

Cage Ball Control Valve model LOWCAV / LOWNOISE

LOWCAV and LOWNOISE X-TRIM Cage valves are engineered for those services where is required pressure and flow rate control with reduced cavitation and noise issues.



GENERAL CONSTRUCTION

Cage Valves model LOWCAV and LOWNOISE are mainly suitable for liquid, steam and gas applications in standard and severe services (with low/cryogenic and high temperature). **A dedicated designed X-TRIM is optimized for cavitation control (LOWCAV) and noise reduction (LOWNOISE) with very high rangeability and high FL values in throttling service. X-TRIM design for extreme applications!**

APPROVALS

Safety Integrity Level	SIL 3
Fire Safe	API 607, API 6FA, BS 6755, ISO 10497-5
Area Classification	ATEX 94/9/EC
Pressure Equipment Directive	PED 97/23/EC
Fugitive Emission Construction	ISO 15848/1 API 6D

APPLICATIONS

CORROSIVE & DIRTY

LOW TEMPERATURE

HIGH PRESSURE

HIGH TEMPERATURE

STANDARD FEATURES

Construction Trim	Three/two pieces bolted body with plates or pin Cage X-trim optimized from cavitation control (LOWCAV) or noise reduction (LOWNOISE)
Stem retention	Anti blow-out stem
Leakage rate	ISO 5208 (for shutoff) and FCI 70-2 / IEC 60534-4
Antistatic device	Included, the ball valve design includes an electric conductive connection between the internal parts of the ball valve and the body, providing the anti-static function.
Pressure relief	Automatic cavity relief to prevent overpressure in body cavity (self-relieving seats)
Sealing	Regulation: Unidirectional Shut-off: Bi-directional, Double block & bleed (DBB) with sealing in both directions (DIB-1&2 upon request). Metal seated with Tungsten or Chrome Carbide coatings
Drain	Drilled and threaded connections for all sizes
Vent	Drilled and threaded vent connections for sizes \geq DN150 (6") < DN150 upon request
Stem grease injectors	On request
Seat grease injectors	Not foreseen on this model
Lifting points	Included for sizes \geq DN150 (6") or on valves of 250 kg min
Support feet	Included for sizes \geq DN150 (6") or on valves of 250 kg min
Stem extension	On request
Valve operation	Gear box with positioning indicator or self-adjusting closed ring control system with actuator and positioner
Material testing	Pressure containing & controlling parts to EN 10204 3.1 Materials in Sour Service according to NACE MR0175, MR0103, ISO 15156 Non-destructive testing (NDT) to API 6D, ASME B16.34
Valve testing	Hydrostatic & pneumatic testing to API 6D/ISO 5208 and FCI 70-2 / IEC 60534-4 (other upon request)

TECHNICAL DATA

Design	API 6D, API 6DSS, API 6A, ASME B16.34, ISO 14313, ISO 10423, ISO 17292
Design pressure	ASME B16.34, EN 1092-1, ISO 17292
Body wall thickness	ASME B16.34, ASME VIII Div. I, ISO 17292
Face to Face	API 6D, ASME B16.10 Long pattern
Temperature range	-196° to > 700°C (-320° to > 1292°F)
Pressures range	PN20 (ANSI 150) to PN420 (ANSI 600)
Standard Size range	DN50 (2") to DN600 (24") other on request
End connections	ASME B16.5 \leq DN600 (24") Flanged RF,FF,RTJ MSS-SP-44 = DN550 (22") Flanged RF,FF,RTJ ASME B16.25 Butt-Weld BW Hub&Clamp

MATERIALS OF CONSTRUCTIONS

Low Temperature and Low Alloy Carbon Steel
Stainless steel, Duplex and Super Duplex
Nickel alloy & Titanium