

SERIES 859 AUTOMATIC CONTROL VALVE

INSTALLATION MANUAL

PRESSURE SUSTAINING VALVE

1.1. INSTALLATION

1.2. TYPICAL INSTALLATION (MAINTENANCE)

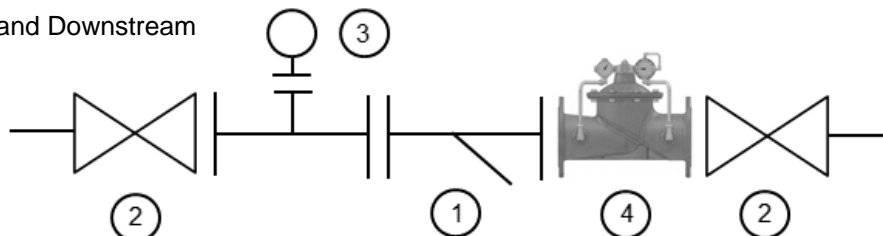
1.3. START UP FOR "PRESSURE SUSTAINING VALVE"



1.1 INSTALLATION

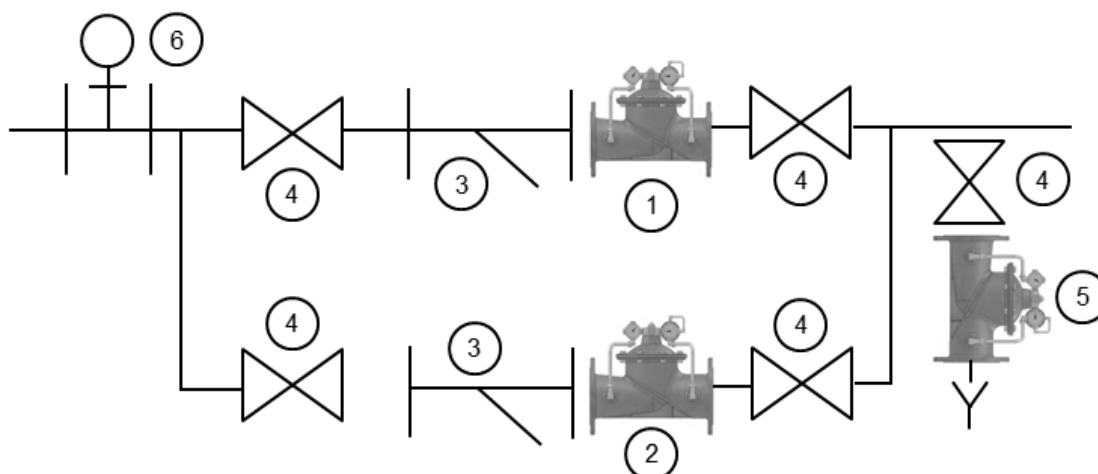
Recommend installation of a typical installation:

- 1 – Filter
- 2 – Isolation Valves Upstream and Downstream
- 3 – Air Vent
- 4 – S859 Control Valve



1.2 TYPICAL INSTALLATION (MAINTENANCE)

- Installation layout shown below, bypass line with S859 control valve to allow maintenance and repairs with system under pressure.
- Before installing valve, main pipe must be inspected for the removal of all foreign matter (sand, stones, etc.).
- Sufficient room should be made available around the control valve installation.
- Install valve - pay attention to flow direction arrow cast on valve body.
- Valve must be installed in horizontal position with the bonnet (cover) up.
- Valve should be lifted using the correct lifting devices.
- Safety is paramount; all installers should provide all relevant safety producers before commencing work.
- Please Note: This is equipment under pressure. Care must be taken at all times.
- Positive isolation and lock off procedures should be used.



