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 available**

Technical features

Medium:
Compressed air
Maximum pressure:
20 bar (290 psi)
Pressure range:
Manual operated:
0.7 ... 8 bar
0.7 ... 17 bar (optional)
0.3 ... 4 bar (optional)
0.3 ... 2 bar (optional)
Pilot operated: 0.7 ... 17 bar

Port size:
G1/4 ... G1 1/4, 1/4PTF ... 1 1/4PTF
Flow:
Manual operated version:
With 10 bar (145psi) inlet pressure, 6.3 bar (91psi) set pressure and 1 bar (14.5psi) droop from set:
Port size 1/2" - 94 dm³/s
Port size 1¼" - 330 dm³/s

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

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)	Adjustment	Weight (kg)	Model
	G1/4	G1/4	0.7 ... 17	Pilot	0,73	R24-201-RNXG
	G3/8	G3/8	0.7 ... 17	Pilot	0,70	R24-301-RNXG
	G1/2	G1/2	0.7 ... 17	Pilot	0,68	R24-401-RNXG
	G3/4	Rc1/2	0.7 ... 17	Pilot	1,18	R24-601-RNXG
	G1	Rc1/2	0.7 ... 17	Pilot	1,18	R24-801-RNXG
	G1 1/4	Rc1/2	0.7 ... 17	Pilot	1,14	R24-A01-RNXG
	G1/4	G1/4	0.7 ... 8	Manual	0,86	R24-200-RNLG
	G3/8	G3/8	0.7 ... 8	Manual	0,83	R24-300-RNLG
	G1/2	G1/2	0.7 ... 8	Manual	0,81	R24-400-RNLG
	G3/4	Rc1/2	0.7 ... 8	Manual	1,24	R24-600-RNLG
	G1	Rc1/2	0.7 ... 8	Manual	1,24	R24-800-RNLG
	G1 1/4	Rc1/2	0.7 ... 8	Manual	1,20	R24-A00-RNLG

Option selector

R24-★0★-R★★★

Port size	Substitute
1/4"	2
3/8"	3
1/2"	4
3/4"	6
1"	8
1 1/4"	A
Type	**Substitute**
Manual operated	0
Pilot operated	1
Gauge	**Substitute**
With	G
Without (standard)	N

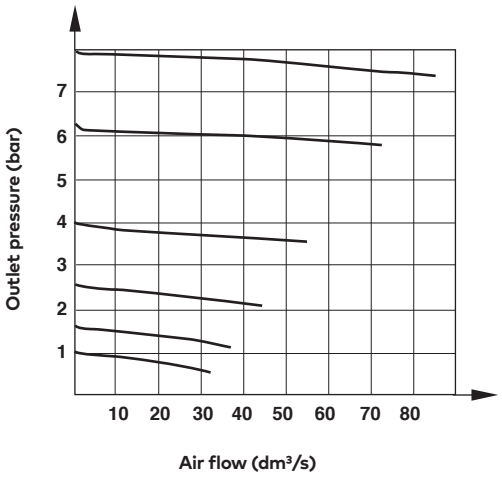
Thread	Substitute
PTF	A
ISO G parallel (standard)	G
Pressure range	**Substitute**
0.7 ... 8 bar *	L
0.3 ... 2 bar *	C
0.3 ... 4 bar *	F
0.7 ... 17 bar *	S
0.7 ... 17 bar **	X

