

A - ONE

Metal Seated Ball Valve

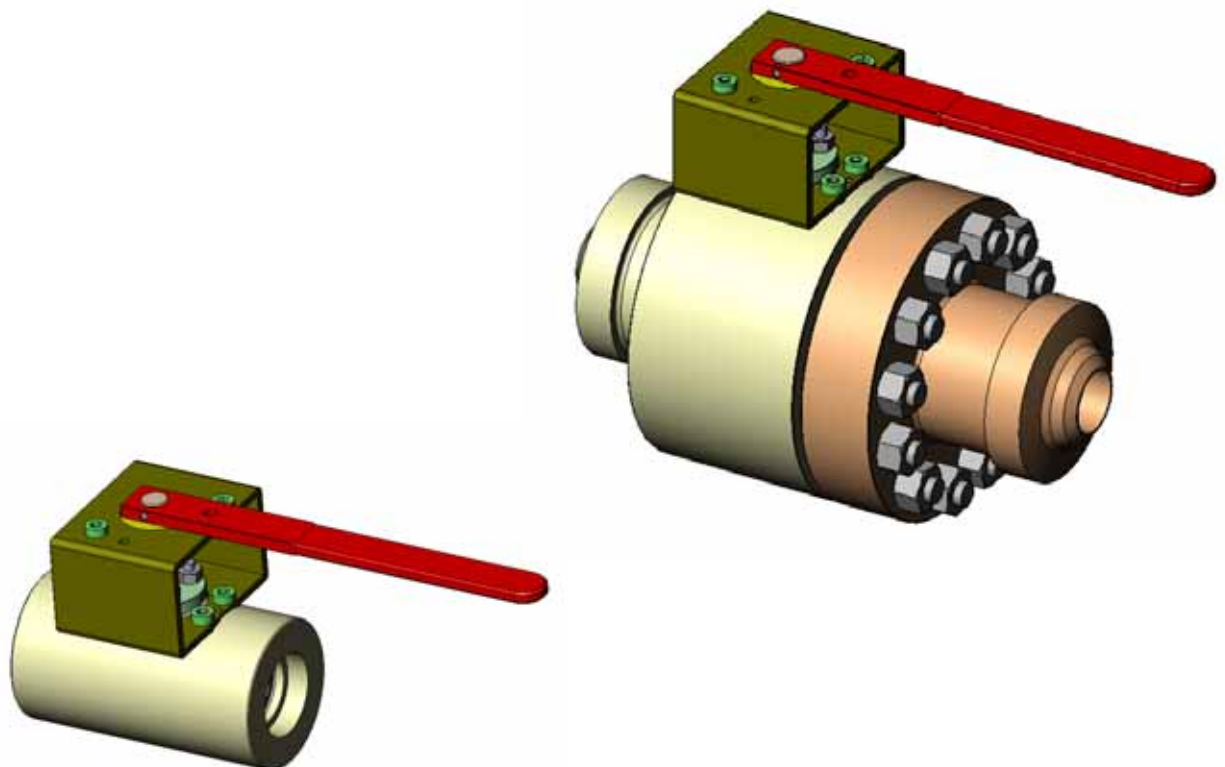
Metal Seated Ball Valve

High Temperature

High Pressure

Severe Service

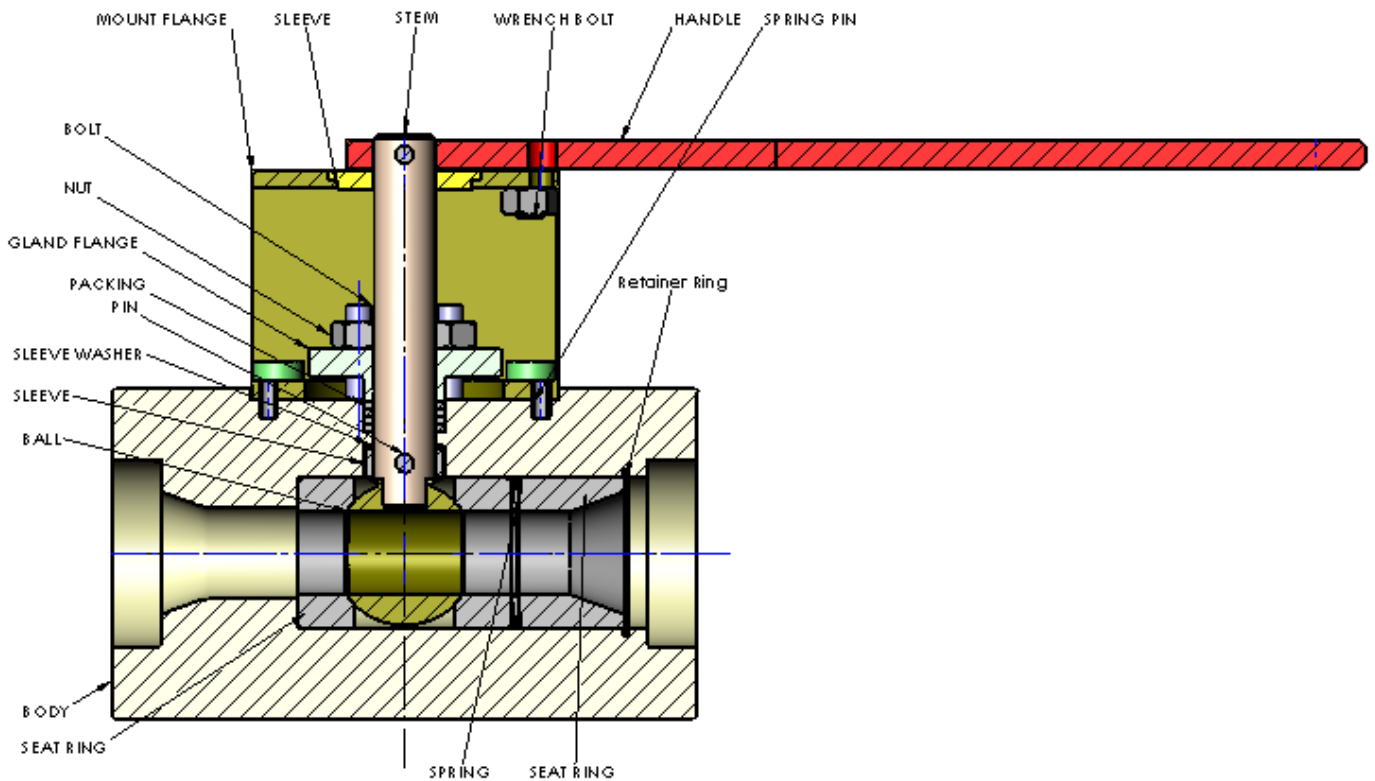
Long Life Cycle



A-ONE Metal Seated Ball Valve

FEATURES

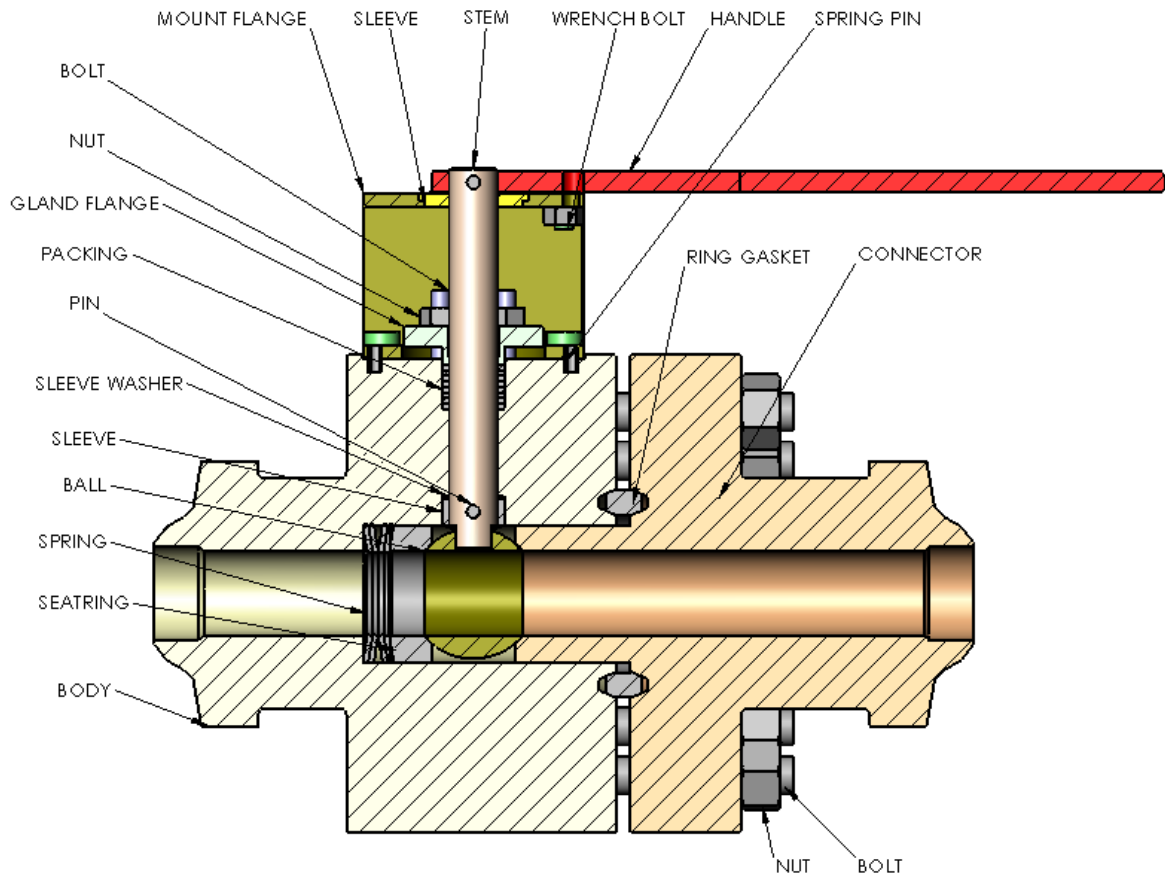
Type MB-10



1. One piece forged body for high pressure service.
2. Dual stem guiding sleeves are for reduces torque and providing accurate alignment for smooth operation.
3. Special custom hard coating on the ball over life cycle.
4. Precision lapped of the seating surfaces is guarantee for zero leakage.
5. Positioning mount flange provides a rigid mounting arrangement for all types of actuators.
