

Filling unit, pneumatically operated, Series NL4-SSU

- Compressed air connection G 1/2
- Pipe connection
- suitable for ATEX



Type	Poppet valve, Can be assembled into blocks
Pilot	Internal
Sealing principle	Soft sealing
Certificates	suitable for ATEX
Working pressure min./max.	0 ... 16 bar
Control pressure min./max.	2,5 ... 16 bar
Ambient temperature min./max.	-10 ... 60 °C
Medium temperature min./max.	-10 ... 60 °C
Medium	Compressed air Neutral gases
Max. particle size	5 µm
Weight	1,69 kg

Technical data

Part No.		Port	Exhaust	Flow	Flow	
				Qn 1→2	Qn 2→3	
0821300949		G 1/2	G 1/2	2500 l/min	1600 l/min	1)
0821300954		G 1/2	G 1/2	2500 l/min	1600 l/min	2)

Nominal flow Qn with secondary pressure p2 = 6 bar at Δp = 1 bar

- 1) Suitable for use in Ex zones 1, 2, 21, 22., adjustable filling
 2) Suitable for use in Ex zones 1, 2, 21, 22., Filling with fixed diaphragm

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
 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.
 Suitable for use in Ex zones 1, 2, 21, 22.
 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.

Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

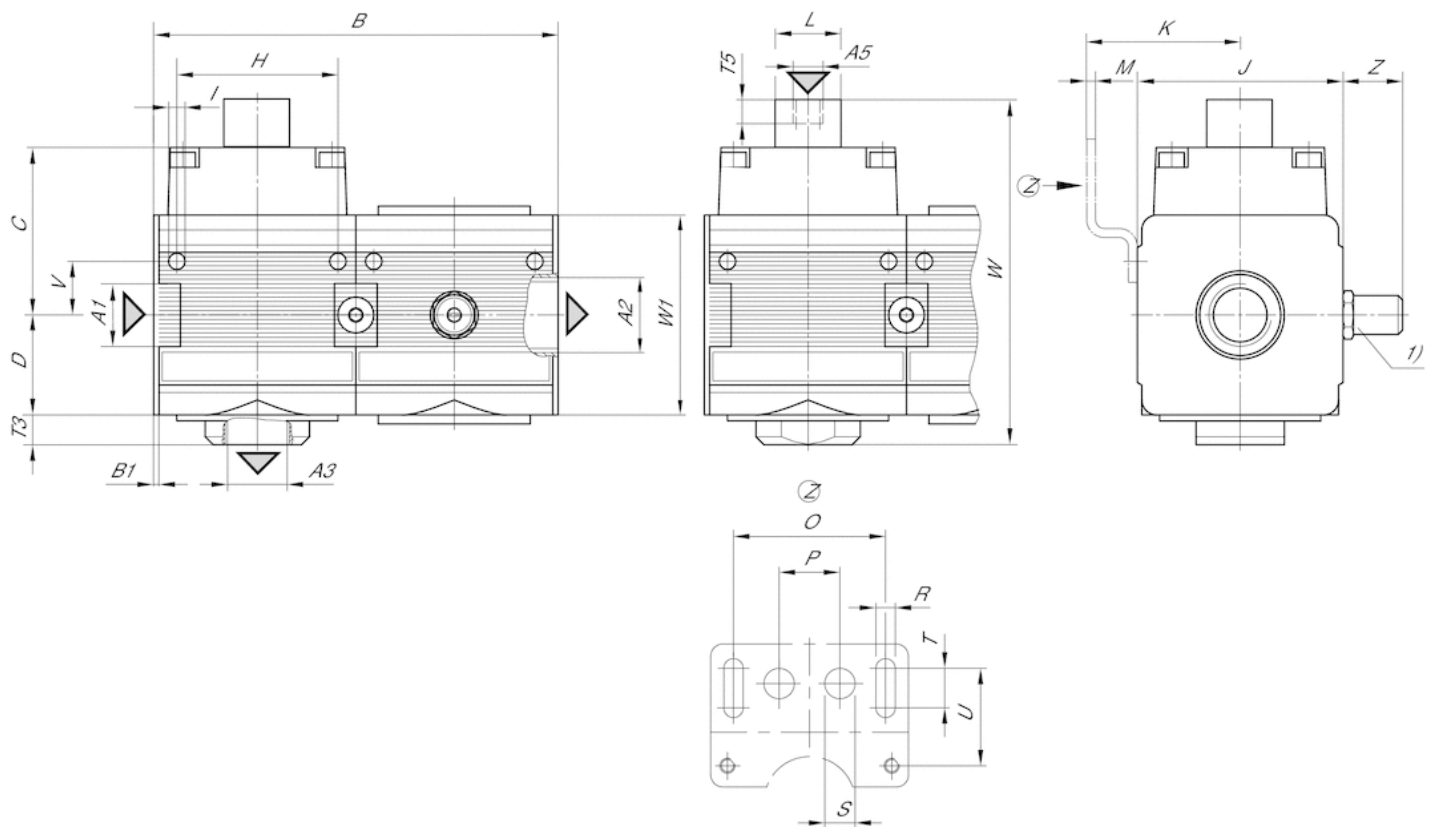
Material

Threaded bushing

Die cast zinc

Dimensions

Dimensions



A1 = input

A2 = output

A3 = ventilation port

A5 = control pressure connection

1) Adjustment screw for filling time

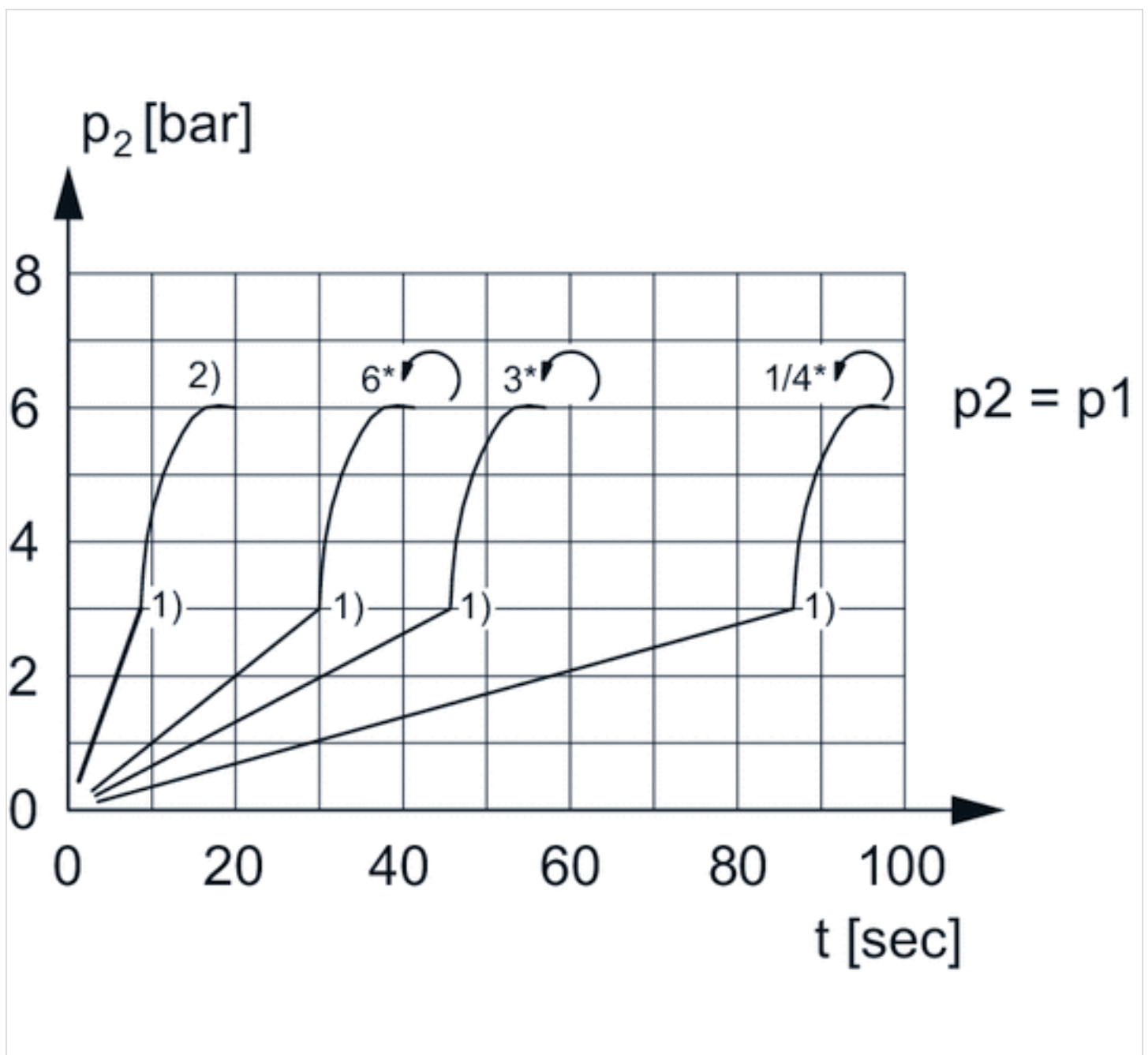
Dimensions in mm

A1	A2	A3	A5	B	B1	C	D	H	I	J	K	L	M	O	P	R	S	T	T3	T5	U	V
G 1/2	G 1/2	G 1/2	G 1/8	135.6	1.8	56.5	33.5	54	5.5	69	54.5	22	3	50	20	6.4	20	10	10	13	27.5	12.3
G 1/2	G 1/2	G 1/2	G 1/8	135.6	1.8	56.5	33.5	54	5.5	69	54.5	22	3	50	20	6.4	20	10	10	13	27.5	12.3

