



### SPECIFICATION

- \* 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
- \* 100% air tested under water at 80-100 psi
- \* Working pressure: 800WOG/ Pn55
- \* Temperature range -20°F to 450°F
- \* with locking function
- \* End type: threaded, socket weld, butt weld

### OPTION

- \* Spring handle (dead man handle)
- \* Fire safe design (follow API 607 Edition 4)
- \* Automation application
- \* PTFE/ PFA coating (40-70 um)
- \* Hastalloy C/ Super duplex/ Alloy 20/ Monel

ZIPSON'S 110T, Top-Entry ball valve is designed for the industries required in-line repairing/ cleaning/ maintaining in very short time for urgent situation. For 110T, size from 1/2" to 4" is the fundamental offering.

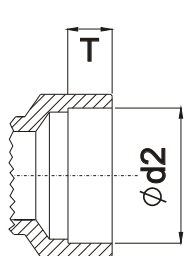
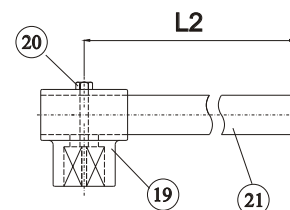
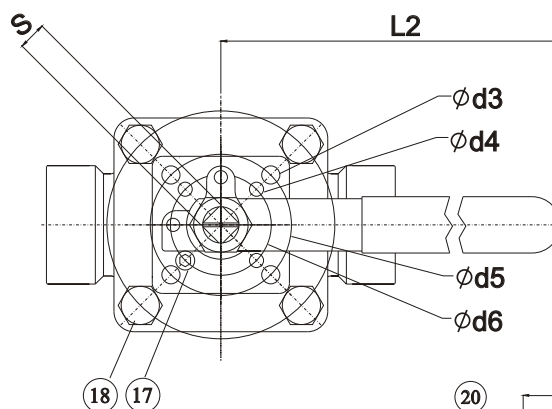
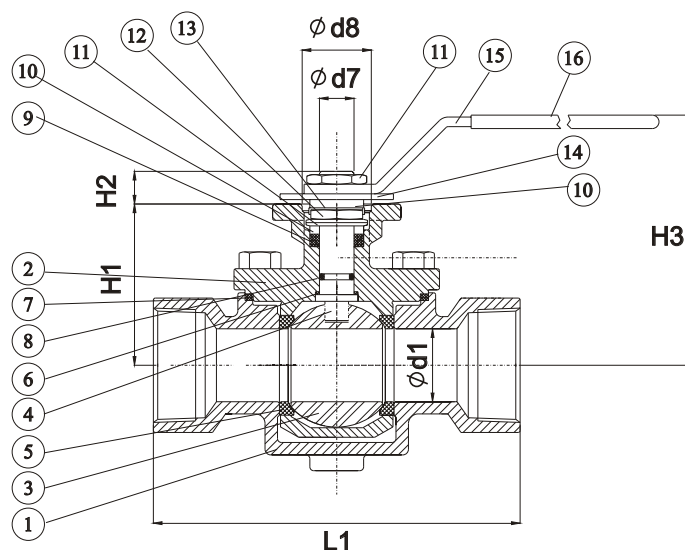
110T designed with ISO direct mounting pad, it's convenient for mounting pneumatic/ electric actuator for automatic control.

110T with the patent on the design while the valve is in "OPEN" position, it's easy to draw out the bonnet with the ball & seat at one time without any other tools & devices. And while the valve is in "CLOSE" position, the ball & seat will be compressed together closely without any other devices.

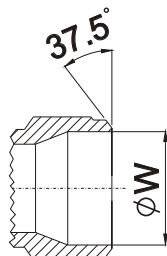
The connection can be thread/ socket weld/ butt weld and 800psi/ PN55 pressure rating.

Fire safe design is available for option, too, with graphite stem packing/ bonnet gasket and SS 316 seat housing replacement.

