






# Filling unit, electrically operated, Series NL1-SSU

- Compressed air connection G 1/4
- Pipe connection



Type	Poppet valve, Can be assembled into blocks
Parts	Filling valve, 3/2-directional valve, electrically operated
Nominal flow 1 ► 2	2000 l/min
Nominal flow 2 ► 3	800 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
0821300796		—	G 1/4	G 1/4	G 1/4
0821300797		—	G 1/4	G 1/4	G 1/4
0821300798		—	G 1/4	G 1/4	G 1/4
0821300799			G 1/4	G 1/4	G 1/4

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
0821300796	24 V	-	-
0821300797	-	230 V	230 V
0821300798	-	-	-
0821300799	-	-	-

Part No.	Power consumption	Holding power	Switch-on power	Manual override
	DC	AC 50 Hz	AC 50 Hz	
0821300796	4,8 W	-	-	-
0821300797	-	8,5 VA	11,8 VA	-
0821300798	-	-	-	with detent
0821300799	-	-	-	-

Part No.	Electrical connection	Connector standard	basic valve with electrical connector
	Pilot valve		
0821300796	Plug, ISO 6952, form B	ISO 6952	-
0821300797	Plug, ISO 6952, form B	ISO 6952	-

Part No.	Electrical connection	Connector standard	basic valve with electrical connector
	Pilot valve		
0821300798	-	-	pilot valve without coil
0821300799	-	-	pilot valve without coil

Part No.	Reverse polarity protection	Weight
0821300796	Protected against polarity reversal	0,88 kg
0821300797	Protected against polarity reversal	0,88 kg
0821300798	-	0,85 kg
0821300799	-	0,85 kg

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

## 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.

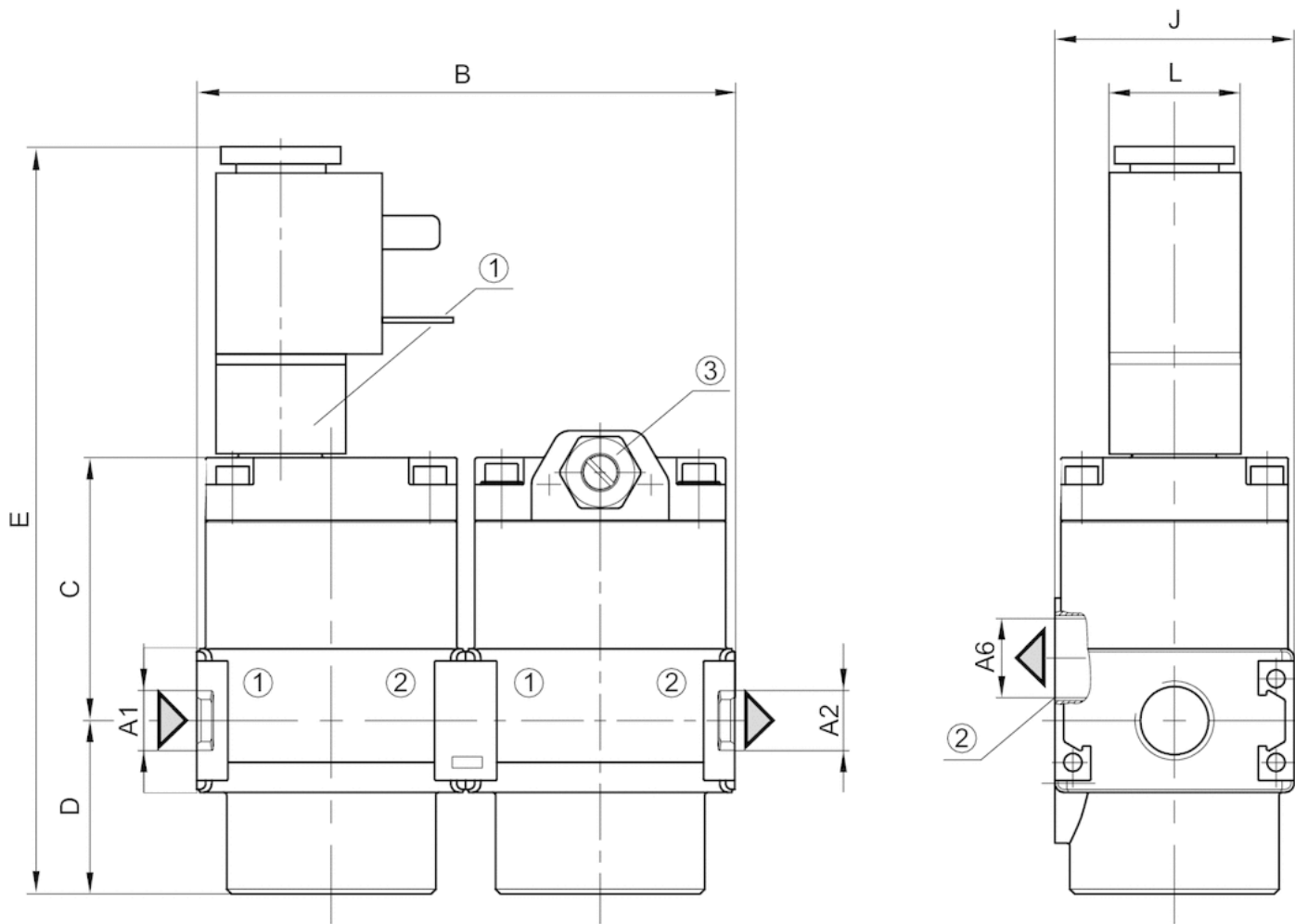
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

