



BELVEN

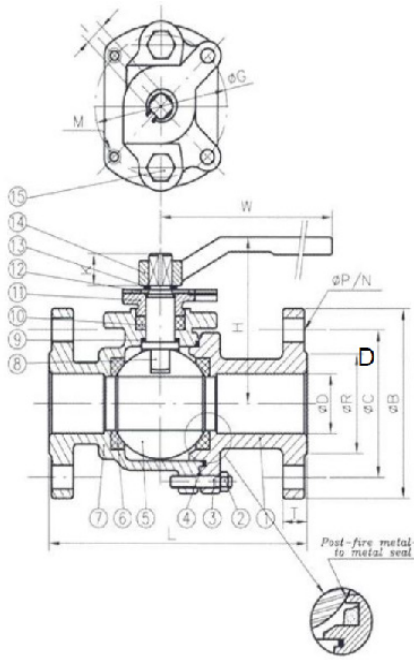
2-PIECE CARBON STEEL BALL VALVE

FIG.CBV-235FLM

CLASS 150 2-PIECE CARBON STEEL FULL PORT BALL VALVE FLANGED ISO 5211 MOUNTING PAD API 607 FIRE-SAFE DESIGNED

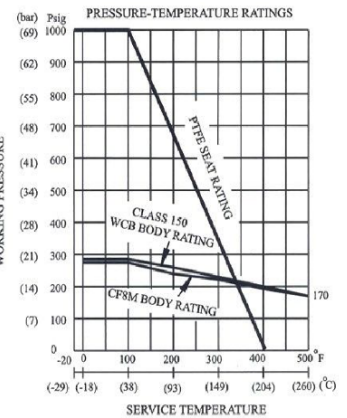
Features:

- Split body design with flanged ends for fast installation, in-line maintenance and rebuilding. Solid ball construction provides structural integrity and minimizes flow turbulence.
- Body join is designed to prevent excessive compression of valve internals, resulting in consistent and low operating torque.
- Mounting pad complied with ISO 5211 for ease and interchangeability of actuation
- Bottom-loaded blow-out proof stem.
- Investment cast body & cap on sizes 1/2" to 4". Sand cast body & cap on sizes 5" to 10".
- Basic design complied with ASME/ANSI B16.34
- Flanged ends complied with ASME/ANSI B16.5
- Face-to-face dimensions complied with ASME/ANSI B16.10
- Graphite gasket & stem packing prevent post-fire external leakage.
- Post-fire metal-to-metal seal prevents internal leakage after fire. Tested according to API 598 & ANSI B 16.34



Materials:

| No. | Part Name | Specification |
|-----|-----------------|-----------------------|
| 1 | End Cap | ASTM A216-WCB |
| 2 | Nut | CARBON STEEL / GR. 2H |
| 3 | Body Joint Bolt | CARBON STEEL / GR. B7 |
| 4 | Gasket | GRAPHITE |
| 5 | Ball | ASTM A351-CF8 / 304 |
| 6 | Seat | PTFE |
| 7 | Body | ASTM A216-WCB |
| 8 | Stem | ASTM A276-304 |
| 9 | Thrust Washer | PTFE |
| 10 | Stem Packing | GRAPHITE |
| 11 | Gland | ASTM A351-CF8 |
| 12 | Handle Stopper | AISI 304 |
| 13 | Snap Ring | AISI 420 |
| 14 | Handle | FCD 45 |
| 15 | Gland Bolt | AISI 304 |



OPTIONS:

- F: FIRE-SAFE DESIGN.
- G: EQUIPPED WITH GEAR OPERATOR.
- P: EQUIPPED WITH PNEUMATIC ACTUATOR
- V: VENTED BALL
- A: ANTI-STATIC DEVICE

Dimension of Mounting Pad:

