



**JDV  
CONTROL  
VALVES**

# JTD-C Type

**Centric Rubber Seat Butterfly Valve**





## Features

- JTC combines butterfly valve production for more than 20 years with scientific research and applications experience. We can provide butterfly valve with better torque control, easy operation, easy installation and maintenance.

## JTC resilient seated butterfly valves have multiple design advantages

- Economy & high performance.
- The butterfly valve features a one-piece body for minimum weight and maximum strength.
- Low maintenance design and long service life.
- High Cv, lower head loss results in energy savings for customer's system.
- Maximum flow and range ability is achieved with the use of a streamlined disc.
- Stems are blowout-proof type.
- Longer seat life with low operating torques is ensured by utilizing upper and lower stem bearings.

## Applications

- JTC butterfly valves are commonly selected for a variety of applications spanning a wide range of industries:
- Potable water, water factory and water conservancy projects
- Wastewater treatment and environmental protection
- Agriculture
- Energy, Power & Utilities
- HVAC system
- Building fire control system
- Chemical and petrochemical
- Ferrous metallurgy
- Pulp, paper
- Food and beverage
- Industrial application



## Cv Values-Valve Sizing Coefficients

Size	10°	20°	30°	40°	50°	60°	70°	80°	90°
DN50 2"	0.06	3	7	15	27	44	70	105	115
DN65 2 1/2"	0.10	6	12	25	45	75	119	178	196
DN80 3"	0.20	9	18	39	70	116	183	275	302
DN100 4"	0.30	17	36	78	139	230	364	546	600
DN125 5"	0.50	29	61	133	237	392	620	930	1022
DN150 6"	0.80	45	95	205	366	605	958	1437	1579
DN200 8"	2	89	188	408	727	1202	1903	2854	3136
DN250 10"	3	151	320	694	1237	2047	3240	4859	5340
DN300 12"	4	234	495	1072	1911	3162	5005	7507	8250
DN350 14"	6	338	715	1549	2761	4568	7230	10844	11917
DN400 16"	8	464	983	2130	3797	6282	9942	14913	16388
DN450 18"	11	615	1302	2822	5028	8320	13168	19752	21705
DN500 20"	14	791	1647	3628	6465	10698	16931	25396	27908
DN600 24"	22	1222	2587	5605	9989	16528	26157	39236	43116
DN750 30"	37	2080	4406	9546	17010	28147	44545	66818	73426

For further values, please contact JDV.

## Construction Materials

<b>Body</b>	Cast iron GJL-250 Nodular iron GJS-400-15 Stainless steel AISI 304 Stainless steel AISI 316 Cast carbon steel Aluminium Bronze C-352 Aluminium bronze C-415 Other alloys	<b>Shaft</b>	Stainless steel AISI 420 Stainless steel AISI 304 Stainless steel AISI 316 Stainless steel AISI 431 Stainless steel AISI 316L Hastelloy Duplex stainless steel Monel Other alloys
<b>Disc</b>	Nodular iron GJS-400-15 Stainless steel AISI 304 Stainless steel AISI 316 Stainless steel AISI 316L Cast carbon steel Aluminium Bronze C-352 Aluminium bronze C-415 Hastelloy Uranus B6 Monel K 500 Duplex stainless steel Other alloys	<b>Seat</b>	EPDM High temperature EPDM Hypalon Nitrile (Buna N) Silicone Food Silicone High temperature silicone PTFE F.P.M.(VITON) Nordel



## ■ Design Benefits

### Top Flange

ISO 5211 top flange with square or round stem to adapt any type of actuators.

### Body

Available in full lug and wafer styles designed for use between all kinds of flanges. Fully lugged body can be used for end of line services.

### Seat

Groove locks boot seat design provides complete isolation of flowing media from the body and stem, maintaining low seating torque.

### Shaft

Shaft is blowout-proof type and shaft is completely isolated from the media.

