

Item 501T Multi-Way Ball Valve

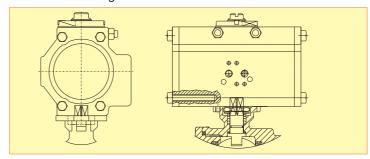
800 WOG/PN55 SIZE: 1/4"-4"



- * Body & end caps quality investment casting
- * Available in stainless steel or carbon steel
- * with ISO 5211 direct mounting pad
- * Adjustable stem packing
- * Blow-out proof stem design
- * Available in L/ T/ X/ I-port
- * Available in full bore or reduced bore (std. Bore)
- * Available in 3/ 4/5-way in block body type.
- * 100% air tested under water at 80-100 psi
- * Temperature range -20 F to 450 F
- * End type: thread/ socket weld/ butt weld
- * with locking function

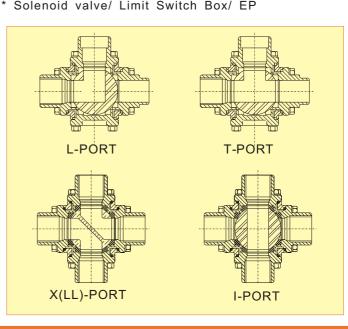
OPTION

- * Automation application
- * PTFE/ PFA coating (40-70 um)
- * TFM1600/ TFM4215/ UPE (UHMWP) soft kits
- Cavity filler
- * 180 degree operation stop plate
- * Hastelloy C, Alloy 20, Super Duplex, Monel
- Fire safe design



ISO direct mount for actuator assembling directly.

- * Pneumatic (DA or SR)/ Electric actuator
- * Solenoid valve/ Limit Switch Box/ EP





ZIPSON'S 501T, multi-way ball valve with ISO direct mount is a smart way to save the cost on pipe line and space. With T/L/X/I-port for 3/4/5way block body type, and will be easy to find a suitable type for any application. The 501T designed with ISO direct mount for assembling the actuator directly.

501T is 4 seats design, this will help to keep the ball position stably. And designed with a insert pin between the stem & ball to make sure the ball will not leaning after hundreds of operation. The 4 windows on the neck will let the media leak from while the valve leaks. This will protect the actuator to keep from damage by the media. And a good way to keep the working temperature lower, this will help to increase the life time of actuator.

Ends cap can be Thread/ Socket Weld/ Butt Weld types for different pipe connection.. (For flanged ends & T-Clamp ends please review our 501F & 620 type) 501T valve can be with cavity fillers to filled all the valve cavity. This will help to keep the media from leaving in the cavity for easy cleaning & anti-sticky of the ball. But the internal body need to be machining first.

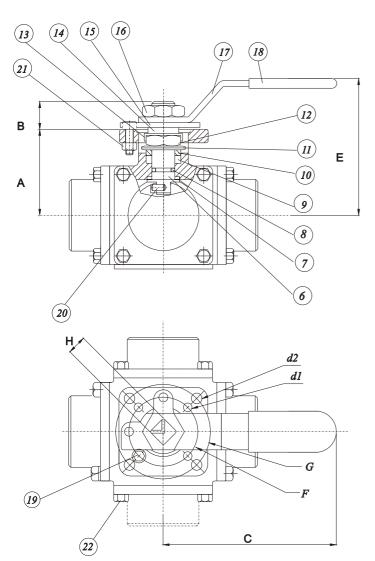
As for the soft kits, pure PTFE/ PTFE+25% Carbon/ TFM1600/ TFM4215/ UPE (UHMWPE) are available for different application. Sometimes we can offer PEEK seats, but not for size over 1-1/4". The PEEK will increase the torque much, replace the stem to be 17-4 may necessary after estimating.

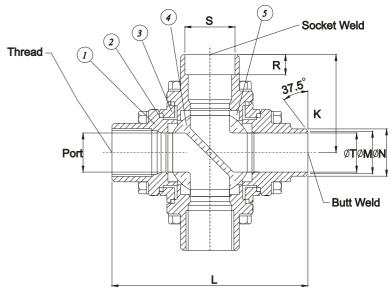
Valve with PTFE/ PFA coating are available while required. It helps to be anti-sticky on both external & internal body, ball, and stem.

Extraordinary material such as Hastelloy C, Monel, Alloy 20, Duplex are available, too, for special media or environment.

