











# Filling unit, electrically operated, Series NL6-SSU

- ATEX optional
- Compressed air connection G 3/4 G 1
- Pipe connection



|   |   |
|---|---|
| Version   | Poppet valve, Can be assembled into blocks                  |
| Parts   | Filling valve, 3/2-directional valve, electrically operated |
| Nominal flow 1 ▶ 2                              | 8750 l/min  |
| Nominal flow 2 ▶ 3                              | 3900 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 |
|------------|---|---|---------------------------------|----------------------------------|---------|
| 0821300959 |  | —   | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300958 |  | —   | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300960 |  | —   | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300994 |  |  | G 3/4                           | G 3/4                            | G 1/2   |
| 0821300961 |  | —   | G 1                             | G 1                              | G 1/2   |
| 0821300962 |  | —   | G 1                             | G 1                              | G 1/2   |
| 0821300963 |  | —   | G 1                             | G 1                              | G 1/2   |
| 0821300995 |  |  | G 1                             | G 1                              | G 1/2   |

| Part No.   | Operationalvoltage | Operationalvoltage | Operationalvoltage | Power consumption |
|------------|--------------------|--------------------|--------------------|-------------------|
|            | DC                 | AC 50 Hz           | AC 60 Hz           | DC                |
| 0821300959 | 24 V               | -                  | -                  | 4,8 W             |
| 0821300958 | -                  | 230 V              | 230 V              | -                 |
| 0821300960 | -                  | -                  | -                  | -                 |
| 0821300994 | -                  | -                  | -                  | -                 |
| 0821300961 | 24 V               | -                  | -                  | 4,8 W             |
| 0821300962 | -                  | 230 V              | 230 V              | -                 |
| 0821300963 | -                  | -                  | -                  | -                 |
| 0821300995 | -                  | -                  | -                  | -                 |

| Part No.   | Holding power | Switch-on power | Manual override | Electrical connection  |
|------------|---------------|-----------------|-----------------|------------------------|
|            | AC 50 Hz      | AC 50 Hz        |                 | Pilot valve            |
| 0821300959 | -             | -               | -               | Plug, ISO 6952, form B |
| 0821300958 | 8,5 VA        | 11,8 VA         | -               | Plug, ISO 6952, form B |
| 0821300960 | -             | -               | without         | -                      |
| 0821300994 | -             | -               | with detent     | -                      |
| 0821300961 | -             | -               | -               | Plug, ISO 6952, form B |
| 0821300962 | 8,5 VA        | 11,8 VA         | -               | Plug, ISO 6952, form B |
| 0821300963 | -             | -               | without         | -                      |
| 0821300995 | -             | -               | with detent     | -                      |

| Part No.   | basic valve with electrical connector | Reverse polarity protection         | Weight  |
|------------|---------------------------------------|-------------------------------------|---------|
| 0821300959 | -                                     | Protected against polarity reversal | 3,13 kg |
| 0821300958 | -                                     | Protected against polarity reversal | 3,13 kg |
| 0821300960 | pilot valve without coil              | -                                   | 3,06 kg |
| 0821300994 | pilot valve without coil              | -                                   | 3,06 kg |
| 0821300961 | -                                     | Protected against polarity reversal | 3,13 kg |
| 0821300962 | -                                     | Protected against polarity reversal | 3,13 kg |
| 0821300963 | pilot valve without coil              | -                                   | 3,06 kg |
| 0821300995 | pilot valve without coil              | -                                   | 3,06 kg |

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

## Technical information

Builds up pressure slowly in the pneumatic systems, i.e. prevents a sudden pressure build-up during a restart after a mains pressure failure or avoids emergency OFF switching. This also avoids dangerous, jerky cylinder movements.

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

ATEX optional: The ATEX ID depends on the selected ATEX coil.

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.