* Manual operated
** Pilot operated

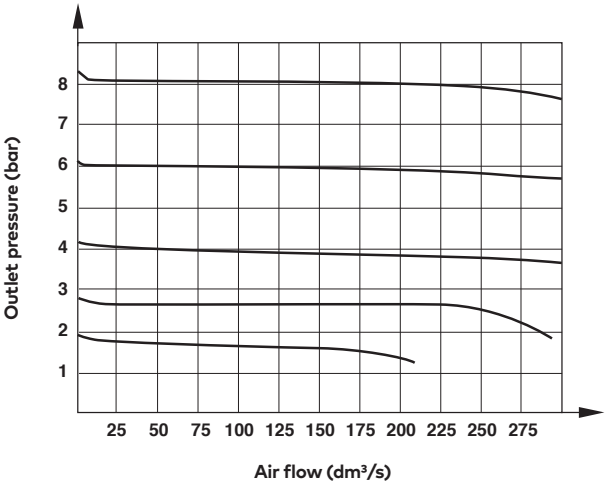
Flow characteristics

Manual-operated

Inlet pressure: 10 bar (145psi)
Port size: 1/2 inch

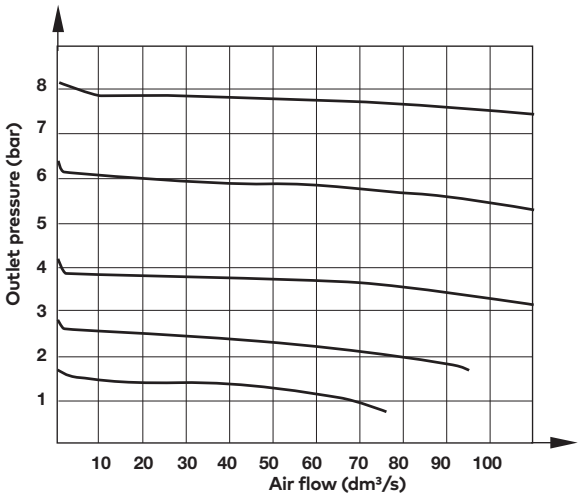


Inlet pressure: 10 bar (145psi)
Port size: 1 inch

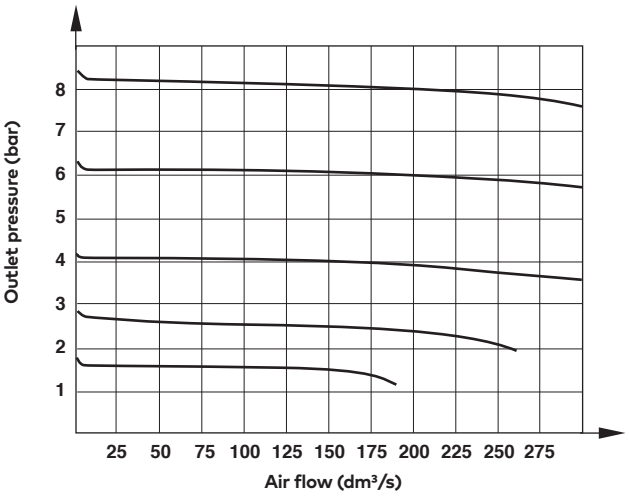


Pilot-operated

Inlet pressure: 10 bar (145psi)
Port size: 1/2 inch



Inlet pressure: 10 bar (145psi)
Port size: 1 inch



Accessories

Mounting bracket kit	Gauge	Concentric reducing adaptors for gauge ports	Panel nut
			
18-999-412	0 ... 6 bar: 18-015-012	R1/4-G1/8: 150232818	2962-04
	0 ... 10 bar: 18-015-013	R3/4-G1/8: 150233818	
	0 ... 25 bar: 18-015-014	R1/2-G1/8: 150234818	

Service kits

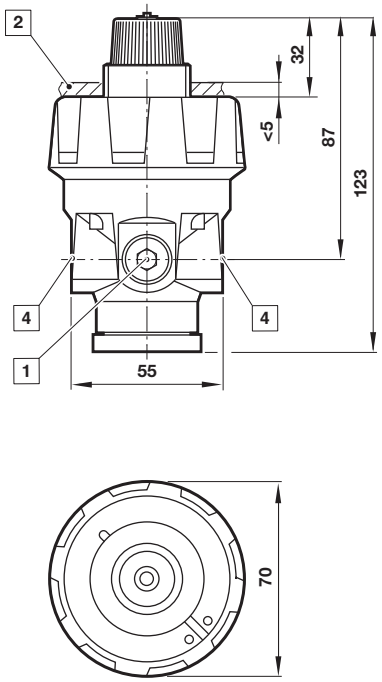
Service kit for standard pressure range 0,7 ... 8 bar only

Manual actuated
G1/4 ... G1/2: 5292-52
G3/4 ... G1 1/4: 5292-53
Pilot actuated
G1/4 ... G1/2: 5292-54
G3/4 ... G1 1/4: 5292-55

