## SINGLE POPPET FOOT VALVES

Model 900

The Model 900 Single Poppet Foot Valves are designed to keep the suction line to the pump set primed by preventing the flow of oil back into the tank when the pumps are not in operation. Check valves mounted above the tank cannot provide an equal degree of protection against loss of prime. Pump life is shortened and reliable performance is lost if the suction piping drains during periods when pumps are inoperative.

All Single Poppet Foot Valves have brass bodies and carefully machined seats and discs to provide long dependable service with light oils through No. 4 fuel oil. Each foot valve includes a strainer. For heavier oils, it is recommended that a high quality angle check valve be installed at the top of the tank.

NOTE: Many local codes do not permit the use of foot valves on suction piping that is not protected by secondary containment. Intermittent pump operation should be avoided in these cases.

### **Suggested Specifications**

Provide and install at the bottom of the tank suction stub an all brass body Preferred Utilities Mfg. Corp., Danbury, CT, Model 900 Single Poppet Foot Valves.



### **Ordering Information**

Select the catalog number from the table below

Catalog Number	Size	O.D.	Height	
13060	1/2"	1 1/4"	2 7/8"	
13061	3/4"	1 <sup>7</sup> /16"	3 5/8"	
13062	1"	1 7/8"	2 5/8"	
13063	1 1/4"	2 <sup>11</sup> / <sub>16</sub> "	4 1/4"	
13064	1 ½"	2 <sup>9</sup> /16"	5 ½"	
13065	2"	3 1/6"	4 5/8"	
13066	3"	4 <sup>7</sup> /16"	6 1/8"	

# **DOUBLE POPPET FOOT VALVES**

Model 22

The Model 22 Double Poppet Foot Valves provides double protection against the loss of pump prime. The valves have long wearing metal to metal seating with flat poppets that close on sharp, raised seats. The poppets and seats are lapped-in for tight closure. The poppets are stem guided for positive alignment. To allow servicing of foot valves, refer to the 233-FV Foot Valve Extractor Fitting (page 78).

All Double Poppet Foot Valves have bonze body and poppet to provide long dependable service with light oils through #4 fuel oil. Each foot valve includes 20 mesh monel screen and rated for 34' maximum hydrostatic head pressure.

### **Suggested Specifications**

Provide and install at the bottom of the tank suction a double poppet foot valve of bronze construction, with lapped-in seats, flat poppets and 20 mesh monel screen. The valve shall be a Preferred Utilities Mfg. Corp., Danbury, CT, Model 22 (add -2 for 2" size) Double Poppet Foot Valves.





# **Ordering Information**

Select the catalog number from the table below

Catalog Number	Size	O.D.	Height
22	1 ½"	2 11/16"	6"
22-2	2"	3 ¾"	6 5/8"

Specifications subject to change without notice.

# FOOT VALVE EXTRACTOR FITTING

Model 233-FV

The Model 233-FV Foot Valve Extractor Fitting permits easy removal and reinstallation of the Model 22 Double Poppet Foot Valves or Model 900 Single Poppet Foot Valves sizes smaller than 1½". The removable access cap is gasket sealed to prevent loss of prime due to air leakage.

### **Suggested Specifications**

Furnish and install at the tank suction stub exit the Model 233-FV Foot Valve Extractor Fitting. If the riser pipe is extended to grade, protect the installation with a Preferred Utilities Mfg. Corp. Model 126A Street Box (Size 3), and a 4" Model W Watertight Fill Box. The foot valve extractor fitting shall be a Preferred Utilities Mfg. Corp., Danbury, CT, Model 233-FV.



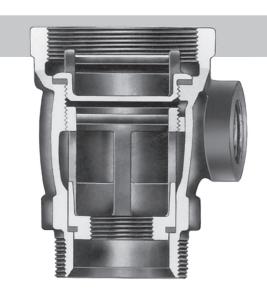
Bottom Thread: 4" NPT for connection to tank entrance

fitting

**Top Thread**: 4" for a riser pipe to grade (if required)

Inlet: 1½" NPT suction stub

Outlet: 1½" NPT



Maximum clear I.D. through the valve: 2 1/8"

#### **Ordering Information**

Foot Valve Extractor Fitting: 233-FV (1 ½")
Preferred Extractor Wrench: 89 (for 4 feet depth)

# **BACK PRESSURE REGULATING VALVE**

Model BQ



The Model BQ Back Pressure Regulating Valve is a self-operated spring-loaded back pressure regulating valve. Typically the Model BQ is installed at the far end of the oil supply line, down stream of the boiler fuel metering valves and passes unburned oil to the return line. Alternately, the Model BQ may be installed upstream of the boiler fuel metering valves. In both cases, the valve passes oil to the return line in order to maintain a constant supply pressure to the fuel metering valves.

The Model BQ is a  $\frac{1}{2}$ " NPT valve with cast iron body, bronze trim, composition disc and neoprene diaphragm. The diaphragm is suitable for use with fluid temperature up to 200° F. The valve has capacities of 390 GPH for No. 2 or No. 4 oil and 275 GPH for No. 6 oil at a viscosity of 3500 SSU. The Model V Back Pressure Regulating Valve (see next page) is recommended for higher flow rates.

#### **Suggested Specifications**

Provide and install a Back Pressure Regulating Valve as shown on the contract drawings. The valve shall be a ½" NPT Preferred Utilities Mfg. Corp., Danbury, CT, Model BQ, with adjustable range from \_\_\_\_\_ to \_\_\_\_ psig, cast iron body, bronze trim and neoprene diaphragm.

## **Ordering Information**

	Size	Spring Range PSI	Set Pressure PSI	Gallons per hour		
Catalog Number				Oil Viscosity, SSU		
Itamboi				35	300	750
11825	1/2"	2 to 30	3	61	48	43
11665	1/2"	5 to 15	5	243	216	190
11666	1/2"	10 to 25	10	369	324	285
11664	1/2"	20 to 75	20	605	540	511
11667	1/2"	65 to 150	65	888	792	696
11668	1/2"	150 to 300	150	1314	1171	1028