### Bushing

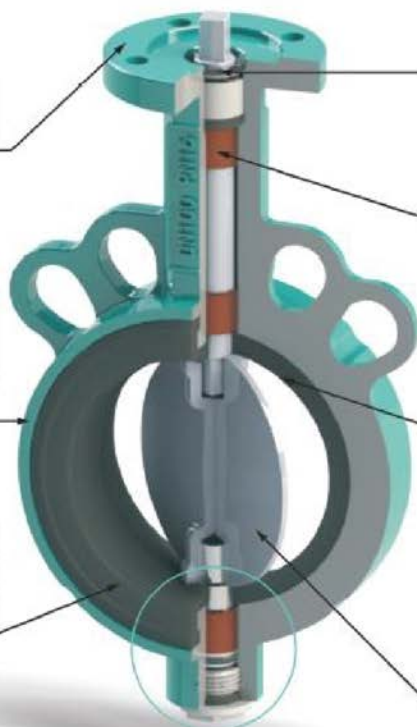
Stem bushings provide shaft support for proper stem alignment and minimize stem deflection.

### Bi-Directional Sealing

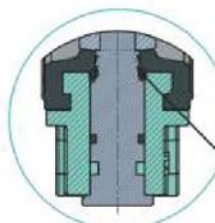
JTC's butterfly valve provides bi-directional sealing at full-rated with identical flow from either direction.

### Disc

Spherical shape for perfect disc/seat tightness and continuous contact. Polished disc edge to assure leak-tight shut off and minimize operating torque. Disc is made in one piece without attachments or pins.

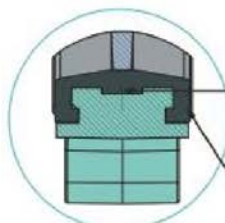


"A"



DETAIL "A"

Ensure tightness between disc/seat and seat/shaft, reduce the torque



DETAIL "A"

Ensure accurate positioning of the seat and better tightness

Lips and groove construction is for better tightness between flanges

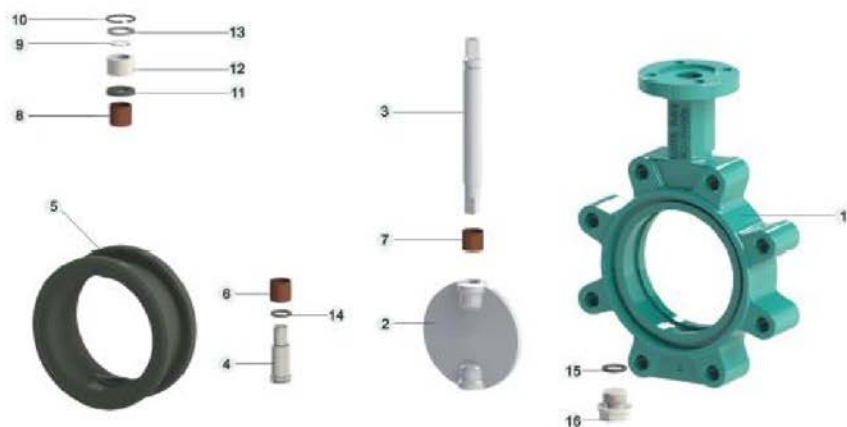


## Valve Seating Torques

Size		Torque(N.M)		
		Operating Pressure		
mm	Inch	6 bar	10 bar	16 bar
40	1 1/2"	7	7	9
50	2"	8	9	10
65	2 1/2"	9	11	16
80	3"	12	16	24
100	4"	20	29	35
125	5"	32	40	53
150	6"	55	72	88
200	8"	86	112	158
250	10"	150	180	208
300	12"	188	248	296
350	14"	280	580	806
400	16"	463	820	1180
450	18"	600	890	1560
500	20"	920	1346	1960
600	24"	1500	2235	3560



