

B100/BW100 Full Port Bronze Ball Valves

The Honeywell Braukmann B100/BW100 are fully ported bronze ball valves that have higher flow rates with less pressure drop than reduced port ball valves. Easy installation and reliable service make the valves suited for use in most heating, plumbing and industrial applications.



- Broad temperature and pressure ratings for wide range of applications—water, oil and steam service.
- Cast bronze (85-5-5-5) is ideal for applications requiring low zinc content.
- Fully ported, bronze valves have higher flow rates with less turbulence, noise and pressure drop than reduced or standard ball valves.
- Easy to install.
- Two-piece cast bronze body provides strength and resistance to corrosion.
- Bottom-loaded, blow-out proof stem with adjustable PTFE stem seal provides extended service life, durability and safety.
- Meet Federal Specifications WW-V-35B, Type II, Class A, Style 3 for end connections A and C (threaded and solder).
- BW100 models include waste vent.
- Not for use with natural or liquid propane (LP) gas.

CONTENTS

<i>Specifications</i>	2
<i>Ordering Information</i>	2
<i>Installation</i>	4
<i>Operation</i>	4

Specifications

MODEL NO.: B100/BW100 Full Port Bronze Ball Valves. CONSTRUCTION MATERIALS: Refer to Fig. 1.

BALL VALVES:

Order Number	Description	Size (in.)	Ends		
B100S5012	Fully ported bronze ball valves.	3/8	Sweat		
B100S5020		1/2			
B100S5028		3/4			
B100S5036		1			
B100S5044		1-1/4			
B100S5052		1-1/2			
B100S5060	Fully ported bronze ball valves.	2	Sweat		
B100S5078		2-1/2			
B100S5086		3			
B100S5094		4			
B100T1001	Fully ported, bronze ball valves.	1/4	NPT threaded		
B100T1009		3/8			
B100T1017		1/2			
B100T1025		3/4			
B100T1033		1			
B100T1041		1-1/4			
B100T1049		1-1/2			
B100T1057		2			
B100T1068		2-1/2			
B100T1076		3			
B100T1084		4			
BW100T1006		Fully ported, bronze ball valves with capped waste vent.		1/2	NPT threaded
BW100T1014				3/4	
BW100T1022	1				
BW100T1030	1-1/4				
BW100T1038	1-1/2				
BW100T1046	2				

RATINGS:

1/2 to 2 in.: 500 psi WOG cold, nonshock, 150 WSP.
 2-1/2 to 4 in.: 400 psi WOG cold, nonshock, 150 WSP.
 Vacuum Service: 29 in. mercury.

PRESSURE TEMPERATURE RATINGS: See Fig. 2.

CAPACITY RATINGS: See Fig. 3.

SIZES AVAILABLE:

3/8, 1/2, 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2, 3, or 4 in.

CONNECTIONS: Sweat or NPT threaded.

DIMENSIONS: Refer to Fig. 4.

Ordering Information

When purchasing replacement and modernization products, specify the complete model number.

1. If you have additional questions, need further information, or want to comment on our products or services, please call:
 1-800-345-6770, ext. 7188

Or write:

Honeywell Customer Assistance Center
 Honeywell Plaza, MN27-2164
 P.O. Box 524
 Minneapolis, Minnesota 55440-0524

2. To place an order, contact:

Honeywell Braukmann Customer Service
 1985 Douglas Drive North
 Minneapolis, Minnesota 55422-3992
 (612) 542-7106 (Eastern US)
 (612) 542-7103 (Western US)

3. Or fax your order to 1-800-356-0149.

Fig. 1—B100/BW100 parts and construction materials.

Part	Material
Handle Nut	Zinc Plated Steel
Handle	Zinc Plated Steel (Vinyl Coated)
Packing Gland	Brass
Stem Packing	PTFE
Stem	Brass
Body	Cast Red Bronze (85-5-5-5)
Seat Ring	PTFE
Ball	Brass, Chrome Plated
Seat Ring	PTFE
Body End Piece	Cast Red Bronze (85-5-5-5)
Waste Vent Cap	Brass
Waste Vent Seal	NBR

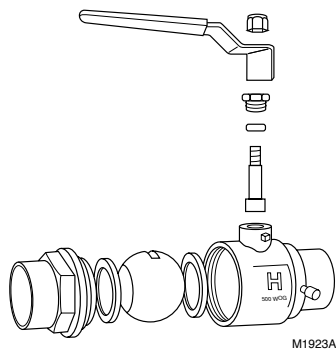


Fig. 2—B100/BW100 pressure temperature ratings.

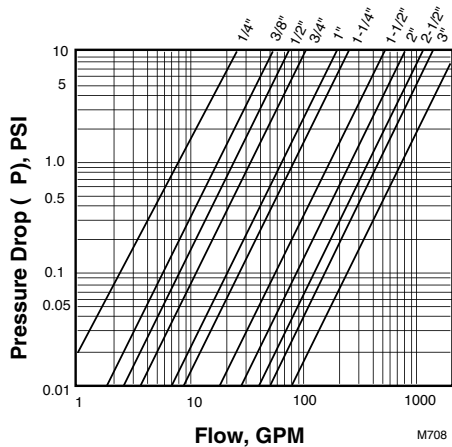


Fig. 3—B100/BW100 capacity curves.