6. Stem is designed for blowout proof and reliability.
7. The live loaded packing design eliminates packing leaks.

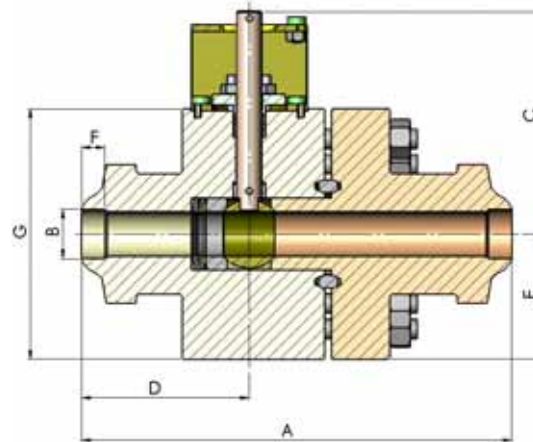
FEATURES

Type MB-20



1. Integral seat design is to prevent internal leaks.
2. Dual stem guiding sleeves are for reduces torque and providing accurate alignment for smooth operation.
3. Special custom hard coating on the ball over life cycle.
4. Precision lapped of the seating surfaces is guarantee for 4 years zero leakage.
5. Positioning mount flange provides a rigid mounting arrangement for all types of actuators.
6. Stem is designed for blowout proof and reliability.
7. The live loaded packing design eliminates packing leaks.
8. Precision metal gasket is for easy maintenance.

DIMENSION



Type MB-10

Size	A		B	C		D		E		F	G		Weight	
	#900- #2500	#4500		#900- #2500	#4500	#900- #2500	#4500	#900- #2500	#4500		#900- #2500	#4500	#900- #2500	#4500
1/2"	127	127	21.7	149	149	70	70	44.5	44.5	10	45	45	19	20
3/4"	127	127	27.1	149	149	70	70	44.5	44.5	13	45	45	21	21
1"	133	133	33.8	149	149	70	70	44.5	44.5	13	45	45	23	24
1-1/4"	133	133	42.6	149	149	70	70	44.5	44.5	13	45	57	22	24
1-1/2"	133	191	48.7	149	149	70	83	44.5	57.2	13	45	57	23	41
2"	191	191	61.1	165	149	97	83	54.1	57.2	16	54	57	25	40

Type MB-20

Size	A		B	C		D		E		F	G	Weight	
	#900- #2500	#4500		#900- #2500	#4500	#900- #2500	#4500	#900- #2500	#4500			#900- #2500	#4500
1/2"	152	203		150	150	70	70	44	44		121	9	9
3/4"	152	203		150	150	70	70	44	44		130	10	10
1"	203	203		150	150	70	70	44	44		149	10	11
1-1/4"	203	203		150	150	70	70	44	44		159	10	11
1-1/2"	203	203		150	150	70	83	44	57.2		178	10	19
2"	254	203		165	149	70	83	54.1	57.2		381	15	19
2-1/2"	254	283		165	N/A	70	97	54.1	108		381	15	24
3"	292	283		N/A	N/A	102	97	76.2	108		381	37	37
4"	292	283		N/A	N/A	102	97	76.2	108		381	39	39

BILL OF MATERIAL

NO.	NAME	QTY.	A105	A182-F316	A182-F22	A182-F91
1	BODY	1	A105	F316	F22	F91
2	CONNECTOR (NOTE1)	1	A105	F316	F22	F91
3	SEAT RING (NOTE2)	2*	A276-420	A276-316	A276-420	A276-420
4	SEAT RING (NOTE3)	1	A276-420	A276-316	A276-420	A276-420
5	BALL	1*	A276-420	A276-420	A276-420	A276-420
6	STEM	1	A276-420	A276-420	A276-420	A276-420
7	PACKING	4*	GRAPHITED	GRAPHITED	GRAPHITED	GRAPHITED
8	GLAND FLANGE	1	A276-420	A276-420	A276-420	A276-420
9	PIN	1	A276-420	A276-420	A276-420	A276-420
10	PIN	1	A276-420	A276-420	A276-420	A276-420
11	SLEEVE	1	A276-410	A276-410	A276-410	A276-410
12	SLEEVE	1	A276-410	A276-410	A276-410	A276-410
13	SLEEVE WASHER	1	A276-420	A276-420	A276-420	A276-420
14	HANDLE	1	A276-410	A276-410	A276-410	A276-410
15	MOUNT FLANGE	1	A276-304	A276-304	A276-304	A276-304
16	SPRING	1*	Inconel 625	Inconel 625	Inconel 625	Inconel 625
17	Retainer Ring	1*	Inconel 625	Inconel 625	Inconel 625	Inconel 625
18	SPRING PIN	2	STAINLESS	STAINLESS	STAINLESS	STAINLESS
19	BOLT	4*	A193-B8M	A193-B8M	A193-B8M	A193-B8M
20	NUT	6*	A194-8M	A194-8M	A194-8M	A194-8M
21	WRENCH BOLT	6	A193-B8	A193-B8	A193-B8	A193-B8

NOTE1 : Only available at type B

NOTE2 : Seatring Qty 1 if type B

NOTE3 : Not available if type B

* Recommended Spare Parts - *

Options

* Other Special Material can be acceptable.

* Special Paint

Pressure Temperature Rating

Material : A105 (psi)

Temp : °F

	- 20 to 100	200	300	400	500	600	650	700	750	800	850	900	950	1000
Class 900	2220	2025	1970	1900	1795	1640	1610	1600	1510	1235	805	515	310	155
Class 1500	3705	3375	3280	3170	2995	2735	2685	2665	2520	2060	1340	860	515	260
Class 2500	6170	5626	5470	5280	4990	4560	4475	4440	4200	3430	2230	1430	860	430
Class 4500	11110	10120	9845	9505	8980	8210	8055	7990	7560	6170	4010	2570	1545	770

Material : A182-F22 (psi)

	- 20 to 100	200	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Class 900	2250	2150	2030	1945	1920	1815	1765	1705	1595	1525	1460	1350	1130	805	595	340	310	165
Class 1500	3750	3580	3385	3240	3200	3025	2940	2840	2660	2540	2435	2245	1885	1340	995	565	515	275
Class 2500	6250	5965	5640	5400	5330	5040	4905	4730	4430	4230	4060	3745	3145	2230	1660	945	860	460
Class 4500	111250	10740	10150	9720	9595	9070	8825	8515	7970	7610	7305	6740	5660	4010	2985	1700	1545	825

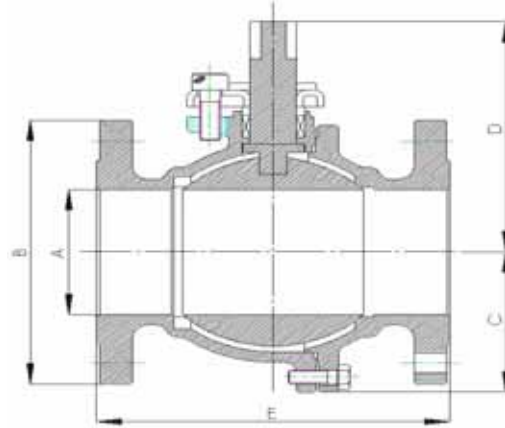
Material : A182-F91 (psi)

	- 20 to 100	200	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Class 900	2250	2250	2185	2115	1920	1815	1765	1705	1595	1525	1460	1350	1109	1090	1080	965	718	448
Class 1500	5625	5625	5463	5293	4798	4536	4414	4258	3988	3808	3654	3370	2898	2728	2700	2416	1800	1105
Class 2500	7750	7750	7527	7292	6610	6249	6081	5866	5492	5244	5034	4644	3993	3765	3720	3330	2480	1523
Class 4500	11250	11250	10925	10585	9595	9070	8825	8515	7970	7610	7305	6740	5795	5450	5400	4835	3600	2211

Material : A182-F316 (psi)

	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
Class 900	1330	1295	1270	1245	1215	1180	1160	1090	1080	965	825	620	545	410	310	225	175	125
Class 1500	2220	2160	2110	2075	2030	1970	1930	1820	1800	1610	1370	1030	910	685	515	380	290	205
Class 2500	3700	3600	3520	3460	3380	3280	3220	3030	3000	2685	2285	1715	1515	1145	860	630	485	345
Class 4500	6660	6480	6335	6230	6085	5905	5795	5450	5400	4835	4115	3085	2725	2060	1545	1130	875	620