## ■ Bill of Materials

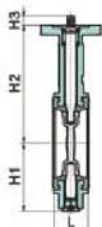


Key No.	Qty.	Description	Material
1	1	Body	*
2	1	Disc	*
3&4	2	Shaft	*
5	1	Seat	*
6&7&8	3	Bushing	PTFE
9&10	2	Circlip	Stainless Steel
11	1	U Type Ring	Rubber
12	1	Bushing	Nylon
13	1	Washer	Stainless Steel
14&15	2	O Ring	Rubber
16	1	Plug	Carbon Steel

\*Complete material specs are on page 2

## ■ Standards

Design	ISO 10631, API 609, BS EN593, DIN 3345, JIS B2032, GB/T 12238
Face to Face	ISO 5752, ASME B16.10, BS EN558-1, DIN 3032, JIS B2002, GB/T 12221
Flange Drilling	ISO7005, ASME B16.1, BS EN1092, ASME B16.5, DIN 2501, JIS 2211-2212, GB/T 17241, GB/T 9113
Top Flange	ISO 5211, GB/T 12223
Inspection and Test	ISO 5208, API 598, BS EN 12266, DIN 17480, JIS B2003, GB/T 13927

**Pressure: PN10, PN16, Class125, 10K**
**Two Pieces Shafts**


Size DN40 to DN300



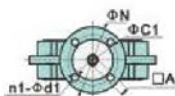
Size DN40 to DN65



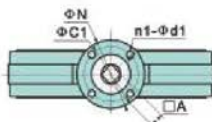
Size DN80 to DN100



Size DN125 to DN300



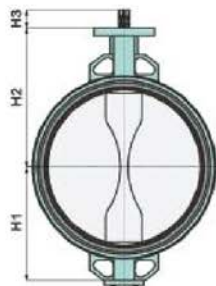
Size DN40 to DN300



Size DN350 to DN600



Size DN350 to DN600



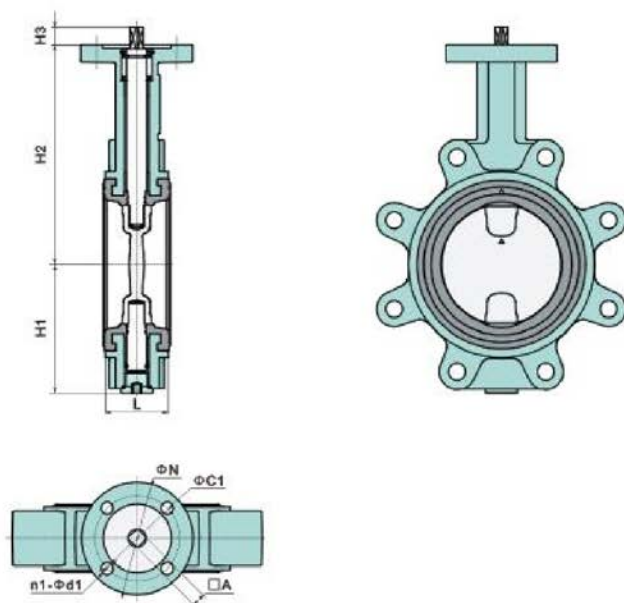
Size		L	H1	H2	H3	ISO 5211	ΦN	ΦC1	n1-Φd1	□A
mm	Inch									
DN40	1 1/2"	33	52	126	14.5	F05	65	50	4-8	9
DN50	2"	43	57	143	14.5	F05	65	50	4-8	9
DN65	2 1/2"	46	68	155	14.5	F05	65	50	4-8	9
DN80	3"	46	82	160	14.5	F05	65	50	4-8	9
DN100	4"	52	100	181	14.5	F07	90	70	4-10	11
DN125	5"	56	112	194	20	F07	90	70	4-10	14
DN150	6"	56	126	202	20	F07	90	70	4-10	14
DN200	8"	60	162	240	28	F07	90	70	4-10	17
DN250	10"	68	193	272	28	F10	125	102	4-12	22
DN300	12"	78	236.5	318	28	F10	125	102	4-12	22
DN350	14"	78	264	328	45	F10	125	102	4-12	22
DN400	16"	102	293	360	51.2	F14	175	140	4-18	27
DN450	18"	114	324	400	51.2	F14	175	140	4-18	27
DN500	20"	127	350	460	64.2	F14	175	140	4-18	36
DN600	24"	154	440	540	70.2	F16	210	165	4-22	36



