



JDV
CONTROL
VALVES



JBT-C/JBT-CM Type

3/4-Way Trunnion Type **Soft Metal** Seat Ball Valve
三通/四通固定軸軟密封/金屬密封球閥



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



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3/4-Way Trunnion Type **Soft Metal** Seat Ball Valve 三通/四通固定軸軟密封/金屬密封球閥

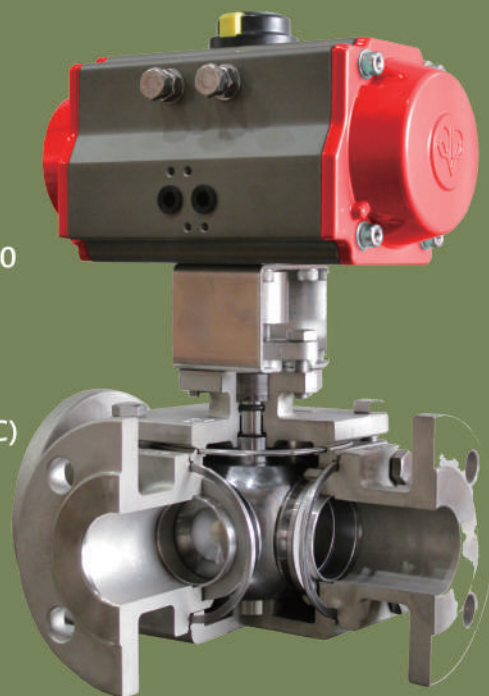
T/L-Port Full Bore Flanged Ends ASME CLASS 150/300 DIN PN16/40 T/L型全通徑法蘭球閥

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/四通球閥,軟密封球閥適用於一般工況,金屬密封球閥適用於高溫、研磨性介質等惡劣環境,廣泛應用於石油、天然氣、石化、化工、電力、造紙、採礦等領域。

Applicable Standards

- Body Material(閥體材質): Standard in WCB, CF8,CF8M Other materials are available according to requirements.(可依專案客制需求)
- Nominal Size(尺寸): 1-1/2" to 12" (DN40 to DN300) are on request.
- Pressure Rating(壓力等級): ASME CLASS 150/300 DIN PN16/40
- End Connections(連接型式): RF(法蘭凸緣)
- Temperature Range(溫度範圍): Soft Seat(軟密封): -20~356°F (-29~180°C)
Metal Seat(硬密封): -20~932°F (-29~500°C)
- Flange Dimensions(法蘭尺寸): ASME B16.5 / EN 1092-1
- Body Pressure Test(本體壓力測試): API 598
- Seat Leakage Test(球墊洩漏測試): Soft Seat(軟密封): API 598
Metal Seat(硬密封): ANSI I FCI70-2 CLASS V
- Casting(鑄造標準): MSS-SP-25 / MSS-SP-55



Product features: 產品特性:

1. Trunnion ball design keeping the torque stable and low, even at a high pressure drop.
固定式閥球設計·在高壓環境下·操作扭力低且穩定
2. Robust 1-PC trim combining ball & stem (size 4" and below), to increase the valve life cycle.
堅固的一體式閥球/閥桿設計(4"以下)·提高閥門使用壽命
3. Oversized stem design preventing any deformation from high pressure or high temperature.
高強度閥桿設計·在高溫高壓環境應用下不容易變形
4. Unique 4-seats design ensuring a perfect balance and an optimum position of the ball.
獨特的4閥座設計·確保閥球保持在最佳的位置與平衡
5. Spring loaded design keeping the seat in tight contact with the ball, even at a low pressure.
閥座加載彈片設計平衡閥球使其平穩運轉。
6. Many options of soft and metal seats to meet the requirements of all using conditions.
多項可選擇的軟/硬密封設計·可滿足各種應用條件需求
7. Fire safe design.
防火設計。
8. Anti-blowout stem design.
閥桿防飛出設計。
9. Anti-static design.
防靜電設計。
10. ISO 5211 Mounting Pad design.
ISO 5211安裝平台設計。

