

# Ball Valve

## Model BV209/N – DZR Brass Compression - Datasheet

### Description

The 209 Ball Valve is a full bore high quality quarter turn spherical valve with integral compression fittings for copper tube. The body is forged in corrosion resistant DZR brass - including compression nuts. The range is WRAS approved for wholesome water (there are very few approved compression Ball Valves larger than 28 mm). The finish is natural.

Most Ball Valves fitted to copper tubing have female BSPP ends, into which male BSP to compression adapters are fitted. This introduces two unnecessary joints, increases the overall length by about 50%, adds labour and is expensive.

The BV209 has a serviceable PTFE spindle seal with gland nut. The nut can be tightened or the seal renewed in service. (Most ball valves have a non-serviceable O-ring spindle seal).

### Connection Pipes

Copper – Compression to BS864-2  
See model BV171 for female BSPP

### Specification

Pressure Supply	16 bar @ 30°C 10 bar @ 80°C 6 bar @ 100°C	<i>35+ mm data. Smaller valves have higher pressure/temperature characteristics.</i>
Pressure Test Approval	24 bar KIWA UK A020039	

### Materials

Body	Forged DZR Brass CZ132
Seat	PTFE (Virgin)
Ball	DZR Brass Chrome Plated
Handle (std)	Forged Aluminium

### Applications

- Cold water – “Wholesome” i.e. Drinking water
- Hot water
- Chilled water
- Heating
- Oil and various hydrocarbons

The new Water Regulations allow Ball Valves to be used as “Stop valves” and “Servicing Valves” – G2.8.

### Options

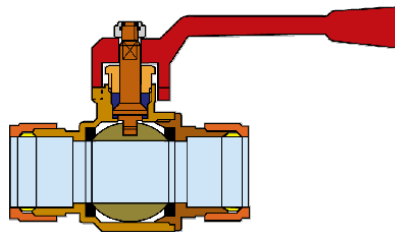
- Nickel plated (not DZR) – model BV209N
- Tee handle (Aluminium) – suffix T
- Motorised



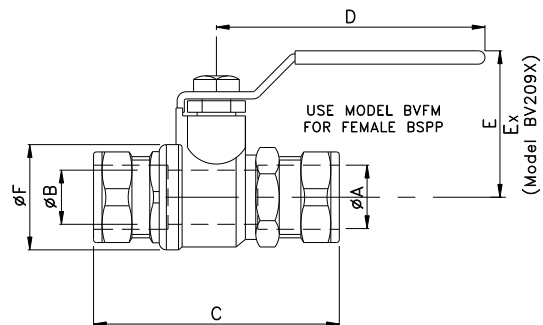
**Model 209N**  
Model BV22C209N –  
Nickel Full bore with  
compression ends



**Model 209**  
Model BV22C209 –  
DZR Full bore with  
compression ends



Section showing  
serviceable  
PTFE spindle  
seal



### Dimensions

SIZE	A	B	C	D <sub>Lever</sub>	D <sub>Tee</sub>	E	E <sub>x</sub>	ØF	K <sub>v</sub> <sup>Note 1</sup>	ΔP <sup>Note 2</sup>	Kg
15	15	77	80	25	62	100	34	17	3.8	0.26	
22	20	87	100	35	56	104	42	41	3.2	0.42	
28	25	95	100	35	60	120	51	68	3.3	0.63	
35	32	114	120	43	73	124	62	123	2.4	0.98	
42	40	125	150	50	89	148	73	189	2.2	1.46	
54	50	150	150	50	96	155	88	290	2.7	2.27	

#### Note

1. K<sub>v</sub> is flow required in m<sup>3</sup>/hr to produce 1 bar differential pressure drop with valve fully open.
2. Pressure drop in mm of water with flow at a 2 m/s

### Codes and Descriptions

Size	Code	Description
15 – 54 mm	BVsizeC209	Ball Valve Lever Ali Red DZR Comp.
15 – 54 mm	BVsizeC209N	Ball Valve Lever Ali Red Nickel Comp.
15 – 54 mm	BVsizeC209T	Ball Valve Tee Ali Red DZR Comp.
15 – 54 mm	BVsizeC209NT	Ball Valve Tee Ali Red Nickel Comp.

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Arrow Valves Ltd reserve the right to change specifications, design and materials at any time without notice.

All unit-less dimensions in mm.  
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