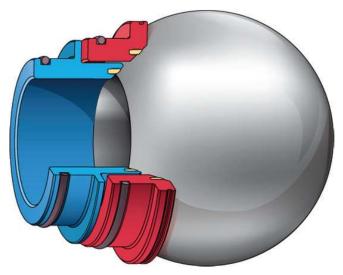
Patented Dual-Seal Ball Valve

WOM's Dual Seal Ball Valve is the only trunnion mounted ball valve with two independent seats on both sides of the ball. The Primary Seat take the normal wear and tear when the valve is cycled. If it ever gets damaged the Secondary Seat takes over. This redundant sealing technology can more than double the useful life of the valve.

Even after the Primary Seat gets damaged, it will continue to work as a wiper ring. Each time the valve is cycled the Primary Seat will clean trash and line debris off of the ball before it can damage the Secondary Seat.



Shown here the Primary seat (blue) and the Secondary Seat (red).

WOM's Dual Seal Ball Valve typically comes with two seats upstream and two seats downstream of the ball. But it can be configured to have the outer seat on the downstream side modified to act as a Third seal. The third seal will provide one more seal on the downstream side of the valve. The valve is still bi-direction, even with the Third Seal option.

The Dual-Seal was designed specifically so that it could not trap pressure in the body cavity. This is critical in hazardous liquids service, where thermal expansion can cause pressure build-up inside the body. The Dual -Seal will automatically self-relieve to the low pressure side of the valve. However, if the third seal is installed, it forces the valve to self-relieve to the upstream side. You are in control of the direction that the self-relieving seats vent to.

Redundant sealing technology, the third seal, and being able to control the direction of the thermal expansion pressure makes the Dual-Seal ball valve unsurpassed in real life performance. This combination of seats gives you a valve that will outlast typical ball or gate valves. It will lower your operational costs, add safety, and increase reliability.

It today's world you need every benefit you can get from your equipment. Put innovation to work by using the Dual-Seal ball valve. The durability and long term performance is unmatched by any other ball or gate valve in the industry.

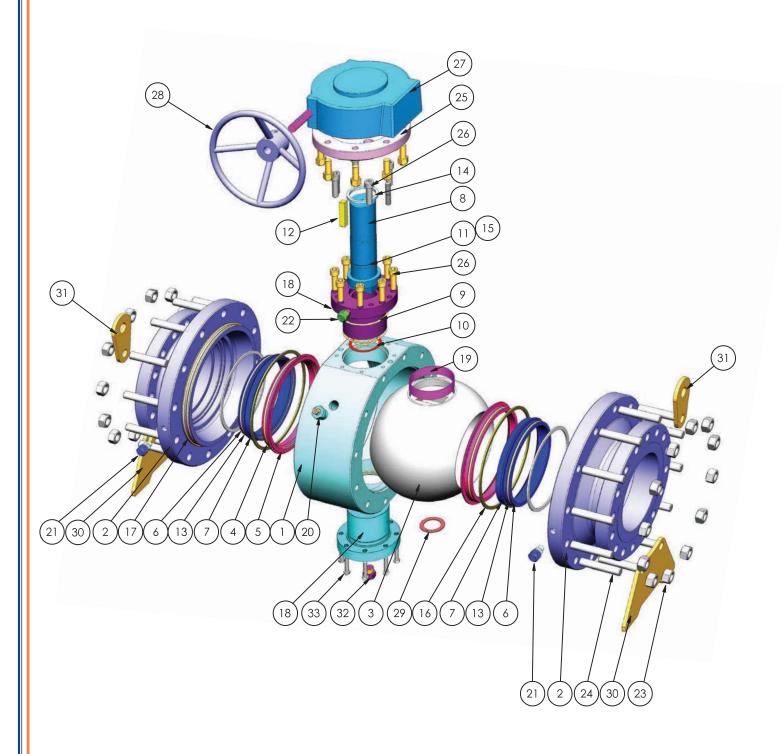
Dual-Seal Ball Valve Features and Benefits

Model 30 & 40 Features and Benefits

- Dual-Seal Ball Valve Model 30 available in sizes ranging from 2" to 36", Available in ASME Pressure classes 150-900
- Dual-Seal Ball Valve Model 40 available in sizes ranging from 2" to 12", Available in ASME Pressure classes 150-1500, with working pressures ranging from 285 psi to 3,705 psi
- All valves are Double Block and Bleed (DBB)
- Cannot trap pressure in the body eliminating the need for thermal relief in liquids service
- All Dual-Seal Ball Valves are Fugitive Emissions Certified per ISO 15848-1
- Primary Seal acts as a wiper ring to clean off the ball and protect the Secondary Seal
- Fire-Safe per ISO, API 6FA, or API 607
- API 6A 2,000-3,000 PSI in size 2 1/16" 7 1/16" in Model 40
- Integral stop ensures precise 90 degrees of rotation
- Patented Split-Block in the Model 40 features the Valve stem inserted from body interior, making the stem positively blowout proof
- Optional Third Seal for additional protection, and to control which end of the valve the thermal relief will bleed to
- Optional Metal to Metal Primary seat for severe service conditions
- Designed to replace through-conduit gate valves in mainline service

Dual-Seal Ball Valve Model 30

Model 30 Parts



Model 30 Trim Chart

| ITEM | PART NAME | STANDARD TRIM | CARBON STEEL NACE | STAINLESS STEEL NACE | Low Temp.Service (-50 deg.F) | Low Temp.SS Service (-50 deg.F) |
|------|-----------------------------|--|---|--|---|--|
| 1 | Body | ASTM A216 GR WCC | ASTM A216 GR WCC | ASTM A216 GR WCC | ASTM A352GR LCC | ASTM A352GR LCC |
| 2 | End Connection / Adapter | ASTM A216 GR WCC | ASTM A216 GR WCC | ASTM A216 GR WCC | ASTM A352 GR LCC | ASTM A352 GR LCC |
| 3 | Ball | Carbon Steel Nickel Chrome Plated | Carbon Steel Nickel Chrome Plated | 17-4PH/ASTM A182 GR.51 UNS31803 Duplex | Carbon Steel/ASTM A352LCC Nickel Chrome Plated | 17-4PH/ASTM A182 GR.51 UNS31803 Duplex |
| 4 | Primary Seat Carrier | Carbon Steel /Alloy Steel Nickel Chrome Plated | Carbon Steel / Alloy Steel Nickel Chrome Plated | 17-4PH/ASTM A182 GR.51 UNS31803 Duplex | Carbon Steel / Alloy Steel Nickel Chrome Plated | 17-4PH/ASTM A182 GR.51 UNS31803 Duplex |
| 5 | Primary Seat Insert | 25% Carbon PTFE | 25% Carbon PTFE | 25% Carbon PTFE | 25% Carbon PTFE | 25% Carbon PTFE |
| 6 | Secondary Seat Carrier | Carbon Steel /Alloy Steel Nickel Chrome Plated | Carbon Steel / Alloy Steel Nickel Chrome Plated | 17-4PH/ASTM A182 GR.51 UNS31803 Duplex | Carbon Steel / Alloy Steel Nickel Chrome Plated | 17-4PH/ASTM A182 GR.51 UNS31803 Duplex |
| 7 | Secondary Seat Insert | 25% Carbon PTFE | 25% Carbon PTFE | 25% Carbon PTFE | 25% Carbon PTFE | 25% Carbon PTFE |
| 8 | Stem | SAE 4130 Nickel Chrome Plated | SAE 4130 Nickel Chrome Plated | SS410 /17-4PH/ Inconel 718 | SAE 4130 Nickel Chrome Plated | SS410 /17-4PH/ Inconel 718 |
| 9 | Stem O-Ring | Fluorocarbon (Viton) | Fluorocarbon (Viton) | Fluorocarbon (Viton) | Low temp.HNBR | Low temp.HNBR |
