

Bronze Globe Valve

PN20

Size ½" to 2" only

Specifications:

IVAL® Bronze Globe Valve with Body, Bonnet of Bronze to EN1982 CC491K, Brass Stem and Disc to EN12164 CW617N, PN20 rated.

Design according to BS 5154:1991

Design incorporates a bronze 35-degree wide angle disc retained on stem by a threaded ring; body seat is integral of the narrow contact angled type.

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

WRAS approved

Features:

- High quality bronze body with robust spherical shape
- PTFE Seal Ring.
- Suitable for industrial applications where flow of water must be regulated or controlled on opening.
- Rising Stem and Screwed Bonnet.
- Assures accurate flow regulation/control.
- Suitable for water -10°C to 110°C.

Pressure/Temperature Ratings:

| | | |
|-------------------------|-------------|------|
| Temperature (°C) | -20 to +110 | 110 |
| Pressure (Bar) | 20 | 18.3 |

Intermediate pressure ratings shall be determined by interpolation.

Test Pressures:

Each valve is individually hydrostatically / air tested at the following test:

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

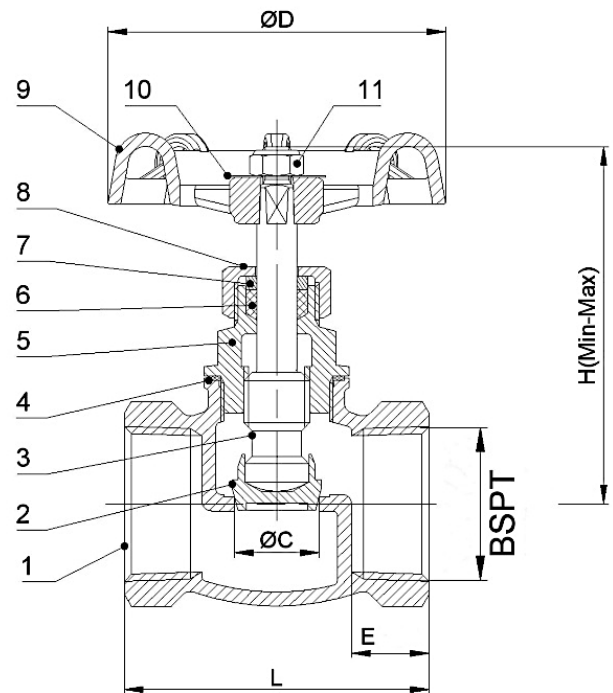
(HYDRAULIC) Shell: 30 bar - **Seat:** 22 bar

Materials:

| No. | Description | Material | Specification |
|-----|---------------|-----------------|----------------|
| 1 | Body | Bronze | EN 1982 CC491K |
| 2 | Disk | Brass | EN12164 CW617N |
| 3 | Stem | Brass | EN12164 CW617N |
| 4 | Seal Ring | PTFE | - |
| 5 | Bonnet | Bronze | EN 1982 CC491K |
| 6 | Packing | PTFE | - |
| 7 | Gasket | Brass | EN12164 CW617N |
| 8 | Packing Gland | Brass | EN12164 CW617N |
| 9 | Handwheel | Cast Iron | EN-GJL-200 |
| 10 | Nameplate | L2 | - |
| 11 | Nut | Stainless Steel | ANSI 304 |

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

TECHNICAL DATASHEET



Dimensions:

| Size | L | C | D | E | H | Wt. |
|------|-----|------|-----|------|-----------|-------|
| DN15 | 50 | 10.5 | 60 | 13.5 | 62.5-69.5 | 266 |
| DN20 | 56 | 13 | 60 | 14.5 | 69.5-77 | 333 |
| DN25 | 65 | 18 | 72 | 16.5 | 76.7-85 | 547 |
| DN32 | 74 | 23 | 72 | 18 | 88.6-99 | 776 |
| DN40 | 80 | 30 | 78 | 18 | 98.1-109 | 1,011 |
| DN50 | 100 | 38 | 100 | 22.5 | 114.6-131 | 1,665 |

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



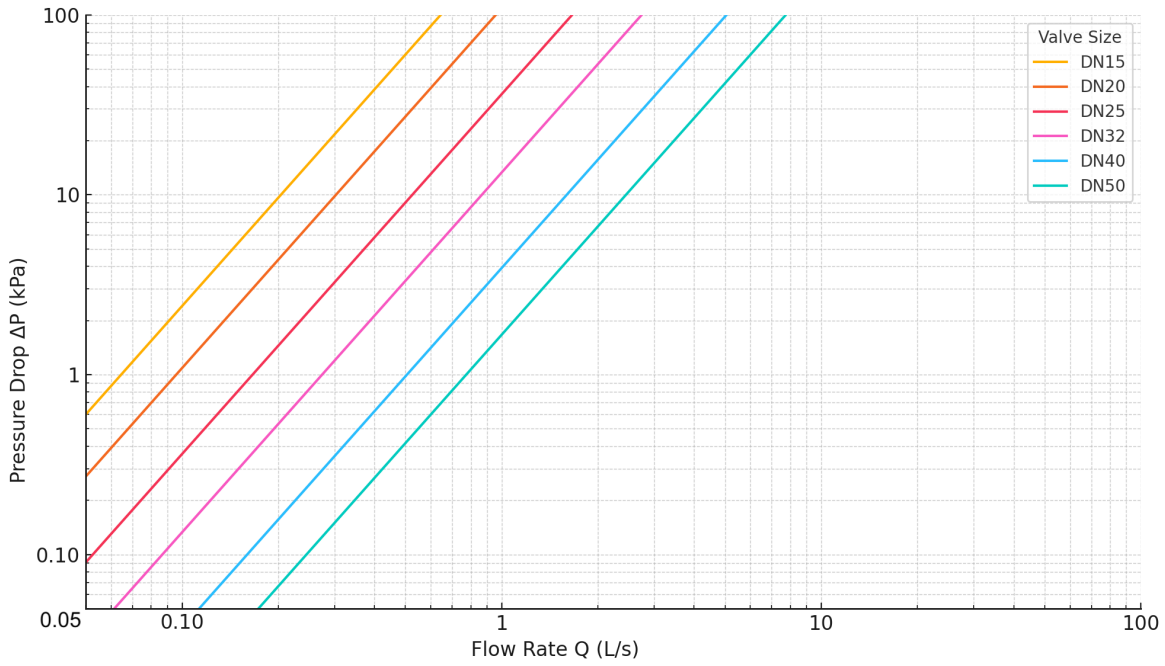
Flow Characteristics:

| Size | DN15 - 1/2" | DN20 - 3/4" | DN25 - 1" | DN32 - 1.1/4" | DN40 - 1.1/2" | DN50 - 2" |
|-----------|-------------|-------------|-----------|---------------|---------------|-----------|
| Kv (m³/h) | 2.06 | 3.41 | 5.97 | 9.48 | 15.36 | 27.6 |

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:



Drawings, photos and data contained in this document are provided for information only. IVAL reserves the right to change them without notice.

