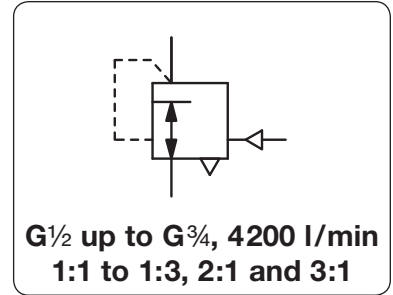


# Precision Volume Booster with High Flow

R450

<b>Description</b>	The volume booster amplifies the volume at a 1:1 ratio of pilot pressure to outlet pressure. The pilot pressure has no constant bleed and shows the same function as a spring in a common regulator: generating counter pressure on the diaphragm. This force is compensated by the outlet pressure on the diaphragm's bottom side. The ratio of pilot pressure to outlet pressure depends on the size of the operating diaphragms.		
<b>Media</b>	compressed air or non-corrosive gases	<b>Supply pressure</b>	max. 17 bar
<b>Pilot pressure</b>	max. 10 bar at 1:1, 2:1 and 3:1 ratio, 5 bar at 1:2,	<b>pilot port:</b>	G $\frac{1}{4}$
<b>Accuracy</b>	at supply pressure variation of 7 bar: < 7 mbar pressure deviation response sensitivity: 2.5 mbar		
<b>Internal air consumption</b>	max. 3 l/min, depending on outlet pressure	<b>Relieving function</b>	relieving
<b>Relief capacity</b>	1100 l/min at 0.35 bar overpressure above setpoint	<b>Mounting position</b>	any
<b>Gauge port</b>	G $\frac{1}{4}$ on both sides of the body, screw plugs supplied		
<b>Temperature range</b>	0 °C to 90 °C / 32 °F to 194 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F		
<b>Material</b>	Body: aluminium die-cast Inner valve: brass and aluminium	<b>Elastomer:</b>	NBR/Buna-N, optionally FKM



Dimensions			K <sub>v</sub> -value	Flow rate	Connection thread	Pilot pressure	Transmission ratio	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	signal : outlet

Booster			with transmission ratio, supply pressure max. 17 bar relieving, with constant bleed, pressure range 0...10 bar				R450		
87	129	40	2.16	240	4000	G $\frac{1}{2}$	10	1 : 1	R450-04I
							5.0	1 : 2	R450-04K
							3.3	1 : 3	R450-04L
							10	2 : 1	R450-04M
							10	3 : 1	R450-04N
87	129	40	2.16	252	4200	G $\frac{3}{4}$	10	1 : 1	R450-06I
							5.0	1 : 2	R450-06K
							3.3	1 : 3	R450-06L
							10	2 : 1	R450-06M
							10	3 : 1	R450-06N



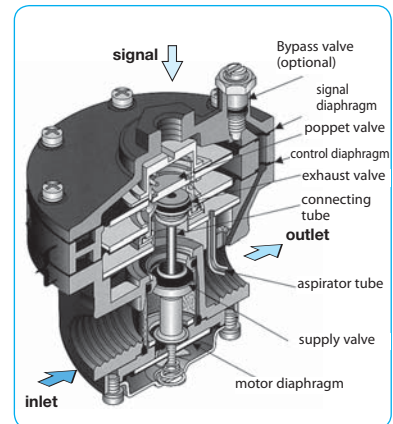
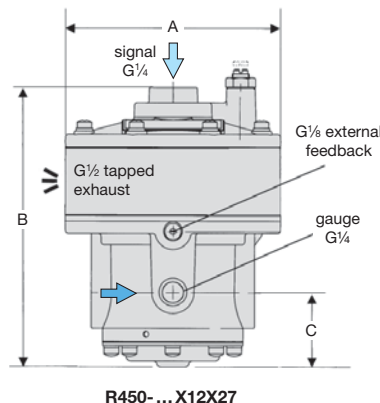
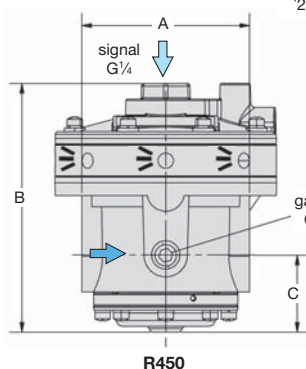
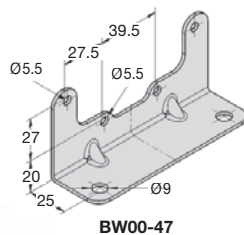
R450

## Special options, add the appropriate letter

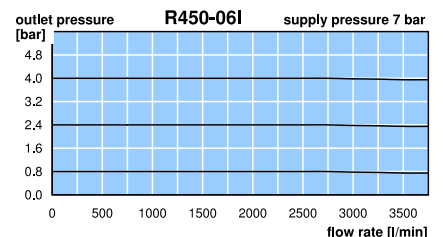
<b>NPT</b>	connection thread	R450-0..N
<b>tapped exhaust</b>	G $\frac{1}{2}$ connection thread, total height 148 mm	R450-0..X12
<b>bypass with restrictor</b>	from control chamber to outlet	1:1 only R450-0..X16
<b>external feedback</b>	with connection thread G $\frac{1}{8}$	R450-0..X27
<b>FKM elastomer</b>		R450-0..V

## Accessories

<b>pressure gauge</b>	Ø 63 mm, 0...*2 bar, G $\frac{1}{4}$	MA6302-..*2
<b>mounting bracket</b>	made of steel	BW00-47



cross section



\*1 at 7 bar supply pressure and 1.4 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:  
R450-04I