

Axial No-slam check valve NSC and NSZ series

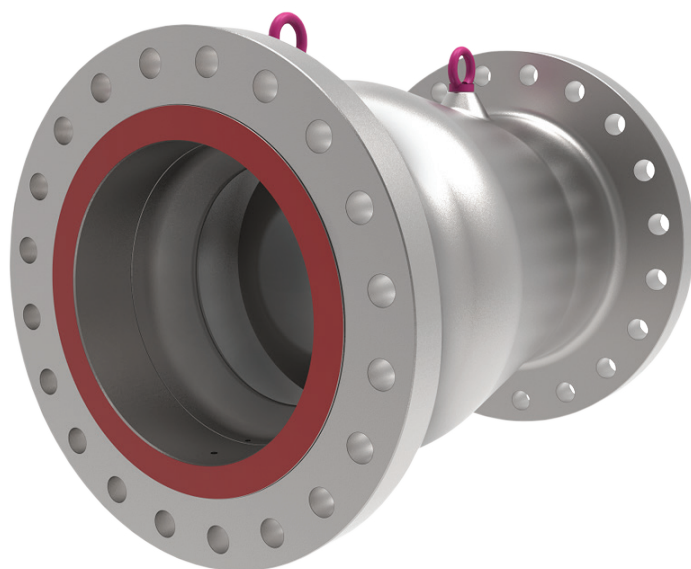
NPS 2–56 (DN 50–1400), ASME Classes 150–2500
NPS 1³/₁₆–21¹/₄ (DN 46–540), API Classes 5000–15000

No-slam check valves are silent in-line and specifically designed to automatically protect critical components from reverse flow as well as pressure transients.

Fast and prompt closing is assured due to the powerful spring and short valve stroke. As forward velocity begins to slow, the spring assist starts to close the disc. By the time it reaches zero, the valve disc is closed against the seat

before reverse flow can occur, preventing a peak of pressure in the line and water hammer phenomena.

In addition, Velan ABV offers a compact version of the No-slam check valve, providing the same reliability and quality of the traditional No-slam valves, but with significant space and weight savings. Material selection is fully customizable to meet customers project specifications.



Design features

- Metal-seated with hardfacing on disk and seat.
- Powerful spring for ultra-fast closing action.
- Venturi pattern design.
- Minor friction between moving parts to eliminate any chance of jamming.
- Spring assisted and short stroke.
- No chattering effect to minimize pressure fluctuation during normal conditions.
- Low pressure drop.
- High dynamic response and zero reverse flow.
- Nozzle design for valves over NPS 20 for better flow regulation.
- Short pattern design with compact face-to-face option for weight and space savings.

Specifications

Valve design	As per API 6D or API 6A and customer requirements
Body design	API 6D: Cast one-piece or bolted two-piece for size over NPS 20 API 6A: Forged bolted two-piece
Temperature range	-150 to 662°F (-101 to 350°C)
Face-to-face	As per API 6D or API 6A standards Short pattern design as per Velan standard
End connections	RF, RTJ as per B16.5 & B16.47 BW, Butt weld as per B16.25 Hub connection 6B, 6BX as per API6A

Operator

- Automatic

Testing & certification

- Compliance with inspection and testing: API 6D, ISO 5208, and API 598 or API 6A.
- Fire safe and fire tested as per API 6FA/607.
- PED 2014/68/UE.
- Available as per API 6A standard:
Product specification levels PSL 1, 2, 3, 3G, and 4.
Performance requirement levels PR1, PR2.
Design validation as per PR2F.