



MIKRON VALVE & MFG.

Two Piece Flanged End Full Port Ball Valves

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Two Piece Flanged End Full Port Ball Valves

FOR THE CHEMICAL, PULP & PAPER, AND POWER INDUSTRIES

SIZE: .5" through 12"

CLASS: 150# through 2500#

END CONNECTIONS: RAISED FACE FLANGED, BUTT WELD, THREADED, SOCKET WELD, RING TYPE JOINT, SANITARY

Mikron's two piece ball valves are a floating ball valve with a two piece ball and stem. These valves have been proven to work in high temperatures and pressures. Since the stem is always perpendicular to the pipe line, leakage between the stem and the packing is minimized. Two piece ball valves have a live loaded packing system in all valves as a standard option, to further ensure leak free packing and less maintenance and downtime as a result. Our metal seated valves can accommodate both high temperatures and pressures. The balls are spherically ground and mate lapped to the seats to ensure the best seating possible for our valves. This provides tight shut off. These valves can be used for applications such as Air, Liquor, sample valves, steam, slurries and much more. Consult factory for any questions you may have.

Mikron's three piece ball valves have been designed to handle high temperatures and pressures. This valve is like the Two piece ball valve except it is repairable inline. The three piece design makes it easier to remove the middle section by just removing the bolts from the tailpieces.

MIKRON MACHINE & VALVE DIVISION WILL BE MORE THEN HAPPY TO WORK WITH CUSTOMERS TO DESIGN THE VALVE THEY ARE LOOKING FOR. WE HAVEOVER 80 YEARS EXPERIENCE IN THE VALVE LINE.

BALL VALVES
MM2 SERIES
METAL AND SOFT SEATED
150# TO 2500#

Mikron's two piece ball valves are available in a 316 stainless steel, carbon steel, and specialty alloys. (consult factory). Seat and trim material are available in many different materials. If the material you are looking for is not on the list please consult factory.

The two piece ball valve provides a tight shut off for the longest period of time in rough applications. This series is designed to withstand corrosion, pressure surges, and abrasion. Mikron's valves are built for applications in Petrochemical, Power Industries, Pulp & Paper, Petroleum Chemicals, and much more.

TWO PIECE BALL AND STEM IMPRESSIVE STEM DESIGN

Allows for effective sealing against back pressure Our stems will withstand high torque in rough ease of disassembly and repair applications without shearing
blow out proof design insures workman safety

SPECIAL SEAT DESIGN ON TIME DELIVERIES

Protects seat seal from sudden pressure surges
long lasting, positive shut off

TIGHT SHUT OFF REBUILDING OF YOUR VALVE

Class V shut off (standard) Send any style or make of valve to be rebuilt
Class VI upon request Mikron can modify most soft seated valves into
metal seated valves

ONE SOURCE SUPPLIER PACKING DESIGN

1/2" through 12" ball valves, Long lasting adjustable packing
soft seated and metal seated Micron's packing design protects packing from
pressure class from 150# & 300#. extrusion and flow media, making a longer
1/2" through 8" ball valves from lasting life for sealing
150# to 4500# class

MIKRON'S QUALITY CONTROL

Every valve will be hydrostatic tested and a seat leakage test performed before the ball valve
leaves the plant

**MIKRON VALVE CAN ALSO SUPPLY YOU WITH YOUR ACTUATION NEEDS, GEAR
OPERATORS, ACTUATORS, COUPLERS, BRACKETS, ETC.**

ANSI VALVE BODY RATINGS

Temperature in Deg. F

316 SST	100	200	300	400	500	600	700	800	1000	1500
150#	275	235	215	195	170	140	110	80	20	20
300#	720	620	560	515	480	450	430	420	350	40

WCB	100	200	300	400	500	600	700	800	1000	1500
150#	285	260	230	200	170	140	110	80	20	
300#	740	675	655	635	600	550	535	410	50	

TESTING

Mikron Valve does all their testing in house. Every valve that leaves the plant has both a hydrostatic and seat leakage test performed on it. The customer is guaranteed a good valve when it is put into service.

TWO PIECE BODY CONSTRUCTION

The design consists of a body and a tailpiece, instead of two identical body halves with a one - piece ball and stem. The Mikron design requires only one body gasket, however the other design requires two gaskets. This includes a body gasket, which cannot completely form an effective seal and is difficult to install properly, and a bonnet gasket, which is required to complete the seal. The maintenance is much easier on the Mikron two piece valve, the body and tailpiece are bolted with a metal to metal contact to ensure that the proper compression on the body gasket is achieved. The body gasket is completely contained in a tongue and groove, making it impossible for the gasket to blow out.

FLOATING BALL DESIGN

Micron's two piece valve series uses a floating ball design. This allows the ball to move with the flow media against the downstream seat. The result is a bi-directional valve with effective sealing at high pressures as well as very low pressures. At Mikron Valve Division the ball is the most important component to insure the most effectiveness of the ball valve. In the manufacturing process the ball is spherically ground to a smooth finish. It is then polished or lapped to achieve the leakage class required by our customers.

ADJUSTABLE PACKING

Care is taken to prevent over torquing the stem packing during assembly and testing. This provides our customers with the longest life possible for their packing. And also keeps the valve torque at a minimum. The packing nuts are easily accessible for tightening the stem packing when required. Live loaded stem packing is also available.

