

# MODELS H-2 AND H-3 AIR MAINTENANCE DEVICES

## GENERAL DESCRIPTION

Globe's Models H-2 and H-3 Air Pressure Maintenance Devices are automatic, field-adjustable devices that control the on-off cycling of an air compressor. They are used to control the supervisory air pressure in a dry pipe sprinkler system, preaction system, or dry pilot line system of a dry pilot sprinkler actuated deluge or preaction valve. The H-2 and H-3 are utilized in applications where it is desirable or necessary to use a small, non-tank mounted compressor that is to be dedicated to the system to be pressurized. The H-2 and H-3 monitor system pressure and automatically cycle the air compressor on and off to maintain system pressure within the desired preset limits.

The Model H-2 should be specified when the primary air compressor has an unloader as an integral part. After the initial system air pressure has been established, the 1/2" globe valve is closed. As pressure on the system side of the 1/4" check valve drops, the air pressure switch contacts close, causing the compressor to start. A restricted orifice limits the rate at which air is replaced. When the system air pressure has been re-established, the switch contacts open, stopping the compressor.

Globe's Model H-3 Air Maintenance Device is similar in operation to the Model H-2. The Model H-3, however, incorporates an unloader valve. This model is selected when the primary air compressor is not equipped with an unloader device. After the compressor has re-established the required air pressure on the system side of the check valve, the air pressure switch contacts open, stopping the compressor and operating a release valve. The release valve vents the compressor head to exhaust the air trapped between the compressor head and the in line check valve. On the next automatic operating cycle, the compressor will start against atmospheric pressure, thus preventing excessive starting loads.

## TECHNICAL DATA

### Approvals

- cULus
- FM
- NYC-DOB MEA 335-91-M

### Minimum Cut Out Pressure

- 14 psi (0.98 kg/cm<sup>2</sup>)

### Maximum Cut In Pressure

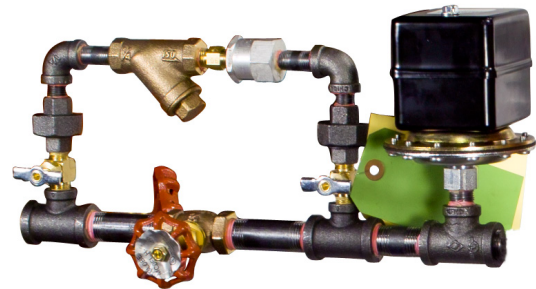
- 60 psi (4.22 kg/cm<sup>2</sup>)

### Differential Pressure

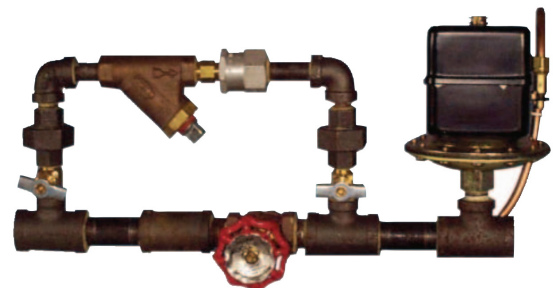
- 6-16 psi (0.42-1.12 kg/cm<sup>2</sup>)

### Factory Set Cut In Pressure

- 30 psi (2.11 kg/cm<sup>2</sup>)



**MODEL H-2  
AIR MAINTENANCE DEVICE**



**MODEL H-3  
AIR MAINTENANCE DEVICE**

### Factory Set Cut Out Pressure

- 40 psi (2.81 kg/cm<sup>2</sup>)

### End Connections

- 1/2" Female NPT

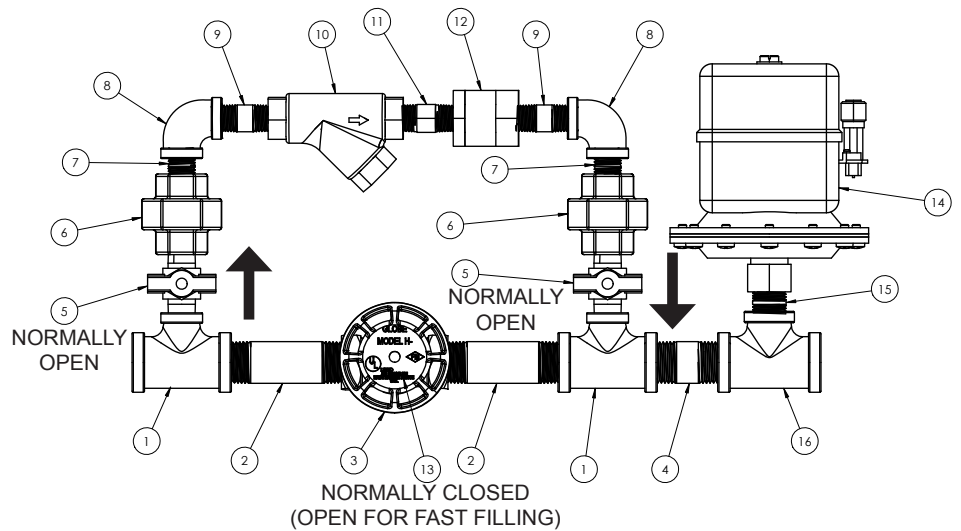
### Physical Dimensions

- H-2 - 13 1/2" X 7" (343 mm X 178 mm)
- H-3 - 13 1/8" X 7 7/8" (334 mm X 200 mm)

2 HP	3 HP	5 HP	3 HP	5 HP	2 HP
120V single phase	240V single phase	600V single phase	120V 3 phase	240V- 600V 3 phase	115V - 230V DC

