

Flanged Floating Ball Valve: API 6D / ISO 17292

In a floating ball valve the ball is not fixed: in the closed position, line pressure pushes the ball against the downstream seat to create the seal. Its simple design, small number of parts and economical construction make it the usual isolation valve on small and mid-size process lines.

Technical specifications

Size	½"–10" (DN15–DN250)
Pressure class	ASME Class 150, 300, 600; higher classes in small sizes with forged bodies
End connections	RF / RTJ flanged (ASME B16.5), butt-weld, socket-weld, threaded
Body	Two-piece or three-piece; full bore or reduced bore
Seats	PTFE, RPTFE, PEEK, nylon
Materials	WCB, LCC, CF8M, CF3M; A105N, LF2, F316 (forged)
Operation	Lockable lever, gear operator, pneumatic or electric actuator on ISO 5211 mounting pad
Testing	API 598 / EN 12266-1; API 607 fire-test certificate for fire-safe designs



Key features

- Fire-safe design (API 607 / ISO 10497)
- Antistatic ball-to-stem-to-body continuity
- Anti-blowout stem
- Lockable lever and ISO 5211 actuator mounting pad
- Extended stem and NACE MR0175 compliant materials on request

Typical part materials

Part	Carbon steel	Low temperature	Stainless steel
Body, end cap	A216 WCB	A352 LCB / LCC	A351 CF8, CF8M, CF3, CF3M
Ball	SS304; SS316 or ENP-plated A105 on request	SS304	SS304, SS316, SS304L, SS316L
Stem	A182 F6a	A182 F304	A182 F304, F316, F304L, F316L
Seat	PTFE, RPTFE, PEEK, nylon-based	PTFE, RPTFE, PEEK	PTFE, RPTFE, PEEK, nylon-based
Stud bolts / nuts	A193 B7 / A194 2H	A320 L7 / A194 7	A193 B8, B8M / A194 8, 8M

Gaskets are SS304/SS316 with graphite or PTFE, O-rings are FKM and packing is flexible graphite / PTFE. A lockable lever is standard; actuators can be mounted on the ISO 5211 mounting pad.