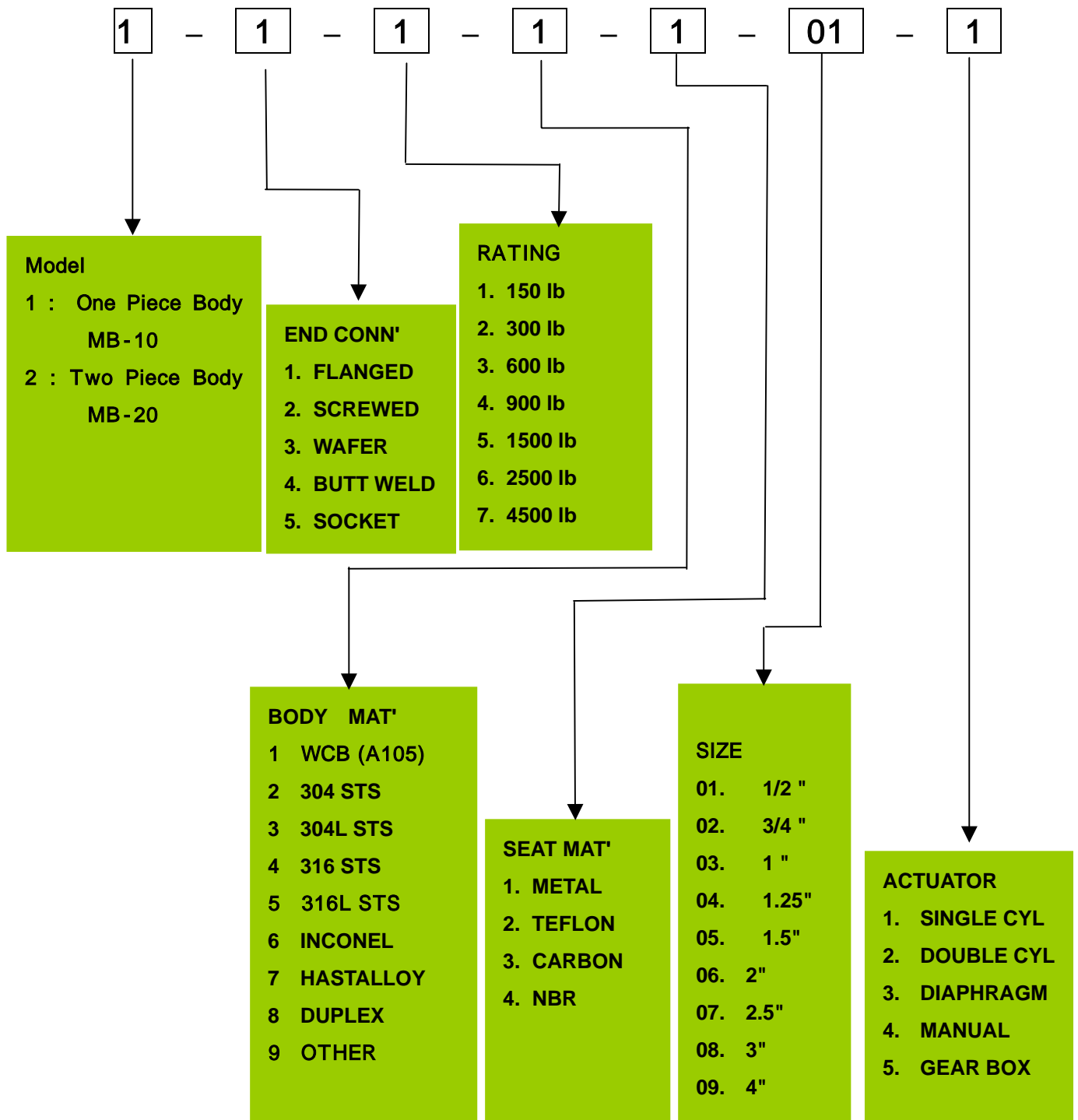
Large Size & Low Pressure



	A			B			C			D			E							
	150	300	600	150	300	600	150	300	600	150	300	600	150	300	600	150	300	600		
1/2	16	16	16	88.9	95.3	95.3	31.8	31.8	31.8	50.8	50.8	50.8	108	139.7	165.1	12.7	8	10	14	28
3/4	16	16	16	98.6	116.8	625.3	31.8	31.8	31.8	50.8	50.8	50.8	117.3	152.4	190.5	12.7	9	12	19	42
1																				
1.1/	38.1	38.1	38.1	127	155.4	155.4	54.1	54.1	54.1	95.3	95.3	95.3	165.1	190.5	241.3	19.1	20	26	32	25
2	54.1	54.1	54.1	152.4	165.1	165.1	85.9	85.9	85.9	254	254	254	177.8	215.9	292.1	25.4	28	31	40	480
3	77.7	77.7	77.7	190.5	209.6	209.6	101.6	101.6	101.6	279.4	279.4	279.4	203.2	282.4	355.6	38.1	95	110	195	1,300
4	103.1	103.1	103.1	228.6	254	273.1	114.3	114.3	114.3	342.9	342.9	342.9	228.6	304.8	431.8	50.8	140	170	290	2,300
6	153.9	153.9	153.9	279.4	317.5	355.6	152.4	152.4	165.1	419.1	419.1	419.1	393.7	403.4	558.8	63.5	410	450	670	5,400
8	204.7	204.7	204.7	342.9	381	419.1	203.2	203.2	215.9	482.6	482.6	482.6	457.2	501.7	660.4	88.9	690	770	1050	10,00
10	255.5	255.5	255.5	406.4	444.5	508	261.6	261.6	261.6	584.2	584.2	584.2	533.4	568.5	787.4	101.6	1060	1150	1840	16,00
12	306.3	306.3	306.3	482.6	520.7	558.8	317.5	317.5	330.2	660.4	660.4	660.4	609.6	647.7	838.2	127	1840	1980	2650	24,00
14	306.3	306.3	306.3	533.4	584.2	603.3	317.5	317.5	330.2	660.4	660.4	660.4	685.8	762	889	127	2180	2140	2910	31,40
16	387.4	387.4	387.4	596.9	647.7	685.8	368.3	368.3	387.4	863.6	863.6	863.6	762	838.2	990.6	177.8	3350	3500	4800	43,00

