

# Industrial Automation

**IMI Norgren** 

## R24 High flow pressure regulator

- Port size:G1/4 ... G1 1/4
- Exceptionally high flow and relief flow characteristics
- Easy to adjust even at high output pressures
- Balanced valve minimises effect of variations in inlet pressure on outlet pressure
- Relieving feature allows outlet pressure reduction even when the system is dead ended
- Full flow gauge ports
- Panel mounting facility
- Pilot operated version availablen





#### **Technical features**

Medium: Compressed air

Maximum pressure: 20 bar (290 psi)q

Pressure range: 0,3 ... 17 bar (4 ... 246 psi)

Port size: 1/4" ... 1 1/4"

Gauge ports: See table below Ambient/Media temperature: 0 ... +80°C (+32 ... +176°F) supply must be dry enough to avoid ice formation at temperatures below +2°C (+35

0F/

#### Materials:

Body & bonnet: zinc alloy Bottom plug & adjusting knob (manual): acetal resin

Main valve: brass/synthetic rubber Elastomers: synthetic rubber

#### Technical data, standard models, relieving, without gauge

| Symbol | Port size | Gauge port size | Pressure range (bar) | Weight<br>(kg) | Model        |
|--------|-----------|-----------------|----------------------|----------------|--------------|
| Ÿ<br>T | G1/4      | G1/4            | 0,3 17               | 0,73           | R24-201-RNXG |
|        | G3/8      | G3/8            | 0,3 17               | 0,70           | R24-301-RNXG |
|        | G1/2      | G1/2            | 0,3 17               | 0,68           | R24-401-RNXG |
|        | G3/4      | G1/2            | 0,3 17               | 1,18           | R24-601-RNXG |
|        | G1        | G1/2            | 0,3 17               | 1,18           | R24-801-RNXG |
|        | G1 1/4    | G1/2            | 0,3 17               | 1,14           | R24-A01-RNXG |
|        | G1/4      | G1/4            | 0,7 8                | 0,86           | R24-200-RNLG |
|        | G3/8      | G3/8            | 0,7 8                | 0,83           | R24-300-RNLG |
|        | G1/2      | G1/2            | 0,7 8                | 0,81           | R24-400-RNLG |
|        | G3/4      | G1/2            | 0,7 8                | 1,24           | R24-600-RNLG |
|        | G1        | G1/2            | 0,7 8                | 1,24           | R24-800-RNLG |
|        | G1 1/4    | G1/2            | 0,7 8                | 1,20           | R24-A00-RNLG |

#### **Option selector** R24-★0★-R★★★ Port size Substitute Substitute Thread 1/4" 2 PTF 3/8" 3 G ISO G parallel (standard) 1/2" 4 Pressure range \* Substitute 6 3/4" 8 0,3 ... 2 bar С 11/4" Α 0,3 ... 4 bar Substitute 0,7 ... 8 bar (standard) Туре 0 Manual actuated Pilot actuated 1 \*Only available as pilot operated version Gauge Substitute With G

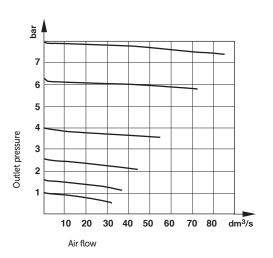
Without (standard)



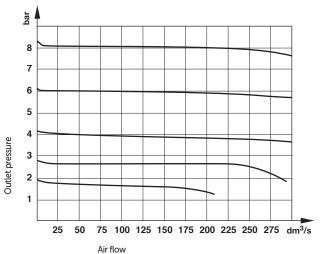
#### Flow characteristics

Manual-operated

Inlet pressure: 10 bar Port size: 1/2 inch

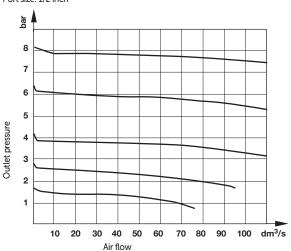


#### Inlet pressure: 10 bar Port size: 1 inch

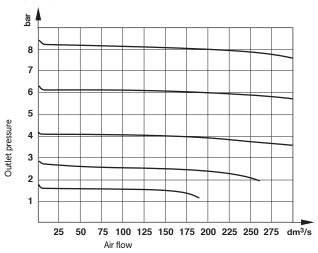


#### Pilot-operated

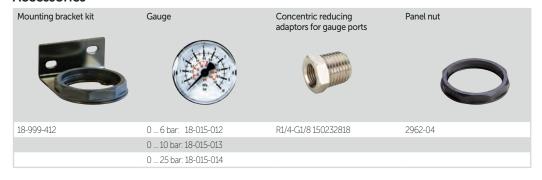
Inlet pressure: 10 bar Port size: 1/2 inch



#### Inlet pressure: 10 bar Port size: 1 inch



#### Accessories



#### Service kits





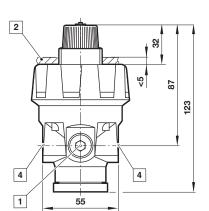
### **Drawings**

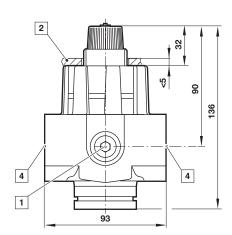
Dimensions in mm Projection/First angle

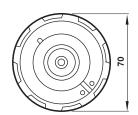
#### R24 (G1/4 ... G1/2) manually operated R24 (G3/4 ... G1 1/4) manually operated

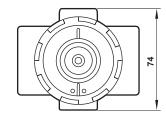






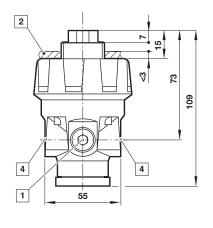


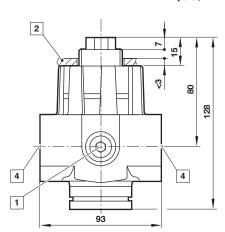


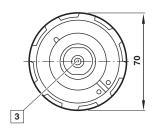


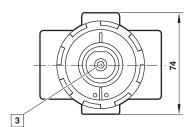
R24 (G1/4 ... G1/2) pilot operated

R24 (G3/4 ... G1 1/4) pilot operated





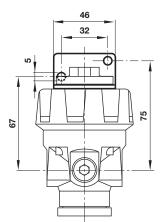


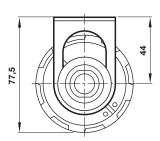


- 1 Gauge port
  2 Panel hole Ø 30 mm
  3 Pilot port G1/4
  4 Main ports 1/4", 3/8", 1/2", 3/4", 1" or 11/4"



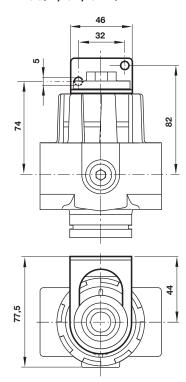
#### Mounting bracket G1/4, G3/8, G1/2





Panel thickness: 0 ... 3 mm

#### G3/4, G1, G1 1/4



## Projection/First angle $\bigcirc$

Dimensions in mm



#### 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 IMI Precision Engineering, Norgren Inc.

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.