PRECISION VOLUME BOOSTER WITH HIGH EXHAUST

The volume booster amplifies the volume at a 1:1 ratio of pilot pressure to outlet pressure. The booster is a rugged precision instrument with key features providing reliable, efficient and stable operation. Very low deadband between the operation of the supply valve and exhaust valve providing provides excellent pressure control. High capacity exhaust valve provides efficient dynamic reverse flow characteristics. Pressure balanced supply valve prevents changes in control characteristics when supply pressure changes. Damped diaphragm control chamber provides stable operation and protects valves from damaging oscillation under high flow conditions. Description Supply pressure max. 17 bar

Media Pilot pres Accuracy

from damaging oscillation under high flow conditions.

compressed air or non-corrosive gases

max. 10 bar; pilot port G¼

at supply pressure variation of 7 bar: < 7 mbar pressure deviation
response sensitivity:

max. 3 l/min subject to outlet pressure

2800 l/min at 0.35 bar overpressure above setpoint of 1.5 bar

Mounting position any

-40 °C to 93 °C / -40 °F to 199 °F

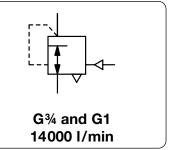
Body:

aluminium die-cast

Diaphragm: NBR/Buna-N on Polyester, Air consumption Relief capacity Gauge port Temperature range Material Relieving function relieving

Diaphragm: NBR/Buna-N on Polyester, optionally FKM

Inner valve: zinc-plated steel, optionally stainless steel



Dimensions			K _v -	Flow	Connection	Supply	Pressure	Order
Α	В	С	value	rate	thread	pressure	range	number
mm	mm	mm	(m³/h)	m³/h*1 l/min*1	G	max. bar	signal : outlet	

Booster					trans reliev	R490				
143	188	44	9	850	14100	G¾	17	010	R490-06	
143	188	44	9	850	14100	G1	17	010	R490-08	

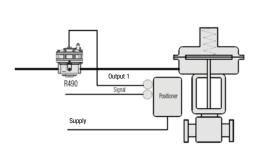


Special options, add the appropriate letter

NPT	connection thread	R490-0 . N
external feedback	with connection thread G1/4	R490-0 . X27
FKM elastomer		R490-0 . V
inner parts SST	all	R490-0 . S

Accessories, enclosed

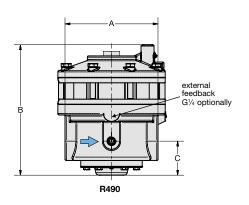
Ø 63 mm, 0...*2 bar, G1/4 MA6302-..*2 pressure gauge

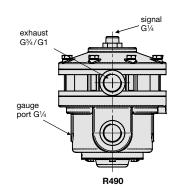


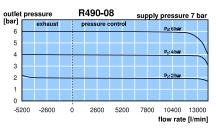
Controlle Molten R490

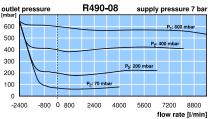
Volume booster with single acting positioner and diaphragm actuator

Volume booster: casting implements









Gauges: see chapter for measuring devices





^{*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