



JDV
CONTROL
VALVES



JBT-C/JBT-CM Type

3/4-Way Trunnion Type **Soft Metal** Seat Ball Valve
三通/四通固定轴软密封/金属密封球阀



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



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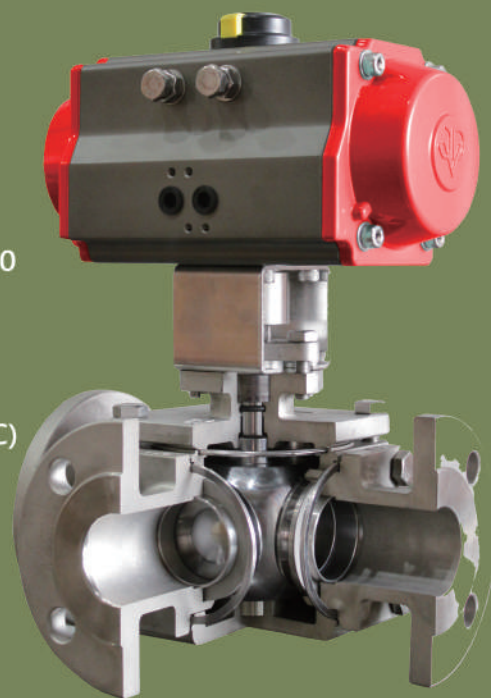
T/L-Port Full Bore Flanged Ends ASME CLASS 150/300 DIN PN16/40 T/L型全通径法兰球阀

The JBT-C/JBT-CM Trunnion-mounted 3/4-way ball valves are designed for the most complex flow control equations. Our unique 4-seat design with many alternatives of soft and metal seats allows the JBT-C/JBT-CM Type to withstand the toughest operating conditions in the fields of Oil & Gas, Refineries, Power Generation, Pulp & Paper, Mining, Petrochemical and Chemical industries, etc.

三通/四通球阀,软密封球阀适用于一般工况,金属密封球阀适用于高温、研磨性介质等恶劣环境,广泛应用于石油、天然气、石化、化工、电力、造纸、采矿等领域。

Applicable Standards

- Body Material(阀体材质): Standard in WCB, CF8, CF8M. Other materials are available according to requirements. (可依专案客制需求)
- Nominal Size(尺寸): 1-1/2" to 12" (DN40 to DN300) are on request.
- Pressure Rating(压力等级): ASME CLASS 150/300 DIN PN16/40
- End Connections(连接型式): RF(法兰凸缘)
- Temperature Range(温度范围): Soft Seat(软密封): -20~356°F (-29~180°C)
Metal Seat(硬密封): -20~932°F (-29~500°C)
- Flange Dimensions(法兰尺寸): ASME B16.5 / EN 1092-1
- Body Pressure Test(本体压力测试): API 598
- Seat Leakage Test(球垫泄漏测试): Soft Seat(软密封): API 598
Metal Seat(硬密封): ANSI I FCI70-2 CLASS V
- Casting(铸造标准): MSS-SP-25 / MSS-SP-55



Product features: 产品特性:

1. Trunnion ball design keeping the torque stable and low, even at a high pressure drop.
固定式球阀设计·在高压环境下·操作扭力低且稳定
2. Robust 1-PC trim combining ball & stem (size 4" and below), to increase the valve life cycle.
坚固的一体式球阀/阀杆设计(4"以下)·提高阀门使用寿命
3. Oversized stem design preventing any deformation from high pressure or high temperature.
高强度阀杆设计·在高温高压环境应用下不容易变形
4. Unique 4-seats design ensuring a perfect balance and an optimum position of the ball.
独特的4阀座设计·确保球阀保持在最佳的位置与平衡
5. Spring loaded design keeping the seat in tight contact with the ball, even at a low pressure.
阀座加载弹片设计平衡球阀使其平稳运转。
6. Many options of soft and metal seats to meet the requirements of all using conditions.
多项可选择的软/硬密封设计·可满足各种应用条件需求
7. Fire safe design.
防火设计。
8. Anti-blowout stem design.
阀杆防飞出设计。
9. Anti-static design.
防静电设计。
10. ISO 5211 Mounting Pad design.
ISO 5211安装平台设计。

Design & Structure 设计&结构

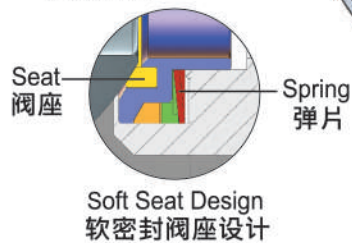
JBT-C/JBT-CM Type DN40~DN100 (1-1/2"~4")

**Integrated Trunnion
Ball & Stem Design**
阀球&阀杆整合设计

**ISO 5211
Mounting Pad Design**
ISO安装平台孔位设计

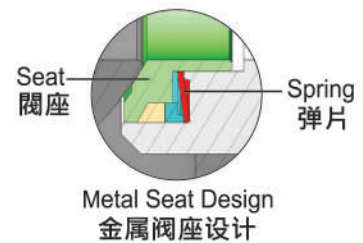
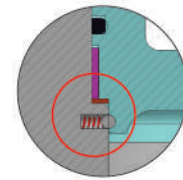
Seat Options:

- Soft Seat
 - Metal Seat
- 阀座选配:
• 软密封阀座
• 金属阀座



Spring Loaded Seat Design
阀座加载弹簧设计

Anti-static Design
防静电设计

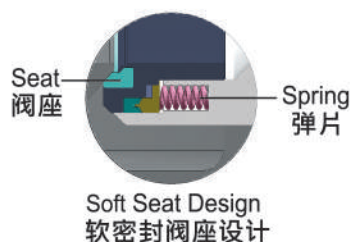


JBT-C/JBT-CM Type DN125~DN200 (5"~8")

**ISO 5211
Mounting Pad Design**
ISO安装平台孔位设计

Seat Options:

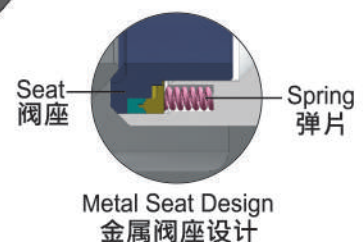
- Soft Seat 阀座
- Metal Seat



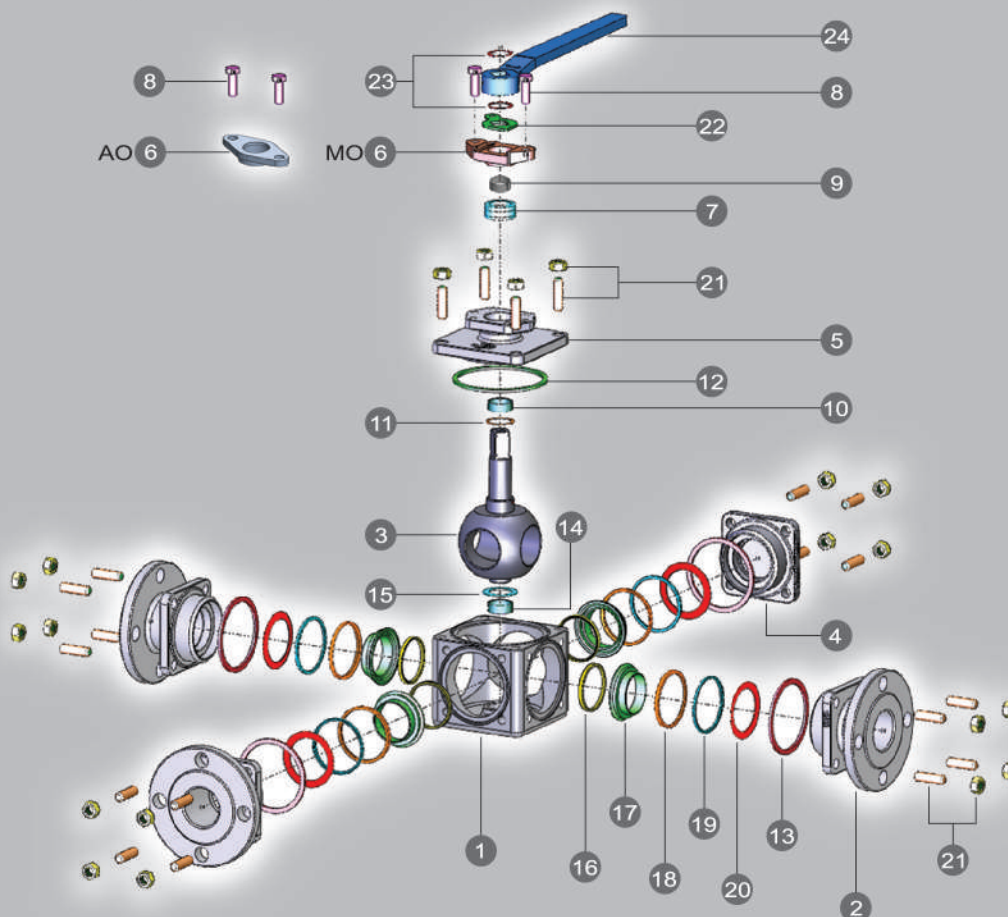
Spring Loaded Seat Design
阀座加载弹簧设计

Anti-static Design
防静电设计

Trunnion Ball Design
固定轴阀球设计



JBT-C Type 1-1/2"~4" (DN40~DN100)