Design & Structure 設計&結構

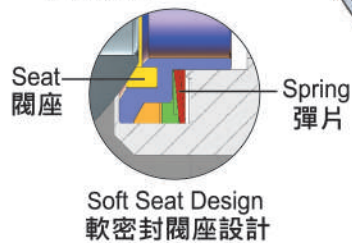
JBT-C/JBT-CM Type DN40~DN100 (1-1/2"~4")

**Integrated Trunnion
Ball & Stem Design**
閥球&閥桿整合設計

**ISO 5211
Mounting Pad Design**
ISO安裝平台孔位設計

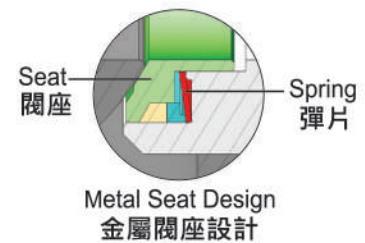
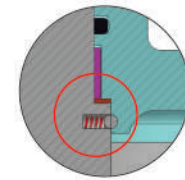
Seat Options:

- Soft Seat
 - Metal Seat
- 閥座選配:
• 軟密封閥座
• 金屬閥座



Spring Loaded Seat Design
閥座加載彈簧設計

Anti-static Design
防靜電設計

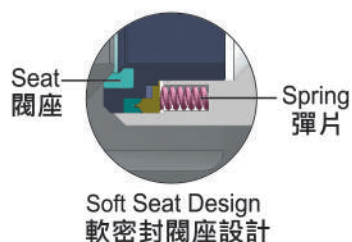


JBT-C/JBT-CM Type DN125~DN200 (5"~8")

**ISO 5211
Mounting Pad Design**
ISO安裝平台孔位設計

Seat Options:

