







Filling unit, electrically operated, Series NL4-SSU

- Compressed air connection G 1/2
- Pipe connection
- Electrical connection: Plug, ISO 6952, form B



Type	Poppet valve, Can be assembled into blocks
Parts	Filling valve, 3/2-directional valve, electrically operated
Nominal flow 1 ▶ 2	2500 l/min
Nominal flow 2 ▶ 3	1600 l/min
Working pressure min./max.	2,5 ... 10 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 ... 60 °C
Ambient temperature min./max.	-10 ... 60 °C
Pilot	Internal
Sealing principle	Soft sealing
Max. particle size	5 µm
Protection class acc. to DIN EN 61140 with plug	IP65
Duty cycle	100 %
Weight	See table below

Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
0821300950		—	G 1/2	G 1/2	G 1/2
0821300952		—	G 1/2	G 1/2	G 1/2
0821300953			G 1/2	G 1/2	G 1/2
0821300955		—	G 1/2	G 1/2	G 1/2
0821300957		—	G 1/2	G 1/2	G 1/2

Part No.	Operational voltage	Power consumption	Manual override
	DC	DC	
0821300950	24 V	4,8 W	-
0821300952	-	-	-
0821300953	-	-	with detent
0821300955	24 V	4,8 W	-
0821300957	-	-	-

Part No.	Electrical connection	Connector standard	basic valve with electrical connector
	Pilot valve		
0821300950	Plug, ISO 6952, form B	ISO 6952	-
0821300952	Plug, ISO 6952, form B	-	pilot valve without coil
0821300953	Plug, ISO 6952, form B	-	pilot valve without coil
0821300955	Plug, ISO 6952, form B	ISO 6952	-
0821300957	Plug, ISO 6952, form B	-	pilot valve without coil

Part No.	Reverse polarity protection	Weight	
0821300950	Protected against polarity reversal	1,74 kg	1)
0821300952	Protected against polarity reversal	1,7 kg	1)
0821300953	Protected against polarity reversal	1,84 kg	1)
0821300955	Protected against polarity reversal	1,74 kg	2)
0821300957	Protected against polarity reversal	1,7 kg	2)

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

1) adjustable filling

2) 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 .

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.

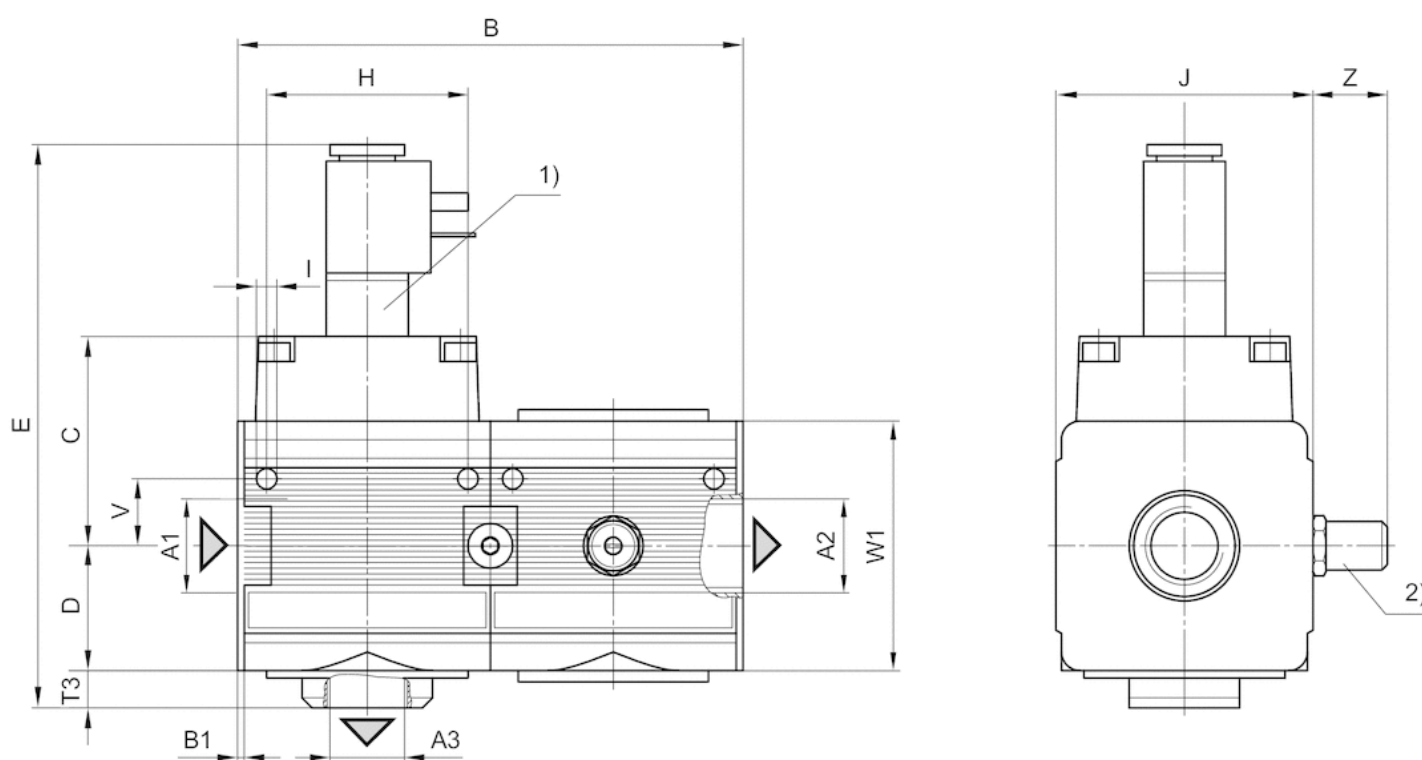
The filling valve builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a recommissioning after a mains pressure failure or avoids emergency OFF switching. This allows dangerous abrupt cylinder motions to be avoided.