Technical Specifications

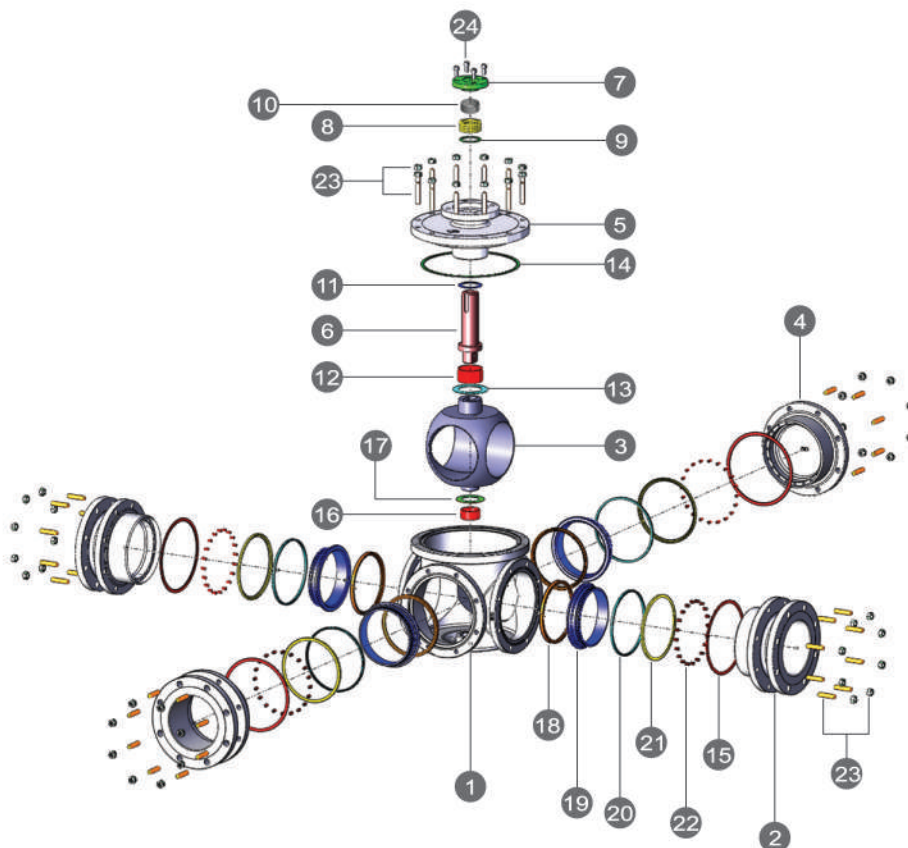
STANDARD MATERIALS 材质表

NO	PART NAME	WCB	CF8	CF8M
1	BODY 阀体	A216-WCB	A351-CF8	A351-CF8M
2	CAP 阀盖	A216-WCB	A351-CF8	A351-CF8M
3	BALL & STEM 阀球&阀杆	A351-CF8		A351-CF8M
4	SIDE COVER 侧阀盖	A216-WCB	A351-CF8	A351-CF8M
5	TOP COVER 顶阀盖	A216-WCB	A351-CF8	A351-CF8M
6	GLAND ⁽¹⁾ 压盖	A351-CF8		
7	GLAND PACKING 中口迫紧	PTFE/GRAPHITE		
8	GLAND BOLT 牛帽螺丝	STAINLESS STEEL		
9	GLAND BEARING 牛帽衬套	G-PTFE		
10	STEM BEARING 阀轴衬套	A240-316+PTFE		
11	STEM THRUST WASHER 中轴垫片	G-PTFE		
12	TOP COVER GASKET 顶盖垫圈	316SS+GRAPHITE		
13	BODY GASKET 阀体密封垫	316SS+GRAPHITE		
14	TRUNNION BEARING 轴衬套	A240-316+PTFE		
15	TRUNNION WASHER 轴垫片	G-PTFE		
16	SEAT 阀座	PTFE / R-PTFE / TFM-1600 / PEEK		
17	SEAT RING 阀座环	A351-CF8	A351-CF8M	
18	SEAT RING SEAL 止泄压环迫紧	GRAPHITE		
19	SEAT RING RETAINER 止泄压环	A351-CF8	A351-CF8M	
20	SPRING 弹片	INCONEL® X-750		
21	BOLT & NUT 螺栓&螺母	A193-B7 & A194-7	A193-B8 & A194-8	
22	TRAVEL STOP ^(MO) 档片	A240-304		
23	SNAP CATCH ^(MO) 扣环	AISI-420		
24	HANDLE ^(MO) 把手	FCD(1-1/2"~2") / FCD+SGP(2-1/2"~4")		

NOTES:

(1) Options: AO:Automation / MO:Manual

JBT-C Type 5"~8" (DN125~DN200)



