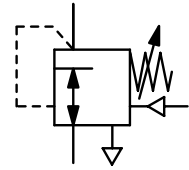


Description	Signal-operated regulator designed to provide outlet pressure which is the sum of the input signal pressure plus a preset bias. As an option, the relay can start with bias range -0.3 bar / -4 psi. The relay can also be used as a differential pressure regulator.		
Media	compressed air or non-corrosive gases		
Supply pressure	max. 17 bar		
Pilot pressure	max. 10 bar, pilot port G $\frac{1}{4}$		
Accuracy	response sensitivity: < 1 mbar		
Air consumption	without constant bleed		
Relief capacity	110 l/min at 1.5 bar outlet and 0.35 bar overpressure above setpoint		
Gauge port	G $\frac{1}{4}$ on both sides of the body, screw plugs supplied		
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 Elastomer: NBR/Buna-N Inner valve: brass		



G $\frac{1}{4}$ up to G $\frac{1}{2}$, 900 l/min parallel translation

Dimensions			Flow rate		Connection thread	Supply recommended	Positive bias	Pressure range	Order number
A	B	C	m 3 /h*1	l/min*1	G	bar	bar	bar	
mm	mm	mm							

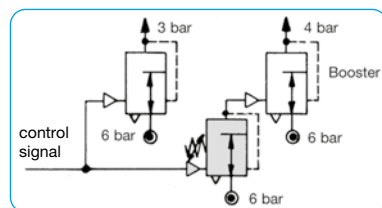
Positive bias relay						supply pressure max. 17 bar, relieving, without constant bleed, transmission ratio 1:1			R650
68	170	16	72	900	G $\frac{1}{4}$	5	0 ... 1	0 ... 10	R650-02C
						5	0 ... 2		R650-02D
						8	0 ... 4		R650-02E
						15	0 ... 10		R650-02F
68	170	16	78	900	G $\frac{3}{8}$	5	0 ... 1	0 ... 10	R650-03C
						5	0 ... 2		R650-03D
						8	0 ... 4		R650-03E
						15	0 ... 10		R650-03F
68	170	16	78	900	G $\frac{1}{2}$	5	0 ... 1	0 ... 10	R650-04C
						5	0 ... 2		R650-04D
						8	0 ... 4		R650-04E
						15	0 ... 10		R650-04F

Special options, add the appropriate letter

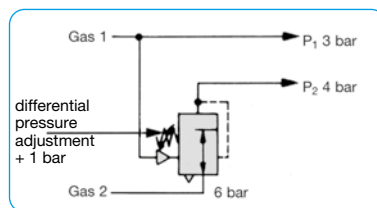
negative bias	factory-set to -0.3 bar	R650-0...Y
NPT	connection thread	R650-0...N
tamper-proof cap	above spindle, total height 174 mm	R650-0...T

Accessories, enclosed

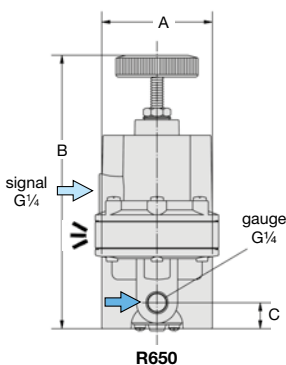
pressure gauge	Ø 50 mm, 0...*2 bar, G $\frac{1}{4}$	MA5002-...*2
mounting bracket	made of steel	BW00-33



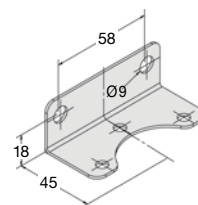
Example 1: constant differential pressure of 1 bar at high flow



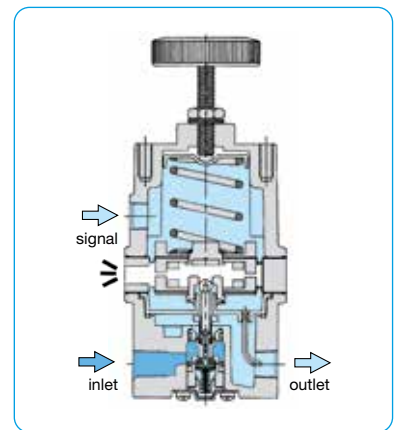
Example 2: constant differential pressure of 1 bar



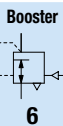
R650



BW00-33

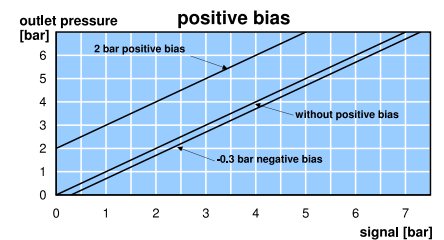
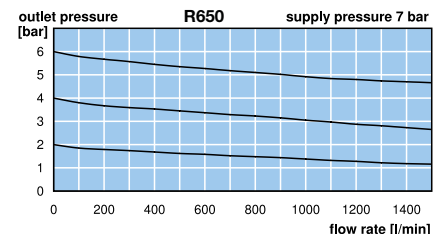


cross-section



Booster

6



*1 at 7 bar supply pressure and 6 bar outlet pressure
*2 01 = 0...1 bar, 02 = 0...2.5 bar, 04 = 0...4 bar, 10 = 0...10 bar

