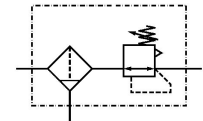


AVENTICS Series NL1 Air Preparation Units

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, without protective guard
Port	G 1/8
Nominal flow Qn	1350 l/min
Filter porosity	5 µm
Condensate drain	semi-automatic, open without pressure
Pressure gauge	without pressure gauge
Min. working pressure	1.5 bar
Max. working pressure	16 bar
Min. ambient temperature	-30 °C
Max. ambient temperature	50 °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 NL1-FRE

NL1

R412007618

2024-04-23

Regulator type	Diaphragm-type pressure regulator
Regulator function	with relieving air exhaust
Filter element	exchangeable
Filter reservoir volume	16 cm ³
Max. achievable compressed air class acc. to ISO 8573-1:2010	6 : 7 : -
Medium	Compressed air Neutral gases
Weight	0.334 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 filter insert	Polyethylene
Part No.	R412007618

Technical information

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

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

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).

Metal protective guard can be retrofitted for all polycarbonate reservoirs

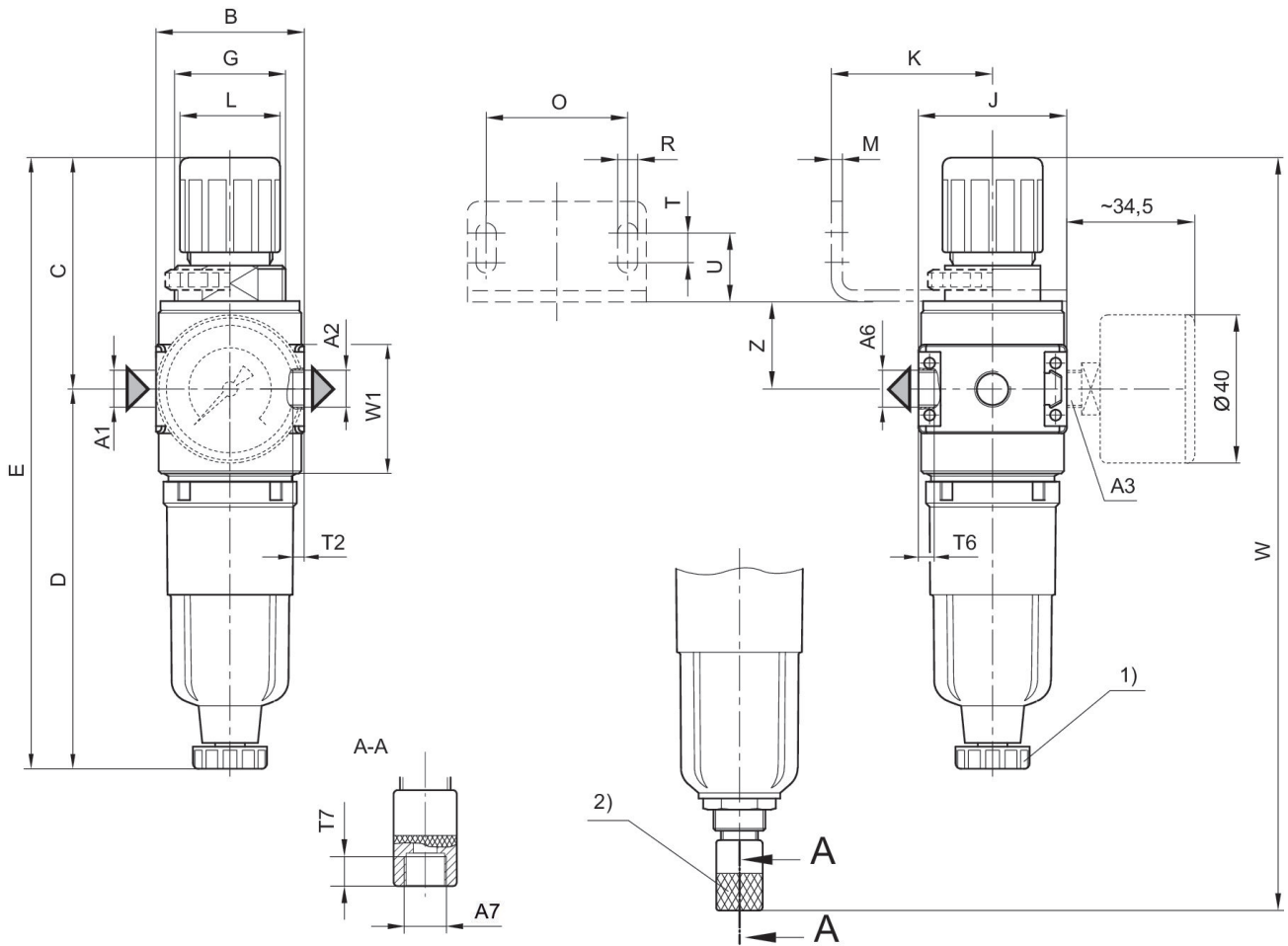
Filter pressure regulator, Series NL1-FRE

NL1

R412007618

2024-04-23

Dimensions



A1 = input A2 = output

A3 = output A6 = output

A7 = condensate drain

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

Dimensions in mm

Part No.	A1	A2	A3	A6	A7	B	C	D	E
R412007618	G 1/8	G 1/8	G 1/8	G 1/8	G 1/8	40	62.5	102.5	165
R412007619	G 1/4	G 1/4	G 1/8	G 1/8	G 1/8	40	62.5	102.5	165

Part No.	G	J	K	L	M	O	R	T	T2
R412007618	M30x1,5	40	43.5	27	3	38	5.4	8	8
R412007619	M30x1,5	40	43.5	27	3	38	5.4	8	8

Part No.	T6	T7	U	W	W1	Z
R412007618	6	8.5	18.5	203	44	24.5
R412007619	6	8.5	18.5	203	44	24.5

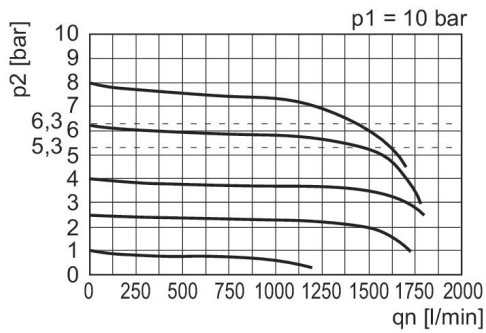
Filter pressure regulator, Series NL1-FRE

NL1

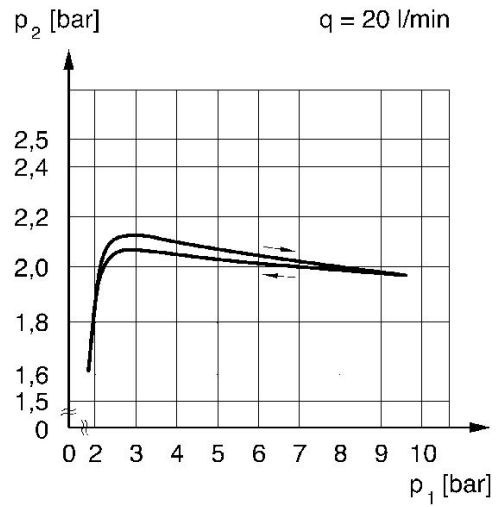
R412007618

2024-04-23

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