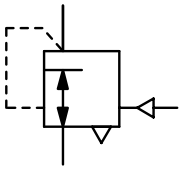
Precision Volume Booster with Transmission Ratio R218

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 and shows the same function as a spring in a common regulator: generating counter pressure on the diaphragm.
Media	compressed air or non-corrosive gases
Supply pressure	max. 17 bar
Pilot pressure	max. 10 bar at 1:1 ratio, 5 bar at 1:2, 3.3 bar at 1:3, 2.5 bar at 1:4, 1.7 bar at 1:6 pilot port G¼
Accuracy	at supply pressure variation of 7 bar: < 7 mbar pressure deviation transmission error: 1% from 1:1 to 1:3 ratio, 2% at greater or inverse transmission response sensitivity: 1 mbar at 1:1, 2 mbar at 1:2, 3 mbar at 1:3 and at inverse transmission
Air consumption	max. 3 l/min, subject to outlet pressure **Relieving function** relieving
Relief capacity	310 l/min at 1.5 bar outlet and 0.35 bar overpressure above setpoint
Gauge port	G¼ on both sides of the body, screw plugs supplied **Mounting position** any
Temperature range	0 °C to 80 °C / 32 °F to 176 °F, NBR, for appropriately conditioned compr. air down to -40 °C / -40 °F 0 °C to 90 °C / 32 °F to 194 °F, FKM, for appropriately conditioned compr. air down to -40 °C / -40 °F
Material	Body: aluminium die-cast Elastomer: NBR/Buna-N Inner valve: brass and zinc-plated steel



G¼ and G⅜, 1300 l/min
1:1 to 1:6 2:1 to 5:1

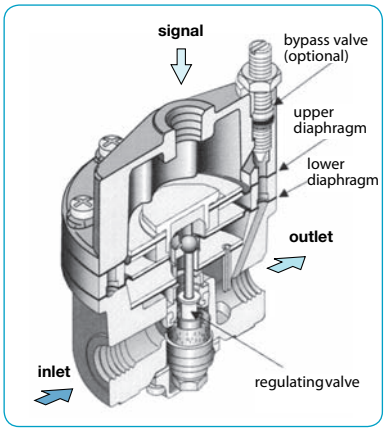
Dimensions A mm	B mm	C mm	K_v value (m^3/h)	Flow rate m^3/h*1	l/min*1	Connection thread G	Pilot pressure max. bar	Transmisson ratio signal : outlet	Order number
Volume booster with transmission ratio, relieving, with constant bleed, supply pressure max. 17 bar, pressure range 0...10 bar									**R218**
76	98	24	0.7	78	1300	G¼	10	1 : 1	**R218-02I**
							5.0	1 : 2	**R218-02K**
							3.3	1 : 3	**R218-02L**
76	110	24	0.7	78	1300	G¼	2.5	1 : 4	**R218-02M**
							2.0	1 : 5	**R218-02N**
							1.7	1 : 6	**R218-02O**
76	98	24	0.7	78	1300	G¼	10	2 : 1	**R218-02R**
								3 : 1	**R218-02S**
76	110	24	0.7	78	1300	G¼	10	4 : 1	**R218-02T**
								5 : 1	**R218-02U**

R218

Volume boosters

Special options, add the appropriate letter

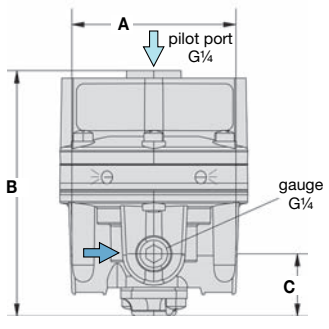
G⅜	connection thread		R218-0**3** .
NPT	connection thread		R218-02 . **N**
non-relieving*3	without relieving function		R218-02 . **K**
tapped exhaust*3	connection thread G¼		R218-02 . **X12**
bypass with restrictor	between control chamber and outlet,	1:1 only	R218-02 . **X16**
negative bias*3	preset to -0.24 bar, adjustable by 30 mbar		R218-02 . **Y**
silicone elastomer	supply pressure: max. 5 bar,	1:1 only	R218-02 . **A**
FKM elastomer			R218-02 . **V**



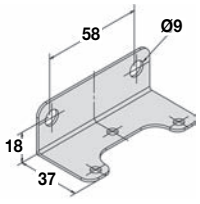
cross section

Accessories, enclosed

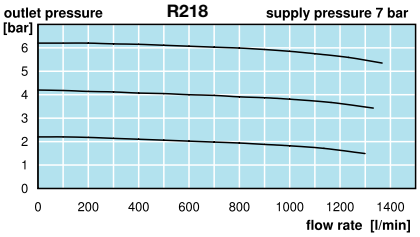
pressure gauge	Ø 63 mm, 0...*2 bar, G¼	**MA5002-..***2
mounting bracket	made of steel	**BW00-34**



R218



BW00-34



*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

*3 only for 1:1, 1:2, 1:3, 2:1 and 3:1

Order example:
R218-02I

China website: www.duray-control.cn