



SUPREME ENTERPRISE

Industrial Valves

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Doc. No.	SV-DATA-2026-NEEDLE_VALVE	Needle Valve -- Technical Datasheet	Page	1 OF 1
Rev.	A		Date	24-May-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.	ASME B16.34, API 602		
1	GENERAL			
2	P&ID No. / Tag No.	N/A -- Product Datasheet	Piping Class	PN160-PN420 / Class 600-2500
3	Valve Tag / Item No.	N/A -- Product Datasheet	Quantity Required	As required
4	Design Standard	ASME B16.34, API 602	Pressure Class / Rating	PN160-PN420 / Class 600-2500
5	Valve Size, Inlet x Outlet	6mm to 25mm	End Connection	Flanged (FF/RF/RTJ) / Screwed (BSP/NPT) / Socket Weld / Butt Weld -- as per specification
6	Valve Type / Model	Needle Valve	Operation Mode	Manual (Handwheel / Lever) -- Electric / Pneumatic / Hydraulic actuator available on request
6A	Service / Application	Instrumentation, Sampling, Gauge Isolation	Fluid State	Liquid / Gas / Steam (as applicable)
7	DESIGN CONDITIONS			
8	Design Pressure (barg)	PN160-PN420 / Class 600-2500	Design Temp. Min / Max (deg C)	-29 deg C to +425 deg C (standard) -- Higher/lower on request
9	Operating Pressure (barg)	PN160-PN420 / Class 600-2500	Operating Temp. (deg C)	Ambient to +200 deg C (standard) -- Project-specific on request
10	Set Pressure / Relief Pressure (barg)	N/A -- Product Datasheet	Back Pressure (barg)	N/A -- Product Datasheet
11	Fluid Handled / Service	Instrumentation, Sampling, Gauge Isolation	Corrosion Allowance (mm)	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	Manual (Handwheel / Lever / Gear) -- Actuated options available	Actuator Specification No.	ISO 5211 mounting pad (for actuated valves) -- Electric / Pneumatic / Hydraulic actuator 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	SS316 / SS304 / Brass / Monel	SS316 / SS304 / Brass / Monel
Bonnet / Cover	As per standard	As per standard
Trim (Disc / Seat)	As per standard	SS410 / SS316 / Bronze (as applicable)
Stem / Spindle	As per standard	SS410 / SS304 / SS316
Gasket / Packing	As per standard	Graphite / PTFE / CI Ring (as applicable)
Bolting / Nuts	As per standard	Carbon Steel / Alloy Steel (as applicable)

17 TESTING, INSPECTION & CERTIFICATION REQUIREMENTS

18 Hydrostatic Test	Shell 1.5x WP	Seat / Pneumatic Test	Seat 1.1x WP
19 NDT Requirements	100% MPI / DPT on machined surfaces (if specified by project) -- 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 as per client specification) -- Special coatings (epoxy, PTFE, rubber lining) available 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 Needle Valve.
2. Design Standard: ASME B16.34, API 602.
3. Application: Instrumentation, Sampling, Gauge Isolation.
4. Size Range: 6mm to 25mm. Pressure Rating: PN160-PN420 / Class 600-2500.
5. All valves are manufactured new and unused by ISO 9001 certified 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 1.5 x rated pressure, Seat test at 1.1 x 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. Special materials (Duplex, Super Duplex, Inconel, Monel, Hastelloy, Titanium) available on request with extended delivery.
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	24-May-2026	Initial issue -- Product datasheet generated from standard catalogue	Supreme Valves India -- Technical Department

AP DOCUMENT APPROVAL

PREPARED BY	REVIEWED BY	APPROVED BY
Supreme Valves India Technical Department Ahmedabad, India _____ Signature / Date	_____ Name / Signature / Date	_____ Name / Signature / Date





Gate Valve



Diaphragm Valve



Globe Valve



Check Valve



Needle Valve



Plug Valve



Butterfly Valve



Piston Valve



Relief Valve



Ball Valve