

# Precision pressure regulator, Series NL4-RGP-...-DS

2024-04-24

0821302524

## 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
Function	Precision pressure regulator
Parts	Precision pressure regulator with continuous pressure supply without pressure gauge
Pressure gauge	Any
Mounting orientation	Diaphragm-type pressure regulator
Regulator type	G 1/2
Port	5600 l/min
Nominal flow Qn	0.1 bar
Min. regulation range	3 bar
Max. regulation range	0.5 bar
Min. working pressure	16 bar
Max. working pressure	-10 °C
Min. ambient temperature	60 °C
Max. ambient temperature	Mechanical
Activation	with relieving air exhaust
Regulator function	Can be assembled into blocks
Regulator type	double
Pressure supply	not lockable
Lock type	

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~~with continuous pressure supply~~

~~with continuous pressure supply~~

Max. internal air consumption  $q_v$

2.6 l/min

Max. pressure gauge  $\varnothing$  in blocked state

40 mm

Medium

Compressed air  
Neutral gases

Recommended pre-filtering

5  $\mu$ m

Weight

0.867 kg

## Material

Housing material

Die cast zinc

Material front plate

Acrylonitrile butadiene styrene

Seal material

Acrylonitrile butadiene rubber

Part No.

0821302524

## 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

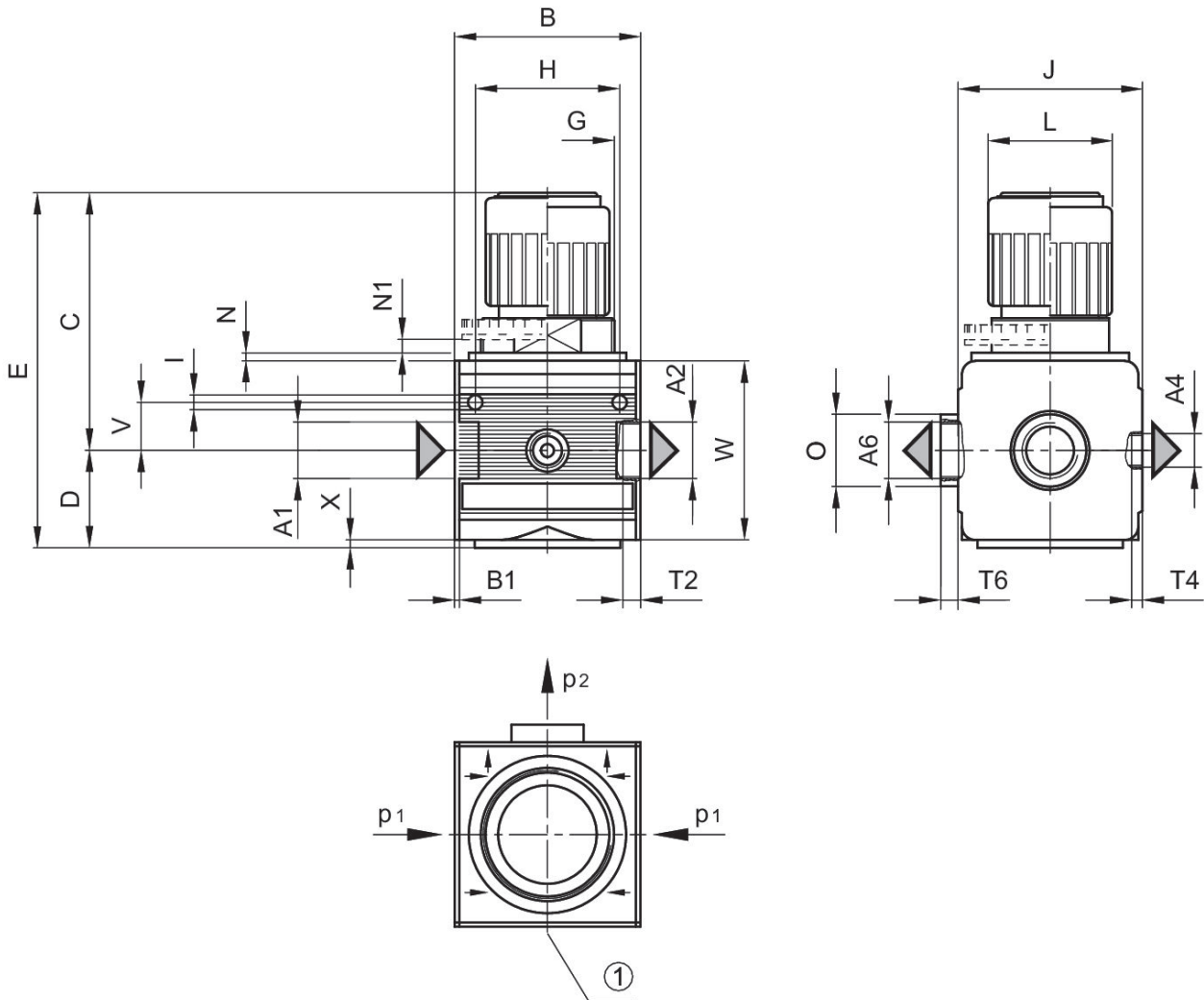
The rear pressure gauge connection on the pressure regulator is closed with a blanking plug, the front connection is open. Depending on the customer application, a second blanking plug may be necessary. Please order separately (see accessories).

