Features / Design

1.- **V-Ball Design** – throttling control segmented ball valve**.** It provides high flow capacity with optimum characteristics for industrial markets including Pulp and Paper, Refinery, Chemical, and Petrochemical Industries.

2.- One piece body design reduces leakage paths.

3.- **V-Ball allows a strong cutting force and self-cleanness** – cutting of solids between the ball and seats enabling the fluid to pass smoothly without obstructions.

4.- V-ball provides large dynamic pass of fluid, including solid particles **– specially suitable for medium containing fiber and tiny solids.**

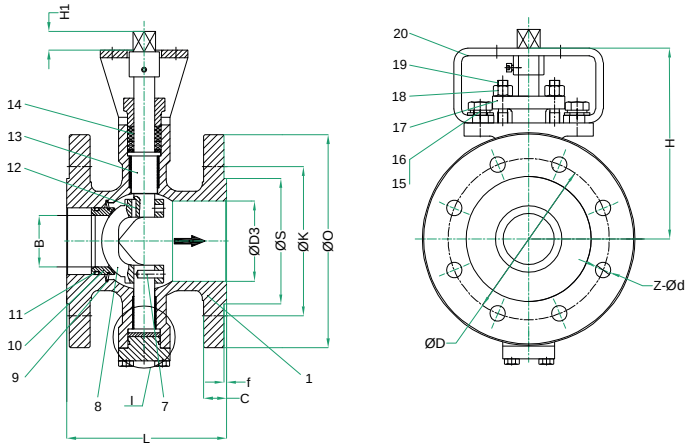
5.- V-ball with top and bottom bearings reduces operational torque.

6.- Spring live-loaded metal seats with Viton or graphite backing.

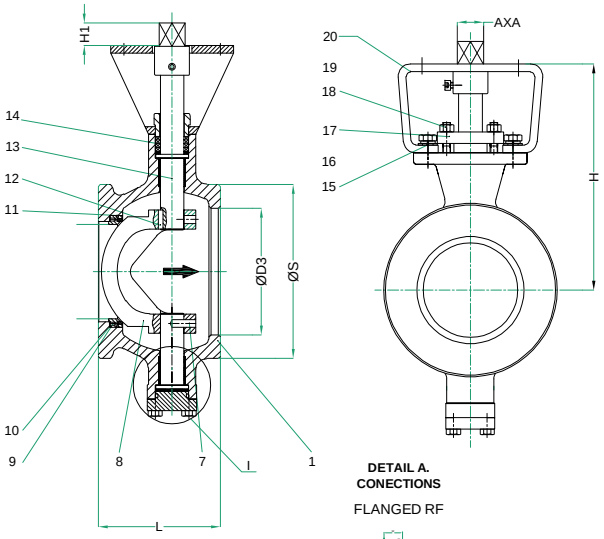
7.- Soft seats and metal seats to satisfy various applications. Seats can be easily changed in a few simple steps.

8.- Ends: Flanged RF acc. to ASME B16.5, Wafer acc. to ASME B16.15; face to face dimension acc. to ISA S 75.01.

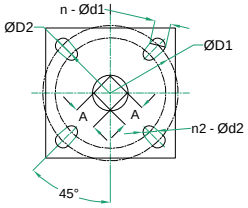
Design for 1" to 16"
(Flanged Connection)



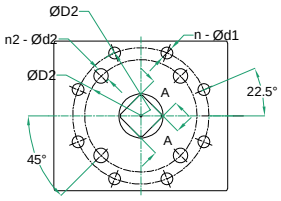
Design for 1" to 10"
(Wafer Connection)

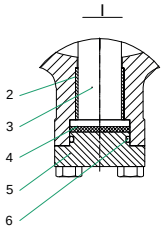


FOR 1" to 14"

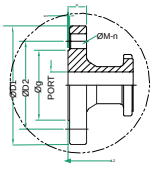


FOR 16"





DETAIL A.
CONECTIONS
FLANGED RF



Material List

NO.	DESCRIPTION	MATERIAL
1	BODY	ATM A351 CF8M
2	BUSHING	SS304 + PTFE
3	SHAFT	SS304
4	GASKET	PTFE
5	COVER	ASTM A351 CF8M
6	O-RING	FKM
7	PIN	VITON
8	BALL	ASTM A351 CF8M + Cr
9	SPRING	17-7PH
10	SEAT	ASTM A182 F304 + STL
11	O-RING	FKM
12	KEY	SS304
13	STEM	17-4PH
14	PACKING	PTFE
15	BOLT	ASTM A193 B8
16	WASHER	SS304
17	PACKING GLAND	ASTM A351 CF8M
18	BOLT	ASTM A193 B9
19	NUT	ASTM A194 8
20	YOKE	ASTM A3

Dimensions - *Cv, Torque, Weight*

SIZE	CV (US gpm)	TORQUE (US gpm)	WEIGHT (Lb)
1”	27.0	309.776	*
1 1/4”	47.0	354.029	*
1 1/2”	70.0	601.850	*
2”	110.0	796.566	*
2 1/2”	170.0	885.073	*
3”	280.0	1239.103	*
4”	470.0	1327.610	*
5”	700.0	1770.146	*
6”	780.0	2655.220	*
8”	1720.0	4425.366	*
10”	2100.0	7965.659	*
12”	3800.0	12391.025	*
14”	6440.0	17701.465	*
16”	8510.0	25667.124	*

NOTE: * Please consult with manufacturer.

