

Bronze Gate Valve

PN20

Size ½" to 2" only

Specifications:

IVAL® Bronze Gate Valve with Body, screwed bonnet and wedge made of bronze. Non-rising blow-out proof stem made of brass resistant to dezincification (DZR).

Stem seal with PTFE gland packing.

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

WRAS approved.

Features:

- Non-rising stem design to minimize installation height.
- Full bore design to ensure minimal pressure drop.
- Adjustable gland packing for ease of maintenance.
- Body, bonnet and disc are made from low lead content bronze, typically 4-6%.
- Conforms to BS 5154 and generally conforms MSS-SP-80.

Pressure/Temperature Ratings:

Temperature (°C)	-10 to +100	170
Pressure (Bar)	20	10

Intermediate pressure ratings shall be determined by interpolation.

Test Pressures:

Each valve is individually hydrostatically / air tested according to EN12266-1, at the following test:

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

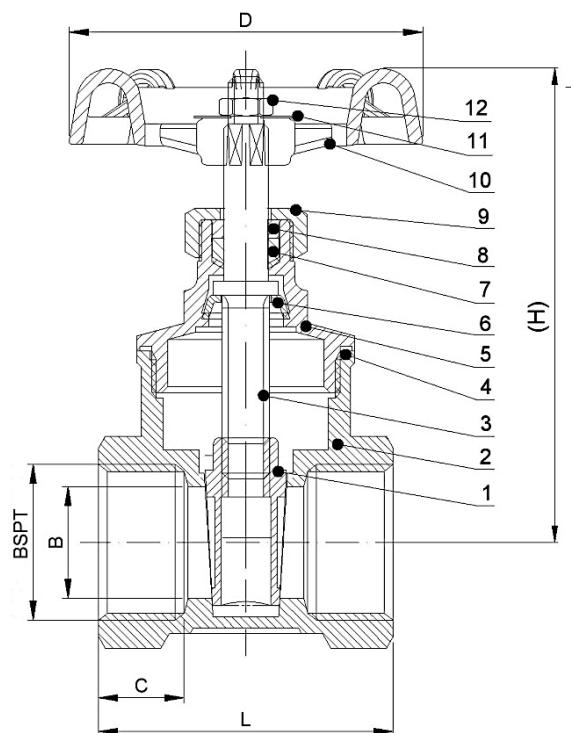
(HYDRAULIC) Shell: 30 bar - **Seat:** 22 bar

Materials:

No.	Description	Material	Specification
1	Disc	Bronze	EN 1982 CC491K
2	Valve Body	Bronze	EN 1982 CC491K
3	Stem	DZR Brass	EN12164 CW602N
4	Gasket	PTFE	-
5	Bonnet	Bronze	EN 1982 CC491K
6	Lock Nut	Brass	EN12164 CW617N
7	Packing	PTFE	-
8	Gland	Brass	EN12164 CW617N
9	Packing Nut	Brass	EN12164 CW617N
10	Handwheel	Cast Iron	EN-GJL-200
11	Nameplate	L2	-
12	Hex Nut	Stainless Steel	AISI 304

This valve is not suitable for use on Gases Group 1 & 2 or unstable fluids Group 1, as defined by the Pressure Equipment Directive 2014/68/EU.

TECHNICAL DATASHEET



Dimensions:

Size	DN15	DN20	DN25	DN32	DN40	DN50
Threads	½"	¾"	1"	1 ¼"	1 ½"	2"
L mm	45	48.5	55	61	63	73
H mm	71.5	81	94.7	108	122.5	147
D mm	53	60	72	72	80	100
B mm	15	20	25	32	38	50
C mm	12	12.5	14	15	15	17.5
Wt. (g)	259	361	541	759	1,020	1,673



Flow Characteristics:

Size	DN15 - 1/2"	DN20 - 3/4"	DN25 - 1"	DN32 - 1.1/4"	DN40 - 1.1/2"	DN50 - 2"
Kv (m³/h)	13.67	29.08	35.11	69.24	90.13	182.71

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:

