

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

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 P₁= 5 bar, 2 l/min at P₁= 7 bar, 4 l/min at P₁= 10 bar, < 1% of volume flow relieving

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

Relief capacity G_{1/4} on both sides of the body, one screw plug supplied

Gauge port any

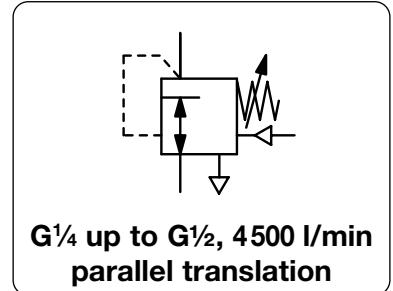
Temperature range 0 °C to 60 °C / 32 °F to 140 °F, for appropriately conditioned compressed air down to -30 °C / -22 °F

Material Body: zinc die-cast

Pilot port G_{1/8}

Mounting position any

Elastomer: NBR/Buna-N



Dimensions			K _v -value	Flow rate	Connection thread	Positive bias	Pressure range	Order number
A	B	C						
mm	mm	mm	(m ³ /h)	m ³ /h*1	l/min*1	G	bar	bar

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 _{1/4} *3	without	0.05 ... 10	R03-02J
			2.3	228	3800	G _{3/8} *3			R03-03J
			2.7	270	4500	G _{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 _{1/4} *3	0 ... 1 bar	0.05 ... 10	R03-02J1
			2.3	228	3800	G _{3/8} *3			R03-03J1
			2.7	270	4500	G _{1/2}			R03-04J1
82	180	41	2.0	198	3300	G _{1/4} *3	0 ... 6 bar	0.05 ... 10	R03-02J6
			2.3	228	3800	G _{3/8} *3			R03-03J6
			2.7	270	4500	G _{1/2}			R03-04J6



Accessories, enclosed

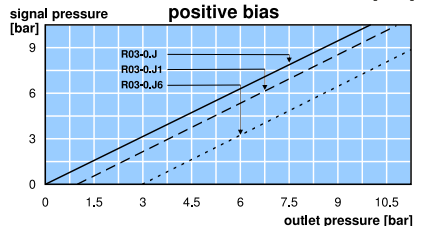
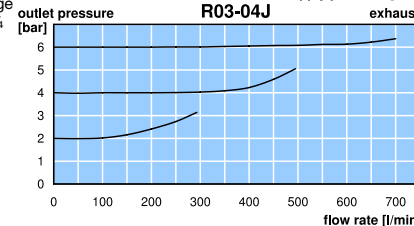
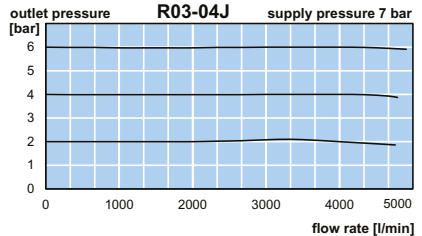
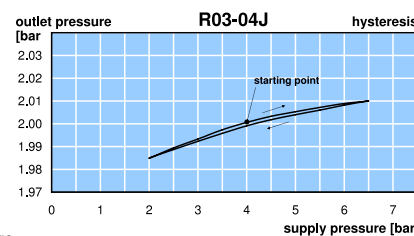
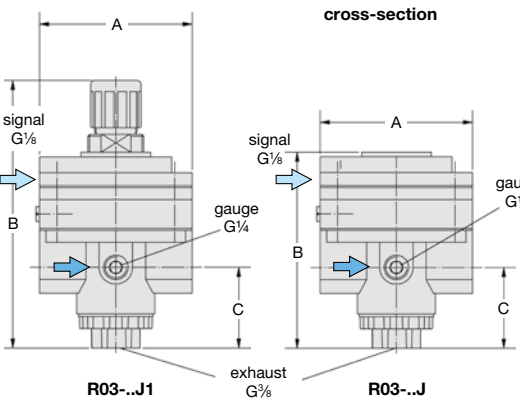
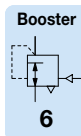
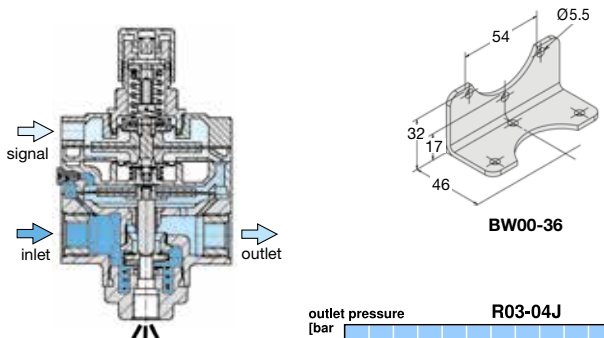
pressure gauge Ø 50 mm, 0...*2 bar, G_{1/4}

mounting nut made of plastic

mounting bracket made of steel

for R03-...J1

MA5002-...*2
M30x1,5K
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_{1/2} reduced to smaller threads by fittings