



# SUPREME ENTERPRISE

Industrial Valves

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Doc. No.	SV-DATA-2026-NAB_SWING_CHECK_VALVE_API_594_FOR_SEAWATER			Page	1 OF 1
Rev.	A			Date	13-Jun-2026
<b>NAB Swing Check Valve – API 594 for Seawater -- 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 594, BS 1868, ASME B16.34, API 598			
<b>1</b>	<b>GENERAL</b>				
2	P&ID No. / Tag No.	N/A -- Product Datasheet	Piping Class	Class 150 / 300 (PN16 / PN25)	
3	Valve Tag / Item No.	N/A -- Product Datasheet	Quantity Required	As required	
4	Design Standard	API 594, BS 1868, ASME B16.34, API 598	Pressure Class / Rating	Class 150 / 300 (PN16 / PN25)	
5	Valve Size, Inlet x Outlet	2" to 24" (DN50 – DN600)	End Connection	Flanged RF per ASME B16.5 / Wafer	
6	Valve Type / Model	NAB Swing Check Valve – API 594 for Seawater	Operation Mode	Bolted-cover swing disc in Nickel Aluminium Bronze prevents seawater backflow on pump discharge and firewater mains -- erosion-corrosion resistant for offshore and desalination duty	
6A	Service / Application	Seawater Pump Discharge, Desalination Plants, Offshore Firewater, Marine Cooling	Fluid State	Liquid / Gas / Steam (as applicable)	
<b>7</b>	<b>DESIGN CONDITIONS</b>				
8	Design Pressure	Class 150 / 300 (PN16 / PN25)	Design Temp. Min / Max	-29°C to +425°C (standard) -- higher/lower on request	
9	Operating Pressure	Class 150 / 300 (PN16 / PN25)	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	Seawater Pump Discharge, Desalination Plants, Offshore Firewater, Marine Cooling	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	Bolted-cover swing disc in Nickel Aluminium Bronze prevents seawater backflow on pump discharge and firewater mains -- erosion-corrosion resistant for offshore and desalination duty	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	Nickel Aluminium Bronze (NAB) -- C95800 / CuAl10Fe5Ni5 (ASTM B148 / BS EN 1982)		
	Bonnet / Cover	As per standard	As per standard / matching body grade		
	Trim (Disc / Seat)	As per standard	NAB C95800 / NAB / Stellite overlay		
	Stem / Spindle	As per standard	As per standard		
	Gasket / Packing	As per standard	Spiral wound SS316 + graphite		
	Bolting / Nuts	As per standard	Super Duplex / Monel K500		
	Hinge Pin	As per standard	SS316 / Monel		
<b>17</b>	<b>TESTING, INSPECTION &amp; CERTIFICATION REQUIREMENTS</b>				
18	Hydrostatic Shell Test	Hydrostatic 3.1 MPa (450 psi)	Seat / Pneumatic Test	Hydrostatic 2.2 MPa (320 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 NOTES</b>		
<p>1. This datasheet covers standard specifications for NAB Swing Check Valve -- API 594 for Seawater.</p> <p>2. Design Standard: API 594, BS 1868, ASME B16.34, API 598.</p> <p>3. Application / Service: Seawater Pump Discharge, Desalination Plants, Offshore Firewater, Marine Cooling.</p> <p>4. Size Range: 2" to 24" (DN50 – DN600). Pressure Rating: Class 150 / 300 (PN16 / PN25).</p> <p>5. All valves are manufactured new and unused by an ISO 9001 compliant foundry.</p> <p>6. Material Test Certificates (MTC) per EN 10204 3.1 provided as standard; EN 10204 3.2 available on request at additional cost.</p> <p>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.</p> <p>8. Face-to-face dimensions per ASME B16.10 / BS 2080 / manufacturer standard unless otherwise specified.</p> <p>9. Marking per MSS SP-25: Size, Pressure Class, Material, Heat Number, Tag Number, Serial Number, Flow Direction.</p> <p>10. Alternative / upgraded materials: Aluminium Bronze C95500 and Duplex SS trims available on request -- ideal for seawater &amp; desalination.</p> <p>11. Actuated valves (electric, pneumatic, hydraulic) supplied with ISO 5211 mounting pad and position indicator.</p> <p>12. Third-party inspection by TUV, SGS, Bureau Veritas, or Lloyds Register available on request at client cost.</p> <p>13. This datasheet is for general reference. Firm specifications to be confirmed upon receipt of confirmed Purchase Order with technical requirements.</p> <p>14. For specific project requirements, deviation forms, or material substitutions, please contact our engineering team.</p>		

<b>RH REVISION HISTORY</b>				
	<b>Rev.</b>	<b>Date</b>	<b>Description of Change</b>	<b>Prepared / Reviewed / Approved</b>
	A	13-Jun-2026	Initial issue -- Product datasheet generated from standard catalogue	Supreme Valves India -- Technical Department
<b>AP DOCUMENT APPROVAL</b>				
	<b>PREPARED BY</b> Supreme Valves India -- Technical Department, Ahmedabad		<b>REVIEWED BY</b>	<b>APPROVED BY</b>
	_____		_____	_____
	Signature / Date		Name / Signature / Date	Name / Signature / Date