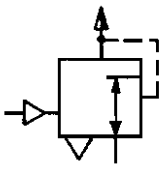
Precision Volume Booster R208

Description	Precision volume booster designed to convert a low-flow control signal to a higher flow outlet. With diaphragm ratio configuration to meet a broad range of signal-to-outlet requirements. Signal-to-outlet pressure available in several ratios. Ideal applications: rapid valves, cylinder movements and air/oil hydraulic systems.
Supply pressure	max. 17 bar / 250 psi
Exhaust capacity	310 l/min / 11 scfm at 0.3 bar downstream pressure above setpoint output pressure of 1.5 bar/20 psi
Outlet pressure	max. 10 bar
Ratio failure	1% at ratio 1:1 to 1:3, 2% accuracy for higher or inverse ratio
Sensitivity	1 mbar at 1:1, 2 mbar at 1:2, 3 mbar at 1:3 and at inverse ratio
Air consumption	0 - 3 l/min depending on outlet pressure
Supply accuracy	if the supply pressure changes by about 7 bar, the outlet pressure changes by <7 mbar
Temperature range	-20 °C to 70 °C / 32 °F to 160 °F operating temperature with NBR
Materials	Body: aluminum die-casting Diaphragm: NBR and Dacron Inner valve: brass and zink-plated steel



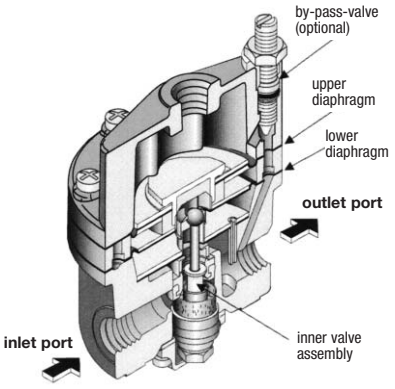
1300 l/min
1:1 to 1:6 2:1 to 5:1

Dimensions height mm	Ø mm	Exhaust capacity l/min*2	Connection thread G	Flow rate l/min*1	Signal pressure max. bar	Ratio Signal: outlet	Order number
Prec. Volume Booster			supply pressure max. 17 bar pressure range 0-10 bar		aluminium housing, NBR K_V-value 0.7 (m³/h)		**R208**
98	76	310	G 1/4	1300	10	1 : 1	**R208-02I**
98	76	310			5	1 : 2	**R208-02K**
98	76	310			3.3	1 : 3	**R208-02L**
110	76	210			2.5	1 : 4	**R208-02M**
110	76	210			2.0	1 : 5	**R208-02N**
110	76	210			1.7	1 : 6	**R208-02O**
98	76	310	G 1/4	1300	10	2 : 1	**R208-02R**
98	76	310			10	3 : 1	**R208-02S**
110	76	210			10	4 : 1	**R208-02T**
110	76	210			10	5 : 1	**R208-02U**

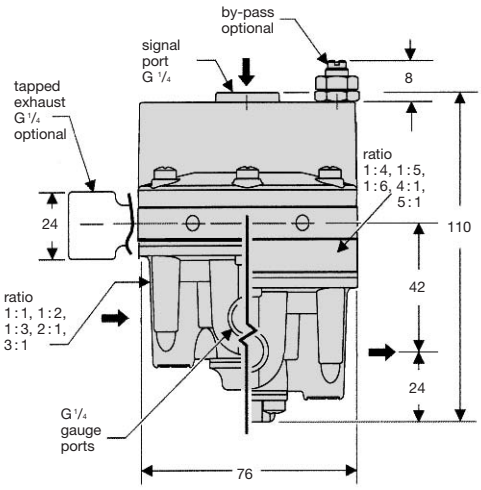
R208-02IB

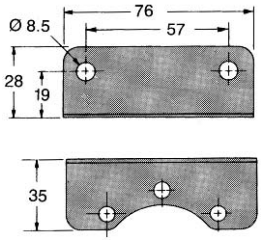
Special options add the appropriate letter

G 3/8 connection			**03**	R208-03.
NPT thread			**N**	R208-02.**N**
tapped exhaust		only 1:1*4	**E**	R208-02.**E**
non-relieving	without exhaust	only 1:1*4	**K**	R208-02.**K**
negative bias	from 240 mbar, re-adjustable by about 30 mbar	only 1:1*4	**Y**	R208-02.**Y**
by-pass + restrictor	between contol chamber and outlet*3	only 1:1	**B**	R208-02.**B**
silicone elastomer	P_1: max. 5 bar	only 1:1	**A**	R208-02.**A**
Viton elastomer	up to 90 °C/200 °F		**V**	R208-02.**V**
mounting bracket	SA-R230		**X**	R208-02.**X**

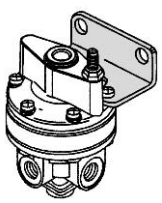


cross-section

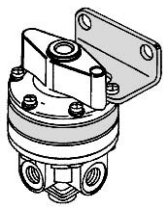




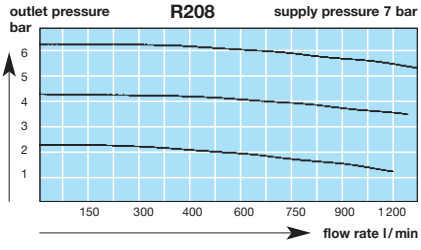
SA-R230



ratio
1:1, 1:2, 1:3, 2:1, 3:1



ratio
1:4, 1:5, 1:6, 4:1, 5:1



*1 at 7 bar supply pressure and 1.5 bar outlet pressure
*2 downstream pressure 0.35 bar above setpoint outlet pressure of 1.5 bar
*3 for safeguarding against vibrations at positioners
*4 also 1:2, 1:3, 2:1 and 3:1

Order example:
R208-02I