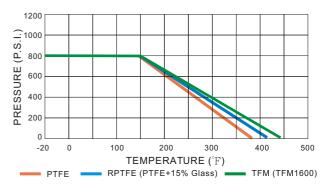








PRESSURE/ TEMPERATURE



DIMENSIONS, 1/4" to 2" (mm)

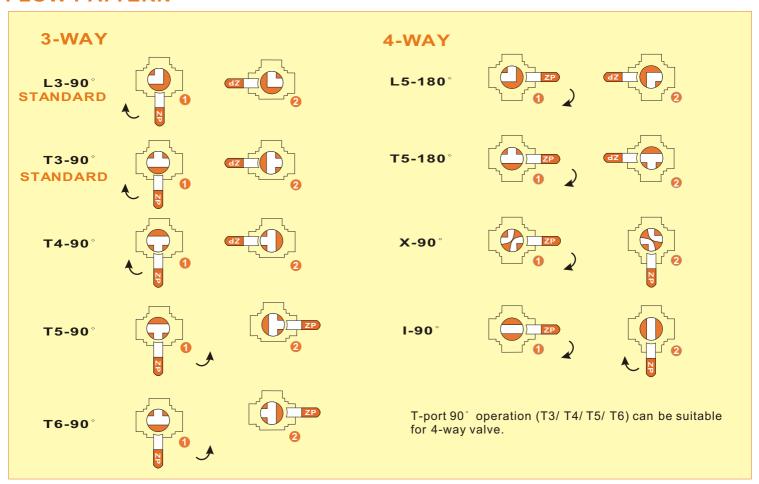
STANDARD PORT	А	В	С	d1	d2	E	F	G	Н	К	L	R	S	Port	3-Way W(kg)	4-Way W(kg)
1/2"	37.5	9.5	130	6.0	6.0	62	36	42	9	44	87	12.7	21.7	12.5	1.30	1.33
3/4"	42	11	130	6.0	6.0	64	36	42	9	52.5	104	14.3	27.1	15	2.04	2.09
1"	49	14	165	6.0	7.1	82	42	50	11	55.5	111	15.9	33.9	20	2.65	2.69
1 1/4"	55	14	165	6.0	7.1	89	42	50	11	64	127	17.5	42.5	25	3.98	4.10
1 1/2"	63	17	205	7.1	9.2	98	50	70	14	69	138	19.1	48.6	32	5.31	5.34
2"	74	16	205	7.1	9.2	108	50	70	14	79	158	22.2	61.1	38	8.37	8.42

FULL PORT	А	В	С	d1	d2	E	F	G	Н	К	L	R	S	Port	Т	M	N	3-Way W(kg)	4-Way W(kg)
1/4"	37.5	9.5	130	6.0	6.0	62	36	42	9	44	87	11.1	14.2	10	10	12.5	17	1.30	1.32
3/8"	37.5	9.5	130	6.0	6.0	62	36	42	9	44	87	11.1	17.5	12.5	12	14.5	19	1.30	1.32
1/2"	42	11	130	6.0	6.0	64	36	42	9	52.5	104	12.7	21.7	15	15	17.5	21.5	2.02	2.05
3/4"	49	14	165	6.0	7.1	82	42	50	11	55.5	111	14.3	27.1	20	20	22.5	27.5	2.62	2.70
1"	55	14	165	6.0	7.1	89	42	50	11	64	127	15.9	33.9	25	25	28	34.5	3.71	3.76
1 1/4"	63	17	205	7.1	9.2	98	50	70	14	69	138	17.5	42.5	32	32	35	42.8	5.47	5.55
1 1/2"	74	16	205	7.1	9.2	108	50	70	14	79	158	19.1	48.6	38	38	41	49	8.44	8.52
2"	93	21	325	9.2	11.4	140	70	102	17	95	190	22.2	61.1	50	50	54	61	15.36	15.46





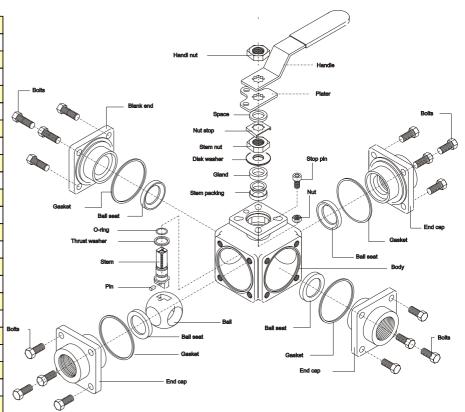
FLOW PATTERN



The wise use of 3-way or multi-way ball valve will help to save much cost on pipe line installation & the cost of place.

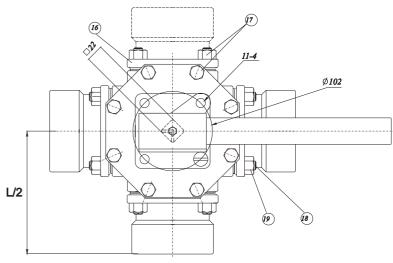
MATERIALS LIST, 1/4" to 2"

ITEM	PART NAME	MATERIALS
1	END CAP	CF8M
2	GASKET	PTFE
3	BODY	CF8M
4	BALL	SS 316
5	SEAT	PTFE
6	THRUST WASHER	RPTFE
7	STEM	SS 316
8	O-RING	VITON
9	STEM PACKING	PTFE
10	GLAND	SS 304
11	DISK WASHER	SS 301
12	STEM NUT	SS 304
13	NUT STOP	SS 304
14	SPACE WASHER	SS 304
15	STOPPER PLATE	SS 304
16	HANDLE NUT	SS 304
17	HANDLE	SS 304
18	SLEEVE	PLASTIC
19	STOP PIN	SS 304
20	INSERT PIN	SS 316
21	STOP PIN NUT	SS 304
22	BOLTS	SS 304









