



# HAYS

## 2545SS & 2547SS Series Stainless Steel Automatic Flow Control Valves

### INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS

#### GENERAL INFORMATION

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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

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1. Flanged valves are intended for use in Building Services Piping meeting the requirements of ASME B 31.9 and are supplied with ANSI B16.5, 1968, 150 lb. raised face stainless steel flanges. These flanges are to be connected into the piping system utilizing new ASTM A194, GR 2H, nuts, new ASTM A193 GR B7 bolts, size 5/8 inch, and two hardened steel washers under each nut. Remove inlet and outlet covers before installation. Appropriate gasket material must be used when installing flange mounted flow control valves.
2. The thinnest practical gasket should be used whenever possible so as to optimize the joint performance.
3. A non-metallic based lubricant such as oil or graphite is to be applied to the nuts and bolts, and the assembly uniformly torqued to 120 ft lb. up to 4" Flanges, 200 ft lb. 6"-8" Flanges, 320 ft lb. 10"-12" Flanges and 490 ft lb. for 14"-18" Flanges. Bolts should

be torqued in at least three even steps using a star or crossing pattern until the final torque is reached.

**CAUTION:** Uneven tightening may cause the gasket to pinch. Gasket should not be visible between segments after bolts are tightened.

## **OPERATION**

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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 2545SS & 2547SS Mesurflo® valves must only be used with fluids that are compatible with 316 Stainless Steel 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**

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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.

## **LIMITED WARRANTY**

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See Hays Fluid Controls Terms & Conditions for warranty information.