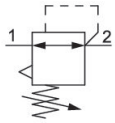
Precision pressure regulator, Series PR1-RGP

0821302556

AVENTICS Series PR1 Precision pressure regulators

The AVENTICS Series PR1/PR2 is designed for applications that demand fast responses to the slightest fluctuation in compressed air. They can be adjusted precisely and are an alternative to electronic pressure regulators. Precision pressure regulators are used to achieve extremely accurate pressure control independent from the pilot pressure and the flow rate. They offer high performance and flexibility, combined with increased reliability.

- Precise pressure control of the output pressure
- High performance
- Flexible
- Increased reliability



Technical data

Industry	Industrial
Note	cold-resistant
Function	Precision pressure regulator
Parts	Precision pressure regulator
Mounting orientation	Any
Regulator type	Diaphragm-type pressure regulator
Port	G 3/8
Nominal flow Qn	5000 l/min
Min. regulation range	0.05 bar
Max. regulation range	7 bar
Min. working pressure	0.5 bar
Max. working pressure	16 bar
Min. ambient temperature	-35 °C
Max. ambient temperature	60 °C
Activation	Mechanical
Regulator function	with relieving air exhaust
Certificates	Suitable for ATEX
Pressure supply	single
Max. internal air consumption q_v	6 l/min

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Medium	Compressed air Neutral gases
Recommended pre-filtering	5 µm
Weight	1.5 kg

Material

Housing material	Die cast zinc
Seal material	Chloroprene rubber
Part No.	0821302556

Technical information

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

Relieving exhaust (≤ 10 mbar over set pressure)

Mounting: mounting bracket R412004872 or installation in piping

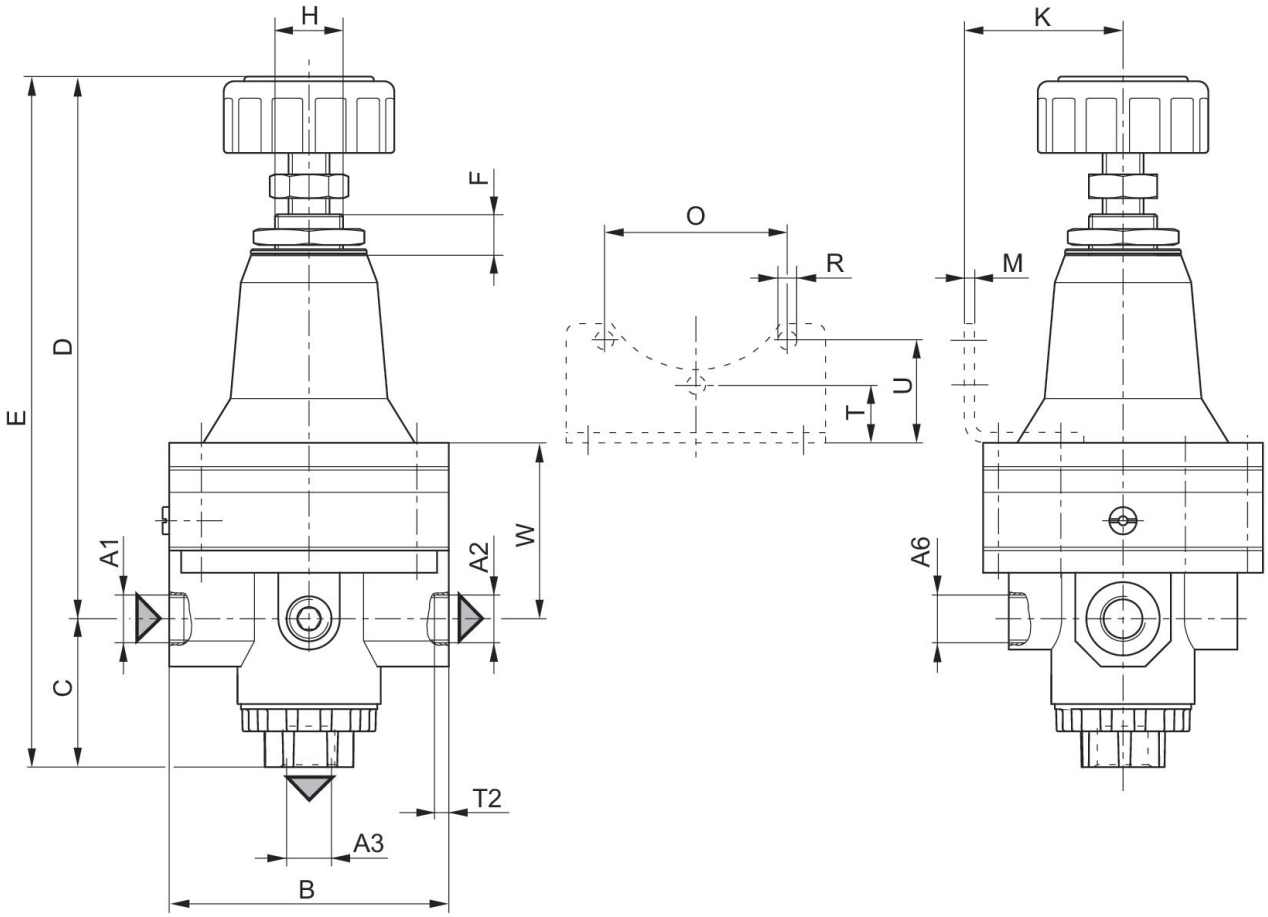
Notice: This product may only be operated with oil-free, dry compressed air.