	A			B			C			D			E							
	150	300	600	150	300	600	150	300	600	150	300	600	150	300	600	150	300	600		
1	16	16	16	108	124	124	31.8	31.8	31.8	50.8	50.8	50.8	127	165.1	215.9	12.7	10	14	22	38
2	38.1	38.1	38.1	152.4	165.1	165.1	54.1	54.1	54.1	95.3	95.3	95.3	177.8	215.9	292.1	19.1	25	29	40	260
3	54.1	54.1	54.1	190.5	210.3	209.6	85.9	85.9	85.9	254	254	254	203.2	282.4	355.6	25.4	35	41	65	560
4	77.7	77.7	77.7	228.6	254	273.1	101.6	101.6	101.6	279.4	279.4	279.4	228.6	304.8	431.8	38.1	100	125	140	1410
6	103.1	103.1	103.1	279.4	317.5	355.6	114.3	114.3	114.3	342.9	342.9	342.9	266.7	403.4	558.8	50.8	180	215	255	2450
8	130.3	153.9	153.9	342.9	381	419.1	136.7	152.4	165.1	439.4	419.1	419.1	292.1	501.7	660.4	63.5	360	610	760	5650*
10	181.1	204.7	204.7	406.4	444.5	508	181.1	203.2	215.9	457.2	482.6	482.6	330.2	568.5	787.4	88.9	480	1160	1490	9800*
12	255.5	255.5	255.5	482.6	520.7	558.8	203.2	261.6	261.6	482.6	584.2	584.2	355.6	647.7	838.2	101.6	890	1790	2450	15,30
14	255.5	255.5	255.5	533.4	584.2	603.3	261.6	261.6	261.6	584.2	584.2	584.2	381	762	889	101.6	1410	2300	2950	15,90
16	306.3	306.3	306.3	596.9	647.7	685.8	261.6	317.5	330.2	584.2	660.4	660.4	406.4	838.2	990.6	127	1740	2550	3300	27,00

