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

adjustable filling

Technical information

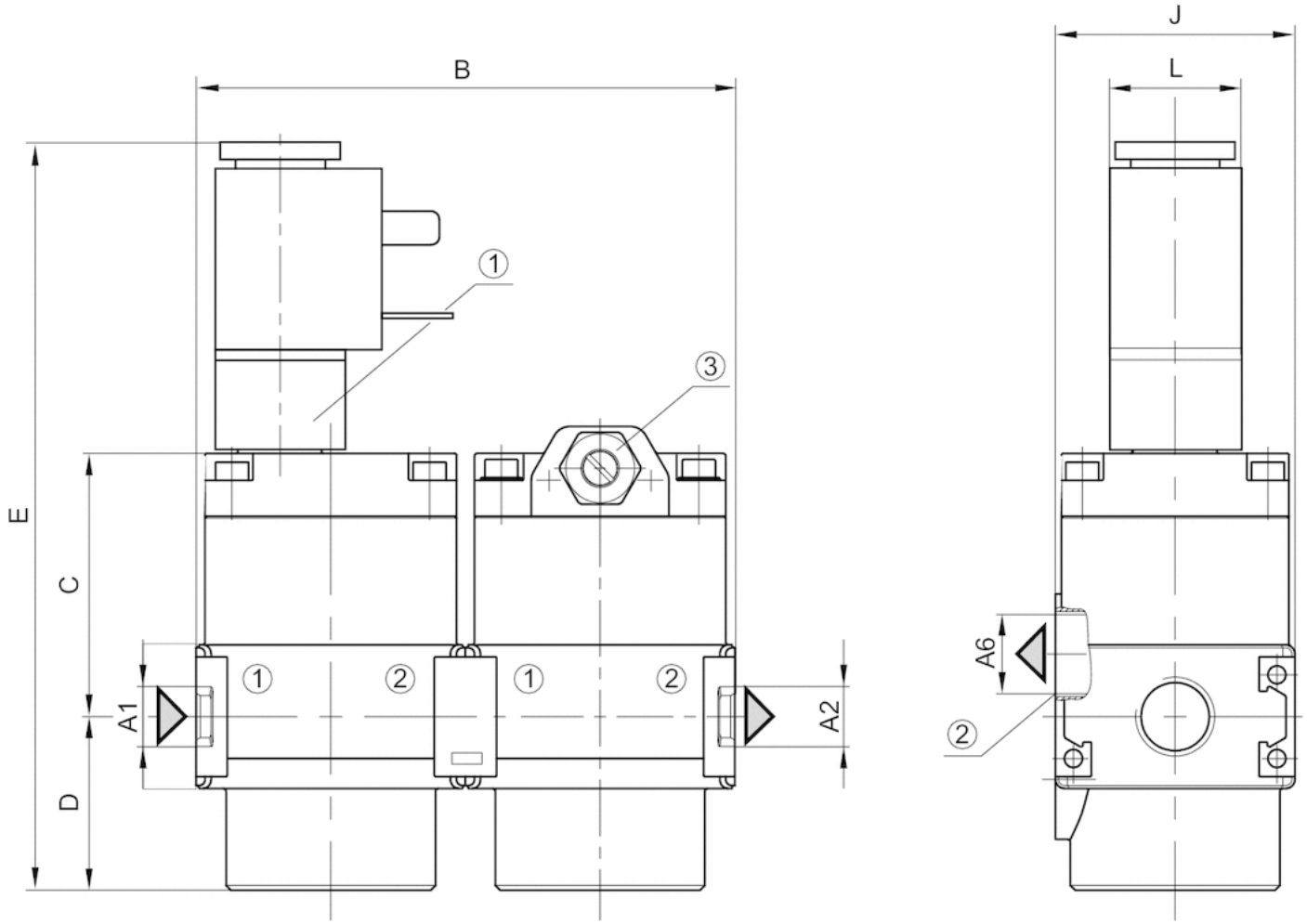
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The filling valve builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a recommissioning after a mains pressure failure or avoids emergency OFF switching. 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



