

3000 WOG/ PN207
SIZE: 1/4"-2"



SPECIFICATION

- * Body & end caps quality investment casting
- * Construction design follow ASME B16.34 standard
- * 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
- * Trunnion and Full bore design
- * Available in 3/4 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)
- * Available in DELRIN/ PEEK/ PEEK+30% Carbon seat
- * Cavity filler
- * 180 degree operation stop plate
- * Hastelloy C, Alloy 20, Super Duplex, Monel
- * Fire safe design

ZIPSON'S 513T, 3000 psi, 3/4 way high performance ball valve was designed for the high pressure industrial pipe line. With T/L/X/I-port for 3/4 way block body type, easy to find a suitable flow pattern for any application which is a smart way to save the cost on pipe line construction and space. With ISO direct mounting pad design, 513T is able to assemble the actuator directly.

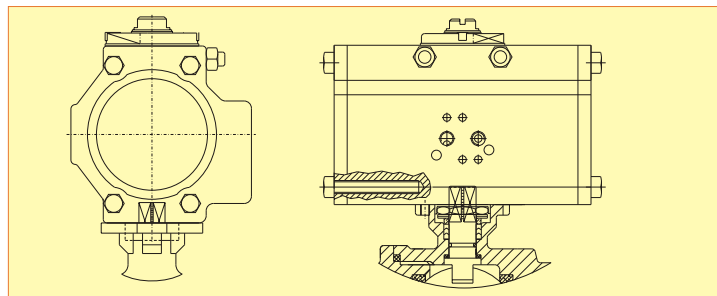
513T was designed according to ANSIB16.34. 513T is with 4 seats, this will help to keep the ball position stably. The trunnion ball/ stem help to stand 3000 psi working pressure and protect the seat and keep from leakage to prolong the life time. The 4 windows on the neck will let the media leak from while the valve start to leak. This will protect the actuator to keep from damage by the media, and a prevision to replace the seal kits in advance. This will also help to keep the working temperature lower, and increase the life time of actuator.

End caps can be Thread/ Socket Weld/ Butt Weld types for different pipe connection. 513T valve can be with cavity fillers to filled all the valve cavity over 90%. This will help to keep the media from leaving in the cavity for easy cleaning & anti-sticky of the ball. Of course, the internal body need to be machining first for the service.

As for the soft kits, DELRIN/ PEEK/ PEEK+30% Carbon are available for different application.

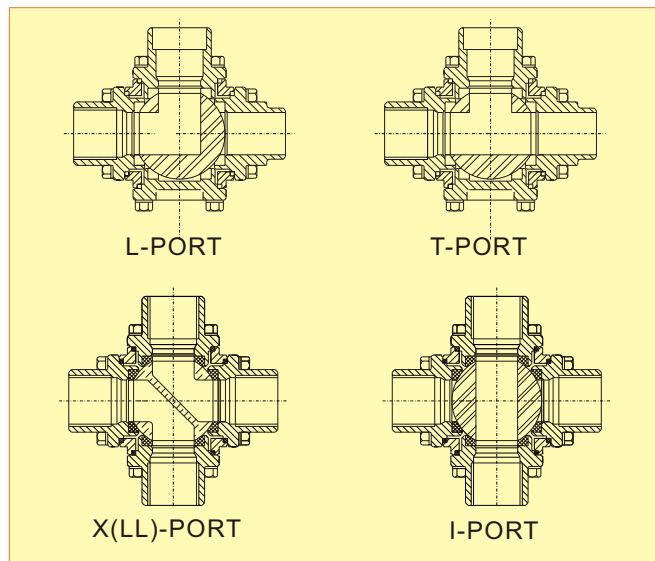
Valve with PTFE/ PFA coating are available while required. It helps to be anti-sticky on both external & internal body, ball, and stem.

