



JDV  
CONTROL  
VALVES



# JBT Series

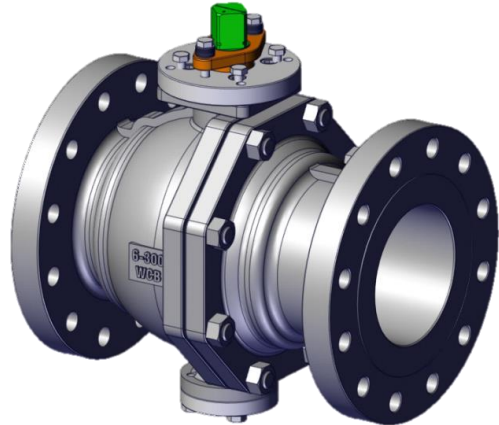
Trunnion Type **Soft Metal** Seat Ball Valve



*We link all you need  
and more than you expect.*

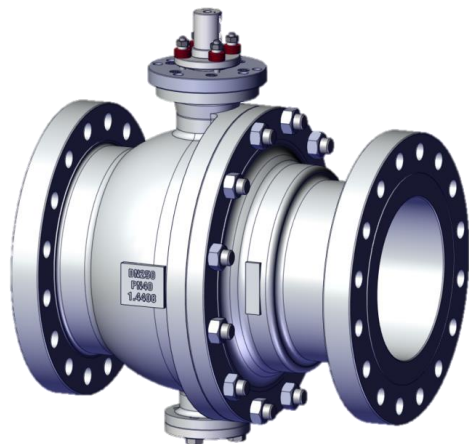
## Industrial Fields

Power Oil & Gas  
 Refinery / Petrochemical  
 Chemical  
 Pulp & paper  
 Power plant  
 Steel Mill  
 Food  
 Mining  
 LNG



## Applicable Standards

ASME B16.34 / B16.10 / B16.5  
 DIN EN12266-1 / EN558(S14 S15) / EN1092-1  
 API 6D DESIGN  
 PED 97/23/EC  
 Fire-safe: API 607, API6FA , ISO 10497  
 FE (Fugitive Emission): ISO 15848,  
 Anti-static: DIN EN ISO 17292  
 Cryogenic: BS 6364 / ISO 28921



## Size Range

JBT-E 2 Piece Trunnion Ball Valve 1-1/2" ~14"  
 JBT-F 3 Piece Trunnion Ball Valve 2"~24"

## Rating

JBT-E Class 150~300 / PN 16 ~40  
 JBT-F Class 150~600



## Configurations

- Extreme High Cycle

Stem supported in bearings to ensure seals are free from operation loads. Special bearing configurations, including cladding of critical areas and trim coating configurations, improve valve life-time.

- Temperature

Designed for temperatures -196 to 500°C.

- Severe Service

Process optimized coatings, cladding option and wearing protection feature for extended ball valve life-time.

- Special Alloys

Process and application related special alloys.

- True bi-direction design and wide temperature range satisfying all application.

- Cavity pressure relief design protecting against any excess of pressure in the body cavity.

- Trunnion ball design ensuring a tight contact between seats and ball.

- SPE seat that guarantees the self-relief of body cavity in case of over pressure.

- DPE seat design in option.

- Optional drain plug device to empty the cavity or to detect any leakage.

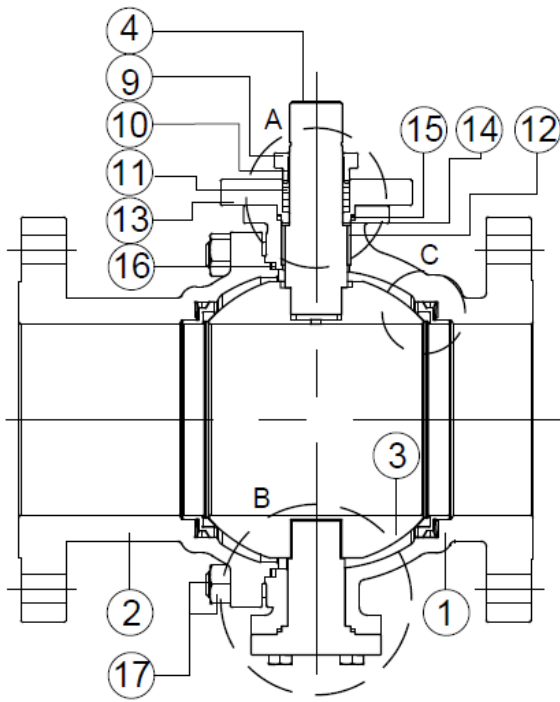
- Antistatic device.

- ISO 5211 mounting pad design.

# Construction & Material

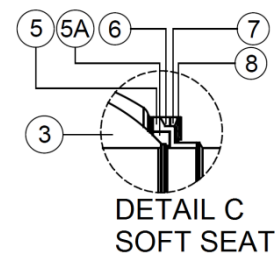
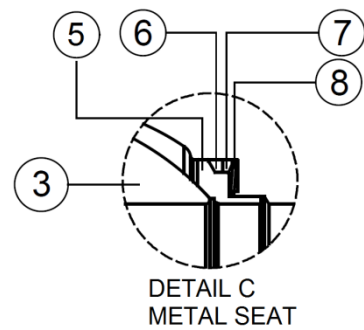
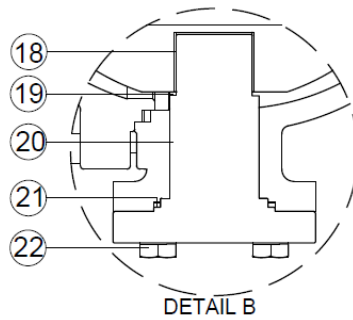
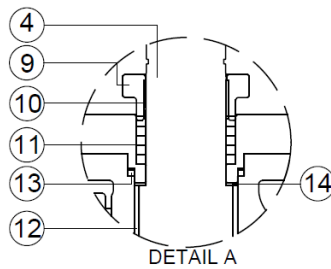
**JBT-E TYPE CLASS 150~300 / PN 16 ~40**

**1-1/2"~ 8" TRUNNION STEM TYPE**



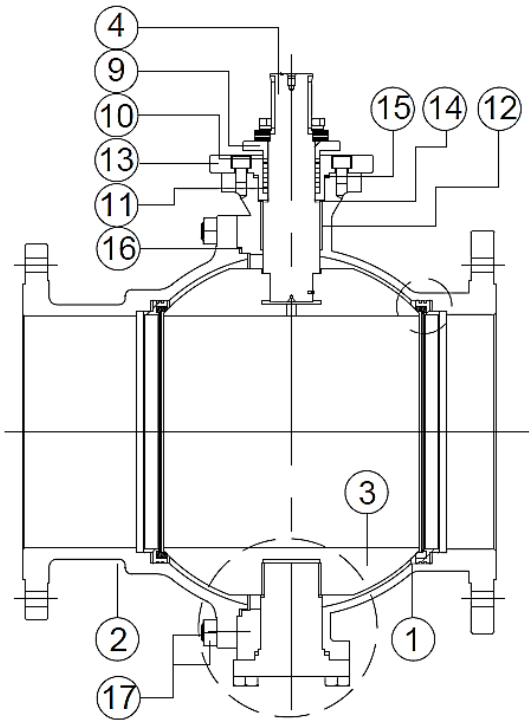
### STANDARD MATERIALS

NO	PART NAME	MATERIAL
1	BODY	A216-WCB / A351-CF8 / CF8M
2	CAP	A216-WCB / A351-CF8 / CF8M
3	BALL	A351-CF8 / CF8M
4	STEM	304 / 316 / 2205 / 17-4PH / A286
5	SEAT	304 / 316 / 2205
5A	SEAT INSERT	R-PTFE / TFM-1600 DEVLON NYLON
6	SEAT GASKET	GRAPHITE
7	SEAT RETAINER	AISI 316 S/S
8	SPRING	INCONEL X 750
9	GLAND	A351-CF8
10	GLAND BEARING	SS W/PTFE
11	STEM PACKING	GRAPHITE
12	STEM BEARING	DU BEARING / SS W/HF
13	STEM RETAINER	304 / 316 / F51
14	STEM THRUST WASHER	DU BEARING / SS W/HF
15	STEM RETAINER GASKET	GRAPHITE / PTFE
16	BODY GASKET	SPRIAL WOUND
17	BOLT & NUT	A193-B7 & A194-7 / A193-B8 & A194-8
18	TRUNNION STEM BEARING	DU BEARING / SS W/HF
19	TRUNNION STEM WASHER	SS W/HF
20	TRUNNION STEM	304 / 316 / 2205 / 17-4PH / A286
21	TRUNNION STEM SEAL	GRAPHITE
22	TRUNNION STEM BOLT	A2-70
23	BODY RETAINER BOLT	A2-70
24	GLAND BOLT	A2-70



