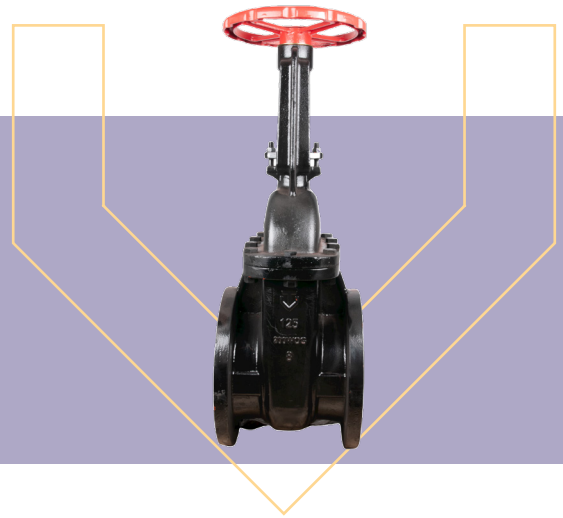


Cast Iron Gate Valve Rising Stem

Weights: 16kg - 1.341kg
Sizes: DN 50 – 600
Class: 125
Pressure: PN14
Temperatures: -10°C to 230°C



Application

The Cast Iron Gate Valve Rising Stem is designed to control and regulate the flow of fluids, such as water or gas in a pipeline. It is constructed with a cast iron body which offers durability and resistance to corrosion making it suitable for water, oil and gas applications. It is also beneficial in industrial settings such as water treatment plants and municipal water supply systems due to its robust construction, reliability, and cost-effectiveness.

The stem which is attached to the gate, moves up and down as the valve is opened or closed, providing a visual indication of the valve's position. Its cost-effectiveness and longevity further contribute to its popularity in various industrial settings.

Dimensions

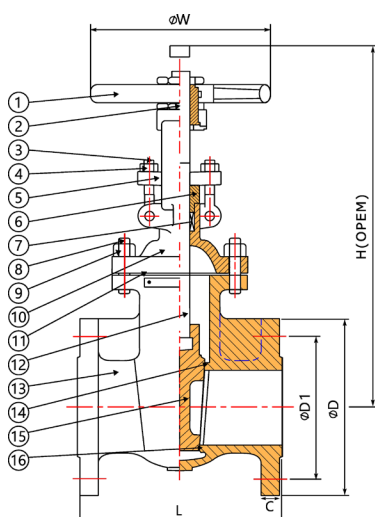
NPS	DN	L	φ D	φ D1	C	H	W	Kg
2	50	177	152	120	15.80	301	180	16
2.5	65	190	178	139	17.50	341	180	20
3	80	203	191	152	19.00	371	180	24
4	100	228	229	190	23.90	451	200	38
5	125	254	254	215	23.90	529	250	52
6	150	266	279	241	25.40	583	280	68
8	200	292	343	298	28.50	751	300	105
10	250	330	406	362	30.20	897	360	172
12	300	355	483	431	31.80	1,053	400	244
14	350	381	533	476	35.00	1,264	505	442
16	400	406	597	539	36.60	1,412	556	596
18	450	431	635	577	39.60	1,572	610	778
20	500	457	699	635	42.90	1,732	610	990
24	600	508	813	749	47.80	1,972	765	1,341

P/T Ratings

Valvetech's Pressure/Temperature Ratings according to ANSI B16.10

Temperature ° Celsius	-10°C to +65°C	100°C	120°C	140°C	150°C	160°C	200°C	230°C
Pressure Bar	13.8	12.7	12.1	11.6	11.4	10.8	9.8	8.6

Diagram



#	Part	Material
1	Handwheel	Cast Iron ASTM A126 B
2	Yoke Sleeve	Cast Iron ASTM A126 B
3	Gland Bolt	ASTM A307B Carbon Steel
4	Gland Bolt Nut	ASTM A563 Carbon Steel
5	Gland	Ductile Iron A536
6	Buffing Box	13 Chrome Stainless Steel
7	Gland Packing	Flexible Graphite
8	Bonnet Bolt	ASTM A307B Carbon Steel
9	Bonnet Bolt Nut	ASTM A563 Carbon Steel
10	Bonnet	Cast Iron ASTM A126 B
11	Bonnet Gasket	Graphite + Steel
12	Stem	13 Chrome Stainless Steel
13	Body	Cast Iron ASTM A126 B
14	Disc Seat Ring	13 Chrome Stainless Steel
15	Disc	Cast Iron ASTM A126 B
16	Body Seat Ring	13 Chrome Stainless Steel

Specifications

Models

VT84

Body Material

Cast Iron

Iron Grade

ASTM A126 B

Stem Operation

Rising

Trim

13Cr

Drill Tables

Table 10, 16, D, ASA150

Standards

Design Standard MSS SP-70
 Flanges conform to ANSI B16.5
 Face to Face conform to ANSI B16.10
 Hydrostatically tested to BS 5150

Services

Water, Oil, Gas, Steam

Industries

Petrochemicals and Petroleum, Refineries,
 Primary Energy, Agriculture, Water Works, HVAC

