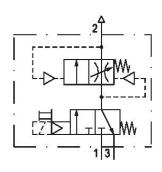
Filling unit, electrically operated, Series AS5-SSU

R412009378

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

DC operating voltage

Industry Industrial

Type adjustable filling time

24 V

Activation Electrically

Nominal flow Qn 8750 I/min

Compressed air connection G 1

Working pressure min. 2.5 bar

Working pressure max 10 bar

Sealing principle soft seal

Pilot Internal



R412009378

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 1/2 Nominal flow Qn 1 to 2 8750 I/min Nominal flow Qn 2 to 3 3700 I/min Operating voltage 24 V DC 2 W Power consumption DC 100 % Duty cycle Protection class with connection **IP65** Electrical connection type 2 Plug Electrical connection 2, thread size M12x1 0.9 kg Weight

Material

Housing material Polyamide

Seal material Acrylonitrile butadiene rubber

Material threaded bushing Die cast zinc

Material front plate Acrylonitrile butadiene styrene

Part No. R412009378

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.

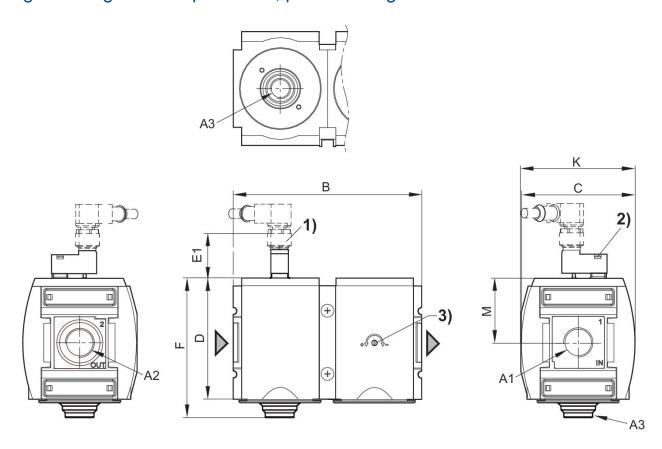
Do not position filling valves or filling units upstream of open consumers, such as nozzles, air barriers, air curtains, since these may prevent through connection of components.

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.

With adjustment screw lock



Fig. 4: Filling unit with pilot valve, push-in fitting M12x1



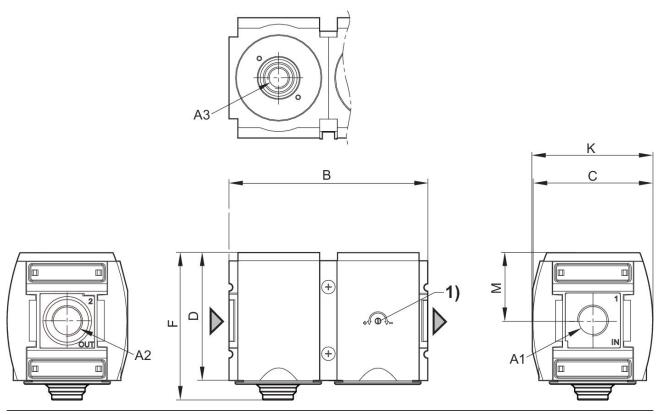
A1 = input A2 = output A3 = ventilation port
1) plug M12
2) Manual override
3) Adjustment screw for filling time

Dimensions in mm

| Part No. | A1 | A2 | A3 | В | С | D | E1 | F | М |
|------------|-----|-----|-------|-----|-----|-----|----|-----|----|
| R412009378 | G 1 | G 1 | G 1/2 | 170 | 103 | 109 | 39 | 125 | 58 |



Fig. 1: Filling unit without pilot valve with porting configuration for series DO16



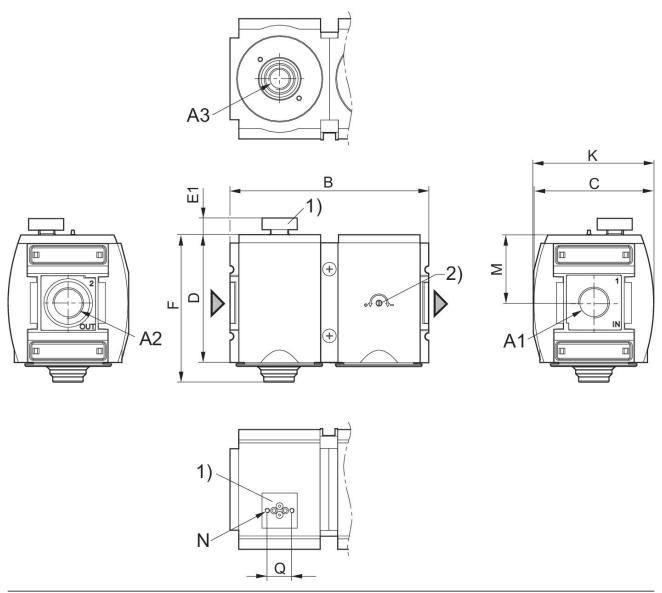
A1 = input A2 = output A3 = ventilation port
1) Adjustment screw for filling time

