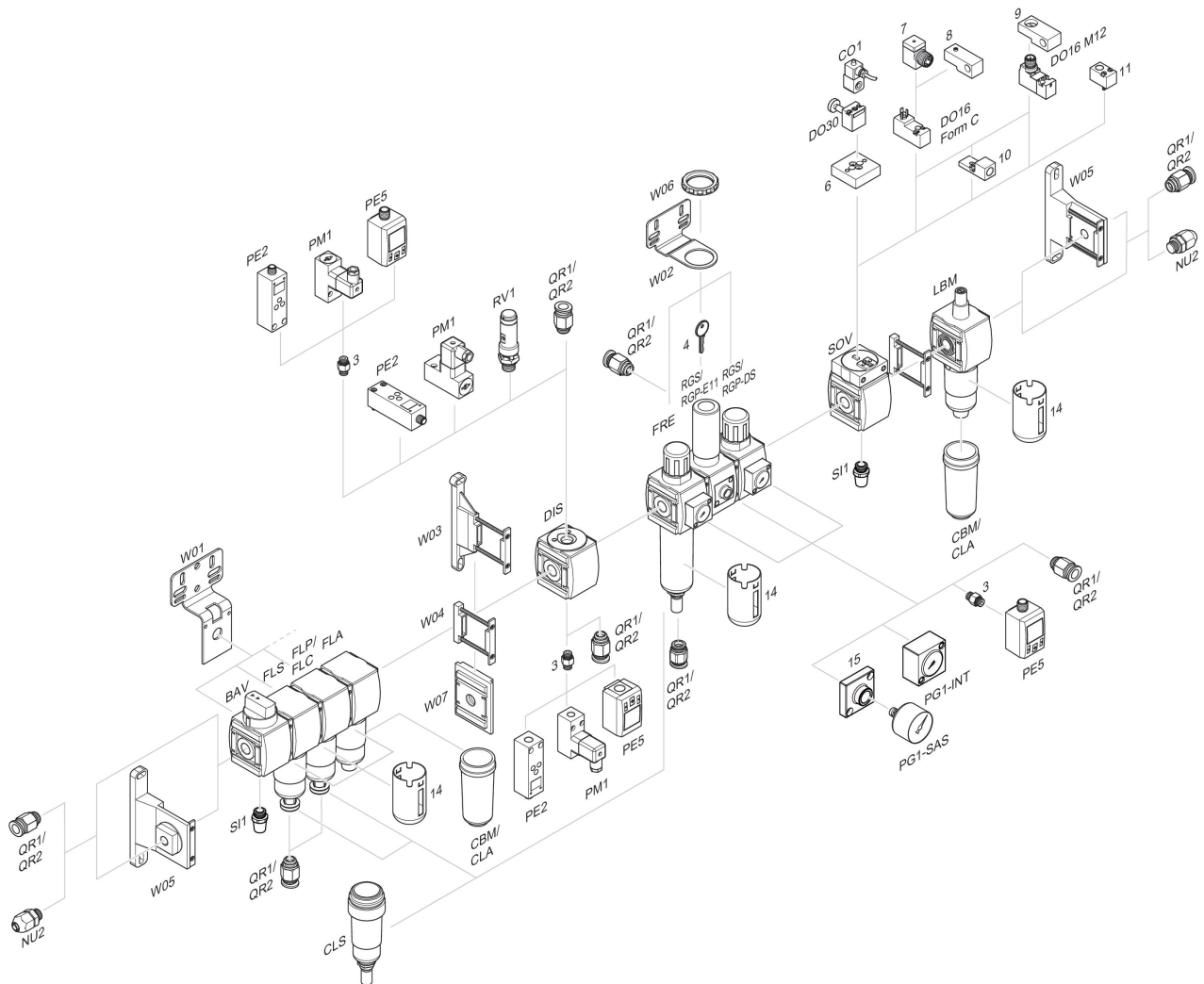
- p_1 = Working pressure
- p_2 = Secondary pressure
- t = filling time, adjustable via adjustment screw (throttle)
- 1) Switching point: adjustable filling time, fixed change-over pressure $\approx 0.5 \times p_1$ (50%)
- 2) Throttle fully opened
- * Adjustment screw rotations

Pin assignment M12x1



3: +/-
4: +/-

Accessories overview



3 = Double nipple 4 = Key for E11 locking 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 14 = Protective guard 15 = Transition plate for assembling a pressure gauge with connection thread G 1/8