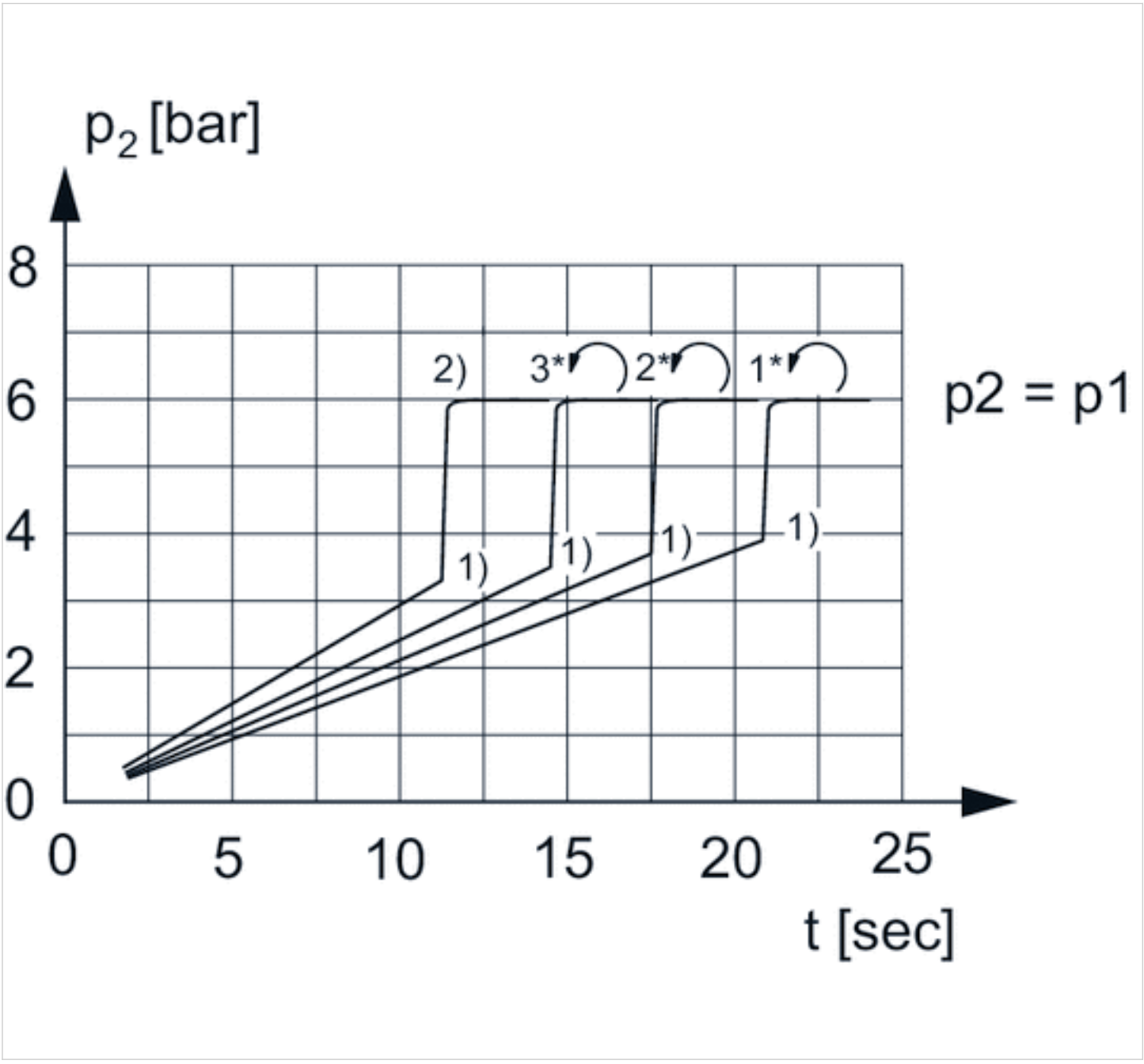
A1 = input
A2 = output
A6 = output
1) electrically operated
2) exhaust
3) Adjustment screw for filling time

