

FORGED STEEL

GATE VALVE (Class-2500)

INTRODUCTION

Leader forged steel gate valves adopts solids gate, renewable seat, rising stem and non-ring hand wheel. It plays the role of pipe opening and closing ultimately through the rotation of the hand wheel to drive the lifting of gate.

PRINCIPAL FEATURES

- Design Std.: ASME B16.34.
- Pressure Temperature Rating as per ASME B16.34.
- Compact but extremely sturdy design for high pressure & temperature service.
- Welded body-bonnet O&S Yoke type rising stem design, welded body-bonnet joints offers an additional level of safety against fugitive emission.
- Die-formed graphite inner packing rings and braided graphite end rings with Inconel wire reinforcement and corrosion inhibitor.
- T-head stem-disc connection of gate valve fully meets strength requirements of API 602 and API 598.
- Tapered shoulder on the stem for back seating.
- The gland, gland flange assembly utilizes a separate, two piece design. This self aligning design allows the flange to be unevenly tightened while the gland maintains its parallel alignment with the stem and stuffing box.
- The yoke sleeve is of forged stainless steel material having a high melting point and is resistant to wear and corrosion.
- Socket welded ends as per ASME B16.11.
- Butt weld ends as per ASME B16.25 available on request.
- Robust construction of hand wheel in open spoke design.
- Valves can be offered with electrical actuators on request.
- Low Temperature Carbon Steel & Austenitic SS forging for body and bonnet with extended bonnet design qualified as per BS 6364 for Cryogenic service available on request.
- Valves can be offered to NACE MR-0175 and other special NACE requirements.
- Valves are available with IBR certification.
- Low Emission, FET qualified valves as per API 624 / ISO 15848-1 can be offered with API 622 (FET), API 607 (Fire Safe) qualified gland packing.

END CONNECTION

Socket Weld / Butt Welded Ends.

WORKING PRESSURE

Maximum working pressure 425 Bar.
See Pressure / Temperature Chart at Page No.38.

TEMPERATURE LIMITS

Maximum working temperature 425°C.
See Pressure / Temperature Chart at Page No.38.



- **Item Code:** FCS022
- **Pressure Rating:** CL-2500
- **Testing Standard:** API-598, BSEN 12266 Part-1
- **Size Range:** 15mm to 25mm
- **Product Standard:** ASME B16.34

SUITABLE FOR

Water	Oil	Air	Gases	Steam
✓	✓	✓	✓	✓

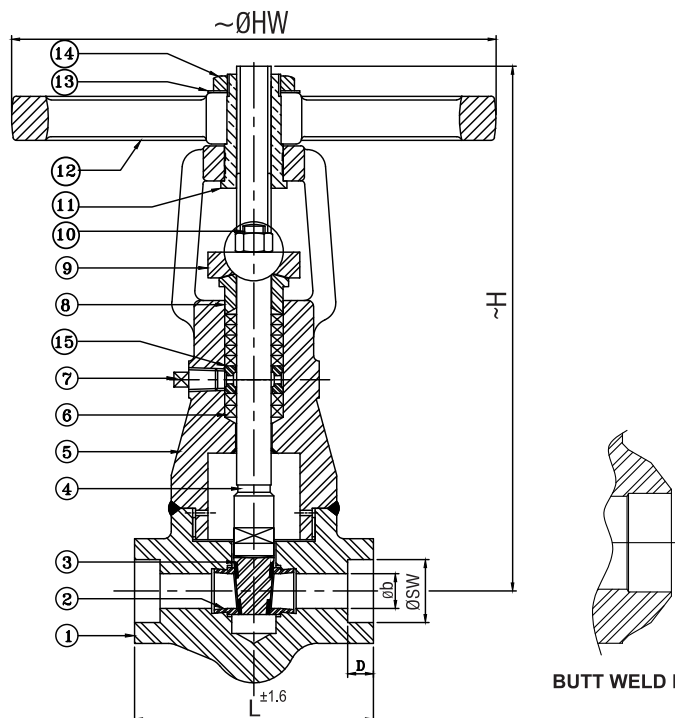
TEST PRESSURE (Hydrostatic)

Rating	CL-2500
Body (Hyd.)	639 Bar
Seat (Hyd.)	468 Bar
Seat (Air)	6.9 Bar

TRIM MATERIAL COMBINATION (ON REQUEST)