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Pressure: PN10, PN16, Class125, 10K

Two Pieces Shafts



Size		L	H1	H2	H3	ISO 5211	φN	φC1	n1-φd1	□A
mm	Inch									
DN40	1 1/2"	33	52	126	14.5	F05	65	50	4-8	9
DN50	2"	43	57	143	14.5	F05	65	50	4-8	9
DN65	2 1/2"	46	68	155	14.5	F05	65	50	4-8	9
DN80	3"	46	82	160	14.5	F05	65	50	4-8	9
DN100	4"	52	100	181	14.5	F07	90	70	4-10	11
DN125	5"	56	112	194	20	F07	90	70	4-10	14
DN150	6"	56	126	202	20	F07	90	70	4-10	14
DN200	8"	60	162	240	28	F07	90	70	4-10	17
DN250	10"	68	193	272	28	F10	125	102	4-12	22
DN300	12"	78	236.5	318	28	F10	125	102	4-12	22
DN350	14"	78	267	368	45	F10	125	102	4-12	22
DN400	16"	102	298.6	400	51.2	F14	175	140	4-18	27
DN450	18"	114	318	422	51.2	F14	175	140	4-18	27
DN500	20"	127	355	480	64.2	F14	175	140	4-18	36
DN600	24"	154	444	562	70.2	F16	210	165	4-22	36



## ■ Design Benefits

### Top Flange

ISO 5211 top flange with square or round stem to adapt any type of actuators.

### Body

Available in full lug and wafer styles designed for use between all kinds of flanges. Fully lugged body can be used for end of line services.

### Seat

Cartridge style seat incorporates an elastomer bonded to a phenolic stabilizing ring, eliminating elastomer movement and reducing seat tearing or fatiguing, maintaining low seating torque. Sealing isn't affected by extrusion. Cartridge style seat also permits easy change without special tools.

### Disc

Disc edge is machined and polished well to assure leak-tight shut off while minimizing operating torque.

### Shaft

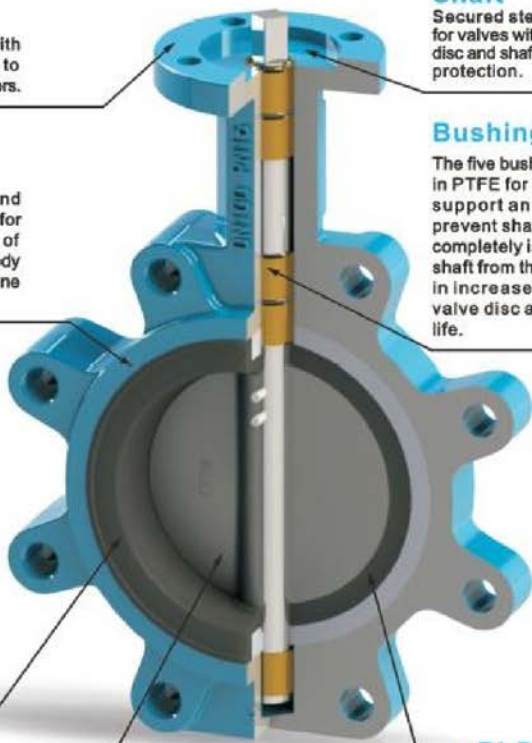
Secured stem retainer plate for valves without pin between disc and shaft as blowout-proof protection.

### Bushing

The five bushing design made in PTFE for maximum radial support and shaft rigidity, prevent shaft deflection and completely isolates the valve shaft from the body, resulting in increased control of the valve disc and longer valve life.

