



JDV  
CONTROL  
VALVES



# JSB-F / JSB-M Type

## V-Port Segment Control Valve

### V型半球控制阀



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



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### V型半球控制阀

JSB Series V-segment valve is the segment ball with V-notch design for both regulating and shut-off services. The high valve capacity with optimum flow characteristics provides the ideal solution in flow control.

独特设计的非球型阀球与V型开口槽，提供了可调整流量与关闭的功能。具有最佳流量控制能力特性的高性能阀门，在流量控制上提供了理想的解决方案。

### Industrial Fields: 应用产业

Oil & Gas 石油&天然气

Refinery / Petrochemical 石油精炼/石化业

Chemical 化工业

Pulp & Paper 造纸业

Power Plant 发电厂

Steel Mill 炼钢厂

Food 食品业

Mining 采矿业

Water Treatment 水处理



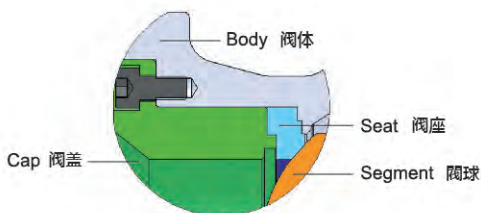
### Product Features:

#### 产品特色

- 1-PC Body design reducing the leakage.  
一体式的阀体设计，减少泄漏的风险。
- V-segment design providing the large and straight path giving a high Cv even in case of fibers or particles.  
V型开口槽设计，提供了大范围与直通流道的流量值，即使在纤维或颗粒状的介质环境。
- Trunnion design with self-lubricating bearings making the torque lighter and life cycle longer.  
固心式设计搭配自润轴承，操作轻巧，提高阀门使用寿命
- V-notch in the segment offering a shearing function to allow fibrous mediums or slurries to pass without any obstruction.  
V型开口槽设计，提供了剪切功能，纤维或泥浆状的介质也可顺利通过，不会附着残留在密封面
- Optional seat design meeting many applications.  
可选配的阀座设计，符合多种应用环境
- Alternative hard faces satisfying numerous services.  
可选配的硬密封面设计，可满足多种工况需求
- Spring-loaded metal seat design providing a lower torque.  
弹簧复归的金属阀座设计，减低操作扭力
- Removable end-cap making the maintenance easier.  
移动式端盖设计，易于维修更换
- Equal percentage flow characteristics.  
具有等比式的流量特性
- Spline stem design reducing the deadband to optimizes the control performance.  
阀杆花齿结合设计，使得操作控制最佳化
- Available in flangeless (wafer) or flanged connections.  
连接方式，法兰面及非法兰面皆可提供
- ISO 5211 mounting pad.  
安装平台符合 ISO 5211
- Anti-static design.  
防静电设计
- Anti-blowout stem design.  
阀杆防飞出设计

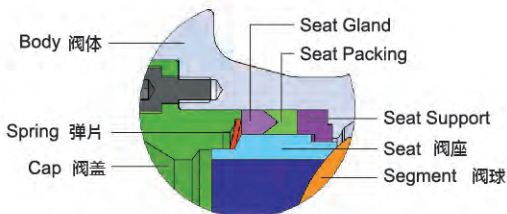
## Design & Structure 设计&结构

### Seat Options: 阀座选配:



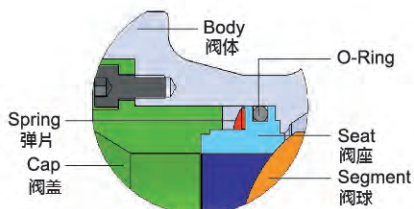
#### 软密封阀座 Soft Seat

Temp. : -20~356 °F (-29~180 °C)



#### 金属密封阀座 Metal Seat-S01 Type

Temp. : -20~661 °F (-29~350 °C)  
Graphite seat packing design allowing higher temperature range.



