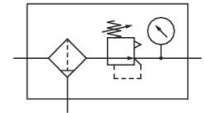


AVENTICS Series NL4 Air Preparation Units

The AVENTICS Series NL maintenance units are suitable for all areas: as individual components or as assembled maintenance units, for centralized or decentralized compressed air preparation, in compact or powerful versions, for use in high or low temperatures. This line offers a complete, customizable compressed air preparation technology. It includes an option to combine every component in the Series to achieve the desired function, making it possible to adjust the components precisely to the application requirements.



Technical data

| | |
|--------------------------|---|
| Industry | Industrial |
| Parts | Filter pressure regulator |
| Reservoir | reservoir, polycarbonate, with metal protective guard |
| Port | G 1/2 |
| Nominal flow Qn | 6900 l/min |
| Filter porosity | 5 µm |
| Condensate drain | semi-automatic, open without pressure |
| Pressure gauge | with pressure gauge |
| Min. working pressure | 1.5 bar |
| Max. working pressure | 16 bar |
| Min. ambient temperature | -10 °C |
| Max. ambient temperature | 60 °C |
| Min. regulation range | 0.5 bar |
| Max. regulation range | 10 bar |
| Lock type | not lockable |
| Type | 1-part |
| Type | Can be assembled into blocks |
| Pressure supply | single |
| Mounting orientation | vertical |

Filter pressure regulator, Series NL4-FRE

NL4

0821300351

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| | |
|--|-----------------------------------|
| Regulator type | Diaphragm-type pressure regulator |
| Regulator function | with relieving air exhaust |
| Filter element | exchangeable |
| Filter reservoir volume | 50 cm ³ |
| Max. achievable compressed air class acc. to ISO 8573-1:2010 | 6 : 7 : - |
| Medium | Compressed air Neutral gases |
| Weight | 1.28 kg |

Material

| | |
|---------------------------|---------------------------------|
| Housing material | Die cast zinc |
| Seal material | Acrylonitrile butadiene rubber |
| Material front plate | Acrylonitrile butadiene styrene |
| Material threaded bushing | Die cast zinc |
| Material reservoir | Polycarbonate |
| Material protective guard | Steel, chrome-plated |
| Material filter insert | Polyethylene |
| Part No. | 0821300351 |

Technical information

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

Note: Polycarbonate reservoirs are susceptible to solvents, supplementary information can be found at "Customer information".

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.

Also suitable for separation of fluid oil or water due to the design.

The rear pressure gauge connection on the pressure regulator is closed with a blanking plug, the front connection is open. Depending on the customer application, a second blanking plug may be necessary. Please order separately (see accessories).

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

Metal protective guard can be retrofitted for all polycarbonate reservoirs

Pressure gauge enclosed separately

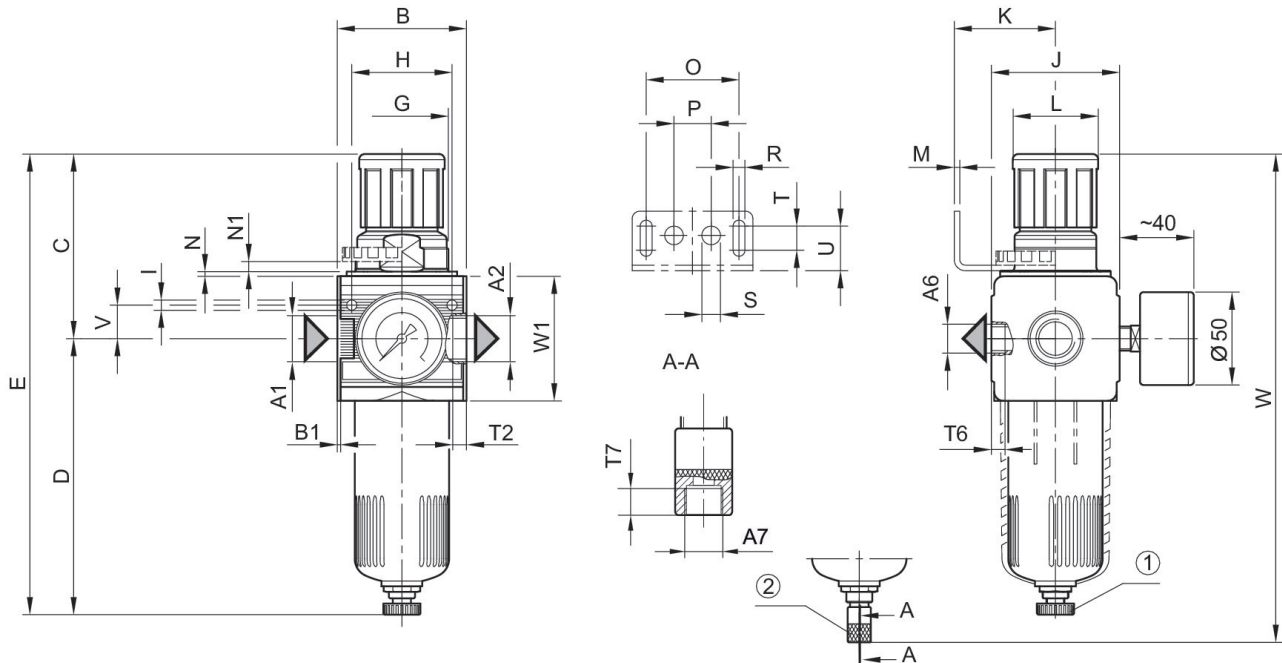
Filter pressure regulator, Series NL4-FRE

