



# SUPREME ENTERPRISE

Industrial Valves

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Doc. No.	SV-DATA-2026-FORGED_STEEL_CHECK_VALVE_API_602_CLASS_800			Page	1 OF 1
Rev.	A			Date	13-Jun-2026
<b>Forged Steel Check Valve API 602 Class 800 -- 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 602, ASME B16.34, BS 5352, API 598			
<b>1</b>	<b>GENERAL</b>				
2	P&ID No. / Tag No.	N/A -- Product Datasheet	Piping Class	ASME Class 800	
3	Valve Tag / Item No.	N/A -- Product Datasheet	Quantity Required	As required	
4	Design Standard	API 602, ASME B16.34, BS 5352, API 598	Pressure Class / Rating	ASME Class 800	
5	Valve Size, Inlet x Outlet	1/2" to 2" (DN15 -- DN50)	End Connection	Socket Weld / NPT Threaded / Butt Weld per API 602	
6	Valve Type / Model	Forged Steel Check Valve API 602 Class 800	Operation Mode	Compact forged piston or swing check prevents reverse flow on high-pressure manifold, instrument, and small-bore process lines -- bolted-cap, renewable seat	
6A	Service / Application	High Pressure Manifold, Instrument Isolation, Oil & Gas, Steam & Condensate	Fluid State	Liquid / Gas / Steam (as applicable)	
<b>7</b>	<b>DESIGN CONDITIONS</b>				
8	Design Pressure	ASME Class 800	Design Temp. Min / Max	-29°C to +425°C (standard) -- higher/lower on request	
9	Operating Pressure	ASME Class 800	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	High Pressure Manifold, Instrument Isolation, Oil & Gas, Steam & Condensate	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	Compact forged piston or swing check prevents reverse flow on high-pressure manifold, instrument, and small-bore process lines -- bolted-cap, renewable seat	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 A105N (Forged Carbon Steel)		
	Bonnet / Cover	As per standard	As per standard / matching body grade		
	Trim (Disc / Seat)	As per standard	SS316 / 13Cr (F6a) + Stellite hardfacing / Integral 13Cr / Stellite hardfaced		
	Stem / Spindle	As per standard	As per standard		
	Gasket / Packing	As per standard	Spiral wound SS316 + graphite		
	Bolting / Nuts	As per standard	ASTM A193 B7 / A194 2H		
	Spring (piston type)	As per standard	SS316 / Inconel X-750		
<b>17</b>	<b>TESTING, INSPECTION &amp; CERTIFICATION REQUIREMENTS</b>				
18	Hydrostatic Shell Test	Hydrostatic 20.4 MPa (2965 psi)	Seat / Pneumatic Test	Hydrostatic 15.0 MPa (2175 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	<b>Packing Requirement</b>	Wooden cases / pallets with VCI protection -- sea-worthy packing for export on request
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26	<b>NOTES</b>
<ol style="list-style-type: none"> <li>1. This datasheet covers standard specifications for Forged Steel Check Valve API 602 Class 800.</li> <li>2. Design Standard: API 602, ASME B16.34, BS 5352, API 598.</li> <li>3. Application / Service: High Pressure Manifold, Instrument Isolation, Oil &amp; Gas, Steam &amp; Condensate.</li> <li>4. Size Range: 1/2" to 2" (DN15 – DN50). Pressure Rating: ASME Class 800.</li> <li>5. All valves are manufactured new and unused by an ISO 9001 compliant foundry.</li> <li>6. Material Test Certificates (MTC) per EN 10204 3.1 provided as standard; EN 10204 3.2 available on request at additional cost.</li> <li>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.</li> <li>8. Face-to-face dimensions per ASME B16.10 / BS 2080 / manufacturer standard unless otherwise specified.</li> <li>9. Marking per MSS SP-25: Size, Pressure Class, Material, Heat Number, Tag Number, Serial Number, Flow Direction.</li> <li>10. Alternative / upgraded materials: A182 F316, A350 LF2 (low temp) trims; swing or piston pattern on request.</li> <li>11. Actuated valves (electric, pneumatic, hydraulic) supplied with ISO 5211 mounting pad and position indicator.</li> <li>12. Third-party inspection by TUV, SGS, Bureau Veritas, or Lloyds Register available on request at client cost.</li> <li>13. This datasheet is for general reference. Firm specifications to be confirmed upon receipt of confirmed Purchase Order with technical requirements.</li> <li>14. For specific project requirements, deviation forms, or material substitutions, please contact our engineering team.</li> </ol>	

<b>RH</b>	<b>REVISION HISTORY</b>		
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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

<b>AP</b>	<b>DOCUMENT APPROVAL</b>		
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<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
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