

800 WOG/ PN55  
SIZE: 1/2"-4"



ZIPSON'S 620, multi-way sanitary ball valve with ISO direct mount is a smart way to save the cost on sanitary pipe line and space. With T/L/X/I-port for 3/4-way block body type, and will be easy to find a suitable type for any application. The 620 designed with ISO direct mount for assembling the actuator directly.

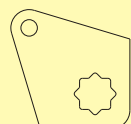
620 designed with cavity filler, this will filled the body cavity over 95%, especially for sanitary application to keep the media from remaining in the cavity and cleanse easily. Non-cavity filler is another option for your special use. The cavity is only for the valve interior with machining.

620 valve 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 T-Clamp or Tube welding end (or extended tube welding ends if asked) types for normal sanitary pipe connection.

As for the soft kits, pure PTFE/ TFM1600/ UPE (UHMWPE) are available for different application.

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



180° stop plate

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.

### SPECIFICATION

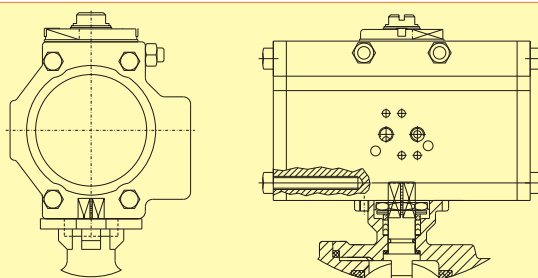
- \* Body & end caps quality investment casting
- \* Available in stainless steel or carbon steel
- \* with ISO 5211 direct mounting pad
- \* Adjustable stem packing
- \* Blow-out proof stem design
- \* Available in L/ T/ X/ I-port
- \* Available in 3/ 4-way in block body type.
- \* with Cavity filler
- \* 100% air tested under water at 80-100 psi
- \* Temperature range -20°F to 450°F
- \* End type: T-Clamp, Tube Weld, Extended Tube Weld
- \* with locking function

### OPTION

- \* CF3M (SS316L)
- \* Automation application
- \* PTFE/ PFA coating (40-70 um)
- \* TFM1600/ UPE (UHMWP) soft kits
- \* non-Cavity filler
- \* 180 degree operation stop plate
- \* Port polish according to customer's requirement
- \* ASME/ BPE STANDARD (for SS316L)
- low ferrite ( <3%)
- low sulphur (0.005% to 0.017%)