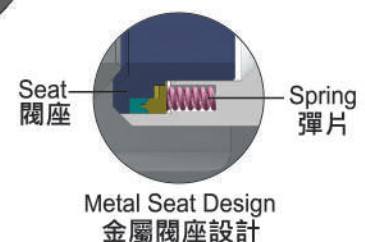
- Soft Seat 閥座
- Metal Seat



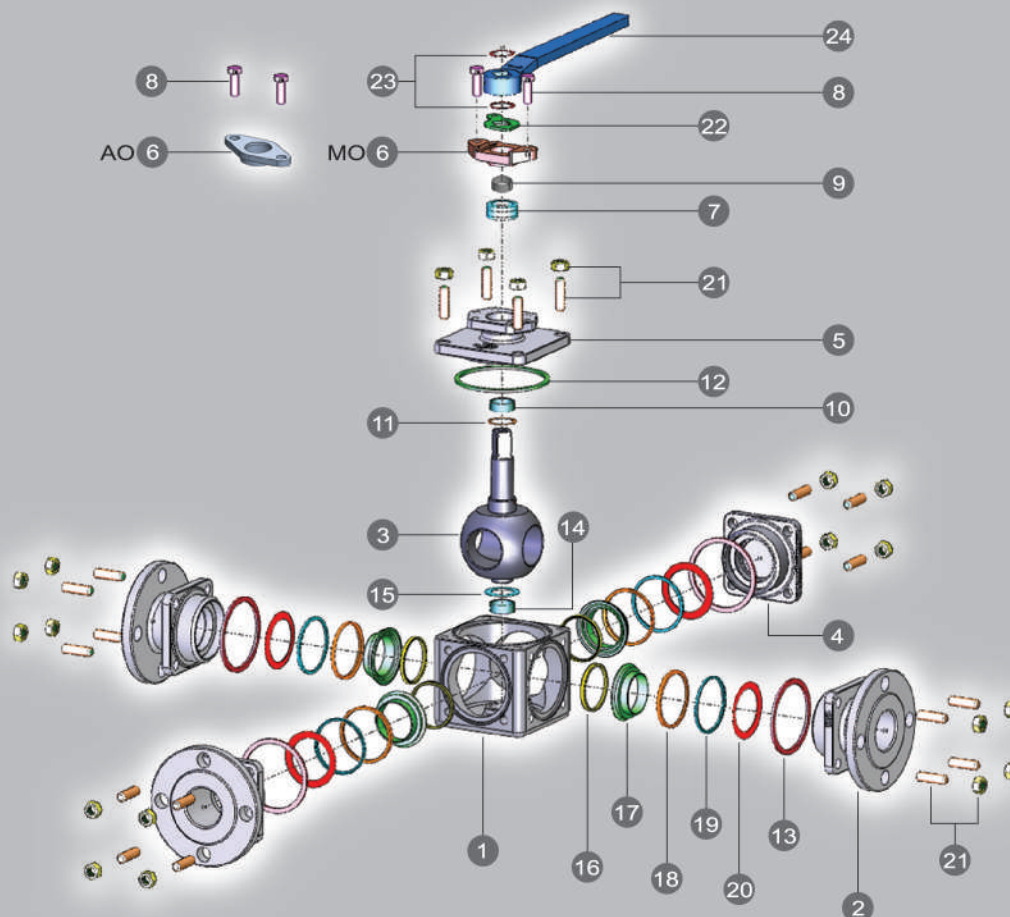
Spring Loaded Seat Design
閥座加載彈簧設計

Anti-static Design
防靜電設計

Trunnion Ball Design
固定軸閥球設計



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



Technical Specifications

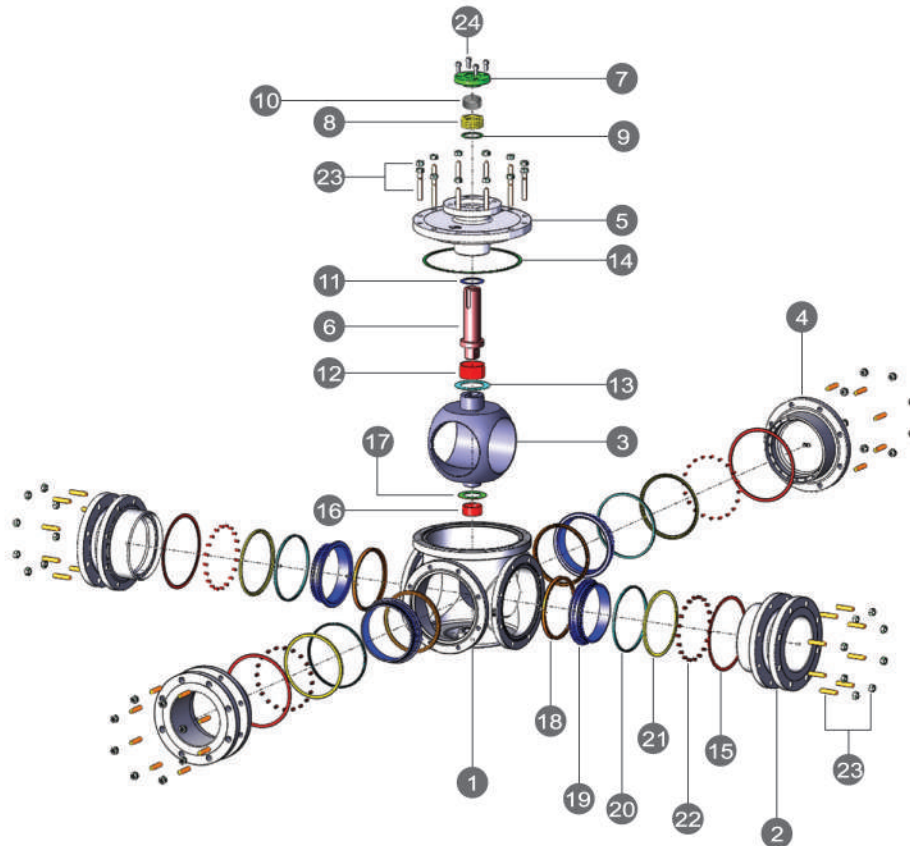
STANDARD MATERIALS 材質表

NO	PART NAME	WCB	CF8	CF8M
1	BODY 閥體	A216-WCB	A351-CF8	A351-CF8M
2	CAP 閥蓋	A216-WCB	A351-CF8	A351-CF8M
3	BALL & STEM 閥球&閥桿	A351-CF8		A351-CF8M
4	SIDE COVER 側閥蓋	A216-WCB	A351-CF8	A351-CF8M
5	TOP COVER 頂閥蓋	A216-WCB	A351-CF8	A351-CF8M
6	GLAND ⁽¹⁾ 壓蓋	A351-CF8		
7	GLAND PACKING 中口迫緊	PTFE/GRAPHITE		
8	GLAND BOLT 牛帽螺絲	STAINLESS STEEL		
9	GLAND BEARING 牛帽襯套	G-PTFE		
10	STEM BEARING 閥軸襯套	A240-316+PTFE		
11	STEM THRUST WASHER 中軸墊片	G-PTFE		
12	TOP COVER GASKET 頂蓋墊圈	316SS+GRAPHITE		
13	BODY GASKET 閥體密封墊	316SS+GRAPHITE		
14	TRUNNION BEARING 軸襯套	A240-316+PTFE		
15	TRUNNION WASHER 軸墊片	G-PTFE		
16	SEAT 閥座	PTFE / R-PTFE / TFM-1600 / PEEK		
17	SEAT RING 閥座環	A351-CF8		A351-CF8M
18	SEAT RING SEAL 止洩壓環迫緊	GRAPHITE		
19	SEAT RING RETAINER 止洩壓環	A351-CF8		A351-CF8M
20	SPRING 彈片	INCONEL® X-750		
21	BOLT & NUT 螺栓&螺母	A193-B7 & A194-7	A193-B8 & A194-8	
22	TRAVEL STOP ^(MO) 檔片	A240-304		
23	SNAP CATCH ^(MO) 扣環	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)



