



**JDV  
CONTROL  
VALVES**

# JTC Series

**Centric Rubber Seat Butterfly Valve**





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CONTROL  
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# JTC SERIES

## Centric Rubber Seat Butterfly Valve

### Product Features

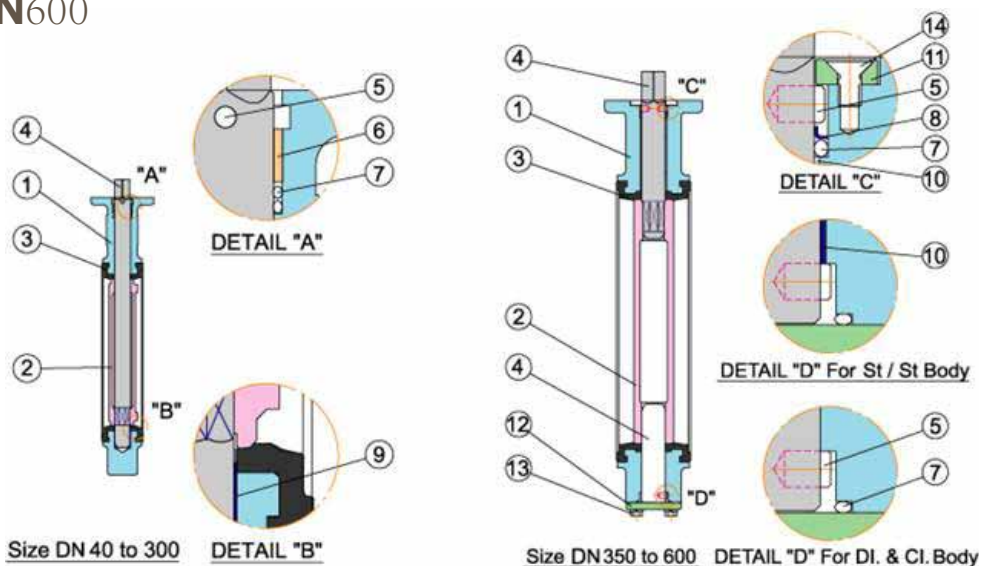
#### 产品特点

- Body Material( 阀体材质 ): Standard in FC-200/WCB/CF8/CF8M Special material is available according to requirements. 可根据客户需求提供相应的特殊材质
- Nominal size( 公称直径 ):1-1/2" to 36" (DN40 to DN900)
- Pressure Rating( 压力标准 ): ANSI 125 /150LB JIS 10K DIN PN10 /16
- Face To Face Dimensions( 法兰面间距尺寸 ):Valve body are designed to meet ISO 5752 table 5 short
- Temperature Range( 温度范围 ): -20°C --204°C
- End Connection ( 端部连接形式 ) : Wafer / Wafer Lugged / Flange
- Top Works: 24" and below, valve mounting flange and stem shall be per ISO 5211  
28" and above, valve mounting flange per ISO 5211, stem shall be round keyed.
- Bi-directional bubble-tight shut off to  
16 bar (230psi)----- DN40~DN300mm  
10 bar (150psi)----- DN350~DN900mm
- And tested to 110% of full rating  
18 bar (260psi)----- DN40~DN300mm  
11 bar (160psi)----- DN350~DN900mm
- The body strength can stand 150% of full rating.  
24 bar (340psi)----- DN40~DN300mm  
15 bar (220psi)----- DN350~DN900mm



