



## 2313 / 2323 Series Sea Water 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 pipe line horizontally, vertically or 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.

#### 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 2313 & 2323 Mesurflo Valve must only be used with fluids that are compatible with Bronze UNS C83600, 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 specific gravity different from that of water will require adjustment. Valves specified for fluids other than water will be so marked and the factory calibration will take the specific fluid's properties into consideration. Operation at a temperature other than the rated temperature may require a correction.

#### INSTALLATION

1. Threaded valves are provided with Dryseal NPT threads in accordance with ANSI STD B1.20.1 and are intended for use in Building Services Piping meeting the requirements of ASME B 31.9.
2. Apply thread sealant to male pipe threads, starting with the second or third thread from the end, and torque the connection to 75 foot pounds per inch of pipe size minimum for 2313. Example: ( ½ ", 1/2 X 75 = 38 ft lb. Min.)  
Apply thread sealant to male pipe threads, starting with the second or third thread from the end, and torque the connection to 75 foot pounds per inch of pipe size minimum for 2323. Example: ( 1-½ ", 1-1/2 X 75 = 113 ft lb. Min.)

#### 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.
2. Spare Cartridge Assemblies, factory calibrated may be ordered.
3. When assembling the **2313** Mesurflo Valve after changing flow cartridges, always use new O'Rings, and tighten the Union Nut to 80 Ft Lbs.  
When assembling the **2323** Mesurflo Valve after changing flow cartridges, always use new O'Rings, and tighten the Union Nut to 130 Ft Lbs.

#### LIMITED WARRANTY

See Hays Fluid Controls current Terms & Conditions for warranty information.