

Technical Services: Tel: (800) 381-9312 / Fax: (800) 791-5500



### 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.

#### WARNINGS

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, 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. The installing contractor or sprinkler manufacturer should be contacted 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

### **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. The installing contractor or product manufacturer should be contacted relative to 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.

#### NOTES

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.

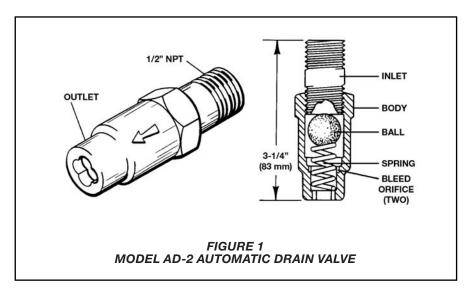
Before closing a fire protection system control valve for inspection or maintenance work on the fire protection system that it controls, permission to shut down the affected fire protection system must first be obtained from the proper authorities and all personnel who may be affected by this action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

Products manufactured by Tyco Fire & Building Products (TFBP) are warranted solely to the original Buyer for ten (10) years against defects in material and workmanship when paid for and properly installed and maintained under normal use and service. This warranty will expire ten (10) years from date of shipment by TFBP. No warranty is given for products or components manufactured by companies not affiliated by ownership with TFBP or for products and components which have been subject to misuse, improper installation, corrosion, or which have not been installed, maintained, modified or repaired in accordance with applicable Standards of the National Fire Protection Association, and/or the standards of any other Authorities Having Jurisdiction. Materials found by TFBP to be defective shall be either repaired or replaced, at TFBP's sole option. TFBP neither assumes, nor authorizes any person to assume for it, any other obligation in connection with the sale of products or parts of products. TFBP shall not be responsible for sprinkler system design errors or inaccurate or incomplete information supplied by Buyer or Buyer's representatives.

In no event shall TFBP be liable, in contract, tort, strict liability or under any other legal theory, for incidental, indirect, special or consequential damages, including but not limited to labor charges, regardless of whether TFBP was informed about the possibility of such damages, and in no event shall TFBP's liability exceed an amount equal to the sales price. The foregoing warranty is made in lieu of any and all other warranties, express or implied, including warranties of merchantability and fitness for a particular purpose.

This limited warranty sets forth the exclusive remedy for claims based on failure of or defect in products, materials or components, whether the claim is made in contract, tort, strict liability or any other legal theory.

This warranty will apply to the full extent permitted by law. The invalidity, in whole or part, of any portion of this warranty will not affect the remainder.

# 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.