

Ductile Iron Resilient Gate Valve

PN16

Size 2" to 24" only

Specifications:

IVAL® Resilient Gate Valve of Ductile Iron Resilient Seated Gate Valve designed in accordance with BS EN5163.

Designed with Ductile Iron Body, Bonnet, Disc, and SS Stem for improved durability, and superior sealing performance with 5 O-Rings and 1 additional Wiper Seal.

Flanged according to EN1092-2 standard.

WRAS approved.

Features:

- Ductile iron disc encapsulated with EPDM WRAS elastomer for improved isolation.
- 5 internal O-Rings and 1 additional wiper seal preventing ingress and improving functional versatility.
- WRAS listed fusion bonded epoxy coating, minimum thickness 250 micron and corrosion resistant construction.

Pressure/Temperature Ratings:

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

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.

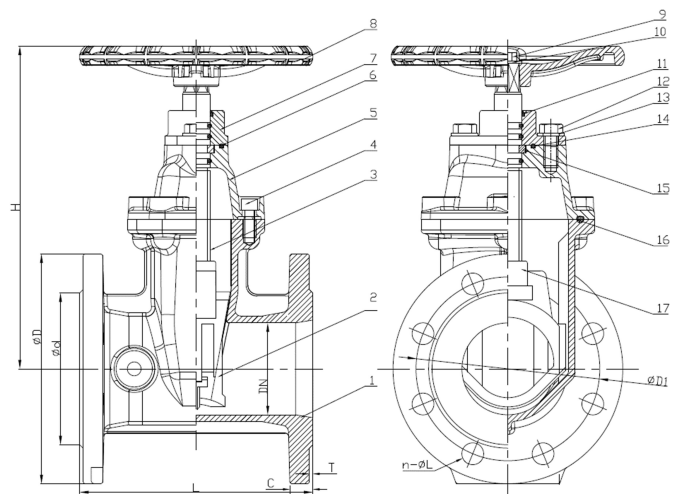
Materials:

No.	Description	Material	Specification
1	Valve Body	Ductile Iron	EN-GJS-450-10
2	Resilient Disc	DI +EPDM	EN-GJS-450-10
3	Stem	Stainless Steel	AISI 420
4	Bolt	CS Zinc Plated	-
5	Bonnet	Ductile Iron	EN-GJS-450-10
6	O-Ring	NBR	-
7	Gland	Ductile Iron	EN-GJS-450-10
8	Handwheel	Ductile Iron	EN-GJS-450-10
9	Bolt	CS Zinc Plated	-
10	Flat Washer	CS Zinc Plated	-
11	Ring Wiper	EPDM	-
12	Bolt	CS Zinc Plated	-
13	Flat Washer	CS Zinc Plated	-
14	O-Ring	NBR	-
15	Thrust Washer	Brass	EN12165 CW614N
16	Bonnet Gasket	EPDM	-
17	Wedge nut	Brass	EN12165 CW614N

Dimensions!:

DN		Dimensions (mm)							Weight (Kg)
Inch	mm	L	H	D	D1	d	C	n-ØL	
2"	50	178	218	165	125	99	19	4-Ø19	
2.5"	65	190	232	185	145	118	19	4-Ø19	
3"	80	203	281	200	160	132	19	8-Ø19	
4"	100	229	316	220	180	156	19	8-Ø19	
5"	125	254	367	250	210	184	19	8-Ø19	
6"	150	267	420	285	240	211	19	8-Ø23	
8"	200	292	490	340	295	266	20	12-Ø23	

TECHNICAL DATASHEET



Dimensions²:

DN		Dimensions (mm)							Weight (Kg)
Inch	mm	L	H	D	D1	d	C	n-ØL	
10"	250	330	628	405	355	319	22	12-Ø28	107.1
12"	300	356	723	460	410	370	24.5	12-Ø28	160.2
14"	350	381	918	520	470	429	26.5	16-Ø28	315.0
16"	400	406	918	580	525	480	28	16-Ø31	326.0
18"	450	432	1108	640	585	548	30	20-Ø31	469.5
20"	500	457	1130	715	650	609	31.5	20-Ø34	506.2
24"	600	508	1311	840	770	720	36	20-Ø37	726.1

Test Pressures:

Each valve is individually hydrostatically tested at the following test:

(HYDRAULIC) Shell: 24 bar - **Seat:** 17.6 bar

Flow Characteristics:

Size	Kv (m ³ /h)
DN50 – 2"	250
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
DN350 – 14"	13,680
DN400 – 16"	17,787.9
DN450 – 18"	22,424.1
DN500 – 20"	27,586.4
DN600 – 24"	39,482.3

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

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

