



JDV  
CONTROL  
VALVES



# JBF Series

## Floating Type Soft Seat Ball Valve



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



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# JBF Series

## Floating Type Soft Seat Ball Valve

Full Bore Two-Piece Flanged Ends

JIS 10/20K ASME CLASS 150/300/600 DIN PN16/40/100



### Industrial Fields:

Oil & Gas  
Refinery / Petrochemical  
Chemical  
Pulp & Paper  
Power Plant  
Steel Mill  
Food  
Mining

JBF Series are quarter-turn ball valves engineered to provide a reliable performance for a wide range of applications. Our vanguard design with many technically advanced features (optional fire-safe, longer stem, live loading, etc.) guarantees the highest level of safety and integrity.

### Applicable Standards

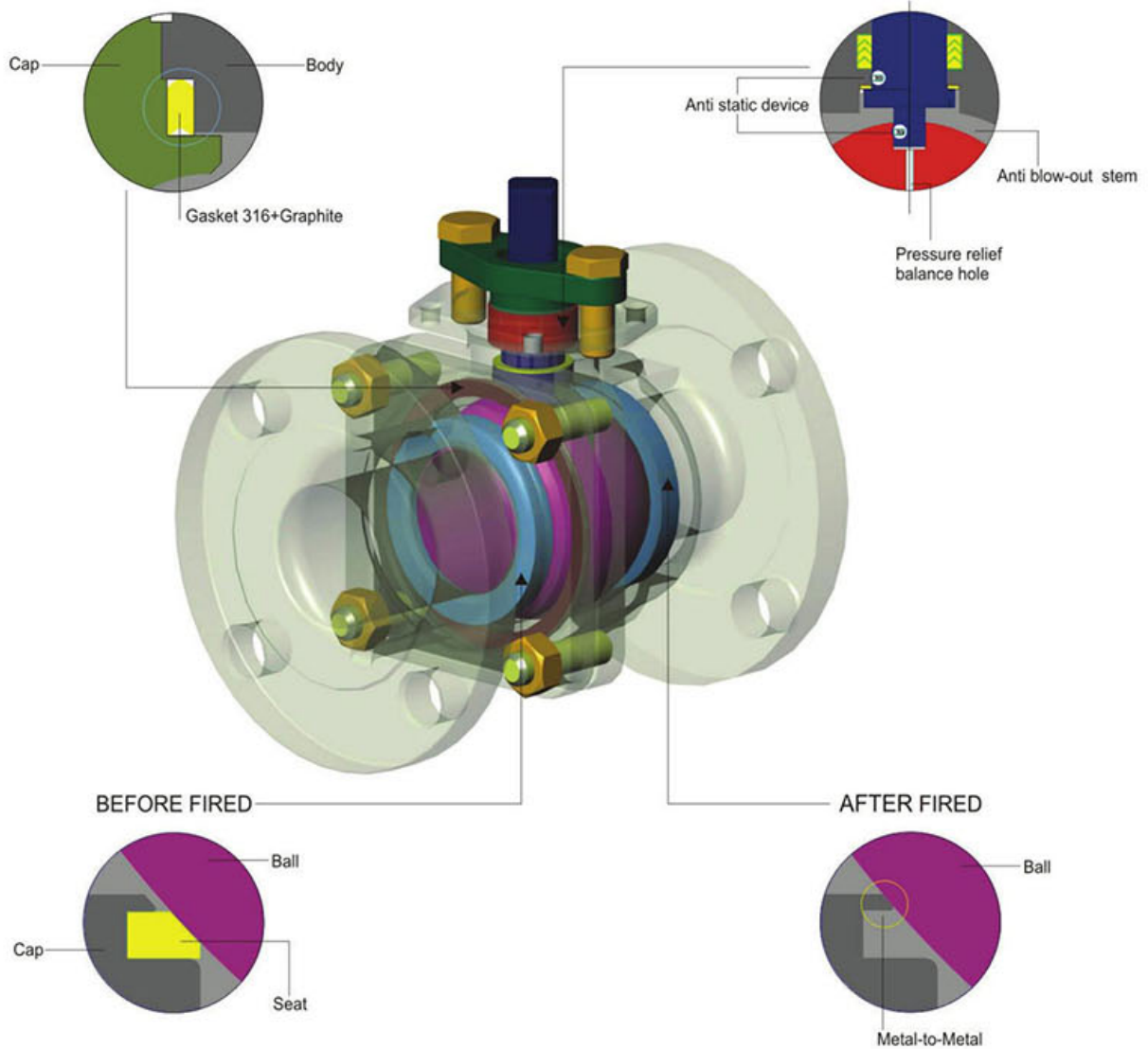
- Body Material : Standard in WCB, CF8, CF8M.  
Other materials are available according to requirements.
- Nominal Size : 1/2" to 12" (DN15 to DN300)
- Pressure Rating : JIS 10/20K ASME CLASS 150/300/600 DIN PN16/40/100
- End Connections : RF
- Temperature Range : -58~446 °F (~-50~230 °C)
- Face-To-Face Dimensions : JIS B2002 / ASME B16.10 / EN558 Series 5/14/15
- Flanged Dimensions : JIS B2220 / ASME B16.5 / EN1092-1
- Body Pressure Test : JIS B2003 / ASME B16.34 / API 598 / EN12266-1
- Seat Leakage Test : JIS B2003 / ASME B16.34 / API 598 / EN12266-1
- Casting : MSS-SP-25 / MSS-SP-55
- Fire Safe Design : Certificated according to API 607

