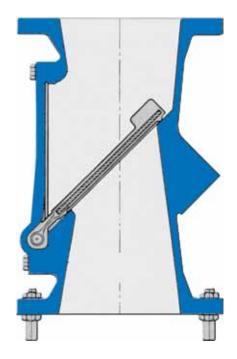
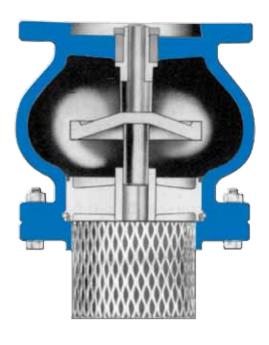


APCO FULL FLOW FOOT VALVES SEWAGE, WATER AND POSITIVE PRIME



Series 100FFor sewage
Sizes 2" - 36" (50 - 900 mm)

Optional Strainer Available (See Bulletin 100 For Dimensions and Materials)



SERIES 1400 For water Sizes 2" - 36" (50 - 900 mm)

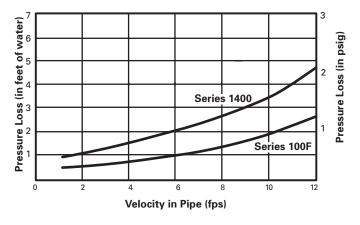
Full Flow Foot Valves

The Foot Valve is a form of a check valve, installed at the bottom of the suction line and inside the wet well. The Foot Valve is an inexpensive way to prime a single centrifugal pump.

Fetures Include:

- 10% greater flow area than pipe size ensures minimal head loss
- 100% hydrostatically tested at twice the flange working pressure
- Drop tight resilient seal compression molded
- All parts easily replaced in the field
- Highest quality materials of construction
- Precision machined to insure top performance
- Heavy duty
- Galvanized strainer bolts

Typical Friction Loss Chart



How it Works

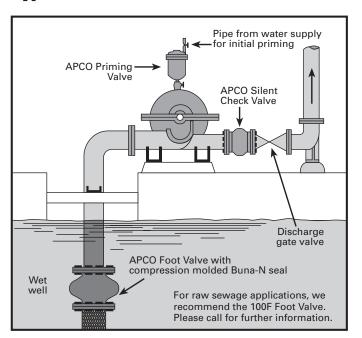
The Foot Valve is installed in the vertical position with the direction of flow upwards. In this position, the Foot Valve is normally closed. Prior to initial start up of the centrifugal pump, it is recommended to manually fill the suction line with water. This eliminates the risk of damage to the centrifugal pump from running dry.

Once the suction line is filled the Foot Valve takes over and opens while the centrifugal pump is running and closes when the pump stops running to maintain a flooded suction and primed pump.

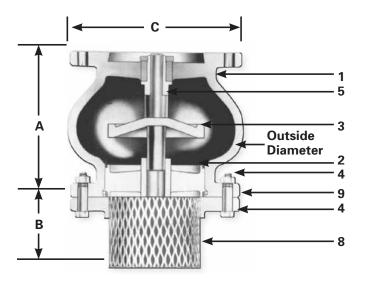
Selection Care

Since the Foot Valve is continually submerged in the wet well and not readily accessible for inspection or repair, it is important to select a Foot Valve of high quality long wearing construction. The APCO Foot Valve is such a valve. It has a heavy cast iron body, rugged bronze internals and most importantly drop tight resilient seating to guarantee no loss of suction. The resilient seal is compression molded (not glued or chemically bonded) onto the seat for long life.

