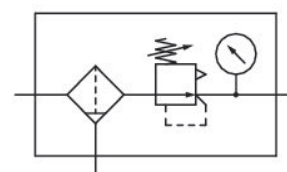


Filter pressure regulator, Series NL4-FRE

0821300354

General series information
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

Parts

Reservoir

Port

Nominal flow Q_n

Filter porosity

Condensate drain

Pressure gauge

Working pressure min.

Working pressure max

Min. ambient temperature

Max. ambient temperature

Regulation range min.

Regulation range max.

Industrial

Filter pressure regulator

reservoir, polycarbonate, with metal protective guard

G 1/2

6900 l/min

5 µm

fully automatic, open without pressure

with pressure gauge

1.5 bar

16 bar

-10 °C

60 °C

0.5 bar

10 bar

Lock type	not lockable
Type	1-part
Type	Can be assembled into blocks
Pressure supply	single
Mounting orientation	vertical
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	1.35 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
Material filter insert	Polyethylene
Part No.	0821300354

Technical information

The pressure dew point must be at least 15 °C under 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.

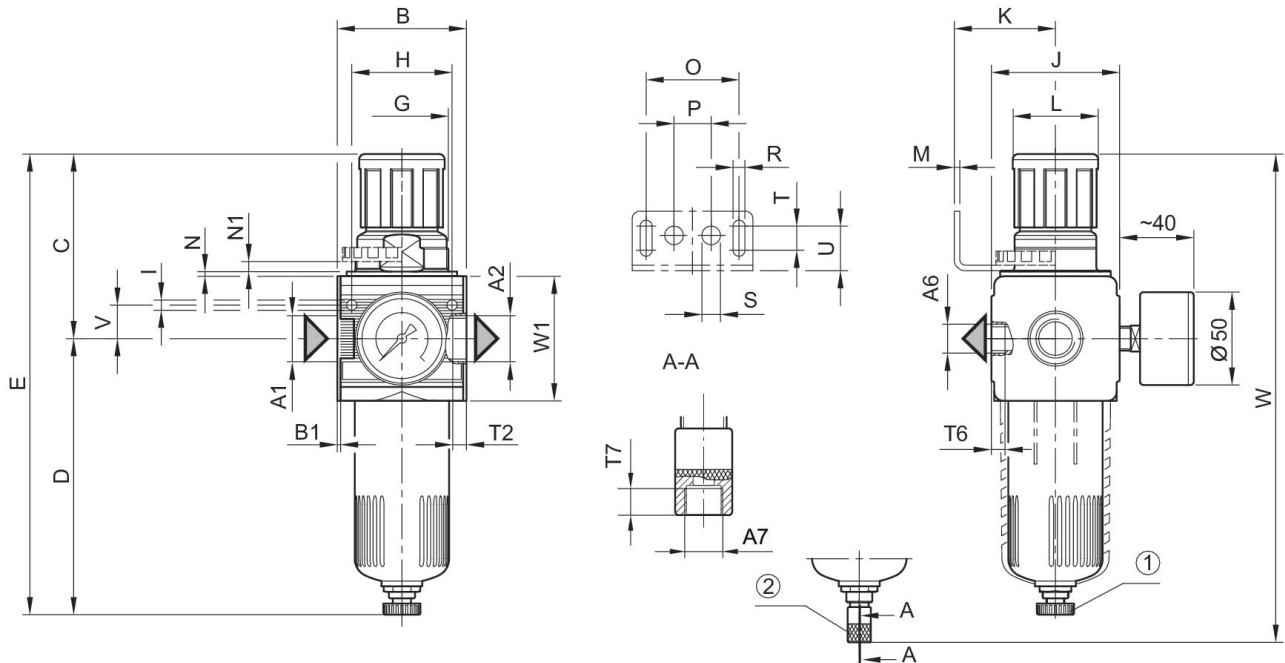
The rear pressure gauge connection on the pressure regulator is closed with a blanking plug, the front connection is open. Depending on the customer application, a second blanking plug may be necessary. Please order separately (see accessories).

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

Metal protective guard can be retrofitted for all polycarbonate reservoirs

Pressure gauge enclosed separately

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

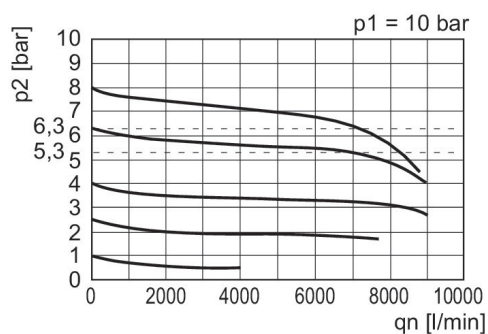
	G	H	I	J	K	L	M	N	N1
0821300350	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300351	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300352	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300353	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300354	M50x1,5	54	5.5	69	54.5	46	3	3	5.5
0821300355	M50x1,5	54	5.5	69	54.5	46	3	3	5.5

	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

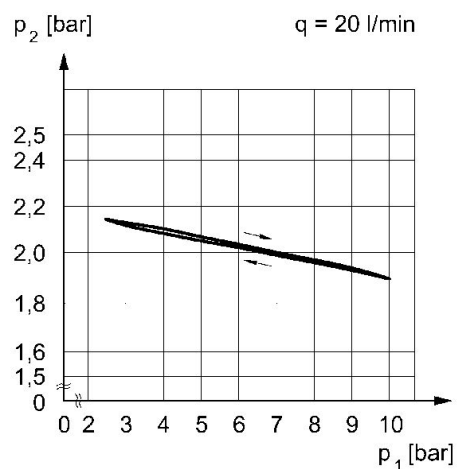
	V	W	W1
0821300350	18	262.8	67
0821300351	18	262.8	67
0821300352	18	262.8	67
0821300353	18	262.8	67
0821300354	18	262.8	67
0821300355	18	262.8	67
0821300380	18	262.8	67
0821300381	18	262.8	67
0821300382	18	262.8	67
0821300383	18	262.8	67
0821300384	18	262.8	67
0821300385	18	262.8	67

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



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

Pressure characteristics curve



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