Internal air consumption depending on adjustment range

Suitable for use in Ex zones 1, 2, 21, 22.

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

Dimensions



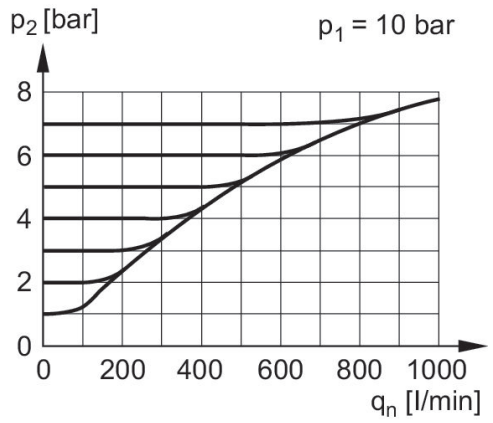
A1 = input
A2 = output
A3 = relieving exhaust
A6 = output

Dimensions in mm

Part No.	A1	A2	A3	A6	B	C	D	E	F	H
0821302565	G 1/4	G 1/4	G 3/8	G 1/4	82	43.5	159	202.5	10	M20x1,5
0821302566	G 1/4	G 1/4	G 3/8	G 1/4	82	43.5	159	202.5	10	M20x1,5
0821302567	G 1/4	G 1/4	G 3/8	G 1/4	82	43.5	159	202.5	10	M20x1,5
0821302554	G 3/8	G 3/8	G 3/8	G 1/4	82	43.5	159	202.5	10	M20x1,5
0821302555	G 3/8	G 3/8	G 3/8	G 1/4	82	43.5	159	202.5	10	M20x1,5
0821302556	G 3/8	G 3/8	G 3/8	G 1/4	82	43.5	159	202.5	10	M20x1,5
0821302173	G 1/2	G 1/2	G 3/8	G 1/4	82	43.5	159	202.5	10	M20x1,5

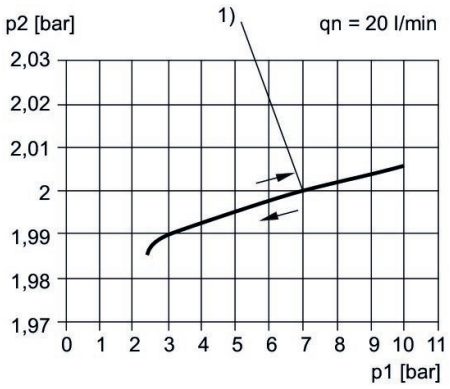
Part No.	K	M	O	R	T	T2	U	W
0821302565	47	3	54	4	17	16	30	51.6
0821302566	47	3	54	4	17	16	30	51.6
0821302567	47	3	54	4	17	16	30	51.6
0821302554	47	3	54	4	17	16	30	51.6
0821302555	47	3	54	4	17	16	30	51.6
0821302556	47	3	54	4	17	16	30	51.6
0821302173	47	3	54	4	17	16	30	51.6

exhaust characteristics (contact limit < 10 mbar)



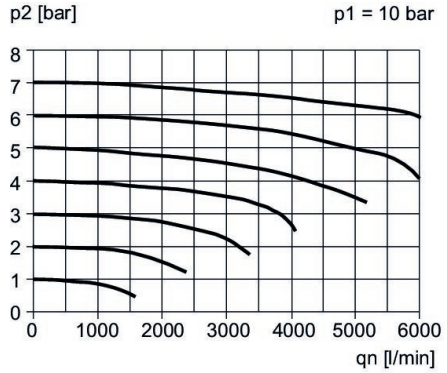
p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow

Hysteresis



p1 = Working pressure
p2 = Secondary pressure
q = flow rate
1) * starting point

Flow rate characteristic



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p2 = Secondary pressure
qn = Nominal flow