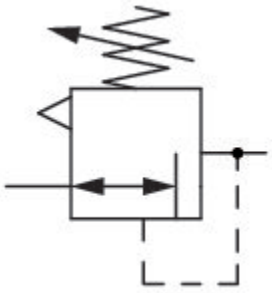
Precision pressure regulator, Series PR2-RGP

R412010840

General series information
Series PR2

- 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.



Technical data

Industry
Industrial

Function
Precision pressure regulator

Parts
Precision pressure regulator

Port
G 1/4

Nominal flow Qn
2000 l/min

Mounting orientation
Any

Regulator type
Diaphragm-type pressure regulator

Regulation range min.
0.05 bar

Regulation range max.
8 bar

Working pressure min.
0.5 bar

Working pressure max
16 bar

Min. ambient temperature
0 °C

Max. ambient temperature
60 °C

Activation
Mechanical

Regulator function
with relieving air exhaust

Pressure supply
single

Internal air consumption q_v max.
1.5 l/min

Medium
Compressed air

Recommended pre-filtering
5 µm

Weight
0.24 kg

Material

Housing material
Aluminum

Seal material
Acrylonitrile butadiene rubber

Part No.
R412010840

Technical information

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

Relieving exhaust: > 300 l/min at 6 bar

Precision: < 0.005 bar

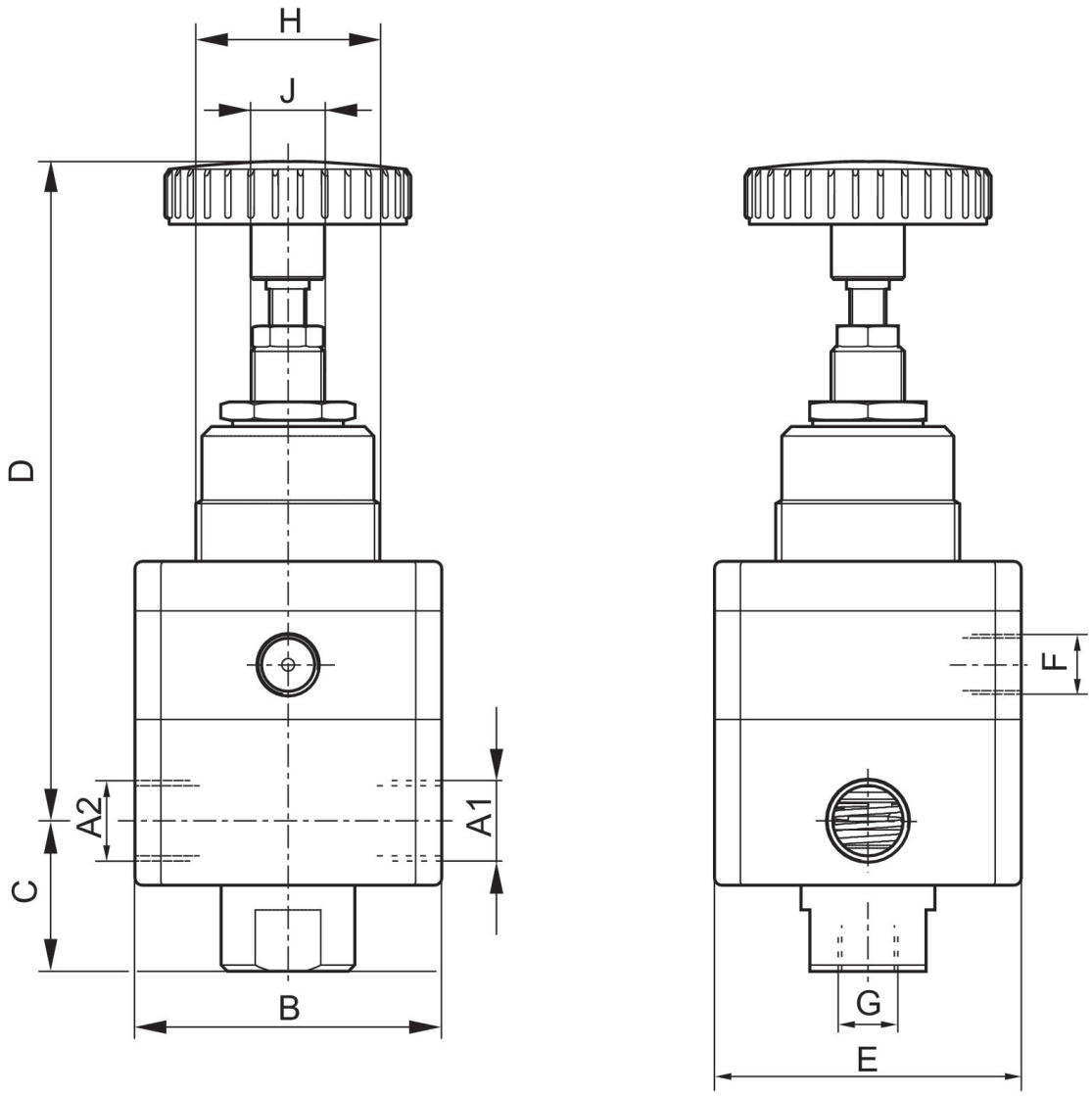
Internal air consumption at P1 = 8 bar (collected). Exhaust and internal air consumption via G 1/4 connection possible downward.

