

## Bronze Full Port Ball Valve

PN40

Size ½" to 2" only

### Specifications:

IVAL® Bronze Ball Valve with EN1982 CC491K Body, two-piece construction, PN40 rating.

Anti-blow out stem, adjustable packing.

Full Bore Chrome Plated Brass (CW617N) Ball. PTFE seat and stem seal.

**Operator:** Lever, Quarter turn.

**UK END CONNECTION:** BSPT Taper Threaded to BS EN 10226-1, compatible with ISO 7/1.

**WRAS approved.**

### Features:

- Ball Valves are light, compact units which are easy to install and operate, yet their robust construction ensures long, trouble-free service life.
- PN40 Pressure rating to suit demanding system pressures.
- 90° handle operation for simple use
- Full bore design to facilitate optimal flow rates with minimum turbulence
- Conforms to MSS-SP-110.

### Pressure/Temperature Ratings:

Temperature (°C)	-10 to +100	140
Pressure (Bar)	40	18

Intermediate pressure ratings shall be determined by interpolation.

### Test Pressures:

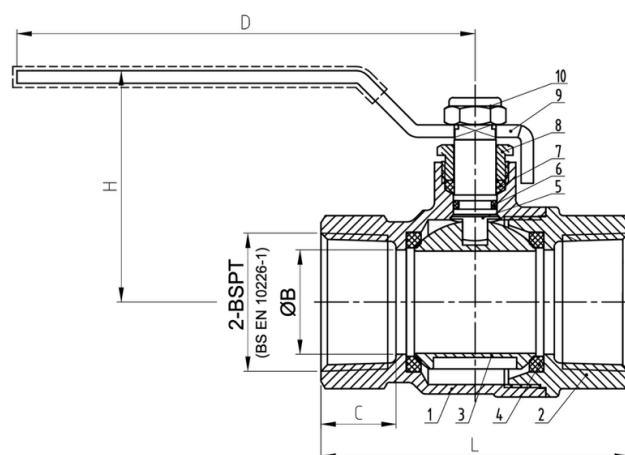
Each valve is individually Pneumatic / air tested to BS EN12266 undergoes the standard 6 bar air test.

**(PNEUMATIC) Shell:** 6 bar - **Seat:** 6 bar

### Materials:

No.	Description	Material	Specification
1	Valve Body	Bronze	EN1982 CC491K
2	Bonnet	Bronze	EN1982 CC491K
3	Ball	Chrome pl. Brass	EN12165 CW617N
4	Seat	PTFE	-
5	Stem	Brass	EN12164 CW617N
6	O-Ring	NBR	-
7	Packing	PTFE	-
8	Packing Nut	Brass	EN12164 CW617N
9	Handle	Carbon Steel	Zinc Plated
10	Hex Nut	Stainless Steel	AISI 304

## TECHNICAL DATASHEET



### Dimensions:

Size	L	C	ØB	H	D	Weight
½"	54	14.5	15	42.5	95	225
¾"	62	15	20	51	110	350
1"	74	18	25	55.5	110	535
1.1/4"	85	18.5	32	82	141	805
1.1/2"	94	18.5	40	87.5	141	1,110
2"	109.5	19.5	50	98	165	1,765

All dimensions in mm and Weight (Wt.) is in grams unless otherwise stated.

Suitable for use on Group 2 Gas and Group 2 Liquids as defined by Pressure Equipment Directive 2014/68/EU, and Pressure Equipment (Safety) Regulations 2016, as amended. Not suitable for use on Group 1 Gases or liquids.



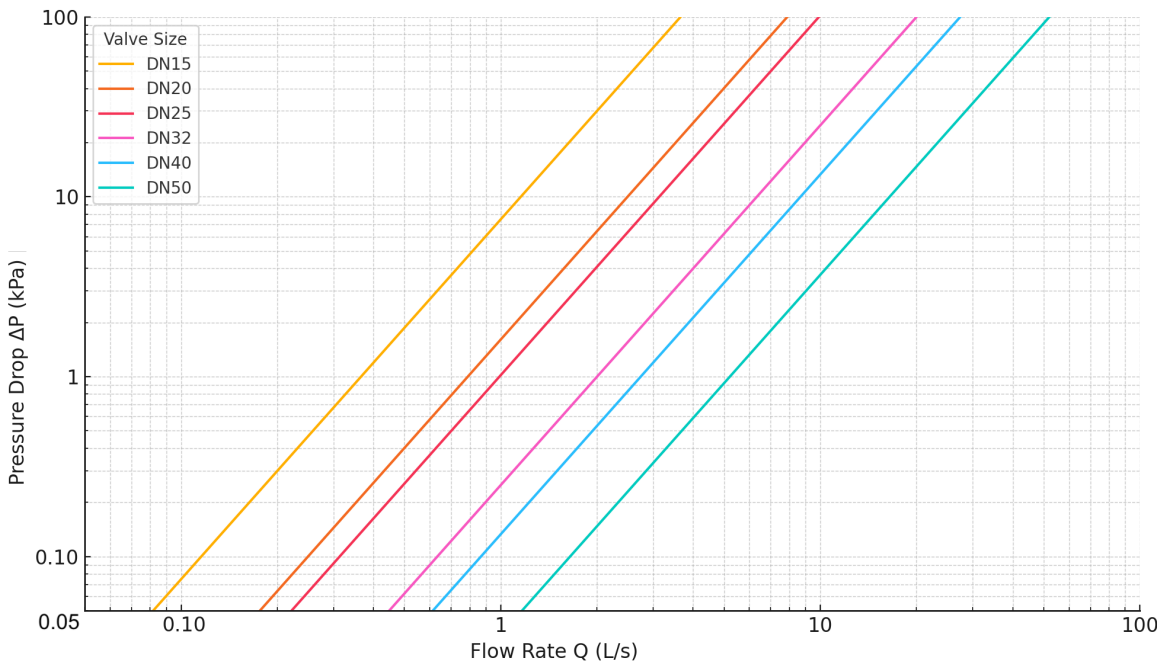
Flow Characteristics:

Size	DN15 - 1/2"	DN20 - 3/4"	DN25 - 1"	DN32 - 1.1/4"	DN40 - 1.1/2"	DN50 - 2"
Kv (m³/h)	13.16	28.4	35.67	72.09	98.73	187.66

Formula linking flow **Q (in l/s)** and theoretical valve head loss **ΔP (in KPa)**:

$$\Delta P = \left( \frac{36 \cdot Q}{K_v} \right)^2$$

Pressure Loss vs. Flow Rate Chart:



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