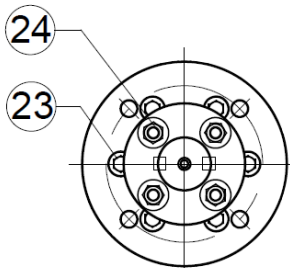
## JBT-E TYPE CLASS 150~300 / PN 16~40

### 10''~ 14'' TRUNNION STEM TYPE

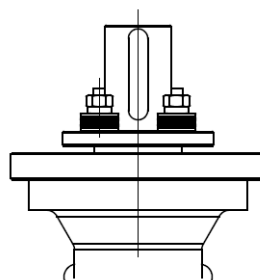


#### STANDARD MATERIALS

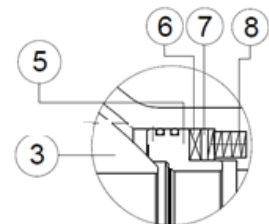
NO	PART NAME	MATERIAL
1	BODY	A216-WCB / A351-CF8 / CF8M
2	CAP	A216-WCB / A351-CF8 / CF8M
3	BALL	A351-CF8 / CF8M
4	STEM	304 / 316 / 2205 / 17-4PH / A286
5	SEAT	304 / 316 / 2205
5A	SEAT INSERT	R-PTFE / TFM-1600 DEVLON NYLON
6	SEAT GASKET	GRAPHITE
7	SEAT RETAINER	AISI 316 S/S
8	SPRING	INCONEL X 750
9	GLAND	A351-CF8
10	GLAND BEARING	SS W/PTFE
11	STEM PACKING	GRAPHITE
12	STEM BEARING	DU BEARING / SS W/HF
13	STEM RETAINER	304 / 316 / F51
14	STEM THRUST WASHER	DU BEARING / SS W/HF
15	STEM RETAINER GASKET	GRAPHITE / PTFE
16	BODY GASKET	SPRIAL WOUND
17	BOLT & NUT	A193-B7 & A194-7 / A193-B8 & A194-8
18	TRUNNION STEM BEARING	DU BEARING / SS W/HF
19	TRUNNION STEM WASHER	SS W/HF
20	TRUNNION STEM	304 / 316 / 2205 / 17-4PH / A286
21	TRUNNION STEM SEAL	GRAPHITE
22	TRUNNION STEM BOLT	A2-70
23	BODY RETAINER BOLT	A2-70
24	GLAND BOLT	A2-70



SIZE: NPS10~14



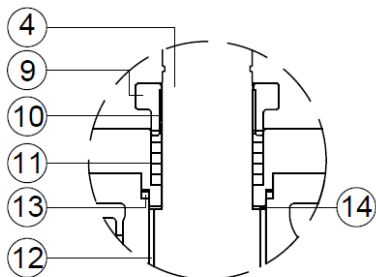
SOFT SEAT



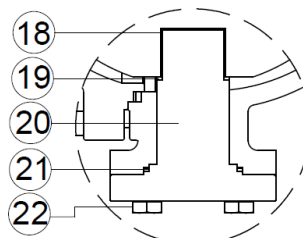
SIZE: NPS10~14

DETAIL C

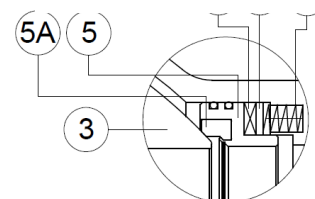
METAL SEAT



DETAIL A



DETAIL B

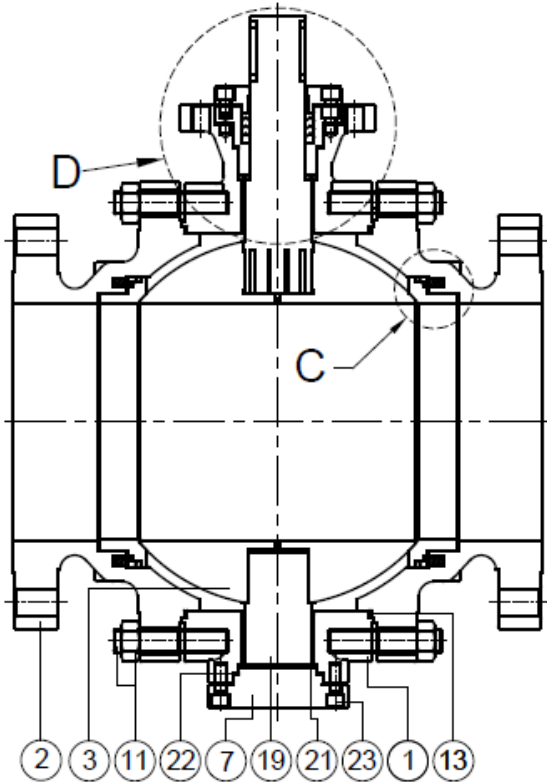


SIZE: NPS10~14

DETAIL C

**JBT-F TYPE CLASS 150~600**

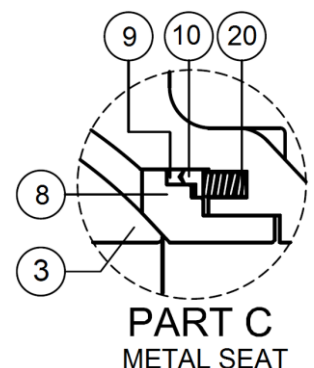
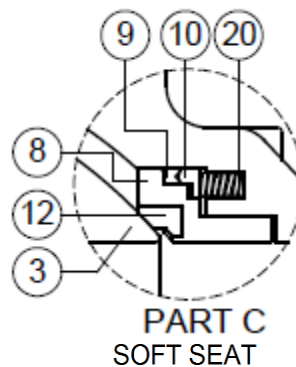
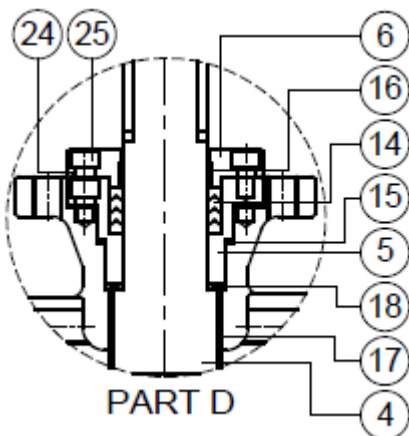
**2"~ 14" TRUNNION STEM TYPE**



**STANDARD MATERIALS :**

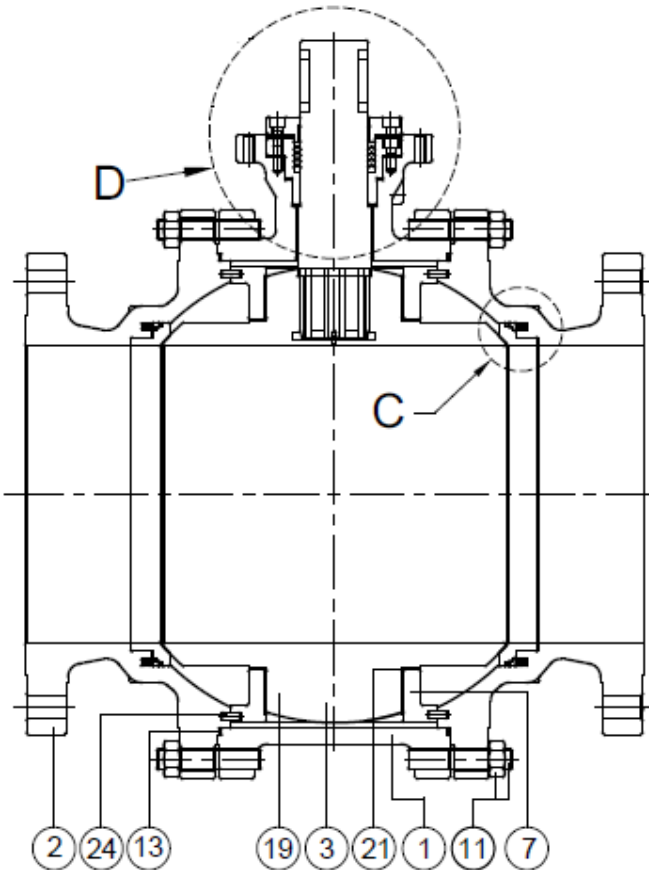
NO.	PART NAME	QTY	MATERIAL		
1	BODY	1	A216-WCB	A351-CF8	A351-CF8M
2	CAP	2	A216-WCB	A351-CF8	A351-CF8M
3	BALL	1	A351-CF8		A351-CF8M
4	STEM	1	A276-304+HCR		A276-316+HCR
5	BODY GLAND	1	A216-WCB	A351-CF8	A351-CF8M
6	GLAND	1	A216-WCB	A351-CF8	A351-CF8M
7	BEARING RETAINER	1	A216-WCB	A351-CF8	A351-CF8M
8	SEAT RING	2	A351-CF8		A351-CF8M
9★	SEAT RING SEAL	2	FLEXIBLE GRAPHITE		
10	SEAT RING RETAINER	2	A351-CF8		A351-CF8M
11	BOLT & NUT	1 SET	A193-B7&A194-7	A193-B8 & A194-8	
12	SEAT	2	PTFE / G-PTFE / C-PTFE / TFM-1600		
13★	BODY GASKET	2	SPIRAL WOUND		
14★	GLAND PACKING	1	FLEXIBLE GRAPHITE		
15★	GLAND THRUST WASHER	1	FLEXIBLE GRAPHITE		
16★	GLAND BEARING	1	G-PTFE		
17	STEM BEARING	2	A240+316+PTFE		
18★	STEM THRUST WASHER	1	G-PTFE		
19	TRUNNION STEM	1	A276-304+HCR	A276-316+HCR	
20	SPRING	1 SET	INCONEL X-750		
21★	TRUNNION STEM WASHER	1	G-PTFE		
22★	TRUNNION STEM GASKET	1	FLEXIBLE GRAPHITE		
23	RETAINER BOLT	1 SET	STAINLESS STEEL		
24	BODY GLAND BOLT	1 SET	STAINLESS STEEL		
25	GLAND BOLT	1 SET	STAINLESS STEEL		