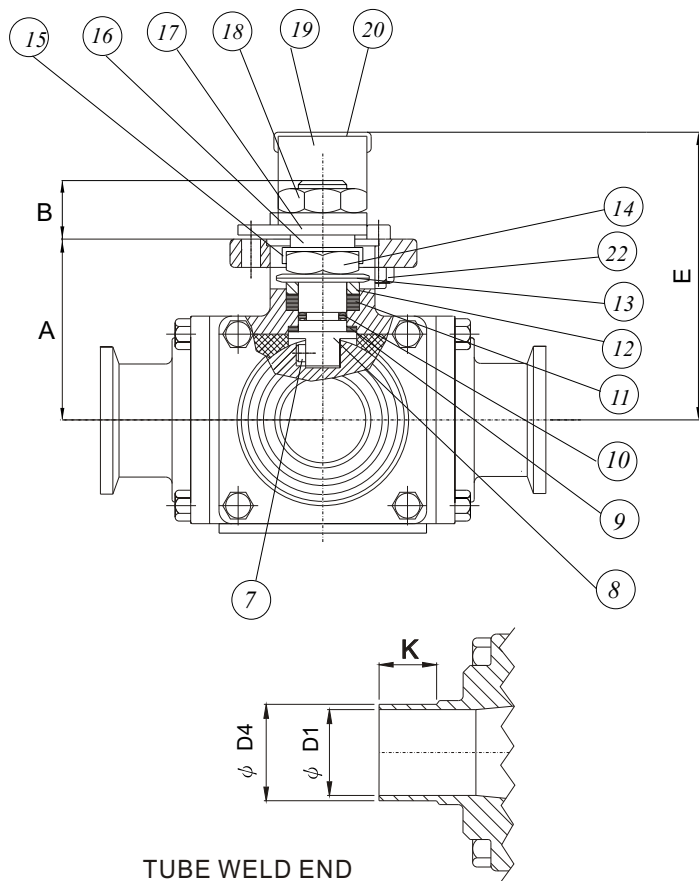
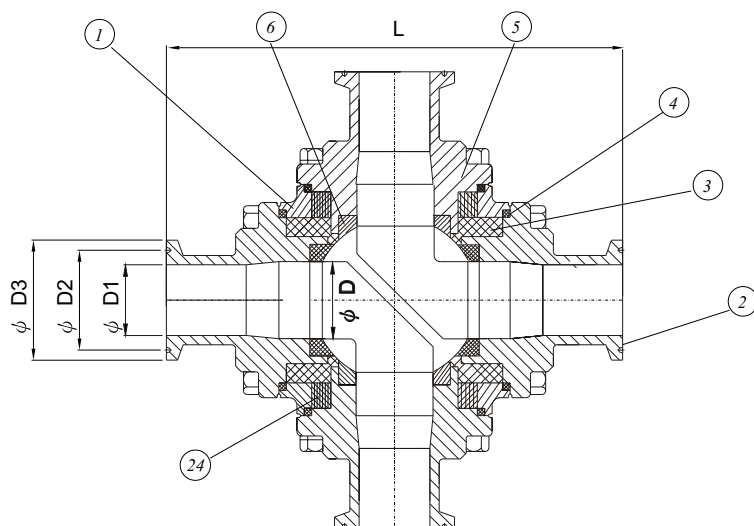
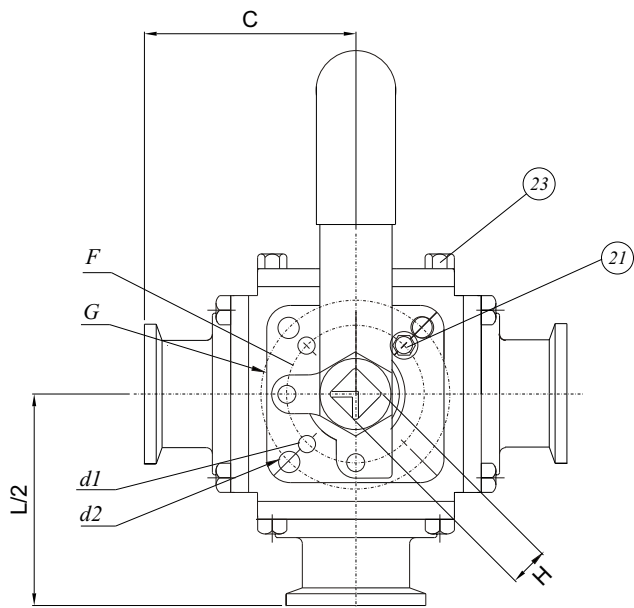


Note: The cavity filler is well developed for all ZIPSON's multi-way products (Item 501T/ 501F) with the body interior machining.



ISO direct mount for actuator assembling directly.