Ordering Information



A - ONE

High Pressure Multi-WAY Ball Valve

FLUID CONTROL SOLUTION

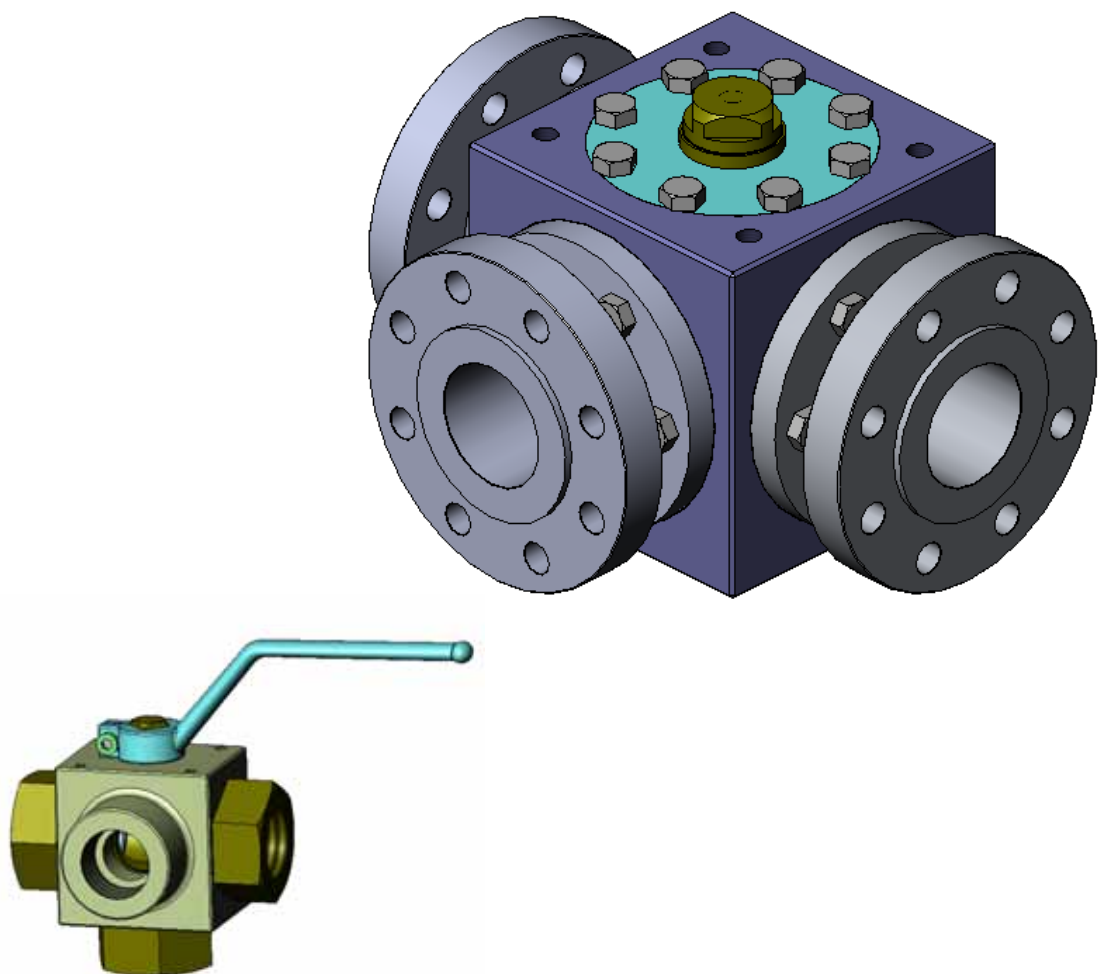
Fully Trunnion Mounted Ball Valve

3-Way 4-Way Multi-way

High Pressure

Severe Service

Long Life Cycle

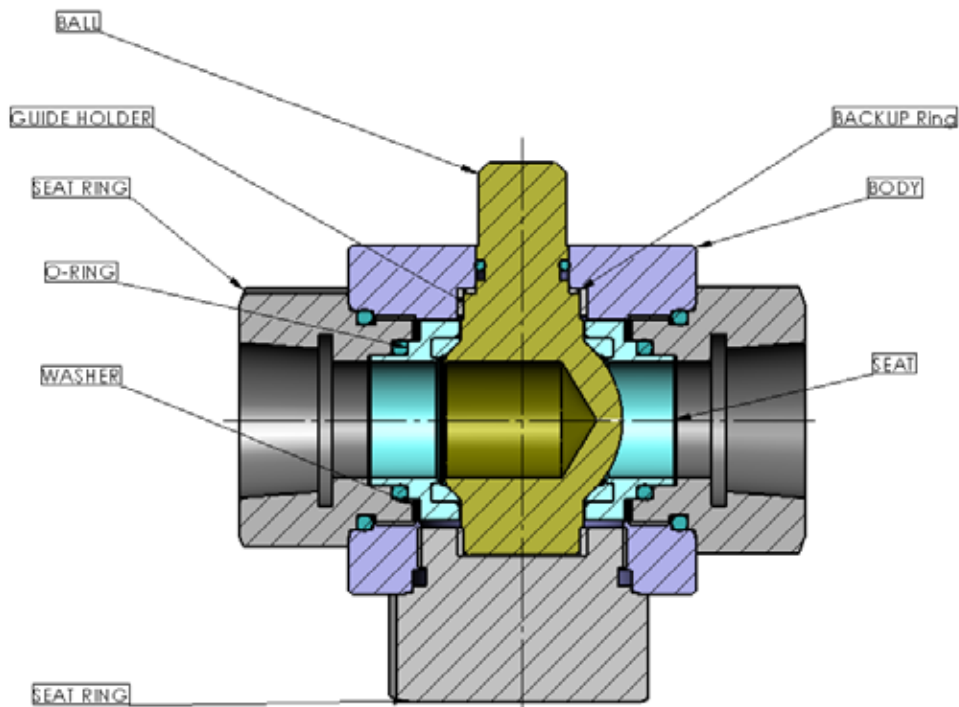


A - ONE High Pressure Multi-WAY Ball Valve

FEATURES

3-Way Small Size

Type CF11

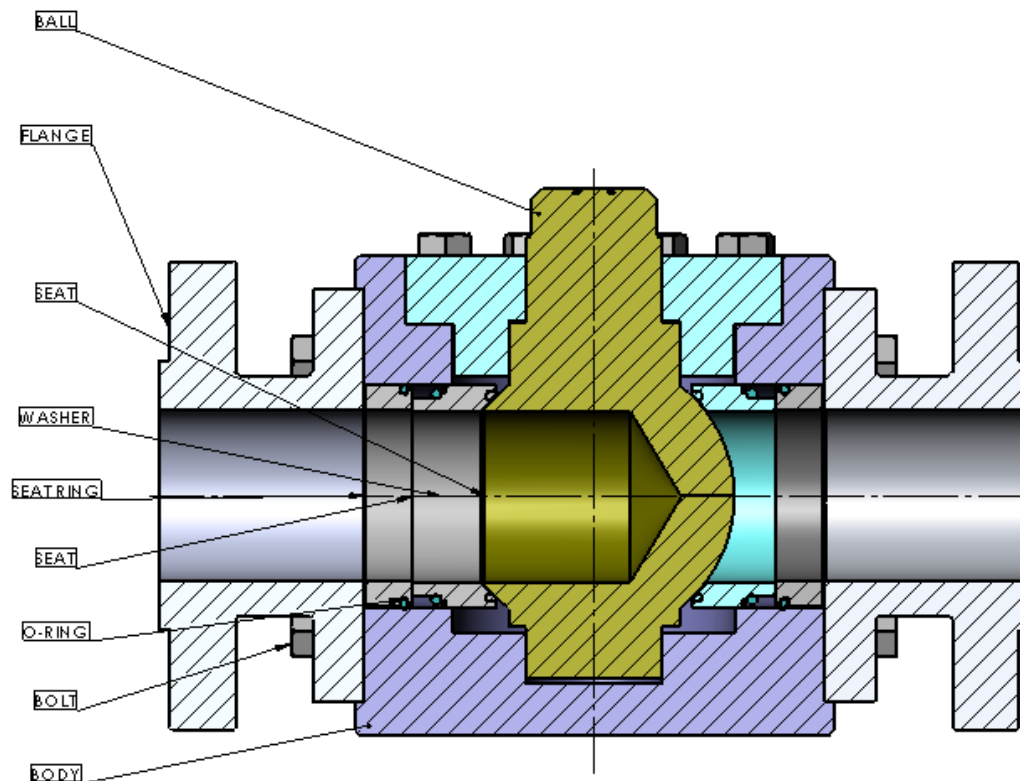


9. One piece Bar Stock body for high pressure service.
10. Dual stem guiding holders are for reduces torque and providing accurate alignment for smooth operation.
11. Special coating on the body over long life cycle.
12. Precision lapped of the seating surfaces is guarantee for zero leakage.
13. Positioning mount flange provides a rigid mounting arrangement for all types of actuators.
14. Stem and ball is fully mounted one-piece for blowout proof.
15. Multy -way inlet method provide flexibility of system design and reduce cost.
16. Many machining parts are provided by one precision machine for reliability.
17. Capable variety user end connection.

