

Ductile Iron OS&Y Gate Valve

PN16

Size 2½" to 12"

Specifications:

IVAL® Gate Valve with Body, bonnet and wedge made of ductile iron. Non-rising stem made of stainless steel.

Design Length according to BS EN 558-2008.

Outside Screw & Yoke (OS&Y).

Flanged according to EN1092-2 standard.

Bronze Trim.

Features:

- Non-rising stem design to minimize installation height.
- IVAL® ductile iron gate valves offer the ultimate in dependable service wherever minimum pressure drop is important
- Adjustable gland packing for ease of maintenance.

Pressure/Temperature Ratings:

Temperature (°C)	-10 to +110
Pressure (Bar)	16

Materials:

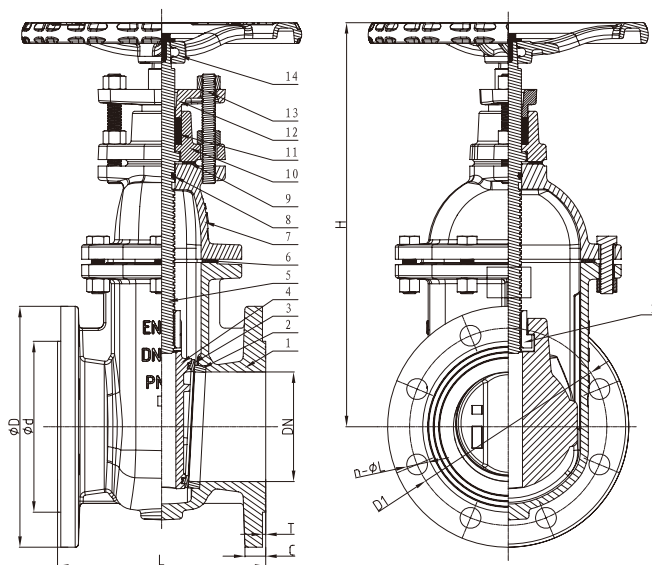
No.	Description	Material	Specification
1	Valve Body	Ductile Iron	EN-GJS-450-10
2	Seat Ring	Bronze	EN 1982 CC491K
3	Disc Seat Ring	Bronze	EN 1982 CC491K
4	Wedge Disc	Ductile Iron	EN-GJS-450-10
5	Stem	Stainless Steel	AISI 420
6	Bonnet Gasket	Graphite	+Acanthopore Plate
7	Bonnet	Ductile Iron	EN-GJS-450-10
8	O-Ring	NBR	-
9	Sealing Washer	Graphite	+Acanthopore Plate
10	Stuffing Box	Ductile Iron	EN-GJS-450-10
11	Stuffing	Graphite	-
12	Gland	Ductile Iron	EN-GJS-450-10
13	Stud	CS Zinc Plated	-
14	Handwheel	Ductile Iron	EN-GJS-450-10
15	Stem Nut	Brass	EN12165 CW614N

Dimensions:

DN		Dimensions (mm)							Weight (Kg)
Inch	mm	L	D	D1	d	n-ØL	H	C	
2.5"	65	170	185	145	118	4-Ø19	280	19	12.3
3"	80	180	200	160	132	8-Ø19	305	19	14.6
4"	100	190	220	180	156	8-Ø19	369	19	18.6
5"	125	200	250	210	184	8-Ø19	443	19	25.4
6"	150	210	285	240	211	8-Ø23	467	19	38.2
8"	200	230	340	295	266	12-Ø23	571	20	46.7
10"	250	250	405	355	319	12-Ø28	662	22	74.4
12"	300	270	460	410	370	12-Ø28	766	24.5	114.7

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



Test Pressures:

Each valve is individually hydrostatically tested at the following test:
(HYDRAULIC) **Shell:** 24 bar - **Seat:** 17.6 bar

Flow Characteristics:

Size	Kv (m³/h)
DN65 – 2.1/2"	400
DN80 – 3"	700
DN100 – 4"	1,100
DN125 – 5"	1,800
DN150 – 6"	2,600
DN200 – 8"	4,600
DN250 – 10"	7,200
DN300 – 12"	10,000

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:

