



DIRECT MOUNT 3-PC METAL SEAT BALL VALVE

Model : Series MS 35 (Formerly FSB-35_Metal)

- **Body Material**

ASTM CF8M, DIN 1.4408
ASTM A216-WCB, DIN 1.0619

- **Size Range**

1/2" - 4" (DN15-DN100)

- **Pressure Rating**

2000 PSI, Class 600, DIN PN130

- **End Connection**

Female pipe Threaded to NPT, Rp, Rc, G..
Socketweld

- **Temperature Range**

-4°F to 840°F (-20°C to 450°C)

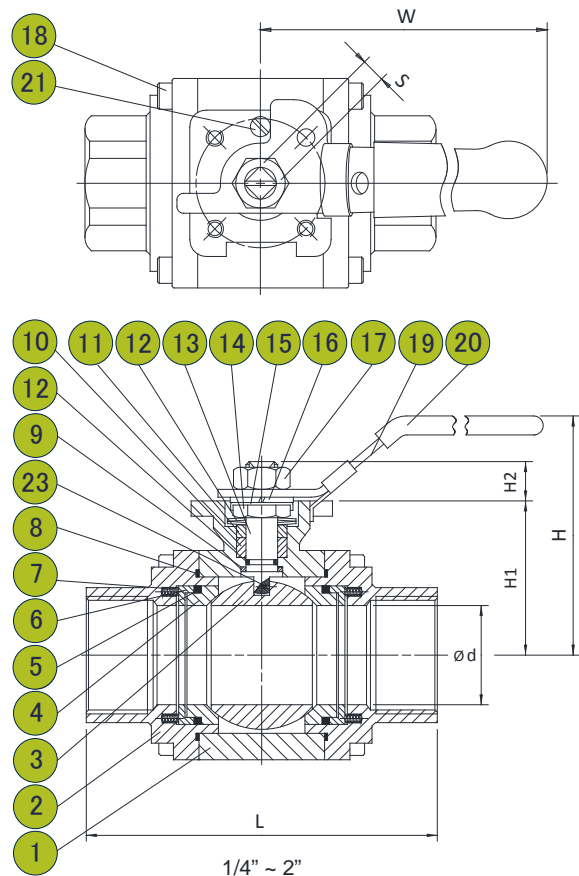
- **Features:**

- Specially surface hardening treatment for ball and seat provides longer working life, particularly with abrasive fluid such as slurries and pulp stock.
- Valve ball remains in close and tight contact with spring loaded ball seat for maximum sealing effects.
- Ball and seat underwent machine lapping for tight contact between the two circular surfaces.
- Conforming to ANSI / FCI 70-2 Class V leakage class; Class VI optional.
- Integral twin pattern ISO 5211 direct-mounting pad.



MATERIALS LIST:

| NO. | PART NAME | MATERIAL |
|-----|--------------------|--|
| 1 | BODY | CF8M / WCB |
| 2 | CAP | CF8M / WCB |
| 3 | BALL | ASTM A194 316 (Hardened / Coating) |
| 4 | BALL SEAT | ASTM A194 316 (Hardened / Coating) |
| 5 | BALL SEAT GASKET | GRAPHITE |
| 6 | BALL SEAT PACKING | ASTM A194 316 |
| 7 | BALL SEAT SPRING | ASTM A164 304(Hardened) ASTM A194 316(Hardened) |
| 8 | BODY SEAL | GRAPHITE |
| 9 | THRUST WASHER | GRAPHITE |
| 10 | STEM PACKING | GRAPHITE |
| 11 | GLAND | ASTM A164 304 |
| 12 | BELLEVILLE WASHER | ASTM 301 ASTM B637 Inconel718 |
| 13 | STEM | ASTM A276 316 ASTM A564 17-4PH |
| 14 | STEM NUT | ASTM A164 304 |
| 15 | LOCK SADDLE | ASTM A164 304 |
| 16 | HANDLE WASHER | ASTM A164 304 |
| 17 | HANDLE NUT | ASTM A164 304 |
| 18 | BODY BOLT | ASTM A193 B8 / B7 |
| 19 | HANDLE | SS304 / ZINC PLATE STEEL |
| 20 | HANDLE SLEEVE | VINYL |
| 21 | STOP PIN | SS304 / CARBON STEEL |
| 22 | O-RING | VITON |
| 23 | ANTI-STATIC DEVICE | ASTM A194 316 |



