

Description

The volume booster with transmission ratio amplifies the outlet pressure at a 1:1 up to 1:6 ratio by a pneumatic pilot pressure, which has no constant bleed. That signal pressure has 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.

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, 1.7 bar at 1:6, pilot port G $\frac{1}{4}$

Accuracy

at supply variation of 3.5 bar: < 70 mbar at 1:1, < 140 mbar at 1:2, < 270 mbar at 1:3, < 400 mbar at 1:6
response sensitivity: < 2 mbar at 1:1, < 3 mbar at 1:2, < 17 mbar at 1:3, < 23 mbar at 1:6

Air consumption

max. 3 l/min, subject to outlet pressure

Relieving function

relieving

Relief capacity

170 l/min at 1.5 bar outlet and 0.7 bar overpressure above setpoint

Gauge port

on both sides of the body, thread equal to regulator thread

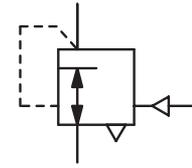
Mounting position any

Temperature range

0 °C to 70 °C / 32 °F to 158 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F

Material

Body: zinc die-cast Elastomer: NBR/Buna-N Inner valve: brass and stainless steel



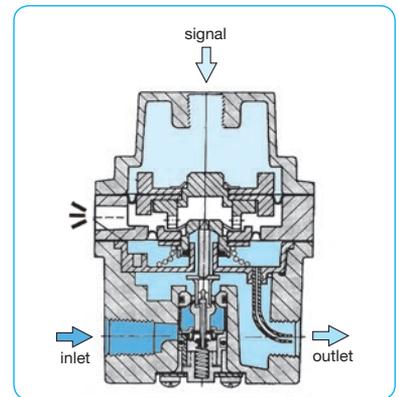
**G $\frac{1}{4}$ and G $\frac{3}{8}$, 1000 l/min
1:1 up to 1:6**

Dimensions			K _v	Flow	Connection	Signal	Transmission	Order
A	B	C	value	rate	thread	pressure	ratio	number
mm	mm	mm	(m ³ /h)	m ³ /h*1	G	max. bar	signal : outlet	

Volume booster			with transmission ratio, supply pressure max. 17 bar, relieving, with constant bleed, pressure range 0...10 bar				R750		
68	102	16	0.5	60	1000	G $\frac{1}{4}$	10	1:1	R750-02I
							5.0	1:2	R750-02K
							3.3	1:3	R750-02C
							1.7	1:6	R750-02M
68	102	16	0.5	60	1000	G $\frac{3}{8}$	10	1:1	R750-03I
							5.0	1:2	R750-03K
							3.3	1:3	R750-03C
							1.7	1:6	R750-03M
68	102	16	0.5	60	1000	G $\frac{1}{2}$	10	1:1	R750-04I
							5.0	1:2	R750-04K
							3.3	1:3	R750-04C
							1.7	1:6	R750-04M



R750



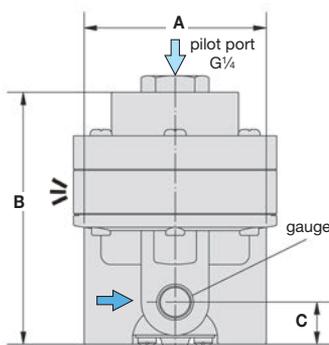
cross section

Special options, add the appropriate letter

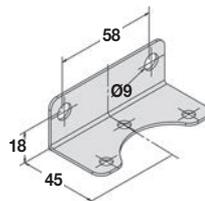
negative bias	factory-set to -0.3 bar	R750-0..Y
NPT	connection thread	R750-0..N
tapped exhaust	G $\frac{1}{4}$ connection thread	R750-0..X12

Accessories, enclosed

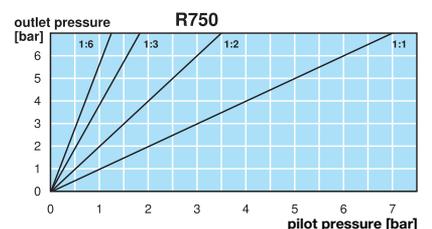
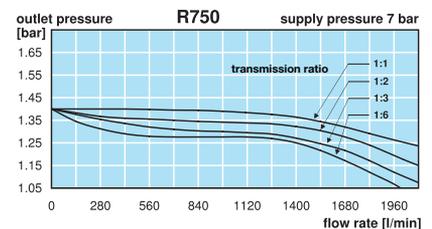
pressure gauge	Ø 50 mm, 0...*2 bar, G $\frac{1}{4}$	MA5002-..*2
mounting bracket	made of steel	BW00-33



R750



BW00-33



*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