Order pressure gauge separately

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Dimensions



A1 = input  
A2 = output  
A4 = output  
A6 = output  
1) Pressure gauge connection  
p1 = Working pressure  
p2 = Secondary pressure

## Dimensions in mm

Part No.	A1	A2	A4	A6	B	B1	C	D	E
0821302524	G 1/2	G 1/2	G 1/4	G 1/2	69.6	1.8	97	35.5	132.5
0821302525	G 1/2	G 1/2	G 1/4	G 1/2	69.6	1.8	97	35.5	132.5
0821302526	G 1/2	G 1/2	G 1/4	G 1/2	69.6	1.8	97	35.5	132.5

Part No.	G	H	I	J	L	N	N1	O	T2
0821302524	M50x1,5	54	5.5	69	46	3	5.5	27	13
0821302525	M50x1,5	54	5.5	69	46	3	5.5	27	13

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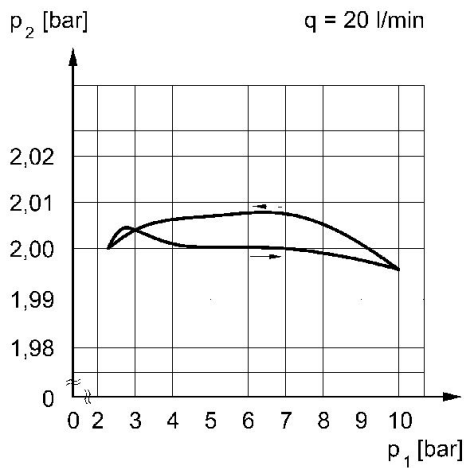
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Part No.	G	H	I	J	L	N	N1	O	T2
0821302526	M50x1,5	54	5.5	69	46	3	5.5	27	13

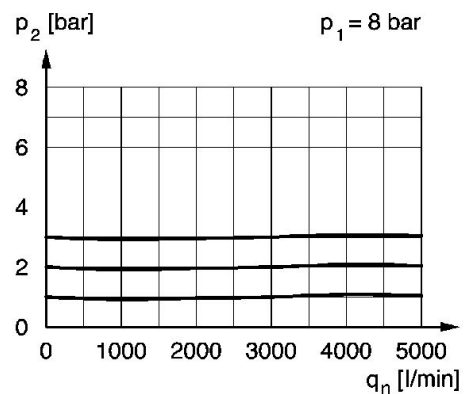
Part No.	T4	T6	V	W	X
0821302524	7	6	18	67	2
0821302525	7	6	18	67	2
0821302526	7	6	18	67	2

## Pressure characteristics curve



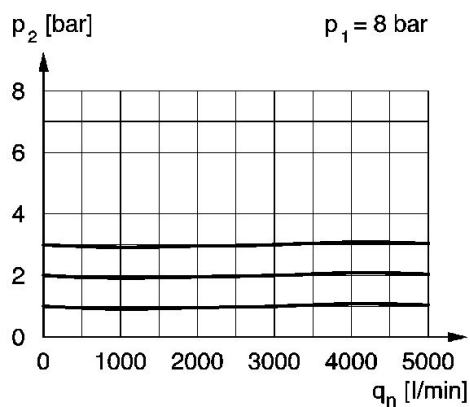
p1 = Working pressure  
p2 = Secondary pressure  
q = flow rate

## Flow rate characteristic, p2 = 0,05 - 7 bar



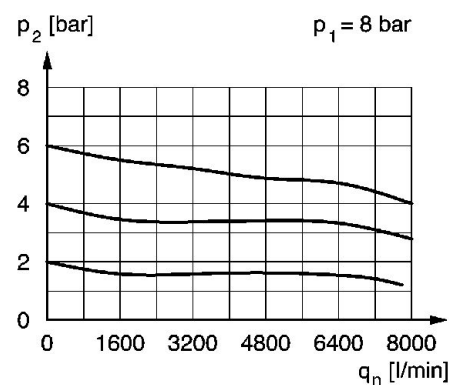
p2 = 0,1 - 3 bar  
p1 = Working pressure  
p2 = Secondary pressure  
qn = Nominal flow

## Flow rate characteristic, p2 = 0,05 - 7 bar



p2 = 0,2 - 6 bar  
p1 = Working pressure  
p2 = Secondary pressure  
qn = Nominal flow

## Flow rate characteristic, p2 = 0,05 - 7 bar



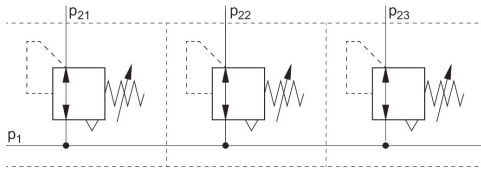
p2 = 0,5 - 10 bar  
p1 = Working pressure  
p2 = Secondary pressure  
qn = Nominal flow

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Application example

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$p_1$  = Working pressure