#### Metal Seat-S02 Type

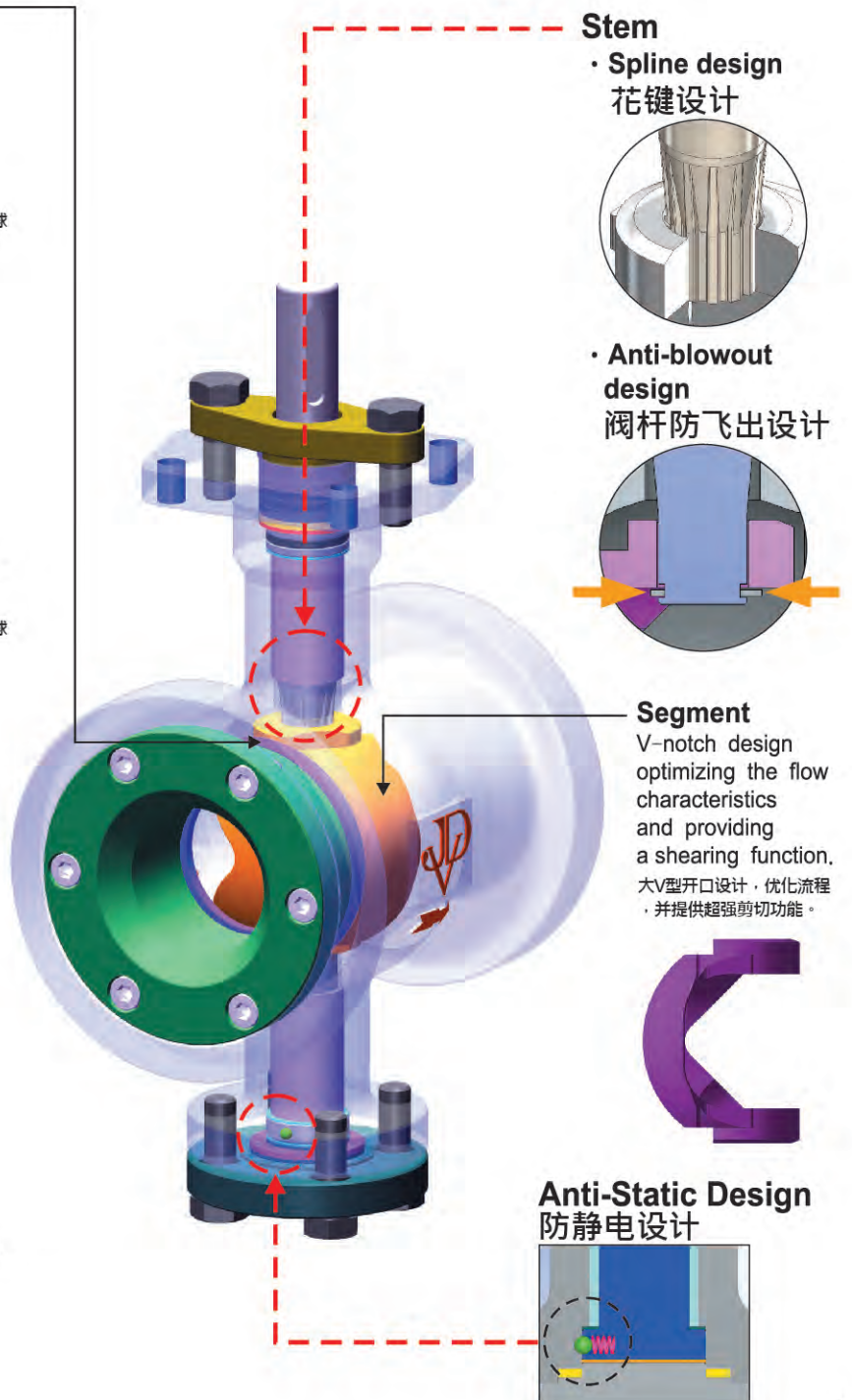
Temp. : -20~446 °F (-29~230 °C)  
FKM O-Ring design providing light torque to enhance the control performance.

## Applications

1. Flow control.
2. Pressure control.
3. Slurries or viscous mediums.
4. Mediums containing powders or particles.
5. Mediums with chips or fibers, especially in the Pulp & Paper industry.

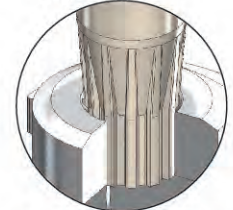
## 适用场合

1. 流量控制
2. 压力控制
3. 浆料及粘性流体
4. 含粉尘和硬质颗粒的流体
5. 造纸过程中的纸浆、碎屑和纤维

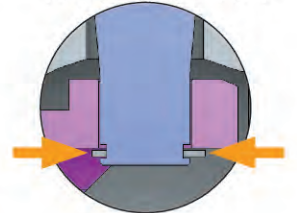


### Stem

- Spline design  
花键设计



- Anti-blowout design  
阀杆防飞出设计

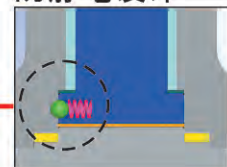


### Segment

V-notch design optimizing the flow characteristics and providing a shearing function.  
大V型开口设计，优化流程，并提供超强剪切功能。



