



Pressure Reducing Valves

Model GP-2000 and GP-2000R

These instructions should be used by experienced personnel!

PRODUCT DESCRIPTION

Model shown on the picture: GP-2000

GP-2000: Armstrong Nodular Iron Externally Piloted Pressure Reducing Valve.

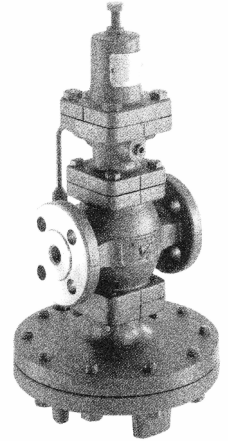
GP-2000R: Armstrong Nodular Iron Externally Piloted Back Pressure Regulator.

For Steam applications only.

Optional:

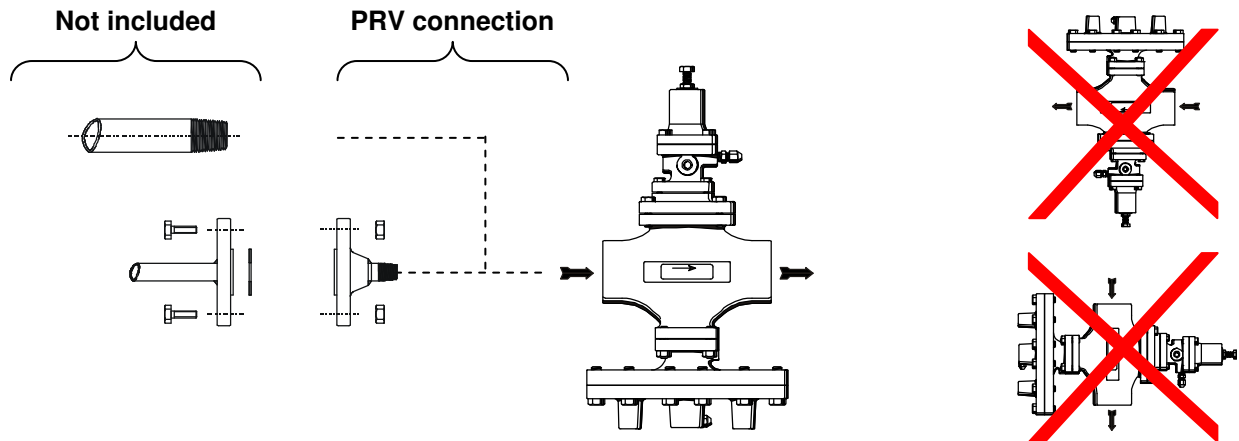
- 1/4" impulse pipe (2m) with connectors

For detailed material specifications, approximate dimensions and weight, see Armstrong literature or consult your local Representative.



INSTALLATION

Model shown on the drawing: GP-2000



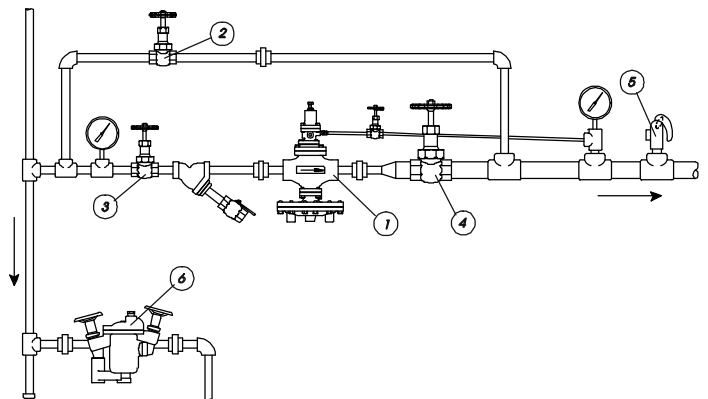
START-UP, ADJUSTMENT AND SHUT-DOWN PROCEDURE

For detailed hookups and adapted start-up and shut-down procedures, see Armstrong literature or consult your local Representative.

Downstream demand is necessary to set the pressure reducing valve.

Installation shown on drawing is for GP-2000.