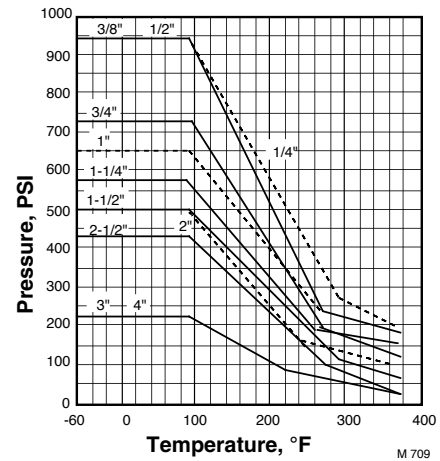
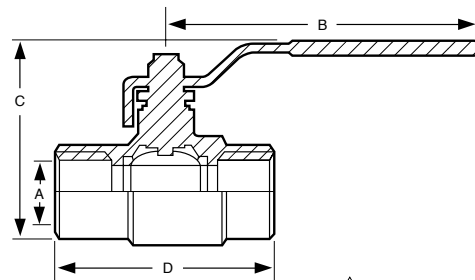


Fig. 4—B100/BW100 dimensions in in. [mm].



SIZE (INCHES)	A	B	C	D	THREADED	SWEAT	Cv
1/4	0.473	3.347	2.402	2.008	-	-	7.2
3/8	0.473	3.347	2.402	2.008	2.008	2.008	18.0
1/2	0.591	3.347	2.402	2.441	2.441	2.441	23.0
3/4	0.748	4.095	2.992	2.756	2.835	2.835	34.0
1	0.985	4.095	3.189	3.347	3.386	3.386	66.0
1-1/4	1.260	4.803	4.095	3.898	3.898	3.898	82.0
1-1/2	1.575	4.803	4.449	4.334	4.410	4.410	195.0
2	1.969	6.024	5.394	5.276	5.355	5.355	280.0
2-1/2	2.362	7.874	6.732	5.591	6.299	6.299	370.0
3	2.992	11.024	8.858	7.007	7.874	7.874	460.0
4	3.740	11.024	10.315	8.268	9.921	9.921	750.0

END-TO-END DIMENSIONS ARE APPROXIMATE.
Cv IS GPM WITH A 1 PSI PRESSURE DROP AT 60° F.

REPLACEMENT PARTS:

Order Number	Size (in.)	Description
3008300	3/8, 1/2	Handle for B100 and BW100 Ball Valves.
3008301	3/4, 1	
3008302	1-1/4, 1-1/2	
3008303	2	

Installation



WARNING

FIRE OR EXPLOSION HAZARD CAN CAUSE PROPERTY DAMAGE, SEVERE INJURY OR DEATH.

Do not use on systems with natural or liquid propane (LP) gas.

Valve Bodies with NPT Threads

For valve bodies with NPT threads, use new, properly reamed pipes that are free of metal chips. Valve distortion or malfunction may result from excess pipe within the valve body.

For Valve Bodies with Sweat Fittings



CAUTION

Do not solder the B100/BW100 valves with the valve closed. This causes the ball to act as a heat sink and may deteriorate the valve seals. Always open the valve before soldering.

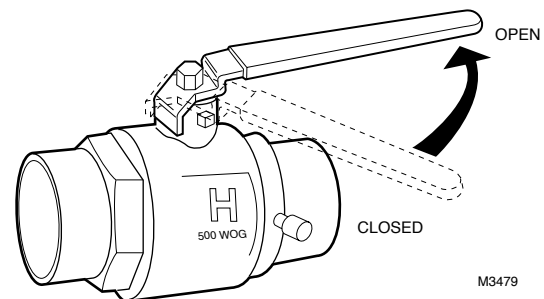
IMPORTANT: Remember to open valve before soldering. Do not use silver solder because of the excessive heat required. If heat is applied to the tubing only and not to the valve body, a secure joint may not form.

1. Use steel wool to thoroughly clean the area inside the valve into which the copper tubing will fit and approximately 3/4 in. [19 mm] of the outside end of the tubing.
2. Apply small amounts of solder flux around the outside ends of the tubing.
3. Insert tubing completely into valve body.
4. Use a propane torch to heat valve body at the junction of the valve body and the tubing.
5. When valve body and tubing reach the melting temperature of the solder, apply solder to the joint. Solder should draw evenly around the fitting.
6. Do not disturb until solder cools.
7. With the water supply turned on, visually inspect for leaks.
8. If a leak is found, drain water and repeat soldering procedure. REMEMBER: Only a clean, fluxed joint, free from water, will accept solder.

Operation

To open ball valve, turn the handle so it is parallel to the valve and pipe. To close ball valve, turn the handle so that it is perpendicular to the ball valve and pipe. See Fig. 4.

Fig. 4—B100/BW100 Full Port Bronze Ball Valve handle positions for open and closed valves.



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