

# Precision Volume Booster with High Volume Flow

R200 / R201

### Description

The volume booster amplifies the volume at a 1:1 ratio of pilot pressure to outlet pressure. The pilot pressure has no constant bleed. The bias spring at booster R200 generates a positive shift of the pressure range between pilot pressure and outlet pressure. Booster R201 with great relief capacity is a combination of two R200 boosters. When the output pressure increases above the signal pressure, the diaphragm assembly moves upward to close the supply valve and open the exhaust valve. Excess output pressure exhausts through the exhaust port until it reaches the setpoint.

### Media

compressed air or non-corrosive gases

**Supply pressure** max. 17 bar

### Pilot pressure

max. 10 bar, pilot port G $\frac{1}{4}$  at R200;  $\frac{1}{4}$ " NPT at R201

### Accuracy

at supply pressure variation of 7 bar: < 20 mbar pressure deviation without constant bleed

**Response sensitivity** 30 mbar

### Air consumption

without constant bleed

**Relieving function** relieving, optionally non-relieving

### Relief capacity

1 800 l/min at 0.3 bar overpressure above setpoint at R200, 9 000 l/min at R201

### Gauge port

G $\frac{1}{4}$  on both sides of the body at R200;  $\frac{1}{4}$ " NPT at R201

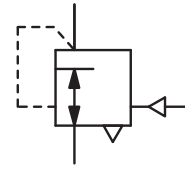
**Mounting position** any

### Temperature range

0 °C to 90 °C / 32 °F to 194 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F

### Material

Body: aluminium die-cast Elastomer: NBR/Buna-N-Dacron, optionally FKM  
Inner valve: stainless steel, cadmium-plated steel and brass



G1 and G1½, 1½" NPT  
30 000 l/min

Dimensions			K <sub>v</sub> -value	Flow rate	Connection thread	Supply pressure	Pressure range	Order number
A	B	C						
mm	mm	mm	(m <sup>3</sup> /h)	m <sup>3</sup> /h*1	l/min*1	G	max. bar	bar

Booster w. high volume flow									
supply pressure max. 17 bar, relieving, without constant bleed, transmission ratio 1:1									
								<b>R200</b>	
141	198	57	11.4	1680	28000	G1	17	0...10	<b>R200-08I</b>
141	198	57	12.2	1800	30000	G1½	17	0...10	<b>R200-12I</b>

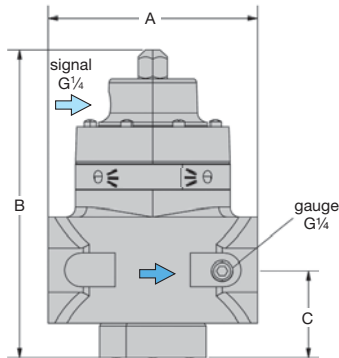
Booster w. high exhaust capacity									
supply pressure max. 17 bar, relieving, without constant bleed, transmission ratio 1:1									
								<b>R201</b>	
250	240	57	12.2	1800	30000	1½" NPT	17	0...10	<b>R201-12I</b>

### Special options, add the appropriate letter

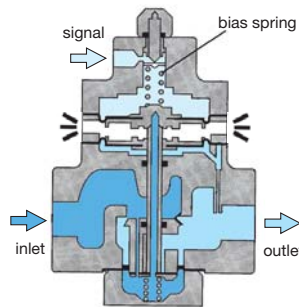
<b>NPT</b>	connection thread	for R200	R200-..IN
<b>non-relieving</b>	without relieving function	for R200	R200-..IK
<b>tapped exhaust</b>	connection thread G $\frac{3}{8}$	for R200	R200-..IX12
<b>FKM elastomer</b>		for R200	R200-..IV

### Accessories

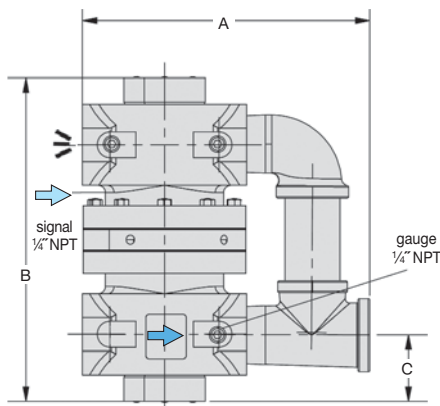
<b>pressure gauge</b>	Ø 63 mm, 0...*2 bar, G $\frac{1}{4}$	<b>MA6302-..*2</b>
<b>adapter</b>	¼" NPT male / G $\frac{1}{4}$ female	for R201 <b>VP-0202N</b>
<b>mounting bracket</b>	made of steel	for R200 <b>BW00-41</b>



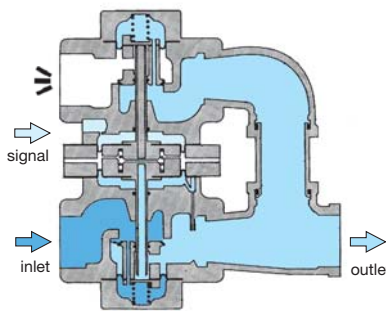
R200



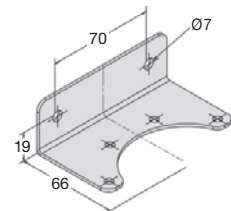
cross-section



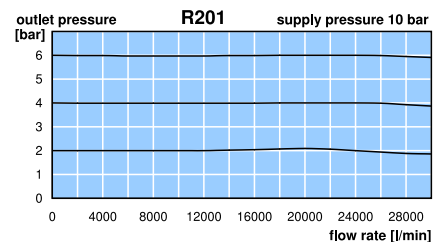
R201



cross-section



BW00-41



\*1 at 10 bar supply pressure and 2.8 bar outlet pressure

\*2 02 = 0...2.5 bar, 04 = 0...4 bar, 06 = 0...6 bar, 10 = 0...10 bar, 16 = 0...16 bar

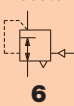
Gauges: see chapter for measuring devices

PDF CAD  
www.aircom.net



Order example:  
R200-08I

Booster



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