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



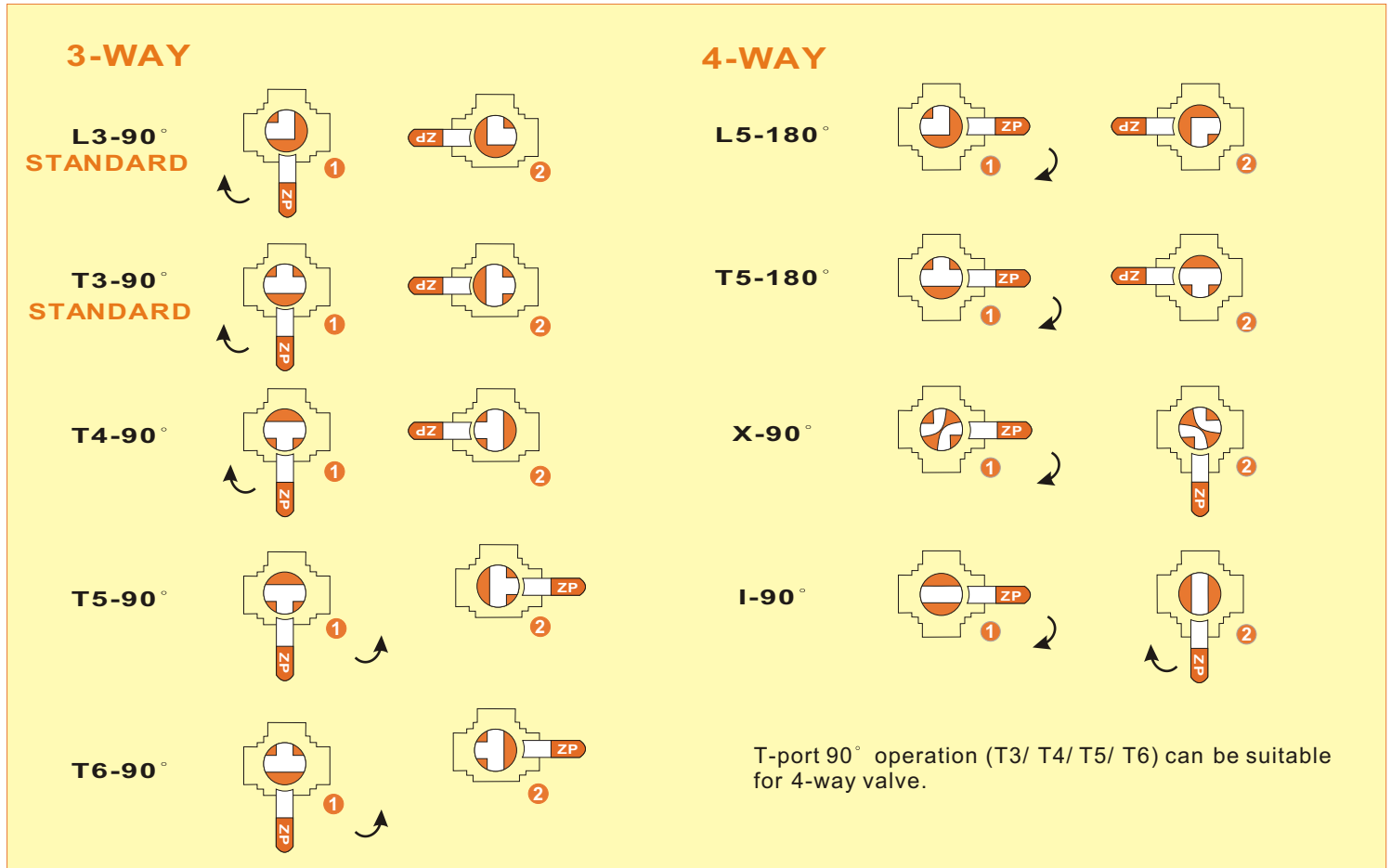
### MATERIALS LIST, 1/2" to 2"

| ITEM | PART NAME      | MATERIALS      |
|------|----------------|----------------|
| 1    | BODY           | CF8M/ CF3M     |
| 2    | T-CLAMP END    | CF8M/ CF3M     |
| 3    | CAVITY FILLER  | PTFE           |
| 4    | GASKET         | PTFE           |
| 5    | BLANK CAP      | CF8M/ CF3M     |
| 6    | SEAT           | PTFE           |
| 7    | INSERT PIN     | SS 316         |
| 8    | STEM           | SS 316/ SS316L |
| 9    | THRUST WASHER  | RPTFE          |
| 10   | O-RING         | VITON          |
| 11   | STEM PACKING   | PTFE           |
| 12   | GLAND          | SS 304         |
| 13   | DISK WASHER    | SS 301         |
| 14   | STEM NUT       | SS 304         |
| 15   | NUT STOP       | SS 304         |
| 16   | SPACE WASHER   | SS 304         |
| 17   | STOPPER PLATE  | SS 304         |
| 18   | HANDLE NUT     | SS 304         |
| 19   | HANDLE         | SS 304         |
| 20   | SLEEVE         | PLASTIC        |
| 21   | STOP PIN       | SS 304         |
| 22   | STOP PIN NUT   | SS 304         |
| 23   | BOLTS          | SS 304         |
| 24   | FILLER HOUSING | SS 304         |