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

Dimensions

Dimensions



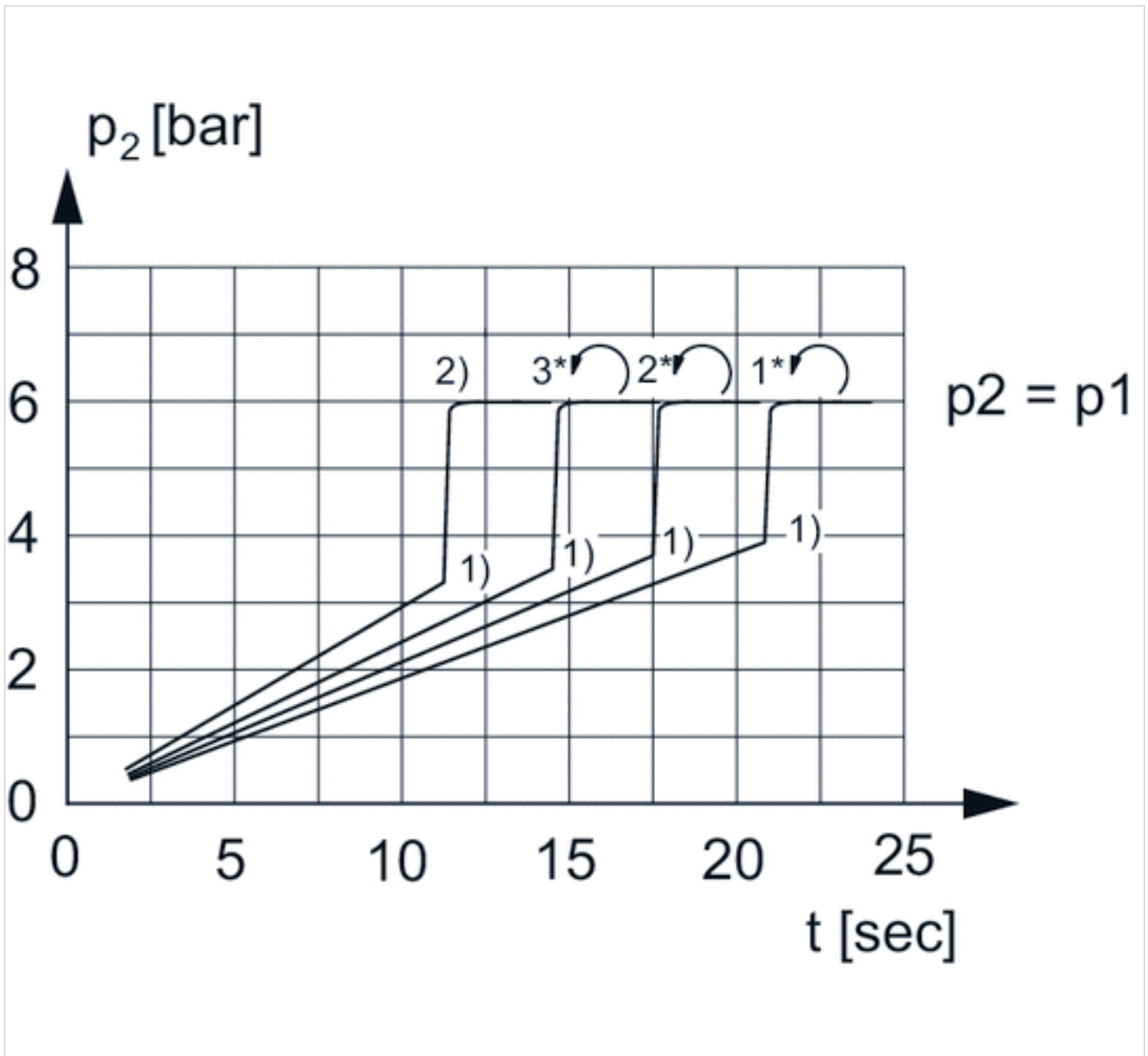
- A1 = input
- A2 = output
- A6 = output
- 1) electrically operated
- 2) exhaust
- 3) Adjustment screw for filling time