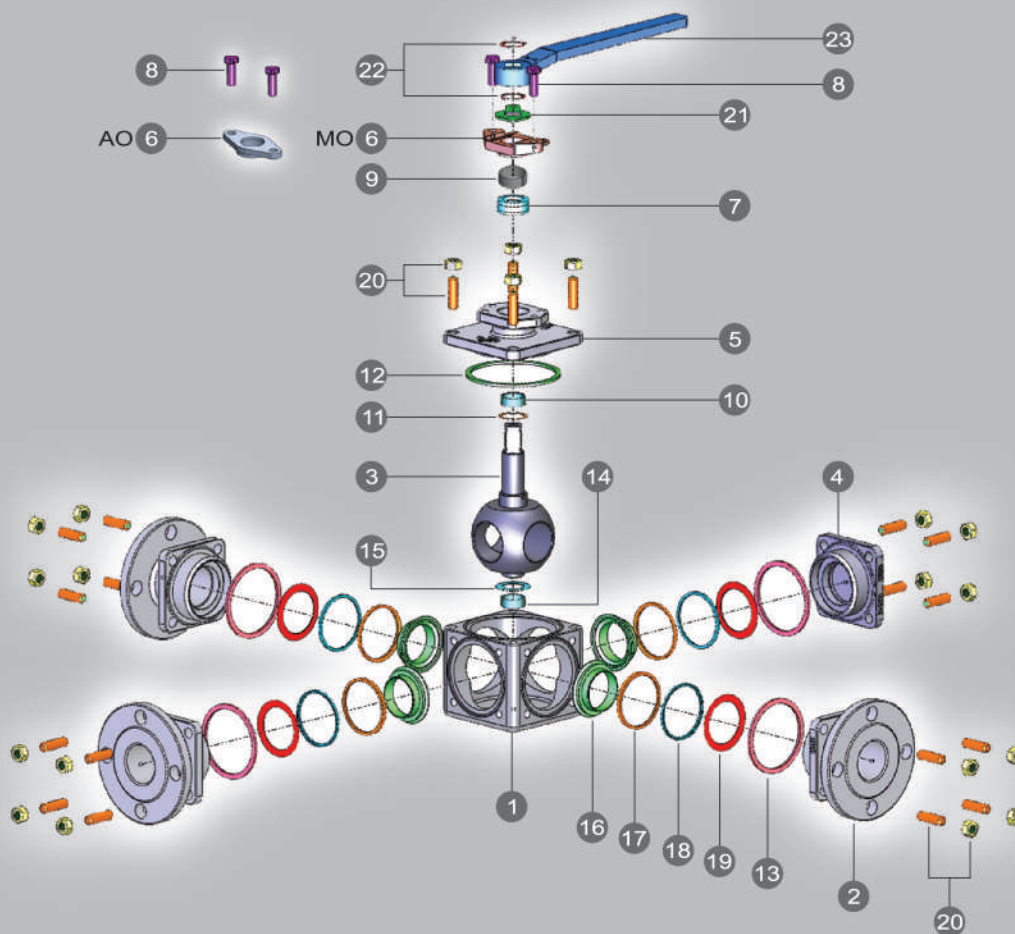
STANDARD MATERIALS

NO	PART NAME		WCB	CF8	CF8M
1	BODY	阀体	A216-WCB	A351-CF8	A351-CF8M
2	CAP	阀盖	A216-WCB	A351-CF8	A351-CF8M
3	BALL	阀球	A351-CF8		A351-CF8M
4	SIDE COVER	侧阀盖	A216-WCB	A351-CF8	A351-CF8M
5	TOP COVER	顶阀盖	A216-WCB	A351-CF8	A351-CF8M
6	STEM	阀杆	A276-304		A276-316
7	GLAND	压盖	A216-WCB	A351-CF8	A351-CF8M
8	GLAND PACKING 中口迫紧		GRAPHITE		
9	GLAND THRUST WASHER 牛楠小薄片		G-PTFE		
10	GLAND BEARING 牛楠衬套		G-PTFE		
11	STEM THRUST WASHER 中轴垫片		G-PTFE		
12	TOP TRUNNION BEARING 顶盖衬套		A240-316+PTFE		
13	TOP TRUNNION WASHER 顶盖垫片		G-PTFE		
14	TOP COVER GASKET 顶盖垫圈		316SS+GRAPHITE		
15	BODY GASKET 阀体密封垫		316SS+GRAPHITE		
16	TRUNNION BEARING 轴衬套		A240-316+PTFE		
17	TRUNNION WASHER 轴垫片		G-PTFE		
18	SEAT 阀座		PTFE / R-PTFE / TFM-1600 / PEEK		
19	SEAT RING 阀座环		A351-CF8		A351-CF8M
20	SEAT RING SEAL 止泄压环迫紧		GRAPHITE		
21	SEAT RING RETAINER 止泄压环		A351-CF8		A351-CF8M
22	SPRING 弹簧		INCONEL® X-750		
23	BOLT & NUT 螺栓&螺帽		A193-B7 & A194-7	A193-B8 & A194-8	
24	GLAND BOLT 牛楠螺丝		STAINLESS STEEL		

The above materials may be changed with different using conditions.



JBT-CM Type 1-1/2"~4" (DN40~DN100)