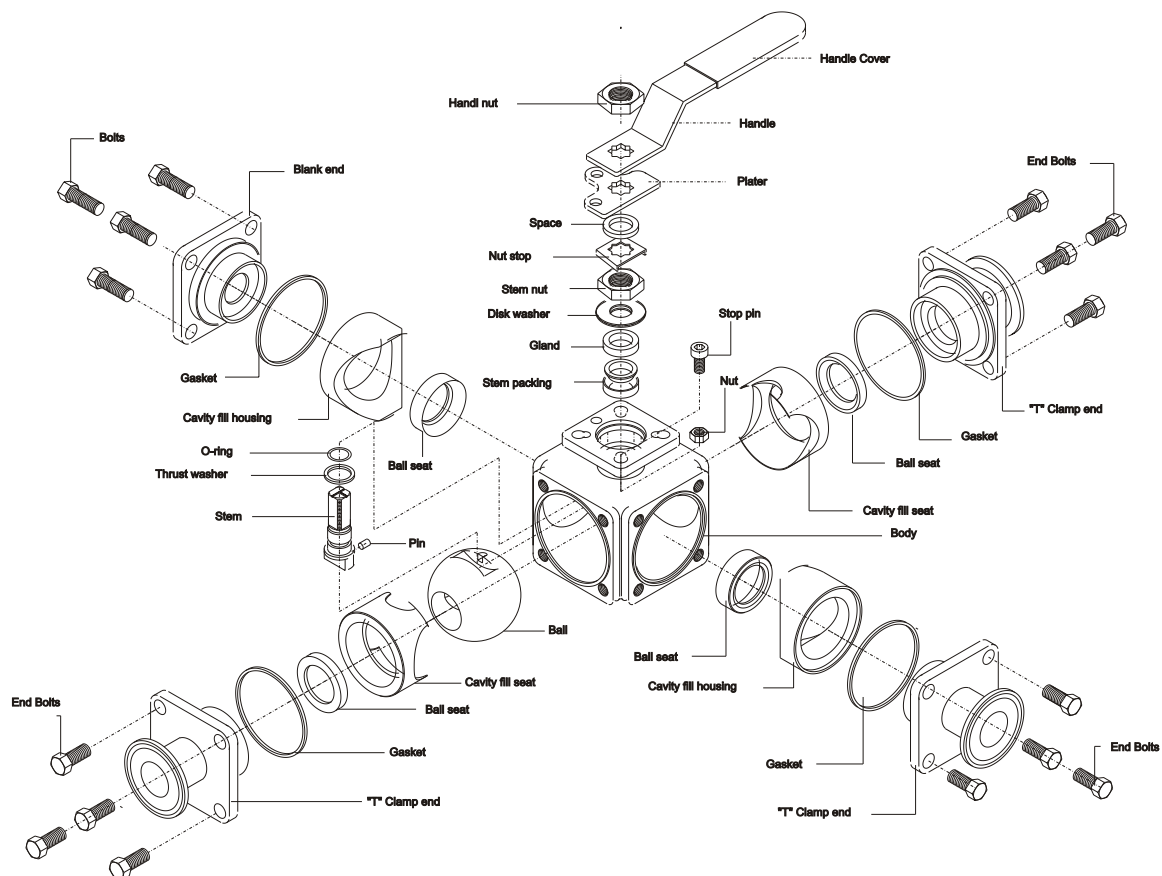
### DIMENSIONS, 1/2" to 2" (mm)