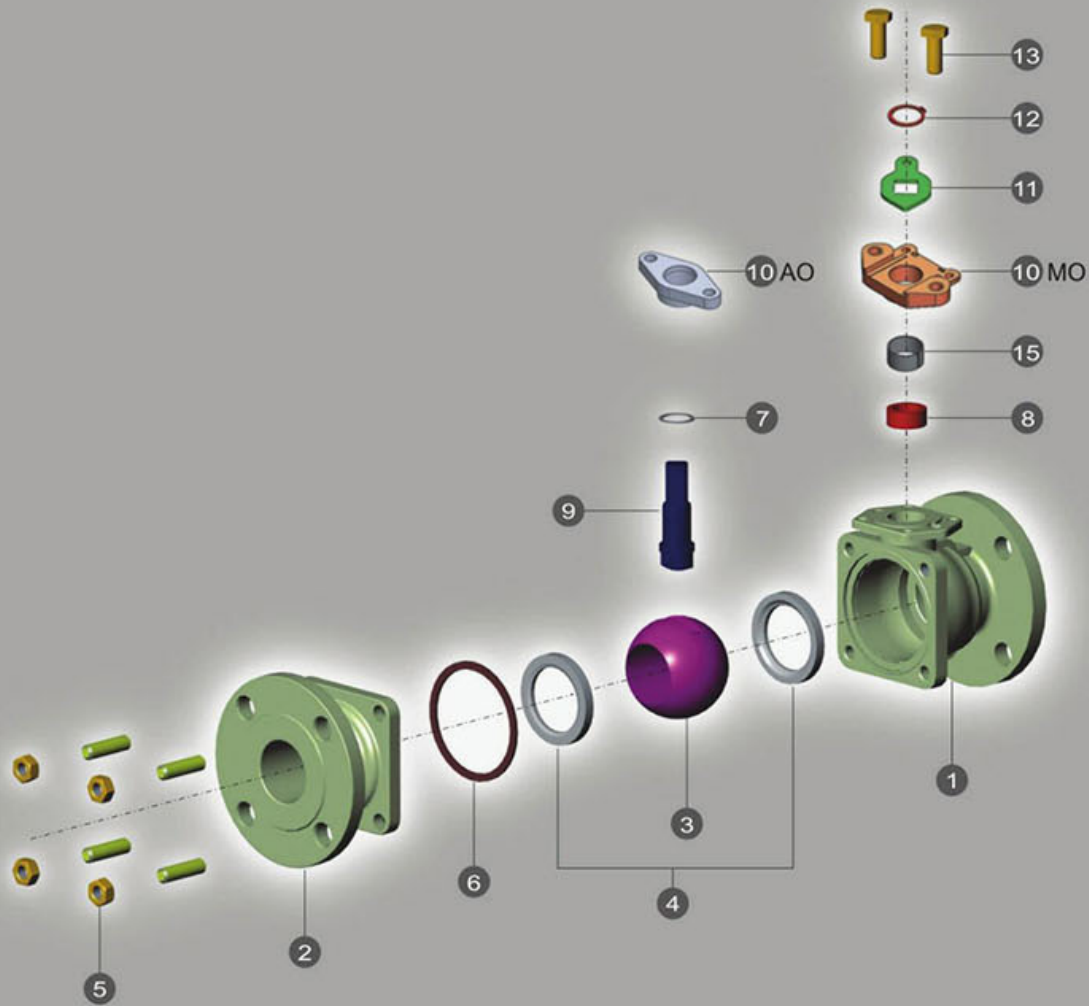


API 607

## Design & Structure

Fire Safe Design





## Technical Specifications

### STANDARD MATERIALS

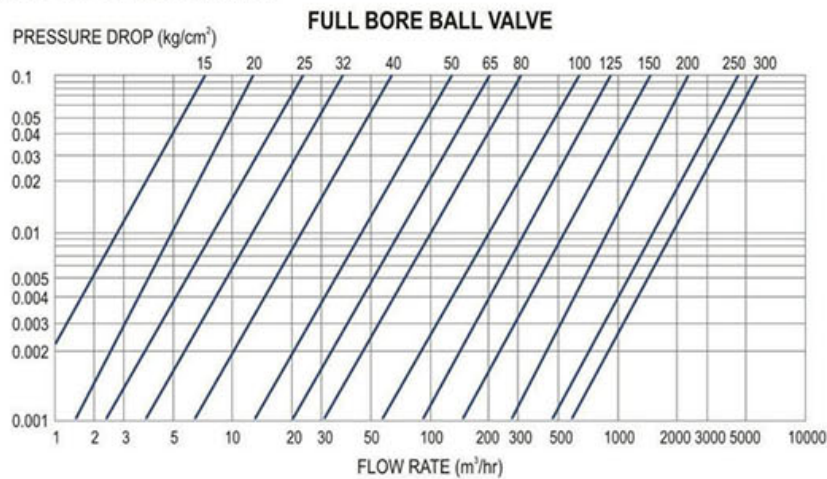
NO	PART NAME	MATERIAL		
1	BODY	A216-WCB	A351-CF8	A351-CF8M
2	CAP	A216-WCB	A351-CF8	A351-CF8M
3	BALL	A351-CF8		A351-CF8M
4	SEAT	PTFE / G-PTFE / C-PTFE / TFM-1600		
5	BOLT&NUT	A193-B7 & A194-7	A193-B8 & A194-8	
6	BODY GASKET	PTFE / 316SS+GRAPHITE (FIRE SAFE)		
7	THRUST WASHER	PTFE		
8	GLAND PACKING	PTFE / GRAPHITE (FIRE SAFE)		
9	STEM	A276-304	A276-316	
10	GLAND <sup>(1)</sup>	A351-CF8		
11	TRAVEL STOP (MO)	A240-304		
12	SNAP CATCH (MO)	AISI-420		
13	GLAND BOLT	STAINLESS STEEL		
14	HANDLE (MO)	A240-304(1/2"~1") / FCD45(1-1/2"~3") / FCD45+5GP(4" AND ABOVE)		
15	GLAND BEARING	G-PTFE		

The above materials may be changed with different using conditions.