| Size | in | | mm | | in | | mm | | K | | ØG | | M |
|-------|-----|------|----|------|------|------|-----|-----|----|----|----|----|---|
| | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | |
| 1/2 | 15 | 0.39 | 10 | 0.69 | 17.5 | 1.65 | 42 | M5 | | | | | |
| 3/4 | 20 | 0.39 | 10 | 0.69 | 17.5 | 1.65 | 42 | M5 | | | | | |
| 1 | 25 | 0.47 | 12 | 0.86 | 22 | 1.97 | 50 | M6 | | | | | |
| 1 1/2 | 40 | 0.67 | 17 | 1.1 | 28 | 2.75 | 70 | M8 | | | | | |
| 2 | 50 | 0.67 | 17 | 1.1 | 28 | 2.75 | 70 | M8 | | | | | |
| 2 1/2 | 65 | 0.86 | 22 | 1.22 | 31 | 4.01 | 102 | M10 | | | | | |
| 3 | 80 | 0.86 | 22 | 1.22 | 31 | 4.01 | 102 | M10 | | | | | |
| 4 | 100 | 0.94 | 24 | 1.3 | 33 | 4.01 | 102 | M10 | | | | | |
| 5 | 125 | 1.06 | 27 | 1.3 | 33 | 4.92 | 125 | M12 | | | | | |
| 6 | 150 | 1.06 | 27 | 1.46 | 37 | 4.92 | 125 | M12 | | | | | |
| 8 | 200 | 1.38 | 35 | 1.57 | 40 | 5.51 | 140 | M16 | | | | | |
| 10 | 250 | 1.38 | 35 | 1.57 | 40 | 5.51 | 140 | M16 | | | | | |

Dimension:

| Size | | Ø D | | L | | T | | ØR | | ØC | | ØB | | ØP | | H | | W | | |
|-------|-----|------|------|------|-----|------|-------|-------|-------|-------|-------|------|-------|------|-------|----|-------|-----|-------|------|
| in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | N | in | mm | in | mm | | |
| 1/2 | 15 | 0.59 | 15 | 4.25 | 108 | 0.44 | 11.18 | 1.38 | 35.1 | 2.38 | 60.5 | 3.5 | 88.9 | 0.62 | 15.75 | 4 | 3.15 | 80 | 5.12 | 130 |
| 3/4 | 20 | 0.79 | 20 | 4.62 | 117 | 0.44 | 11.18 | 1.69 | 42.9 | 2.75 | 69.5 | 3.88 | 98.6 | 0.62 | 15.75 | 4 | 3.27 | 83 | 5.12 | 130 |
| 1 | 25 | 1 | 25.4 | 5 | 127 | 0.44 | 11.18 | 2 | 50.8 | 3.12 | 79.2 | 4.25 | 108 | 0.62 | 15.75 | 4 | 3.82 | 97 | 6.3 | 160 |
| 1 1/2 | 40 | 1.57 | 40 | 6.5 | 165 | 0.56 | 14.22 | 2.88 | 73.2 | 3.88 | 98.6 | 5 | 127 | 0.62 | 15.75 | 4 | 4.37 | 111 | 9.06 | 230 |
| 2 | 50 | 1.97 | 50 | 7 | 178 | 0.62 | 15.75 | 3.62 | 91.9 | 4.75 | 120.7 | 6 | 152.4 | 0.75 | 19.05 | 4 | 4.65 | 118 | 9.06 | 230 |
| 2 1/2 | 65 | 2.56 | 65 | 7.5 | 191 | 0.69 | 17.53 | 4.12 | 104.6 | 5.5 | 139.7 | 7 | 177.8 | 0.75 | 19.05 | 4 | 5.67 | 144 | 15.75 | 400 |
| 3 | 80 | 3.15 | 80 | 8 | 203 | 0.75 | 19.05 | 5 | 127 | 6 | 152.4 | 7.5 | 190.5 | 0.75 | 19.05 | 4 | 6.06 | 154 | 15.75 | 400 |
| 4 | 100 | 3.94 | 100 | 9 | 229 | 0.94 | 23.88 | 6.19 | 157.2 | 7.5 | 190.5 | 9 | 228.6 | 0.75 | 19.05 | 8 | 6.85 | 174 | 18.11 | 460 |
| 5 | 125 | 4.92 | 125 | 14 | 356 | 0.94 | 23.88 | 7.31 | 185.7 | 8.5 | 215.9 | 10 | 254 | 0.88 | 22.35 | 8 | 8.66 | 220 | 21.65 | 550 |
| 6 | 150 | 5.91 | 150 | 15.5 | 394 | 1 | 25.4 | 8.5 | 215.9 | 9.5 | 241.3 | 11 | 279.4 | 0.88 | 22.35 | 8 | 9.45 | 240 | 21.65 | 550 |
| 8 | 200 | 7.87 | 200 | 18 | 457 | 1.12 | 28.45 | 10.62 | 269.7 | 11.75 | 298.5 | 13.5 | 342.9 | 0.88 | 22.35 | 8 | 11.81 | 300 | 39.37 | 1000 |
| 10 | 250 | 9.84 | 250 | 21 | 533 | 1.19 | 30.23 | 12.75 | 323.9 | 14.25 | 362 | 16 | 406.4 | 1 | 25.4 | 12 | 13.98 | 355 | 39.37 | 1000 |