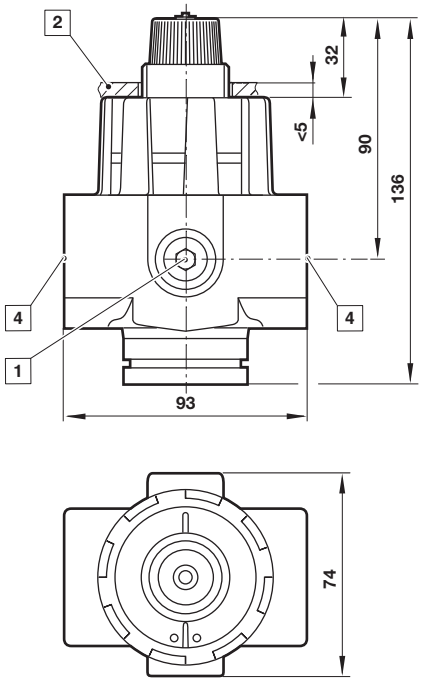
Drawings

Dimensions in mm
Projection/First angle

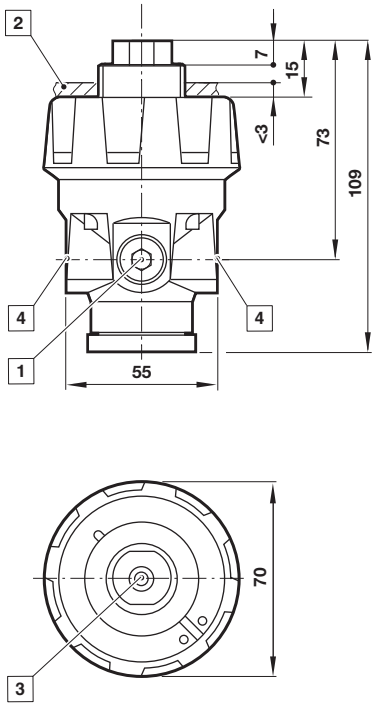
R24 (G1/4 ... G1/2) manually operated



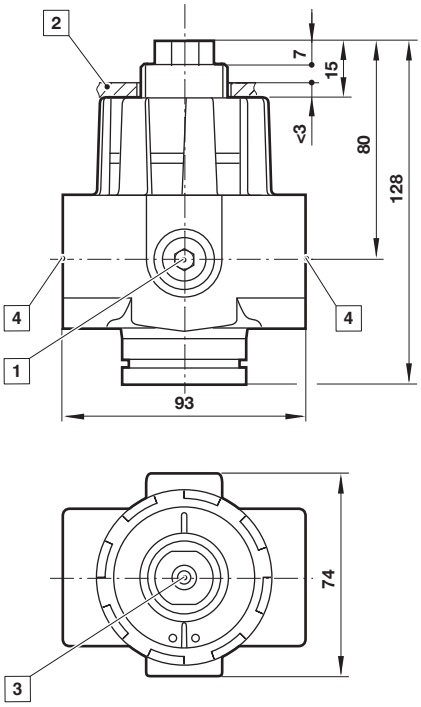
R24 (G3/4 ... G1 1/4) manually operated



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

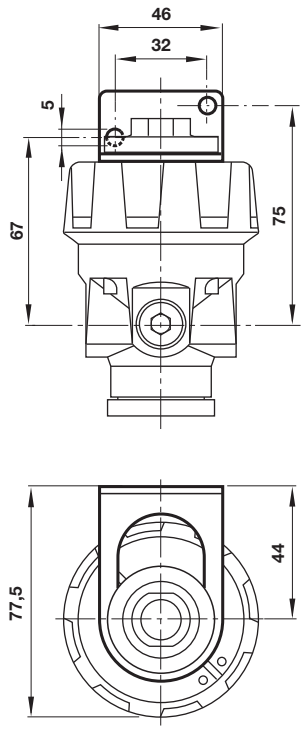


R24 (G3/4 ... G1 1/4) pilot operated

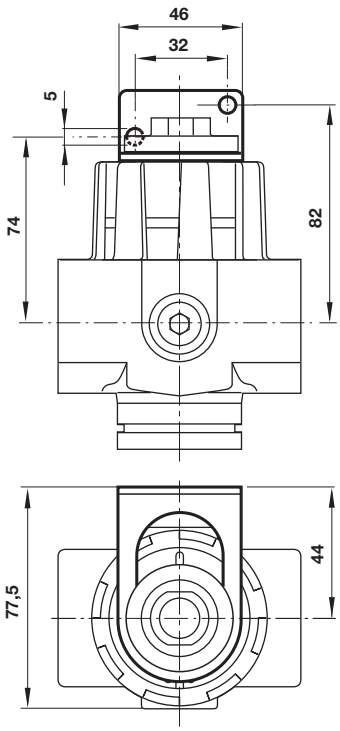


1 Gauge port
2 Panel hole ø 30 mm
3 Pilot port G1/4
4 Main ports 1/4", 3/8", 1/2", 3/4", 1" or 1 1/4"

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



G3/4, G1, G1 1/4



Dimensions in mm
Projection/First angle

Panel thickness: 0 ... 3 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.
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.