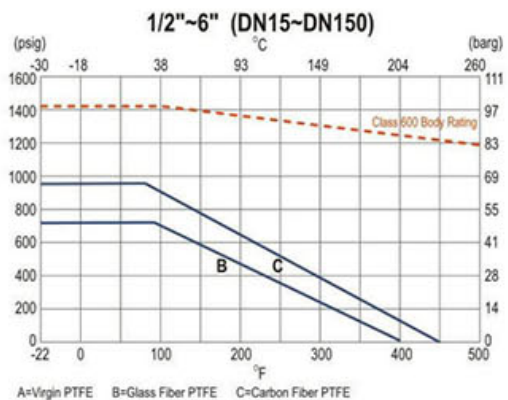
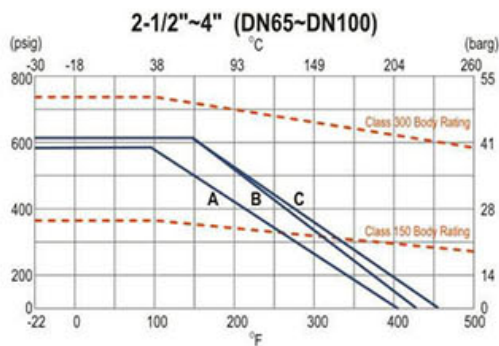
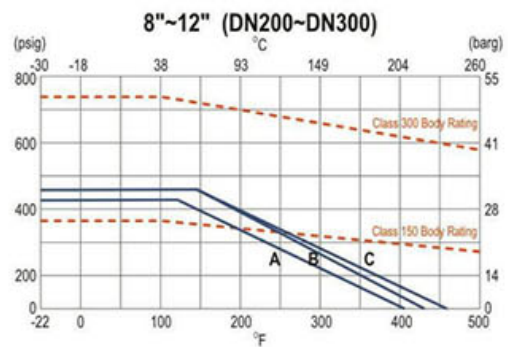
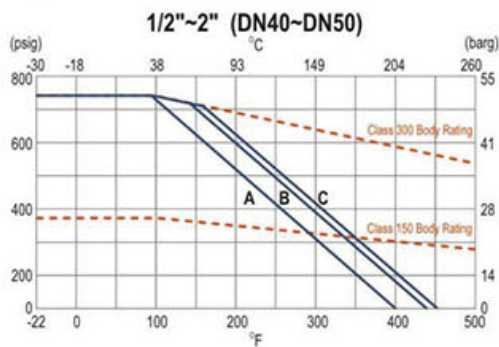
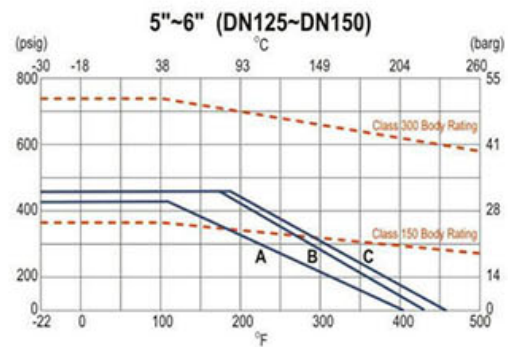
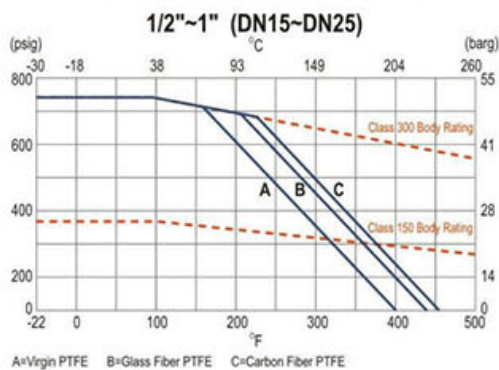
## Cv VALUES

Size	DN15	DN20	DN25	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300
	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"
Cv	27	61	114	268	501	750	1158	2118	3812	5074	9337	14590	21802

