

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



1" Brass Valve



1½" Brass Valve



2" Brass Valve

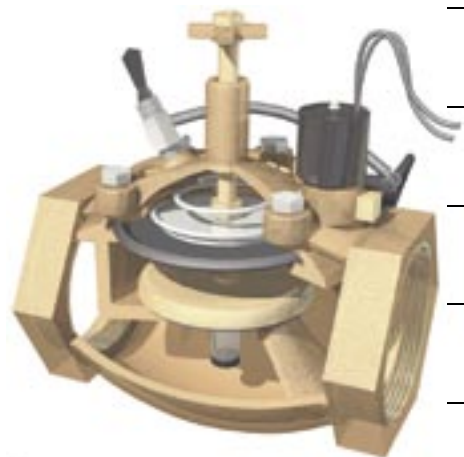


3" Brass Valve

**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

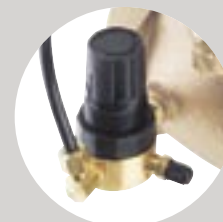
#### Reinforced 600 lb. test diaphragm with integral O-ring seal

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 4⅜" 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 11⅝" L x 10" W  
(25 cm H x 29 cm L x 25 cm W)
- HBV-101EP: 4½" H x 4⅜" 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 11⅝" 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 m³/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

m³/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 m³/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 HBV	FEATURES	OPTIONS
	101E = 1" Globe Valve	P = Pressure Regulation
	151E = 1½" Globe Valve	B = BSP Threads
	201E = 2" Globe Valve	DC = DC Latching Solenoid
	301E = 3" Globe Valve	(Field Installed)