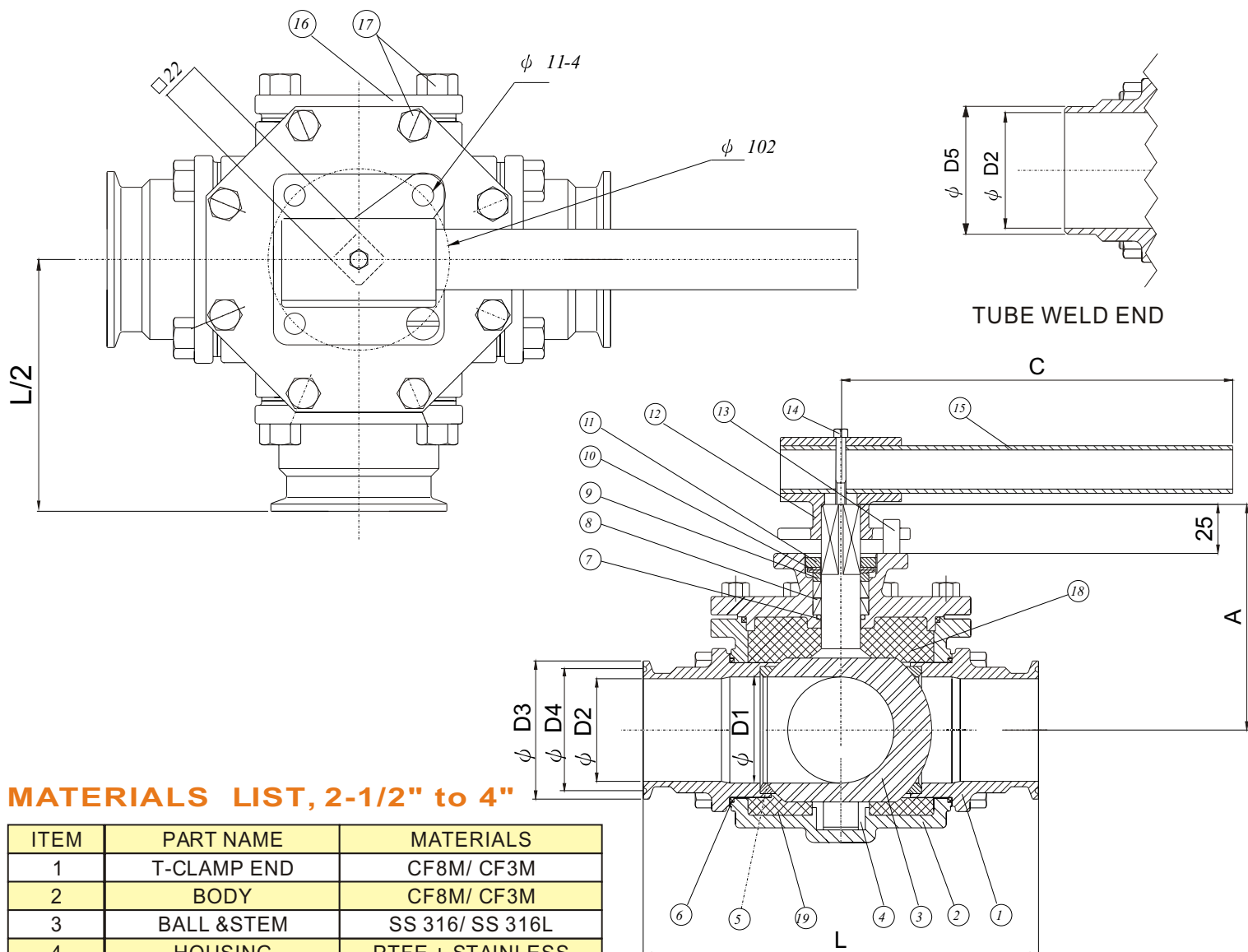
| SIZE   | A    | B   | C   | d1  | d2   | E   | F  | G   | H  | L/2 | L   | D  | D1   | D2   | D3   | D4    | K  | 3-Way<br>W(kg) |
|--------|------|-----|-----|-----|------|-----|----|-----|----|-----|-----|----|------|------|------|-------|----|----------------|
| 1/2"   | 37.5 | 9.5 | 130 | 6.0 | 6.0  | 62  | 36 | 42  | 9  | 60  | 120 | 12 | 9.6  | 21.7 | 25   | 12.7  | 15 | 1.36           |
| 3/4"   | 42   | 11  | 130 | 6.0 | 6.0  | 64  | 36 | 42  | 9  | 68  | 136 | 15 | 15.8 | 21.7 | 25   | 19.05 | 20 | 2.68           |
| 1"     | 55   | 14  | 165 | 6.0 | 7.1  | 89  | 42 | 50  | 11 | 80  | 160 | 25 | 22.1 | 43.5 | 50.4 | 25.4  | 20 | 4.37           |
| 1 1/2" | 74   | 16  | 205 | 7.1 | 9.2  | 108 | 50 | 70  | 14 | 91  | 182 | 38 | 34.8 | 43.5 | 50.4 | 38.1  | 20 | 8.58           |
| 2"     | 93   | 21  | 325 | 9.2 | 11.4 | 140 | 70 | 102 | 17 | 108 | 216 | 50 | 47.5 | 56.5 | 63.9 | 50.8  | 20 | 15.33          |

