

GATE150 - GATE300 API Gate Valve

Product Description

Gate valves are primarily designed for on-off services. Gate Valves consist of Body, Bonnet, Gate, Stem outside screw & Yoke, rising Stem with Non Rising Hand wheel, Integral seat as standard with options for Renewable Seats. Open & Closed Indicator with lockable Handwheel.

Features

Gate valves offer positive shutoff with minimal pressure drop; this makes them ideal for controlling liquid or gas flow in various applications. They're also highly effective and easy to maintain due to their robust construction and simple design.

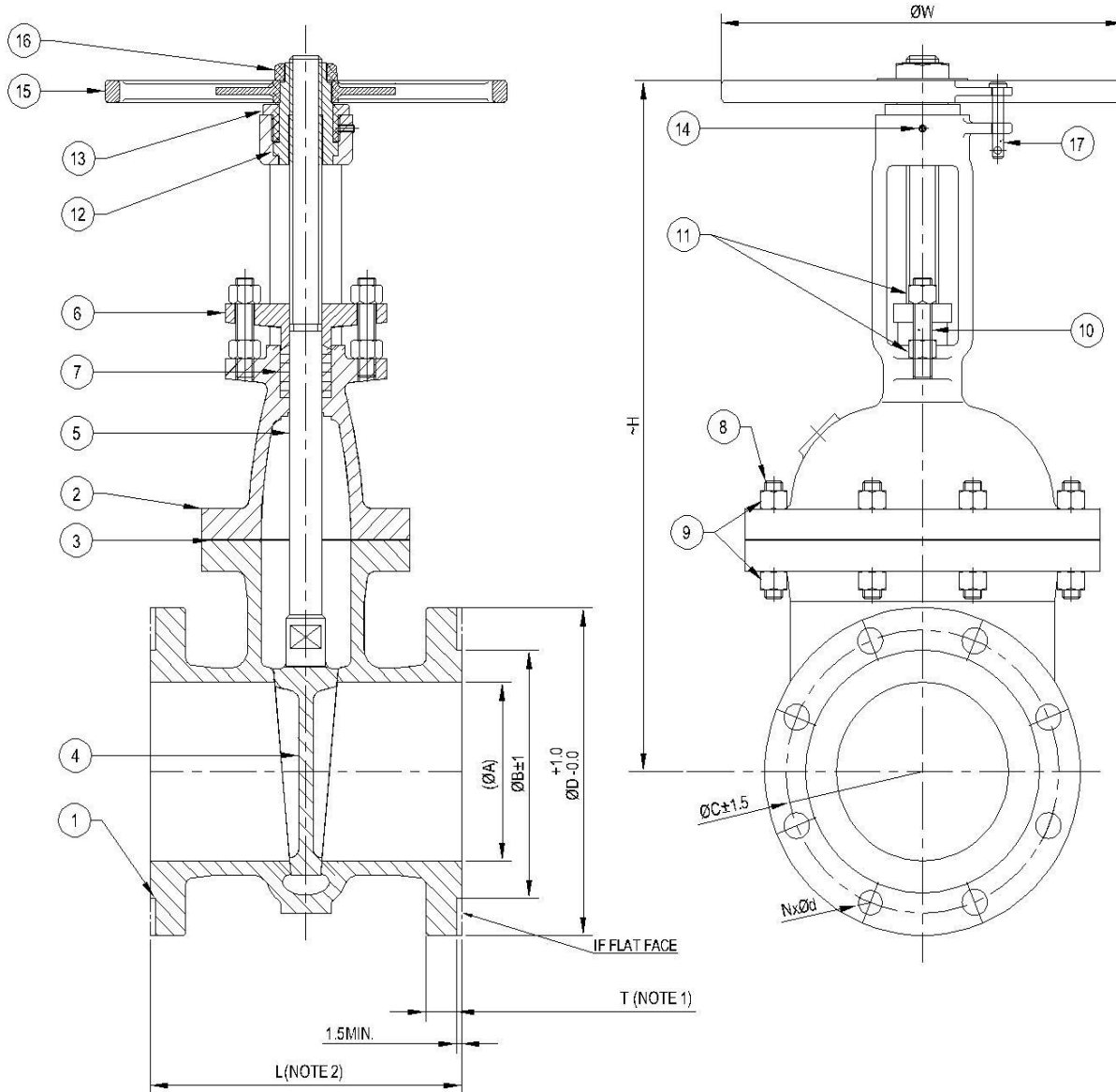
Gate valves are operated manually or by an automated device such as a motor, solenoid, actuator, etc. When the gate is closed, it acts as a barrier and blocks flow. When open, the gate swings away from the seat allowing full flow through the valve. When closed, fluid flow is completely blocked.

