

Features & Benefits

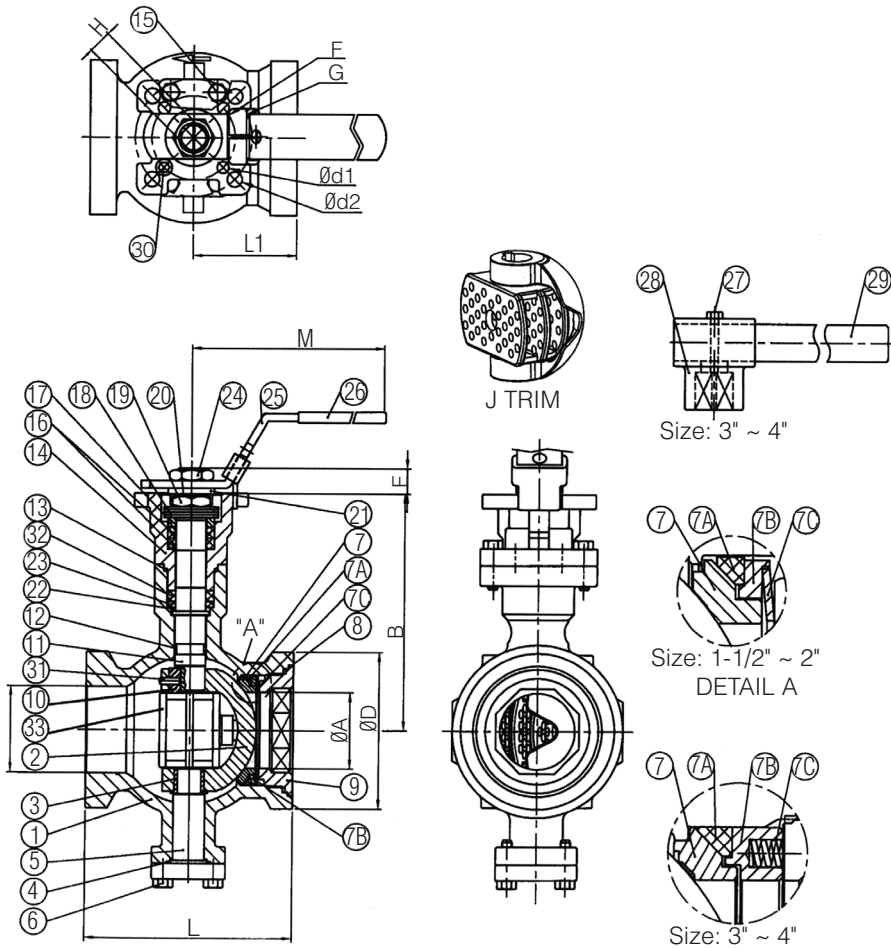
- Size range: 1-1/2" - 4"
- ISO 5211 direct mount wafer design
- ANSI Class 600
- Flanged and flangedless versions available
- Live loaded packing
- Protected bearings, top & bottom
- Easy installation and versatility
- Standard ISA 75.04 face-to-face; optional: ANSI B16.20 short pattern
- Extremely low actuator torque
- J trim for cavitation/noise abatement
- WCB, 36SS, 317SS and other alloy materials available
- Metal seated
- Patent Number US8,398,055B2



Ordering Schematic

Series	Anti-Cavitation	Body	Trim	Port	Packing	Seat	End Conn.																																				
DM99	J	<table border="1"> <tr><td>2</td><td>WCB</td></tr> <tr><td>3</td><td>316SS</td></tr> <tr><td>4</td><td>Alloy 20</td></tr> <tr><td>6</td><td>317SS</td></tr> <tr><td>7</td><td>Hast. C</td></tr> <tr><td>9</td><td>Duplex</td></tr> </table>	2	WCB	3	316SS	4	Alloy 20	6	317SS	7	Hast. C	9	Duplex	<table border="1"> <tr><td>3</td><td>316SS</td></tr> <tr><td>4</td><td>Alloy 20</td></tr> <tr><td>6</td><td>317SS</td></tr> <tr><td>7</td><td>Hast. C</td></tr> <tr><td>9</td><td>Duplex</td></tr> </table>	3	316SS	4	Alloy 20	6	317SS	7	Hast. C	9	Duplex	<table border="1"> <tr><td>F</td><td>Full</td></tr> <tr><td>R</td><td>Reduced</td></tr> </table>	F	Full	R	Reduced	<table border="1"> <tr><td>G</td><td>Graphoil</td></tr> <tr><td>TM</td><td>TFM 1600</td></tr> <tr><td>TC</td><td>TFM 4215</td></tr> </table>	G	Graphoil	TM	TFM 1600	TC	TFM 4215	<table border="1"> <tr><td>M</td><td>Metal</td></tr> </table>	M	Metal	<table border="1"> <tr><td>W</td><td>Wafer</td></tr> </table>	W	Wafer
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Dimensions



