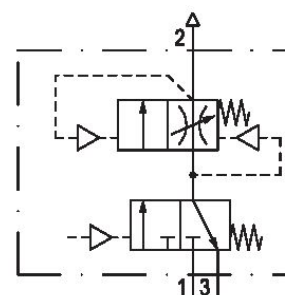


Filling unit, pneumatically operated, Series NL1-SSU

0821300795

General series information Series NL1

- The AVENTICS Series NL maintenance units are suitable for all areas: as individual components or as assembled maintenance units, for centralized or decentralized compressed air preparation, in compact or powerful versions, for use in high or low temperatures. This line offers a complete, customizable compressed air preparation technology. It includes an option to combine every component in the Series to achieve the desired function, making it possible to adjust the components precisely to the application requirements.



Technical data

Industry

Industrial

Activation

Pneumatically

Parts

3/2-directional valve

Filling valve

Nominal flow Q_n

2000 l/min

Compressed air connection

G 1/4

Working pressure min.

0 bar

Working pressure max

16 bar

Connection type

Pipe connection

Sealing principle

Soft Seal

Type

Poppet valve

Pilot

Internal

Can be assembled into blocks

Can be assembled into blocks

Control pressure min.

2.5 bar

Control pressure max.

16 bar

Min. ambient temperature	-10 °C
Max. ambient temperature	60 °C
Medium	Compressed air Neutral gases
Max. particle size	5 µm
Compressed air connection, exhaust	G 1/4
Nominal flow Qn 1 to 2	2000 l/min
Nominal flow Qn 2 to 3	800 l/min
Weight	0.83 kg

Material

Housing material	Die cast zinc
Seal material	Acrylonitrile butadiene rubber
Material, front cover	Acrylonitrile butadiene styrene
Material threaded bushing	Die cast zinc
Part No.	0821300795

Technical information

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

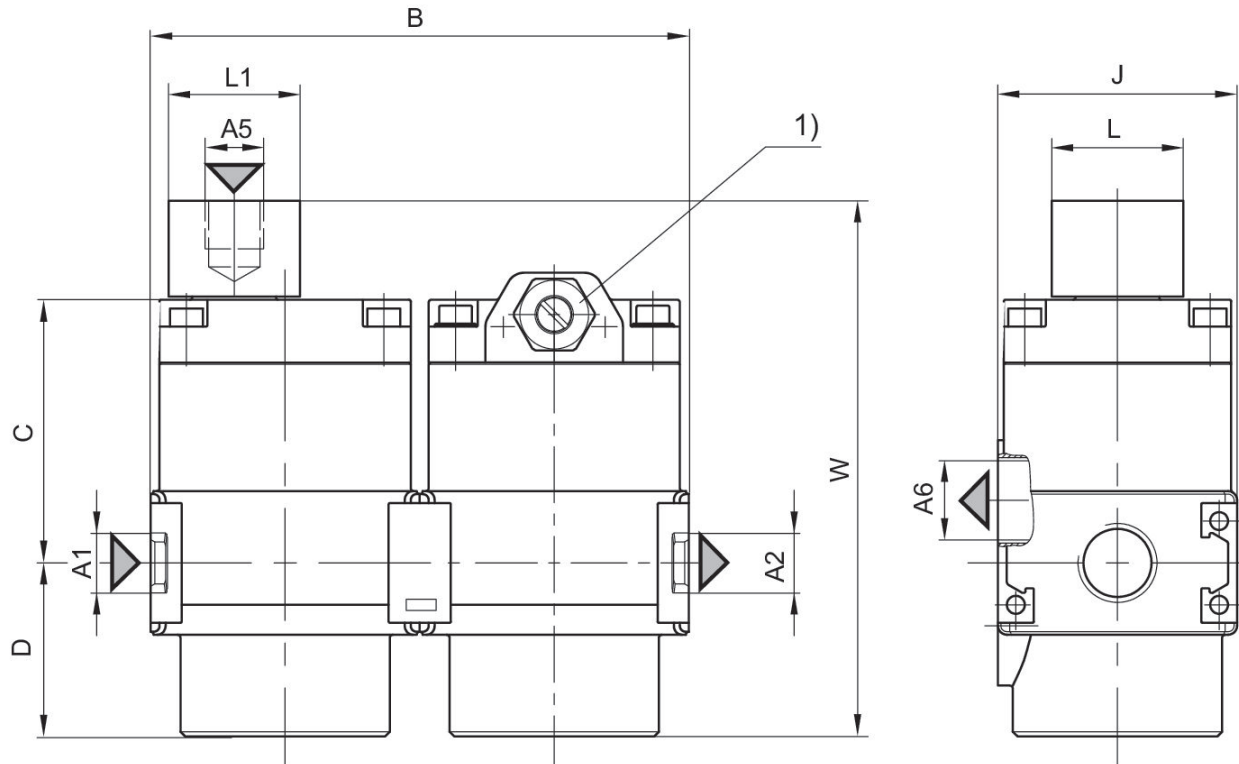
Nominal flow Qn with secondary pressure $p_2 = 6$ bar at $\Delta p = 1$ bar

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.

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



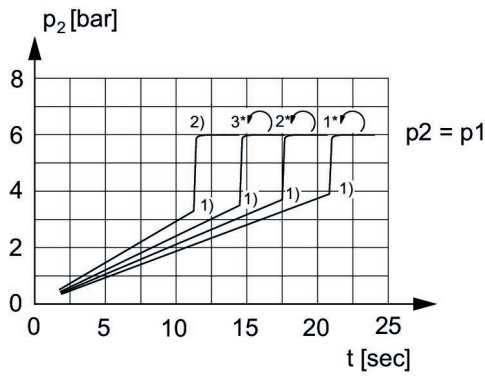
A1 = input A2 = output
 A5 = Control pressure connection
 A6 = ventilation port
 1) Adjustment screw for filling time

Dimensions in mm

Part No.	A1	A2	A5	A6	B	C	D	J	L
0821300795	G 1/4	G 1/4	G1/8	G 1/4	90	44.5	29	40	22

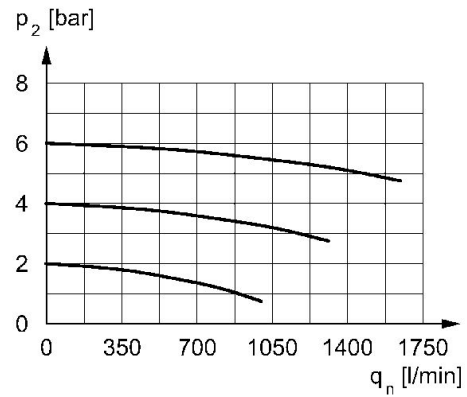
Part No.	L1	W
0821300795	22	89.5

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

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



p_2 = secondary pressure q_n = nominal flow