

Description

Pilot-operated volume booster with positive bias designed to supply outlet pressure equal to signal pressure plus an adjustable preset spring constant. With very high forward and reverse flow characteristics and excellent sensitivity. If requested the system pressure can also manually be adjusted up to 6 bar adding to the pilot pressure.

Media

oil-free and 5 µm filtered compressed air or non-corrosive gases

Supply pressure

max. 16 bar

Pilot pressure

max. 10 bar, accordingly lower in the case of manual pre-pressure setting

Pilot port G $\frac{1}{8}$

Accuracy

at supply pressure change from 2 bar to 7 bar: < 6 mbar pressure deviation
at flow rate change from 0 l/min to 20 l/min: < 20 mbar pressure deviation
response sensitivity: < 2 mbar

Air consumption

1.5 l/min at P $_1$ = 5 bar, 2 l/min at P $_1$ = 7 bar, 4 l/min at P $_1$ = 10 bar, < 1% of volume flow

Relieving function

relieving

Relief capacity

700 l/min at 6 bar outlet and 0.35 bar overpressure above setpoint

Gauge port

G $\frac{1}{4}$ on both sides of the body, one screw plug supplied

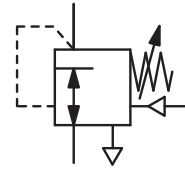
Mounting position

any
0 °C to 60 °C / 32 °F to 140 °F, for appropriately conditioned compressed air down to -30 °C / -22 °F

Material

Body: zinc die-cast

Elastomer: NBR/Buna-N



G $\frac{1}{4}$ up to G $\frac{1}{2}$, 4500 l/min
parallel translation

Dimensions			K $_v$ -value	Flow rate	Connection thread	Positive bias	Pressure range	Order number
A	B	C						

Volume booster			supply pressure max. 16 bar, with constant bleed, tapped exhaust, transmission ratio 1:1					R03-J	
82	106	41	2.0	198	3300	G $\frac{1}{4}$ *3	without	0.05 ... 10	R03-02J
			2.3	228	3800	G $\frac{3}{8}$ *3			R03-03J
			2.7	270	4500	G $\frac{1}{2}$			R03-04J



R03-...J

Positive bias booster			supply pressure max. 16 bar, with constant bleed, tapped exhaust, transmission ratio 1:1					R03-J .	
82	142	41	2.0	198	3300	G $\frac{1}{4}$ *3	0 ... 1 bar	0.05 ... 10	R03-02J1
			2.3	228	3800	G $\frac{3}{8}$ *3			R03-03J1
			2.7	270	4500	G $\frac{1}{2}$			R03-04J1
82	180	41	2.0	198	3300	G $\frac{1}{4}$ *3	0 ... 6 bar	0.05 ... 10	R03-02J6
			2.3	228	3800	G $\frac{3}{8}$ *3			R03-03J6
			2.7	270	4500	G $\frac{1}{2}$			R03-04J6



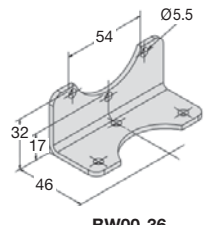
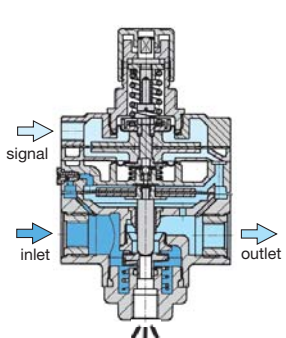
R03-...J1

Accessories

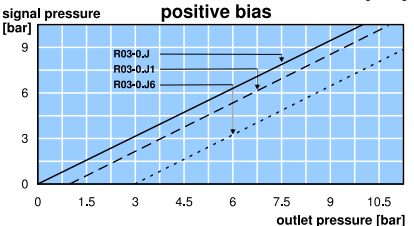
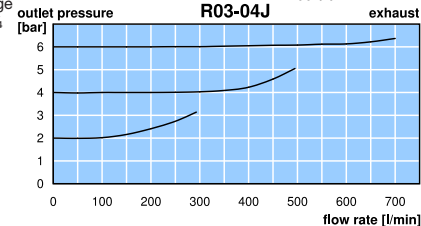
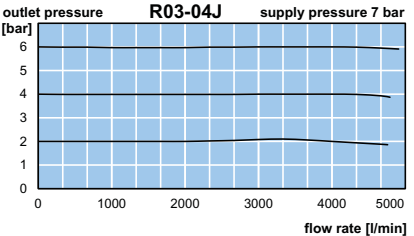
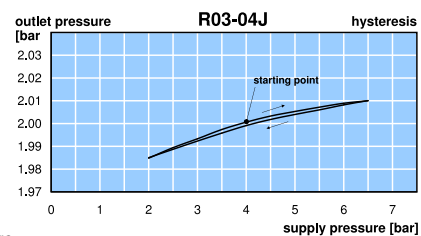
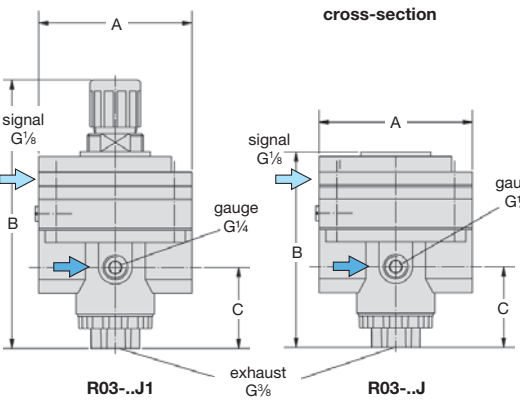
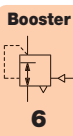
- pressure gauge
- mounting nut
- mounting bracket

Ø 50 mm, 0...*2 bar, G $\frac{1}{4}$
made of plastic
made of steel

MA5002-...*2
for R03-...J1 M30x15K
BW00-36



R03-...J6



*1 at 7 bar supply pressure, 6 bar outlet pressure and 1 bar pressure drop
*2 02 = 0...2.5 bar, 04 = 0...4 bar, 06 = 0...6 bar, 10 = 0...10 bar, 16 = 0...16 bar
*3 standard unit G $\frac{1}{2}$ reduced to smaller threads by fittings

Gauges: see chapter for measuring devices

PDF CAD
www.aircom.net



Order example:
R03-02J