MIKRON SEAT DESIGNS

Micron's metal seated valves are manufactured and tested for class V and class VI shut off between the seat and the ball. And in doing this we have to grind every ball to a very tight tolerance, carefully generating a radius on each individual seat to its mating ball, and then lapping them together for that perfect shut off. Micron's soft seated ball valves provide a tight shut off.

STYLES OF SEATS AVAILABLE

METAL SEATS



A series of graphite rings behind the metal seat prevent media from building up behind the seat. The rings also allow for expansion of the internal valve parts in high temperature applications. This ring is also available with a scraper, to help clean build up. The temperature range is from 200 deg f. to 1200 deg f., applications ranging from steam, abrasion, high temperatures, fine solids and much more. This seat is offered in Class V and Class VI shut off.

**** Always consult factory for any questions you may have****

SPRING LOADED



For unidirectional applications, the sealing seat is available as a separate seat ring for reparability, or integral with the tailpiece for high temperature applications. The temperature range is from 400 deg. F., to 1200 deg f., applications ranging from low pressure, steam, high pressures and much more. The seat is offered in Class V and Class VI shut off.

O-RING STYLE

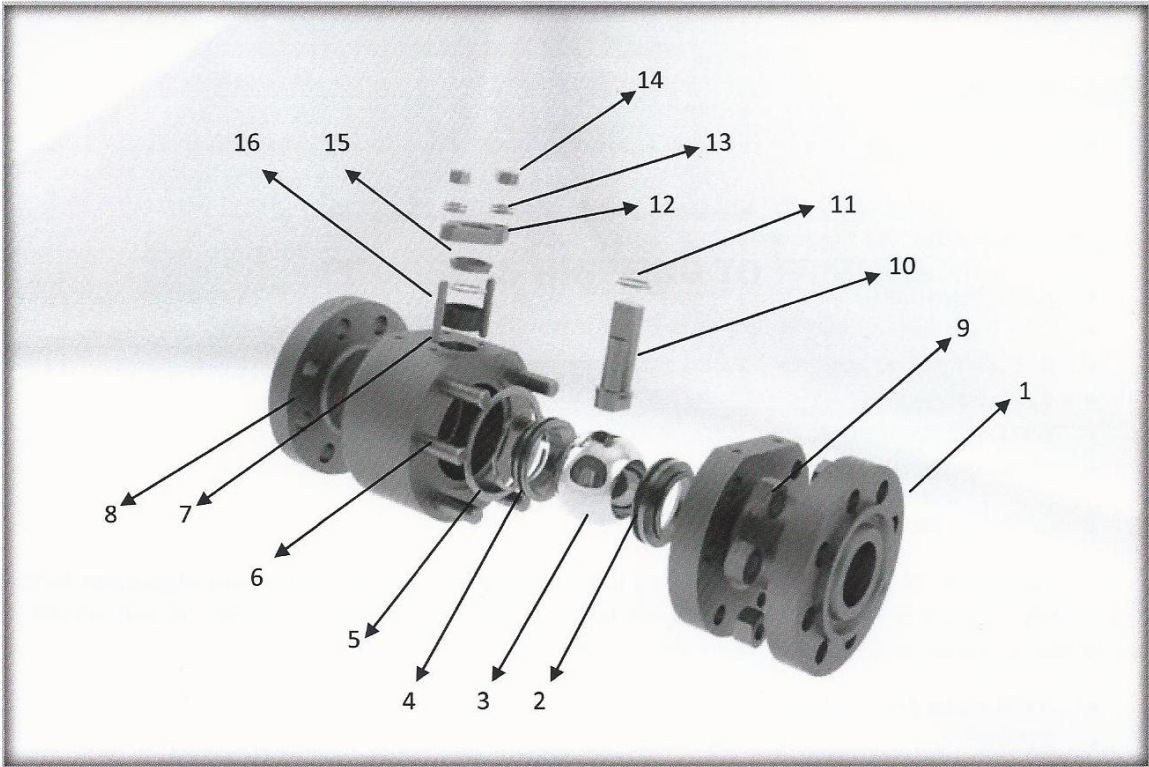


The O-Ring seal provides spring loaded and excellent sealing capabilities. Temperatures range from -150 degrees F., to 500 degrees F., applications ranging from steam, low pressure, emulsions and abrasives. The seat is offered in Class V and Class VI shut off.

REINFORCED TEFLON SEAT



A glass filled Teflon is typically used for most applications. A metal filled Teflon seat is available for increased abrasion resistance and reduction to cold flow. The metal filled seat is good for abrasion. The temperature range is -250 deg f., to 450 deg F. Applications rang from steam, low pressure, emulsions and nonabrasive media. The seat is offered in Class VI shut off.



Mikron is a manufacturer of custom High Performance High Pressure Ball Valves, the Miller line of Stream Flow Check valves and specialized in precision machining. Mikron's Valves are used in the chemical, water, oil and gas industries. Mikron is ISO9001:2008 certified and hold the American Petroleum Institute (API) certification. The above layout is an example of a Mikron valve cut away to show the precision machining and the metal seating of our valves.

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|----------------|------------------------|
| 1) Tail piece | 9) Heavy hex nuts |
| 2) Metal seat | 10) Stem |
| 3) Ball | 11) Thrust washer |
| 4) Metal seat | 12) Gland follower |
| 5) Body gasket | 13) Belleville washers |
| 6) Studs | 14) Heavy hex nuts |
| 7) Studs | 15) Gland Ring |
| 8) Body | 16) Packing |

Our knowledge and expertise is only a phone call away. We will work with you to custom design a solution to meet your particular application requirements. Let our knowledgeable staff help resolve your application issues.