### Bi-Directional Sealing

JTC's butterfly valve provides bi-directional sealing at full-rated with identical flow from either direction.





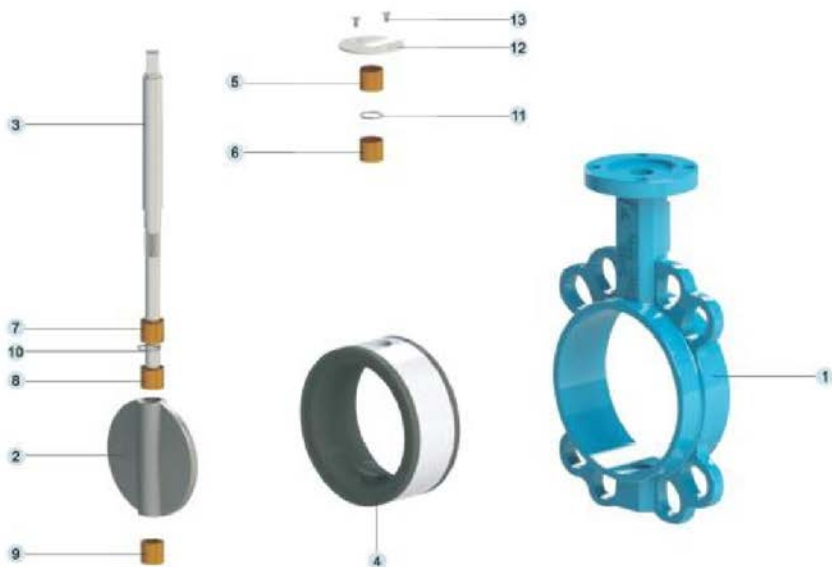
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## Valve Seating Torques

Size		Torque(N.M)		
mm	Inch	6 bar	10 bar	16 bar
32	1 1/4"	8	8	10
40	1 1/2"	9	9	11
50	2"	9	10	13
65	2 1/2"	13	14	19
80	3"	15	18	26
100	4"	29	33	45
125	5"	35	42	62
150	6"	58	86	115
200	8"	83	121	226
250	10"	119	204	319
300	12"	188	297	374
350	14"	297	629	906
400	16"	463	820	1180
450	18"	715	1223	1762
500	20"	960	1492	2148
600	24"	1573	2967	3917
700	28"	2235	5062	6063
750	30"	2589	5189	6105
800	32"	3200	3898	6480
900	36"	3980	6700	11800
1000	40"	6212	7680	14800
1200	48"	11000	13800	22800

## Bill of Materials



Key No.	Qty.	Description	Material
1	1	Body	*
2	1	Disc	*
3	1	Shaft	*
4	1	Seat	*
5&6&7&8&9	5	Bushing	PTFE
10&11	2	O Ring	Rubber
12	1	Retaining Plate	Stainless Steel
13	2	Retaining Plate Screw	Stainless Steel

\*Complete material specs are on page 2

## Standards

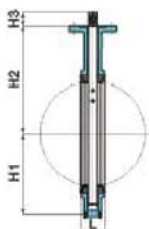
Design	ISO 10631, API 609, BS EN593, DIN 3345, JIS B2032, GB/T 12238
Face to Face	ISO 5752, ASME B16.10, BS EN558-1, DIN 3032, JIS B2002, GB/T 12221
Flange Drilling	ISO7005, ASME B16.1, BS EN1092, ASME B16.5, DIN 2501, JIS 2211-2212, GB/T 17241, GB/T 9113
Top Flange	ISO 5211, GB/T 12223
Inspection and Test	ISO 5208, API 598, BS EN 12266, DIN 17480, JIS B2003, GB/T 13927