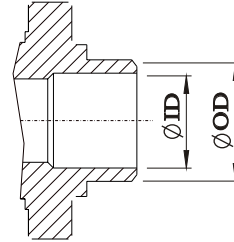
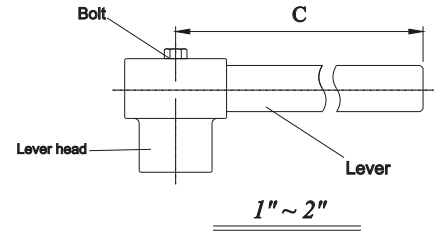
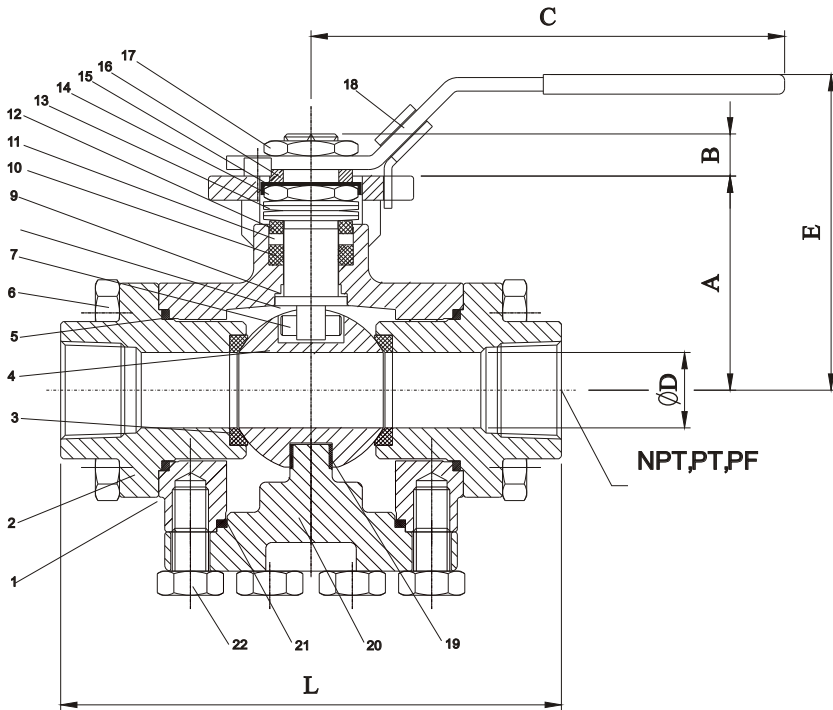
Extraordinary material such as Hastelloy C, Monel, Alloy 20, Duplex are available, too, for special media or environment.



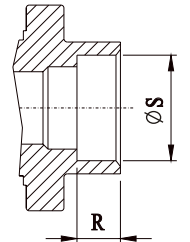
ISO direct mount for actuator assembling directly.

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

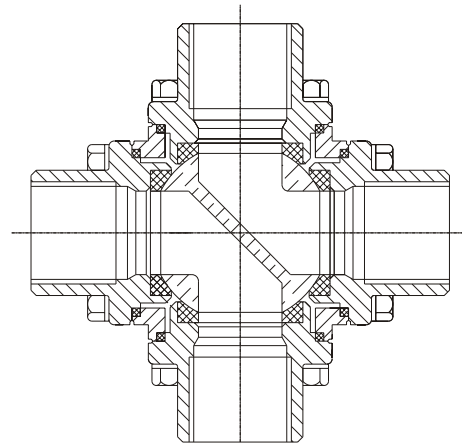




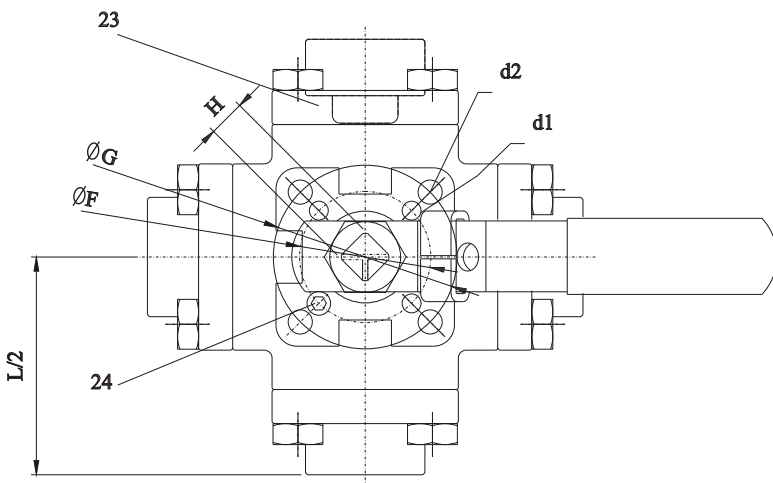
BUTT WELD (SCH. 40/ 80)