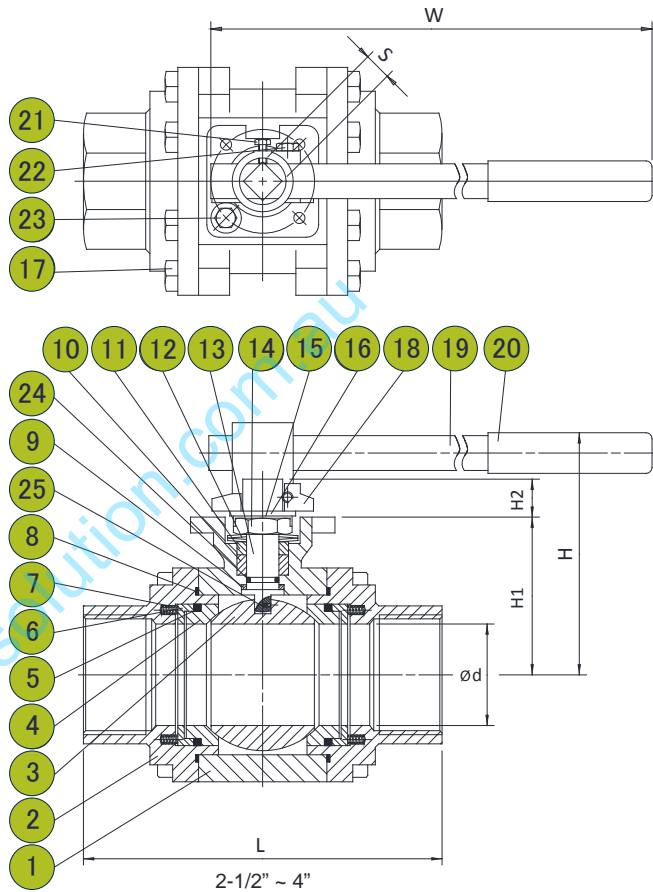


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MATERIALS LIST:

| NO. | PART NAME | MATERIAL |
|-----|--------------------|--|
| 1 | BODY | CF8M / WCB |
| 2 | CAP | CF8M / WCB |
| 3 | BALL | ASTM A194 316 (Hardened / Coating) |
| 4 | BALL SEAT | ASTM A194 316 (Hardened / Coating) |
| 5 | BALL SEAT GASKET | GRAPHITE |
| 6 | BALL SEAT PACKING | ASTM A164 304 |
| 7 | BALL SEAT SPRING | ASTM A164 304(Hardened) ASTM A194 316(Hardened) |
| 8 | BODY SEAL | GRAPHITE |
| 9 | THRUST WASHER | GRAPHITE |
| 10 | STEM PACKING | GRAPHITE |
| 11 | GLAND | ASTM A164 304 |
| 12 | BELLEVILLE WASHER | ASTM 316 ASTM B637 Inconel718 |
| 13 | STEM | ASTM A276 316 ASTM A564 17-4PH |
| 14 | STEM NUT | ASTM A164 304 |
| 15 | LOCK SADDLE | ASTM A164 304 |
| 16 | HANDLE WASHER | ASTM A164 304 |
| 17 | BODY BOLT | ASTM A193 B8 / B7 |
| 18 | HANDLE ADAPTER | CF8 |
| 19 | HANDLE STEEL PIPE | ASTM A164 304 |
| 20 | HANDLE SLEEVE | VINYL |
| 21 | HANDLE BOLT | ASTM A164 304 |
| 22 | HANDLE BOLT | ASTM A164 304 |
| 23 | STOP PIN | SS304 / CARBON STEEL |
| 24 | O-RING | VITON |
| 25 | ANTI-STATIC DEVICE | ASTM A194 316 |



Dimensions (mm)

| SIZE | INCH | DN | d | L | H | W | H1 | H2 | S | D2 | C | ISO 5211 | Torque N.m. |
|--------|------|-------|-------|-----|-----|-------|----|----|-------|----|-----------|----------|-------------|
| 1/4" | 8 | 11.0 | 125.0 | 70 | 140 | 37.5 | 8 | 9 | 14.0 | 10 | F04 | 5 | |
| 3/8" | 10 | 11.0 | 125.0 | 70 | 140 | 37.5 | 8 | 9 | 17.6 | 10 | F04 | 5 | |
| 1/2" | 15 | 14.0 | 125.0 | 70 | 140 | 37.5 | 8 | 9 | 21.8 | 13 | F04 | 5 | |
| 3/4" | 20 | 20.5 | 135.0 | 90 | 180 | 50.0 | 11 | 11 | 27.2 | 13 | F04 / F05 | 5 | |
| 1" | 25 | 25.0 | 150.0 | 100 | 180 | 60.0 | 11 | 11 | 33.9 | 15 | F04 / F05 | 6 | |
| 1-1/4" | 32 | 31.5 | 170.0 | 112 | 215 | 72.0 | 16 | 14 | 42.7 | 15 | F07 | 8 | |
| 1-1/2" | 40 | 37.0 | 165.0 | 115 | 215 | 76.0 | 16 | 14 | 48.8 | 16 | F07 | 9 | |
| 2" | 50 | 50.0 | 190.0 | 133 | 215 | 93.0 | 16 | 14 | 61.2 | 16 | F07 | 10 | |
| 2-1/2" | 65 | 65.0 | 220.0 | 173 | 460 | 116.5 | 24 | 22 | 73.9 | 17 | F07 / F10 | 15 | |
| 3" | 80 | 80.0 | 250.0 | 184 | 460 | 127.0 | 24 | 22 | 89.8 | 17 | F07 / F10 | 25 | |
| 4" | 100 | 100.0 | 280.0 | 242 | 600 | 159.0 | 29 | 27 | 115.2 | 20 | F10 | 30 | |

Note: Torque measured at ambient temperature with no loading; safety factor is not included.