# JDV CONTROL VALVES

Pressure: PN10, PN16, Class125, 10K

P: Pin Connection  
S: Spine Connection  
T: Two Pieces Shafts



Size DN25 to DN600



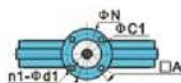
Size DN25 to DN32



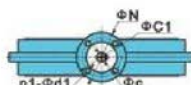
Size DN40 to DN300



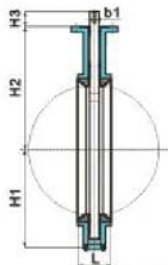
Size DN350 to DN600



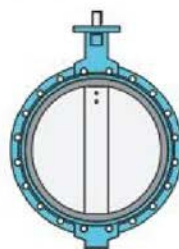
Size DN25 to DN600



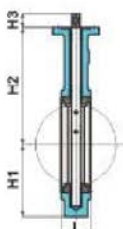
Size DN700 to DN1200



Size DN700 to DN1200



Size		L	H1	H2	H3	ISO 5211	φN	φC1	n1-φd1	□A	φc	b1
mm	Inch											
DN25	1"	31	57	85	14.5	F04	54	42	4-7	7	-	-
DN32	1 1/4"	32	60	100	14.5	F04	54	42	4-7	7	-	-
DN40	1 1/2"	33	52	126	14.5	F05	65	50	4-8	9	-	-
DN50	2"	43	57	143	14.5	F05	65	50	4-8	9	-	-
DN65	2 1/2"	46	68	155	14.5	F05	65	50	4-8	9	-	-
DN80	3"	46	82	160	14.5	F05	65	50	4-8	9	-	-
DN100	4"	52	100	181	14.5	F07	90	70	4-10	11	-	-
DN125	5"	56	112	194	20	F07	90	70	4-10	14	-	-
DN150	6"	56	126	202	20	F07	90	70	4-10	14	-	-
DN200	8"	60	162	240	28	F07	90	70	4-10	17	-	-
DN250	10"	68	193	272	28	F10	125	102	4-12	22	-	-
DN300	12"	78	236.5	318	28	F10	125	102	4-12	22	-	-
DN350	14"	78	267	368	45	F10	125	102	4-12	22	-	-
DN400	16"	102	298.6	400	51.2	F14	175	140	4-18	27	-	-
DN450	18"	114	318	422	51.2	F14	175	140	4-18	27	-	-
DN500	20"	127	355	480	64.2	F14	175	140	4-18	36	-	-
DN600	24"	154	444	562	70.2	F16	210	165	4-22	36	-	-
DN700	28"	165	505.1	623.9	66	F25	300	254	8-18	-	φ55	16
DN750	30"	165	499	646	66	F25	300	254	8-18	-	φ55	16
DN800	32"	190	576	672	66	F25	300	254	8-18	-	φ55	16
DN900	36"	203	637	720	118	F25	300	254	8-18	-	φ75	22
DN1000	40"	216	701	800	142	F25	300	254	8-18	-	φ85	22
DN1200	48"	276	844	940	160	F30	350	298	8-22	-	φ105	28

