



# SUPREME ENTERPRISE

Industrial Valves

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Doc. No.	SV-DATA-2026-EXPANDING_GATE_VALVE_CLASS_600			Page	1 OF 1
Rev.	A			Date	13-Jun-2026
<b>Expanding Gate Valve Class 600 (Parallel Expanding, Pipeline) -- Technical Datasheet</b>					
<b>R</b>	<b>REFERENCES &amp; RELATED DOCUMENTS</b>				
R1	P&ID / Process Diagram	N/A -- Product Datasheet	Piping Material Spec.	N/A -- Product Datasheet	
R2	Project Standard / Spec.	API 6D, ASME B16.34, API 598, NACE MR0175			
<b>1</b>	<b>GENERAL</b>				
2	P&ID No. / Tag No.	N/A -- Product Datasheet	Piping Class	ASME Class 600	
3	Valve Tag / Item No.	N/A -- Product Datasheet	Quantity Required	As required	
4	Design Standard	API 6D, ASME B16.34, API 598, NACE MR0175		Pressure Class / Rating	ASME Class 600
5	Valve Size, Inlet x Outlet	2" to 24" (DN50 – DN600)		End Connection	Flanged RF / RTJ per ASME B16.5 / Butt Weld
6	Valve Type / Model	Expanding Gate Valve Class 600 (Parallel Expanding, Pipeline)		Operation Mode	Two-piece gate mechanically expands against both seats at the fully open and closed positions for metal-to-metal tight shut-off -- gear or actuator operated for crude and products pipeline isolation
6A	Service / Application	Crude & Products Pipelines, Pipeline Isolation, Tank Farm, Terminals		Fluid State	Liquid / Gas / Steam (as applicable)
<b>7</b>	<b>DESIGN CONDITIONS</b>				
8	Design Pressure	ASME Class 600		Design Temp. Min / Max	-29°C to +425°C (standard) -- higher/lower on request
9	Operating Pressure	ASME Class 600		Operating Temp.	Ambient to +200°C (standard) -- project-specific on request
10	Set / Relief Pressure	N/A -- Product Datasheet		Back Pressure	N/A -- Product Datasheet
11	Fluid Handled / Service	Crude & Products Pipelines, Pipeline Isolation, Tank Farm, Terminals		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)
<b>13</b>	<b>VALVE OPERATION REQUIREMENT</b>				
14	Type of Valve Operator	Two-piece gate mechanically expands against both seats at the fully open and closed positions for metal-to-metal tight shut-off -- gear or actuator operated for crude and products pipeline isolation		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
<b>16</b>	<b>VALVE MATERIAL SPECIFICATION (EQUIVALENT OR SUPERIOR)</b>				
	Valve Part	Specified Material		Proposed Material (Supreme Valves India)	
	Body	As per project specification		ASTM A216 WCB / A105N	
	Bonnet / Cover	As per standard		As per standard / matching body grade	
	Trim (Disc / Seat)	As per standard		Two-piece expanding gate & segment, 13Cr / ENP coated / Solid metal, mechanically energized on closure	
	Stem / Spindle	As per standard		ASTM A182 F6a, non-rising	
	Gasket / Packing	As per standard		Spiral wound SS316 + graphite	
	Bolting / Nuts	As per standard		ASTM A193 B7 / A194 2H	
<b>17</b>	<b>TESTING, INSPECTION &amp; CERTIFICATION REQUIREMENTS</b>				
18	Hydrostatic Shell Test	Hydrostatic 15.3 MPa (2225 psi)		Seat / Pneumatic Test	Hydrostatic 11.2 MPa (1630 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)
<b>22</b>	<b>PAINTING, PRESERVATION &amp; PACKING</b>				
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			
<b>26</b>	<b>NOTES</b>				

1. This datasheet covers standard specifications for Expanding Gate Valve Class 600 (Parallel Expanding, Pipeline).
2. Design Standard: API 6D, ASME B16.34, API 598, NACE MR0175.
3. Application / Service: Crude & Products Pipelines, Pipeline Isolation, Tank Farm, Terminals.
4. Size Range: 2" to 24" (DN50 – DN600). Pressure Rating: ASME Class 600.
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: LF2 low-temp body, Inconel/13Cr overlay, sour-service NACE trim 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			
<b>PREPARED BY</b> Supreme Valves India -- Technical Department, Ahmedabad  _____ Signature / Date		<b>REVIEWED BY</b>  _____ Name / Signature / Date	<b>APPROVED BY</b>  _____ Name / Signature / Date