Trim No.	Seat Ring Face	Wedge Seat Face	Stem	Backseat Bush	Lantern Ring
2	F304	F304	F304/AISI304	F304/AISI304	F304/AISI304
5	STELLITE(#6)	STELLITE(#6)	F6a/AISI410	F6a/AISI410	F6a/AISI410
8	STELLITE(#6)	F6a/13%Cr.	F6a/AISI410	F6a/AISI410	F6a/AISI410
9	MONEL	MONEL	MONEL	MONEL	MONEL
10	F316	F316	F316/AISI316	F316/AISI316	F316/AISI316
12	316+Stellite(#6)	316	F316/AISI316	F316/AISI316	F316/AISI316
13	ALLOY 20	ALLOY 20	ALLOY 20	ALLOY 20	ALLOY 20

Note : The above data is subject to change without notice due to our continuing product improvement program.



DIMENSIONAL DATA CLASS-2500

SIZE (mm)	15	20	25	
L	130	130	130	
Øb	12	15	19	
~ØHW	200	200	200	
~H	300	300	328	
ØSW	AS PER ASME B16.11	22.2	27.6	34.3
		21.8	27.2	33.9
D	11	14	14	

MATERIAL SPECIFICATION

P.No.	NAME OF PART	CARBON STEEL		ALLOY STEEL				STAINLESS STEEL			
		A105	A350 LF2	A182 F5	A182 F11	A182 F22	A182 F9	A182 F304	A182 F316	A182 F304L	A182 F316L
1	BODY	A105	A350 LF2	A182 F5	A182 F11	A182 F22	A182 F9	A182 F304	A182 F316	A182 F304L	A182 F316L
2	SEAT RING	ASTM A276 TYPE 410 +STELLITE	SS 304 +STELLITE	SS 410 +STELLITE	SS 410 +STELLITE	SS 410 +STELLITE	SS 410 +STELLITE	SS 304 +STELLITE	SS 316 +STELLITE	SS 304L +STELLITE	SS 316L +STELLITE
3	WEDGE	ASTM A217 Gr.CA15/ ASTM 276 TYPE 410 +STELLITE	SS 304 +STELLITE	CA15/ SS 410 +STELLITE	CA15/ SS 410 +STELLITE	CA15/ SS 410 +STELLITE	CA15/ SS 410 +STELLITE	SS 304 +STELLITE	SS 316 +STELLITE	SS 304L +STELLITE	SS 316L +STELLITE
4	STEM	ASTM A276 TYPE 410	SS 304	SS 410	SS 410	SS 410	SS 410	SS 304	SS 316	SS 304L	SS 316L
5	BONNET	A105	A350 LF2	A182 F5	A182 F11	A182 F22	A182 F9	A182 F304	A182 F316	A182 F304L	A182 F316L
6.	PACKING	FLEXIBLE GRAPHITE									
7.	LATERN PLUG	ASTM A276 TYPE 410	SS 304	SS 410	SS 410	SS 410	SS 410	SS 304	SS 316	SS 304L	SS 316L
8.	GLAND	A182 F6a	SS 304	A182 F6a	A182 F6a	A182 F6a	A182 F6a	SS 304	SS 316	SS 304L	SS 316L
9	GLAND FLANGE	A105	A350 LF2	A182 F5	A182 F11	A182 F22	A182 F9	A182 F304	A182 F316	A182 F304L	A182 F316L
10	STUD & NUT	A193 B7/ A194 2H	A320 L7 / A194 Gr.4	A193 B7/ A194 2H	A193 B7/ A194 Gr.4	A193 B16 / A194 Gr.4	A193 B16 / A194 Gr.4	A193 B8 / A194 Gr.8	A193 B8 / A194 Gr.8	A193 B8 / A194 Gr.8	A193 B8 / A194 Gr.8
11.	YOKE SLEEVE	ASTM A582 Type 416									
12	HAND WHEEL	DI. A536 Gr. 80-55-06									
13	NAME PLATE	ALUMINIUM / STEEL									
14	YOKE SLEEVE NUT	CARBON STEEL									
15	LATERN RING	ASTM A276 TYPE 410	SS 304	SS 410	SS 410	SS 410	SS 410	SS 304	SS 316	SS 304L	SS 316L