

CB54 – CB55 Ball Control Valves

Control Ball Valves of CB series provide an excellent tightness, typical of on-off ball valves with a high rangeability. CB series valves match together the ability to transfer large flows with a **precise regulating action at small flows**. In this way it is possible to reach rangeability of 200:1 and with particular trims until 300:1. Furthermore the special trim design of CB series provides **noise and cavitation abatement**.



CB series are available in **two configurations**:

1. CB 54 has a downstream drilled disc especially engineered to reduce aerodynamic noise
2. CB 55 special multi-path / multi-stage trim allows an excellent flow control, and it is especially designed to reduce both noise and cavitation effects.

Technical characteristics:

Body:

- Side entry flanged and butt-welded design
- Size: from 2" to 42"
- Rating: from #150 to #2500
- Face to face dimensions API 6D
- Materials: carbon and stainless steel, duplex, nickel alloys

Ball:

- CB 55 series with integral trim up to 4"
- With **removable trim** for 6" and over
- Soft / metal to metal seat
- Flow direction:
 - unidirectional: CB 54
 - bidirectional: CB 55
- Materials: same as body

Shaft:

- Anti blow-out design
- Quick changing shaft packing
- Materials: stainless steel, A564 T630, A479 XM19
- Packing: teflon or graphite ring

Bearings:

- Radial bearings: generous sizing of these bearings allows a **smooth rotation** and a **maintenance-free** long life
- Axial bearings: thrust due to internal pressure is held from an antifriction washer

Seat:

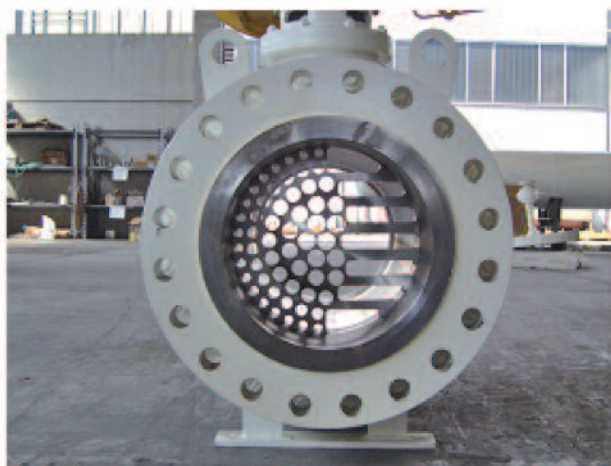
- **Spring energized, double-effect piston** construction on request
- Soft / metal to metal seat

Actuators:

- Pneumatic **low friction** skotch-yoke **PRA** type
- **DRA** pneumatic diaphragm type
- Electric, hydraulic, electro-hydraulic

Leakage Class:

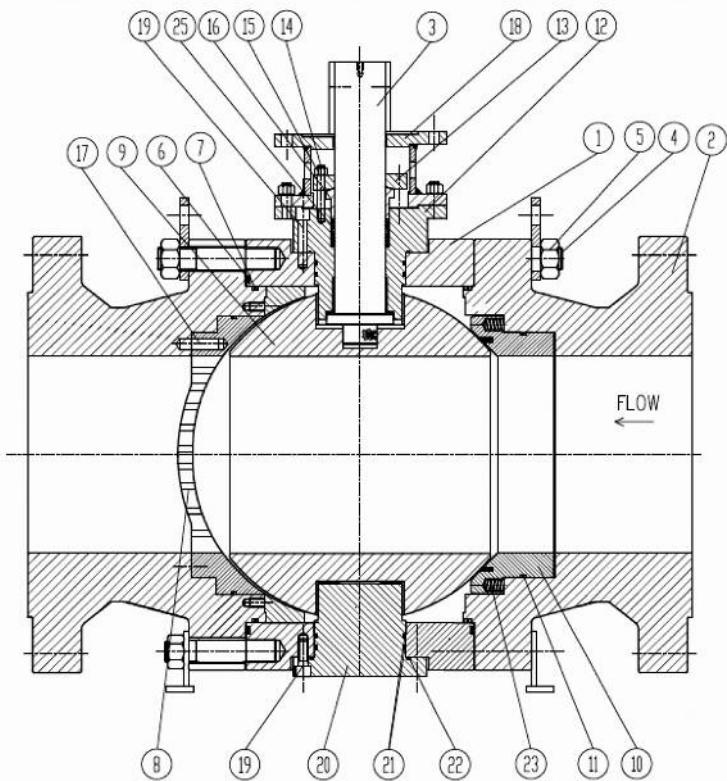
- Classes **IV, IV S1** and **V** according to IEC 60534-4, Class **VI** is also available with **soft-seat**