**Pressure: PN10, PN16, Class125, 10K**
**P: Pin Connection  
S: Spline Connection  
T: Two Pieces Shafts**


Size DN25 to DN600



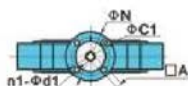
Size DN25 to DN32



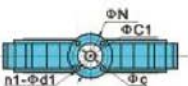
Size DN40 to DN300



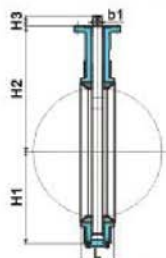
Size DN350 to DN600



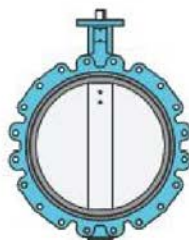
Size DN25 to DN600



Size DN700 to DN800



Size DN700 to DN800



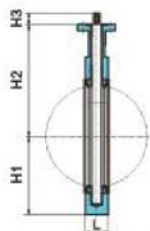
Size		L	H1	H2	H3	ISO 5211	ΦN	ΦC1	n1-Φd1	□A	Φc	b1
mm	Inch											
DN25	1"	31	57	85	14.5	F04	54	42	4-7	7	-	-
DN32	1 1/4"	32	60	100	14.5	F04	54	42	4-7	7	-	-
DN40	1 1/2"	33	52	126	14.5	F05	65	50	4-8	9	-	-
DN50	2"	43	57	143	14.5	F05	65	50	4-8	9	-	-
DN65	2 1/2"	46	68	155	14.5	F05	65	50	4-8	9	-	-
DN80	3"	46	82	160	14.5	F05	65	50	4-8	9	-	-
DN100	4"	52	100	181	14.5	F07	90	70	4-10	11	-	-
DN125	5"	56	112	194	20	F07	90	70	4-10	14	-	-
DN150	6"	56	126	202	20	F07	90	70	4-10	14	-	-
DN200	8"	60	162	240	28	F07	90	70	4-10	17	-	-
DN250	10"	68	193	272	28	F10	125	102	4-12	22	-	-
DN300	12"	78	236.5	318	28	F10	125	102	4-12	22	-	-
DN350	14"	78	267	368	45	F10	125	102	4-12	22	-	-
DN400	16"	102	298.6	400	51.2	F14	175	140	4-18	27	-	-
DN450	18"	114	318	422	51.2	F14	175	140	4-18	27	-	-
DN500	20"	127	355	480	64.2	F14	175	140	4-18	36	-	-
DN600	24"	154	444	562	70.2	F16	210	165	4-22	36	-	-
DN700	28"	165	505.1	623.9	66	F25	300	254	8-18	-	Φ55	16
DN750	30"	165	499	646	66	F25	300	254	8-18	-	Φ55	16
DN800	32"	190	576	672	66	F25	300	254	8-18	-	Φ55	16



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Pressure: PN10, PN16, Class125, 10K

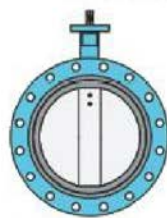
**P: Pin Connection  
S: Spline Connection  
T: Two Pieces Shafts**