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

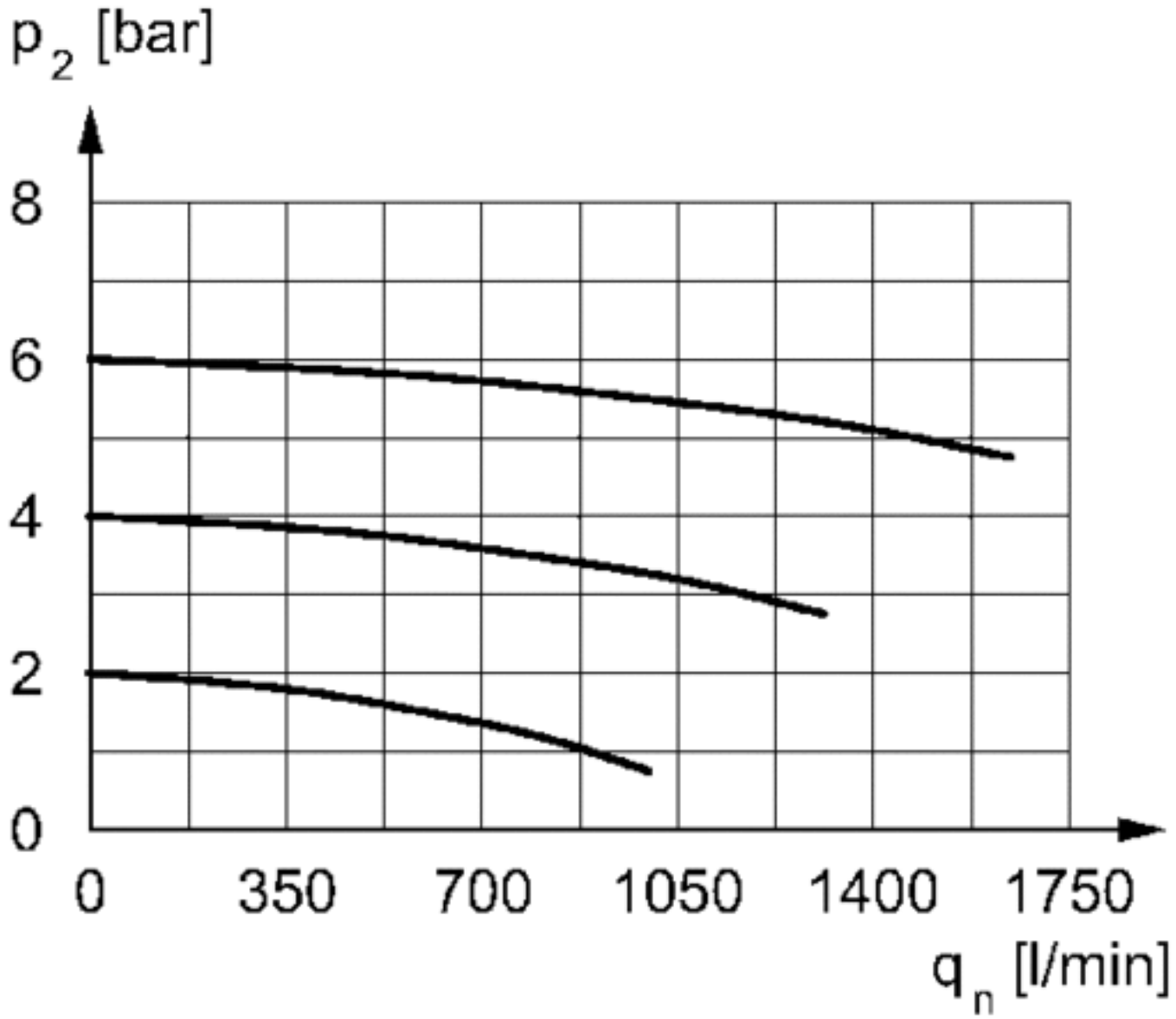
Diagrams

Secondary pressure while filling



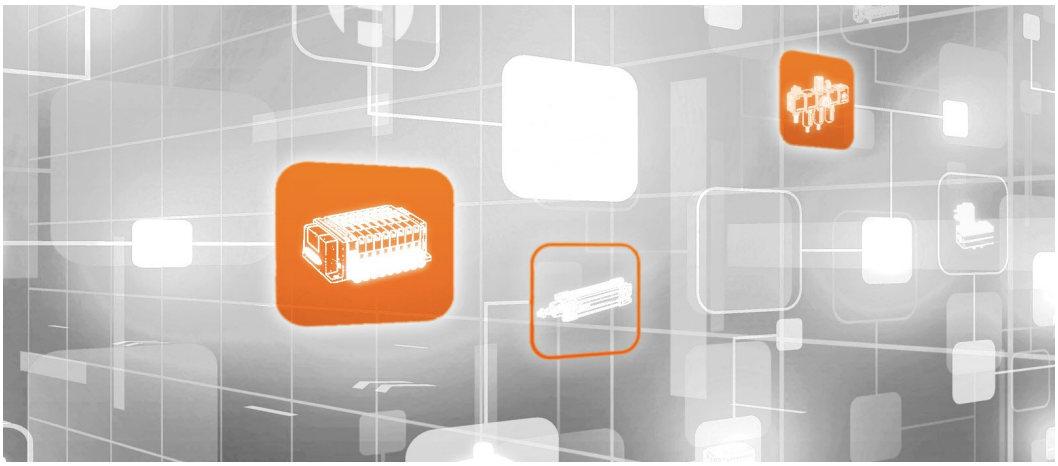
p1 = working pressure
p2 = secondary pressure
t = filling time, adjustable via adjustment screw (throttle)
1) Switching point: adjustable filling time, fixed change-over pressure ≈ 0.5 x p1 (50%)
2) Throttle fully opened
* Adjustment screw rotations

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

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



Visit us: Emerson.com/Aventics

Your local contact: Emerson.com/contactus

Emerson.com

Facebook.com/EmersonAutomationSolutions

LinkedIn.com/company/Emerson-Automation-Solutions

Twitter.com/EMR_Automation

2020-12

EMERSON.

CONSIDER IT SOLVED™