



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-NOZZLE_CHECK_VALVE_CLASS_300			Page	1 OF 1
Rev.	A			Date	13-Jun-2026
Silent Nozzle Check Valve Class 300 -- 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 594, ASME B16.34, ASME B16.10, API 598			
1	GENERAL				
2	P&ID No. / Tag No.	N/A -- Product Datasheet	Piping Class	Class 300	
3	Valve Tag / Item No.	N/A -- Product Datasheet	Quantity Required	As required	
4	Design Standard	API 594, ASME B16.34, ASME B16.10, API 598		Pressure Class / Rating	Class 300
5	Valve Size, Inlet x Outlet	2" to 24" (DN50–DN600)		End Connection	Wafer or Flanged RF, ASME B16.5
6	Valve Type / Model	Silent Nozzle Check Valve Class 300		Operation Mode	Spring-loaded axial disc closes ahead of flow reversal -- eliminates water hammer and slam noise on pump discharge manifolds
6A	Service / Application	Oil & Gas, Petrochemical, Water Treatment, Power Generation		Fluid State	Liquid / Gas / Steam (as applicable)
7	DESIGN CONDITIONS				
8	Design Pressure	Class 300		Design Temp. Min / Max	-29°C to +425°C (standard) -- higher/lower on request
9	Operating Pressure	Class 300		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, Petrochemical, Water Treatment, Power Generation		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	Spring-loaded axial disc closes ahead of flow reversal -- eliminates water hammer and slam noise on pump discharge manifolds		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 A216 WCB (Carbon Steel)	
	Bonnet / Cover	As per standard		As per standard / matching body grade	
	Trim (Disc / Seat)	As per standard		SS316 / A105 with Stellite overlay / Integral hardfaced or soft-seated PTFE	
	Stem / Spindle	As per standard		As per standard	
	Gasket / Packing	As per standard		Spiral wound SS316 + graphite	
	Bolting / Nuts	As per standard		A193 B7 / A194 2H	
	Spring	As per standard		SS316 / Inconel X-750	
17	TESTING, INSPECTION & CERTIFICATION REQUIREMENTS				
18	Hydrostatic Shell Test	Hydrostatic 7.7 MPa (1125 psi)		Seat / Pneumatic Test	Hydrostatic 5.6 MPa (815 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 Silent Nozzle Check Valve Class 300.
2. Design Standard: API 594, ASME B16.34, ASME B16.10, API 598.
3. Application / Service: Oil & Gas, Petrochemical, Water Treatment, Power Generation.
4. Size Range: 2" to 24" (DN50–DN600). Pressure Rating: Class 300.
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: A351 CF8M (SS316) body available 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 Supreme Valves India -- Technical Department, Ahmedabad _____ Signature / Date		REVIEWED BY _____ Name / Signature / Date	APPROVED BY _____ Name / Signature / Date