## PRESSURE DROP vs FLOW RATE

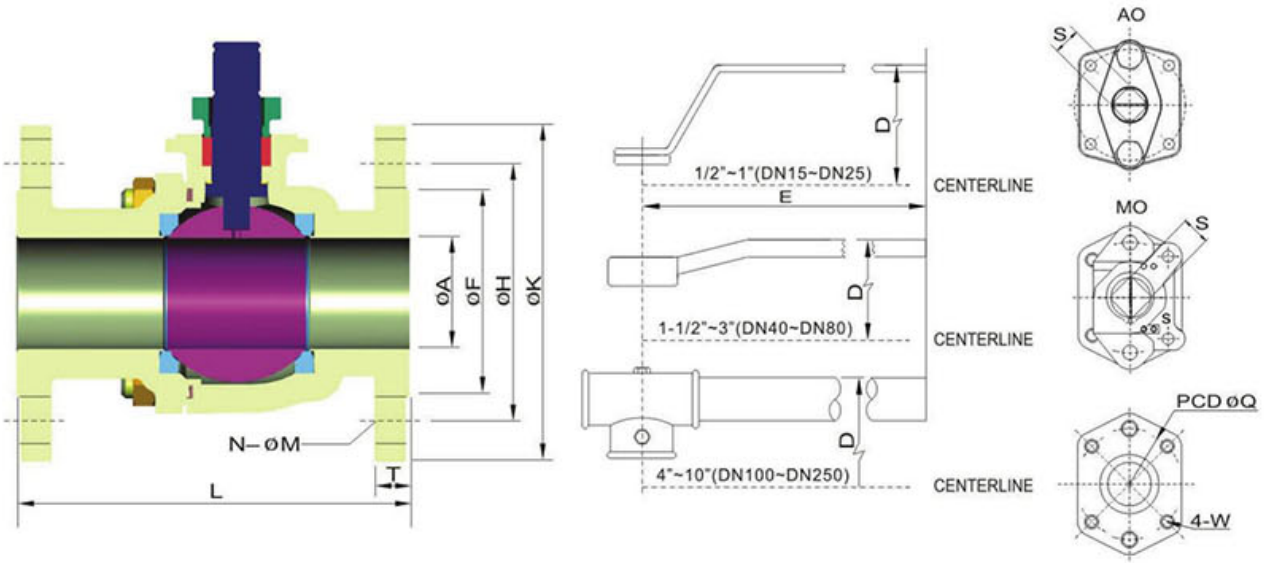


## TEMPERATURE & PRESSURE DIAGRAM





# JDV CONTROL VALVES



**DIMENSIONS (JBF-A1 SERIES JIS 10K)**

(mm)

Size	A	F	H	K	M	N	L	T	S	Q	W	D	E	Wt (Kg)	
15	1/2"	15	51	70	95	15	4	108	12	10	42	M5	97	130	1.9
20	3/4"	20	56	75	100	15	4	117	14	10	42	M5	100	130	2.3
25	1"	25	67	90	125	19	4	127	14	12	50	M6	110	160	3.8
40	1-1/2"	38	81	105	140	19	4	165	16	17	70	M8	115	224	6.7
50	2"	50	96	120	155	19	4	178	16	17	70	M8	120	224	8.5
65	2-1/2"	65	116	140	175	19	4	190	18	20	70	M8	140	324	14
80	3"	76	126	150	185	19	8	203	18	20	70	M8	150	324	18
100	4"	100	151	175	210	19	8	229	18	27	102	M10	220	400	26
125	5"	125	182	210	250	23	8	356	20	27	102	M10	240	550	42
150	6"	150	212	240	280	23	8	394	22	32	125	M12	280	550	65
200	8"	201	262	290	330	23	12	457	22	35	140	M16	340	1000	120
250	10"	252	324	355	400	25	12	533	24	35	140	M16	380	1000	200
300	12"	303	368	400	445	25	16	610	24	45	165	M20	-	-	350

**DIMENSIONS (JBF-A2 SERIES JIS 20K)**

(mm)

Size	A	F	H	K	M	N	L	T	S	Q	W	D	E	Wt (Kg)	
15	1/2"	15	51	70	95	15	4	140	14	10	42	M5	97	130	2.4
20	3/4"	20	56	75	100	15	4	152	16	10	42	M5	100	130	3
25	1"	25	67	90	125	19	4	165	16	12	50	M6	110	160	5
40	1-1/2"	38	81	105	140	19	4	190	18	17	70	M8	115	224	9.5
50	2"	50	96	120	155	19	4	216	18	17	70	M8	120	224	12
65	2-1/2"	65	116	140	175	19	4	241	20	20	70	M8	140	324	21.5
80	3"	76	132	160	200	23	8	283	22	20	70	M8	150	324	30
100	4"	100	160	185	225	23	8	305	24	27	102	M10	220	400	45
150	6"	150	230	260	305	25	12	403	28	32	125	M12	280	550	95
200	8"	201	275	305	350	25	12	502	30	35	140	M16	340	1000	162
250	10"	252	345	380	430	27	12	568	34	35	165	M20	380	1000	250
300	12"	303	395	430	480	27	16	648	36	45	165	M20	-	-	450