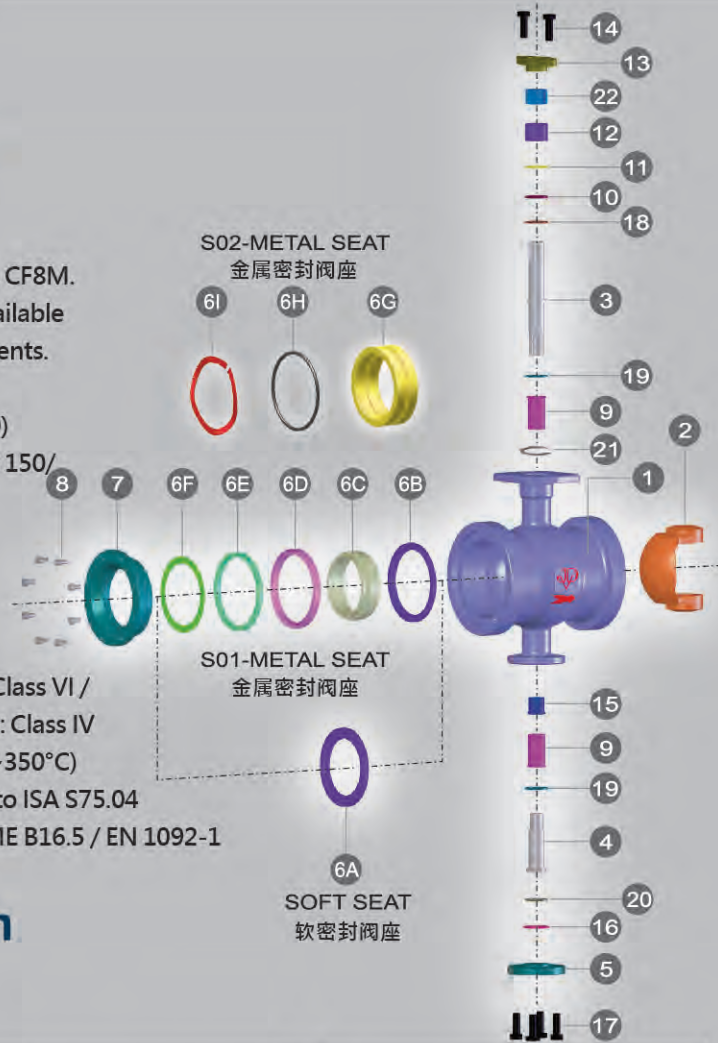
### Anti-Static Design 防静电设计





## Applicable Standards 适用标准

- 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" to 16" (DN25 to DN400)
- Pressure Rating(压力等级): JIS 10K ASME CLASS 150/  
300 DIN PN16/40
- End Connections(连接型式): Flangeless /  
RF Flanged
- Range Ability(开度比): Greater than 150:1.
- Seat Leakage(球垫泄漏测试): ANSI/FCI70-2 /  
Soft-seat(软密封): Class VI /  
Metal-seat(硬密封): Class IV
- Temperature Range(温度范围): -20~661°F (-29~350°C)
- Face-to-face Dimensions(面间尺寸): According to ISA S75.04
- Flanged Dimensions(法兰尺寸): JIS B2220 / ASME B16.5 / EN 1092-1