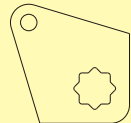


SOCKET WELD



4 WAY "LL"(X) PORT





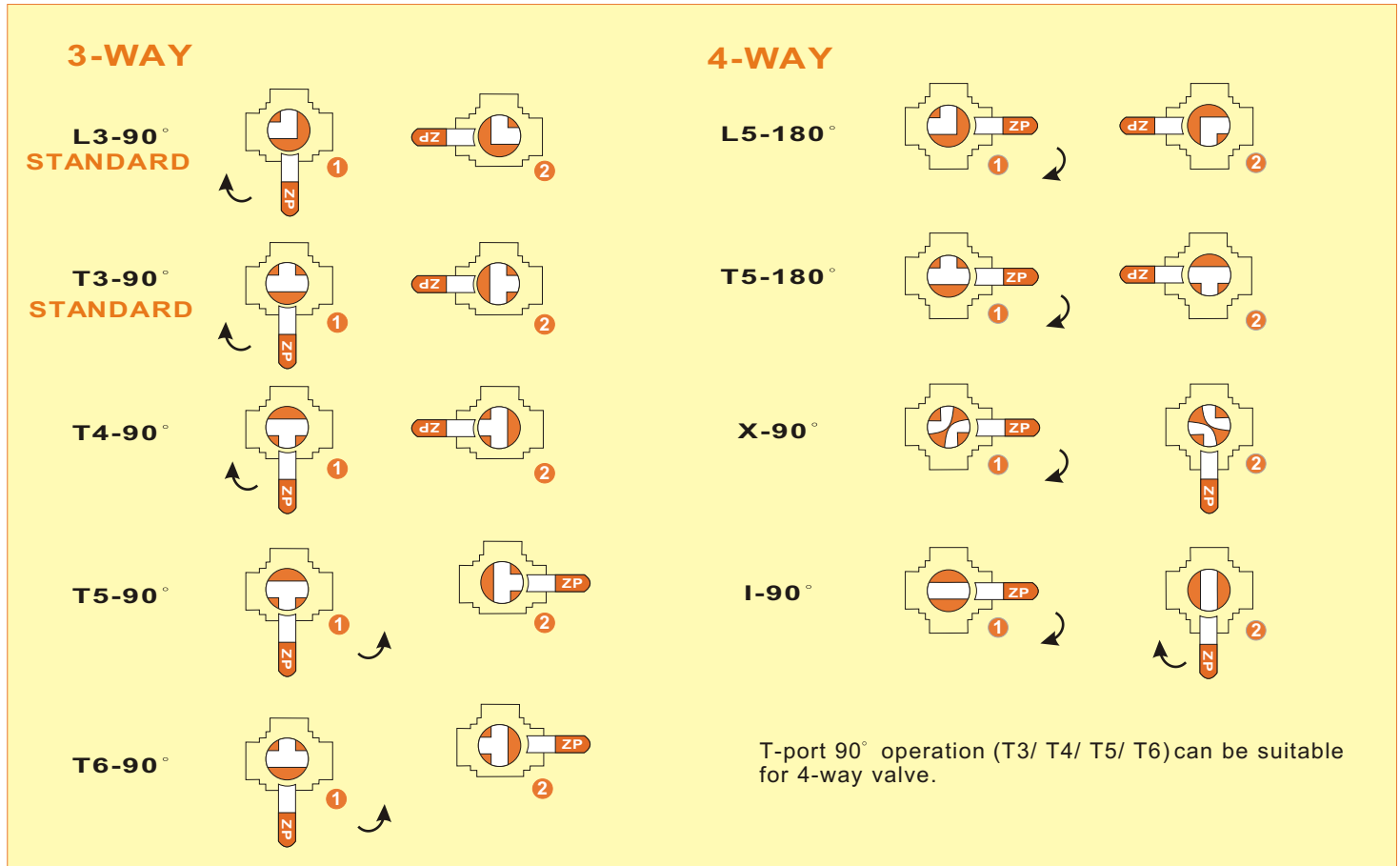
513T ball valve is available for 180° operation. This design will allow more flow patterns to be use in your pipe works. Customer just have to change a 180° stop plate for this option.