NOTE : ★ RECOMMENDED REPAIR KIT



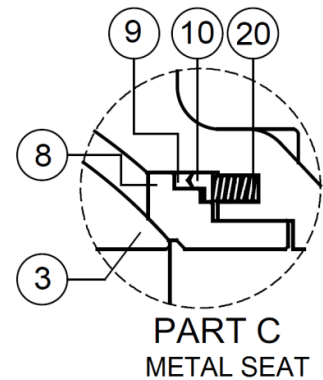
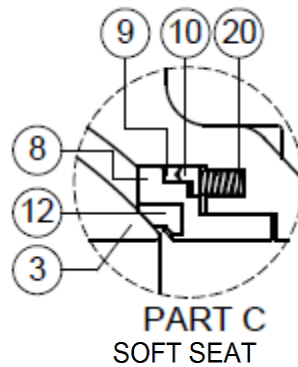
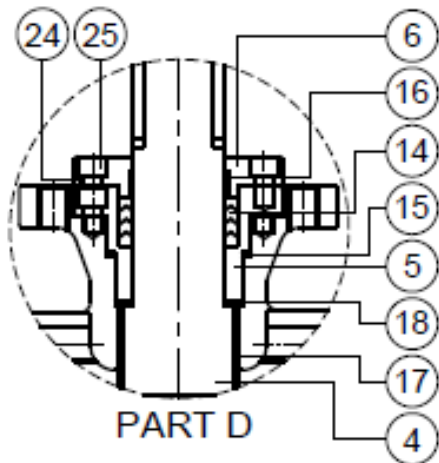
## JBT-F TYPE CLASS 150~600

### 16"~24" PLATE FIXED TYPE



NO.	PART NAME	QTY	MATERIAL		
1	BODY	1	A216-WCB	A351-CF8	A351-CF8M
2	CAP	2	A216-WCB	A351-CF8	A351-CF8M
3	BALL	1	A351-CF8		A351-CF8M
4	STEM	1	A276-304+HCR		A276-316+HCR
5	BODY GLAND	1	A216-WCB	A351-CF8	A351-CF8M
6	GLAND	1	A216-WCB	A351-CF8	A351-CF8M
7	TRUNNION	2	A216-WCB	A351-CF8	A351-CF8M
8	SEAT RING	2	A351-CF8		A351-CF8M
9	SEAT RING SEAL	2	FLEXIBLE GRAPHITE		
10	SEAT RING RETAINER	2	A351-CF8		A351-CF8M
11	BOLT & NUT	1 SET	A193-B7&A194-7	A193-B8 & A194-8	
12	SEAT	2	PTFE / G-PTFE / C-PTFE / TFM-1600		
13	BODY GASKET	2	SPIRAL WOUND		
14	GLAND PACKING	1	FLEXIBLE GRAPHITE		
15	GLAND THRUST WASHER	1	FLEXIBLE GRAPHITE		
16	GLAND BEARING	1	G-PTFE		
17	STEM BEARING	1	A240-316+PTFE		
18	STEM THRUST WASHER	1	A240-316+HCR		
19	TRUNNION BEARING	2	A240-316+PTFE		
20	SPRING	1 SET	INCONEL X-750		
21	WASHER	2	A240-316+HCR		
22	BODY GLAND BOLT	1 SET	STAINLESS STEEL		
23	GLAND BOLT	1 SET	STAINLESS STEEL		
24	PIN	1 SET	STAINLESS STEEL		

NOTE: ★ RECOMMENDED REPAIR KIT



## Trim selection

### SEAT

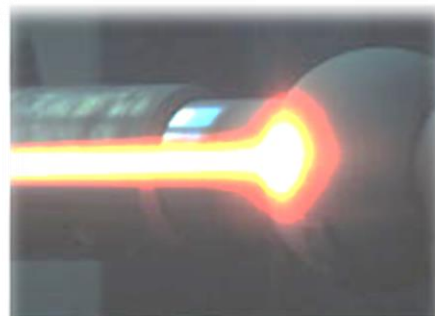
SEAT			
JDV CODE		MATERIAL / HARD FACE	TEMPERATURE
SOFT	R	R-PTFE	-60~180°C
	L	NYLON(PA)	-29~100°C
	V	DEVLON	-50~130°C
	M	MOLON(PA66+MOS2)	-50~130°C
	K	PEEK	-59~250°C
	O	DELRON®(POM)	-60~110°C
	C	PCTFE	-196~140°C

SEAT			
JDV CODE		MATERIAL / HARD FACE	TEMPERATURE
METAL	SM	Hard Chrome	-196~350°C
	SH1	Tungsten Carbide	-196~450°C
	SH2	Chromium Carbide	-196~500°C
	ST	Stellite	-196~350°C