# TECHNICAL SPECIFICATION 技术资料

## DN40~DN600

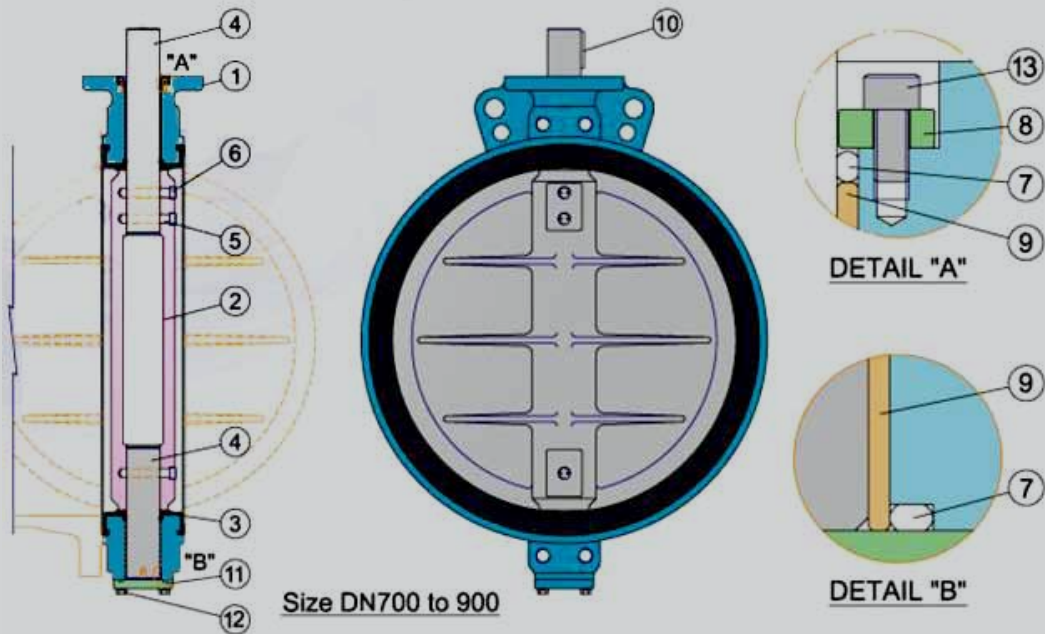


## MATERIA

NO.	Name	Materials	Specification		Remark
			JIS	ASTM	
1	BODY	CAST IRON	FC 200	A126-B	
		DUCTILE IRON	FCD 450	A-536-65-45-12	
		STAINLESS STEEL	SCS 13	A351 CF8	
			SCS 14	A351 CF8M	
2	DISC	DUCTILE IRON	FCD 450	A-536-65-45-12	Nylon 11 coated
		STAINLESS STEEL	SCS 13	A351 CF8	
			SCS 14	A351 CF8M	
		ALU-BRONZE	ALBC2	B148-954	
3	SEAT	NBR(NITRILE)			-10° ~80°C (14° ~176° F)
		EPDM			-20° ~120°C (-4° ~248° F)
		NEOPRENE(CR)			0° ~80°C (32° ~176° F)
		SILICON			-20° ~180°C (-4° ~356° F)
		HYPALON(CSM)			-20° ~135°C (-4° ~275° F)
		VITON			-18° ~204°C (-0.4° ~400° F)
4	STEM	STAINLESS STEEL	SUS 410	A182 F6A	
			SUS 304	A182 F304	
			SUS 316	A182 F316	
5	PIN	STAINLESS STEEL	SUS 316	A182 F316	
6	BUSH	DELFIN			
7	O-RING	NBR (NITRILE)			
8	BACK-UP RING	PLASTIC			
9	BUSH	BRONZE	BC6	B62	For cast iron and ductile iron body
10	UPPER COVER	STEEL	SS41	A6	For cast iron and ductile iron body
			SUS 304	A240 304	For stainless steel body
11	BOTTOM COVER	CAST IRON	FC 200	A126-B	For cast iron and ductile iron body
		STAINLESS STEEL	SCS 13	A351 CF8	For stainless steel body
12	BOLT	STEEL			
13	BOLT	STEEL			