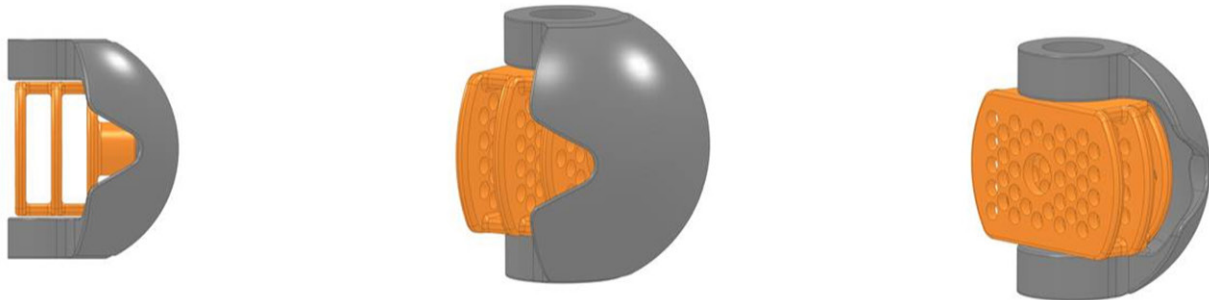
Item	Parts	Materials	Options	Item	Parts	Materials	Options
1	Body	A351 Gr. CF8M	A216 Gr. WCB	15	Bonnet Bolts	SS 304	-
2	Ball Segment	CF8M+Hardchrome	-	16	Stem Packing	Graphite	-
3	Bearing	PEEK	-	17	Gland	SS 304	-
4	Gasket	Graphite	-	18	Belleville Washer	17-7PH	-
5	Bottom Cap	A351 Gr. CF8M	A216 Gr. WCB	19	Set Nut	SS 304	-
6	Bottom Cap Bolts	SS 304	-	20	Nut Stop	SS 304	-
7	Metal Seat	SS316+Stellite	-	21	Space Washer	SS 316	-
7A	Seat Back Seal	Graphite	-	22	Thrust Washer	PEEK	-
7B	Seat Housing	SS 316	-	23	Thrust Back	SS 316	-
7C	Spring Disc (1-1/2"~2")	Inconel	-	24	Handle Nut	SS 304	-
	Seat Spring (3"~4")	Inconel	-	25	Lock Handle	SS 304	-
8	Insert Gasket	Graphite	-	26	Handle Cover	Plastisol	-
9	Insert Cap	A351 Gr. CF8M	A216 Gr. WCB	27	Set Bolt	SS 304	-
10	Key	SS 316	-	28	Lever Head	A351 CF8	-
11	Stem	SS 630 (17-4PH)	-	29	Lever	Steel Pipe	-
12	Bearing	PEEK	-	30	Stop Pin	SS 304	-
13	Bonnet Gasket	Graphite	-	31	Fixed Pin	SS 316	-
14	Bonnet	A351 Gr. CF8M	A216 Gr. WCB	32	Thrust Washer	PEEK	-
				33	Noise Red. Plate	A351 Gr. CF8M	-

Size	A	B	D	E	M	L (ISA)	L1	H	D1	F	G	d2
1-1/2"	1.34	4.77	2.88	0.55	8.07	4.50	2.24	0.55	1.50	1.97	2.76	0.366
2"	1.77	5.52	3.62	0.55	8.07	4.88	2.44	0.55	2.00	1.97	2.76	0.366
3"	2.60	6.65	5.00	0.63	12.20	6.50	3.43	0.67	3.29	2.76	4.02	0.449
4"	3.16	7.20	6.19	0.83	12.20	7.62	4.05	0.67	3.88	2.76	4.02	0.449

