

*Constructed of solid brass to handle tough conditions and resist contamination*



1" Brass Valve



1½" Brass Valve



2" Brass Valve

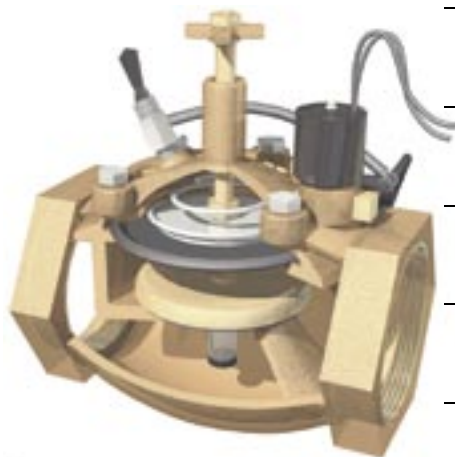


3" Brass Valve

**D**irt particles can often jam a solenoid operated diaphragm valve...but not this one! The contamination-resistant HBV actually filters dirty water before it enters the solenoid chamber. An internal self-flushing filter and self-cleaning metering rod see to that. The product's solid construction also features a

stainless steel solenoid seat that will never corrode, as well as a surgical-quality toggle switch that provides easy manual operation through an internal downstream bleed—no more muddy valve boxes. It's rugged. It's reliable. This is a brass valve created for the fiercest conditions found on a commercial site.

### Features & Benefits



#### Heavy-duty toggle switch

Makes manual operation easy

#### Waterproof solenoid

Corrosion-free operation

#### Stainless steel seat in solenoid chamber

Prevents rust and corrosion

#### Slow closure

Stops water hammer, surge and noise

#### Internal downstream bleed

Keeps valve box dry

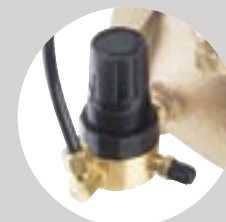
#### Reinforced 600 lb. test diaphragm with integral O-ring seal

Long life under extreme pressures

### The HBV Pressure Regulating Valve



*This option has all the exceptional features of the HBV plus a pressure regulator with a Schraeder-type valve. It operates within the 20-200 PSI pressure range and is adjustable from 10 to 125 PSI. Make it the heart of your high-end system where reliability and consistent pressure at the heads are required.*



*The pressure regulator for the HBV features a large easy to turn knob.*

## Models

- HBV-101E – 1" brass globe valve
- HBV-151E – 1½" brass globe valve
- HBV-201E – 2" brass globe valve
- HBV-301E – 3" brass globe valve

## Dimensions

- HBV-101E: 4½" H x 4¾" L x 5½" W  
(11 cm H x 11 cm L x 14 cm W)
- HBV-151E: 8" H x 6" L x 8" W  
(20 cm H x 15 cm L x 20 cm W)
- HBV-201E: 9" H x 7" L x 9" W  
(23 cm H x 18 cm L x 23 cm W)
- HBV-301E: 10" H x 11½" L x 10" W  
(25 cm H x 29 cm L x 25 cm W)
- HBV-101EP: 4½" H x 4¾" L x 5½" W  
(11 cm H x 11 cm L x 14 cm W)
- HBV-151EP: 8" H x 6" L x 7½" W  
(20 cm H x 15 cm L x 19 cm W)
- HBV-201EP: 9" H x 7" L x 7¾" W  
(23 cm H x 18 cm L x 20 cm W)
- HBV-301EP: 10" H x 11½" L x 11" W  
(25 cm H x 29 cm L x 28 cm W)
- Female inlet/outlet: NPT or BSP

HBV Pressure Loss in PSI				
GPM	1"	1½"	2"	3"
5	0.2			
10	0.8			
15	1.5			
20	2.6	0.5		
30	5.7	1.0		
40	10.0	1.7	0.5	
50	15.6	2.7	0.8	
60	22.0	3.8	1.2	
70		5.1	1.6	
80		6.6	2.1	
90		8.3	2.6	
100		10.1	3.2	2.4
120		14.8	4.6	2.5
140		19.0	6.3	2.5
160		23.1	8.0	2.9
200			13.9	4.0
240				6.0
280				8.2
320				10.7
360				13.2

*Charts based on full-open non-regulated setting position.  
Minimum flow on 1" valve is 2.5 gpm.*

## Operating Specifications

- Flow: 5 to 360 GPM  
(1.14 to 81.8 m<sup>3</sup>/hr; 18.9 to 1362 l/min)
- Pressure: 20 to 200 PSI  
(1.4 to 14.0 bars; 138 to 1379 kPa)  
Note: Inlet pressure must exceed outlet pressure by a minimum of 15 PSI (1.0 bars; 103 kPa) on pressure regulated models
- Electrical: 24VAC, 50/60 cycle solenoid power requirement – 335mA (.335A; 8VA) inrush current; 200mA (.200A; 4.9VA) holding current

## Options Available

- Pressure regulation
- BSP threads
- DC latching solenoid, field installed (part # S16305)



HBV Pressure Loss in Bars				
m <sup>3</sup> /hr	1"	1½"	2"	3"
1.14	0.00			
2.27	0.10			
3.41	0.10			
4.54	0.20	0.00		
6.81	0.40	0.10		
9.09	0.70	0.10	0.00	
11.36	1.10	0.20	0.10	
13.63	1.50	0.30	0.10	
15.90		0.40	0.10	
18.17		0.50	0.10	
20.44		0.60	0.20	
22.72		0.70	0.20	0.20
27.26		1.00	0.30	0.20
31.80		1.30	0.40	0.20
36.35		1.60	0.60	0.20
45.43			1.00	0.30
54.51				0.40
63.59				0.60
72.68				0.70
81.76				1.90

*Charts based on full-open non-regulated setting position.  
Minimum flow on 1" valve is 0.57 m<sup>3</sup>/hr.*

HBV Pressure Loss in kPa				
l/min	1"	1½"	2"	3"
18.9	1.10			
37.9	5.20			
56.8	10.30			
75.7	17.90	3.10		
113.6	39.30	6.90		
151.4	68.90	11.70	3.70	
189.3	110.00	18.30	5.70	
227.1	151.90	26.20	8.30	
265.0		35.20	11.00	
302.8		45.50	14.10	
340.7		57.20	17.90	
378.5		69.60	22.10	16.00
454.2		102.20	31.70	17.00
530.0		131.20	43.40	17.00
605.7		159.40	55.20	20.00
757.1			95.80	28.00
908.4				41.00
1059.8				57.00
1211.2				74.00
1362.6				91.00

*Charts based on full-open non-regulated setting position.  
Minimum flow on 1" valve is 9.5 l/min.*



**SPECIFICATION GUIDE**

EXAMPLE: **HBV - 201E - P**

MODEL	FEATURES	OPTIONS
HBV	<ul style="list-style-type: none"> <li>101E = 1" Globe Valve</li> <li>151E = 1½" Globe Valve</li> <li>201E = 2" Globe Valve</li> <li>301E = 3" Globe Valve</li> </ul>	<ul style="list-style-type: none"> <li>P = Pressure Regulation</li> <li>B = BSP Threads</li> <li>DC = DC Latching Solenoid (Field Installed)</li> </ul>