Dimensions in mm

| 1 | Part No. | A1 | A2 | A3 | | С | D | | K | М |
|---|------------|-------|-------|-------|-----|-----|-----|-----|-------|----|
| Ī | R412009277 | G 3/4 | G 3/4 | G 1/2 | 170 | 103 | 109 | 125 | 103.5 | 58 |
| | R412009282 | G 3/4 | G 1 | G 1/2 | 170 | 103 | 109 | 125 | 103.5 | 58 |



Fig. 2: Filling unit with transition plate for pilot valve series DO30



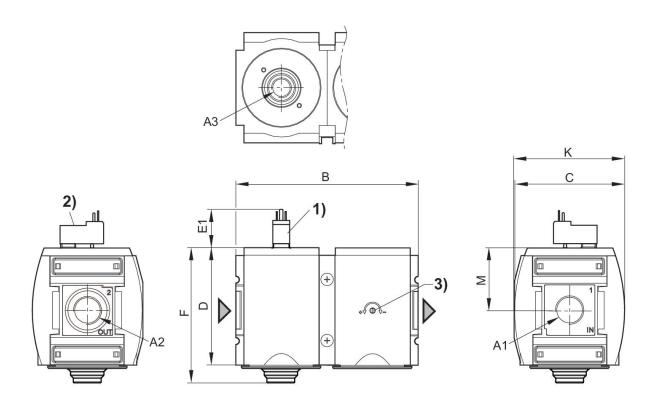


A1 = input A2 = output A3 = ventilation port

1) Transition plate with CNOMO porting configuration for pilot valve DO30

2) Adjustment screw for filling time

Fig. 3: Filling unit with pilot valve and port for electrical connector form C



A1 = input A2 = output A3 = ventilation port

Dimensions in mm

| Part No. | A1 | A2 | A3 | | С | D | E1 | | K |
|------------|-------|-------|-------|-----|-----|-----|------|-----|-------|
| R412009278 | G 3/4 | G 3/4 | G 1/2 | 170 | 103 | 109 | 25.1 | 125 | 103.5 |
| R412009279 | G 3/4 | G 3/4 | G 1/2 | 170 | 103 | 109 | 25.1 | 125 | 103.5 |
| R412009280 | G 3/4 | G 3/4 | G 1/2 | 170 | 103 | 109 | 25.1 | 125 | 103.5 |
| R412009283 | G 1 | G 1 | G 1/2 | 170 | 103 | 109 | 25.1 | 125 | 103.5 |
| R412009284 | G 1 | G 1 | G 1/2 | 170 | 103 | 109 | 25.1 | 125 | 103.5 |
| R412009285 | G 1 | G 1 | G 1/2 | 170 | 103 | 109 | 25.1 | 125 | 103.5 |

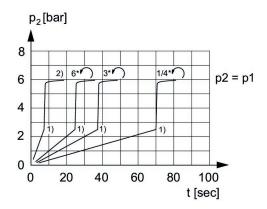
| Part No. | М |
|------------|----|
| R412009278 | 58 |
| R412009279 | 58 |
| R412009280 | 58 |
| R412009283 | 58 |
| R412009284 | 58 |
| R412009285 | 58 |



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

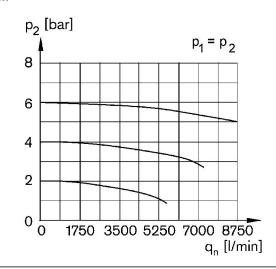
Manual override
 Adjustment screw for filling time

Secondary pressure while filling



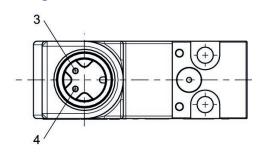
- p1 = Working pressure
- p2 = Secondary pressure
- t = filling time, adjustable via adjustment screw (throttle)
- 1) Switching point: adjustable filling time, fixed change-over pressure $\approx 0.5 \text{ x}$
- 2) Throttle fully opened
 * Adjustment screw rotations

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



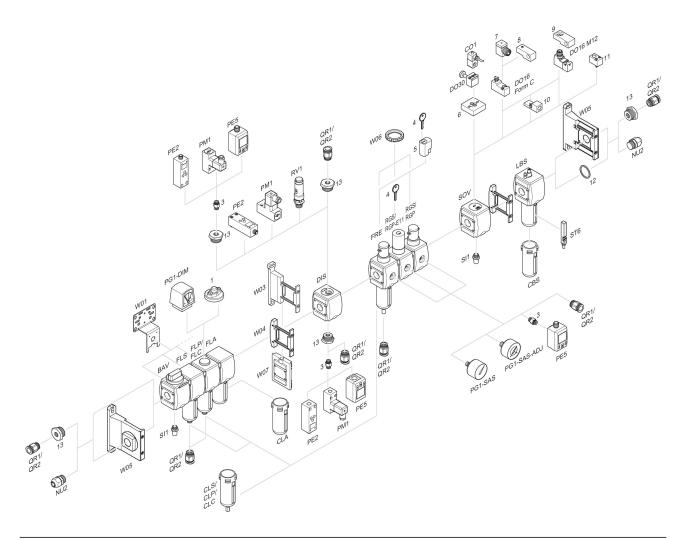
p1 = Working pressure p2 = Secondary pressure qn = Nominal flow

Pin assignment M12x1



- 3: +/-

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

