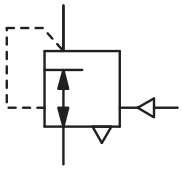
Precision Volume Booster with High Flow R450

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. 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, 2:1 and 3:1 ratio, 5 bar at 1:2, 3.3 bar at 1:3,		pilot port G¼
Accuracy	at supply pressure variation of 7 bar: < 7 mbar pressure deviation response sensitivity: 2.5 mbar		
Air consumption	without constant bleed	**Relieving function**	relieving
Relief capacity	1100 l/min at 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 90 °C / 32 °F to 194 °F, for appropriately conditioned compressed air down to -40 °C / -40 °F		
Material	Body: aluminium die-cast Inner valve: brass and aluminium	Elastomer:	NBR/Buna-N, optionally FKM



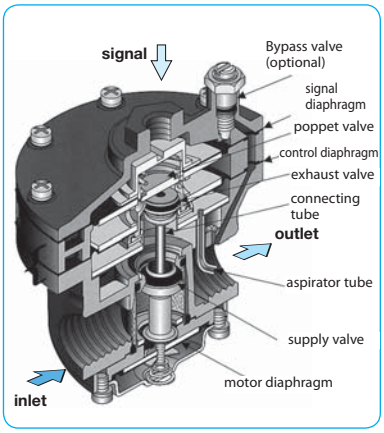
4200 l/min
1:1 up to 1:3, 2:1 and 3:1

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	Signal pressure max. bar	Transmission ratio signal : outlet	Order number
Volume 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	G½	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	G¾	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

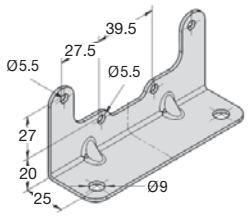
NPT	connection thread		R450-0 . .**N**
tapped exhaust	G½ connection thread, total height 148 mm		R450-0 . .**X12**
bypass with restrictor	from control chamber to outlet ,	1:1 only	R450-0 . .**X16**
external feedback	with connection thread G⅛		R450-0 . .**X27**
FKM elastomer			R450-0 . .**V**



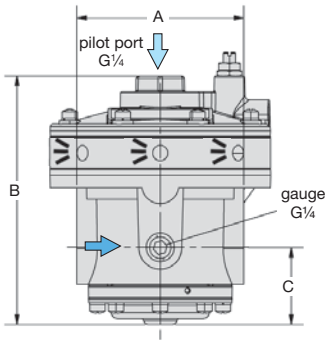
cross section

Accessories, enclosed

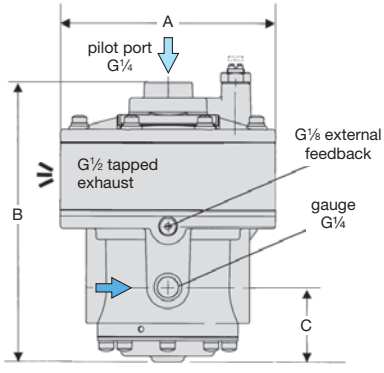
pressure gauge	Ø 63 mm, 0...*2 bar, G¼	**MA6302-..*2**
mounting bracket	made of steel	**BW00-47**



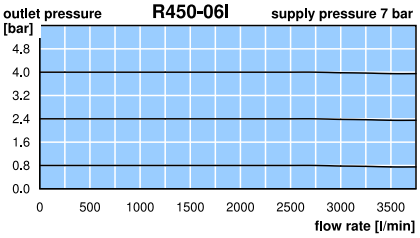
BW00-47



R450-..X16



R450-...X12X27



*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