### SEAT SEAL

#### Seat Back Seal-RS

JDV CODE	MATERIAL
N	NBR
V	VITON A/B
U	VITON GLT
E	EPDM
Y	PTFE+ELGILOY
G	GRAPHITE



HVOF Thermal Spray

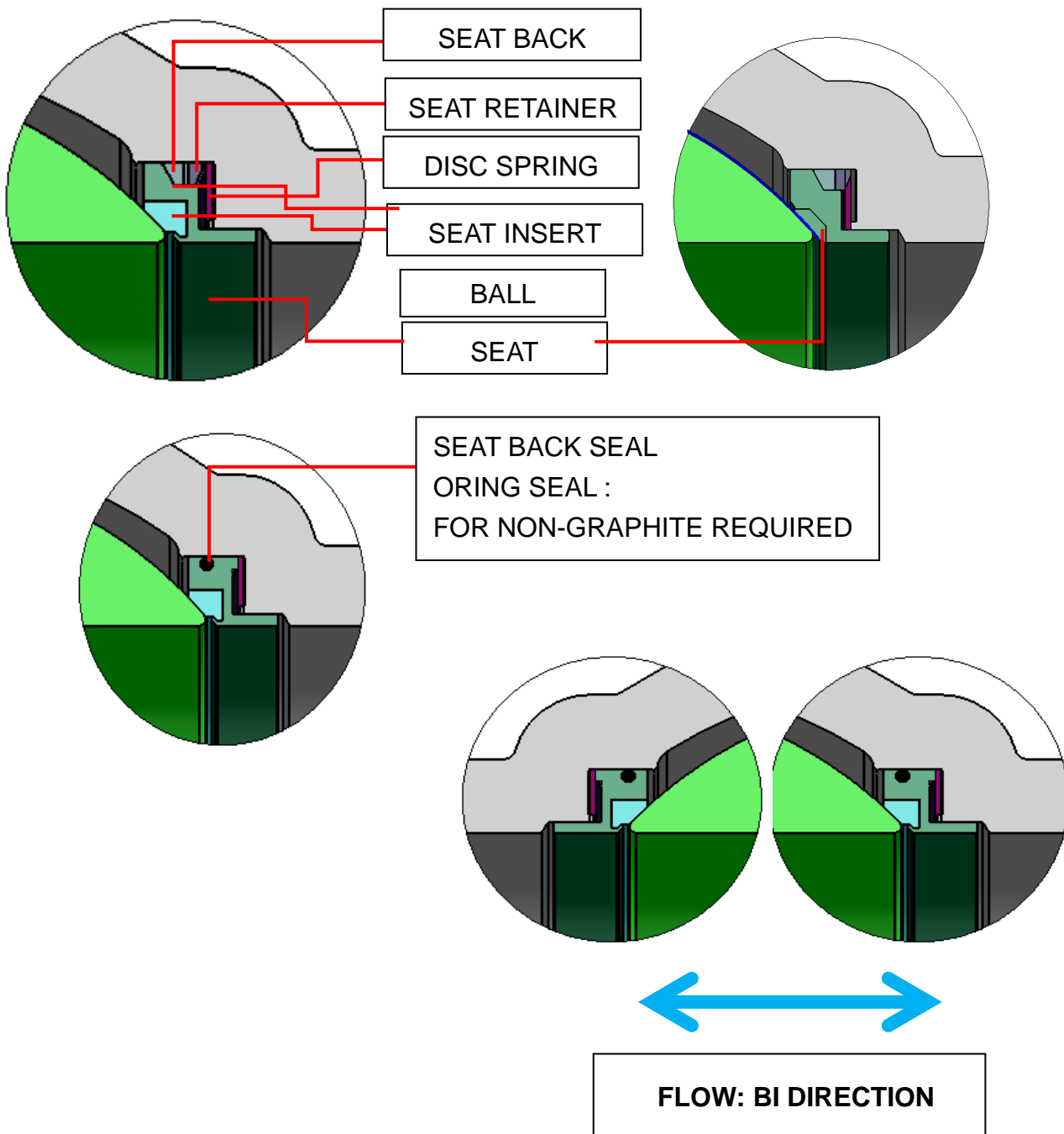


# Design & Structure View

## JBT-E SEAT DESIGN

SIZE 1-1/2"~8"

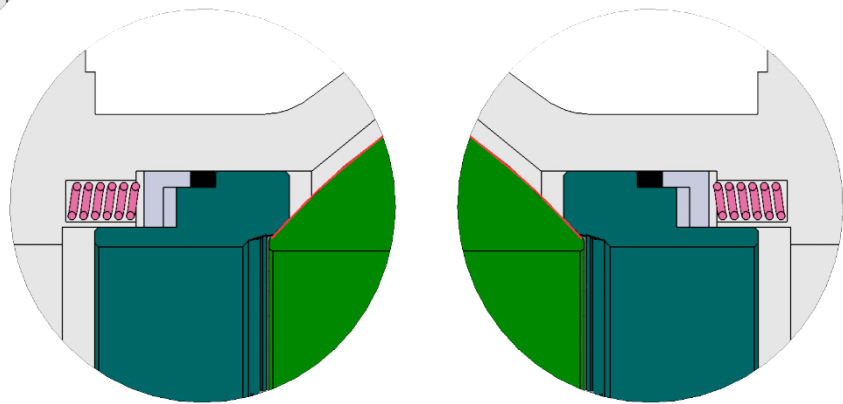
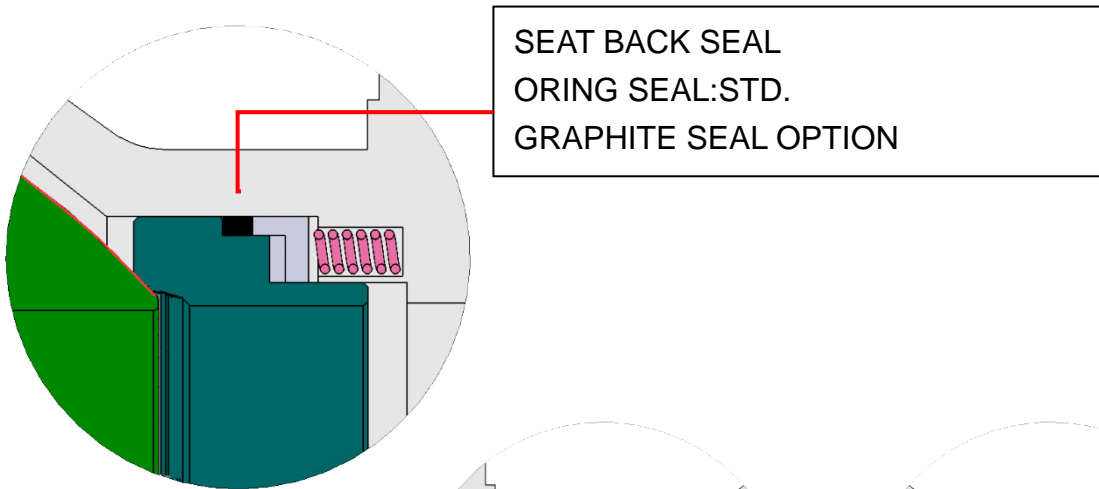
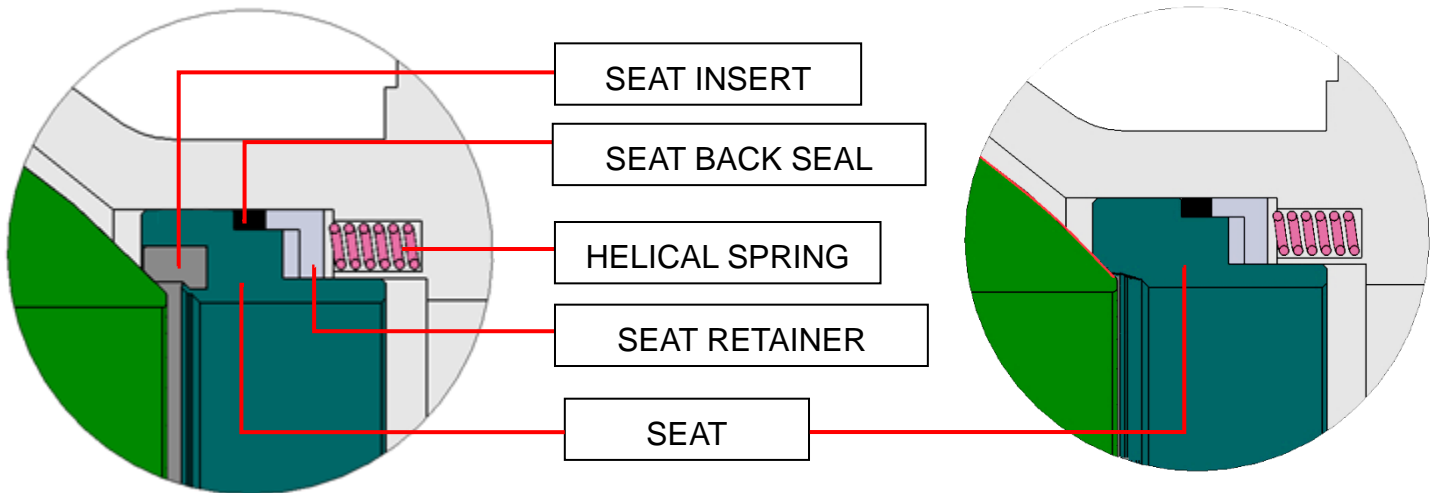
- Disc spring in the design ensures that the assembly maintains the seal between ball and seat.
- Reduce the valve seat abrasion to enhance the reliability of sealing



**JBT-E 10"~14"**

**JBT-F 2"~24" SEAT DESIGN**

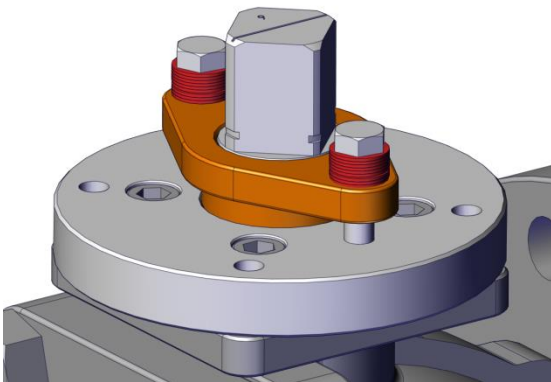
- HELICAL SPRING:



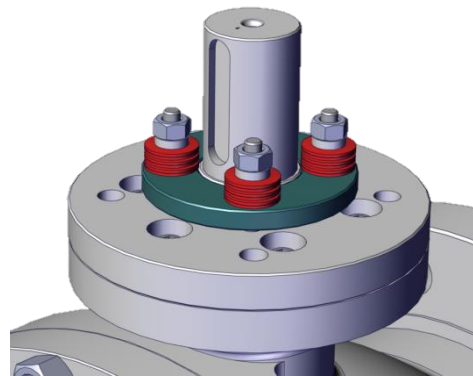
**FLOW: BI DIRECTION**

## Live Loading Design

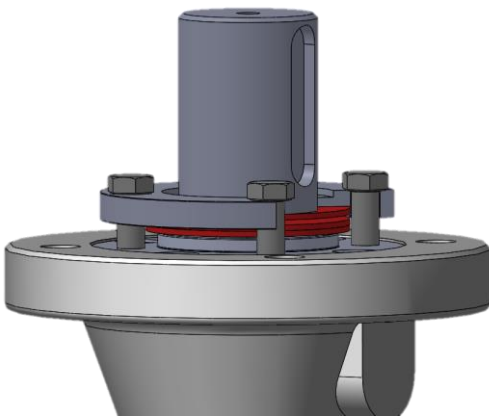
- Live loading system :To fasten screws to increase the spring force on the packing in the event of leakage



JBT-E MODEL SIZE:1-1/2"~8"



JBT-E MODEL SIZE: 10"~14"

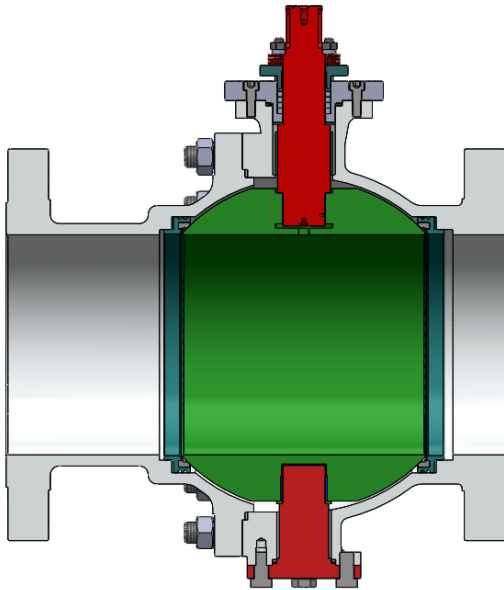


JBT-F MODEL SIZE: 2"~24"

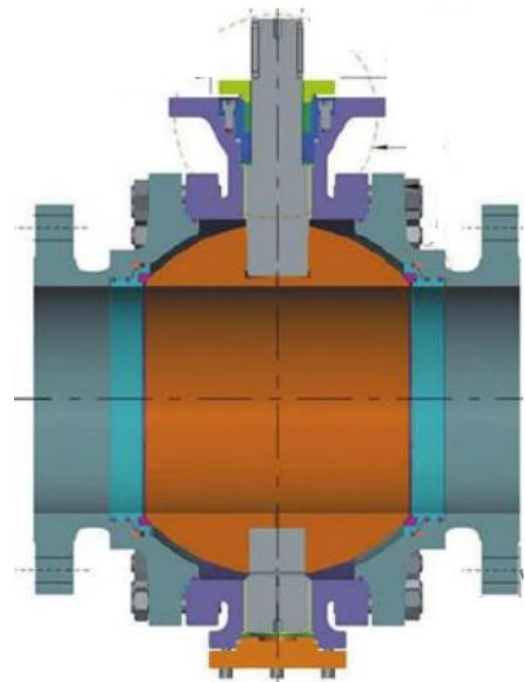
## Fixed Type

TRUNNION FIXED

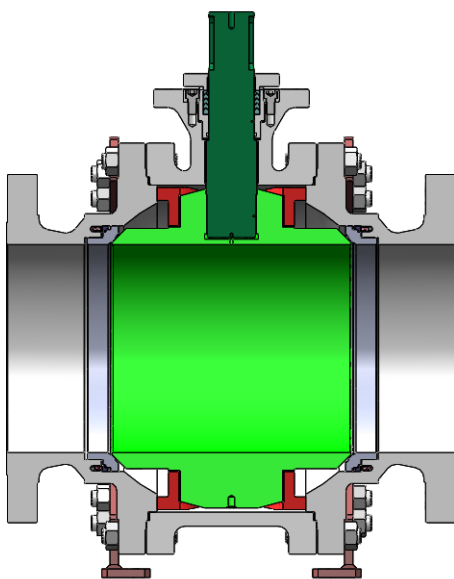
JBT-E 1-1/2"~14" CLASS 150~300 PN16~40



JBT-F 2"~14" CLASS 150~600



JBT-F Plate fixed Structure  
16"~24" CLASS 150~600



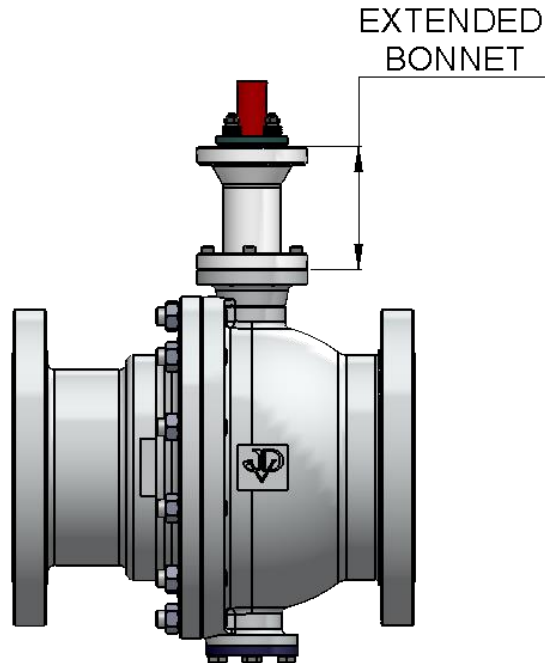
## Extension For Hi / Low Temperature

### JBT-E TYPE

1-1/2"~14"

CLASS 150~300

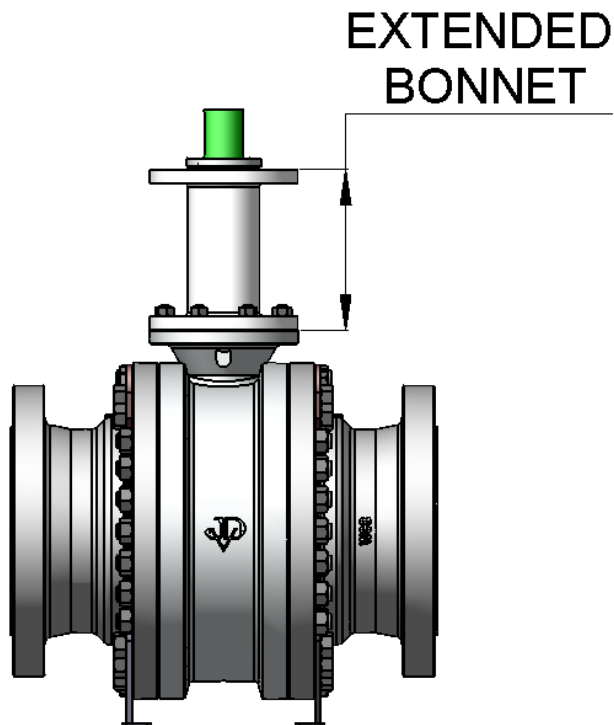
PN16~40



### JBT-F TYPE

2"~24"

CLASS 150~600



## Extended Bonnet Length

High Temperature: UP TO 550°C

Extension length for Heat conservation & personnel protect									
EXTENDED BONNET LENGTH	Valve size DN	Temperature °C				Valve size NPS			
		Manual operation & Insulation valve		Control valve w/ mounting bracket & Insulation valve					
		Short		Long					
		MIN.	MAX.	MIN.	MAX.			MIN.	MAX.
		-29	350	351	550			-29	550
		L		L1				L	
		$32 \leq DN \leq 65$	100	125	100			$1-1/4 \leq NPS \leq 2-1/2$	
$80 \leq DN \leq 125$	100	150	100		$3 \leq NPS \leq 5$				
$150 \leq DN \leq 200$	100	175	100		$6 \leq NPS \leq 8$				
$250 \leq DN \leq 300$	100	200	100		$10 \leq NPS \leq 12$				
$350 \leq DN \leq 400$	100	250	100		$14 \leq NPS \leq 16$				
$450 \leq DN \leq 650$	100	300	100		$18 \leq NPS \leq 26$				