Priority Media

Acetylene, Borax, Butane Gas, Carbon Dioxide,
 Castor Oil, Caustic Soda, Detergents, Diesel
 Fuels, Hydraulic Oil, Linseed Oil, Nitrogen,
 Propane Gas, Steam, Tributyl Phosphate

Inventory Code and Description

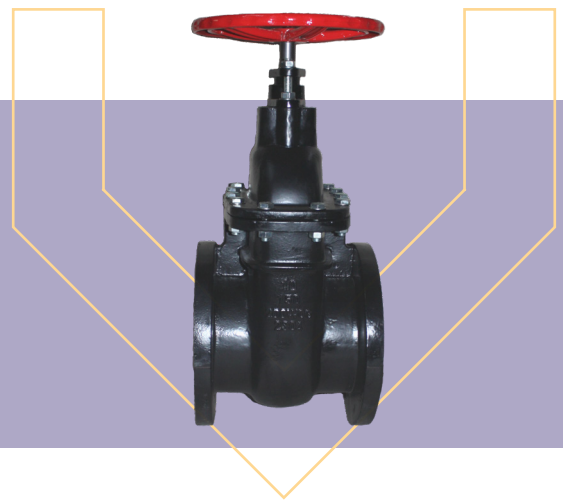
CIGATEVT84
 CI GATE VALVE RS 13CR SS TRIM FLANGED
 Cast Iron Gate Valve Rising Stem 13
 Chrome Stainless Steel Trim Class 125
 Flanged

Also Known As:

Outside Screw and Yolk (OS + Y) Gate Valve,
 Rotational Stem Design Gate Valve, Rising Stem
 Wedge Gate Valve, Sluice Valve

Gate Valves

Models:	VT84N ; VT84 ; VT68N ; VT68 ; 201
Class:	150 ; 125
Sizes:	DN 50 – 600 ; DN 15 - 100
Pressure:	PN16; PN40
Body Material:	Ductile Iron ; Cast Iron ; Brass
Temperatures:	-10°C to 400°C ; -2°C to 120°C 14kg -
Weights:	870kg ; 250g - 6kg



Specifications

Services

Petrochemicals and Petroleum, Refineries, Primary Energy, Agriculture, Water Works, HVAC

Industries

Water, Oil, Gas, Steam

Priority Media

Acetylene, Borax, Butane Gas, Carbon Dioxide, Castor Oil, Caustic Soda, Detergents, Diesel Fuels, Hydraulic Oil, Linseed Oil, Nitrogen, Propane Gas, Steam, Tributyl Phosphate

Also Known As:

Insider Screw Valve (Non-Rising)
Outside Screw and Yolk (OS+Y; Rising)
Rotational Stem Design Gate Valve
Non-Rising Stem Wedge Gate Valve
Rising Stem Wedge Gate Valve
Sluice Valve

Gate Valve Details

A Gate Valve is used in On/Off applications that do not require throttling. Due to their heavy-duty design and casting, they can handle high temperatures and are durable under constant, lower pressures while media is able to flow in both directions.

Application

When fully opened, the Gate Valve wedge disc is completely removed from the space within the valve, removing all resistance to the flow of media resulting in little pressure drop. Because there is the absence of any valve components within the tunnel when it is fully opened, high-viscosity slurries such as pulp and mining solids or sludge can travel through without obstruction, preventing blockages.

When the valve is fully closed, the disk-to-seal ring surface creates a 360° contact, which enables good sealing via the wedge. This means that very little or no leakage occurs across the disk, no matter the volume of media or the pressure behind it and the media can flow in both directions.

Typical applications of Gate Valves include:

- **Isolation and Shutoff** in pipelines carrying fluids or gases as their design allows for a tight seal when fully closed, effectively stopping the flow of the medium through the pipeline
- **High-Pressure Systems** due to their sturdy construction and ability to provide a tight seal, making them suitable for use in pipelines where the pressure requirements are significant
- **On/Off Flow Control** as opposed to throttling as their primary strength lies in their ability to provide full flow or complete shutoff

Advantages:

- **Unchanged dimensions** when open or closed, so the installation space is smaller if a Non-Rising Stem is used. A Rising Stem makes it easy to identify from a distance as to whether the valve is open or closed
- **High-temperature resistance** enables the valve to withstand elevated temperatures without significant degradation, warping or deterioration
- **Cheap and easy maintenance** due to their simplicity in design, making them one of the most common valves for industrial applications
- **Versatility in applications** provides for a wide range of fluids, including liquids, gases, and slurries making them suitable for every industry
- **Low pressure drop** and full flow provide a straight-through, unobstructed flow path when fully open, minimising pressure drop allowing for efficient and high-capacity fluid flow

Common Industry Uses:

- Underground piping or buried installations
- Clean liquid and gasses, and Heating and Conditioning (HVAC)
- Potable water applications
- Wastewater, water treatment, and distribution systems
- Corrosive mediums such as diesel, petroleum and acids