AVENTICS Series PR2 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.





Technical data
Industry
Function
Parts
Mounting orientation
Regulator type
Port
Nominal flow Qn
Min. regulation range
Max. regulation range
Min. working pressure
Max. working pressure
Min. ambient temperature
Max. ambient temperature
Activation
Regulator function
Pressure supply
Max. internal air consumption
Medium
Recommended pre-filtering

Industrial Precision pressure regulator Precision pressure regulator Any Diaphragm-type pressure regulator G 1/4 380 l/min 0.1 bar 4 bar 0.5 bar 12 bar -10 °C 60 °C Mechanical with relieving air exhaust single 2.5 l/min Compressed air 5 µm



 q_v

Precision pressure regulator, Series PR2-RGP

R412010480

Series PR2 2024-02-16

Weight

0.24 kg

Material

Housing material Seal material Part No. Polyamide Acrylonitrile butadiene rubber R412010480

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: > 300 l/min at 6 bar

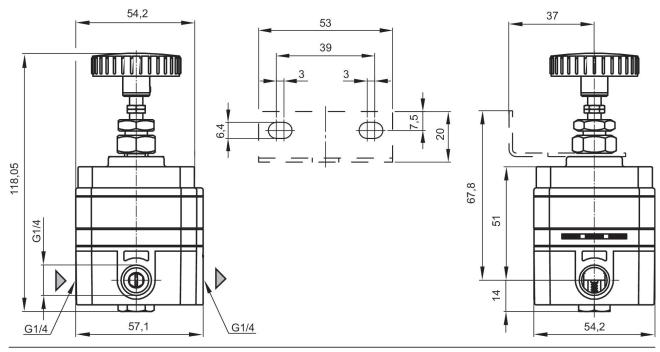
Precision: < 0.005 bar

Mounting: mounting bracket R412010482 or installation in piping

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

Nominal flow Qn with secondary pressure p2 = 6,3 bar at $\Delta p = 1$ bar

Dimensions in mm



A1 = input A2 = output



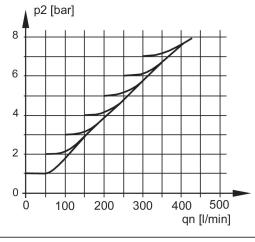
Precision pressure regulator, Series PR2-RGP

R412010480

Series PR2

2024-02-16

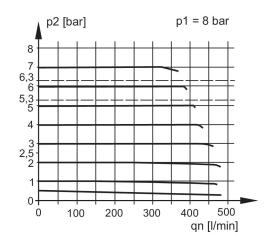
Exhaust characteristics



p2 = Secondary pressure

qn = Nominal flow

Flow rate characteristic, p2 = 0.05 - 7bar

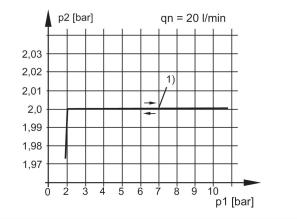


p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow

Pressure characteristics curve



p1 = Working pressure

p2 = Secondary pressure qn = Nominal flow

1) Starting point