**DIMENSIONS (JBF-C1 SERIES ASME CLASS 150)**

(mm)

Size	A	F	H	K	M	N	L	T	S	Q	W	D	E	Wt (Kg)	
15	1/2"	15	35	60.5	89	16	4	108	11.2	10	42	M5	97	130	1.7
20	3/4"	20	43	70	98	16	4	117	11.2	10	42	M5	100	130	2
25	1"	25	51	79.5	108	16	4	127	11.2	12	50	M6	110	160	2.8
40	1-1/2"	38	73	98.5	127	16	4	165	14.3	17	70	M8	115	224	5.8
50	2"	50	92	120.5	152	19	4	178	15.9	17	70	M8	120	224	8.5
65	2-1/2"	65	105	139.5	178	19	4	190	17.5	20	70	M8	140	324	12.5
80	3"	76	127	152.5	190	19	4	203	19.1	20	70	M8	150	324	16.2
100	4"	100	157	190.5	229	19	8	229	23.9	27	102	M10	220	400	26.6
125	5"	125	186	216	254	22	8	356	23.9	27	102	M10	240	550	42
150	6"	150	216	241.5	279	22	8	394	25.4	32	125	M12	280	550	59.2
200	8"	201	270	298.5	343	22	8	457	28.6	35	140	M16	340	1000	120
250	10"	252	324	362	406	25	12	533	30.2	35	140	M16	380	1000	200
300	12"	303	381	432	483	25	12	610	31.8	45	165	M20	-	-	350

**DIMENSIONS (JBF-C2 SERIES ASME CLASS 300)**

(mm)

Size	A	F	H	K	M	N	L	T	S	Q	W	D	E	Wt (Kg)	
15	1/2"	15	35	66.5	95	16	4	140	14.3	10	42	M5	97	130	2.4
20	3/4"	20	43	82.5	117	19	4	152	15.9	10	42	M5	100	130	3
25	1"	25	51	89	124	19	4	165	17.5	12	50	M6	110	160	4.29
40	1-1/2"	38	73	114.5	156	22	4	190	20.7	17	70	M8	115	224	9.5
50	2"	50	92	127	165	19	8	216	22.3	17	70	M8	120	224	12
65	2-1/2"	65	105	149	190	22	8	241	25.4	20	70	M8	140	324	21.5
80	3"	76	127	168	210	22	8	282	28.6	20	70	M8	150	324	30
100	4"	100	157	200	254	22	8	305	31.8	27	102	M10	220	400	45
125	5"	125	186	235	280	22	12	381	35.2	32	125	M12	260	550	65.1
150	6"	150	216	270	318	22	12	403	36.6	32	125	M12	280	550	95
200	8"	201	270	330	381	25	12	502	41.2	35	140	M16	340	1000	162
250	10"	252	324	387.5	444	29	16	568	47.7	35	165	M20	380	1000	250
300	12"	303	381	451	521	32	16	648	50.8	45	165	M20	-	-	450

## DIMENSIONS (JBF-C3 SERIES ASME CLASS 600)

(mm)

Size	A	F	H	K	M	N	L	T	S	Q	W	D	E	Wt (Kg)
15 1/2"	15	35	66.5	95	16	4	165	20.9	10	42	M5	97	130	2.8
20 3/4"	20	43	82.5	117	19	4	190	22.3	10	42	M5	100	130	3.9
25 1"	25	51	89	124	19	4	216	23.9	12	50	M6	110	160	4.6
40 1-1/2"	38	73	114.5	156	22	4	241	28.7	17	70	M8	115	224	10
50 2"	50	92	127	165	19	8	292	31.8	17	70	M8	130	224	16
65 2-1/2"	65	105	149	190	22	8	330	35	22	102	M10	190	324	29
80 3"	76	127	168	210	22	8	356	38.2	22	102	M12	200	324	35
100 4"	100	157	216	273	25	8	432	44.5	27	125	M12	240	550	66
150 6"	150	216	292	356	29	12	559	54.1	35	140	M16	310	1000	148

## DIMENSIONS (JBF-D2 SERIES DIN PN16)

(mm)