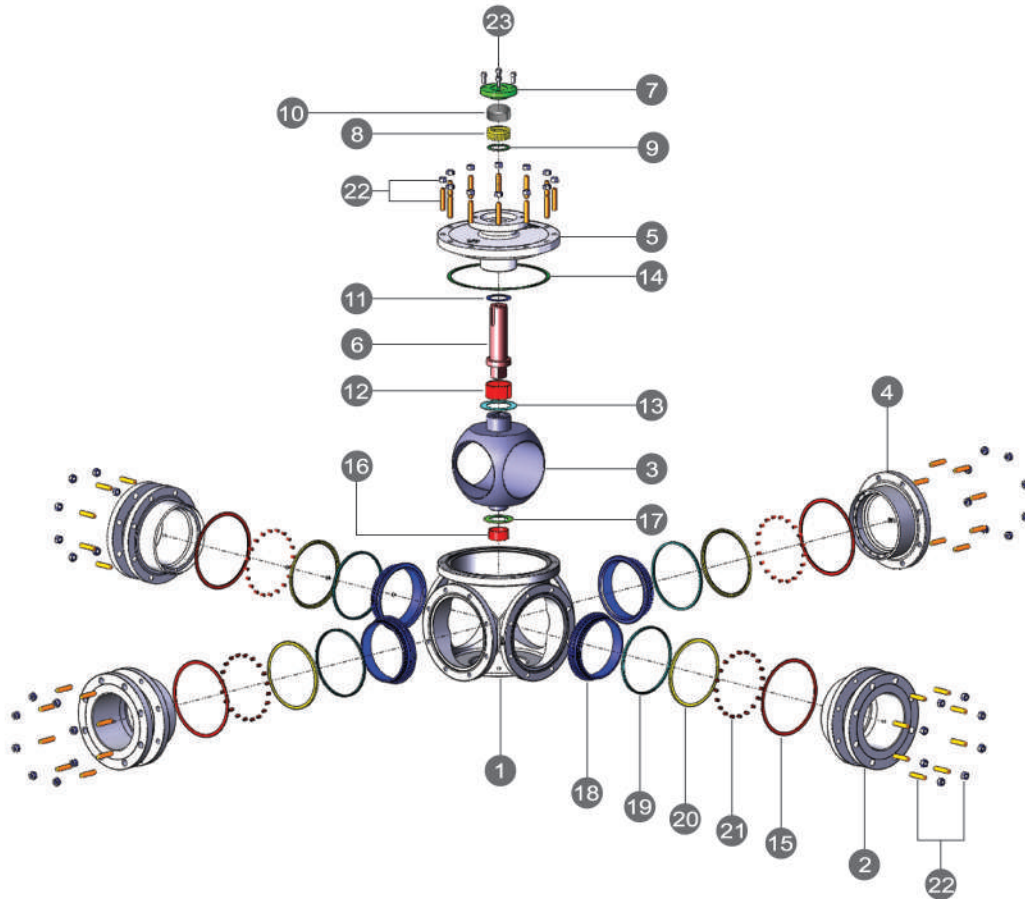
STANDARD MATERIALS

NO	PART NAME	SM			SH		
		-20~661°F (-29~350°C)			-20~797°F (-29~425°C)	-20~932°F (-29~500°C)	
1	BODY 阀体	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
2	CAP 阀盖	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
3	BALL & STEM 球阀&阀杆	A351-CF8+HCR ⁽²⁾		A351-CF8M+HCR	A351-CF8+TC ⁽²⁾ / CRC ⁽²⁾		A351-CF8M+TC / CRC
4	SIDE COVER 侧阀盖	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
5	TOP COVER 顶阀盖	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
6	GLAND ⁽¹⁾ 压盖	A351-CF8					
7	GLAND PACKING 中口迫紧	GRAPHITE					
8	GLAND BOLT 牛楠螺丝	STAINLESS STEEL					
9	GLAND BEARING 牛楠衬套	A240-316+PTFE					
10	STEM BEARING 阀杆轴承	METAL+HARD FACE					
11	STEM THRUST WASHER 中轴垫片	METAL+HARD FACE					
12	TOP COVER GASKET 顶盖垫圈	316SS+GRAPHITE					
13	BODY GASKET 阀体密封垫	316SS+GRAPHITE					
14	TRUNNION BEARING 轴衬套	METAL+HARD FACE					
15	TRUNNION WASHER 轴垫片	METAL+HARD FACE					
16	SEAT 阀座	A351-CF8+STELLITE ®		A351-CF8M+STELLITE®	A351-CF8+TC/CRC		A351-CF8M+TC/CRC
17	SEAT RING SEAL 止泄压环迫紧	GRAPHITE					
18	SEAT RING RETAINER 止泄压环	A351-CF8		A351-CF8M	A351-CF8		A351-CF8M
19	SPRING 弹簧	INCONEL ® X-750					
20	BOLT & NUT 螺栓&螺母	A193-B7 & A194-7	A193-B8 & A194-8		A193-B7 & A194-7	A193-B8 & A194-8	
21	TRAVEL STOP ^(MO) 档片	A240-304					
22	SNAP CATCH ^(MO) 扣环	AISI-420					
23	HANDLE ^(MO) 把手	FCD (1-1/2"~2") / FCD45+SGP (2-1/2"~4")					

NOTES:

(1) Options: AO:Automation / MO:Manual (2) HCR=Hard Chrome TC=Tungsten Carbide CRC=Chrome Carbide
镀硬铬 碳化钨喷涂

JBT-CM Type 5"~8" (DN125~DN200)