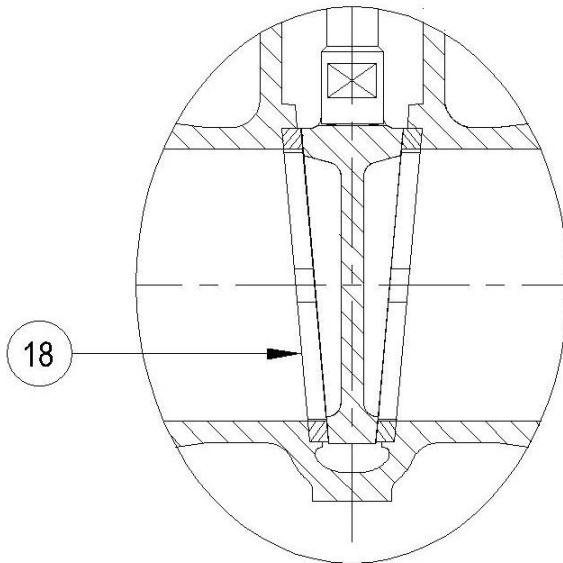


Technical Data #150		
Design Standard	API 600 / ISO 10434 / BS 1414	
Size	DN50 TO DN600	
Flanges	ASME B16.5 #150	
End To End	ASME B16.10 #150	
Testing	EN 12266-1, API 598	
Max pressure:- 19 BAR		Min Temperature:- -29°C
Max pressure:- 7.9 BAR		Min Temperature:- 260°C
Testing Pressure (Bar G) at Ambient Condition (-29°C to 38°C)		
Shell (Hydro)	Seat (Hydro)	Seat (Air)
28.5	21	N/A
Testing Duration (Sec)		
As Per STD.	As Per STD.	N/A
Certifications		
Material Test	BS EN 10204-3.1	

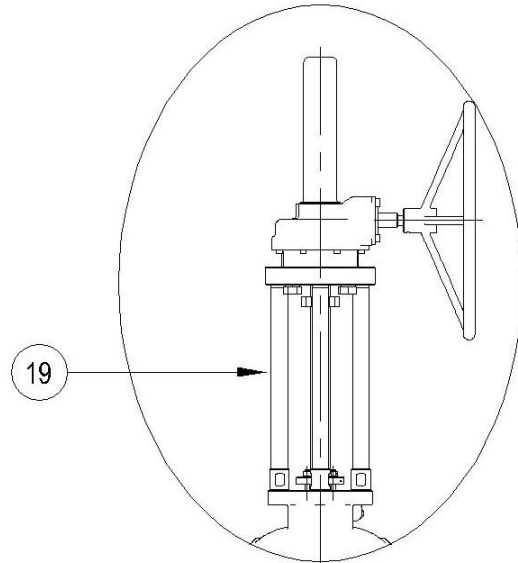
Technical Data #300		
Design Standard	API 600 / ISO 10434 / BS 1414	
Size	DN50 TO DN600	
Flanges	ASME B16.5 #300	
End To End	ASME B16.10 #300	
Testing	EN 12266-1, API 598	
Max pressure:- 49.6 BAR		Min Temperature:- -29°C
Max pressure:- 20.6 BAR		Min Temperature:- 260°C
Testing Pressure (Bar G) at Ambient Condition (-29°C to 38°C)		
Shell (Hydro)	Seat (Hydro)	Seat (Air)
74.4	54.5	N/A
Testing Duration (Sec)		
As Per STD.	As Per STD.	N/A
Certifications		
Material Test	BS EN 10204-3.1	

General Assembly View





RENEWABLE SEAT RING DESIGN



GEAR BOX ARRANGEMENT (NOTE 3)

1. FOR NPS ≥ 20 THE FLANGE THICKNESS WILL BE +5.0, - 0.0mm (+0.20, - 0.00 in.) AND FOR NPS ≤ 18 THE FLANGE THICKNESS WILL BE +3.0, -0.0 (+0.12, -0.00 in).
2. A TOLERANCE OF ± 1.5 MM (± 0.06 IN.) SHALL BE ALLOWED ON FACE-TO-FACE AND END-TO-END DIMENSIONS OF VALVES OF NPS 10 AND SMALLER, AND A TOLERANCE OF ± 3.0 MM (± 0.12 IN.) SHALL BE ALLOWED FOR NPS 12 AND LARGER.
3. THE GEAR BOX WILL BE ADDED FROM SIZE 14" TO 24".