| 10 | Stem Thrust Washer | Aluminium Bronze | Aluminium Bronze | Aluminium Bronze | Aluminium Bronze | Aluminium Bronze |
| 11 | Anti-static Spring | Stainless Steel 316 | Stainless Steel 316 | Stainless Steel 316 | Stainless Steel 316 | Stainless Steel 316 |
| 12 | Stem Key | SAE 4130 /Alloy steel | SAE 4130 /Alloy steel | SAE 4130 /Alloy steel | SAE 4130 /Alloy steel | SAE 4130 /Alloy steel |
| 13 | Seat O-Ring | Fluorocarbon (Viton) | Fluorocarbon (Viton) | Fluorocarbon (Viton) | Nitrile (Low temp.HNBR) | Nitrile (Low temp.HNBR) |
| 14 | Stem Packing | Polypak (Fluorocarbon)/ Graphite | Polypak (Fluorocarbon)/ Graphite | Polypak (Fluorocarbon)/ Graphite | Polypak (Fluorocarbon)/ Graphite | Polypak (Fluorocarbon)/ Graphite |
| 15 | Anti-static Ball | Stainless Steel 316 | Stainless Steel 316 | Stainless Steel 316 | Stainless Steel 316 | Stainless Steel 316 |
| 16 | Springs | 17-7PH SS | Inconel X-750 | Inconel X-750 | Inconel X-750 | Inconel X-750 |
| 17 | Body O-Ring | Fluorocarbon (Viton) | Fluorocarbon (Viton) | Fluorocarbon (Viton) | Nitrile-Buna (Low temp.HNBR) | Nitrile-Buna (Low temp.HNBR) |
| 18 | Trunnion | SAE 4130 /Alloy steel | SAE 4130 /Alloy steel | SAE 4130 /Alloy steel | SAE 4130 /Alloy steel | SAE 4130 /Alloy steel |
| 19 | Trunnion DU Bearing | Phosphor bronze-C.S. | Phosphor bronze-C.S. | Phosphor bronze-C.S. | Phosphor bronze-C.S. | Phosphor bronze-C.S. |
| 20 | Bleed Fitting | Alloy Steel | Alloy Steel/Stainless Steel | Stainless Steel | Alloy Steel/Stainless Steel | Alloy Steel/Stainless Steel |
| 21 | Grease Fitting | Alloy Steel | Alloy Steel / Stainless Steel | Stainless Steel | Alloy Steel / Stainless Steel | Alloy Steel / Stainless Steel |
| 22 | Internal Check Fitting | Stainless Steel 316 | Stainless Steel 316 | Stainless Steel 316 | Stainless Steel 316 | Stainless Steel 316 |
| 23 | Nuts | ASTM A194 2H | ASTM A194 2H / 2HM | ASTM A194 2H /2HM | ASTM A194 2H | ASTM A194 2H |
| 24 | Studs | ASTM A193 B7 | ASTM A193 B7 / B7M | ASTM A193 B7 / B7M | ASTM A320 L7 | ASTM A320 L7 |
| 25 | Gland/Adapter Plate | Carbon Steel | Carbon Steel | Carbon Steel | Carbon Steel | Carbon Steel |
| 26 | FerryHead Capscrews | ASTM A320 L7 | ASTM A320 L7 | ASTM A320 L7 | ASTM A320 L7 | ASTM A320 L7 |
| 27 | Gear Operator | Ductile Iron | Ductile Iron | Ductile Iron | Ductile Iron | Ductile Iron |
| 28 | Handwheel | Carbon Steel /ASTM A106 | Carbon Steel /ASTM A106 | Carbon Steel /ASTM | Carbon Steel /ASTM A106 | Carbon Steel /ASTM A106 |
| 29 | Thrust Washer | Aluminium Bronze | Aluminium Bronze | Aluminium Bronze | Aluminium Bronze | Aluminium Bronze |
| 30 | Foot Support | Carbon Steel | Carbon Steel | Carbon Steel | Carbon Stee l | Carbon Steel |
| 31 | Lift Eye | Carbon Steel | Carbon Steel | Carbon Steel | Carbon Steel | Carbon Steel |
| 32 | Drain Plug | Alloy Steel | Alloy Steel / Stainless Steel | Stainless Steel | Alloy Steel / Stainless Steel | Alloy Steel / Stainless Steel |
| 33 | Hex Head Bolt | A193 B7 | A193 B7 | A193 B7 | A193 B7 | A193 B7 |