

R27-200 Series

Precision pressure regulator, manually actuated

- Port size: 1/4" (ISO G, NPT)
- Versatile design for varied applications
- High-precision manual pressure regulator
- Highly sensitive and accurate
- Perfect for dead-end applications
- Excellent long term stability
- High forward and relief flow capability
- Low air consumption



Technical features

Medium:

Oil free, dry air filtered to 25 µm
Note: for use with gases other than compressed air please consult NORGREN

Operation:

Handwheel 2,5 ... 3 turns

Inlet pressure:

At least 0,2 bar (3 psi) above max required output pressure, up to a maximum of 10 bar (145 psi)

Air and gauge ports:

G1/4 or 1/4 NPT

Flow capacity:

Up to 500 l/min

Hysteresis & repeatability:

Typically < 0,05% at mid range

Ambient/Media temperature:

-20 ... +70°C (-4 ... +158°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35 °F)

Materials:

Body: Passivated zinc, epoxy painted
Springs: Stainless steel
Elastomers: NBR

Technical data, standard model

Symbol	Port size	Pressure range (bar)	Air consumption (l/min)	Regulation accuracy *1) (%)	Weight (kg)	Model
	G1/4	0,14 ... 2,0	Typically < 2	0,1	0,78	R27-200-RNCG
	G1/4	0,14 ... 4,0	Typically < 2	0,05	0,78	R27-200-RNFG
	G1/4	0,14 ... 8,0	Typically < 2	0,02	0,78	R27-200-RNLG

*1) % output change for 1 bar supply pressure change at mid-range output

*Other options available include captured bleed, natural gas, gearbox, yoke mount, weatherproof, alternative pneumatic connections and low pressure versions. For options not shown and any specific requirements please contact the Norgren technical department via www.norgren.com/watsonsmith

Option selector

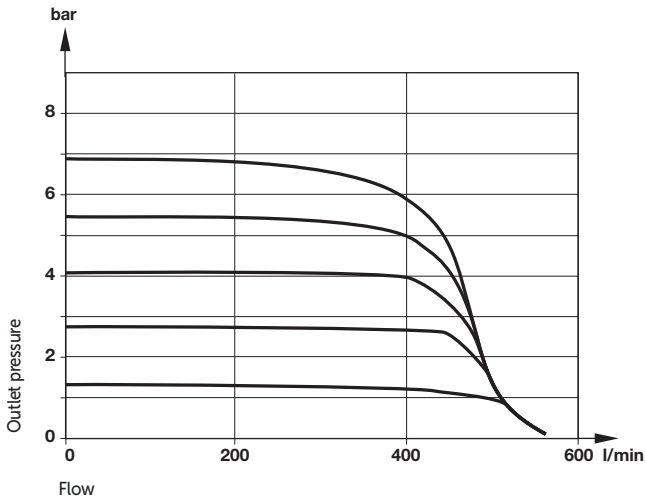
R27-200-RN★★

Pressure range	Substitute
0,14 ... 2,0 bar (2 ... 29 psi)	C
0,14 ... 4,0 bar (2 ... 58 psi)	F
0,14 ... 8,0 bar (2 ... 116 psi)	L

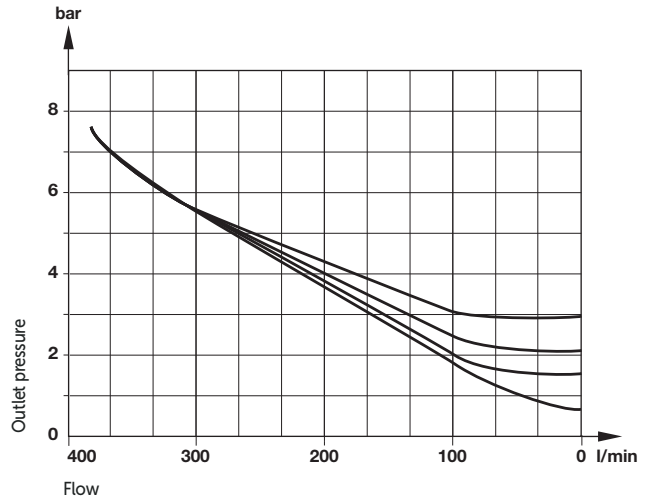
Threads	Substitute
NPT	R
ISO G parallel	G

Flow characteristics

Forward flow (supply pressure 7 bar)

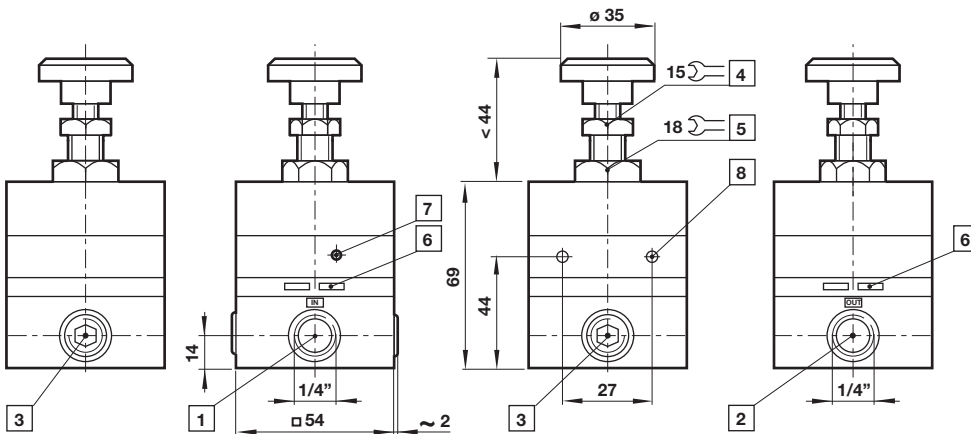
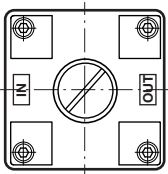


Relief flow (supply pressure 7 bar)



Dimensions

Dimensions in mm
Projection/First angle



- 1 Inlet port G1/4 or 1/4 NPT
- 2 Outlet port G1/4 or 1/4 NPT
- 3 Gauge port G1/4 or 1/4 NPT
- 4 Tension nut
- 5 Mounting nut (Ø 11,5 required for panel mounting)
- 6 Exhaust, do not obstruct!
- 7 Bleed port
- 8 Mounting holes (mount with M4 x 8 mm self tap screws)

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under

»Technical features/data«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult Norgren.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.