Technical information

Material	
Housing	Die cast zinc
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene styrene
Threaded bushing	Die cast zinc

Dimensions

Dimensions



A1 = input

A2 = output

A3 = ventilation port

1) electrically operated

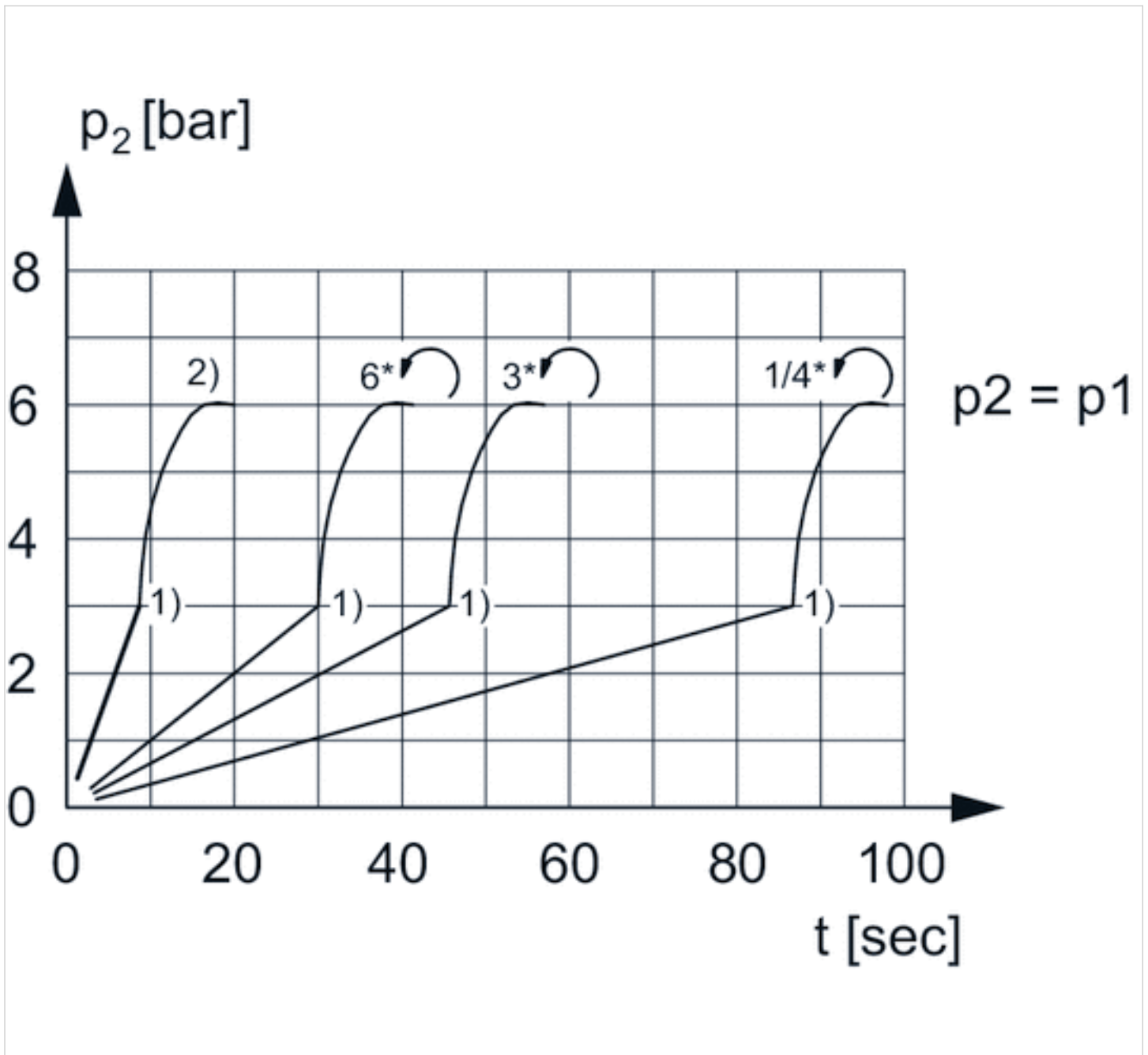
2) Adjustment screw for filling time

Dimensions in mm

A1	A2	A3	B	B1	C	D	E	H	I	J	T3	W1	Z
G 1/2	G 1/2	G 1/2	135.6	1.8	56.5	33.5	151	54	5.5	69	10	52	20
G 1/2	G 1/2	G 1/2	135.6	1.8	56.5	33.5	151	54	5.5	69	10	52	–