## Technical Specification 技术规范

### STANDARD MATERIALS 标准材料

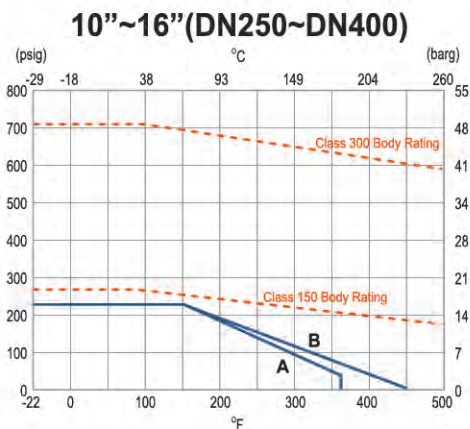
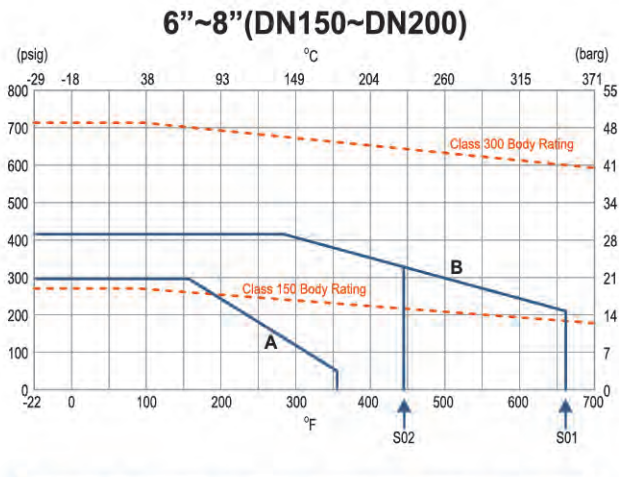
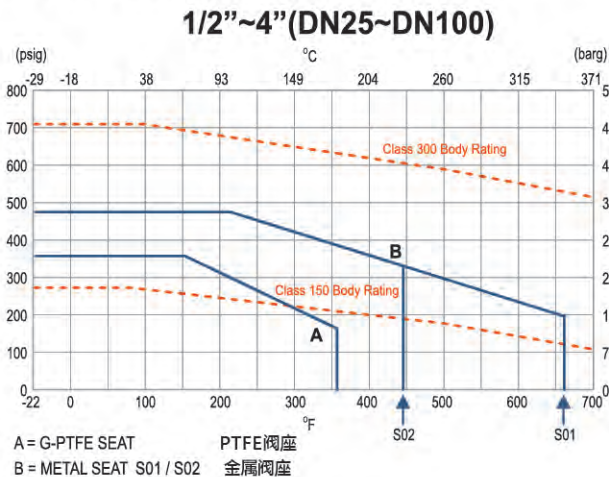
NO	料件名稱	材質		
1	BODY 阀体	A216-WCB	A351-CF8	A351-CF8M
2-1	SEGMENT - SOFT SEAT 阀球	A351-CF8		
2-2	SEGMENT - METAL SEAT 阀球	A351-CF8+HCR <sup>(1)</sup> / TC <sup>(1)</sup>		
3	STEM 阀杆	A276-304		
4	SHAFT 支撑轴	A276-304		
5	END COVER 底盖	AISI-1045	A276-304	A276-316
SOFT SEAT	6A SEAT 阀座	G-PTFE		
S01 METAL SEAT	3 STEM 阀杆	A564-630(HH1150)		
	4 SHAFT 支撑轴	A564-630(HH1150)		
	6B SEAT SUPPORT 支撑环	A351-CF8		
	6C SEAT 阀座	A351-CF8+STELLITE® / TC		
	6D PACKING 填料	GRAPHITE		
	6E SEAT GLAND 阀座压环	A351-CF8		
	6F SPRING 弹片	INCONEL® X-750		
S02 METAL SEAT	6G SEAT 阀座	A351-CF8+STELLITE®		
	6H O-RING O型圈	FKM		
	6I SPRING 弹片	INCONEL® X-750		
7	CAP 阀盖	A351-CF8	A351-CF8M	
8	BOLT <sup>(2)</sup> 螺栓	304SS		
9	THURST BEARING	A240-316+PTFE/A240-316+HARD FACE		
10	WASHER 垫圈	G-PTFE/GRAPHITE		
11	WASHER 垫圈	A240-316+HARD FACE		
12	GLAND PACKING 压盖填料	G-PTFE/GRAPHITE		
13	GLAND 阀盖	A351-CF8		
14	GLAND BOLT 中口螺丝	304SS		
15	SUPPORT <sup>(3)</sup> 套筒	A276-304	A-276-316	
16	COVER GASKET 底部封盖迫紧	G-PTFE/GRAPHITE		
17	COVER BOLT 底盖螺丝	304SS		
SOFT SEAT & S02 METAL SEAT	18 STEM O-RING <sup>(4)</sup>	FKM		
19	WASHER 中轴垫片	TFE COMP./A240-316+HARD FACE		
20	WASHER 中轴垫片	TFE COMP./GRAPHITE		
21	C-CLIP C型扣环	STAINLESS STEEL		
22	GLAND BEARING 牛捕衬套	G-PTFE / A240-316+PTFE		

NOTES: (1) HCR = Hard Chrome TC = Tungsten Carbide (2) For size 2" and above. (3) For size 2-1/2" and above. (4) Max temp 446 °F (230 °C)  
镀硬铬