FEATURES

3-Way Large Size

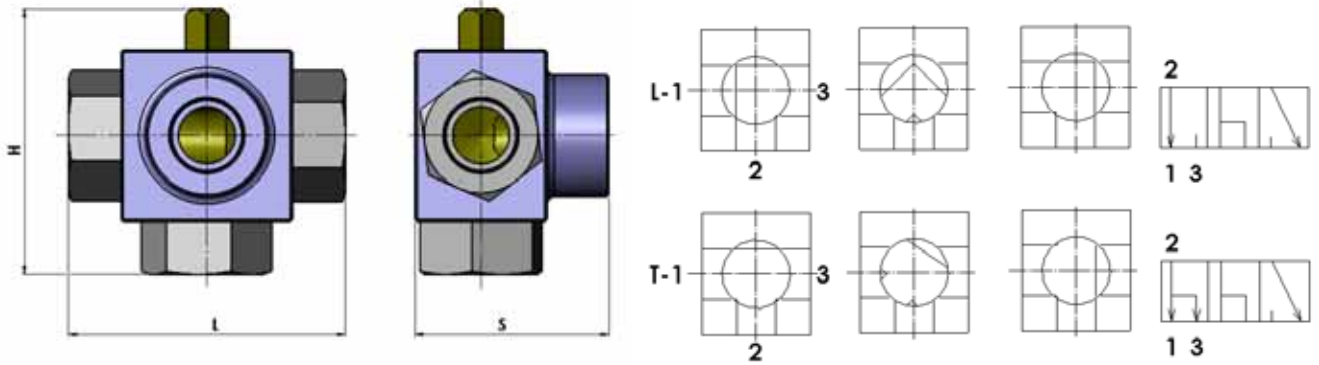
Type CF1R



1. One piece Bar Stock body for high-pressure service.
2. Dual stem guiding holders are for reduces torque and providing accurate alignment for smooth operation.
3. Special coating on the body over long life cycle.
4. Precision lapped of the seating surfaces is guarantee for zero leakage.
5. Positioning mount flange provides a rigid mounting arrangement for all types of actuators.
6. Stem and ball is fully mounted one-piece for blowout proof.
7. Multi-way inlet method provides flexibility of system design and reduces cost.
8. Many machining parts are provided by one precision machine for reliability.
9. Capable Large size under 24"(600A) including user end connections.

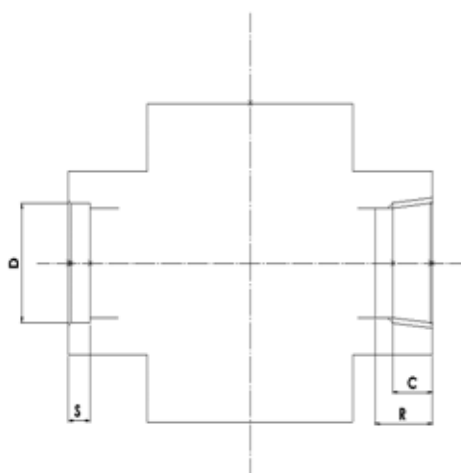
DIMENSION

3-Way Ball Valve



Type CF11

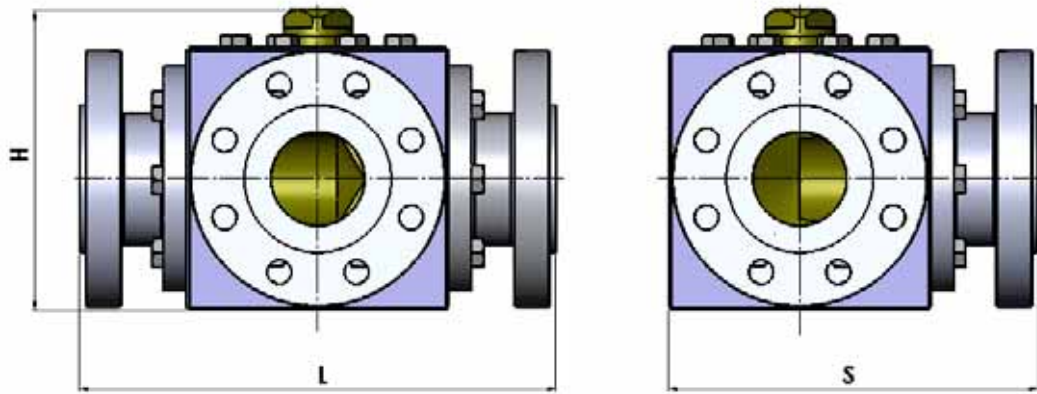
SIZE	DN	H		L		S		Weight(Kgf)	
		#1500	#2500	#1500	#2500	#1500	#2500	#1500	#2500
1/8"	4	77	87	69	89	47.5	57.5	0.4	0.6
1/4"	6	77	87	69	89	47.5	57.5	0.4	0.6
3/8"	10	82	94	72	82	52	64	0.6	0.8
1/2"	13	84	96	83	90	59	70	0.7	0.9
3/4"	20	105	115	95	105	72	82	1.8	2.2
1"	25	113	123	113	123	85.5	95	2.4	2.6
1-1/4"	32	136	146	120	140	94	105	3.8	4.5
1-1/2"	40	157	167	130	140	118	120	6.2	8.0
2"	50	167	160	150	160	133	150	7.8	9.2



	ANSI SW		JIS SW		ANSI NPT		JIS PT	
	D+0.5	S	D+0.3	S	C	R	C	R
1/8"	10.7	10	11.1	9.6	8	10	8	10
1/4"	14.1	10	14.3	9.6	10	12	10	12
3/8"	17.6	10	17.8	9.6	11	15	11	15
1/2"	21.7	10	22.2	9.6	15.5	17	15.5	17
3/4"	27.1	13	27.7	12.7	16.5	18	16.5	18
1"	33.8	13	34.5	12.7	19.5	22	19.5	22
1-1/4"	42.6	13	43.2	12.7	21	23	21	23
1-1/2"	48.7	13	49.1	12.7	21	23	21	23
2"	61.1	16	61.1	15.9	23	26	23	26

DIMENSION

3-Way Ball Valve



Type CF11

SIZE	DN	H		L		S		Weight(Kgf)	
		#1500	#2500	#1500	#2500	#1500	#2500	#1500	#2500
2"	50	200	220	368	451	200	220	8.1	9.2
3"	80	220	240	470	558	310	320	9.2	10.5
4"	100	240	250	546	673	320	330	10.5	12.0
6"	150	250	300	705	914	400	420	12.0	15.0
8"	200	300	310	832	1022	500	520	13.0	20.0
10"	250	310		991		600		15.0	
12"	300	320		1130		800		22.0	
14"	350	360		1257		900		26.0	
16"	400	400		1384		1100		28.0	
18"	450								
20"	500								
24"	600								

* ANSI JIS BW ENDS AVAILABLE

* JIS FLANGE ENDS AVAILABLE

* ABOVE DIMMENSION COULD BE CHANGED WITH OUT NOTICE

Pressure Temperature Rating

Material : A105 (psi)