Dimensions (inches)

SIZE	L (in)	L (in)	B (in)	C (in)	D (in)	S (in)	S2 (in)	D3 (in)	d (in)	f (in)	Z (in)	Ø (in)	H (in)	H1 (in)	A (in)	D1 (in)	D2 (in)	n (in)	Ød1 (in)	n2 (in)	Ød2 (in)	ISO5211
1”	4.016	1.969	0.787	4.331	3.126	2.000	2.559	1.496	0.457	0.079	4	0.630	5.157	0.709	0.551	2.756	1.969	4	0.354	4	0.276	F05/F07
1 1/4”	4.016	2.362	0.984	4.528	3.500	2.500	3.071	1.772	0.520	0.079	4	0.630	5.551	0.709	0.551	2.756	1.969	4	0.354	4	0.276	F05/F07
1 1/2”	4.488	2.362	1.260	4.921	3.874	2.874	3.228	1.969	0.579	0.079	4	0.630	5.433	0.709	0.551	2.756	1.969	4	0.354	4	0.276	F05/F07
2”	4.882	2.953	1.575	5.906	4.752	3.626	3.937	2.441	0.642	0.079	4	0.709	5.827	0.709	0.551	2.756	1.969	4	0.354	4	0.276	F05/F07
2 1/2”	5.709	3.937	2.165	7.087	5.500	4.126	4.646	3.031	0.705	0.079	4	0.709	6.417	0.709	0.551	2.756	1.969	4	0.354	4	0.276	F05/F07
3”	6.496	3.937	2.559	7.480	6.000	5.000	5.315	3.661	0.768	0.079	4	0.709	8.071	1.004	0.669	4.016	2.756	4	0.472	4	0.354	F07/F10
4”	7.638	4.528	2.992	9.055	7.500	6.189	6.220	4.528	0.957	0.079	8	0.709	8.465	1.004	0.669	4.016	2.756	4	0.472	4	0.354	F07/F10
5”	7.638	5.079	3.937	10.039	8.500	7.311	7.244	5.276	0.957	0.079	8	0.866	9.055	0.984	0.866	4.016	2.756	4	0.472	4	0.354	F07/F10
6”	9.016	6.299	4.961	11.024	9.500	8.500	8.465	6.457	1.020	0.079	8	0.866	10.630	1.181	1.063	4.921	4.016	4	0.551	4	0.472	F10/F12
8”	9.567	7.874	6.220	13.583	11.752	10.626	10.551	8.110	1.142	0.079	8	0.866	11.890	1.181	1.063	4.921	4.016	4	0.551	4	0.472	F10/F12
10”	11.693	9.449	7.795	15.945	14.252	12.748	12.795	10.236	1.205	0.079	12	1.024	14.370	1.575	1.063	5.512	4.921	4	0.709	4	0.551	F12/F14
12”	13.307	/	9.843	19.094	17.000	15.000	/	12.441	1.268	0.079	12	1.024	16.142	1.575	1.063	6.496	5.512	4	0.866	4	0.709	F14/F16
14”	15.748	/	11.102	21.063	18.752	16.252	/	13.780	1.394	0.079	12	1.181	17.441	1.575	1.417	6.496	5.512	4	0.866	4	0.709	F14/F16
16”	15.748	/	12.441	23.425	21.252	18.500	/	15.945	1.457	0.079	16	1.181	18.819	1.890	1.811	7.874	6.496	8	0.709	4	0.866	F16/F20

How to Order

VALVE BODY DESIGN (SERIES)	SPECIAL FEATURES	MATERIAL								
		BODY[2]	TRIM	SEAT	ENDS	CLASS	SIZE[5]		OPERATION	
1C Full Port 1 Pc Ball Valve V-Port	NONE None	2 WCB	3 316 SS	P PTFE[3]	F Flanged RF	0 ANSI 150#	01	1"	L	Manual Lever Operator
	O Oxigen Service[1]	3 CF8M	4 304 SS	M Metal to Metal[4]	W Wafer		01.25	1 1/4"	C	Manual Lever Operator with Locking Device
		4 CF8					01.5	1 1/2"		
							02	2"		
							02.5	2 1/2"	B	Bare Shaft
							03	3"	G	Gear Operator
							04	4"	S	Spring Return Safety Handle
							05	5"	SR	Spring Return Sliding Lock
							06	6"		
							08	8"	O	Oval Handle
							10	10"	E	Economical Stem Extention
							12	12"	P	Peumatic Actuator
							14	14"		
							16	16"	E	Electric Actuator

Example:

V-Port Ball Valve, Body & Trim 316 SS, Seats: Metal to Metal, Ends Flanged ANSI Class150#, Size 1" with Lever.

1C33MF001L

NOTES:
(1) Available for stainless steel valves only.
(2) Special material on request.
(3) PTFE available but not recommended thus the main function of segment ball valve is cut off medium & regulate.
(4) Stellite,Tungsten Carbide, etc.
(5) Flange type 1"-24" size available.