The above materials may be changed with different using conditions.  
以上阀门部件的材质为标准配置,可根据客户需求和工况选择其他材质

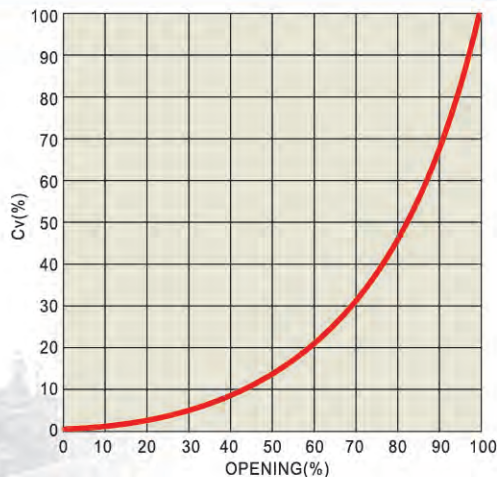
## TEMPERATURE & PRESSURE DIAGRAM

### 温度&压力曲线



## INHERENT FLOW CHARACTERISTICS

### 固有流量特性



## Cv VALUES

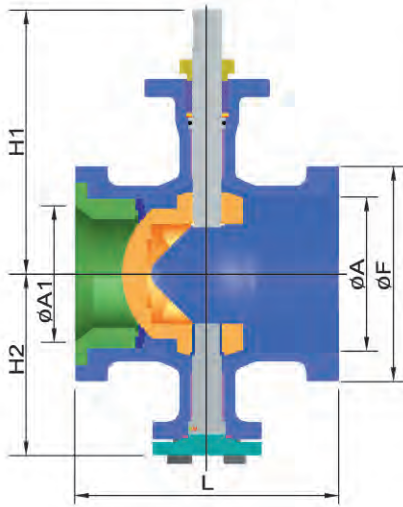
SIZE	OPENING %									
	10	20	30	40	50	60	70	80	90	100
1"	0.01	0.52	1.66	3.44	5.87	9.11	13.36	18.83	27.54	40.50
1-1/2"	0.02	1.06	3.35	6.95	11.85	18.38	26.96	38.00	55.55	81.70
2"	0.04	1.68	5.30	11.00	18.75	29.10	42.67	60.12	87.90	129.30
2-1/2"	0.06	2.79	8.80	10.23	31.10	40.26	70.78	99.74	145.86	214.50
3"	0.10	4.54	14.30	29.67	50.62	78.50	115.20	162.30	237.40	349.10
4"	0.15	6.57	20.70	43.00	73.30	113.70	166.80	235.00	343.70	505.50
5"	0.23	10.20	32.10	66.64	113.70	176.40	258.70	360.60	533.00	784.00
6"	0.38	16.70	52.70	109.30	186.50	289.50	424.54	598.20	874.80	1286.50
8"	0.50	21.90	69.00	143.00	244.10	378.90	555.68	783.00	1145.00	1683.90
10"	0.93	39.58	124.85	258.80	441.50	685.13	1004.80	1416.00	2040.00	3045.00
12"	1.29	55.96	176.50	366.00	624.20	968.60	1420.60	2001.80	2927.40	4305.00
14"	1.73	75.30	237.40	492.20	839.50	1302.00	1910.70	2663.40	3937.00	5790.00
16"	2.27	98.30	310.20	643.00	1097.00	1702.00	2497.00	3480.00	5145.00	7566.00

※ Above values are just for reference, and the exact values will be presented by the practical testing.

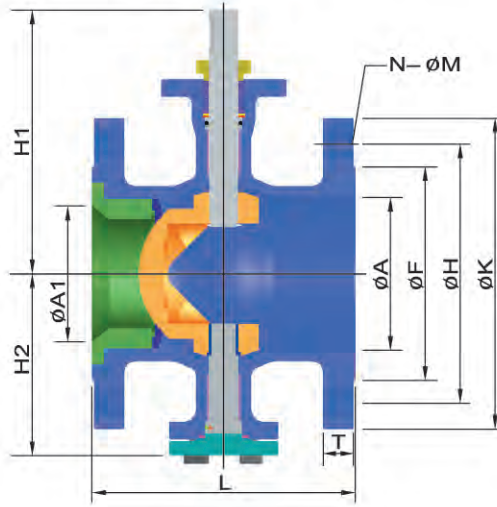


# JDV CONTROL VALVES

## FLANGELESS TYPE

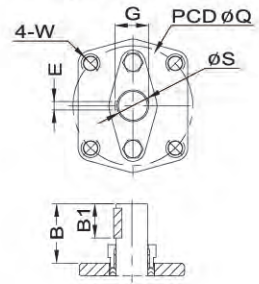


## FLANGED TYPE

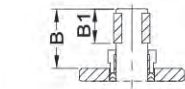
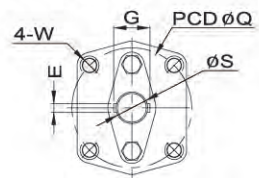


