

### SPECIFICATION

- \* Body & end caps quality investment casting
- \* Valve construction & thickness follow ANSIB16.34
- \* Full port design
- \* with ISO 5211 direct mounting pad
- \* Adjustable stem packing
- \* Available in stainless steel or carbon steel
- \* Blow-out proof stem design
- \* 100% air tested under water at 80-100 psi
- \* End type: ANSI1500
- \* Working pressure: Class1500
- \* Temperature range: see Pressure/Temperature table
- \* with locking function

### OPTION

- \* **FIRE SAFE: API607-6th Edition Certified**
- \* Spring return handle (dead man handle)
- \* Steam jacket
- \* V-ball for control valve (ball valve type)
- \* Automation application
- \* Cryogenic bonnet
- \* Fugitive emission bonnet
- \* PTFE/ PFA coating (40-70 um)
- \* Alloy: Hastalloy C/ Super duplex/ Alloy 20/ Monel

ZIPSON'S 306F, 3-piece high performance flanged ball valve is designed for the high pressure industrial & chemical pipe line in full port usage. The working pressure is going high up to Class 1500 (3600 psi).

Stainless steel, carbon steel or even special alloy of Hastelloy C, Alloy 20, 254 SMO, Duplex, Super Duplex for chlorine contained media, sea water, acid or alkali media are for option as required.

306F is with very smart sealing design on stem part. Self adjusting stem packing with belleville washer, TFM thrust washer with PEEK washer protector will lead to long term operation without leakage.

To compare the economic valve in the market, Zipson make valve structure & wall thickness totally with ASME B16.34 standard. The exact structure make safe in the high performance application.

For this high working pressure, seat is required to use DELRIN (POM) for ambient temperature or PEEK for high temperature. Gasket & steam packing will be TFM1600 or Graphite for high temperature usage.

306F valves are with complete size range from 1/2" to 3" in full port (DN15-DN100). V-ball for ball-type control valve are available for 15°, 30°, 60°, or 90° and slot ball for different flow rate requirement.

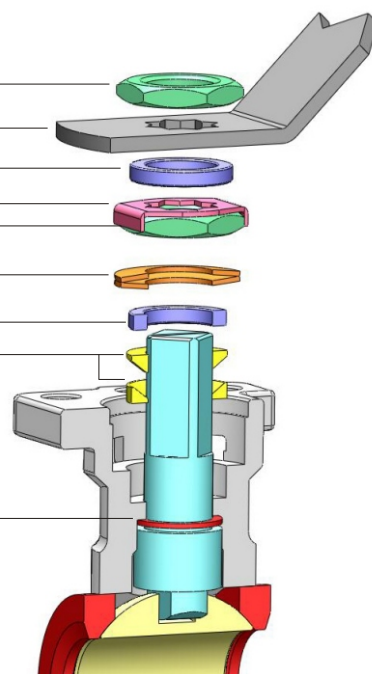
306F, the high pressure 3-piece flanged ball valve can be with fire safe design with SS seat housing & graphite stem packing / gasket for option to follow API607 fire safe standard.

The standard bare stem type is well designed with ISO 5211 direct mounting pad. ZIPSON also offer pneumatic/ electric actuator, limit switch box/ solenoid valve/ modulating controller, gear operator for complete automation service.