Dimensions in mm

A1	A2	A6	B	C	D	E	J	L	L1	W
G 1/4	G 1/4	G 1/4	90	44.5	29	124.5	40	22	22	89.5

## Diagrams

## Secondary pressure while filling



$p_1$  = working pressure

$p_2$  = secondary pressure

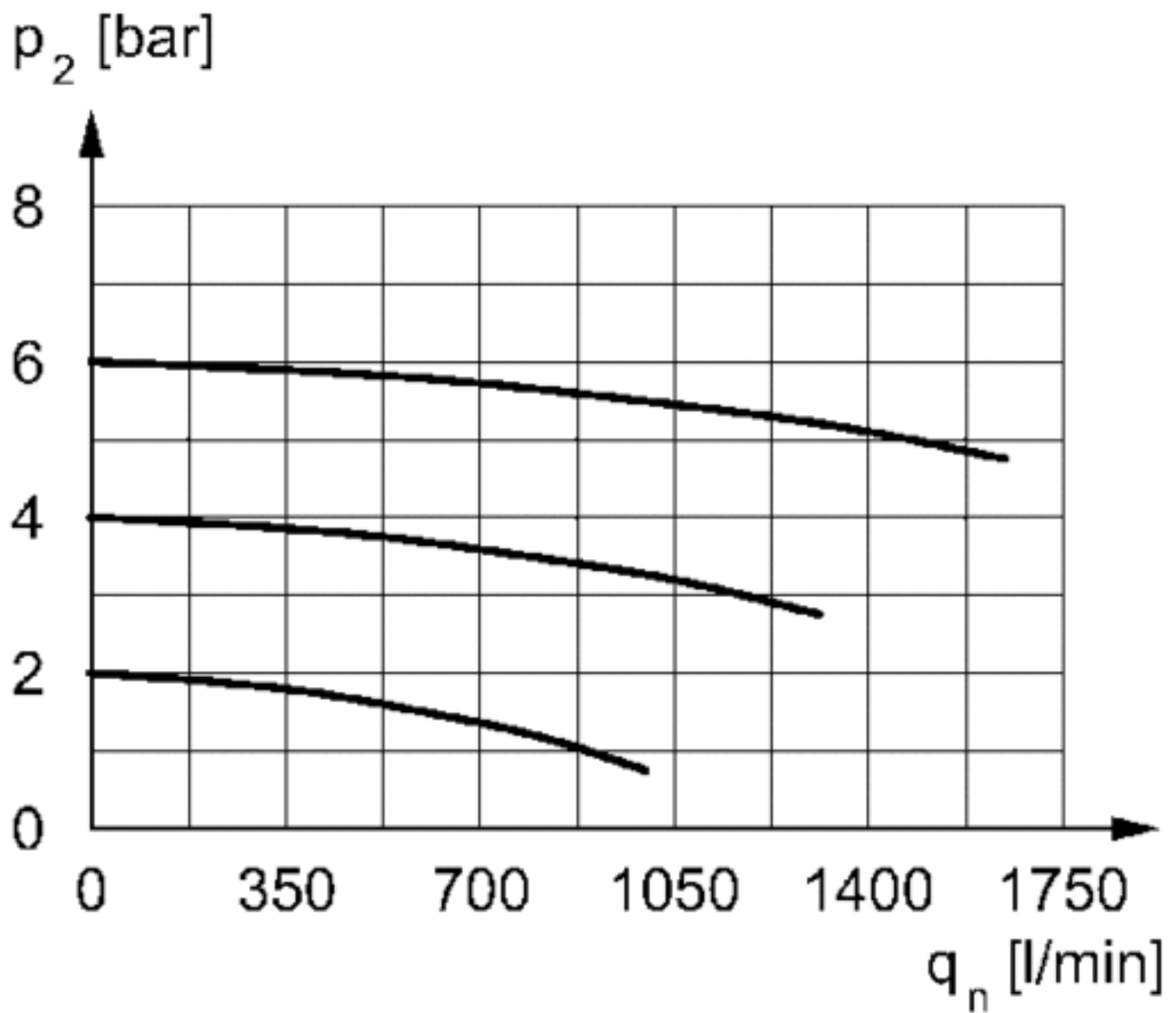
$t$  = filling time, adjustable via adjustment screw (throttle)

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

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2020-12



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