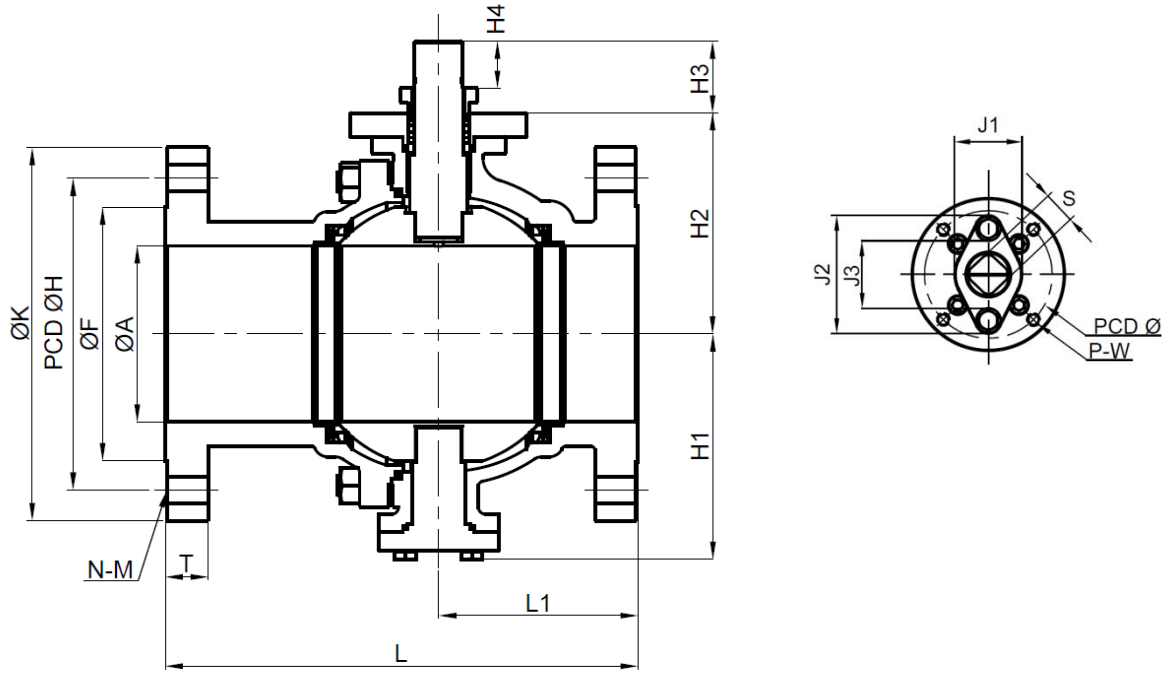
Cryogenic / Low Temperature : -30~-196 (non-cold box)

MIN. Vapour column length non-cold box extension						
EXTENDED BONNET LENGTH	Valve size range DN	MIN. Vapour column length				Valve size range NPS
		MIN. design temperature °C				
		MIN.	MAX.	MIN.	MAX.	
		-196	-110	-109	-30	
		CY		L1		
$32 \leq DN \leq 65$	250	125	$1-1/4 \leq NPS \leq 2-1/2$			
$80 \leq DN \leq 125$	300	150	$3 \leq NPS \leq 5$			
$150 \leq DN \leq 200$	350	175	$6 \leq NPS \leq 8$			
$250 \leq DN \leq 300$	400	200	$10 \leq NPS \leq 12$			

Note: 1. extended length is according to ISO 28921-2013 to ISO28921

# Dimension

## JBT-E TYPE 1-1/2"~8" CLASS 150~300 / PN16~40



### DIMENSIONS CLASS 150

(mm)

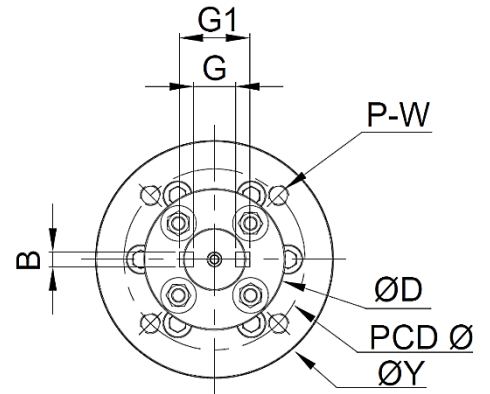
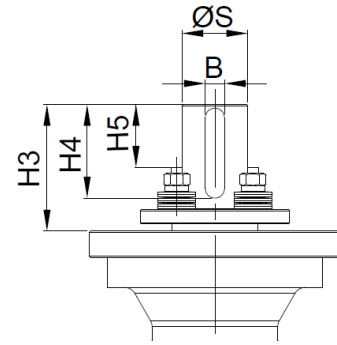
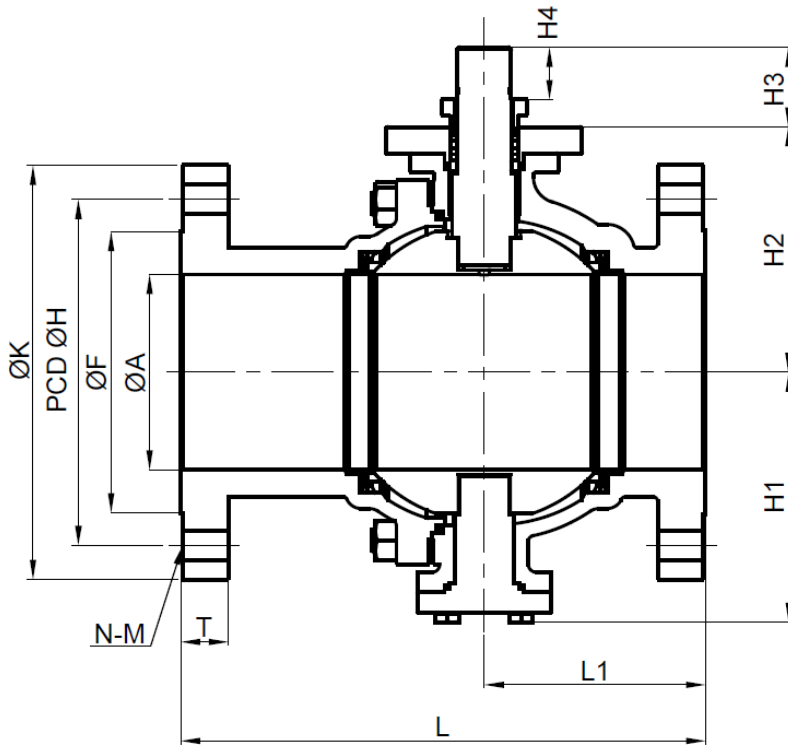
SIZE	A	F	H	K	M	N	L	L1	T	S	Q	W	H1	H2	H3	H4	J1	J2	J3
40 1-1/2"	40	73	98.5	127	16	4	165	72	14.3	17	70	M8	73.7	77.3	42	26.5	40	82	42
50 2"	50	92	120.5	152	19	4	178	79	15.9	17	70	M8	80.7	84	42	26.5	40	82	42
65 2-1/2"	65	105	139.5	178	19	4	190	86	17.5	20	70	M8	92.7	105	47	29.5	44	92.6	52.5
80 3"	76	127	152.5	190	19	4	203	98	19.1	20	70	M8	101.7	113.5	47	29.5	44	92.6	52.5
100 4"	100	157	190.5	229	19	8	229	114	23.9	27	102	M10	139.4	137	52	34.5	60	109	61
125 5"	125	186	216.0	254	22	8	356	136.5	23.9	27	102	M10	170	165.5	52	34.5	60	109	66
150 6"	150	216	241.5	279	22	8	394	149	25.4	32	125	M12	192	188.5	62	41	66	116	66
200 8"	201	270	298.5	343	22	8	457	212	28.6	35	140	M16	237.5	238	71	46	74	137	74

### DIMENSIONS CLASS 300

(mm)

SIZE	A	F	H	K	M	N	L	L1	T	S	Q	W	H1	H2	H3	H4	J1	J2	J3
40 1-1/2"	40	73	114.5	156	22	4	190	82	20.6	17	70	M8	73.7	77.3	42	26.5	40	82	42
50 2"	50	92	127.0	165	19	8	216	96.3	22.3	17	70	M8	80.7	84	42	26.5	40	82	42
65 2-1/2"	65	105	149.0	190	22	8	241	99	25.4	20	70	M8	92.7	105	47	29.5	44	92.6	52.5
80 3"	76	127	168.0	210	22	8	282	129	28.6	20	70	M8	101.7	113.5	47	29.5	44	92.6	52.5
100 4"	100	157	200.0	254	22	8	305	135.8	31.8	27	102	M10	139.4	137	52	34.5	60	109	61
125 5"	125	186	235.0	280	22	8	381	171.5	35.1	32	125	M12	170	165.5	62	41	60	116	66
150 6"	150	216	269.7	318	22	12	403	170	36.6	32	125	M12	192	188.5	62	41	66	116	66
200 8"	201	270	330.0	381	25	12	502	226	41.2	35	140	M16	237.5	238	71	46	74	137	74

