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 q_v 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 8 bar 0.5 bar 12 bar -10 °C 60 °C Mechanical with relieving air exhaust single 2.5 l/min Compressed air 5 µm



Precision pressure regulator, Series PR2-RGP

R412010481

Series PR2 2024-02-16

Weight

0.24 kg

Material

Housing material Seal material Part No. Polyamide Acrylonitrile butadiene rubber R412010481

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

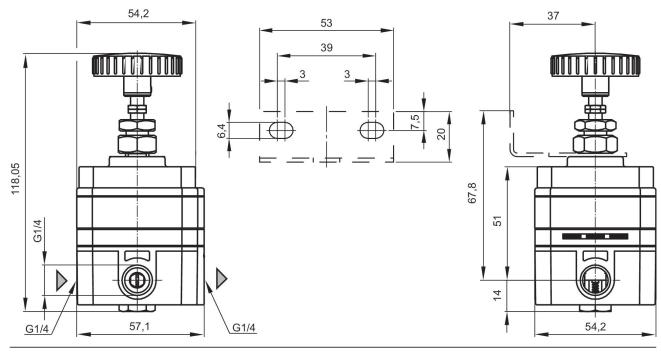
Precision: < 0.005 bar

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



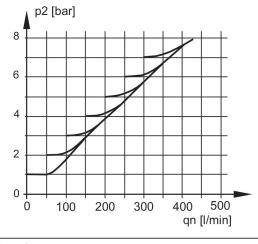
Precision pressure regulator, Series PR2-RGP

R412010481

Series PR2

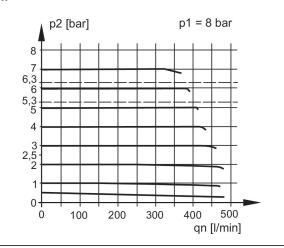
2024-02-16

Exhaust characteristics



p2 = Secondary pressure qn = Nominal flow

Flow rate characteristic, p2 = 0.05 - 7bar

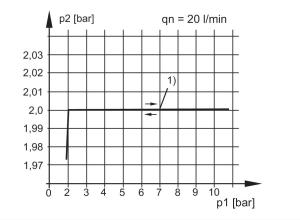


p1 = Working pressure

p2 = Secondary pressure

qn = Nominal flow

Pressure characteristics curve



p1 = Working pressure

p2 = Secondary pressure qn = Nominal flow

1) Starting point