## ISO MOUNTING PAD

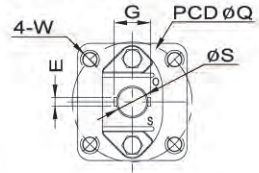
1"~4"(DN25~DN100)



5"~10"(DN125~DN250)



12"~16"(DN300~DN400)



### DIMENSIONS FOR FLANGELESS TYPE

(mm)

SIZE	A	A1	L	F	H1	H2	S	E	G	B	B1	Q	W	Wt (Kg)
25 1"	33	25	102	64	108	70	15.5	5	17.5	33	20	50	M6	2.5
40 1-1/2"	49	40	114	82	134	84	15.5	5	17.5	45	30	70	M8	3.75
50 2"	60	50	124	100	142	92	15.5	5	17.5	44	30	70	M8	4.8
65 2-1/2"	73	65	140*	118	151	101	15.5	6	17.5	45	30	70	M8	5.51
80 3"	89	80	165	131	164	112	22	8	25	45	30	70	M8	9.11
100 4"	113	100	194	158	194	134	22	8	25	51	30	102	M10	14.85
125 5"	140	125	254*	185	215	154	25	8	31	52	30	102	M10	25.9
150 6"	160	132	229	216	232	171	25	8	31	52	30	102	M10	28.22
200 8"	203	200	243	267	279	199	30	8	36	70	45	140	M16	45.2
250 10"	252	250	297	324	326	234	36.3	14	46.3	76	55	140	M16	75
300 12"	300	285	338	375	386	272	48	14	61	86	67	165	M20	125

Face-to-Face dimensions L according to ISA S75.04

\*Not in ISA standard

### DIMENSIONS FOR FLANGED TYPE (JIS 10K)

(mm)

SIZE	A	A1	L	F	JIS 10K					H1	H2	S	E	G	B	B1	Q	W	Wt (Kg)
					H	K	M	N	T										
25 1"	33	25	127	67	90	125	19	4	14	108	70	15.5	5	17.5	33	20	50	M6	3.7
40 1-1/2"	49	40	165	81	105	140	19	4	16	134	84	15.5	5	17.5	45	30	70	M8	5.8
50 2"	60	50	178	96	120	155	19	4	16	142	92	15.5	5	17.5	44	30	70	M8	7.5
65 2-1/2"	73	65	190	116	140	175	19	4	18	151	101	15.5	6	17.5	45	30	70	M8	11.8
80 3"	89	80	203	126	150	185	19	8	18	164	112	22	8	25	45	30	70	M8	12.8
100 4"	113	100	229	151	175	210	19	8	18	194	134	22	8	25	51	30	102	M10	23
125 5"	140	125	254	182	210	250	23	8	20	215	154	25	8	31	52	30	102	M10	31.5
150 6"	160	132	267	212	240	280	23	8	22	232	171	25	8	31	52	30	102	M10	38
200 8"	203	200	292	262	290	330	23	12	22	279	199	30	8	36	70	45	140	M16	62.5

Face-to-Face dimensions L according to JIS B 2002

### DIMENSIONS FOR FLANGED TYPE (ASME CLASS 150/300)

(mm)