### STEM DESIGN

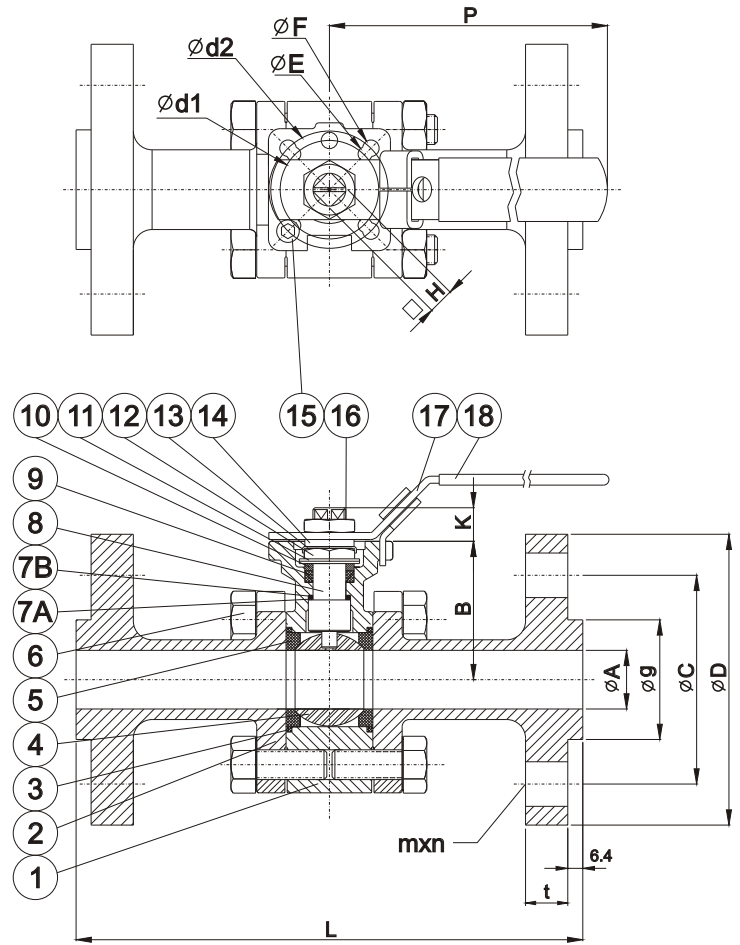
#### STANDARD

- Handle Nut
- Handle
- Space Washer
- Nut Stopper
- Stem Nut
- Disk Washer (Belleville Washer)
- Gland Washer
- Stem Packing
- Thrust Washer



## MATERIALS LIST

ITEM	PART NAME	MATERIALS
1	BODY	CF8M
2	FLANG CAP	CF8M
3	GASKET	TFM
4	BALL	SS 316
5	BALL SEATS	PEEK / DELRIN
6	BOLTS	SS 304
7A	THRUST WASHER	TFM
7B	THRUST WASHER	PEEK
8	STEM	SS 316
9	STEM PACKING	TFM
10	GLAND WASHER	SS 304
11	DISK WASHER	SS 301
12	GLAND NUT	SS 304
13	NUT STOP	SS 304
14	SPACE WASHER	SS 304
15	STOP PIN	SS 304
16	HANDLE NUT	SS 304
17	HANDLE	SS 304
18	HANDLE COVER	PLASTIC



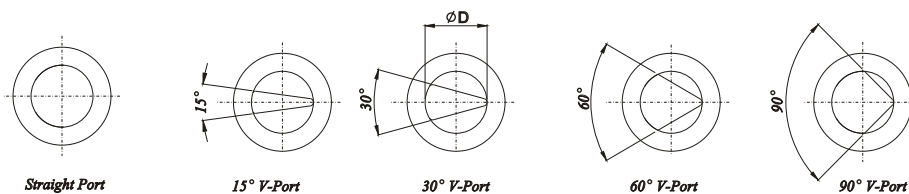
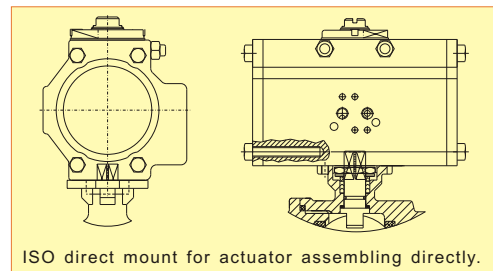
## DIMENSIONS (mm) (1/2" to 1")

SIZE	A	B	K	d1	d2	E	F	H	P	L	g	C	D	t	m	n
1/2"	15	48	9.5	36	42	6.0	6.0	9	130	216	35	82.6	120	22.3	22.3	4
3/4"	20	53	12	42	50	6.0	6.0	11	155	229	43	88.9	130	25.4	22.3	4
1"	25	59	12	42	50	6.0	7.0	11	155	254	51	101.6	150	28.6	25.4	4

## MAX. OPERATING PRESSURE

Body Rating (Non-Shock)

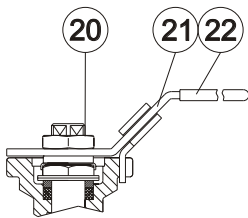
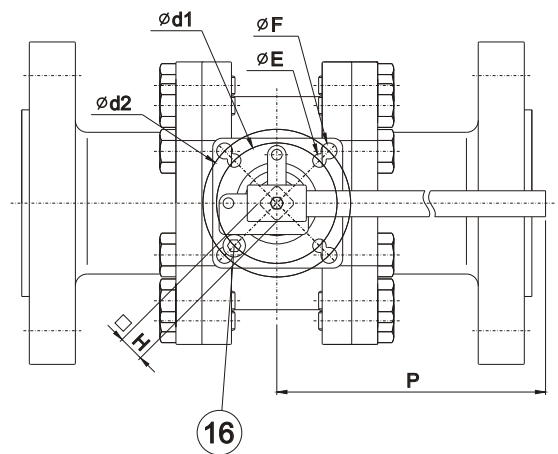
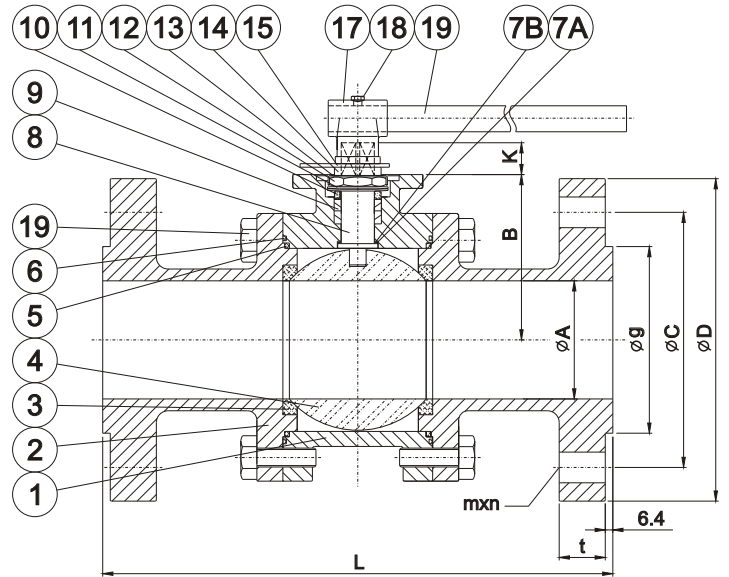
VALVE SIZE	MAX. PRESSURE RATING
1/4"~1/2"	UP TO 6000 psi
3/4" & 1"	UP TO 5500 psi
1-1/2"	UP TO 5500 psi
2"	UP TO 5000 psi