Typical Maintenance Installation (Allowing Maintenance to be carried out efficiently)

- 1 – S859 Control Valve
- 2 – S859 Control Valve By-pass
- 3 – Protection Filter
- 4 – Isolating Valves
- 5 – S859 Relief Valve
- 6 – Air Vent



1.3 START UP FOR “PRESSURE SUSTAINING VALVE”.

- Confirm pilot spring range within regulator and spring identification label are the same.
- Close valve 1B and open valve 1A (S859 Control Valve).
- Close valve C and open valve B (System).
- Remove air from control chamber using mechanical air vent 5 (859 Control Valve).
- Turn clockwise needle 3A (closing speed) and 3B (opening speed)
- To open turn anticlockwise 3A (S859 Control Valve).
- To open turn anticlockwise 3B (S859 Control Valve).
- Pull regulator 6 to unlock and turn anticlockwise (S859 Control Valve).
- Open partially (low flow) isolating valve C slowly (System).
- Close partially isolating valve B to allow flow in valve C to be greater than valve B (System).
- Open valve 1B (S859 Control Valve).
- Turn slowly clockwise pilot regulator 6 until desired upstream pressure is achieved (S859 Control Valve).
- Push regulator 6 to lock (Remove if required).
- Open slowly valves B and C (System).
- Valve adjustments are now set.

SYSTEM

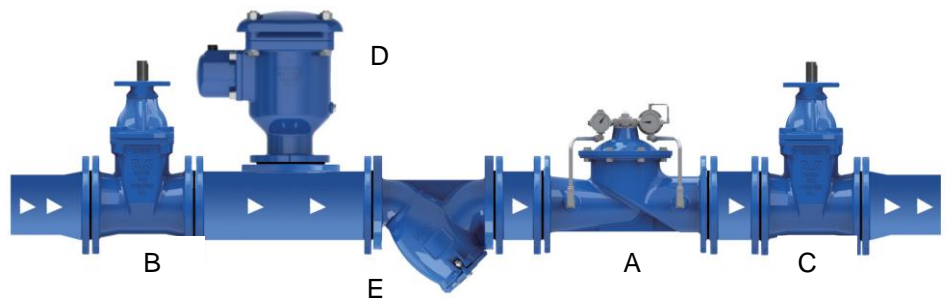
A – S859 Control Valve

B – Isolation Valves Upstream

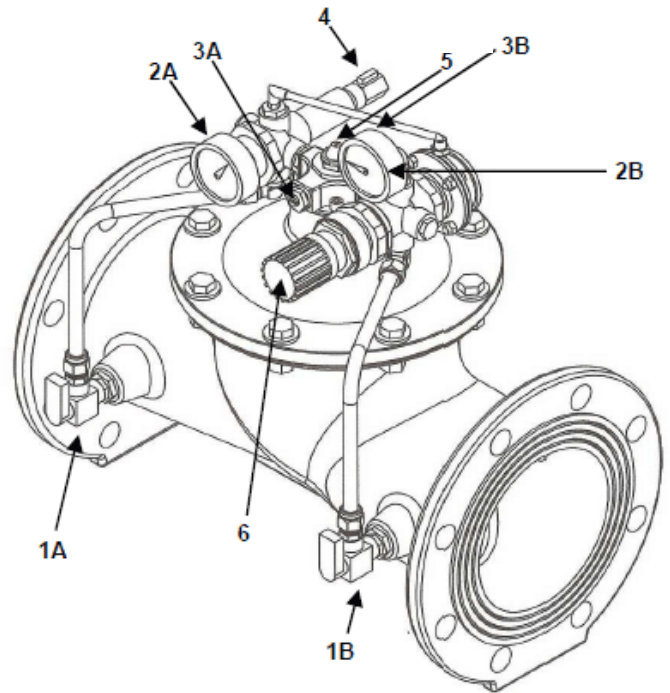
C – Isolation Valves Downstream

D – Air Vent

E – Filter



- 1A – Isolating Ball Valve-Inlet
- 1B – Isolating Ball Valve-Outlet
- 2A – Upstream Pressure Gauge (If Fitted)
- 2B – Downstream Pressure Gauge (If Fitted)
- 3A – Closing Speed (C.S)
- 3B – Opening Speed (O.S)
- 4 – Filter Flushing Valve (If Fitted)
- 5 – Mechanical Air Vent
- 6 - Regulator



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