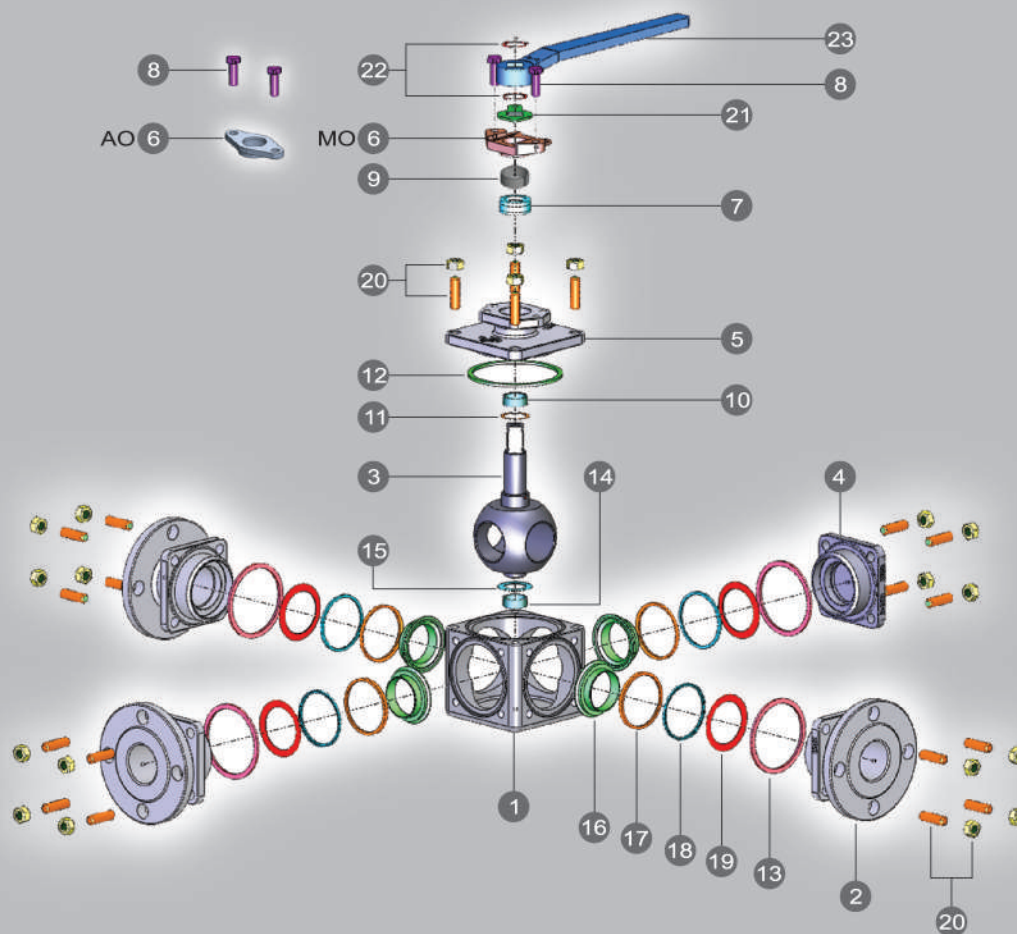
STANDARD MATERIALS

NO	PART NAME	WCB	CF8	CF8M
1	BODY 閥體	A216-WCB	A351-CF8	A351-CF8M
2	CAP 閥蓋	A216-WCB	A351-CF8	A351-CF8M
3	BALL 閥球	A351-CF8		A351-CF8M
4	SIDE COVER 側閥蓋	A216-WCB	A351-CF8	A351-CF8M
5	TOP COVER 頂閥蓋	A216-WCB	A351-CF8	A351-CF8M
6	STEM 閥桿	A276-304		A276-316
7	GLAND 壓蓋	A216-WCB	A351-CF8	A351-CF8M
8	GLAND PACKING 中口迫緊	GRAPHITE		
9	GLAND THRUST WASHER 牛楠小薄片	G-PTFE		
10	GLAND BEARING 牛楠襯套	G-PTFE		
11	STEM THRUST WASHER 中軸墊片	G-PTFE		
12	TOP TRUNNION BEARING 頂蓋襯套	A240-316+PTFE		
13	TOP TRUNNION WASHER 頂蓋墊片	G-PTFE		
14	TOP COVER GASKET 頂蓋墊圈	316SS+GRAPHITE		
15	BODY GASKET 閥體密封墊	316SS+GRAPHITE		
16	TRUNNION BEARING 軸襯套	A240-316+PTFE		
17	TRUNNION WASHER 軸墊片	G-PTFE		
18	SEAT 閥座	PTFE / R-PTFE / TFM-1600 / PEEK		
19	SEAT RING 閥座環	A351-CF8		A351-CF8M
20	SEAT RING SEAL 止洩壓環迫緊	GRAPHITE		
21	SEAT RING RETAINER 止洩壓環	A351-CF8		A351-CF8M
22	SPRING 彈簧	INCONEL® X-750		
23	BOLT & NUT 螺栓&螺帽	A193-B7 & A194-7	A193-B8 & A194-8	
24	GLAND BOLT 牛楠螺絲	STAINLESS STEEL		

The above materials may be changed with different using conditions.