Special alloy such as Hastalloy C/ Alloy 20/ Super Duplex/ Monel are available for media with chlorine or others. The soft kits for 110T, the very well design & high quality top-entry ball valve, we use TFM1600 (TFM) as standard. TFM4215/ UHMWPE (UPE) are both for options.



110T, Sokcet Weld End



110T, Butt Weld End

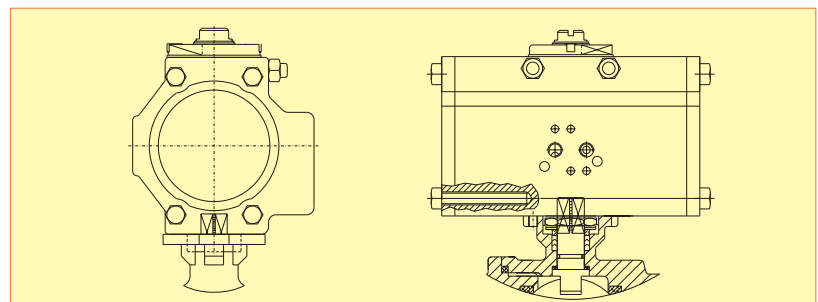
For 110T, 3" & 4" valves

## DIMENSIONS (mm)/ Thread/ SW/ BW Ends

SIZE	d1	d2	d3	d4	d5	d6	d7	d8	H1	H2	H3	L1 (Thread/ SW)	L1 (BW)	L2	S	T	W SCH. 40
1/2"	19.5	21.8	7.2	6.0	50	42	M14	30	65	14	96	127	140	165	11	12.7	15.5
3/4"	19.5	27.1	7.2	6.0	50	42	M14	30	65	14	96	133	152	165	11	14.3	20.5
1"	19.5	33.8	7.2	6.0	50	42	M14	30	65	14	96	140	165	165	11	15.9	26.5
1-1/2"	32	48.7	9.2	7.2	70	50	M18	35	75.5	16	111	172	191	205	14	19.1	35.0
2"	38	61.1	9.2	7.2	70	50	M18	35	80.5	16	111	191	216	205	14	22.2	40.5
3"	57.2	89.9	11.5	9.2	102	70	M22	55	106	23	153	241	283	340	17	25.4	78
4"	76	115.2	11.5	9.2	102	70	M22	55	130	23	153	280	305	340	17	32	102