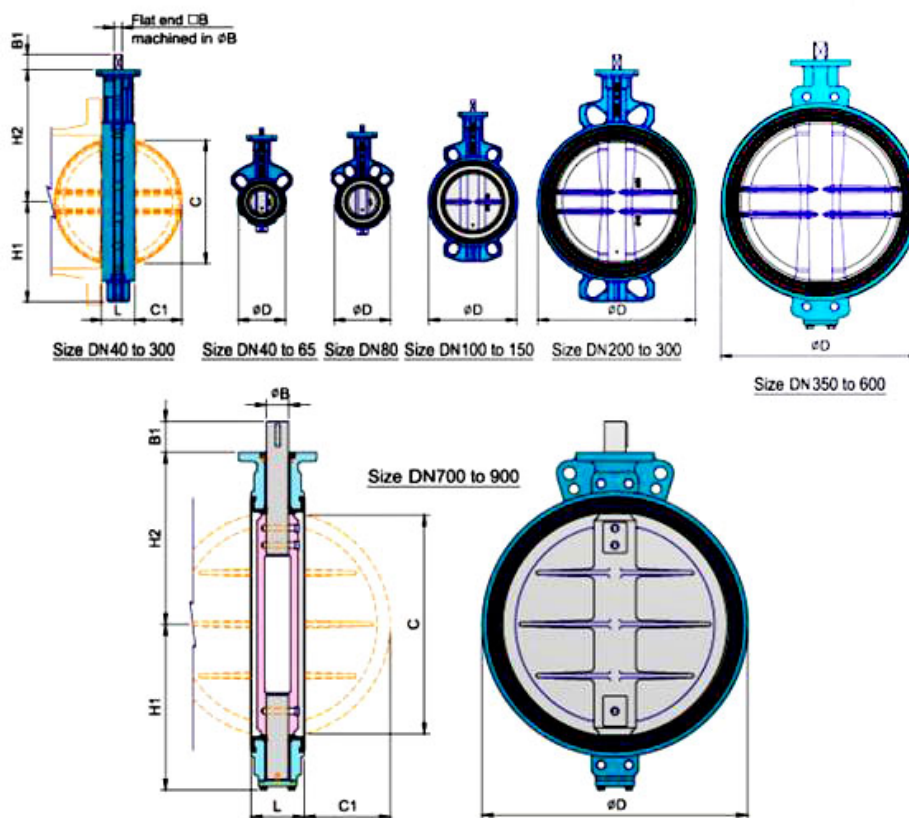
## WAFER & FLANGE TYPE DN700~DN900



## MATERIA

NO.	Name	Materials	Specification		Remark
			JIS	ASTM	
1	BODY	DUCTILE IRON	FCD 450	A-536-65-45-12	
		STAINLESS STEEL	SCS 13	A351 CF8	
			SCS 14	A351 CF8M	
2	DISC	DUCTILE IRON	FCD 450	A-536-65-45-12	Nylon 11 coated
		STAINLESS STEEL	SCS 13	A351 CF8	
			SCS 14	A351 CF8M	
3	SEAT	NBR (NITRILE)			-10° ~80°C (14° ~176° F)
		EPDM			-20° ~120°C (-4° ~248° F)
		NEOPRENE (CR)			0° ~80°C (32° ~176° F)
		SILICON			-20° ~180°C (-4° ~356° F)
		HYPALON (CSM)			-20° ~135°C (-4° ~275° F)
		VITON			-18° ~204°C (-0.4° ~400° F)
4	STEM	STAINLESS STEEL	SUS 410	A182 F6A	
			SUS 304	A182 F304	
			SUS 316	A182 F316	
5	PIN	STAINLESS STEEL	SUS 316	A182 F316	
6	PLUG	STAINLESS STEEL			
7	O-RING	NBR(NITRILE)			
8	UPPER COVER	STEEL	SS41	A6	For stainless steel body
		STAINLESS STEEL	SUS 304	A240 304	For cast iron and ductile iron body
9	BUSH	BRONZE	BC6	B62	
10	UPPER COVER	STEEL			
11	BEARING	BRONZE	BC6	B62	
12	BOTTOM COVER	CAST IRON	FC 200	A126-B	
13	BOLT	STEEL			
14	BOLT	STEEL			