Mounting with mounting bracket 1821331013 (please order separately) and panel nuts

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

Nominal flow with secondary pressure 6,3 bar at Δp = 1 bar

Dimensions



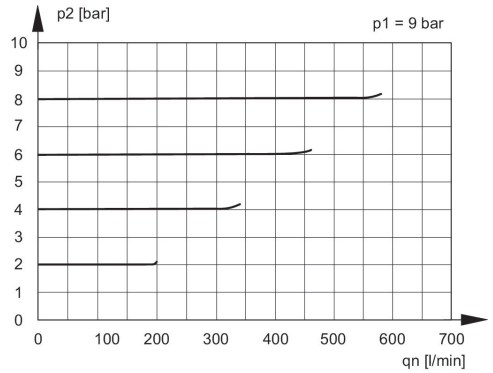
A1 = input
A2 = output
Unscrew handwheel including spindle completely.
Mount precision pressure regulator using mounting bracket and panel nut.
Screw handwheel including spindle back in fully, adjust desired pressure, and fix spindle with lock nut.

Dimensions in mm

Part No.	A1	A2	B	C	D	E	F	G	H
R412010840	G 1/4	G 1/4	50	25	106	50	G 1/8	G 1/8	M30x1,5

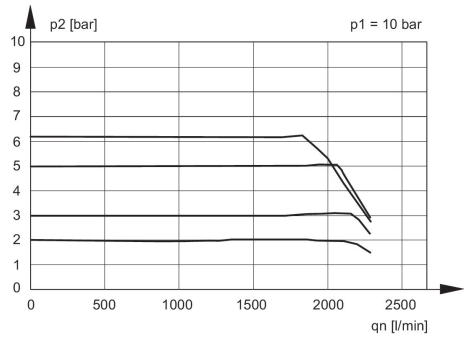
Part No.	J
R412010840	M12x1

Exhaust characteristics



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

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



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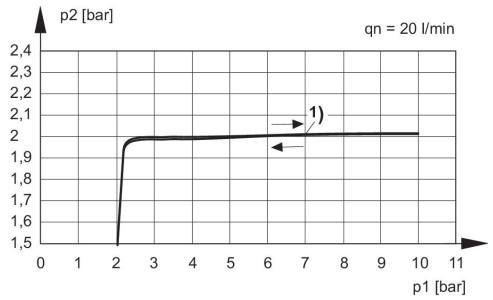
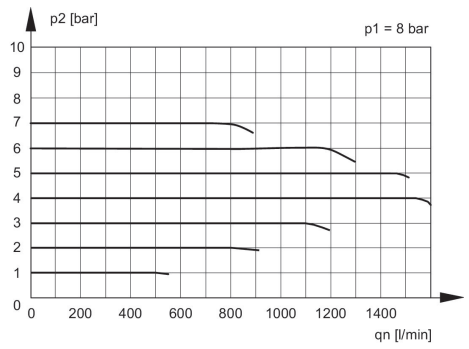
Pressure characteristics curve



p1 = Working pressure
p2 = Secondary pressure
qn = Nominal flow
1) Starting point

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



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