SUPREME ENTERPRISE

Industrial Valves

4th Floor, Survey No. 235/A and 247/A, E/401, Nr. Bhattha School, Gyaspur, Ahmedabad, Gujarat 382405, India | Branch: Mehta House, Relief Road, Ahmedabad 380001
GST 24AFAFS5839J1ZQ • IEC AFAFS5839J • info@supremevalves.in | www.supremevalves.in • +91 97732 78770

Doc. No.	SV-DATA-2026-PRESSURE_SEAL_GATE_VALVE_CLASS_600_900_1500	**Pressure Seal Gate Valve Class 600/900/1500 -- Technical Datasheet**	Page	1 OF 1
Rev.	A		Date	13-Jun-2026

R	**REFERENCES & RELATED DOCUMENTS**			
R1	**P&ID / Process Diagram**	N/A -- Product Datasheet	**Piping Material Spec.**	N/A -- Product Datasheet
R2	**Project Standard / Spec.**	API 600 / BS 1414, ASME B16.34, API 598		
1	**GENERAL**			
2	**P&ID No. / Tag No.**	N/A -- Product Datasheet	**Piping Class**	ASME Class 600 / 900 / 1500
3	**Valve Tag / Item No.**	N/A -- Product Datasheet	**Quantity Required**	As required
4	**Design Standard**	API 600 / BS 1414, ASME B16.34, API 598	**Pressure Class / Rating**	ASME Class 600 / 900 / 1500
5	**Valve Size, Inlet x Outlet**	2" to 24" (DN50 – DN600)	**End Connection**	Flanged RF / RTJ per ASME B16.5 / Butt Weld per ASME B16.25
6	**Valve Type / Model**	Pressure Seal Gate Valve Class 600/900/1500	**Operation Mode**	Pressure-energized bonnet seal tightens under line pressure -- OS&Y rising-stem gate for Class 600/900/1500 high-pressure steam mains and boiler feed; gear or motor operated
6A	**Service / Application**	Power Plant Steam Mains, Boiler Feed, Refineries, High Pressure Process	**Fluid State**	Liquid / Gas / Steam (as applicable)
7	**DESIGN CONDITIONS**			
8	**Design Pressure**	ASME Class 600 / 900 / 1500	**Design Temp. Min / Max**	-10°C to +550°C (HT steam) -- per project
9	**Operating Pressure**	ASME Class 600 / 900 / 1500	**Operating Temp.**	Saturated / superheated steam -- project-specific
10	**Set / Relief Pressure**	N/A -- Product Datasheet	**Back Pressure**	N/A -- Product Datasheet
11	**Fluid Handled / Service**	Power Plant Steam Mains, Boiler Feed, Refineries, High Pressure Process	**Corrosion Allowance**	As per project specification
12	**Required Capacity / Flow Rate**	As per valve size and pressure class	**Location / Installation**	Indoor / Outdoor / Offshore / Marine (as applicable)
13	**VALVE OPERATION REQUIREMENT**			
14	**Type of Valve Operator**	Pressure-energized bonnet seal tightens under line pressure -- OS&Y rising-stem gate for Class 600/900/1500 high-pressure steam mains and boiler feed; gear or motor operated	**Actuator Specification**	ISO 5211 pad (actuated) -- Electric / Pneumatic / Hydraulic on request
15	**Fail-Safe Position**	As per project / application requirements	**Accessories Required**	Limit switches, positioners, solenoid valves, manual override -- on request
16	**VALVE MATERIAL SPECIFICATION (EQUIVALENT OR SUPERIOR)**			
	Valve Part	**Specified Material**	**Proposed Material (Supreme Valves India)**	
	Body	As per project specification	ASTM A217 WC6 / WC9 (Cr-Mo Alloy Steel) / A216 WCB	
	Bonnet / Cover	As per standard	Pressure-seal type, WC6 / WC9 / A182 F22	
	Trim (Disc / Seat)	As per standard	A217 WC6 + Stellite 6 hardfacing / Stellite 6 overlay, integral	
	Stem / Spindle	As per standard	ASTM A182 F6a / F22, OS&Y rising	
	Gasket / Packing	As per standard	Flexible graphite pressure-seal ring + spiral wound gasket	
	Bolting / Nuts	As per standard	ASTM A193 B16 / A194 7	
17	**TESTING, INSPECTION & CERTIFICATION REQUIREMENTS**			
18	**Hydrostatic Shell Test**	Hydrostatic 38.2 MPa (5550 psi)	**Seat / Pneumatic Test**	Hydrostatic 27.9 MPa (4075 psi)
19	**NDT Requirements**	100% MPI / DPT on machined surfaces (if specified) -- Radiography / Ultrasonic on request		
20	**Required Certificates / MTC**	EN 10204 3.1 MTC (standard) -- EN 10204 3.2 / third-party inspection on request		
21	**Witness / Inspection Agency**	Client / TPI representative (if specified)	**Third Party Inspection**	TUV / SGS / BV / Lloyds Register (client cost)
22	**PAINTING, PRESERVATION & PACKING**			
23	**Painting / Coating Specification**	Standard: one coat primer + two coats synthetic enamel (colour per client spec) -- special coatings (epoxy, PTFE, rubber lining) on request		
24	**Packing Requirement**	Wooden cases / pallets with VCI protection -- sea-worthy packing for export on request		

26 NOTES

1. This datasheet covers standard specifications for Pressure Seal Gate Valve Class 600/900/1500.
2. Design Standard: API 600 / BS 1414, ASME B16.34, API 598.
3. Application / Service: Power Plant Steam Mains, Boiler Feed, Refineries, High Pressure Process.
4. Size Range: 2" to 24" (DN50 – DN600). Pressure Rating: ASME Class 600 / 900 / 1500.
5. All valves are manufactured new and unused by an ISO 9001 compliant foundry.
6. Material Test Certificates (MTC) per EN 10204 3.1 provided as standard; EN 10204 3.2 available on request at additional cost.
7. Testing performed per ISO 5208 / API 598: shell test at 1.5x rated pressure, seat test at 1.1x rated pressure -- bubble-tight zero leakage.
8. Face-to-face dimensions per ASME B16.10 / BS 2080 / manufacturer standard unless otherwise specified.
9. Marking per MSS SP-25: Size, Pressure Class, Material, Heat Number, Tag Number, Serial Number, Flow Direction.
10. Alternative / upgraded materials: A182 F91 / F22 high-temperature and A351 CF8M trims on request.
11. Actuated valves (electric, pneumatic, hydraulic) supplied with ISO 5211 mounting pad and position indicator.
12. Third-party inspection by TUV, SGS, Bureau Veritas, or Lloyds Register available on request at client cost.
13. This datasheet is for general reference. Firm specifications to be confirmed upon receipt of confirmed Purchase Order with technical requirements.
14. For specific project requirements, deviation forms, or material substitutions, please contact our engineering team.

RH — REVISION HISTORY

Rev.	Date	Description of Change	Prepared / Reviewed / Approved
A	13-Jun-2026	Initial issue -- Product datasheet generated from standard catalogue	Supreme Valves India -- Technical Department

AP — DOCUMENT APPROVAL

PREPARED BY	REVIEWED BY	APPROVED BY
Supreme Valves India -- Technical Department, Ahmedabad		
Signature / Date	Name / Signature / Date	Name / Signature / Date