

Precision Volume Booster with High Relief Capacity

R03-J

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. A typical application is balancing or regulating pressure in tanks. oil-free and 5 µm filtered compressed air or non-corrosive gases

Media

Supply pressure

Pilot pressure

Accuracy

Air consumption

Relieving function

Relief capacity

Gauge port

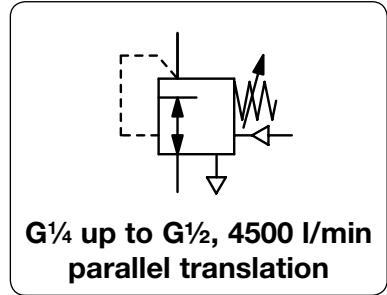
Temperature range

Material

max. 16 bar
 max. 10 bar, accordingly lower in the case of manual pre-pressure setting, pilot port G $\frac{1}{4}$ 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
 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
 700 l/min at 6 bar outlet and 0.35 bar overpressure above setpoint
 G $\frac{1}{4}$ on both sides of the body, one screw plug supplied
 -35 °C to 60 °C / -31 °F to 140 °F
 Body: zinc die-cast
 Elastomer: NBR/Buna-N

Mounting position any

Elastomer: NBR/Buna-N



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

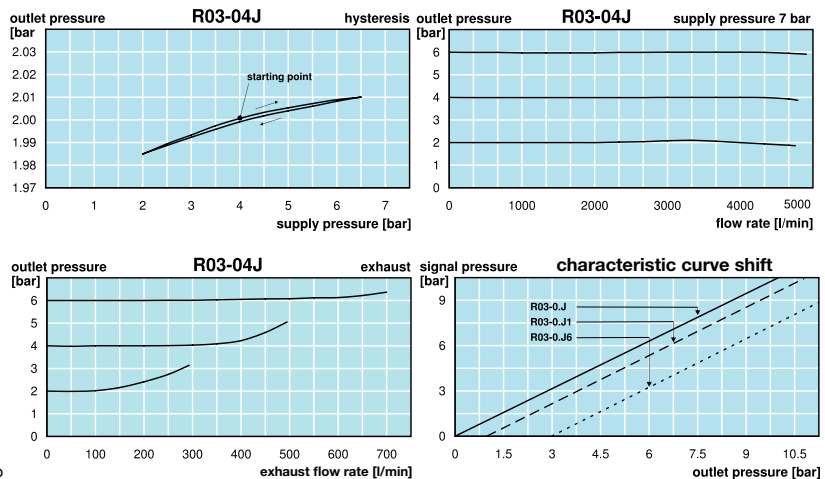
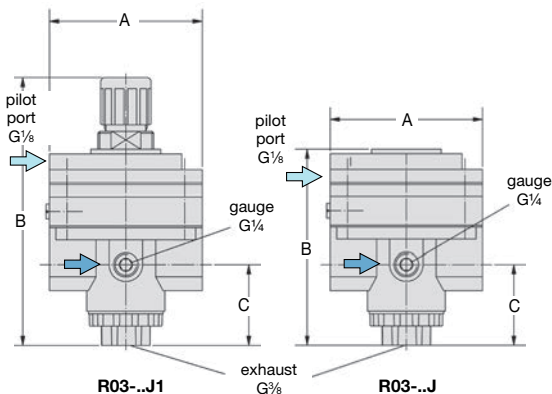
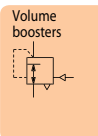
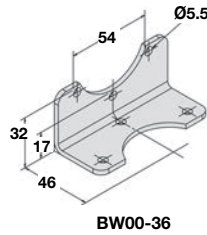
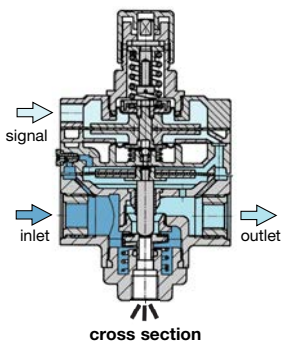
Volume booster									supply pressure max. 16 bar, with constant bleed, tapped exhaust, transmission ratio 1:1	R03-J
82	106	41	2.0	198	3300	G $\frac{1}{4}$ *3	without	0.05...10	R03-02J	
			2.3	228	3800	G $\frac{3}{8}$ *3			R03-03J	
			2.7	270	4500	G $\frac{1}{2}$			R03-04J	

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	

Accessories, enclosed

- pressure gauge Ø 50 mm, 0...*2 bar, G $\frac{1}{4}$
- mounting nut made of plastic
- mounting bracket made of steel

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



*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



Order example
R03-02J
 China website: www.duray-control.cn