## MATERIALS LIST

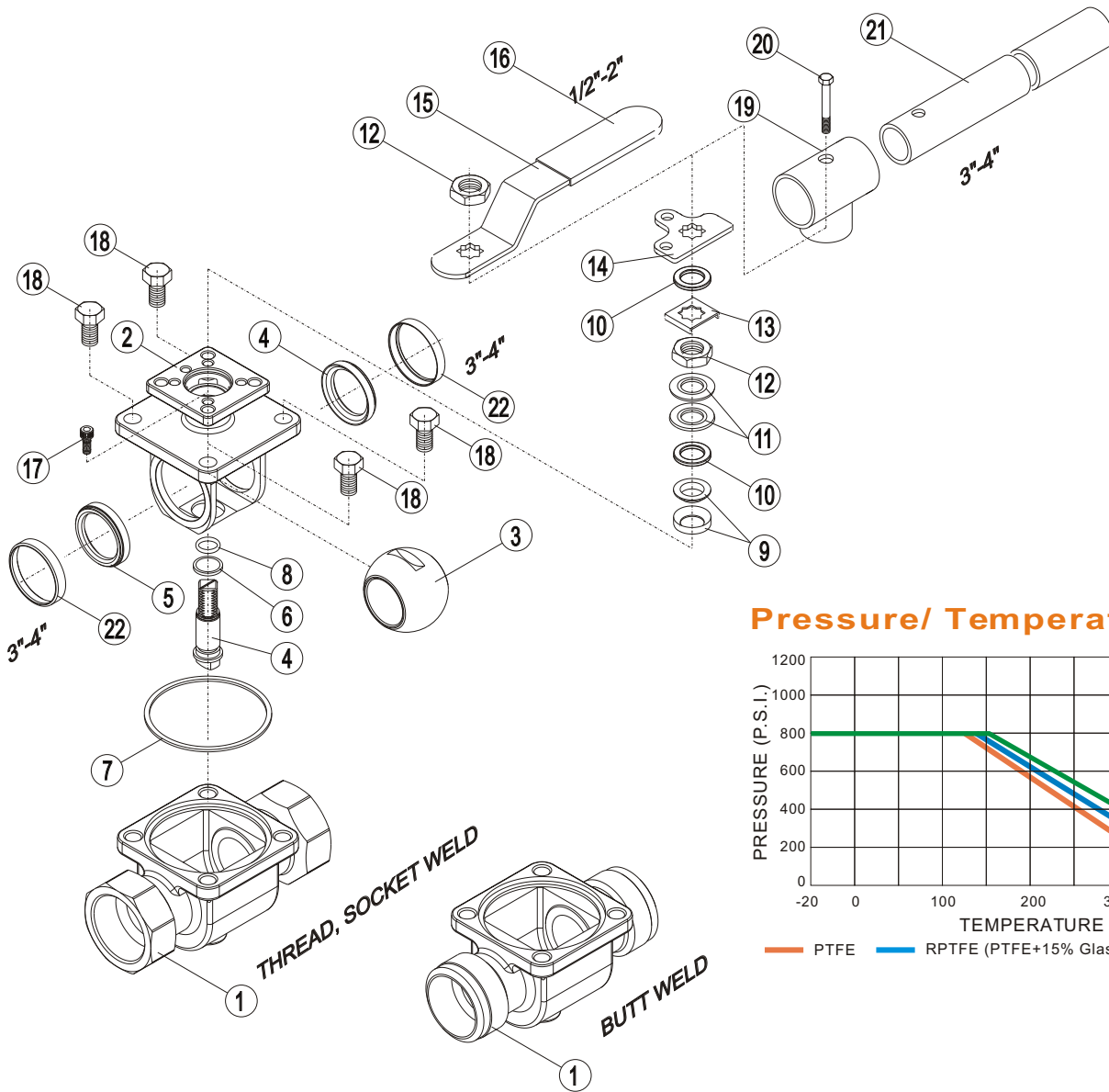
ITEM	PART NAME	MATERIALS	
1	BODY FLANGE	CF8M	WCB
2	BONNET	CF8M	WCB
3	BALL	SS 316	SS 316
4	STEM	SS 316	SS 316
5	SEAT	TFM1600	TFM1600
6	THRUST WASHER	TFM1600	TFM1600
7	GASKET	TFM1600	TFM1600
8	O-RING	VITON	VITON
9	STEM PACKING	TFM1600	TFM1600
10	SPACE WASHER	SS 304	SS 304
11	DISK WASHER	SS 301	SS 301
12	STEM NUT	SS 304	SS 304
13	NUT STOP	SS 304	SS 304
14	STOPPER PLATE	SS 304	SS 304
15	HANDLE	SS 304	SS 304
16	SLEEVE	PLASTIC	PLASTIC
17	STOP PIN	SS 304	SS 304
18	BONNET BOLTS	GRADE B8	GRADE B7
19	LEVER HEAD	CF8	CF8
20	SET BOLT	SS 304	SS 304
21	LEVER	STEEL PIPE	STEEL PIPE
22	SEAT HOUSING	SS 316	SS 316



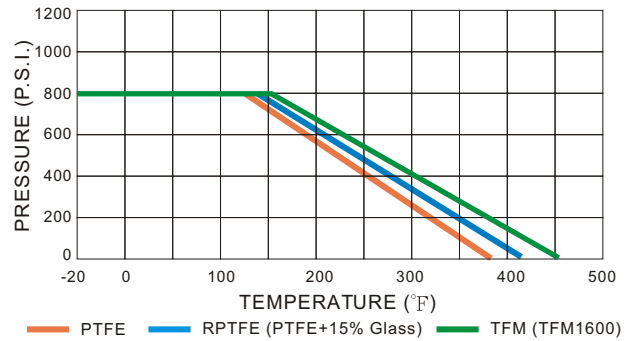
ISO direct mount for actuator assembling directly.