Typical Foot Valve Installation



Specifications



1	Body	Cast Iron
2	Seat	Bronze W/Buna-N Seal
3	Plug	Bronze
4	Bolts & Nuts	Steel
5	Bushing	Bronze
8	Strainer	Stainless
9	Gasket	Lexide

125# Class								
Size	Model	Α	В	С	O.D.	Weight		
<u>3"</u>	1403	<u>6"</u>	4.875"	<u>7.5"</u>	<u>5.625"</u>	<u>38</u>		
80		152	124	191	143	17		
<u>4"</u>	1404	7.25 <u>"</u>	4.875"	<u>9"</u>	7.375"	<u>51</u>		
100		184	124	229	187	23		
<u>5"</u>	1405	<u>8.5"</u>	<u>5"</u>	10"	9.25 <u>"</u>	7 <u>2</u>		
125		216	127	254	235	33		
<u>6"</u>	1406	<u>9"</u>	<u>5"</u>	11"	10"	9 <u>5</u>		
150		229	127	279	254	43		
<u>8"</u>	1408	<u>10.125"</u>	<u>5.125"</u>	<u>13.5"</u>	<u>13.125"</u>	<u>146</u>		
200		257	130	343	333	66		
<u>10"</u>	1410	<u>12"</u>	<u>5.125"</u>	<u>16"</u>	<u>16.75"</u>	<u>218</u>		
250		305	130	406	425	99		
<u>12"</u>	1412	14.375"	<u>5"</u>	<u>19"</u>	<u>20.125"</u>	<u>335</u>		
300		365	127	483	511	152		
<u>14"</u>	1414	<u>15.75"</u>	<u>5.375"</u>	21"	22.375"	450		
350		400	137	533	568	204		
16"	1416	<u>17.625"</u>	<u>5.375"</u>	<u>23.5"</u>	25.375"	<u>570</u>		
400		448	137	597	645	259		
18"	1418	<u>18.75"</u>	<u>5"</u>	<u>25"</u>	27.75"	700		
450		476	127	635	705	318		
<u>20"</u>	1420	<u>20.625"</u>	<u>5.5"</u>	<u>27.5"</u>	<u>31.125"</u>	<u>845</u>		
500		524	140	699	791	383		
<u>24"</u>	1424	<u>24"</u>	<u>7"</u>	<u>32"</u>	<u>37"</u>	<u>1595</u>		
600		610	178	813	940	723		
30"	1430	29.25"	<u>7"</u>	38.75"	<u>45.25"</u>	<u>2020</u>		
750		743	178	984	1149	916		
<u>36"</u>	1436	<u>45"</u>	<u>8"</u>	<u>40"</u>	<u>53.25"</u>	<u>4185</u>		
900		1143	203	1016	1353	1898		

<u>Inch</u> <u>Ibs</u> Millimeter kg

Specifications

The Foot Valve shall have a heavily constructed cast iron globe style body with integral flanges. The flow area through the body shall be 10% greater than the equivalent pipe size.

The plug and seat shall be bronze. The plug shall be center guided from both ends to ensure shut-off. The downstream side of the plug stem shall be guided by a bronze bushing inside the hub of the body spokes. The upstream side of the plug stem shall be guided by the bore in the center hub of the bronze seat. The seat shall have a resilient Buna-N seal compression molded, not glued or chemically bonded, for positive water tight shut-off at low head pressures. The strainer cap shall be heavy stainless steel expanded metal with a steel flange. The strainer cap shall be bolted to the Foot Valve body.

All the materials of construction shall be certified in writing to conform to ASTM specifications as follows:

Body Cast Iron ASTM A126 GR.B

Ductile Iron ASTM A536 GR65-45-12

Plug & seat Bronze* ASTM B584

Seat seal Buna-N

Strainer Stainless Steel T302

Bolts Steel ASTM A307 GR.B

Exterior paint Universal Metal Primer FDA approved for potable water contact

Note: for APCO Series 100F see Bulletin 100 for dimensions and materials.

Sales and Service



250 Riverside Ave. N. Sartell, Minnesota 56377 • Phone: 320-259-2000 • Fax: 320-259-2227

DeZURIK, Inc. reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing by DeZURIK, Inc. Certified drawings are available upon request.

^{*} Bronze components meet current lead free requirements.