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



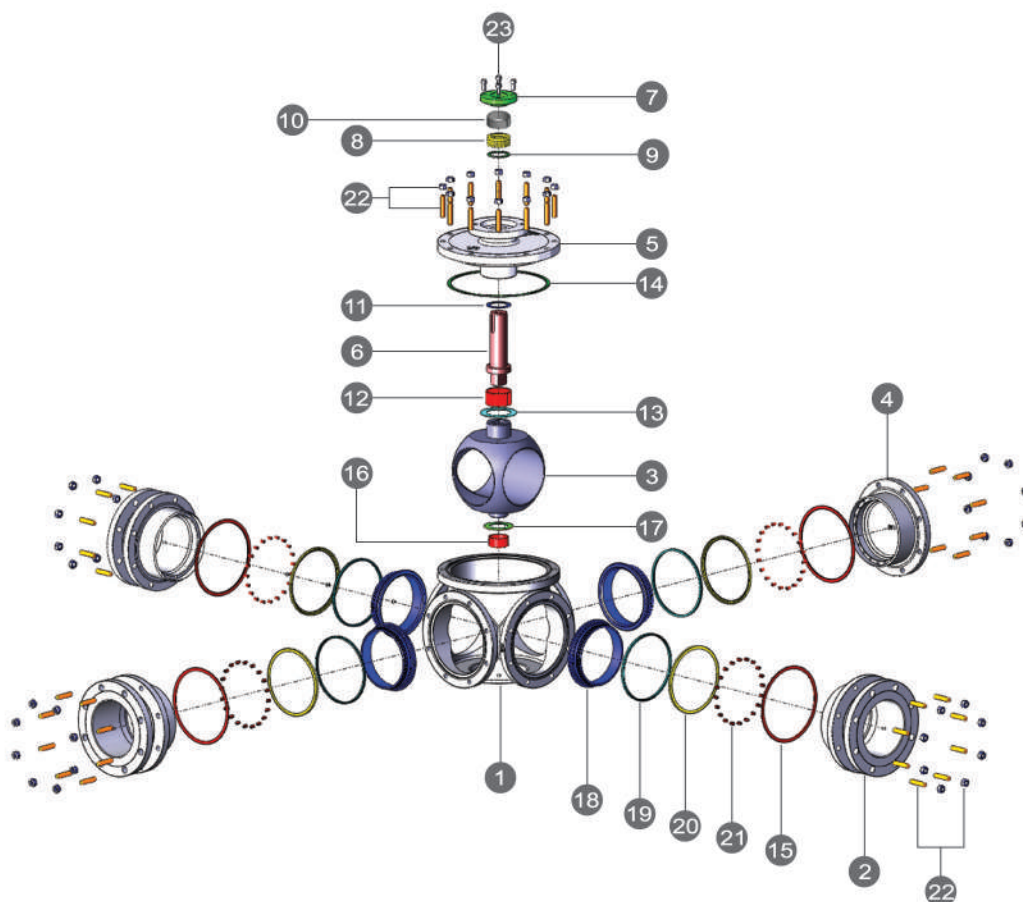
STANDARD MATERIALS

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 閥體	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
2	CAP 閥蓋	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
3	BALL & STEM 閥球&閥桿	A351-CF8+HCR ⁽²⁾		A351-CF8M+HCR	A351-CF8+TC ⁽²⁾ / CRC ⁽²⁾		A351-CF8M+TC / CRC
4	SIDE COVER 側閥蓋	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
5	TOP COVER 頂閥蓋	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
6	GLAND ⁽¹⁾ 壓蓋	A351-CF8					
7	GLAND PACKING 中口迫緊	GRAPHITE					
8	GLAND BOLT 牛橋螺絲	STAINLESS STEEL					
9	GLAND BEARING 牛橋襯套	A240-316+PTFE					
10	STEM BEARING 閥桿軸承	METAL+HARD FACE					
11	STEM THRUST WASHER 中軸墊片	METAL+HARD FACE					
12	TOP COVER GASKET 頂蓋墊圈	316SS+GRAPHITE					
13	BODY GASKET 閥體密封墊	316SS+GRAPHITE					
14	TRUNNION BEARING 軸襯套	METAL+HARD FACE					
15	TRUNNION WASHER 軸墊片	METAL+HARD FACE					
16	SEAT 閥座	A351-CF8+STELLITE ®		A351-CF8M+STELLITE®	A351-CF8+TC/CRC		A351-CF8M+TC/CRC
17	SEAT RING SEAL 止洩壓環迫緊	GRAPHITE					
18	SEAT RING RETAINER 止洩壓環	A351-CF8		A351-CF8M	A351-CF8		A351-CF8M
19	SPRING 彈簧	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) 檔片	A240-304					
22	SNAP CATCH ^(MO) 扣環	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
鍍硬鉻 碳化鎢噴塗