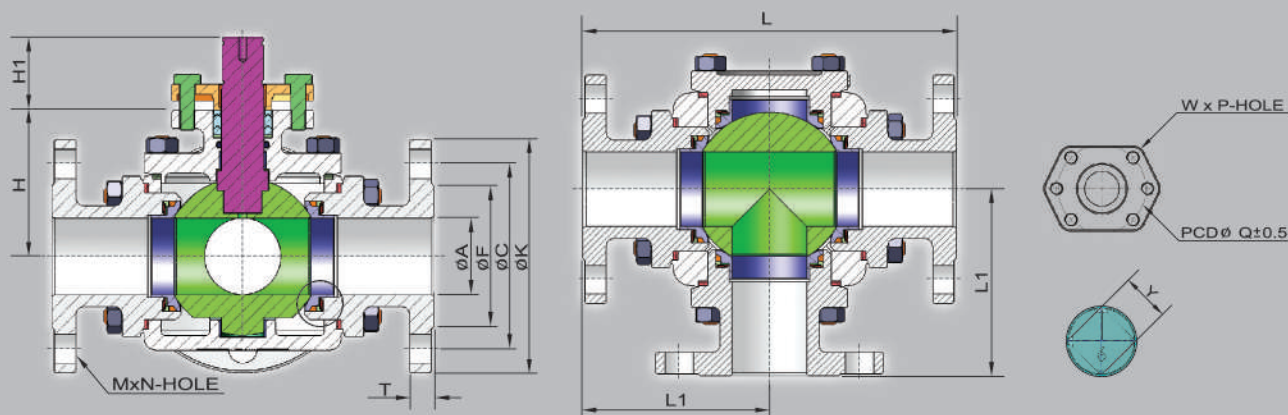


STANDARD MATERIALS

NO	PART NAME	SM			SH		
		-20~661°F (-29~350°C)			-20~797°F (-29~425°C)	-20~932°F (-29~500°C)	
1	BODY 阀体	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
2	CAP 阀盖	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
3	BALL 阀球	A351-CF8+HCR		A351-CF8M+HCR	A351-CF8+TC/CRC		A351-CF8M+TC/CRC
4	SIDE COVER 侧阀盖	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
5	TOP COVER 顶阀盖	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
6	STEM 阀杆	A564-630 (H1150)		A638-S66286	A638-S66286		
7	GLAND 压盖	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
8	GLAND PACKING 中口迫紧	GRAPHITE					
9	GLAND THRUST WASHER 牛楠小薄片	METAL+HARD FACE					
10	GLAND BEARING 牛楠衬套	A240-316+PTFE					
11	STEM THRUST WASHER 中轴垫片	METAL+HARD FACE					
12	TOP TRUNNION BEARING 顶盖衬套	METAL+HARD FACE					
13	TOP TRUNNION WASHER 顶盖垫片	METAL+HARD FACE					
14	TOP COVER GASKET 顶盖垫圈	316SS+GRAPHITE					
15	BODY GASKET 阀体密封圈	316SS+GRAPHITE					
16	TRUNNION BEARING 轴衬套	METAL+HARD FACE					
17	TRUNNION WASHER 轴垫片	METAL+HARD FACE					
18	SEAT 阀座	A351-CF8+STELLITE ®		A351-CF8M+STELLITE®	A351-CF8+TC/CRC		A351-CF8M+TC/CRC
19	SEAT RING SEAL 止泄压环迫紧	GRAPHITE					
20	SEAT RING RETAINER 止泄压环	A351-CF8		A351-CF8M	A351-CF8		A351-CF8M
21	SPRING 弹簧	INCONEL ® X-750					
22	BOLT & NUT 螺栓&螺帽	A193-B7 & A194-7	A193-B8 & A194-8		A193-B7 & A194-7	A193-B8 & A194-8	
23	GLAND BOLT 牛楠螺丝	STAINLESS STEEL					

The above materials may be changed with different using conditions.

JBT-C/JBT-CM Type DN40~DN100 (1-1/2" ~4")



DIMENSION (ANSI-150LB FLANGED)

(M.M.)

SIZE	A	F	C	K	L	L1	T	H	H1	M	N	Q	W	P	Y
40 1-1/2"	38	73	98.5	127	230	115	14.3	80	42	16	4	70	M8	4	17
50 2"	50	92	120.5	152	257	128.5	15.9	95.5	47	19	4	70	M8	4	20
65 2-1/2"	65	105	139.5	178	291	145.5	17.5	142	52	19	4	102	M10	4	27
80 3"	76	127	152.5	190	334	167	19.1	155	52	19	4	102	M10	4	27
100 4"	100	157	190.5	229	392	196	23.9	172	57	19	8	125	M12	4	32

DIMENSION (ANSI-300LB FLANGED)

(M.M.)

SIZE	A	F	C	K	L	L1	T	H	H1	M	N	Q	W	P	Y
40 1-1/2"	38	73	114.5	156	260	130	20.6	80	42	22	4	70	M8	4	17
50 2"	50	92	127	165	265	132.5	22.3	95.5	47	19	8	70	M8	4	20
65 2-1/2"	65	105	149.5	190	321	160.5	25.4	142	52	22	8	102	M10	4	27
80 3"	76	127	168	210	360	180	28.6	155	52	22	8	102	M10	4	27
100 4"	100	157	200	254	420	210	31.8	172	57	22	8	125	M12	4	32

DIMENSION (DIN PN16 FLANGED)

(M.M.)

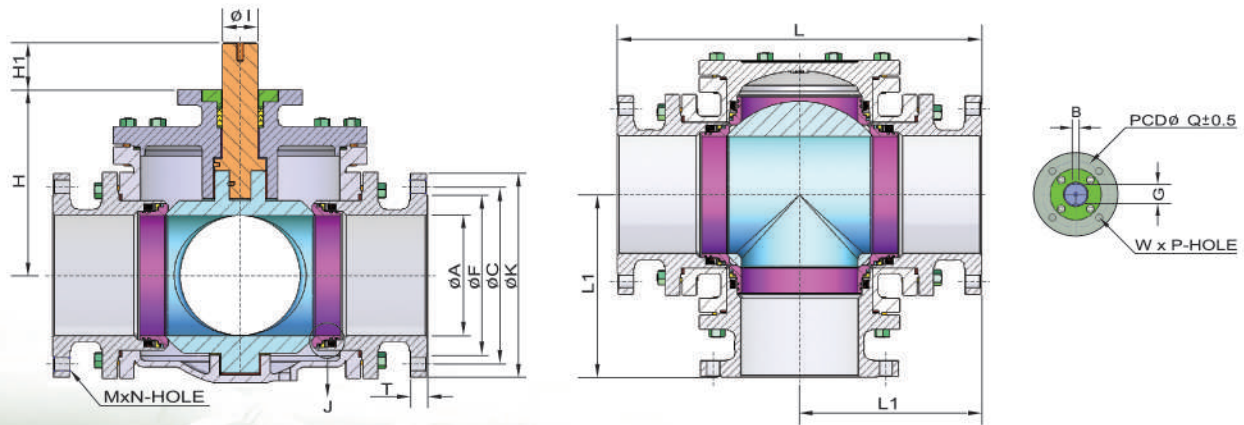
SIZE	A	F	C	K	L	L1	T	H	H1	M	N	Q	W	P	Y
40 1-1/2"	38	88	110	150	245	122.5	16	80	42	18	4	70	M8	4	17
50 2"	50	102	125	165	257	128.5	18	95.5	47	18	4	70	M8	4	20
65 2-1/2"	65	122	145	185	292	146	18	142	52	18	4	102	M10	4	27
80 3"	76	138	160	200	330	165	20	155	52	18	8	102	M10	4	27
100 4"	100	158	180	220	380	190	20	172	57	18	8	125	M12	4	32