W	W1	Z
96	52	20
96	52	—

Diagrams

Secondary pressure while filling



p_1 = working pressure
 p_2 = secondary pressure

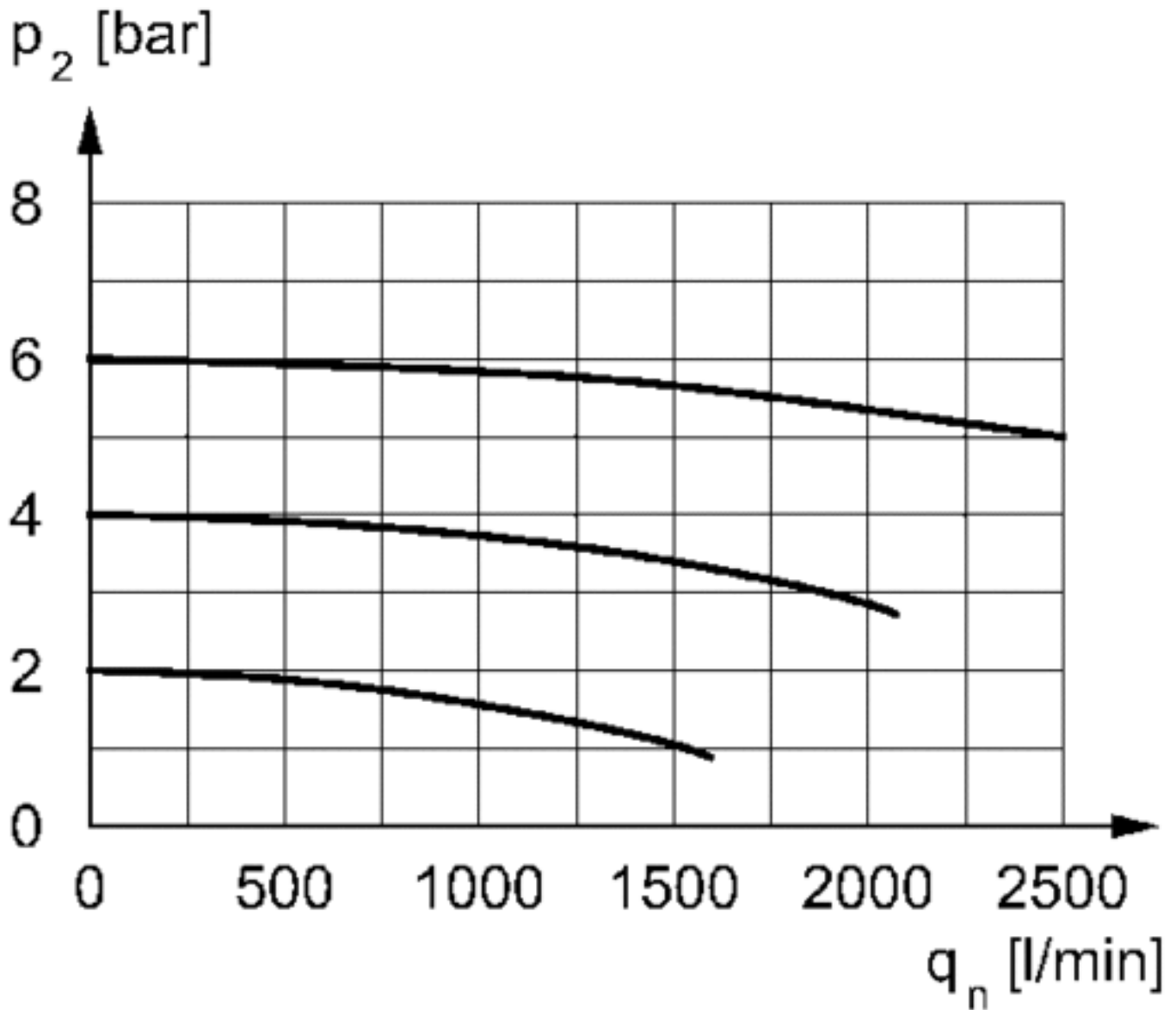
t = filling time, adjustable via adjustment screw (throttle)

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 = secondary pressure

q_n = nominal flow

Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



Visit us: [Emerson.com/Aventics](https://www.emerson.com/Aventics)

Your local contact: [Emerson.com/contactus](https://www.emerson.com/contactus)



Emerson.com



Facebook.com/EmersonAutomationSolutions



LinkedIn.com/company/Emerson-Automation-Solutions



Twitter.com/EMR_Automation

An example configuration is depicted on the title page. The delivered product may thus vary from that in the illustration. Subject to change. This Document, as well as the data, specifications and other information set forth in it, are the exclusive property of AVENTICS GmbH. It may not be reproduced or given to third parties without its consent. Only use the AVENTICS products shown in industrial applications. Read the product documentation completely and carefully before using the product. Observe the applicable regulations and laws of the respective country. When integrating the product into applications, note the system manufacturer's specifications for safe use of the product. The data specified only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgement and verification. It must be remembered that the products are subject to a natural process of wear and aging.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Brand logotype are registered trademarks of one of the Emerson family of companies. All other marks are the property of their respective owners. © 2020 Emerson Electric Co. All rights reserved.
2020-12



CONSIDER IT SOLVED™