## WAFER TYPE DN40~DN900

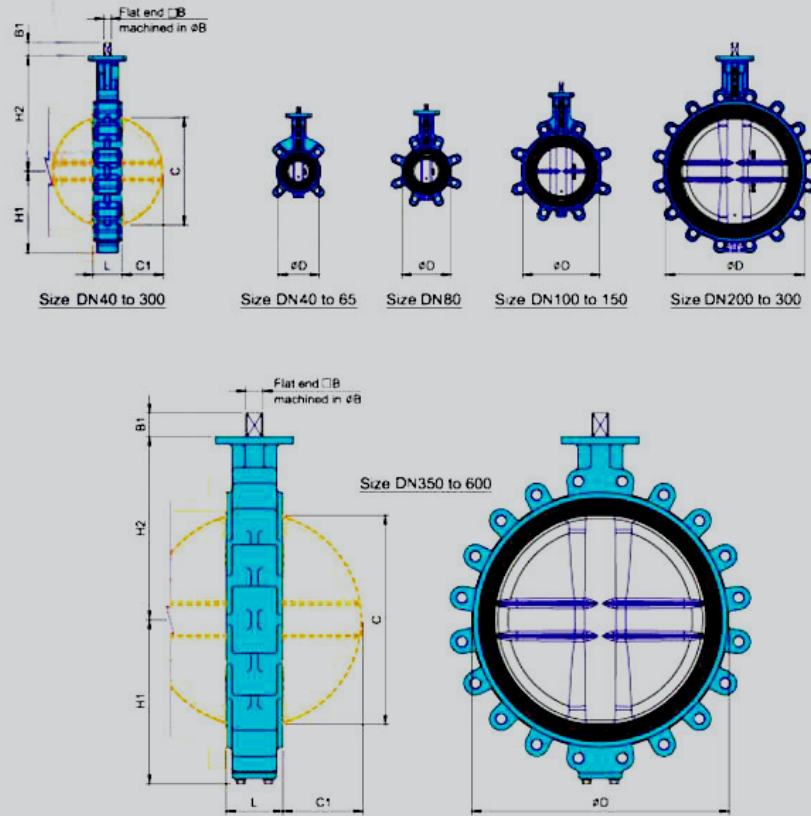


## DIMENSIONS

SIZE		Face to Face					Mounting flange (ISO 5211)		Flat shaft end			key	Disc clearance		Weight
mm	inch		L	H1	H2	D	Type	PCD	B	B1	ØB		C	C1	
mm	inch	L	H1	H2	D	Type	PCD	B	B1	ØB		C	C1	kg	
40	1-1/2	33	60	120	81	F07	70	11	19	14		34	7	2	
50	2	43	65	143	96	F07	70	11	19	14		39	8	3	
65	2-1/2	46	71	155	110	F07	70	11	19	14		55	13	3.8	
80	3	46	77	162	124	F07	70	11	19	14		69	19	4	
100	4	52	107	181	148	F07	70	11	19	14		91	27	5.3	
125	5	56	122	197	180	F07	70	14	19	19		115	36	7.3	
150	6	56	140	210	206	F07	70	14	19	19		140	47	8.2	
200	8	60	165	240	259	F10	102	17	24	22		186	68	13.5	
250	10	68	201	286	320	F10	102	19	24	25		239	90	21.2	
300	12	78	234	309	370	F10	102	22	24	30		288	111	32.5	
350	14	78	301.5	329	412	F12	125	27	29	35		325	128	48	
400	16	102	333.5	361	475	F12	125	32	29	42		375	143	60	
450	18	114	358.5	393	530	F14	140	32	38	45		423	162	80	
500	20	127	392.5	427	585	F14	140	36	38	50		473	182	125	
600	24	154	454.5	492	687	F16	165	46	48	60		560	214	200	
700	28	165	508	533	796	F25	254		110	70	18*12	655	255	395	
750	30	190	543	568	856	F25	254		110	75	20*12	692	264	490	
800	32	190	574	599	903	F25	254		110	75	20*12	736	285	580	
900	36	203	632	660	1003	F25	254		110	85	24*16	841	331	730	



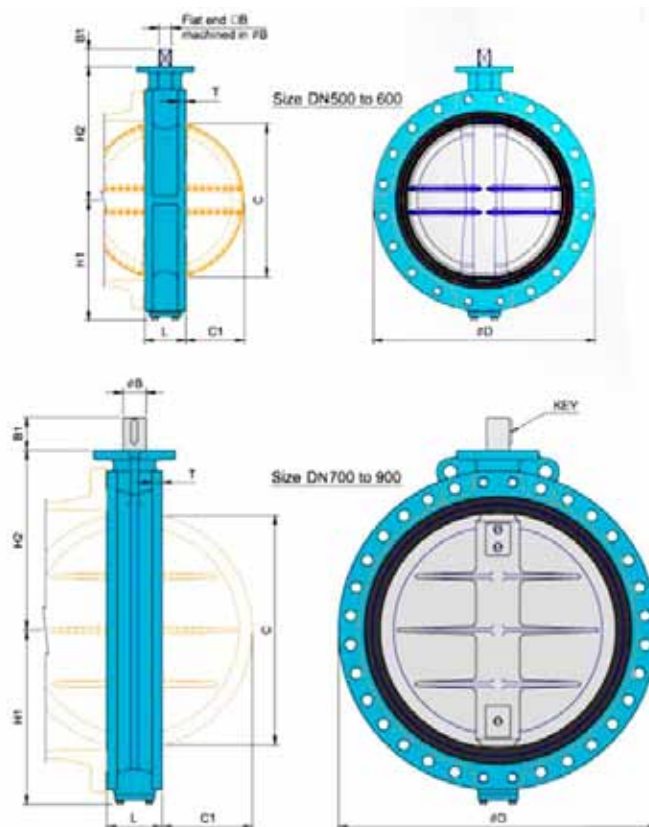
## LUG TYPE DN<sub>40</sub>~DN<sub>600</sub>



