



HAYS

**25TC Series
Stainless Steel
Automatic Flow Control Valves**

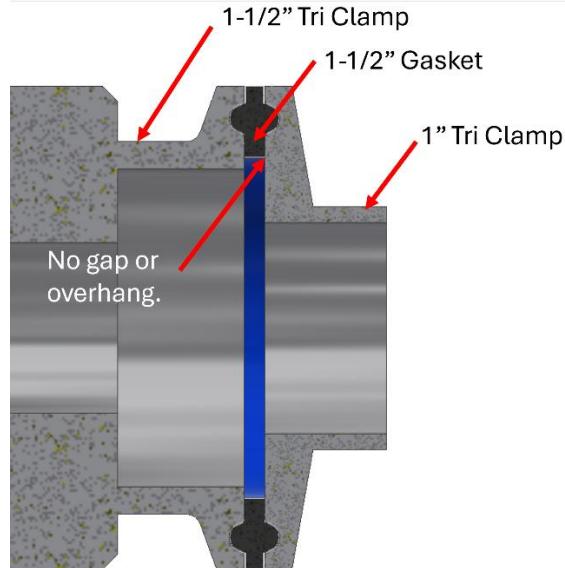
INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS

GENERAL INFORMATION

1. Clean the lines of all foreign material, (welding slag, pipe scale, dirt, thread chips etc.). Upstream installation of a strainer may be necessary in dirty systems.
2. Air should be eliminated from the system prior to startup to assure quiet operation and freedom from water hammer.
3. Hays Automatic Flow Control Valves may be installed in the pipeline horizontally, vertically or at any angle in between. Straight sections of pipe upstream or downstream of the Hays valve are unnecessary for proper operation. Standard reducing bushings or flanges may be directly connected to the Hays valve if required.
4. All Hays Automatic Flow Control Valves are marked with direction of flow and rate of flow. **THE FLOW ARROW MUST POINT IN THE DIRECTION OF FLOW FOR PROPER OPERATION.**
5. Hays Flow Control Valves are factory assembled, individually calibrated and are tamperproof once installed in the pipe. The valves are warranted to be accurate within 10% of rated flow when properly installed.
6. Hays Automatic Flow Control Valves may be modified by using a Hays Service Kit. Contact Factory for part numbers, instructions and other details.

INSTALLATION

1. 25TC Series valves are equipped with tri clamp (sanitary) ferrule connections. Visually inspect the ferrule connections for proper surface finish. Ferrule connections should be free of any dings or imperfections on the gasket sealing surface.
2. Use only new undamaged gaskets. Center the gasket properly in the ferrule face; do not allow it to protrude excessively into the flow path.
3. Align the ferrule connections perfectly. Install the clamp and hand-tighten the clamp nut until the gasket is lightly compressed. Follow the clamp manufacturer's recommended torque values for final tightening of the clamp.
4. When installing a 1-1/2" 25TC to a 1" ferrule connection a 1-1/2" gasket must be used for the proper fit and sealing. This is to prevent gasket overhang and eliminate a gap in the sealing surface. See image below for reference.



OPERATION

1. For optimum operation, air entrainment in the system must be eliminated. The flow control valve must remain filled with fluid. The system must be clean and free of foreign materials.
2. The Hays 25TC valves must only be used with fluids that are compatible with UNS 31600 and EPDM materials. The temperature during operation must be limited to the range of 32°F to 225°F.
3. The use of fluids having a viscosity or specific gravity different from that of water will require compensation. Valves specified for fluids other than water will be marked and the factory calibration will take the specific fluid's properties into consideration.
4. Operation at a temperature other than the rated temperature may require additional compensation.

MAINTENANCE

1. General maintenance is not required for Hays Flow Control Valves, however if the system experiences large amounts of pipe scale due to poor water conditions, as sometimes is found in older or retrofit systems, some may be required. Provisions should be made to keep the system clean. Proper water treatment is also recommended, and reverse flushing may be required.
2. Spare Cartridge Assemblies, factory calibrated may be ordered.
3. Always use new O-rings after changing flow cartridges.

LIMITED WARRANTY

See Hays Fluid Controls Terms & Conditions for warranty information.