DIN PN16~PN40 . available on request

**JBT-E TYPE 10"~14" CLASS 150~300 / PN16~40**

**DIMENSIONS CLASS 150**

(mm)

SIZE	ØA	ØF	ØH	ØK	M	N	L	L1	T	H1	H2	H3	H4	H5	ØS	B	G	G1	Q	W	P	Y	D	
250	10"	252	323.8	362	405	25.4	12	533	240	30.6	270	299.5	85.5	48	36	42	12	32	48	140	M16	4	175	100
300	12"	303	381	431.8	485	25.4	12	610	263.5	32.2	325	357	105.5	78	52	55	16	43	63	165	M20	4	210	125
350	14"	334	412.8	476.3	535	28.5	12	686	309.5	35.4	345	400	137.5	78	56	70	20	55	79	254	M16	8	300	170

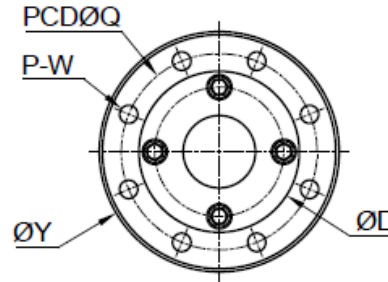
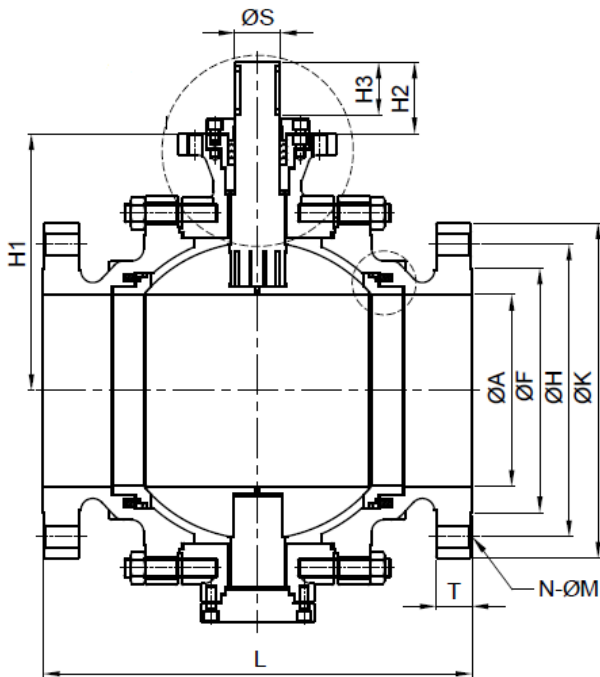
**DIMENSIONS CLASS 300**

(mm)

SIZE	ØA	ØF	ØH	ØK	M	N	L	L1	T	H1	H2	H3	H4	H5	ØS	B	G	G1	Q	W	P	Y	D	
250	10"	252	323.8	387.4	445	28.5	16	568	240	48.1	270	299.5	85.5	48	36	60	12	32	48	140	M16	4	175	100
300	12"	303	381	450.8	520	31.8	16	648	263.5	51.3	325	357	105.5	78	52	70	16	43	63	165	M20	4	210	125
350	14"	334	412.8	514.4	585	31.8	20	762	309.5	54.4	345	400	137.5	78	56	75	20	55	79	254	M16	8	300	170



**JBT-F TYPE 2~14" CLASS 150~600**



**DIMENSIONS CLASS 150**

(mm)

SIZE	ØA	ØF	ØH	ØK	M	N	L	T	H1	H2	H3	H4	ØS	E	G	Q	W	P	Y	D	
50	2"	50	92.1	120.7	150	19	4	178	15.9	116.5	60	40	104	27	8	17	102	M10	4	130	73
80	3"	76	127	152.4	190	19	4	203	19.1	155.5	61	40	134	36.3	10	26.3	102	M10	4	130	85
100	4"	100	157.2	190.5	230	19	8	229	24.3	181	84	60	168	40	10	30	125	M12	4	153	100
150	6"	150	215.9	241.5	280	22.2	8	394	25.9	235	91	70	214	48	14	37	165	M20	4	210	125
200	8"	201	269.9	298.5	345	22.2	8	457	29.0	300	100	75	265	60	18	46	165	M20	4	210	128
250	10"	252	323.8	362	405	25.4	12	533	30.6	340	100	75	314	60	18	46	165	M20	4	210	128
300	12"	303	381	431.8	485	25.4	12	610	32.2	405	120	95	368	70	20	54	254	M16	8	290	156
350	14"	334	412.8	476.3	535	28.5	12	686	35.4	438.5	146	110	402	75	20	59	254	M16	8	300	170

**DIMENSIONS CLASS 300**

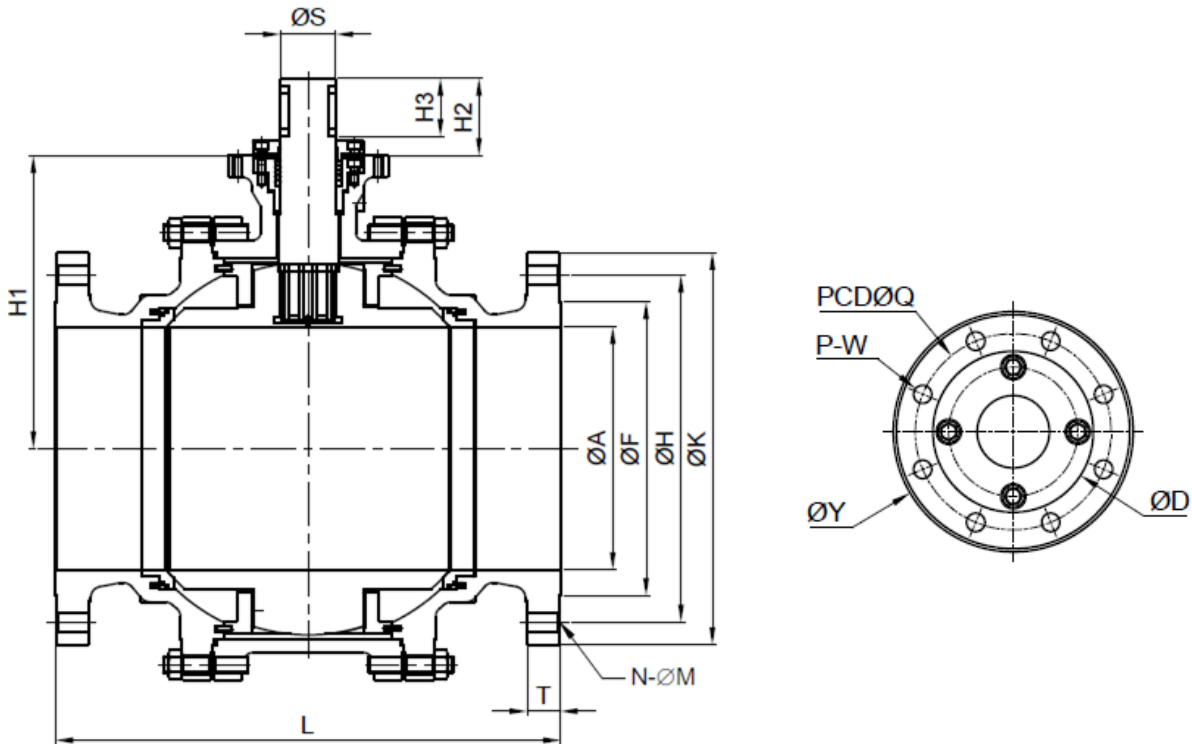
(mm)

SIZE	ØA	ØF	ØH	ØK	M	N	L	T	H1	H2	H3	H4	ØS	E	G	Q	W	P	Y	D	
50	2"	50	92.1	127	165	19	8	216	22.7	116.5	60	40	104	27	8	19	102	M10	4	130	73
80	3"	76	127	168.3	210	22.2	8	283	29.0	155.5	61	40	134	36.3	10	26.3	102	M10	4	130	85
100	4"	100	157.2	200	255	22.2	8	305	32.2	181	84	60	168	40	10	30	125	M12	4	153	100
150	6"	150	215.9	269.9	320	22.2	12	403	37.0	235	91	70	214	48	14	37	165	M20	4	210	125
200	8"	201	269.9	330.2	380	25.4	12	502	41.7	300	100	75	265	60	18	46	165	M20	4	210	128
250	10"	252	323.8	387.4	445	28.5	16	568	48.1	340	100	75	314	60	18	46	254	M16	8	290	128
300	12"	303	381	450.8	520	31.8	16	648	51.3	405	120	95	368	70	20	55	254	M16	8	290	156
350	14"	334	412.8	514.4	585	31.8	20	762	54.4	438.5	146	110	402	75	20	60	254	M16	8	300	170