## DIMENSIONS

SIZE		Face to Face					Mounting flange (ISO 5211)		Flat shaft end			Disc clearance		Weight
mm	inch	L	H1	H2	D	Type	PCD	B	B1	ØB	C	C1	kg	
40	1-1/2	33	60	120	81	F07	70	11	19	14	34	7	2.2	
50	2	43	65	143	96	F07	70	11	19	14	39	8	3.4	
65	2-1/2	46	71	155	110	F07	70	11	19	14	55	13	4	
80	3	46	77	162	124	F07	70	11	19	14	69	19	4.5	
100	4	52	89	181	148	F07	70	11	19	14	91	27	7.6	
125	5	56	112	197	180	F07	70	14	19	19	115	36	9.5	
150	6	56	123	210	206	F07	70	14	19	19	140	47	10.4	
200	8	60	150	240	259	F10	102	17	24	22	186	68	17.5	
250	10	68	179	286	320	F10	102	19	24	25	239	90	26.5	
300	12	78	216	309	370	F10	102	22	24	30	288	111	43.5	
350	14	78	301.5	329	412	F12	125	27	29	35	325	128	58	
400	16	102	333.5	361	475	F12	125	32	29	42	375	143	81	
450	18	114	358.5	393	530	F14	140	32	38	45	423	162	110	
500	20	127	392.5	427	585	F14	140	36	38	50	473	182	155	
600	24	154	454.5	492	687	F16	165	46	48	60	560	214	259	

## FLANGE TYPE DN500~DN900

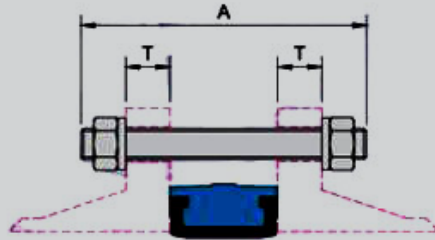


## DIMENSIONS

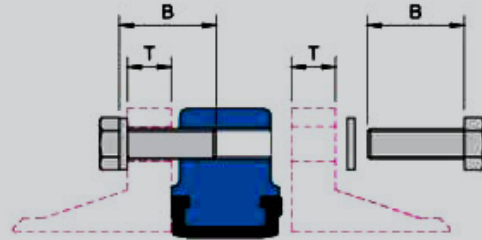
SIZE		Face to Face					Mounting flange (ISO 5211)		Flat shaft end			key	Disc clearance		Weight	
mm	inch		L	H1	H2	D	Type	PCD	B	B1	ØB		C	C1	T	kg
500	20	127	392.5	427	715	F14	140	36	38	50		473	182	30	190	
600	24	154	454.5	492	840	F16	165	46	48	60		560	214	32	260	
700	28	165	508	533	927	F25	254		110	70	18*12	655	255	34	380	
750	30	190	543	568	997	F25	254		110	75	20*12	692	264	36	480	
800	32	190	574	599	1060	F25	254		110	75	20*12	736	285	36	540	
900	36	203	632	660	1170	F25	254		110	85	24*16	841	331	40	700	