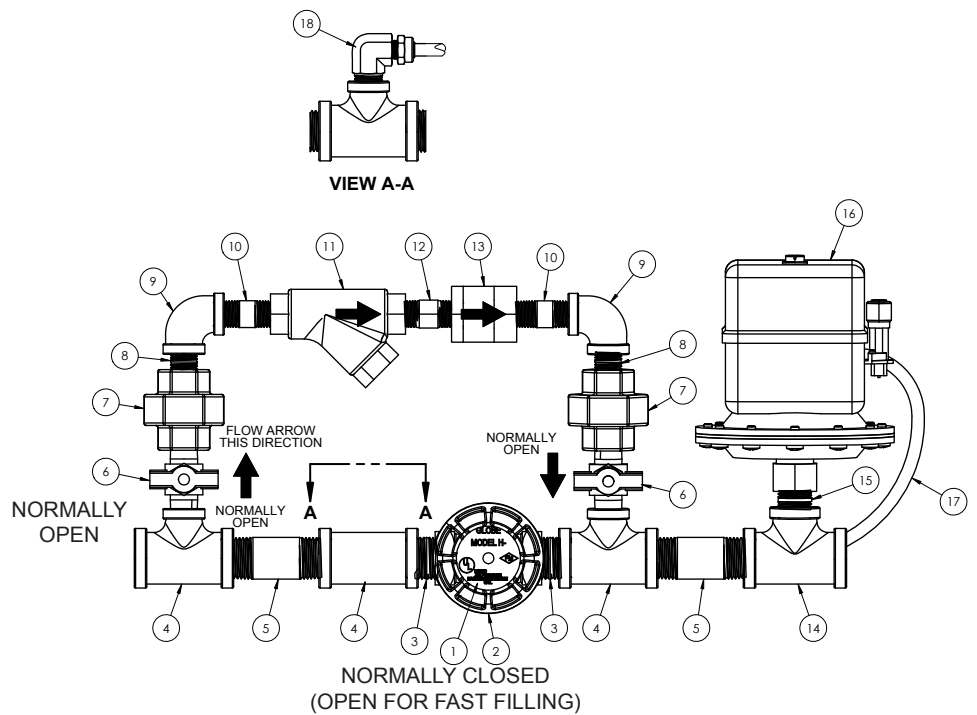
NOTE: Metric conversions are approximate.

ITEM	QTY.	QTY
1	1/2" x 1/2" x 1/4" GALV. TEE	2
2	1/2" x 3" NIPPLE	2
3	1/2 GLOBE VALVE	1
4	1/2" X 2" NIPPLE	1
5	1/4 NEEDLE VALVE	2
6	1/4 UNION	2
7	1/4" X CLOSE NIPPLE	2
8	1/4" GALV. ELBOW	2
9	1/4" x 1 1/2" GALV. NIPPLE	2
10	1/4" WYE STRAINER	1
11	METERING ORFICE	1
12	1/4 CHECK VALVE	1
13	NAMEPLATE FOR "H" A.M.D.	1
14	PRESSURE SWITCH	1
15	3/8 CLOSE NIPPLE	1
16	1/2" x 1/2" x 1/4" TEE	1



**FIGURE 1: H-2 AIR MAINTENANCE DEVICE**

ITEM	QTY.	QTY
1	NAMEPLATE	1
2	1/2" GLOBE VALVE	1
3	1/2" CLOSE NIPPLE	3
4	1/2" x 1/2" x 1/4" TEE	2
5	1/2" x 2 1/2" NIPPLE	2
6	1/4" NEEDLE VALVE	2
7	1/4" UNION	2
8	1/4" CLOSE NIPPLE	2
9	1/4" ELBOW	9
10	1/4" x 1 1/2" NIPPLE	2
11	1/4" WYE STRAINER	1
12	METERING ORFICE	1
13	1/4" CHECK VALVE	1
14	1/2" x 1/2" x 3/8" TEE	1
15	3/8" CLOSE NIPPLE	1
16	PRESSURE SWITCH	1
17	CONNECTOR TUBING-19"	1
18	H-3 TUBING ELBOW	1



**FIGURE 2: H-3 AIR MAINTENANCE DEVICE**

## **ORDERING INFORMATION**

### **MODEL H-1 AIR MAINTENANCE DEVICE**

SPECIFY: MODEL (H-2 or H-3) AIR MAINTENANCE DEVICE, PN:

H-2 AIR MAINTENANCE DEVICE . . . 320595

H-3 AIR MAINTENANCE DEVICE . . . 320600

## **REPLACEMENT PARTS**

1/4 NEEDLE VALVE . . . . .320586

1/4 WYE STRAINER . . . . .320587

METERING ORIFICE . . . . .320588

1/4 CHECK VALVE . . . . .320589

H-2 PRESSURE SWITCH . . . . .320597

H-3 SWITCH W/UNLOADER . . . . .320602

H-3 TUBING ELBOW . . . . .320603

H-3 CONNECTOR TUBE . . . . .320604

## **GLOBE® PRODUCT WARRANTY**

Globe agrees to repair or replace any of its own manufactured products found to be defective in material or workmanship for a period of one year from date of shipment.

For specific details of our warranty please refer to Price List Terms and Conditions of Sale (Our Price List).

---

4077 Airpark Dr.  
Standish, MI 48658  
Ph. 989-846-4583

Technical Support  
1-800-248-0278  
techservice@globesprinkler.com

[www.globesprinkler.com](http://www.globesprinkler.com)

