



SUPREME ENTERPRISE

Industrial Valves

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| Doc. No. | SV-DATA-2026-NAB_GATE_VALVE_API_600_FOR_SEAWATER | | | Page | 1 OF 1 |
|---|--|--|-----------------------|---|--|
| Rev. | A | | | Date | 13-Jun-2026 |
| NAB Gate Valve – API 600 for Seawater -- 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 600, ASME B16.34, ASME B16.10, API 598 | | | |
| 1 | GENERAL | | | | |
| 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 600, ASME B16.34, ASME B16.10, 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 |
| 6 | Valve Type / Model | NAB Gate Valve – API 600 for Seawater | | Operation Mode | OS&Y rising stem wedge gate in Nickel Aluminium Bronze -- handwheel or gear operated isolation for seawater, brine, and offshore cooling-water mains |
| 6A | Service / Application | Seawater Cooling, Desalination Plants, Offshore Platforms, Ballast & Firewater | | Fluid State | Liquid / Gas / Steam (as applicable) |
| 7 | DESIGN CONDITIONS | | | | |
| 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 Cooling, Desalination Plants, Offshore Platforms, Ballast & Firewater | | 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 | OS&Y rising stem wedge gate in Nickel Aluminium Bronze -- handwheel or gear operated isolation for seawater, brine, and offshore cooling-water mains | | 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 | | 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, solid or flexible / NAB / Stellite overlay | |
| | Stem / Spindle | As per standard | | NAB / SS316 / Monel | |
| | Gasket / Packing | As per standard | | Spiral wound SS316 + graphite | |
| | Bolting / Nuts | As per standard | | Super Duplex / Monel K500 | |
| 17 | TESTING, INSPECTION & CERTIFICATION REQUIREMENTS | | | | |
| 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) |
| 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 NAB Gate Valve – API 600 for Seawater.
2. Design Standard: API 600, ASME B16.34, ASME B16.10, API 598.
3. Application / Service: Seawater Cooling, Desalination Plants, Offshore Platforms, Ballast & Firewater.
4. Size Range: 2" to 24" (DN50 – DN600). Pressure Rating: Class 150 / 300 (PN16 / PN25).
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: Aluminium Bronze C95500 and Duplex SS trims available on request -- ideal for seawater & desalination.
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 |