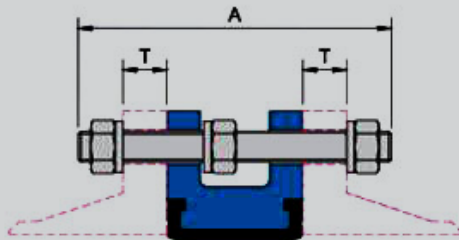
## BOLTING FOR INSTALLATION



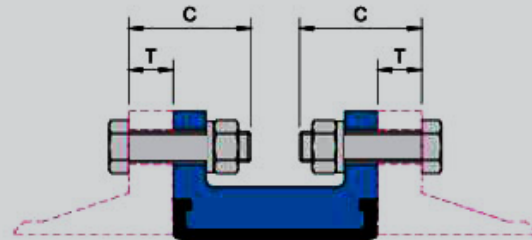
**WAFFER TYPE  
DN40 ~ DN900**



**FULL LUG TYPE  
DN40 ~ DN600**



**FLANGE TYPE  
DN500**



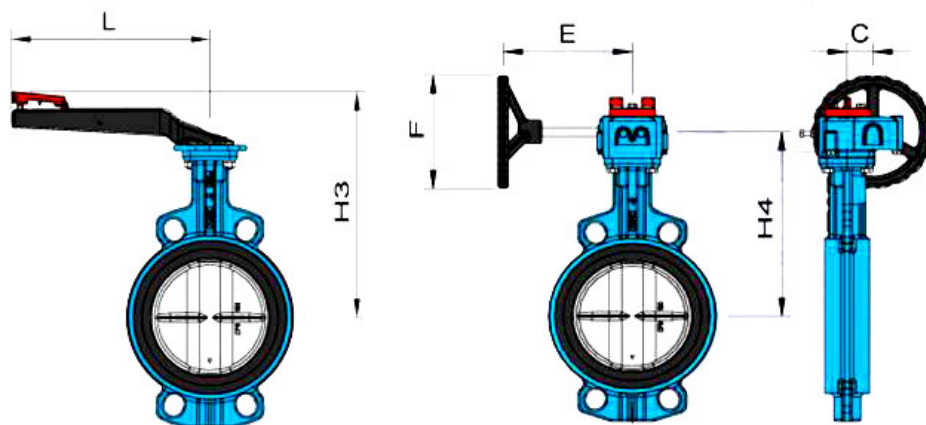
**FLANGE TYPE  
DN600 ~ DN900**

## DIMENSIONS

Size		PN10					PN16					ASME B16.5 CLASS150 ASME B16.47 CLASS150 SERIES A				JIS 10K						
mm	inch	Bolt Size	A	B	C	T	Bolt Size	A	B	C	T	Bolt Size	A	B	C	T	Bolt Size	A	B	C	T	
40	1-1/2	M 16	115	35		18	M 16	115	35		18	1/2"	105	35		18	M 16	110	35		16	
50	2	M 16	130	40		20	M 16	130	40		20	5/8"	125	40		19	M 16	120	40		16	
65	2-1/2	M 16	130	45		20	M 16	130	45		20	5/8"	135	45		22	M 16	125	45		18	
80	3	M 16	130	45		20	M 16	130	45		20	5/8"	140	45		24	M 16	125	45		18	
100	4	M 16	140	50		22	M 16	140	50		22	5/8"	145	50		24	M 16	135	45		18	
125	5	M 16	145	50		22	M 16	145	50		22	3/4"	155	55		24	M 20	145	55		20	
150	6	M 20	160	55		24	M 20	160	55		24	3/4"	160	55		25	M 20	155	55		22	
200	8	M 20	165	55		24	M 20	160	55		24	3/4"	170	60		28	M 20	160	55		22	
250	10	M 20	175	60		26	M 24	180	60		26	7/8"	185	65		30	M 22	175	60		24	
300	12	M 20	185	60		26	M 24	195	70		28	3/4"	200	70		32	M 22	185	60		24	
350	14	M 20	185	60		26	M 24	200	70		30	1"	215	75		35	M 22	185	65		26	
400	16	M 24	220	65		26	M 27	235	80		32	1"	245	80		37	M 24	225	70		28	
450	18	M 24	235	70		28	M 27	265	85		40	1-1/8"	265	85		40	M 24	240	70		30	
500	20	M 24	250	70		28	M 30	290	100		44	1-1/8"	285	90		43	M 24	250	70		30	
600	24	M 27	295	80	100	34	M 33	345	110	130	54	1-1/4"	330	100	120	48	M 30	295	80	100	32	
700	28	M 27	295		100	30	M 33	325		120	38	1-1/4"	390		150	71	M 30	310		110	34	
750	30											1-1/4"	420		150	75	M 30	335		110	36	
800	32	M 30	330		110	32	M 36	355		120	38	1-1/2"	445		170	81	M 30	335		110	36	
900	36	M 30	345		110	34	M 36	370		130	40	1-1/2"	475		180	90	M 30	355		120	38	
1000	40	M 33			120	34	M 39			130	42	1-1/2"			180	90	M 36			130	40	
1050	42											1-1/2"			190	97						
1100	44											1-1/2"			190	102	M 36			130	42	
1200	48	M 36			130	38	M 45			150	48	1-1/2"			200	108	M 36			130	44	