\* V-ball options for controls valve

## MATERIALS LIST

ITEM	PART NAME	MATERIALS
1	BODY	CF8M
2	FLANG CAP	CF8M
3	BALL SEATS	PEEK / DELRIN
4	BALL	SS 316
5	GASKET	TFM
6	SECONDLY GASKET (3" ONLY)	TFM
7A	THRUST WASHER	TFM
7B	THRUST WASHER	PEEK
8	STEM	SS 316
9	STEM PACKING	TFM
10	GLAND WASHER	SS 304
11	DISK WASHER	SS 301
12	GLAND NUT	SS 304
13	NUT STOP	SS 304
14	SPACE WASHER	SS 304
15	PLATER	SS 304
16	STOP PIN	SS 304
17	LEVER HEAD	SS 304
18	BOLTS	SS 304
19	LEVER	STEEL PIPE
20	HANDLE NUT	SS 304
21	HANDLE	SS 304
22	HANDLE COVER	PLASTIC



SIZE: 1-1/2" Only

## DIMENSIONS (mm) (1-1/2" to 3")

SIZE	A	B	K	d1	d2	E	F	H	P	L	g	C	D	t	m	n
1-1/2"	38	70	16	50	70	7.0	9.2	14	205	305	73	123.8	180	31.8	28.6	4
2"	50	90	19	70	102	9.2	11.4	17	300	368	93	165.1	215	38.1	25.4	8
3"	100	140	23	102	125	11.4	13.5	22	500	470	127	203.2	269	47.7	31.8	8

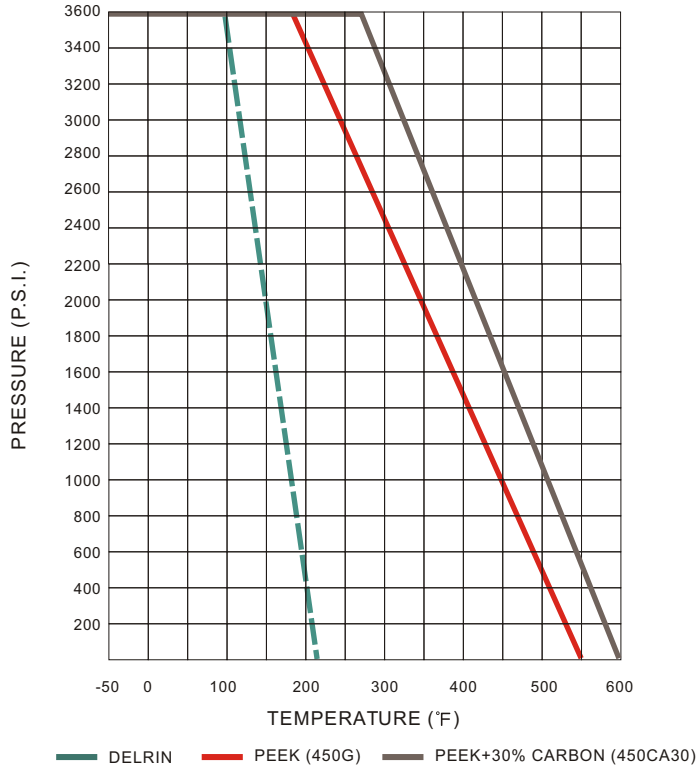
## BREAK-TORQUE VALUE

SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
GREASE	16	22	28	-	70	195	-	330

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.

## PRESSURE/ TEMPERATURE



### VALVE HANDLE WITH LIMIT SWITCH BOX

ZIPSON ball valve with ISO 5211 mounting pad can be with compact design for valve handle & limit switch box.

Available Type: 201D/ 302F/ 305D/ 306D/ 305F/ 306F/ 207S/ 207F/ 107S

#### 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.