\* Pneumatic (DA or SR)/ Electric actuator

\* Accessories of Solenoid valve/ Limit Switch Box/ EP



### Pressure/ Temperature



### BREAK-TORQUE VALUE for Pressure Below 300 PSI

SIZE	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
GREASE	6	8.5	8.5	12.5	18	52.5	86
NON-GREASE	8	11.5	11.5	19	29	121	187.5

### BREAK-TORQUE VALUE for Pressure Over 300PSI

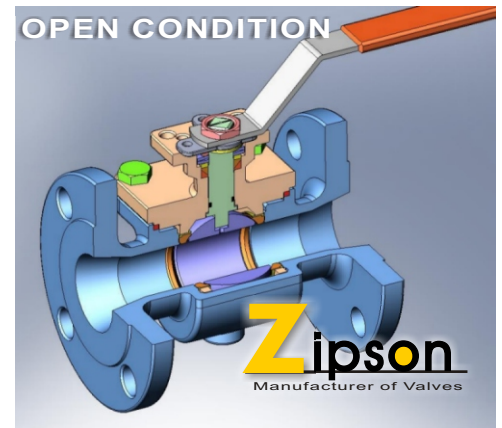
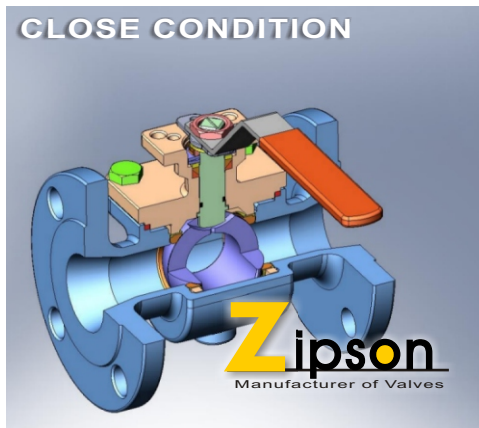
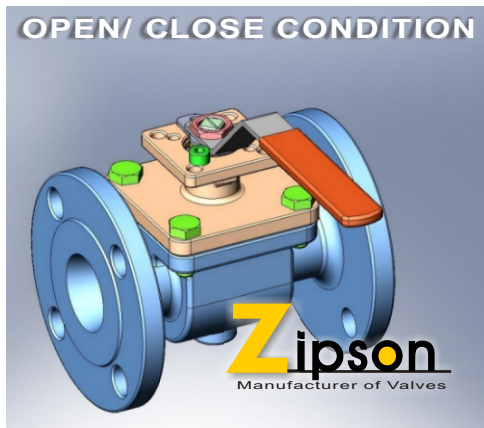
SIZE	1/2"	3/4"	1"	1 1/2"	2"	3"	4"
GREASE	9	12.8	12.8	18.8	27	78.8	129
NON-GREASE	12	17.3	17.3	28.5	43.5	182	281.3

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

#### Suggestion!

1. As dismantle the ball valve, don't forget to replace new Repair Kits, especially the gasket to prevent from leaking.
2. PTFE 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 after over 500 times operation. Another good option is TFM or PTFE+25% Carbon.
3. Before welding the valves, make sure the ends were dismantled. And welding the dismantled ends. After all the ends be cool, assemble the ends & use new gasket to prevent from leaking.

## OPEN/ CLOSE CONDITION



## DISMANTLING (FABRICATION CONTRARY)