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

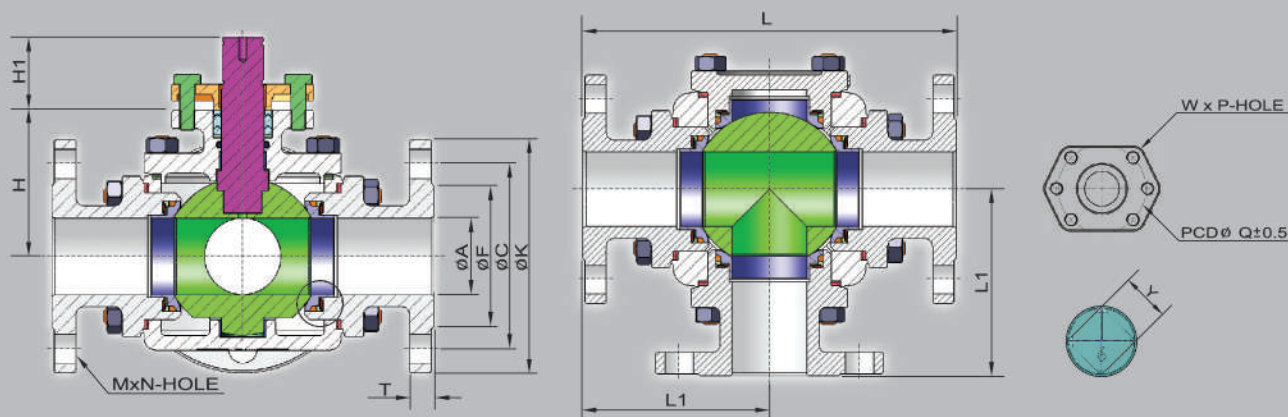


STANDARD MATERIALS

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	閥體	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
2	CAP	閥蓋	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
3	BALL	閥球	A351-CF8+HCR		A351-CF8M+HCR	A351-CF8+TC/CRC		A351-CF8M+TC/CRC
4	SIDE COVER	側閥蓋	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
5	TOP COVER	頂閥蓋	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
6	STEM	閥桿	A564-630 (H1150)		A638-S66286	A638-S66286		
7	GLAND	壓蓋	A216-WCB	A351-CF8	A351-CF8M	A216-WCB	A351-CF8	A351-CF8M
8	GLAND PACKING	中口迫緊	GRAPHITE					
9	GLAND THRUST WASHER	牛楠小薄片	METAL+HARD FACE					
10	GLAND BEARING	牛楠襯套	A240-316+PTFE					
11	STEM THRUST WASHER	中軸墊片	METAL+HARD FACE					
12	TOP TRUNNION BEARING	頂蓋襯套	METAL+HARD FACE					
13	TOP TRUNNION WASHER	頂蓋墊片	METAL+HARD FACE					
14	TOP COVER GASKET	頂蓋墊圈	316SS+GRAPHITE					
15	BODY GASKET	閥體密封圈	316SS+GRAPHITE					
16	TRUNNION BEARING	軸襯套	METAL+HARD FACE					
17	TRUNNION WASHER	軸墊片	METAL+HARD FACE					
18	SEAT	閥座	A351-CF8+STELLITE®		A351-CF8M+STELLITE®	A351-CF8+TC/CRC		A351-CF8M+TC/CRC
19	SEAT RING SEAL	止洩壓環迫緊	GRAPHITE					
20	SEAT RING RETAINER	止洩壓環	A351-CF8		A351-CF8M	A351-CF8		A351-CF8M
21	SPRING	彈簧	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	牛楠螺絲	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.)