180° stop plate

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

| FULL PORT | A | B | C | D | E | F | G | d1 | d2 | H | L | SW | | BW(40#) | | BW(#80) | |
|-----------|-----|----|-----|----|-----|-----|-----|------|------|----|-----|------|------|---------|------|---------|------|
| | | | | | | | | | | | | S | R | OD | ID | OD | ID |
| 1/4" | 52 | 11 | 160 | 11 | 82 | - | 50 | - | 7.2 | 11 | 120 | 14.2 | 11.1 | 13.7 | 10 | 13.7 | 7.5 |
| 3/8" | 52 | 11 | 160 | 12 | 82 | - | 50 | - | 7.2 | 11 | 120 | 17.5 | 11.1 | 17.1 | 12 | 17.1 | 10.7 |
| 1/2" | 52 | 11 | 160 | 15 | 82 | - | 50 | - | 7.2 | 11 | 120 | 21.7 | 12.7 | 21.3 | 15.7 | 21.3 | 13.9 |
| 3/4" | 63 | 11 | 160 | 20 | 93 | - | 50 | - | 7.2 | 11 | 152 | 27.1 | 14.3 | 26.7 | 20.9 | 26.7 | 18.9 |
| 1" | 71 | 14 | 250 | 25 | 115 | 50 | 70 | 7.2 | 9.2 | 14 | 166 | 33.8 | 15.9 | 33.4 | 26.6 | 33.4 | 24.2 |
| 1 1/2" | 92 | 17 | 250 | 38 | 135 | 70 | 102 | 9.2 | 11.4 | 17 | 217 | 48.6 | 19.1 | 48.3 | 40.9 | 48.3 | 38.1 |
| 2" | 123 | 26 | 310 | 50 | 183 | 102 | 125 | 11.4 | 13.5 | 22 | 266 | 61.1 | 22.2 | 60.3 | 52.5 | 60.3 | 49.3 |

