

Ball Valve 52 Series

New

Application

Sanitary ball valves are used in stainless steel piping systems for isolation, either manually or automatically operated. The full port design with zero flow restriction makes it an optimum choice for viscous or particulate liquids.

Working Principle

A precision ball with a full port is positioned inside the valve body between two flanges and two PTFE valve seats. The 90° rotation of the valve stem, through the handle or a pneumatic actuator, is transferred to the ball thereby opening or closing the valve.

Standard Design

The valve consists of a valve body, two flanges, PTFE valve seats, EPDM O'Rings, ball, stem and a handle or actuator. All Seats and Seals are made from FDA approved materials.

The valve body, flanges and ball are made of forged 316L and 304L stainless steel which ensures non porous, smooth and dimensionally stable construction.

The valve is designed to maintain a full flow rate, with a minimum pressure drop and it is fully drainable. A Bottom entry, precision machined stem with a live loaded PTFE thrust washer ensures a smooth rotation at various temperatures and pressure conditions.

Purge ports are provided on the valve body for SIP / CIP applications.

Available Sizes

1", 1 1/2", 2", 2 1/2", 3", 4"

Options

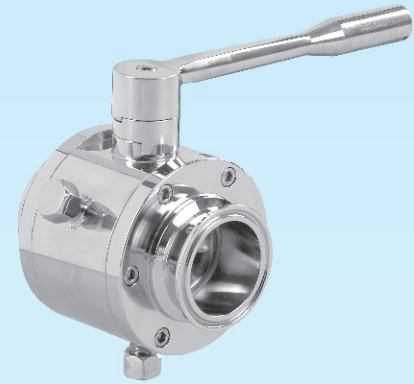
Automatic operation by vertical/horizontal pneumatic actuator.

Electrical control unit with micro switches or proximity switches and solenoid valve for remote operation.

End connections : Sanitary Clamp, Butt - Weld, Extended Butt Weld (for high purity applications), I-Line or others on request.

Material : AISI 316L or AISI 304L

Handle Options : 90° Open / Close
Universal Snapping



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TECHNICAL SPECIFICATIONS :

Material :

Product wetted steel parts.....AISI 316L/AISI 304L
 Other steel parts.....AISI 304

FDA Seals :

Valve Seat.....TFM PTFE
 O'ring.....EPDM
 Cavity filler (optional).....PTFE / TFM PTFE available upon request
 *Other Material available upon request

Nominal Pressure :

Maximum product pressure.....200 PSI maximum (14 Bars)
 Test pressure 235 PSI (16 Bars)
 (Leakage test according to BS EN 12266-1)

Supply Pressure for
 Air Actuator (Min. - Max. Range).....70-115 PSI (Dry & Filtered Compressed Air)

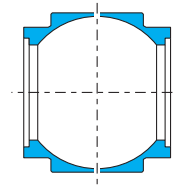
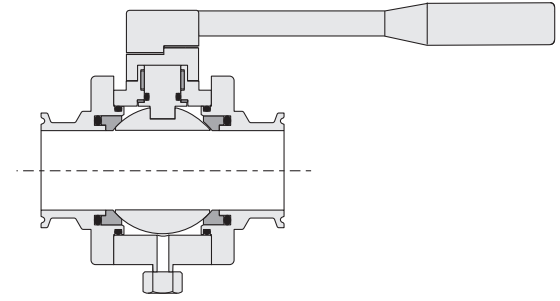
Temperature Range :.....-60° Degrees Fahrenheit to +300° Degrees Fahrenheit
 *Other seal material available for higher temperatures

Surface Finish :

Surface in contact with product.....Ra <= 25 µ in (Grit 220g)
 Optional.....Ra <= 15 µ in (Grit 320g)
 *Electropolishing available upon request.

ConnectionsSanitary Clamp (ISO 2852 / BS 4825-3)
 Optional.....Butt Weld (ISO 2037 / BS 4825-01)
 I-Line
 Other connections on request

Purge Port Connections.....1/4" Male BSP
 * Please see page11 for purge port adapters



Cavity fillers on request
 * Consult the factory
 for torque values with
 cavity fillers.

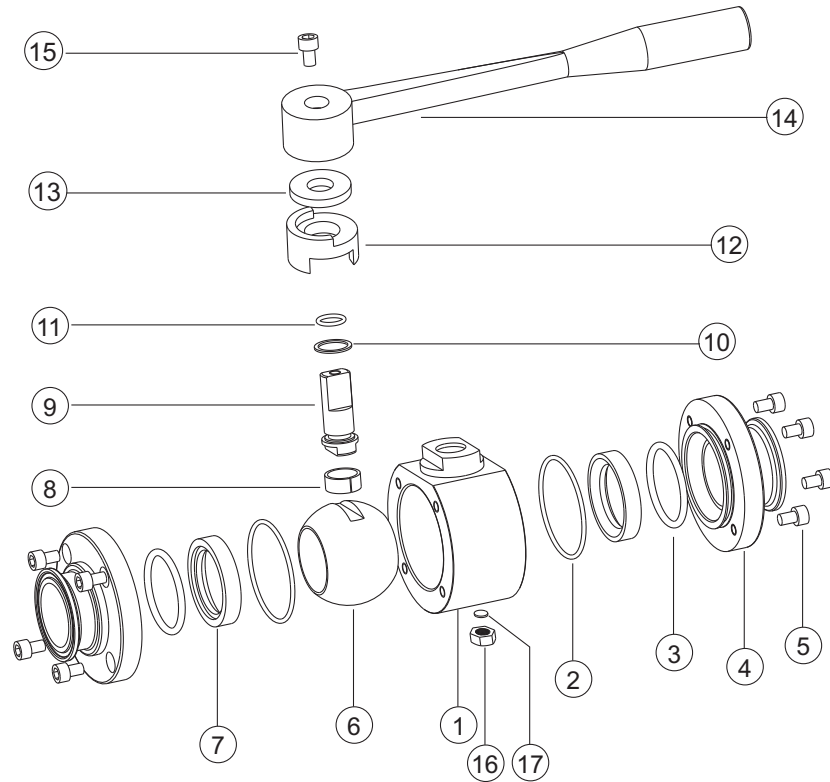
Torque values (for rotating the valve stem)

Size	ft.lb	Nm	Cv GPM	Kv m ³ /hr
1"	6	8		
1.5"	15	20	1"	66
2"	20	27	1.5"	192
2.5"	28	38	2"	434
3"	38	52	2.5"	723
4"	54	84	3"	1124
			4"	2100

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Exploded view of standard Ball Valve



NO.	PART NO.	DESCRIPTION	MATERIAL
1	5201	BODY	AISI 316L / AISI 304L
2	5202	O'RING	EPDM
3	5203	O'RING	EPDM
4	5204	FLANGE	AISI 316L / AISI 304L
5	5205	CAP SCREW	AISI 304
6	5206	BALL	AISI 316L / AISI 304L
7	5207	SEAT	TFM PTFE
8	5208	BUSHING	PTFE
9	5209	STEM	AISI 316L / AISI 304L
10	5210	THRUST RING	PTFE
11	5211	O'RING	EPDM
12	5212	INDEX BASE	AISI 304
13	5213	THRUST WASHER	PTFE
14	5214	HANDLE	AISI 304
15	5215	CAP SCREW	AISI 304
16	5216	DRAIN CAP	AISI 316L / AISI 304L
17	5217	WASHER	PTFE