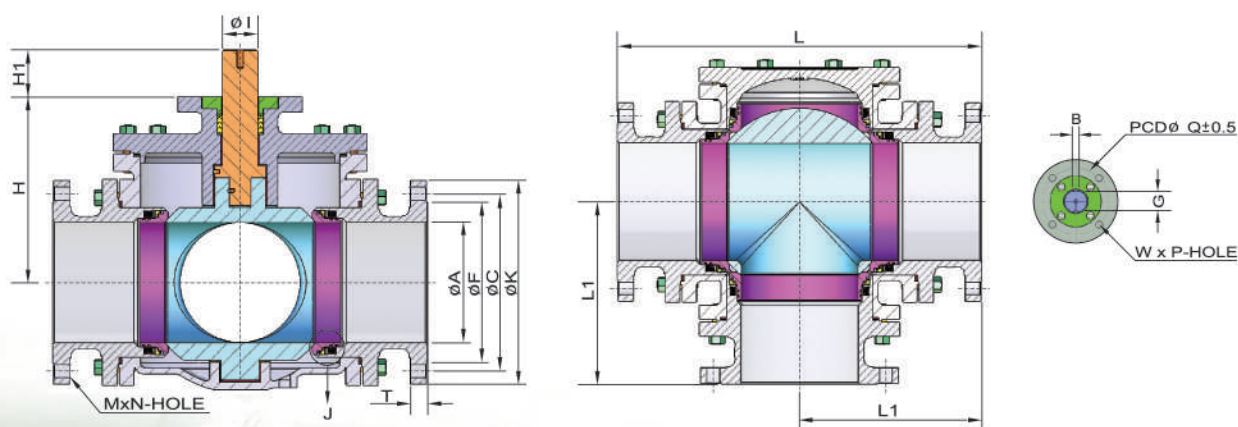
SIZE	A	F	C	K	L	L1	T	H	H1	M	N	Q	W	P	Y
40 1-1/2"	38	88	110	150	245	122.5	16	80	42	18	4	70	M8	4	17
50 2"	50	102	125	165	257	128.5	18	95.5	47	18	4	70	M8	4	20
65 2-1/2"	65	122	145	185	292	146	18	142	52	18	4	102	M10	4	27
80 3"	76	138	160	200	330	165	20	155	52	18	8	102	M10	4	27
100 4"	100	158	180	220	380	190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

CE

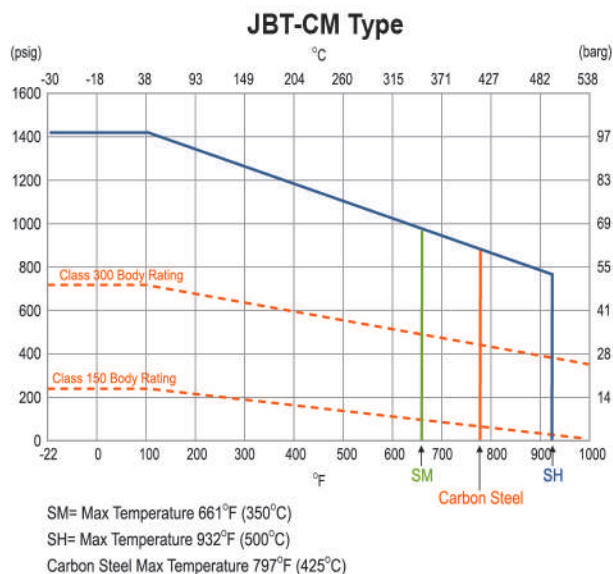
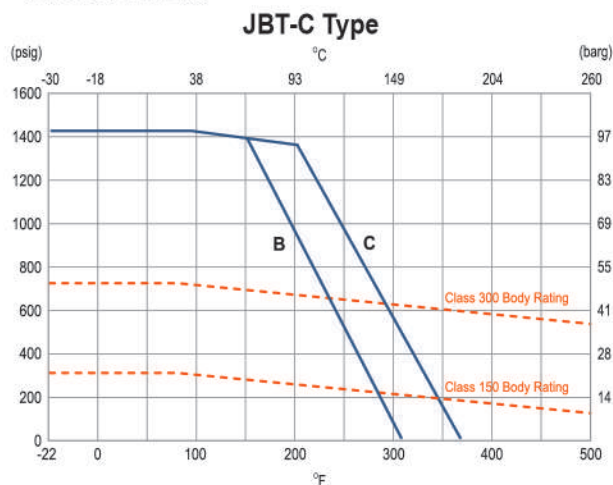
High Temperature Testing

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

溫度&壓力曲線



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 Failure Air In Turn Right	Air In Turn Left	Air Failure Air In Turn Right	Air In Turn Left	Air Failure Air In Turn Right	Air In Turn Left	Air Failure Air In Turn Right
C Type		D Type		G Type		H Type	
CL	CR	DL	DR	GR		HL	
Air In Turn Left	Air Failure Air In Turn Right	Air In Turn Left	Air Failure Air In Turn Right	Air Failure Air In Turn Right		Air In Turn Left Air Failure	

HOW TO ORDER

如何訂購

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" 小口徑,可選擇三通/四通浮動式軟密封/金屬密封球閥



■ HEADQUARTERS

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