FLOW PATTERN

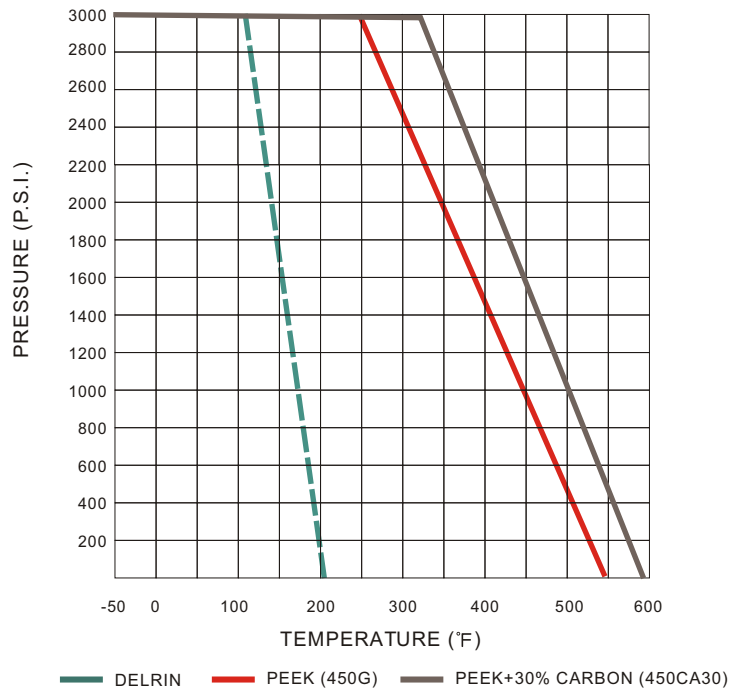


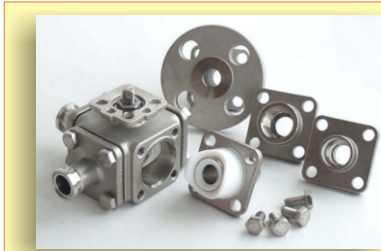
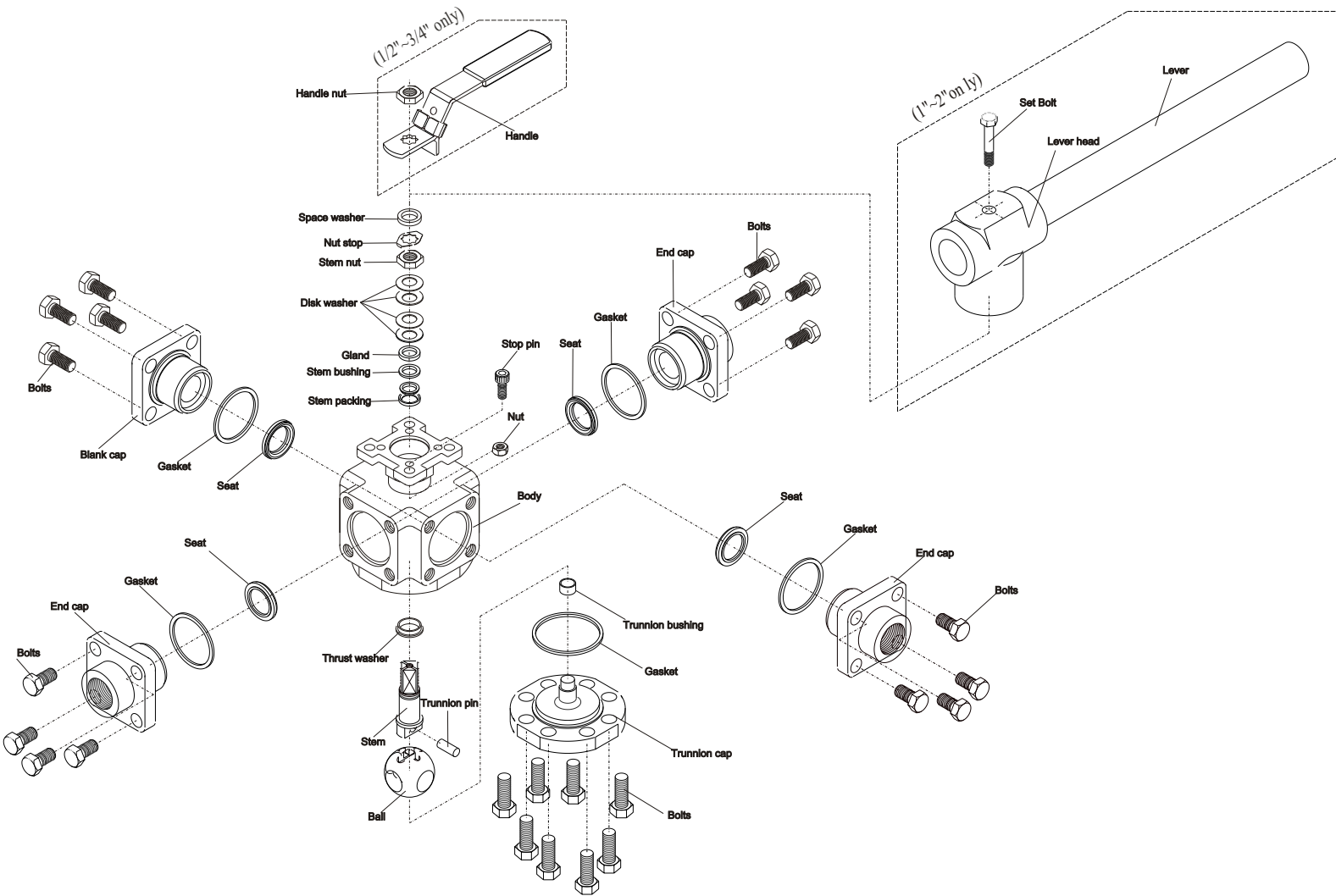
The wise use of 3-way or multi-way ball valve will help to save much cost on pipe line installation & the cost of place.

MATERIALS LIST, 1/4" to 2"

| ITEM | PART NAME | MATERIALS |
|------|------------------|---------------|
| 1 | BODY | CF8M/ WCB |
| 2 | END CAP | CF8M/ WCB |
| 3 | SEAT | DELFIN/ PEEK |
| 4 | BALL | SS 316 |
| 5 | GASKET | TFM/ GRAPHITE |
| 6 | BOLTS | SS 304 |
| 7 | TRUNNION PIN | SS 316 |
| 8 | STEM | SS 316 |
| 9 | THRUST WASHER | PEEK |
| 10 | STEM PACKING | TFM/ GRAPHITE |
| 11 | STEM BUSHING | DELFIN/ PEEK |
| 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 | HANDLE NUT | SS 304 |
| 18 | HANDLE | SS 304 |
| 19 | TRUNNION BUSHING | DELFIN/ PEEK |
| 20 | TRUNNION CAP | CF8M/ WCB |
| 21 | GASKET | TFM/ GRAPHITE |
| 22 | TRUNNION BOLT | SS 304 |
| 23 | BLANK CAP | CF8M/ WCB |
| 24 | STOP PIN | SS 304 |

PRESSURE/ TEMPERATURE





513T, 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 clean. The cavity filler will keep the ball operation from sticking for glue-like media.

BREAK-TORQUE VALUE (Nm)

| SIZE | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" |
|-------------|------|------|------|------|------|--------|--------|-----|
| GREASE | 27.5 | 27.5 | 27.5 | 45.6 | 55 | - | 88 | 132 |
| NON-GREASE | 35.2 | 35.2 | 35.2 | 62.2 | 77 | - | 121 | 187 |
| AT 3000 PSI | 44 | 44 | 44 | 76.8 | 93.5 | - | 198 | 341 |

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. 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.