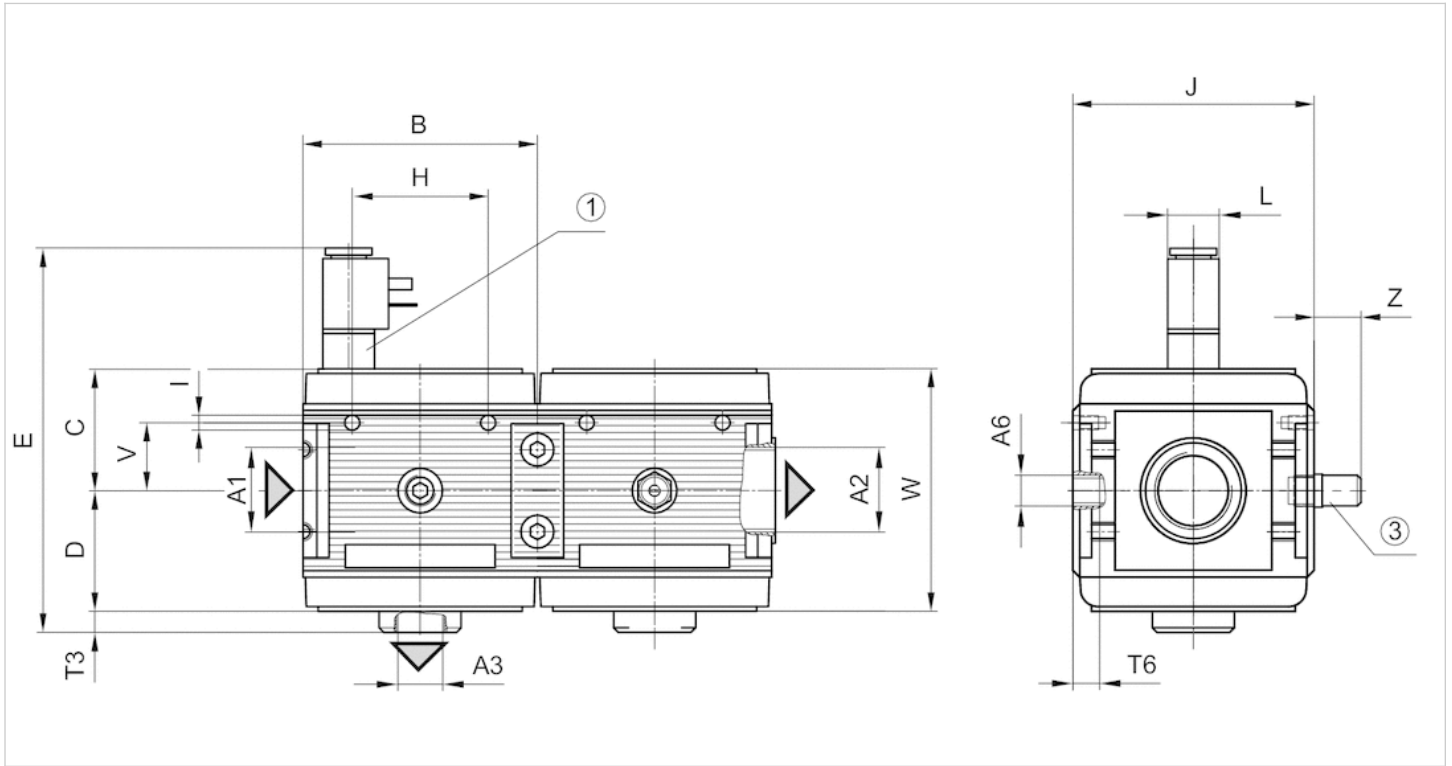
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

## Technical information

| Material    |                                 |
|-------------|---------------------------------|
| Housing     | Die-cast aluminum               |
| Front plate | Acrylonitrile butadiene styrene |
| Seals       | Acrylonitrile butadiene styrene |