- Close the isolation valves (3 & 4) and open the by-pass valve (2) to blow-down inlet piping. After having blown the system down, close the by-pass valve (2);
- Make sure steam trap (6) is operating properly;
- Loosen the lock nut and the adjusting screw located on the top of the Pressure Reducing Valve (1) in order to set the adjusting spring free;



Model GP-2000:

- Completely open the inlet valve (3) and partially open the outlet valve (4);
- Turn the adjusting screw clockwise until the desired pressure is reached at the outlet of the Pressure Reducing Valve (1). Tighten the lock nut to block the adjustment;

- Completely open the outlet valve (4), pressure reducing station should now operate normally;
- To shut the system down, close the inlet valve (3) first, then the outlet valve (4).

Model GP-2000R:

- Partially open the inlet valve (3) and completely open the outlet valve (4);
- Make sure the inlet pressure is set at the value to be maintained. Turn the adjusting screw clockwise until the Pressure Reducing Valve (1) opens completely (outlet pressure is almost equal to inlet pressure). Pressure Reducing Valve (1) should close when inlet pressure decreases. Tighten the lock nut to block the adjustment;
- Completely open the inlet valve (3), pressure reducing station should now operate normally;
- To shut the system down, close the inlet valve (3) first, then the outlet valve (4).

MAINTENANCE

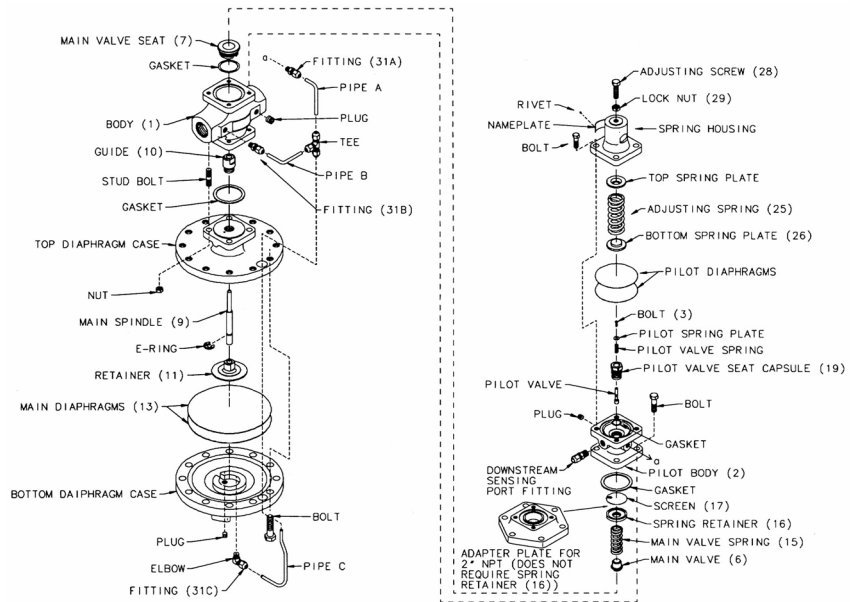
For troubleshooting, testing methods, frequency of maintenance and detailed spare parts list, see Armstrong literature or consult your local Representative.



**EQUIPMENT UNDER PRESSURE
OPERATING TEMPERATURE >100 °C
MAKE SURE PRESSURE REDUCING VALVE IS COLD BEFORE HANDLING**

I. Pilot Valve Replacement:

- Loosen the lock nut (29) and turn the adjusting screw (28) counterclockwise until pressure is relieved from spring (25);
- Unscrew the bolts and take out the adjusting spring (25), the bottom plate (26) and the 2 pilot diaphragms;
- Remove the pilot valve capsule (19) and disassemble it. If necessary clean the internal parts or replace complete pilot valve capsule (19) if necessary.



Model shown on the drawing: GP-2000

II. Main Valve Replacement:

- Disassemble the copper tubing on the side of the valve (31 A, B & C);
- Unscrew the 4 bolts linking the pilot body (2) to the main body (1). If the pilot is mounted remotely, remove the cover from the top of the main body (1);
- Remove the spring retainer (16), the screen (17), the main spring (15) and the main valve (6). Clean or replace main valve (6) if necessary;
- Unscrew the 4 bolts between the main body (1) and the top of the diaphragm case. Remove main valve seat (7) and clean or replace it if necessary.

III. Main Diaphragm Replacement:

- Remove all bolts and nuts linking the top diaphragm case and the bottom diaphragm case;
- Remove the 2 main diaphragms (13), the retainer (11) and the main spindle (9);
- Replace the diaphragms (13) if they are damaged.

MODELS WITH CE MARKING

Valve Model	PMA	TMA	DN	PMO
GP-2000 GP-2000R	20 bar	232 °C	65	20 bar
			80	
			100	
			150	

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