Description of J-Trim Option

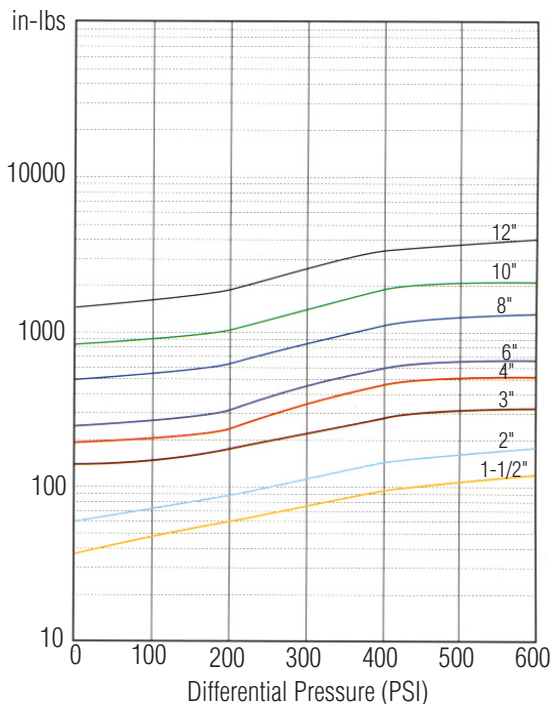
The J Trim option can help with liquid cavitation and aerodynamic noise problems. The pressure drop is divided into a series of small pressure drops and separates the flow stream into many small jet streams. This provides a combination of cavitation/noise abatement with high capacity, high rangeability and the capability to handle impure fluids.

J Trim Option



Now available with J Trim option! The valve's application can now range from very low-flow and high accuracy service. This is ideal for additive and coloring lines and pilot plants. Cavitation and aerodynamic noise is also reduced. The J Trim is a self-cleaning design which handles contaminated flows without plugging.

Actuator Sizing Torque



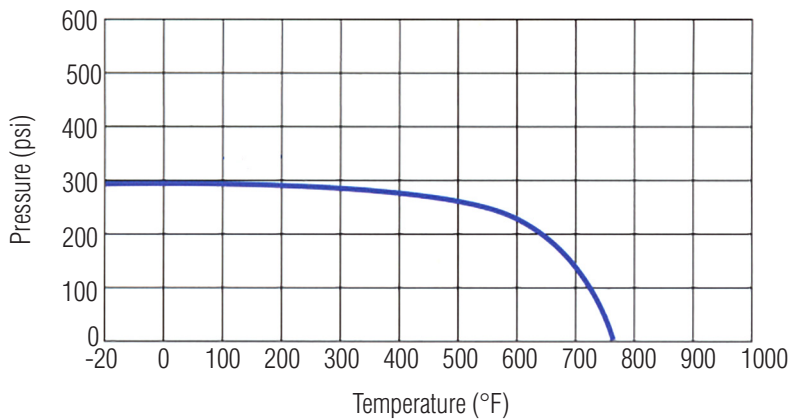
Torque is based on clean, clear liquid

DM9900W Series

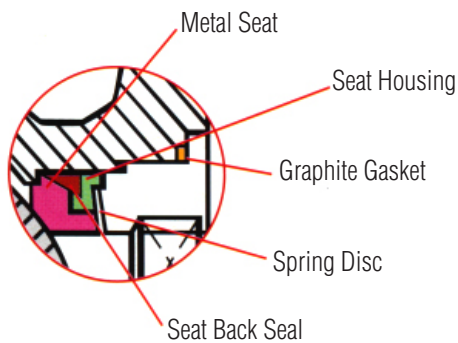
Nominal Diameter		DM9900 Series Flanged	9900 Series Wafer		Cv Max
inches	mm	Class 150	Class 150	Class 300	
1-1/2"	40				--
2"	50				47
3"	80				160
4"	100				250

The segmented V-Port ball valve can be used in modulating control services or "on-off" services.

Pressure Temperature Chart (ANSI 150 Metal Seat)



Metal-To-Metal Contact Seats



Suitable for erosive services, fibers, chemical fluids with suspended solids, and high temperature applications.

Metal seat with hardened stellite contact surface and 316 stainless steel segmented ball with tungsten carbide coating ANSI Class IV shutoff.