SIZE	A	A1	L	F	ASME CLASS 150					ASME CLASS 300					H1	H2	S	E	G	B	B1	Q	W	Wt (Kg)	
					H	K	M	N	T	H	K	M	N	T										CLASS 150	CLASS 300
25 1"	33	25	102	51	79.5	108	16	4	14.3	89	124	19	4	17.5	108	70	15.5	5	17.5	33	20	50	M6	3.4	5.8
40 1-1/2"	49	40	114	73	98.5	127	16	4	17.5	114.5	156	22	4	20.6	134	84	15.5	5	17.5	45	30	70	M8	5.4	8.9
50 2"	60	50	124	92	120.5	152	19	4	19.1	127	165	19	8	22.3	142	92	15.5	5	17.5	44	30	70	M8	7.2	12.8
65 2-1/2"	73	65	140*	105	139.5	178	19	4	22.3	149	190	22	8	25.4	151	101	15.5	6	17.5	45	30	70	M8	11	16
80 3"	89	80	165	127	152.5	190	19	4	23.9	168	210	22	8	28.6	164	112	22	8	25	45	30	70	M8	14.5	19.8
100 4"	113	100	194	157	190.5	229	19	8	23.9	200	254	22	8	31.8	194	134	22	8	25	51	30	102	M10	21.8	32.8
125 5"	140	125	254*	186	216	254	22	8	23.9	235	279.4	22	8	35.1	215	154	25	8	31	52	30	102	M10	30	42
150 6"	160	132	229	216	241.5	279	22	8	25.4	267.9	318	22	12	36.6	232	171	25	8	31	52	30	102	M10	36	51
200 8"	203	200	243	270	298.5	343	22	8	28.6	330	381	25	12	41.2	279	199	30	8	36	70	45	140	M16	59	86.5
250 10"	252	250	297	324	362	406	25	12	30.2	387.5	445	29	16	47.7	326	234	36.3	14	46.3	76	55	140	M16	98.6	143.3
300 12"	300	285	338	381	431.8	483	25	12	31.8	451	521	32	16	50.8	386	272	48	14	61	86	67	165	M20	165	210.6
350 14"	350	336	400	413	476.3	533	29	12	35	514.4	584	32	20	54	450	340	67	20	76	115	80	165	M20	255	340
400 16"	400	380	400	470	539.8	597	29	16	36.6	571.5	648	35	20	57	505	373	67	20	76	135	100	165	M20	340	450

Face-to-Face dimensions L according to ISA S75.04

\*Not in ISA standard

## DIMENSIONS FOR FLANGED TYPE (DIN PN16/40)

(mm)

SIZE	A	A1	L	DIN PN16						DIN PN40						H1	H2	S	E	G	B	B1	Q	W	Wt (Kg)		
				F	H	K	M	N	T	F	H	K	M	N	T										DIN PN16	DIN PN40	
25	1"	33	25	102	68	85	115	14	4	18	68	85	115	14	4	18	108	70	15.5	5	17.5	33	20	50	M6	5.5	5.5
40	1-1/2"	49	40	114	88	110	150	18	4	18	88	110	150	18	4	18	134	84	15.5	5	17.5	45	30	70	M8	8	8
50	2"	60	50	124	102	125	165	18	4	18	102	125	165	18	4	20	142	92	15.5	5	17.5	44	30	70	M8	13	13
65	2-1/2"	73	65	140*	122	145	185	18	8	18	122	145	185	18	8	22	151	101	15.5	6	17.5	45	30	70	M8	13.5	15
80	3"	89	80	165	138	160	200	18	8	20	138	160	200	18	8	24	164	112	22	8	25	45	30	70	M8	15	17
100	4"	113	100	194	158	180	220	18	8	20	162	190	235	22	8	24	193	134	22	8	25	51	30	102	M10	19.5	26
125	5"	140	125	254*	188	210	250	18	8	22	188	220	270	26	8	26	215	154	25	8	31	52	30	102	M10	30.5	36.7
150	6"	160	132	229	212	240	285	22	8	22	218	250	300	26	8	28	232	171	25	8	31	52	30	102	M10	36.5	41
200	8"	203	200	243	268	295	340	22	12	24	285	320	375	30	12	34	279	198	30	8	36	70	45	140	M16	54	76.5
250	10"	252	250	297	320	355	405	26	12	26	345	385	450	33	12	38	326	234	36.3	14	46.3	76	55	140	M16	99	133
300	12"	300	285	338	378	410	460	26	12	28	410	450	515	33	16	42	386	272	48	14	61	86	67	165	M20	155	191
350	14"	350	336	400	438	470	520	26	16	30	465	510	580	36	16	46	445	315	48	14	61	100	80	165	M20	240	320
400	16"	400	380	400	490	525	580	30	16	32	535	585	660	39	16	50	505	373	67	20	76	135	100	165	M20	320	440