## LEVER & GEAR OPERATED



## DIMENSIONS

Size		Operator Series no.	Lever operator		Gear operator				Handwheel turns ON/OFF	Mounting flange (ISO 5211)	
mm	inch		H3	L	H4	C	E	F		N	Type
40	1-1/2	L 7A	181	200	157	41	155	150	10	F07	70
		C 07									
50	2	L 7A	204	200	180	41	155	150	10	F07	70
		C 07									
65	2-1/2	L 7A	216	200	192	41	155	150	10	F07	70
		C 07									
80	3	L 7A	223	200	199	41	155	150	10	F07	70
		C 07									
100	4	L 7B	242	200	218	41	155	150	10	F07	70
		C 07									
125	5	L 7B	258	250	234	41	155	150	10	F07	70
		C 07									
150	6	L 7B	271	250	247	41	155	150	10	F10	70
		C 07									
200	8	L 10	308	355	281.5	61	195	200	9	F10	102
		C 10									
250	10	L 10	354	355	327.5	61	195	200	9	F10	102
		C 10									
300	12	L 10	377	355	350.5	61	195	200	9	F10	102
		C 10									
350	14	C 12			370	61	232	310	9.5	F12	125
400	16	C 12			402	61	232	310	9.5	F12	125
450	18	C 14			445	81	235	450	12	F14	140
500	20	C 14			479	81	235	450	12	F14	140
600	24	A2			548	123	307	400	17.5	F16	165
700	28	A3+S3			678	160	370	400	52.5	F25	254
750	30	A3+S3			713	160	370	400	52.5	F25	254
800	32	A3+S3			744	160	370	400	52.5	F25	254
900	36	A3+S3			805	160	370	400	52.5	F30	254
1000	40	A4+S4			925	197	471	600	90	F30	298
1050	42	A4+S4			988	197	471	600	90	F30	298
1100	44	A4+S4			952	197	471	600	90	F30	298
1200	48	A4+S4			1059	197	471	600	90	F30	298



## DESIGN DETAILS AND SPECIFICATIONS

### Kv Values-Valve Sizing Coefficient

Size		Disc Angle (Open Degree)								
mm	inch	10°	20°	30°	40°	50°	60°	70°	80°	90°
40	1-1/2	1	2	7	14	22	36	59	81	113
50	2	1	4	10	22	38	60	100	132	193
65	2-1/2	2	8	18	35	61	95	187	240	315
80	3	3	10	26	48	83	126	214	338	425
100	4	4	15	39	72	119	221	361	606	723
125	5	7	24	62	118	217	394	599	1,038	1,243
150	6	10	41	95	175	326	542	873	1,260	1,859
200	8	19	64	165	306	573	995	1,567	2,310	3,124
250	10	28	101	245	451	836	1,462	2,253	3,256	4,757
300	12	34	129	312	615	1,137	2,125	3,248	4,991	7,058
350	14	47	163	390	795	1,498	2,573	3,980	5,749	8,319
400	16	62	231	508	1,077	1,973	3,381	5,385	8,099	11,458
450	18	75	256	621	1,208	2,315	3,925	6,331	9,474	13,612
500	20	103	346	859	1,692	3,086	5,348	8,513	13,109	18,748
600	24	139	494	1,153	2,389	4,466	7,561	11,945	18,088	25,217
700	28	191	659	1,674	3,224	5,990	10,659	17,442	25,194	36,821
750	30	203	700	1,777	3,420	6,354	11,307	18,503	26,727	39,062
800	32	257	973	2,302	4,533	8,235	14,123	23,021	31,613	45,995
900	36	329	1,253	2,950	5,862	10,810	18,184	29,756	42,893	61,044
1,000	40	510	1,919	4,456	7,956	13,494	21,939	36,000	54,649	68,874
1,050	42	587	2,061	4,574	8,398	14,244	23,158	37,999	57,684	72,699
1,100	44	703	2,634	6,076	10,282	16,612	26,431	43,450	68,122	79,219
1,200	48	969	3,638	8,103	14,180	22,107	35,317	57,822	90,417	106,288