CB54 drilled disc view

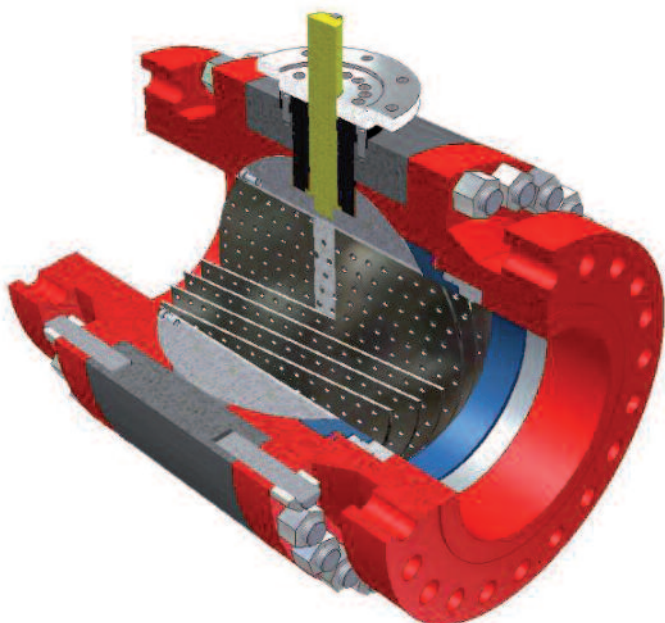


CB54 gas plant installation

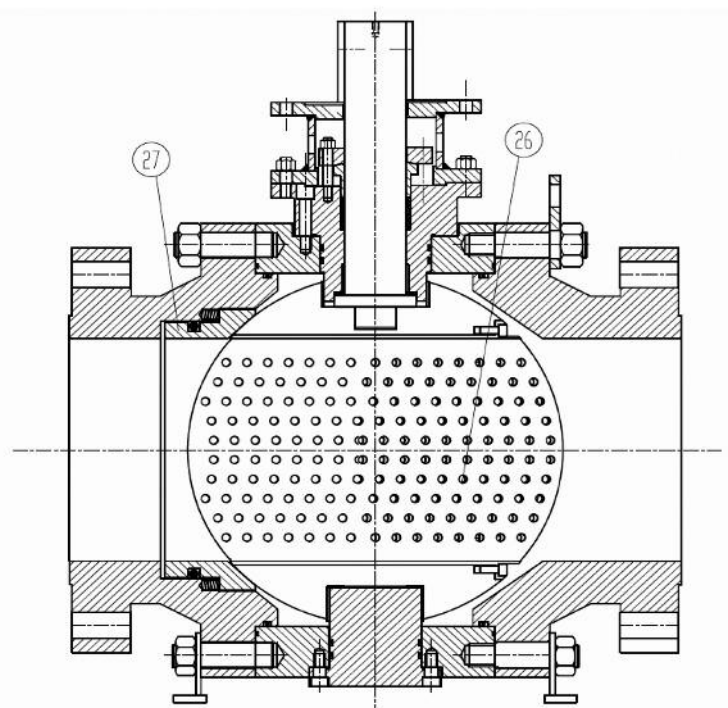


CB54

ITEM	PART NAME
1	BODY
2	CLOSURE
3	STEM
4	STUD
5	NUT
6	OR BODY GASKET
7	GRAPHITE BODY GASKET
8	DRILLED DISC
9	BALL
10	SEAT RING
11	SEAT OR
12	UPPER TRUNNION
13	PACKING FLANGE
14	PACKING STUD
15	PACKING NUT
16	PACKING FOLLOWER
17	PIN
18	ISO FLANGE
19	TRUNNION BOLTS
20	LOWER TRUNNION
21	TRUNNION OR
22	TRUNNION GRAPHITE GASKET
23	SEAT SPRING
25	PACKING BOX
26	MULTI-PATH MULTI-STAGE TRIM (only CB55)
27	SEAT RING (DPE for CB55)



CB55 sectional view



CB55