Temp : °F

	- 20 to 100	200	300	400	500	600	650	700	750	800	850	900	950	1000
Class 900	2220	2025	1970	1900	1795	1640	1610	1600	1510	1235	805	515	310	155
Class 1500	3705	3375	3280	3170	2995	2735	2685	2665	2520	2060	1340	860	515	260
Class 2500	6170	5626	5470	5280	4990	4560	4475	4440	4200	3430	2230	1430	860	430
Class 4500	11110	10120	9845	9505	8980	8210	8055	7990	7560	6170	4010	2570	1545	770

Material : A182-F22 (psi)

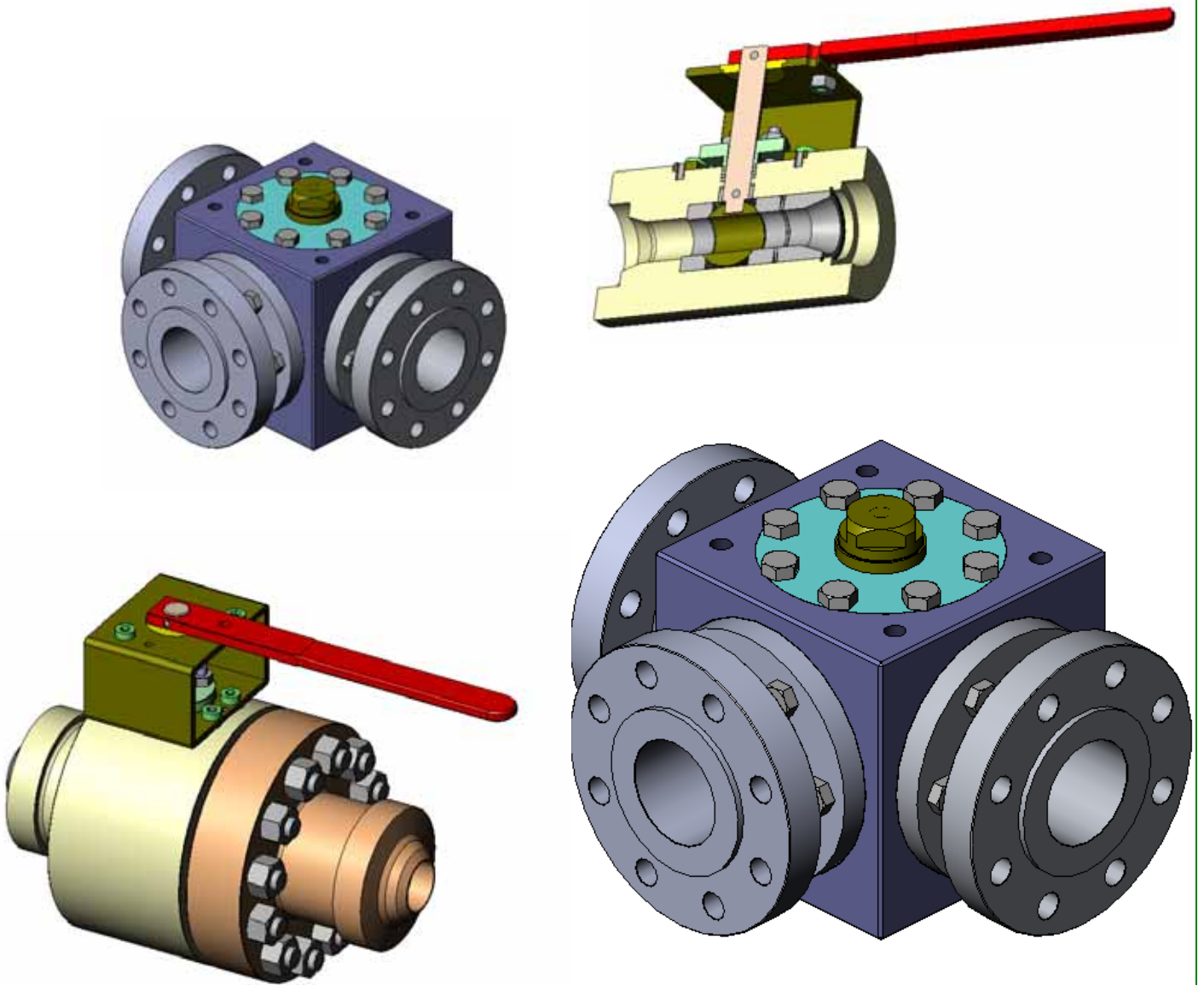
	- 20 to 100	200	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Class 900	2250	2150	2030	1945	1920	1815	1765	1705	1595	1525	1460	1350	1130	805	595	340	310	165
Class 1500	3750	3580	3385	3240	3200	3025	2940	2840	2660	2540	2435	2245	1885	1340	995	565	515	275
Class 2500	6250	5965	5640	5400	5330	5040	4905	4730	4430	4230	4060	3745	3145	2230	1660	945	860	460
Class 4500	111250	10740	10150	9720	9595	9070	8825	8515	7970	7610	7305	6740	5660	4010	2985	1700	1545	825

Material : A182-F91 (psi)

	- 20 to 100	200	300	400	500	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
Class 900	2250	2250	2185	2115	1920	1815	1765	1705	1595	1525	1460	1350	1109	1090	1080	965	718	448
Class 1500	5625	5625	5463	5293	4798	4536	4414	4258	3988	3808	3654	3370	2898	2728	2700	2416	1800	1105
Class 2500	7750	7750	7527	7292	6610	6249	6081	5866	5492	5244	5034	4644	3993	3765	3720	3330	2480	1523
Class 4500	11250	11250	10925	10585	9595	9070	8825	8515	7970	7610	7305	6740	5795	5450	5400	4835	3600	2211

Material : A182-F316 (psi)

	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
Class 900	1330	1295	1270	1245	1215	1180	1160	1090	1080	965	825	620	545	410	310	225	175	125
Class 1500	2220	2160	2110	2075	2030	1970	1930	1820	1800	1610	1370	1030	910	685	515	380	290	205
Class 2500	3700	3600	3520	3460	3380	3280	3220	3030	3000	2685	2285	1715	1515	1145	860	630	485	345
Class 4500	6660	6480	6335	6230	6085	5905	5795	5450	5400	4835	4115	3085	2725	2060	1545	1130	875	620



Aone Fluid Control Solution **A-ONE AUTO VALVE**

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