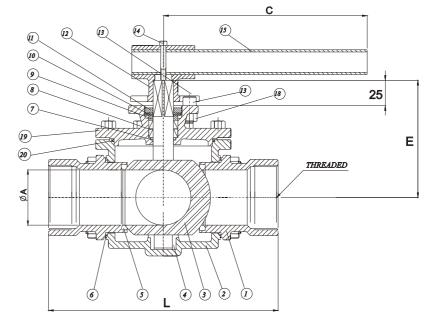
MATERIALS LIST, 2-1/2" to 4"

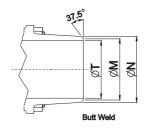
ITEM	PART NAME	MATERIALS
1	END CAP	CF8M
		0.0
2	BODY	CF8M
3	BALL &STEM	SS 316
4	HOUSING	PTFE + STAINLESS
5	SEATS	PTFE
6	GASKET	PTFE
7	O-RING	VITON
8	STEM PACKING	PTFE
9	GLAND WASHER	SS 304
10	DISK WASHER	SS 301
11	GLAND	SS 304
12	HANDLE HEAD	A351 Gr.CF8
13	STOP PIN	SS 304
14	BOLT	SS 304
15	HANDLE	STEEL PIPE
16	BLANK CAP	CF8M
17	BOLT	SS 304
18	END CAP BOLTS	SS 304
19	BOLT NUTS	SS 304
20	STOP PIN NUT	CF8M
21	BONNET	SS 304
22	BONNET GASKET	PTFE

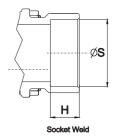


501T ball valve is available for 180° operation. This design will allow more flow patterns to be use in your pipe works. Customer just have to change a 180° stop plate for this option.

180° stop plate





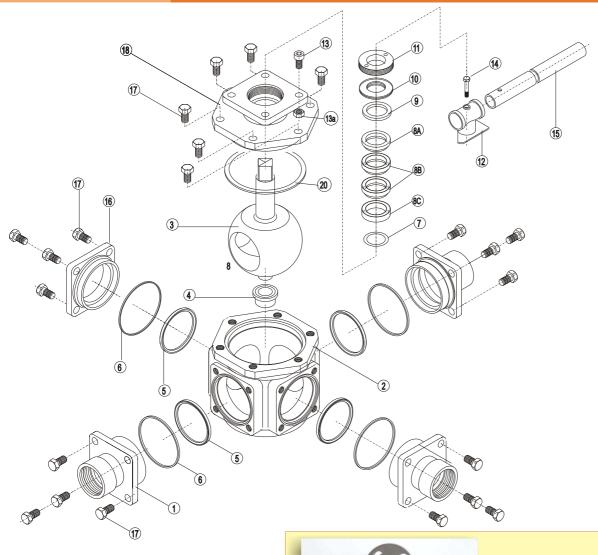


DIMENSIONS, 2-1/2" to 4" (mm)

SIZE	Α	В	С	Е	L	L(BW)	Н	S	Т	М	N	3-Way W(kg)	4-Way W(kg)
2-1/2"	62	65	400	144	294	265	23	73.9/ 77 (DIN)	65	70	77	22.7	23.6
3"	76	80	500	162	317	290.6	23	89.6	80	85	91	31.2	31.8
4"	96	100	650	182	369	345	29	115	100	100	115	53.4	54.2







501T, multi-way ball valve can be with cavity filler in internal body to fill the inner cavity. This may keep the body cavity clean and easy to cleanse. The cavity filler will keep the ball operation from sticking for glue-like media.

BREAK-TORQUE VALUE (Nm)

SIZE (FULL BORE)	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
SIZE (RED. BORE)	-	1/4"~1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	-	-	-	-
GREASE	10.3	10.3	12.8	15.4	25.0	34.6	55.3	71.8	134.7	147.5	237.3
NON-GREASE	15.4	15.4	16.2	19.5	32.2	41.3	63.4	96.2	229.0	258.2	427.5

Note 1: The greases ZIPSON use including lubricant & anti-seize grease are both SILICONE-FREE.

Note 2: Strongly suggest increasing at least 30%~40% for safety factor for mounting actuator.

CAUTION!

- 1. As dismantle the ball valve, don't forget to replace new Repair Kits, especially the gasket to prevent from leaking.
- 2. PTFE/TFM is better than RPTFE (+15% Glass) as operate the valve by actuator, for Glass fiber will hurt the ball and cause the torque value increasing.
- 3. Before welding, make sure the ends were dismantled for welding.
- 4. For multi-way valve, when the media is AIR and over 30 bar, please ask Zipson to make SS housing to protect the seat.

