



SUPREME ENTERPRISE

Industrial Valves

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Doc. No.	SV-DATA-2026-API_6D_CLASS_900_TRUNNION_BALL_VALVE			Page	1 OF 1
Rev.	A			Date	13-Jun-2026
API 6D Class 900 Trunnion Mounted Ball Valve (Forged A105N, SIL 2, PED) -- Technical Datasheet					
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 6D, ASME B16.34, API 607, NACE MR0175			
1	GENERAL				
2	P&ID No. / Tag No.	N/A -- Product Datasheet	Piping Class	ASME Class 900 (up to 150 bar working)	
3	Valve Tag / Item No.	N/A -- Product Datasheet	Quantity Required	As required	
4	Design Standard	API 6D, ASME B16.34, API 607, NACE MR0175		Pressure Class / Rating	ASME Class 900 (up to 150 bar working)
5	Valve Size, Inlet x Outlet	2" to 30" (Full Bore)		End Connection	Flanged RF/RTJ per ASME B16.5 or Butt Weld per ASME B16.25
6	Valve Type / Model	API 6D Class 900 Trunnion Mounted Ball Valve (Forged A105N, SIL 2, PED)		Operation Mode	Trunnion-mounted full-bore ball with self-relieving seats -- scotch-yoke pneumatic, gear, or electric actuation; SIL 2 capable, PED Module H, API 607 fire-safe for high-pressure pipeline isolation
6A	Service / Application	Oil & Gas Pipelines, Gas Distribution, Petrochemical, Refineries		Fluid State	Liquid / Gas / Steam (as applicable)
7	DESIGN CONDITIONS				
8	Design Pressure	ASME Class 900 (up to 150 bar working)		Design Temp. Min / Max	-29°C to +425°C (standard) -- higher/lower on request
9	Operating Pressure	ASME Class 900 (up to 150 bar working)		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	Oil & Gas Pipelines, Gas Distribution, Petrochemical, Refineries		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	Trunnion-mounted full-bore ball with self-relieving seats -- scotch-yoke pneumatic, gear, or electric actuation; SIL 2 capable, PED Module H, API 607 fire-safe for high-pressure 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
16	VALVE MATERIAL SPECIFICATION (EQUIVALENT OR SUPERIOR)				
	Valve Part	Specified Material		Proposed Material (Supreme Valves India)	
	Body	As per project specification		ASTM A105N (Forged Carbon Steel) / A350 LF2 / A182 F316	
	Bonnet / Cover	As per standard		As per standard / matching body grade	
	Trim (Disc / Seat)	As per standard		ASTM A182 F6a (13Cr) / SS316 with hard chrome plating / ASTM A182 F6a / SS316 with Devlon / PEEK inserts	
	Stem / Spindle	As per standard		ASTM A182 F6a / SS316, blowout-proof	
	Gasket / Packing	As per standard		Viton AED (Anti-Explosive Decompression) / Graphoil	
	Bolting / Nuts	As per standard		ASTM A193 B7 / A194 2H	
	Actuation	As per standard		Scotch Yoke Pneumatic Actuator or Manual Gear Box	
17	TESTING, INSPECTION & CERTIFICATION REQUIREMENTS				
18	Hydrostatic Shell Test	Hydrostatic 23.0 MPa (3335 psi)		Seat / Pneumatic Test	Hydrostatic 16.8 MPa (2440 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 API 6D Class 900 Trunnion Mounted Ball Valve (Forged A105N, SIL 2, PED).
2. Design Standard: API 6D, ASME B16.34, API 607, NACE MR0175.
3. Application / Service: Oil & Gas Pipelines, Gas Distribution, Petrochemical, Refineries.
4. Size Range: 2" to 30" (Full Bore), Pressure Rating: ASME Class 900 (up to 150 bar working).
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: NACE MR0175 / ISO 15156 sour service; SIL 2 Capable; PED 2014/68/EU Module H certification.
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		
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Signature / Date	Name / Signature / Date	Name / Signature / Date