

## **Model AD-2 Automatic Drain Valve 1/2 Inch NPT, 175 psi (12,1 bar) For Use With Dry Standpipes and F.D. Connections**

### **General Description**

The Model AD-2 Automatic Drain Valves (Ref. Figure 1) are designed to automatically drain water from fire protection equipment supply connections that are to be maintained normally dry. The AD-2 is used to drain any water that may leak past the control valve at a hose station or that could be trapped between a fire department connection and a check valve.

The AD-2 is installed vertically and utilized with an open drain. Its 1/2 inch NPT male inlet permits direct connection to the low point to be drained.

The Model AD-2 Automatic Drain Valve is a redesignation of the Gem Model F789.

#### **NOTICE**

*The Model AD-2 Automatic Drain Valve described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of these devices.*

*The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.*

### **Technical Data**

**Approvals**  
UL Listed  
FM Approved

**Maximum Working Pressure**  
175 psi (12,1 bar)

#### **Physical Characteristics**

Body ..... Bronze  
Inlet ..... Steel  
Ball ..... Stainless Steel or Brass  
Spring ..... Beryllium Copper



#### **IMPORTANT**

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

## Operation

The AD-2 utilizes a spring loaded ball mechanism to maintain the Valve open under normal conditions. As the Inlet is pressurized, the Ball is automatically forced downward and the Valve is closed at a pressure of approximately 7 psi (0,48 bar). In the closed condition, a limited amount of water continues to flow out through the two Bleed Orifices: 1 to 2 GPM at 100 psi (0,38 to 0,75 LPM at 6,9 bar). On decreasing pressure, the Spring automatically reopens the Valve at a pressure of 5 psi (0,34 bar) or greater.

## Installation

The Model AD-2 Automatic Drain Valve is to be installed vertically with the arrow on the Body pointing directly downward. An automatic drain valve is to be located at the low point of each trapped section of piping that is to be kept normally dry, and drainage arrangements, as appropriate, should be provided.

## Care and Maintenance

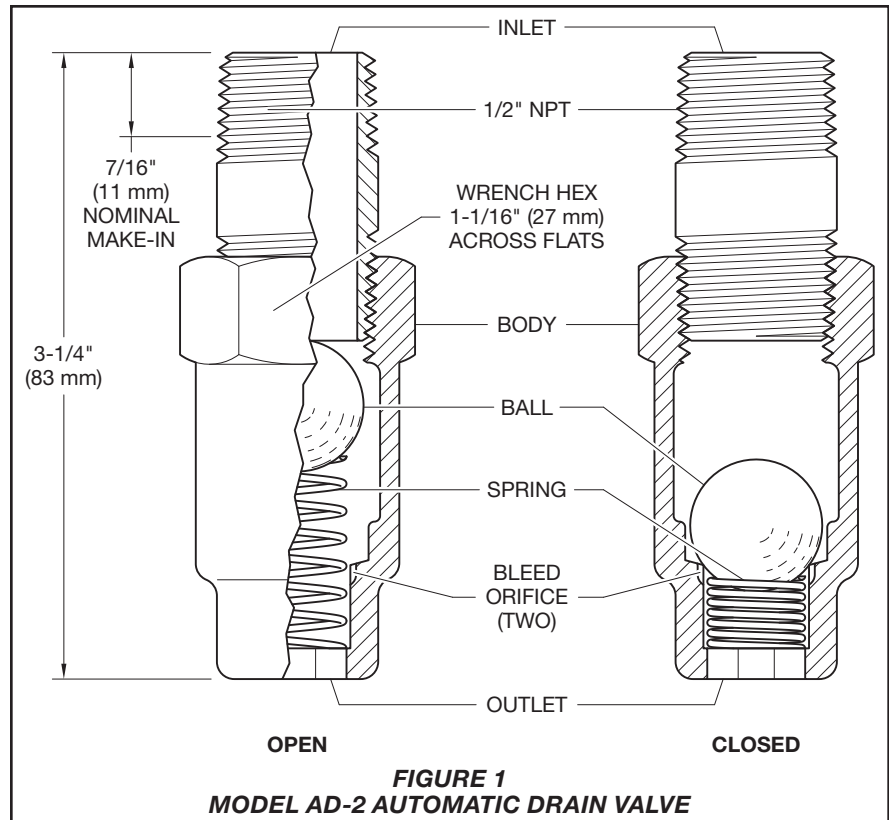
The following inspection procedure must be performed as indicated, in addition to any specific requirements of the NFPA. Any impairments must be immediately corrected.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (e.g., NFPA 25), in addition to the standards of any authority having jurisdiction. Contact the installing contractor or product manufacturer with any questions.

It is recommended that automatic sprinkler systems be inspected, tested, and maintained by a qualified Inspection Service in accordance with local requirements and/or national codes.

### NOTICE

No attempt is to be made to disassemble, repair or clean an impaired AD-2 Automatic Drain Valve. The complete assembly must be replaced if there is any indication of malfunction.



Before closing a fire protection system control valve for inspection or maintenance work on the fire protection system that it controls, permission to shut down the affected fire protection system must first be obtained from the proper authorities and all personnel who may be affected by this action must be notified.

After placing a fire protection system in service, notify the proper authorities and advise those responsible for monitoring proprietary and/or central station alarms.

### Inspection Procedure

It is recommended that Model AD-2 Automatic Drain Valve installations be inspected monthly, or more frequently as may be necessary in applications where condensate must be continuously removed. Verify that each Valve is in working order and not obstructed with scale, dirt, or other deposits. If the Valve must be removed for inspection, only wrench on the Inlet.

Each automatic drain valve should also be checked for proper drainage whenever the associated fire protection equipment supply connection is flow (pressure) tested.

## Limited Warranty

For warranty terms and conditions, visit [www.tyco-fire.com](http://www.tyco-fire.com).

## Ordering Procedure

Orders must include the description and Part Number (P/N). Contact your local distributor for availability.

**Model AD-2 Automatic Drain Valve**  
Specify: Model AD-2 Automatic Drain Valve, P/N 52-789-1-004