Face-to-Face dimensions L according to ISA S75.04 \*Not in ISA standard

## HOW TO ORDER 如何订购

**JSB-F Soft Seat** Ex: → **W1** → **04** → **C** → **G** → **03** → **050** → **A1**

A. SPECIFICATION	B. BODY MAT'L	C. SEGMENT MAT'L	D. SEAT MAT'L	E. STEM MAT'L	F. SIZE	G. OPTION
<b>W1</b> FLANGELESS	<b>02</b> WCB (1.0619)	<b>A</b> CF8 (1.4308)	<b>G</b> G-PTFE (15% GLASS FIBER+PTFE)	<b>02</b> 304 (1.4301)	<b>025</b> 1"	<b>I</b> LIVE LOADING
<b>A1</b> JIS 10K	<b>04</b> CF8 (1.4308)	<b>C</b> CF8M (1.4408)	<b>S</b> S-PTFE (50% SS316+PTFE)	<b>03</b> 316 (1.4401)	<b>040</b> 1-1/2"	<b>H</b> LEVER
<b>C1</b> ASME CLASS 150	<b>04</b> CF8M (1.4408)	<b>D</b> CF3 (1.4306)	<b>T</b> TFM-1600	<b>05</b> 317 (1.4449)	<b>050</b> 2"	<b>G</b> GEAR
<b>C2</b> ASME CLASS 300	<b>05</b> CF3 (1.4306)	<b>E</b> CF3M (1.4404)	<b>E</b> PEEK	<b>07</b> 304L (1.4306)	<b>065</b> 2-1/2"	<b>A</b> BARE SHAFT
<b>D2</b> DIN PN16	<b>06</b> CF3M (1.4404)	<b>F</b> CG8M (1.4412)		<b>08</b> 316L (1.4404)	<b>080</b> 3"	
<b>D4</b> DIN PN40	<b>07</b> CG8M (1.4412)	<b>I</b> CD3MN (1.4470)		<b>10</b> S31803 (1.4462)	<b>100</b> 4"	
	<b>15</b> CD3MN (1.4470)				<b>125</b> 5"	
					<b>150</b> 6"	
					<b>200</b> 8"	
					<b>250</b> 10"	
					<b>300</b> 12"	
					<b>350</b> 14"	
					<b>400</b> 16"	

**JSB-M Metal Seat** Ex: → **C1** → **04** → **C** → **7** → **050** → **A1** → **S01** → **HCR**

A. SPECIFICATION	B. BODY MAT'L	C. SEGMENT MAT'L	D. STEM MAT'L	E. SIZE	F. OPTION	G. TEMPERATURE
<b>W1</b> FLANGELESS	<b>02</b> WCB (1.0619)	<b>A</b> CF8 (1.4308)	<b>02</b> 304 (1.4301)	<b>025</b> 1"	<b>I</b> LIVE LOADING	<b>S01</b> -20~661 °F (-29~350 °C)
<b>A1</b> JIS 10K	<b>04</b> CF8 (1.4308)	<b>C</b> CF8M (1.4408)	<b>03</b> 316 (1.4401)	<b>040</b> 1-1/2"	<b>H</b> LEVER	<b>S02</b> -20~446 °F (-29~230 °C)
<b>C1</b> ASME CLASS 150	<b>04</b> CF8M (1.4408)	<b>D</b> CF3 (1.4306)	<b>05</b> 317 (1.4449)	<b>050</b> 2"	<b>G</b> GEAR	
<b>C2</b> ASME CLASS 300	<b>05</b> CF3 (1.4306)	<b>E</b> CF3M (1.4404)	<b>07</b> 304L (1.4306)	<b>065</b> 2-1/2"	<b>A</b> BARE SHAFT	
<b>D2</b> DIN PN16	<b>06</b> CF3M (1.4404)	<b>F</b> CG8M (1.4412)	<b>08</b> 316L (1.4404)	<b>080</b> 3"		<b>H. HARD FACE</b>
<b>D4</b> DIN PN40	<b>07</b> CG8M (1.4412)	<b>I</b> CD3MN (1.4470)	<b>10</b> S31803 (1.4462)	<b>100</b> 4"		<b>HCR</b> SEGMENT W / HCR
	<b>15</b> CD3MN (1.4470)		<b>22</b> 630 (1.4542)	<b>125</b> 5"		SEAT W / STELLITE®
				<b>150</b> 6"		<b>TC</b> SEGMENT W / TC
				<b>200</b> 8"		SEAT W / TC
				<b>250</b> 10"		
				<b>300</b> 12"		
				<b>350</b> 14"		
				<b>400</b> 16"		

# HOW TO ORDER



■ HEADQUARTERS

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