

# Precision Pressure Regulator / Booster with Excellent Pressure Stability

R40

**Description** Highly sensitive, two-step precision pressure regulator working in the flapper-nozzle principle. Solid construction for low-maintenance operation with compressed air or non-corrosive gases.

**Booster version** In option A version the regulator can also be controlled by pilot pressure up to 7 bar in addition to range spring control. Thereby the regulator becomes a volume booster with double loop, parallel zero point shift

**Supply pressure** minimum: 0.3 bar above outlet pressure maximum: see chart

**Air consumption** Constant bleed only when flow is circulating. The greater the difference between supply and outlet pressure the greater is the air consumption, e.g. 9 bar inlet and 7 bar outlet resulting in 3 l/min air consumption.

**Exhaust** 50 l/min at 1.7 bar outlet pressure and 20 mbar overpressure to outlet pressure

**Pressure stability** 10 mbar pressure drop when changing flow rate from "0" to "max".

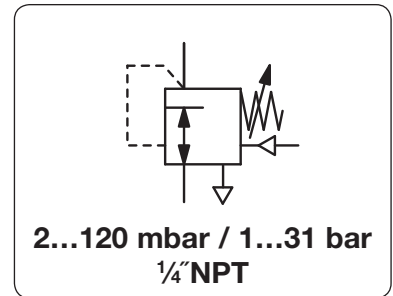
**Setting accuracy** < 0.03 % outlet pressure. Ten adjusting knob turns for the setting of the whole adjustment range.

**Gauge port** 1/4" NPT on both sides, screw plugs supplied

**Temperature range** Operating pressure : -4 °C to 80 °C / 25 °F to 176 °F Storage temperature: -20 °C to 100 °C / -4 °F to 212 °F

**Temperature sensitivity** 1 % pressure deviation at temperature change of 30 K, 0.1 % deviation for isotherm spring (please inquire)

**Material** fluid-contact: brass, stainless steel, neoprene, aluminium and zinc

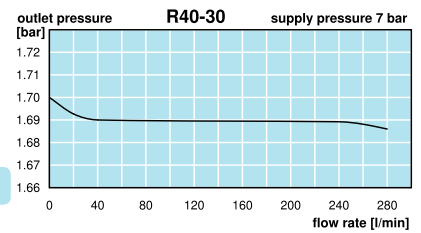


Dimensions	Flow rate	supply pressure	Connection	Pressure	Order
height	rate	recommended	thread	range	number
mm	l/min*1	bar*2	NPT	mbar / bar	



R40

Precision regulator						K <sub>v</sub> = 0.16 K <sub>v</sub> = 0.66 for version "H"	R40
189	86	300	0.7	1.7	1/4"	2 ... 120 mbar	R40-2
189	86	300	3.5	7	1/4"	10 ... 500 mbar	R40-7
189	86	300	5	10	1/4"	0.03 ... 1 bar	R40-15
189	86	300	8	10	1/4"	0.07 ... 2 bar	R40-30
189	86	300	8	10	1/4"	0.07 ... 3.5 bar	R40-50
189	86	1200	8	10	1/4"	0.07 ... 3.5 bar	R40-50H
189	86	300	10	35	1/4"	0.1 ... 7 bar	R40-100
189	86	1200	10	35	1/4"	0.1 ... 7 bar	R40-100H
192	86	300	17	35	1/4"	0.2 ... 14 bar	R40-200
192	86	300	24	35	1/4"	0.5 ... 21 bar	R40-300
192	86	300	35	35	1/4"	1 ... 31 bar	R40-450



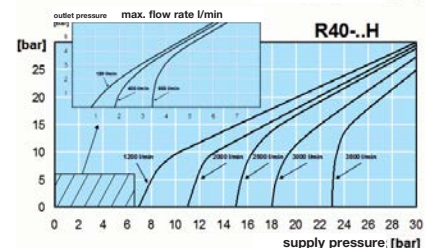
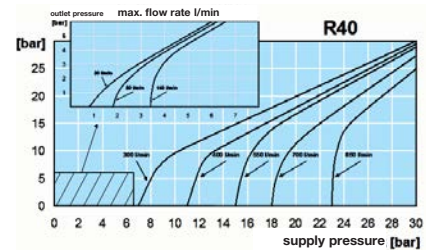
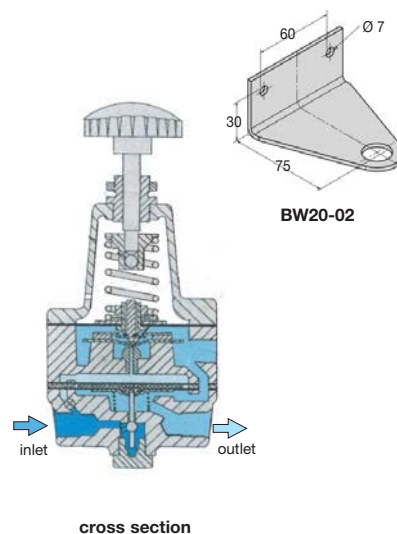
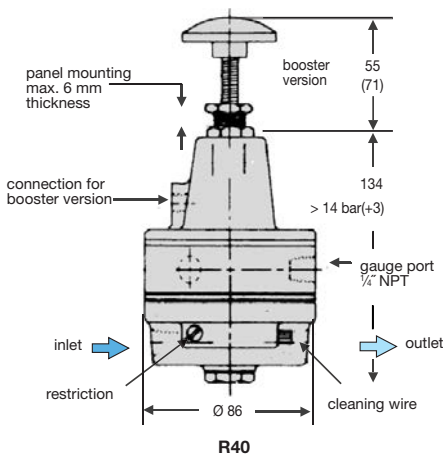
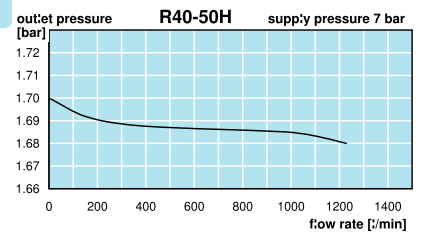
## Special options, add the appropriate letter

volume booster version: up to max. 7 bar pilot pressure R40A- . . .

## Accessories, enclosed

pressure gauge Ø 50 mm, 0...\*2 bar, G1/4  
gauge connectors for NPT ports, adapter 1/4" NPT to G1/4 female  
mounting bracket

MA5002-..\*2  
VP-0202N  
BW20-02



\*1 at 7 bar supply pressure, 1.7 bar outlet pressure and 20 mbar pressure drop  
\*2 lowest outlet pressure will only be reached when applying the recommended inlet pressure



Order example: R40-2  
China website: www.duray-control.cn