DIMENSION (DIN PN40 FLANGED)

(M.M.)

SIZE	A	F	C	K	L	L1	T	H	H1	M	N	Q	W	P	Y
40 1-1/2"	38	88	110	150	250	125	18	80	42	18	4	70	M8	4	17
65 2-1/2"	65	122	145	185	308	154	22	142	52	18	4	102	M10	4	27
80 3"	76	138	160	200	350	175	24	155	52	18	8	102	M10	4	27
100 4"	100	162	190	235	404	202	24	172	57	22	8	125	M12	4	32

JBT-C/JBT-CM Type DN125~DN200 (5" ~8")



DIMENSION (ANSI-150LB FLANGED)

(M.M.)

SIZE	A	F	C	K	L	L1	T	H	H1	M	N	Q	W	P	I	G	B
125 5"	125	186	216	254	450	225	24	222	89	22	8	140	M16	4	48	37	14
150 6"	152	216	241.5	279.5	504	252	25.4	246.5	80.5	22	8	140	M16	4	48	37	14
200 8"	203	270	298.5	343	630	315	28.5	311.5	80	22	8	165	M20	4	60	48	16

DIMENSION (ANSI-300LB FLANGED)

(M.M.)

SIZE	A	F	C	K	L	L1	T	H	H1	M	N	Q	W	P	I	G	B
125 5"	125	186	235	280	530	265	35.5	222	89	22	8	140	M16	4	48	37	14
150 6"	152	216	270	318	590	295	36.6	246.5	80.5	22	12	140	M16	4	48	37	14
200 8"	203	270	330	381	750	375	41.5	311.5	80	25	12	165	M20	4	60	48	16

DIMENSION (DIN PN10/16 FLANGED)

(M.M.)

SIZE	A	F	C	K	L	L1	T	H	H1	M	N	Q	W	P	I	G	B
125 5"	125	188	210	250	450	225	22	222	89	18	8	140	M16	4	48	37	14
150 6"	152	212	240	285	504	252	22	246.5	80.5	22	8	140	M16	4	48	37	14
200 8"	203	268	295	340	630	315	24	311.5	80	22	8	165	M20	4	60	48	16

DIMENSION (DIN PN40 FLANGED)

(M.M.)

SIZE	A	F	C	K	L	L1	T	H	H1	M	N	Q	W	P	I	G	B
125 5"	125	188	210	250	450	225	22	222	89	18	8	140	M16	4	48	37	14
150 6"	152	212	240	285	504	252	22	246.5	80.5	22	8	140	M16	4	48	37	14
200 8"	203	268	295	340	630	315	24	311.5	80	22	12	165	M20	4	60	48	16

CERTIFICATES



ISO 9001

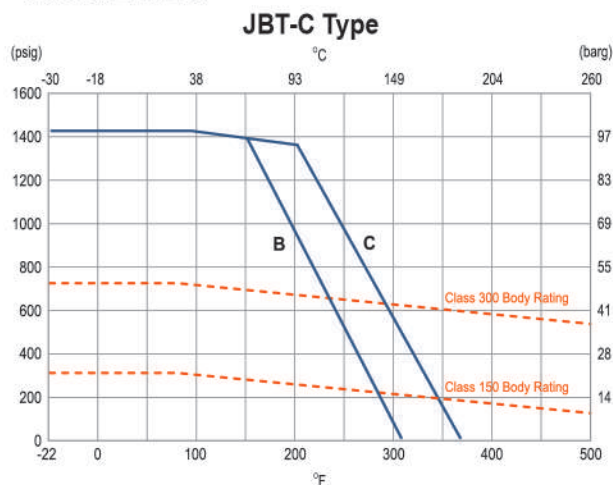
High Temperature Testing

Cv VALUES CV值

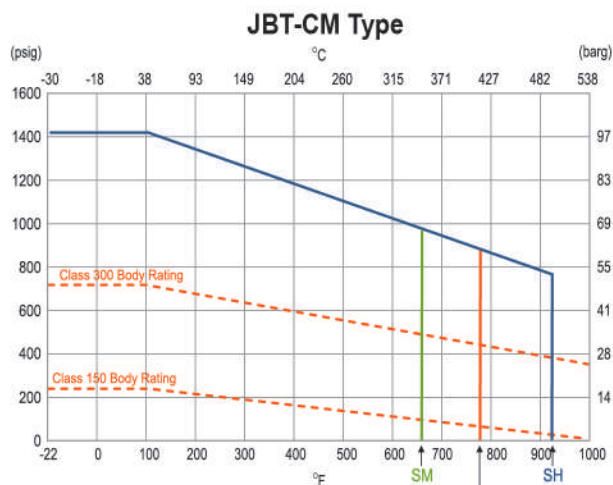
Size	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"
Cv	268	501	804	1158	2118	3412	5074	9337