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NL4

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Dimensions



A1 = input A2 = output A6 = output

A7 = condensate drain

1) Semi-automatic condensate drain 2) fully automatic condensate drain

Dimensions in mm

| | A1 | A2 | A6 | A7 | B | B1 | C | D | E |
|------------|-------|-------|-------|-------|------|-----|------|-------|-------|
| 0821300350 | G 1/2 | G 1/2 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |
| 0821300351 | G 1/2 | G 1/2 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |
| 0821300352 | G 1/2 | G 1/2 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |
| 0821300353 | G 1/2 | G 1/2 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |
| 0821300354 | G 1/2 | G 1/2 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |
| 0821300355 | G 1/2 | G 1/2 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |
| 0821300380 | G 3/4 | G 3/4 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |
| 0821300381 | G 3/4 | G 3/4 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |
| 0821300382 | G 3/4 | G 3/4 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |
| 0821300383 | G 3/4 | G 3/4 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |
| 0821300384 | G 3/4 | G 3/4 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |
| 0821300385 | G 3/4 | G 3/4 | G 1/4 | G 1/8 | 69.6 | 1.8 | 98.3 | 146.5 | 244.8 |

| | G | H | I | J | K | L | M | N | N1 |
|------------|---------|----|-----|----|------|----|---|---|-----|
| 0821300350 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |
| 0821300351 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |
| 0821300352 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |
| 0821300353 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |
| 0821300354 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |
| 0821300355 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |

Filter pressure regulator, Series NL4-FRE

NL4

0821300351

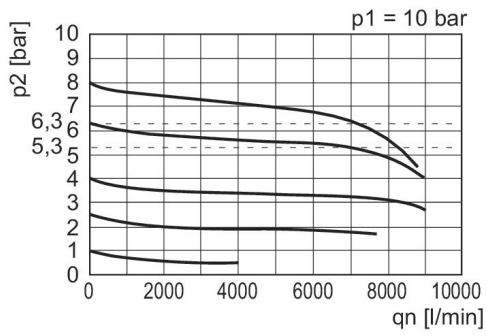
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| | G | H | I | J | K | L | M | N | N1 |
|------------|---------|----|-----|----|------|----|---|---|-----|
| 0821300380 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |
| 0821300381 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |
| 0821300382 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |
| 0821300383 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |
| 0821300384 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |
| 0821300385 | M50x1,5 | 54 | 5.5 | 69 | 54.5 | 46 | 3 | 3 | 5.5 |

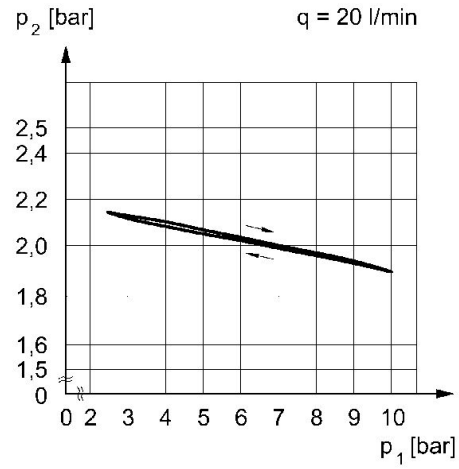
| | O | P | R | S | T | T2 | T6 | T7 | U |
|------------|----|----|-----|----|----|----|----|-----|----|
| 0821300350 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |
| 0821300351 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |
| 0821300352 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |
| 0821300353 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |
| 0821300354 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |
| 0821300355 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |
| 0821300380 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |
| 0821300381 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |
| 0821300382 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |
| 0821300383 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |
| 0821300384 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |
| 0821300385 | 50 | 20 | 6.4 | 10 | 13 | 13 | 7 | 8.5 | 24 |

| | V | W | W1 |
|------------|----|-------|----|
| 0821300350 | 18 | 262.8 | 67 |
| 0821300351 | 18 | 262.8 | 67 |
| 0821300352 | 18 | 262.8 | 67 |
| 0821300353 | 18 | 262.8 | 67 |
| 0821300354 | 18 | 262.8 | 67 |
| 0821300355 | 18 | 262.8 | 67 |
| 0821300380 | 18 | 262.8 | 67 |
| 0821300381 | 18 | 262.8 | 67 |
| 0821300382 | 18 | 262.8 | 67 |
| 0821300383 | 18 | 262.8 | 67 |
| 0821300384 | 18 | 262.8 | 67 |
| 0821300385 | 18 | 262.8 | 67 |

Flow rate characteristic, $p_2 = 0,05 - 7$ bar Pressure characteristics curve



p_1 = Working pressure p_2 = Secondary pressure q_n = Nominal flow



p_1 = working pressure p_2 = secondary pressure q = flow rate