



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 24AFAFSS5839J1ZQ • IEC AFAFSS5839J • info@supremevalves.in | www.supremevalves.in • +91 97732 78770

Doc. No.	SV-DATA-2026-PISTON_CHECK_VALVE_WCB_CLASS_600			Piston Check Valve WCB Class 600 -- Technical Datasheet	Page	1 OF 1
Rev.	A				Date	13-Jun-2026
R	REFERENCES & RELATED DOCUMENTS					
R1	P&ID / Process Diagram	N/A -- Product Datasheet	Piping Material Spec.	N/A -- Product Datasheet		
R2	Project Standard / Spec.	BS 1868, ASME B16.34, API 598				
1	GENERAL					
2	P&ID No. / Tag No.	N/A -- Product Datasheet	Piping Class	Class 600		
3	Valve Tag / Item No.	N/A -- Product Datasheet	Quantity Required	As required		
4	Design Standard	BS 1868, ASME B16.34, API 598		Pressure Class / Rating	Class 600	
5	Valve Size, Inlet x Outlet	1/2" to 12" (DN15–DN300)		End Connection	Flanged RF, ASME B16.5 / Socket Weld / Butt Weld	
6	Valve Type / Model	Piston Check Valve WCB Class 600		Operation Mode	Self-acting piston lift with Stellite-overlaid metal seat for steam & hydrocarbon service	
6A	Service / Application	Oil & Gas, Petrochemical, Water Treatment, Power Generation		Fluid State	Liquid / Gas / Steam (as applicable)	
7	DESIGN CONDITIONS					
8	Design Pressure	Class 600		Design Temp. Min / Max	-10°C to +550°C (HT steam) -- per project	
9	Operating Pressure	Class 600		Operating Temp.	Saturated / superheated steam -- project-specific	
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	Self-acting piston lift with Stellite-overlaid metal seat for steam & hydrocarbon service		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		A216 WCB + 13Cr overlay, or CF8 / CF8M solid / Stellite 6 hardfaced or integral / soft (PTFE, Viton)		
	Stem / Spindle	As per standard		ASTM A182 F6a, F304, or F316		
	Gasket / Packing	As per standard		Spiral wound SS316 + graphite or RTJ ring		
	Bolting / Nuts	As per standard		A193 B7 / A194 2H (SS316 on request)		
17	TESTING, INSPECTION & CERTIFICATION REQUIREMENTS					
18	Hydrostatic Shell Test	Hydrostatic 15.3 MPa (2225 psi)		Seat / Pneumatic Test	Hydrostatic 11.2 MPa (1630 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 Piston Check Valve WCB Class 600.

2. Design Standard: BS 1868, ASME B16.34, API 598.
3. Application / Service: Oil & Gas, Petrochemical, Water Treatment, Power Generation.
4. Size Range: 1/2" to 12" (DN15–DN300). Pressure Rating: Class 600.
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: A217 WC6 / WC9 for high-temperature steam service 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