## Dimensions

### Dimensions



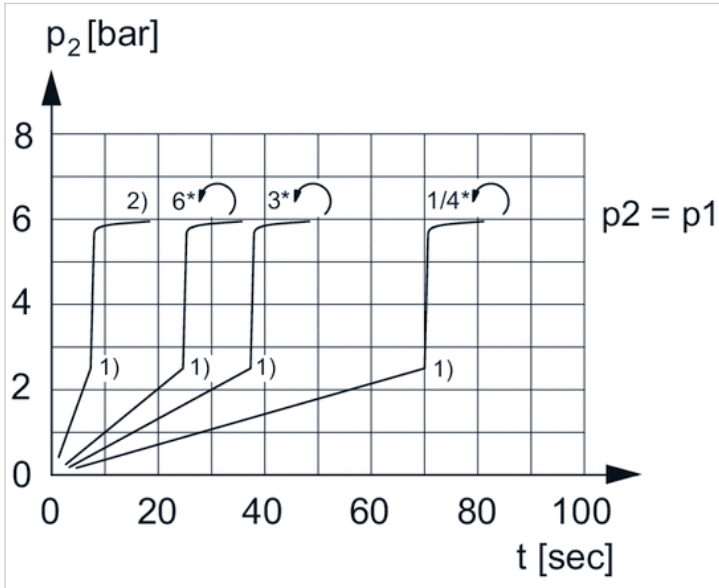
- A1 = input A2 = output
- A3 = ventilation port
- 1) electrically operated
- 2) Adjustment screw for filling time

### Dimensions in mm

| A1    | A2    | A3    | A6    | B   | C  | D    | E     | H  | I  | J   | L  | T3  | T6 | V  | W     | Z  |
|-------|-------|-------|-------|-----|----|------|-------|----|----|-----|----|-----|----|----|-------|----|
| G 3/4 | G 3/4 | G 1/2 | G 1/4 | 100 | 52 | 51.5 | 164.5 | 58 | M6 | 103 | 22 | 9.5 | 7  | 29 | 103.5 | 20 |
| G 1   | G 1   | G 1/2 | G 1/4 | 100 | 52 | 51.5 | 164.5 | 58 | M6 | 103 | 22 | 9.5 | 7  | 29 | 103.5 | 20 |

## Diagrams

### Secondary pressure while filling



$p_1$  = working pressure

$p_2$  = secondary pressure

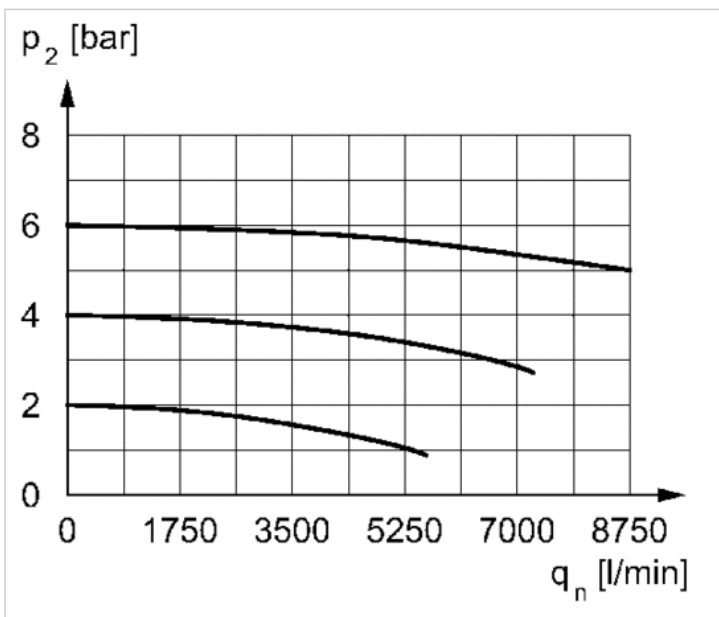
$t$  = filling time, adjustable via adjustment screw (throttle)

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