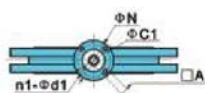
Size DN40 to DN600



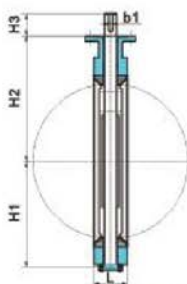
Size DN40 to DN300



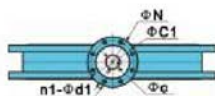
Size DN350 to DN600



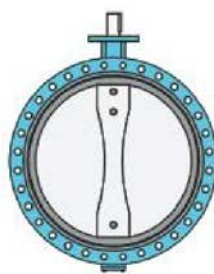
Size DN40 to DN600



Size DN700 to DN1200



Size DN700 to DN1200

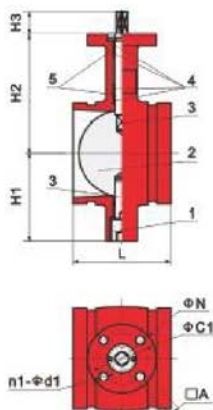


Size	mm		L	H1	H2	H3	ISO 5211	ΦN	ΦC1	n1-Φd1	□A	Φc	b1
	mm	Inch											
DN40	1 1/2"	33	75	139	14.5	F05	65	50	4-8	9	-	-	-
DN50	2"	43	82.5	161	14.5	F05	65	50	4-8	9	-	-	-
DN65	2 1/2"	46	92.5	175	14.5	F05	65	50	4-8	9	-	-	-
DN80	3"	46	100	181	14.5	F05	65	50	4-8	9	-	-	-
DN100	4"	52	110	200	14.5	F07	90	70	4-10	11	-	-	-
DN125	5"	56	125	213	20	F07	90	70	4-10	14	-	-	-
DN150	6"	56	142.5	226	20	F07	90	70	4-10	14	-	-	-
DN200	8"	60	170	260	28	F07	90	70	4-10	17	-	-	-
DN250	10"	68	202.5	292	28	F10	125	102	4-12	22	-	-	-
DN300	12"	78	230	337	28	F10	125	102	4-12	22	-	-	-
DN350	14"	78	260	368	45	F10	125	102	4-12	22	-	-	-
DN400	16"	102	290	400	51.2	F14	175	140	4-18	27	-	-	-
DN450	18"	114	324	422	51.2	F14	175	140	4-18	27	-	-	-
DN500	20"	127	357.5	480	64.2	F14	175	140	4-18	36	-	-	-
DN600	24"	154	420	562	70.2	F16	210	165	4-22	36	-	-	-
DN700	28"	165	455	624	66	F25	300	254	8-18	-	Φ55	16	-
DN750	30"	165	499	646	66	F25	300	254	8-18	-	Φ55	16	-
DN800	32"	190	576	672	66	F25	300	254	8-18	-	Φ55	16	-
DN900	36"	203	563	720	118	F25	300	254	8-18	-	Φ75	22	-
DN1000	40"	216	701	747	142	F25	300	254	8-18	-	Φ85	22	-
DN1200	48"	276	844	940	160	F30	350	298	8-22	-	Φ105	28	-

Pressure: **PN10, PN16, PN20, Class125, 10K, 16K**

**Two Pieces Shafts**

Size DN50 to DN300



## Bill of Materials

Key No.	Qty.	Description	Material
1	1	Body	Ductile Iron
2	1	Disc	Ductile Iron+EPDM
3	2	Stem	Stainless Steel
4	4	Bushing	PTFE
5	2	O Ring	Buna-N or EPDM

General Design: MSS SP-67

Top Flange: ISO 5211

Face to Face: ASME B16.10

End Connection: AWWA C606

Size		L	H1	H2	H3	ISO 5211	ΦN	ΦC1	n1-Φd1	□A
mm	Inch									
DN50	2"	84.6	70	101.6	29	F05	65	50	4-8	9
DN65	2 1/2"	97.8	75	106.2	29	F05	65	50	4-8	9
DN80	3"	97.8	82	112.5	29	F05	65	50	4-8	9
DN100	4"	116	100	135.4	29	F07	90	70	4-10	11
DN125	5"	133	100	138	29	F07	90	70	4-10	14
DN150	6"	134	115	163	29	F07	90	70	4-10	14
DN200	8"	148	150	204	35	F10	125	102	4-12	17
DN250	10"	159	200	250	35	F10	125	102	4-12	22
DN300	12"	163	230	275	35	F10	125	102	4-12	22

### ■ H21 Aluminum Handle

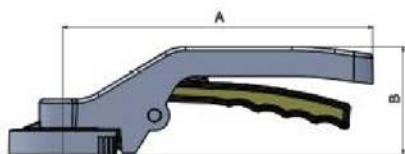
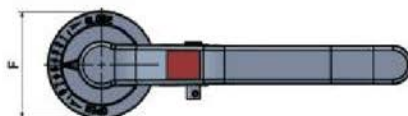


FIG.	F	A	B
H21-190	F05	190	65
H21-256	F07	256	76
H21-355	F10	355	86



### ■ H32 Iron Handle



FIG.	F	A	B
H32-190	F05	190	28
H32-256	F07	256	30
H32-355	F10	355	36





## HOW TO ORDER

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. SEAT MAT'L
A1 JIS 10K	01 FC-20	A CF8 & 304	N NBR
C1 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	Y FCD	

E. SIZE	F. END CONNECTION
040 1-1/2"	W WAFER
050 2"	L LUG
065 2-1/2"	F FLANGE
080 3"	
100 4"	
125 5"	
150 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



■ HEADQUARTERS

NO.6-1, QINGNIAN RD., YANGMEI DIST., TAOYUAN CITY 326, TAIWAN  
Tel: 886-3-4965066 Fax: 886-3-4965300 E-mail:sales@jdv.com.tw

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