## DESIGN DETAILS AND SPECIFICATIONS

Size		Disc Angle (Open Degree)								
mm	inch	10°	20°	30°	40°	50°	60°	70°	80°	90°
40	1-1/2	1	2	7	14	22	36	59	81	113
50	2	1	4	10	22	38	60	100	132	193
65	2-1/2	2	8	18	35	61	95	187	240	315
80	3	3	10	26	48	83	126	214	338	425
100	4	4	15	39	72	119	221	361	606	723
125	5	7	24	62	118	217	394	599	1,038	1,243
150	6	10	41	95	175	326	542	873	1,260	1,859
200	8	19	64	165	306	573	995	1,567	2,310	3,124
250	10	28	101	245	451	836	1,462	2,253	3,256	4,757
300	12	34	129	312	615	1,137	2,125	3,248	4,991	7,058
350	14	47	163	390	795	1,498	2,573	3,980	5,749	8,319
400	16	62	231	508	1,077	1,973	3,381	5,385	8,099	11,458
450	18	75	256	621	1,208	2,315	3,925	6,331	9,474	13,612
500	20	103	346	859	1,692	3,086	5,348	8,513	13,109	18,748
600	24	139	494	1,153	2,389	4,466	7,561	11,945	18,088	25,217
700	28	191	659	1,674	3,224	5,990	10,659	17,442	25,194	36,821
750	30	203	700	1,777	3,420	6,354	11,307	18,503	26,727	39,062
800	32	257	973	2,302	4,533	8,235	14,123	23,021	31,613	45,995
900	36	329	1,253	2,950	5,862	10,810	18,184	29,756	42,893	61,044
1,000	40	510	1,919	4,456	7,956	13,494	21,939	36,000	54,649	68,874
1,050	42	587	2,061	4,574	8,398	14,244	23,158	37,999	57,684	72,699
1,100	44	703	2,634	6,076	10,282	16,612	26,431	43,450	68,122	79,219
1,200	48	969	3,638	8,103	14,180	22,107	35,317	57,822	90,417	106,288

To Use The Torque Chart, Note The Following

- 1) Seating/Unseating torque values above included friction bearing torque for stated  $\Delta P$ .
- 2) Do not apply a safety factor to above torque values when determining actuator output torque requirement.

## HOW TO ORDER 如何选购

JTC — **A** — **B** — **C** **D** — **E** — **F**  
 Ex: JTC — **C1** — **01** — **Y** **N** — **150** — **F**

A. SPECIFICATION	B. BODY MAT'L	C. DISC & SHAFT MAT'L	D. STEM MAT'L
A1 JIS 10K	01 FC-20	A CF8 & 304	N NBR
<b>C1</b> ANSI 150LB	02 WCB	C CF8M & 316	E EPDM
D1 DIN PN10	03 CF8	D CF3 & 304L	V VITON
D2 DIN PN16	04 CF8M	E CF3M & 316L	
	05 CF3	F CG8M & 317	
	06 CF3M	H CG3M & 317L	
	07 CG8M	W WCB	
	08 CG3M	<b>Y</b> FCD	

E. SIZE	F. END CONNECTION
040 1-1/2"	W WAFER
050 2"	L LUG
065 2-1/2"	<b>F</b> FLANGE
080 3"	
100 4"	
125 5"	
<b>150</b> 6"	
200 8"	
250 10"	
300 12"	
350 14"	
400 16"	
450 18"	
500 20"	
600 24"	
700 28"	
750 30"	
800 32"	
900 36"	

HOW TO ORDER