Size	A	F	H	K	M	N	L		T	S	Q	W	D	E	Wt (Kg)
							S14	S15							
DN 15-DN 50 USE PN40															
65 2-1/2"	65	122	145	185	18	8	170		18	20	70	M8	140	324	15
80 3"	76	138	160	200	18	8	180		20	20	70	M8	150	324	19
100 4"	100	158	180	220	18	8	190		20	27	102	M10	220	400	31
150 6"	150	212	240	285	22	8		350	22	32	125	M12	280	550	62
200 8"	201	268	295	340	22	12		400	24	35	140	M16	340	1000	152
250 10"	252	320	355	405	26	12		450	26	35	140	M16	380	1000	192

## DIMENSIONS (JBF-D4 SERIES DIN PN40)

(mm)

Size	A	F	H	K	M	N	L		T	S	Q	W	D	E	Wt (Kg)
							S14	S15							
15 1/2"	15	45	65	95	14	4	115		16	10	42	M5	97	130	2.5
20 3/4"	20	58	75	105	14	4	120		18	10	42	M5	100	130	2.8
25 1"	25	68	85	115	14	4	125		18	12	50	M6	110	160	3.8
40 1-1/2"	38	88	110	150	18	4	140		18	17	70	M8	115	224	8
50 2"	50	102	125	165	18	4	150		20	17	70	M8	120	224	11.7
65 2-1/2"	65	122	145	185	18	8	170		22	20	70	M8	140	324	22
80 3"	76	138	160	200	18	8	180		24	20	70	M8	150	324	28
100 4"	100	162	190	235	22	8	190		24	27	102	M10	220	400	33
150 6"	150	218	250	300	26	8		350	28	32	125	M12	280	550	80
200 8"	201	285	320	375	30	12		400	34	35	140	M16	340	1000	145
250 10"	252	345	385	450	33	12		450	38	35	140	M16	380	1000	230

## DIMENSIONS (JBF-D5 SERIES DIN PN100)

(mm)

Size	A	F	H	K	M	N	L		T	S	Q	W	D	E	Wt (Kg)
							S5	S5							
15 1/2"	15	45	75	105	14	4	165		20	10	42	M5	97	130	2.8
25 1"	25	68	100	140	18	4	216		24	12	50	M6	110	160	4.6
40 1-1/2"	38	88	125	170	22	4	241		28	17	70	M8	115	224	10
50 2"	50	102	145	195	26	4	292		30	17	70	M8	130	224	16
65 2-1/2"	65	122	170	220	26	8	330		34	22	102	M10	190	324	29
80 3"	76	138	180	230	26	8	356		36	22	102	M10	200	324	35
100 4"	100	162	210	265	30	8	432		40	27	125	M12	240	550	66

## HOW TO ORDER

JBF → A → B → C → D → E → F → G

Ex: JBF → C2 → 04 → C → G → 03 → 050 → FH

A. SPECIFICATION	B. BODY MAT'L	C. BALL MAT'L	D. SEAT MAT'L	E. STEM MAT'L	F. SIZE
A1 JIS 10K	02 WCB	A CF8	P PTFE	02 304	015 1/2"
A2 JIS 20K	03 CF8	C CF8M	G G-PTFE (15% GLASS FIBER+PTFE)	03 316	020 3/4"
C1 ASME CLASS 150	04 CF8M	D CF3	C C-PTFE (15% CARBON+PTFE)	05 317	025 1"
C2 ASME CLASS 300	05 CF3	E CF3M	S S-PTFE (50% 316+PTFE)	07 304L	040 1-1/2"
C3 ASME CLASS 600	06 CF3M	F CG8M	T TFM-1600	08 316L	050 2"
D2 DIN PN16	07 CG8M	I CD3MN	E PEEK	10 S31803	065 2-1/2"
D4 DIN PN40	11 LCB				080 3"
D5 DIN PN100	12 LCC				100 4"
	15 CD3MN				125 5"
					150 6"
					200 8"
					250 10"
					300 12"
				<b>G. OPTION</b>	
				F FIRE SAFE	
				L EXTENDED STEM	
				I LIVE LOADING	
				H LEVER	
				A BARE SHAFT	

# HOW TO ORDER

※ Alternative materials are available on request.



■ HEADQUARTERS

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