Bill of Materials

S.NO.	PART	MATERIAL
1	Body	NAB(ASTM B148 C95800)
2	Bonnet	NAB(ASTM B148 C95800)
3	Bonnet Joint	SS-316+Graphite
4	Wedge	NAB (ASTM B148 C95800) / MONEL (ASTM A494 GR M35-1)
5	Stem	NAB (ASTM B150 C63200) / MONEL (ASTM B865 N05500)
6	Gland	NAB(ASTM B148 C95800)
7	Gland Packing	GRAPHITE
8	Bonnet Stud	ASTM A193 Gr.B7
9	Bonnet Nut	ASTM A194 Gr.2H
10	Gland Stud	ASTM A193 Gr.B7
11	Gland Nut	ASTM A194 Gr.2H
12	Yoke Sleeve	NAB (ASTM B150 C63200)
13	Retaining Nut	NAB (ASTM B150 C63200)
14	Set Screw	BS 6105 A4-70
15	Hand Wheel	ASTM A351 CF8M
16	Nut	NAB (ASTM B150 C63200)
17	Locking Pin	SS(BS EN-10088-3)
18	Renewable Seat Ring	NAB(ASTM B148 C95800)
19	Gear Box	Ductile Iron

Dimensions

Tables #150 ASME

B16.5

SIZE	ΦA	ΦB	ΦC	ΦD	T	R.F	NxΦd	L	~H	ΦW
DN50	50.8	91.9	120.6	152	14.2	1.5	4x3/4"	178	320	178
DN65	63.5	104.6	139.7	178	15.7		4x3/4"	190	338	178
DN80	76.2	127	152.4	190	17.5		4x3/4"	203	374	229
DN100	101.6	157.2	190.5	229	22.4		8x3/4"	229	457	254
DN150	152.4	215.9	241.3	279	23.9		8x7/8"	267	610	356
DN200	203.2	269.7	298.4	343	26.9		8x7/8"	292	814	406
DN250	254	323.8	362	406	28.4		12x1"	330	980	470
DN300	304.8	381	431.8	483	30.2		12x1"	356	1166	470
DN350	336.6	412.8	476.2	533	33.3		12x1-1/8"	381	1705	600
DN400	387.4	469.9	539.8	597	35.1		16x1-1/8"	406	1838	600
DN450	438.2	533.4	577.8	635	38.1		16x1-1/4"	432	2040	600
DN500	489	584.2	635	693	41.1		20x1-1/4"	457	2285	700
DN600	590.6	692.2	749.3	813	46		20x1-3/8"	508	2660	800

#300 ASME B16.5

SIZE	ΦA	ΦB	ΦC	ΦD	T	R.F	NxΦd	L	~H	ΦW
DN50	50.8	91.9	127	165	20.6	1.5	8x3/4"	216	300	178
DN80	76.2	127	168.1	210	26.9		4x7/8"	282	470	229
DN100	101.6	157.2	200.2	254	30.2		8x7/8"	305	584	254
DN150	152.4	215.9	269.7	318	35.1		12x7/8"	403	787	470
DN200	203.2	269.7	330.2	381	39.6		12x1"	419	960	470
DN250	254	323.8	387.4	444	46		16x1-1/8"	457	1459	500
DN300	304.8	381	450.8	521	49.3		16x1-1/4"	502	1555	600
DN350	336.6	412.8	514.4	584	52.3		20x1-1/4"	762	1767	600
DN400	387.4	469.9	571.5	648	55.6		20x1-3/8"	838	2025	600
DN450	431	533.4	628.6	711	58.7		24x1-3/8"	914	1883	600
DN500	482.6	584.2	685.8	775	62		24x1-3/8"	991	2595	800
DN600	584.2	692.2	812.8	914	68.3		24x1-5/8"	1143	3112	800