**DIMENSIONS CLASS 600**

(mm)

SIZE	ØA	ØF	ØH	ØK	M	N	L	T	H1	H2	H3	H4	ØS	E	G	Q	W	P	Y	D	
50	2"	50	92.1	127	165	19	8	292	32.4	116.5	60	40	104	27	8	19	102	M10	4	130	73
80	3"	76	127	168.3	210	22.2	8	356	38.8	155.5	61	40	134	36.3	10	26.3	102	M10	4	130	85
100	4"	100	157.2	215.9	275	25.4	8	432	45.1	181	84	60	168	40	10	30	125	M12	4	153	100
150	6"	150	215.9	292.1	355	28.5	12	559	54.7	235	91	70	214	48	14	37	165	M20	4	210	125
200	8"	201	269.9	349.2	420	31.8	12	660	62.6	300	100	75	265	60	18	46	165	M20	4	210	128
250	10"	252	323.8	431.8	510	34.9	16	787	70.5	340	100	75	314	60	18	46	254	M16	8	290	128
300	12"	303	381	489	560	34.9	20	838	73.7	405	120	95	368	70	20	55	254	M16	8	290	156
350	14"	334	412.8	527	605	38.1	20	889	76.9	438.5	146	110	402	75	20	60	254	M16	8	300	170

**JBT-F TYPE 16" ~24" CLASS 150~600**

**DIMENSIONS CLASS 150**

(mm)

SIZE	ØA	ØF	ØH	ØK	M	N	L	T	H1	H2	H3	ØS	E	G	Q	W	P	Y	D
400 16"	387	469.9	539.8	595	28.6	16	762	37.0	487	145	108	85	24	65.6	254	M16	8	290	179
450 18"	438	533.4	577.9	635	31.8	16	864	40.1	531	170	135	100	28	80	254	M16	8	290	200
500 20"	489	584.2	635	700	31.8	20	914	43.3	562	180	145	110	32	84	356	M30	8	415	210
600 24"	589	692.2	749.5	815	34.9	20	1067	48.1	650	200	160	120	32	109	356	M30	8	415	230

**DIMENSIONS CLASS 300**

(mm)

SIZE	ØA	ØF	ØH	ØK	M	N	L	T	H1	H2	H3	ØS	E	G	Q	W	P	Y	D
400 16"	387	469.9	571.5	650	34.9	20	838	57.6	487	145	108	85	24	65.6	254	M16	8	290	179
450 18"	438	533.4	628.6	710	34.9	24	914	60.8	531	170	135	100	28	80	254	M16	8	290	200
500 20"	489	584.2	685.8	775	34.9	24	991	64.0	562	180	145	110	32	84	356	M30	8	415	210
600 24"	589	692.2	812.8	915	41.3	24	1143	70.3	650	200	160	120	32	109	356	M30	8	415	230

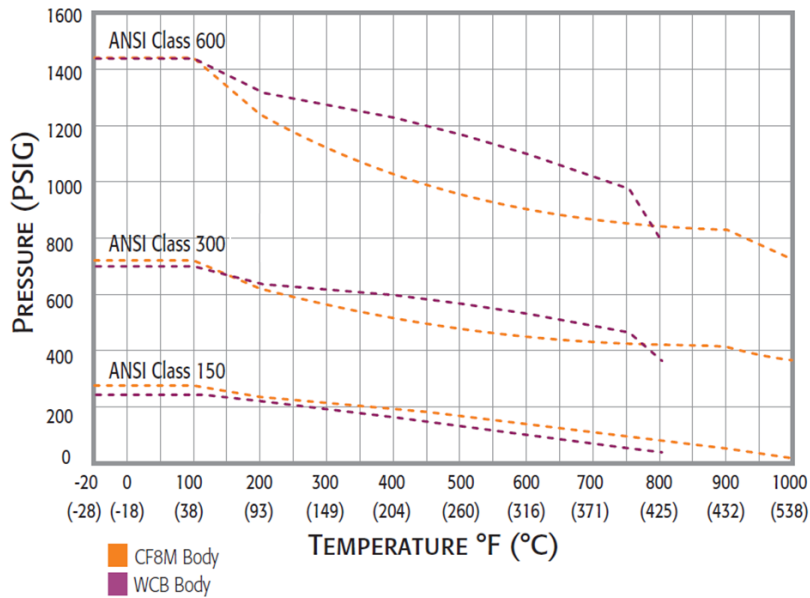
**DIMENSIONS CLASS 600**

(mm)

SIZE	ØA	ØF	ØH	ØK	M	N	L	T	H1	H2	H3	H4	ØS	E	G	Q	W	P	Y	D
400 16"	387	469.9	603.2	685	41.3	20	991	83.2	487	145	108	425	85	24	65.6	254	M16	8	300	179
450 18"	438	533.4	654.0	745	44.5	20	1092	89.6	531	170	135	435	100	28	80	254	M16	8	300	200
500 20"	489	584.2	723.9	815	44.5	24	1194	95.9	562	180	145	555	110	32	84	356	M30	8	415	210
600 24"	589	692.2	838.2	940	50.8	24	1397	108.6	650	200	160	610	120	32	109	356	M30	8	415	230

# P/T CHART

Pressure vs. Temperature



\*Other material P/T pls ref to ASME B16.34

Seat temperature application table

SEAT			
JDV CODE		MATERIAL / HARD FACE	TEMPERATURE
METAL	SM	Hard Chrome	-196~350°C
	SH1	Tungsten Carbide	-196~450°C
	SH2	Chromium Carbide	-196~500°C
	ST	Stellite	-196~350°C

SEAT			
JDV CODE		MATERIAL / HARD FACE	TEMPERATURE
SOFT	R	R-PTFE	-60~180°C
	L	NYLON(PA)	-29~100°C
	V	DEVLON	-50~130°C
	M	MOLON(PA66+MOS2)	-50~130°C
	K	PEEK	-59~250°C
	O	DELRON®(POM)	-60~110°C
	C	PCTFE	-196~140°C

# HOW TO ORDER

EXAMPLES: 1 2 3 4 5 6 7 8 9 10

**JBT-E - C1 - 02 - A - R - G - 02 - 050 - FGA - R**

1.TYPE	2.SPEC.		3.BODY.		4.TRIM (BALL/SEAT HOLDER)		5.SEAT (Soft/Metal Coating)		6.SEAL	
JBT-E	C1	150	02	WCB	A	CF8	Soft		G	GRAPHITE
JBT-EM	C2	300	03	CF8	C	CF8M	R	R-TFE (15%G+PTFE)	N	NBR
JBT-F	C3	600	04	CF8M	D	CF3	T	TFM-1600	V	VITON
JBT-M	D2	DIN PN16*	05	CF3	E	CF3M	K	PEEK	E	EPDM
	D4	DIN PN40*	06	CF3M	F	CG8M	C	PCTFE	P	PTFE
		*DIN SPEC available on request	07	CG8M	I	CD3MN	Metal Coating		Y	PTFE+ELGILOY
			11	LCB			SM	BALL:HCR SEAT:STELLITED		
			12	LCC			SH1	BALL:TC SEAT:TC		
			15	CD3MN			SH2	BALL:CRC SEAT:CRC		

7.STEM		8.SIZE		9.OPTION		10.CONNECTION	
02	304	040	1-1/2"	F	FIRE SAFE	R	RF FLANGED
03	316	050	2"	L1	EXTENDED STEM	J	RTJ FLANGED
10	2205	065	2-1/2"	L2	EXTENDED (-30~ -110°C)		*others connection available on request
22	630(17-4PH)	080	3"	I	LIVE LOADING		
36	A286	100	4"	H	LEVER		
		150	6"	G	GEAR		
		200	8"	A	BARE SHAFT		
		250	10"	N	NACE		
		300	12"	ES	EMERGENCY		
		350	14"		GREASE SEALS		
		400	16"	DB	DOUBLE BLOCK & BLEED		
		450	18"	DP	DOUBLE PISTON		
		500	20"	DR	DRAIN		
		600	24"	CY	CRYOGENIC DESIGN (-50~-196°C)		

Note: Other material available on request.



■ HEADQUARTERS

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**TGT**



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