



SUPREME ENTERPRISE

Industrial Valves

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Doc. No.	SV-DATA-2026-KNIFE_EDGE_GATE_VALVE	Knife Edge Gate Valve -- Technical Datasheet	Page	1 OF 1
Rev.	A		Date	24-May-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, MSS SP-81		
1	GENERAL			
2	P&ID No. / Tag No.	N/A -- Product Datasheet	Piping Class	PN10-PN16
3	Valve Tag / Item No.	N/A -- Product Datasheet	Quantity Required	As required
4	Design Standard	API 600, MSS SP-81	Pressure Class / Rating	PN10-PN16
5	Valve Size, Inlet x Outlet	50mm to 1200mm	End Connection	Flanged (FF/RF/RTJ) / Screwed (BSP/NPT) / Socket Weld / Butt Weld -- as per specification
6	Valve Type / Model	Knife Edge Gate Valve	Operation Mode	Manual (Handwheel / Lever) -- Electric / Pneumatic / Hydraulic actuator available on request
6A	Service / Application	Slurry, Pulp & Paper, Mining	Fluid State	Liquid / Gas / Steam (as applicable)
7	DESIGN CONDITIONS			
8	Design Pressure (barg)	PN10-PN16	Design Temp. Min / Max (deg C)	-29 deg C to +425 deg C (standard) -- Higher/lower on request
9	Operating Pressure (barg)	PN10-PN16	Operating Temp. (deg C)	Ambient to +200 deg C (standard) -- Project-specific on request
10	Set Pressure / Relief Pressure (barg)	N/A -- Product Datasheet	Back Pressure (barg)	N/A -- Product Datasheet
11	Fluid Handled / Service	Slurry, Pulp & Paper, Mining	Corrosion Allowance (mm)	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	Manual (Handwheel / Lever / Gear) -- Actuated options available	Actuator Specification No.	ISO 5211 mounting pad (for actuated valves) -- Electric / Pneumatic / Hydraulic actuator 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	WCB / SS304 / SS316 / Duplex	WCB / SS304 / SS316 / Duplex
Bonnet / Cover	As per standard	As per standard
Trim (Disc / Seat)	As per standard	SS410 / SS316 / Bronze (as applicable)
Stem / Spindle	As per standard	SS410 / SS304 / SS316
Gasket / Packing	As per standard	Graphite / PTFE / CI Ring (as applicable)
Bolting / Nuts	As per standard	Carbon Steel / Alloy Steel (as applicable)

17	TESTING, INSPECTION & CERTIFICATION REQUIREMENTS		
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18	Hydrostatic Test	Shell 1.5x WP	Seat / Pneumatic Test	Seat 1.1x WP
19	NDT Requirements	100% MPI / DPT on machined surfaces (if specified by project) -- 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			
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23	Painting / Coating Specification	Standard: One coat primer + two coats synthetic enamel (colour as per client specification) -- Special coatings (epoxy, PTFE, rubber lining) available on request		
24	Packing Requirement	Wooden cases / pallets with VCI protection -- Sea-worthy packing for export on request		

26	NOTES			
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1. This datasheet covers standard specifications for Knife Edge Gate Valve.
2. Design Standard: API 600, MSS SP-81.
3. Application: Slurry, Pulp & Paper, Mining.
4. Size Range: 50mm to 1200mm. Pressure Rating: PN10-PN16.
5. All valves are manufactured new and unused by ISO 9001 certified 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 1.5 x rated pressure, Seat test at 1.1 x 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. Special materials (Duplex, Super Duplex, Inconel, Monel, Hastelloy, Titanium) available on request with extended delivery.
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			
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Rev.	Date	Description of Change	Prepared / Reviewed / Approved
A	24-May-2026	Initial issue -- Product datasheet generated from standard catalogue	Supreme Valves India -- Technical Department

AP	DOCUMENT APPROVAL		
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PREPARED BY Supreme Valves India Technical Department Ahmedabad, India _____ Signature / Date	REVIEWED BY _____ Name / Signature / Date	APPROVED BY _____ Name / Signature / Date
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Gate Valve



Diaphragm Valve



Globe Valve



Check Valve



Needle Valve



Plug Valve



Butterfly Valve



Piston Valve



Relief Valve



Ball Valve