

MANOSTAT PRECISION PRESSURE REGULATOR SERIES REMOTE MANUAL AND AUTO/MANUAL LOADING STATIONS

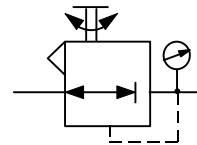
FEATURES

- Reliable, durable
- Visual display of set pressure
- Precise regulation
- Excellent setting sensitivity



GENERAL DESCRIPTION

Remote manual and auto/manual loading stations are designed for the remote control of pneumatic systems using a manostat regulator and different combinations of air switching valve and pressure gauge.



Functional Symbol

TECHNICAL DATA

PNEUMATIC

- Output Signal See ordering information. Minimum outlet pressure 0.1-0.14bar (1.5-2psig).
- Air Supply Oil free, dry air or other dry gases, filtered to better than 25 microns; at least 0.2bar (3psig) above output pressure to a maximum of 10bar (150psig, 1000kPa)
- Flow Capacity Up to 300NI/min (10scfm). A high relief version is available for applications requiring a rapid exhaust
- Air Consumption 0.2 l/min (0.006scfm) at 1bar (15psig); 0.3 l/min (0.01scfm) at 1.7bar (25psig); 0.6 l/min (0.02scfm) at 4bar (60psig); 1.2 l/min (0.04scfm) at 8bar (120psig) (typical values at maximum supply pressure)
- Response Time less than 0.2 seconds for 50% load change
- Regulation Accuracy % output change for 1bar/15psi supply pressure change at mid-range output: 0.1% (0.14bar/2-25psi), 0.05% (0.14-4bar/2-60psi), 0.02% (0.14-8bar/2-120psi)
- Sensitivity Better than 0.3mbar (0.005psi)
- Hysteresis and Repeatability Typically less than 0.05% setting at mid-range
- Temperature span Effect Typically better than $\pm 1\%$ change of full between -20°C and $+70^{\circ}\text{C}$
- Connections 1/4" NPT female standard (plus two integral 1/4" NPT gauge ports); others available on request

Note: a small positive pressure (<2psig, 0.14bar) will always be shown at the lower end of the gauge scale (due to regulator servo operation)

MODEL TYPES

(With panel mounting plate, 3mm thick, black painted finish with corner fixing straps)

- SP Manostat regulator plus 63mm diameter pressure gauge (phosphor bronze Bourdon tube to BS1780); horizontal/vertical mounting
- SP2 As SP model but with a rotary 2 position, 3-way auto/manual valve; horizontal/vertical mounting; pressure gauge indicates manual set pressure only
- SP2G2 As SP2 model but with a second pressure gauge to measure auto signal pressure before switching; horizontal/vertical mounting
- SP2G2W Weatherproof SP2G2; surface/post mounting (yoke supplied suitable for a 50mm/2" diameter post)

PHYSICAL

- Operating Temperature -20°C to $+70^{\circ}\text{C}$
- I.P. Rating IP65
- Vibration The unit is unaffected by moderate vibration
- Material of Construction Zinc diecasting passivated and epoxy painted, Beryllium copper capsule; Nitrile diaphragms