Diagrams

Secondary pressure while filling



p_1 = working pressure

p_2 = secondary pressure

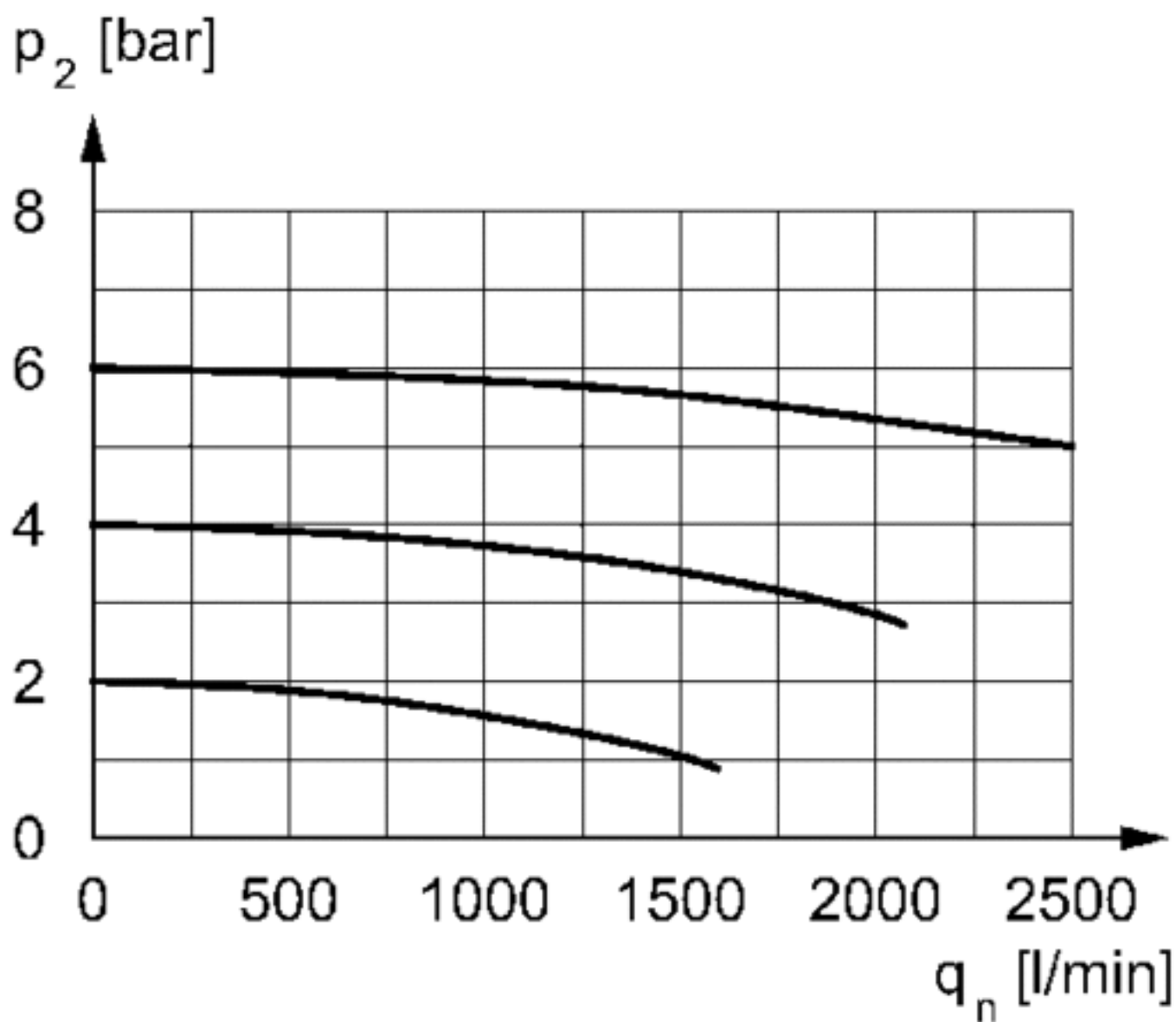
t = filling time, adjustable via adjustment screw (throttle)

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://emerson.com/aventics)

Your local contact: [Emerson.com/contactus](https://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™