## 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.





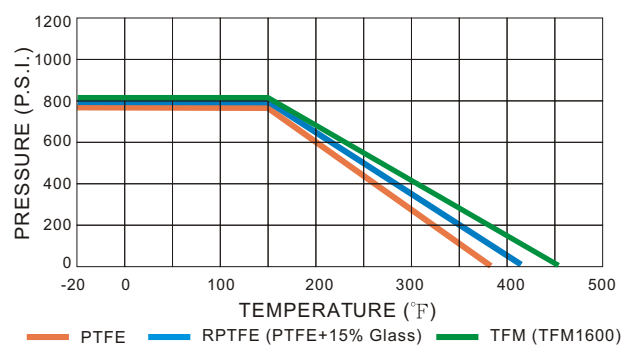
**MATERIALS LIST, 2-1/2" to 4"**

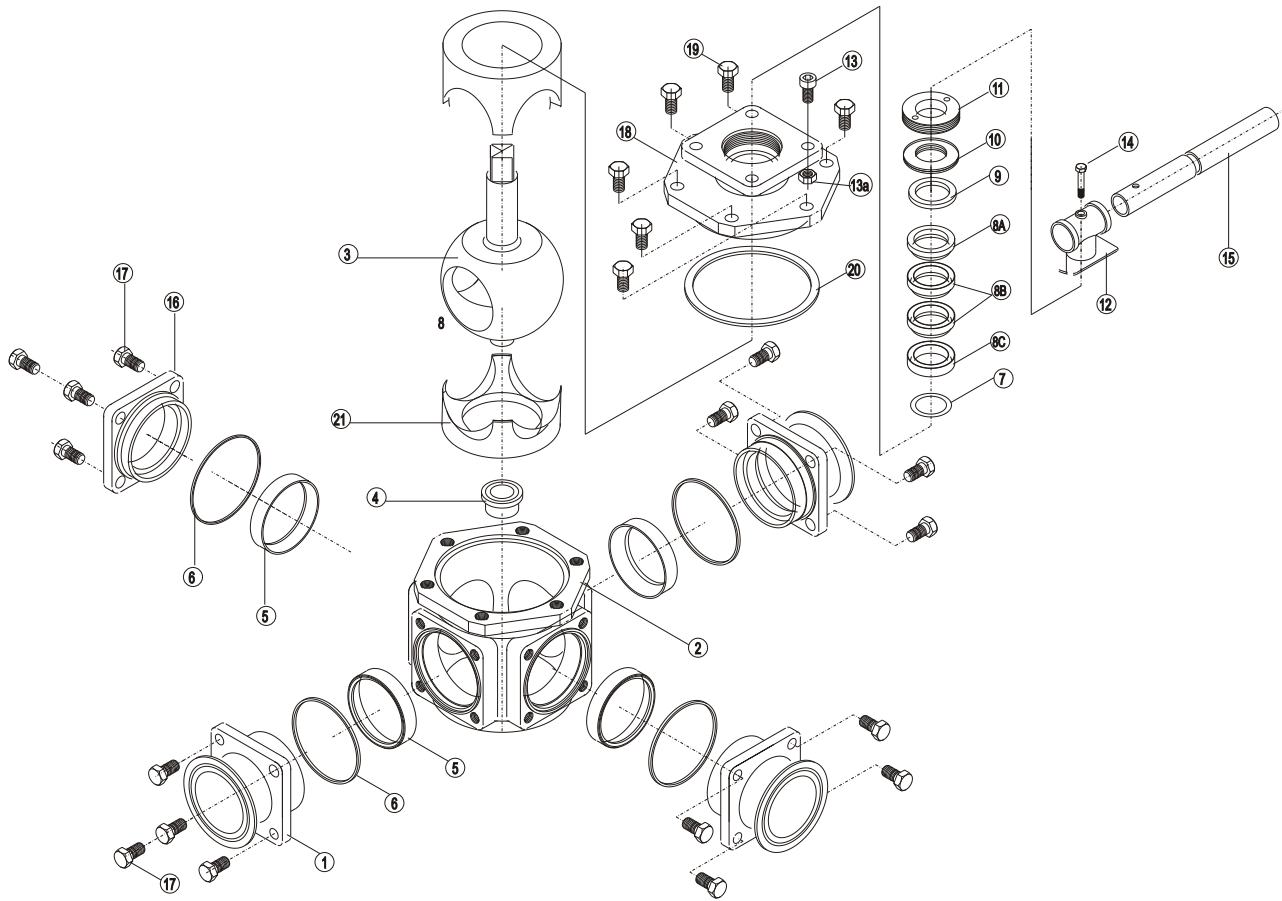
| ITEM | PART NAME         | MATERIALS        |
|------|-------------------|------------------|
| 1    | T-CLAMP END       | CF8M/ CF3M       |
| 2    | BODY              | CF8M/ CF3M       |
| 3    | BALL & STEM       | SS 316/ SS 316L  |
| 4    | HOUSING           | PTFE + STAINLESS |
| 5    | SEATS             | 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       | Cf8              |
| 13   | STOP PIN          | SS 304           |
| 14   | SET BOLT          | SS 304           |
| 15   | HANDLE            | STEEL PIPE       |
| 16   | BLANK CAP         | CF8M/ CF3M       |
| 17   | BOLT              | SS 304           |
| 18   | CAVITY FILLER (A) | SS 304           |
| 19   | CAVITY FILLER (B) | SS 304           |

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

| SIZE   | A   | C   | D1 | D2   | D3   | D4    | D5    | L     | L/2    | 3-Way W(kg) |
|--------|-----|-----|----|------|------|-------|-------|-------|--------|-------------|
| 2-1/2" | 144 | 400 | 62 | 60.2 | 77.4 | 70.5  | 63.5  | 241.3 | 120.65 | 20.25       |
| 3"     | 162 | 500 | 76 | 72.9 | 91   | 83.2  | 76.2  | 279.4 | 139.7  | 26.36       |
| 4"     | 182 | 650 | 96 | 97.4 | 119  | 110.4 | 101.6 | 330.2 | 165.1  | 47.63       |

**PRESSURE/ TEMPERATURE**





## BREAK-TORQUE VALUE (Nm)

| SIZE       | 1/2"  | 3/4" | 1"    | 1-1/2" | 2"     | 2-1/2" | 3"     | 4"     |
|------------|-------|------|-------|--------|--------|--------|--------|--------|
| NON-GREASE | 18.48 | 19.2 | 34.64 | 73.92  | 115.44 | 261.6  | 300.12 | 384.84 |

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.

### 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.