TEMPERATURE & PRESSURE DIAGRAM

温度&压力曲线



B= Glass Fiber PTFE
C= Carbon Fiber PTFE



SM= Max Temperature 661°F (350°C)
SH= Max Temperature 932°F (500°C)
Carbon Steel Max Temperature 797°F (425°C)

PORT TYPE

T-PORT : 90°				L-PORT : 90°			
A Type		B Type		E Type		F Type	
AL	AR	BL	BR	EL	ER	FL	FR
							
Air In Turn Left	Air In Turn Right	Air In Turn Left	Air In Turn Right	Air In Turn Left	Air In Turn Right	Air In Turn Left	Air In Turn Right
C Type		D Type		G Type		H Type	
CL	CR	DL	DR	GR		HL	
							
Air In Turn Left	Air In Turn Right	Air In Turn Left	Air In Turn Right	Air In Turn Right		Air In Turn Left	

HOW TO ORDER

如何订购

JBT-C → **A** → **B** → **C** → **D** → **E** → **F** → **G** → **H**

Ex: **JBT-C** → **C1** → **04** → **C** → **G** → **00** → **100** → **FIH** → **DL**

A. SPECIFICATION	B. BODY MAT'L	C. BALL MAT'L	D. SEAT MAT'L	E. STEM MAT'L
C1 ASME CLASS 150	02 WCB (1.0619)	A CF8	P PTFE	00 1-1/2"~4" SAME AS BALL MAT'L
C2 ASME CLASS 300	03 CF8 (1.4308)	C CF8M	G G-PTFE (15% GLASS FIBER+PTFE)	02 304
D2 DIN PN16	04 CF8M (1.4408)	D CF3	C C-PTFE (15% CARBON+PTFE)	03 316
D4 DIN PN40	05 CF3 (1.4306)	E CF3M	S S-PTFE (50% 316+PTFE)	05 317
	06 CF3M (1.4404)	F CG8M	T TFM-1600 ®	07 304L
	07 CG8M (1.4412)		E PEEK	08 316L
	11 LCB (1.1138)			
	12 LCC (1.7219)			

F. SIZE	G. OPTION	H. PORT TYPE
040 1-1/2"	F FIRE SAFE	AL T-Port AL
050 2"	L EXTENDED STEM	AR T-Port AR
065 2-1/2"	I LIVE LOADING	BL T-Port BL
080 3"	H LEVER	BR T-Port BR
100 4"	G GEAR	CL T-Port CL
125 5"	A BARE SHAFT	CR T-Port CR
150 6"		DL T-Port DL
200 8"		DR T-Port DR
250 10"		EL L-Port EL
300 12"		ER L-Port ER
		FL L-Port FL
		FR L-Port FR
		GR L-Port GR
		HL L-Port HL

JBT-CM → **A** → **B** → **C** → **D** → **E** → **F** → **G** → **H**

Ex: **JBT-CM** → **C2** → **04** → **C** → **26** → **150** → **LIA** → **SH1** → **BL**

A. SPECIFICATION	B. BODY MAT'L	C. BALL & SEAT MAT'L	D. STEM MAT'L	E. SIZE
C1 ASME CLASS 150	02 WCB (1.0619)	A CF8	00 1-1/2"~4" SAME AS BALL MAT'L	040 1-1/2"
C2 ASME CLASS 300	03 CF8 (1.4308)	C CF8M	10 S31803	050 2"
D2 DIN PN16	04 CF8M (1.4408)	D CF3	22 630	065 2-1/2"
D4 DIN PN40	05 CF3 (1.4306)	E CF3M	26 S66286	080 3"
	06 CF3M (1.4404)	F CG8M		100 4"
	07 CG8M (1.4412)			125 5"
	11 LCB (1.1138)			150 6"
	12 LCC (1.7219)			200 8"
				250 10"
				300 12"

F. OPTION	G. TEMPERATURE	H. PORT TYPE
F FIRE SAFE	SM -20~661°F (-29~350°C) BALL W/HCR SEAT W/STELLITE ®	AL T-Port AL
L EXTENDED STEM	SH1 -20~842°F (-29~450°C) BALL W/TC SEAT W/TC	AR T-Port AR
I LIVE LOADING	SH2 -20~932°F (-29~500°C) BALL W/CRC SEAT W/CRC	BL T-Port BL
H LEVER		BR T-Port BR
G GEAR		CL T-Port CL
A BARE SHAFT		CR T-Port CR
		DL T-Port DL
		DR T-Port DR
		EL L-Port EL
		ER L-Port ER
		FL L-Port FL
		FR L-Port FR
		GR L-Port GR
		HL L-Port HL

HOW TO ORDER

*1/2"-4" 小口径, 可选择三通/四通浮动式软密封/金属密封球阀



■ HEADQUARTERS

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