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Shanxi Solid Industrial Co.,Ltd.

SOLID VALVES

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CONTENS

Wafer Butterfly Valve

- Wafer Butterfly Valve with Universal Flange(Pin)/BV111-B1
- Wafer Butterfly Valve with Universal Flange(Pinless)/BV112-B1
- Wafer Butterfly Valve(Pin)/BV111-A1
- Wafer Butterfly Valve(Pinless)/BV112-A1
- Non Backed Wafer Butterfly Valve/BV122-D2
- Rubber Lined Wafer Butterfly Valve/BV132-D3
- Binaural Non Backed Butterfly Valve/BV122-D1
- Notched Butterfly Valve/BV112-C1
- Lug Butterfly Valve (Pin)/BV211-A1
- Lug Butterfly Valve (Pinless)/BV212-A1
- Non Backed Lug Butterfly Valve/BV221-D2
- U Section Butterfly Valve (Pin)/BV311-A1
- Rubber Lined U Section Butterfly Valve/BV331-A1
- High Performance Lug Butterfly Valve/BV242-A1
- High Performance Wafer Butterfly Valve/BV142-B1

Flange Butterfly Valve

- Double Flanged Concentric Butterfly Valve/BV431-D3
- Double Flanged Double Eccentric Butterfly Valve/BV501

Check Valve

- Dual Plate Wafer Check Valve/CV770
- ASME Wafer Check Valve/CV772
- Rubber Lined Dual Plate Check Valve/CV771

Grooved End Butterfly Valve

- AWWA Grooved End Butterfly Valve/GBV632-01
- BS Grooved End Butterfly Valve/GBV632-02

Threaded End Butterfly Valve

- Threaded End Butterfly Valve/HBV801

Gate Valve

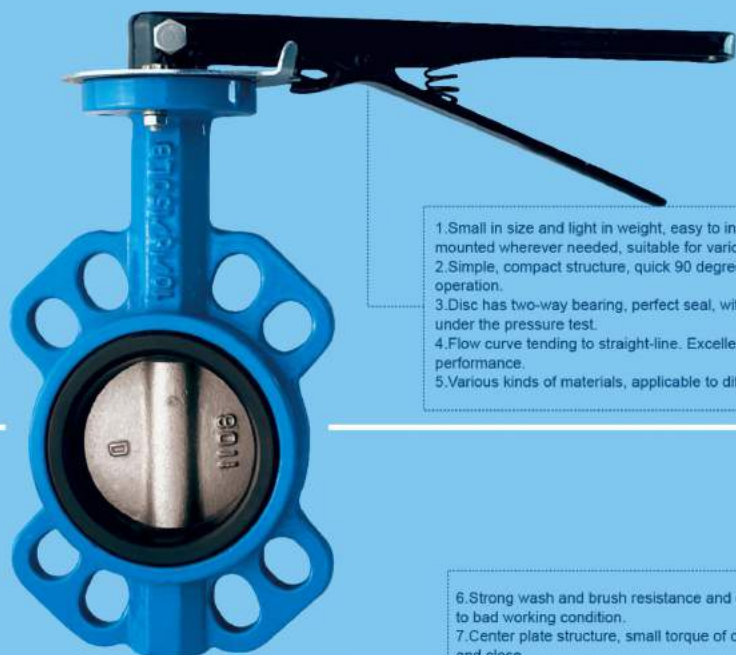
- Non Rising Stem Resilient Seated Gate Valve/GV110
- Knife Gate Valve/KGV110
- Rising Stem Resilient Seated Gate Valve/GV200

Y-type Filter

- Y-strainer/YS400

Expansion Joint

- Dismantling Joint(Expansion Joint) PN16/EJ001
- Dismantling Joint(Expansion Joint) PN10/EJ002



- 1.Small in size and light in weight, easy to install. It can be mounted wherever needed, suitable for various actuators.
- 2.Simple, compact structure, quick 90 degree on-off operation.
- 3.Disc has two-way bearing, perfect seal, without leakage under the pressure test.
- 4.Flow curve tending to straight-line. Excellent regulation performance.
- 5.Various kinds of materials, applicable to different medium.

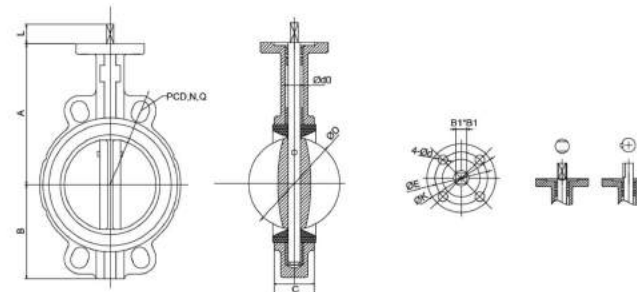
- 6.Strong wash and brush resistance and can fit to bad working condition.
- 7.Center plate structure, small torque of open and close.
- 8.Long service life. Standing the test of 10,000 times opening and closing operation.
- 9.Can be used in cutting off and regulation medium.
- 10.Disc & stem are fastened by pin, more stable.

SIZE: DN40-DN300 (1.5"-12")
standard:

- 1: Design standard: BS5155, API609, EN593
 - 2: Test standard: DIN3230 Part3, API598, EN12266-1
 - 3: Face to face standard: DIN3202K1, API609, EN558-1, ISO5752.
 - 4: Flange connection: DIN 2501 PN10&PN16, BS4504 PN10&PN16, ASME B16.1 125LB and 150LB, JIS B2220 10K.and so on.
- Medium: water, oil, gas and so on
Working pressure: 10bar/16bar
Test pressure :
Shell: 15bar/24bar
Seal: 11bar/17.6bar



5005 5007 5014 5015 5017 5018 5021 6016 6021 3013 3014 1023



Material of main parts

Name	Material	Specification
Body	Cast Iron	ASTM A126B
	Ductile Iron	ASTM A536
	Carbon Steel	A216 WCB
	Stainless Steel	A351 CF8M A351 CF8
Disc	Plated Ductile Iron	ASTM A536
	Aluminum Bronze	B148-95400
	Stainless Steel	A351 CF8M A351 CF8
Stem	Stainless Steel	A276-410 A276-304 A276-316
Seat	NBR(NITRILE)	
	EPDM	
	NEOPRENE(CR)	
	VITON(FKM)	
	NATURAL RUBBER(NR)	
Pin	Stainless Steel	A182 F6A A182 F304 A182 F316
Bushing	PTFE Bronze	
O-Ring	NBR	
	EPDM VITON	

★ Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	d0	PCD	N-Q	ISO 5211	ØK	ØE	N-Ød1	B1×B1	L
DN40	120	70	33	12.6	110	4-19	F05	65	50	4-7	9×9	26
DN50	140	80	43	12.6	125	4-19	F07	90	70	4-10	11×11	26
DN65	150	89	46	12.6	145	4-19	F07	90	70	4-10	11×11	30
DN80	158	95	46	12.6	160	8-19	F07	90	70	4-10	11×11	30
DN100	176	114	52	15.77	180	8-19	F07	90	70	4-10	11×11	30
DN125	190	127	56	18.92	210	8-19	F07	90	70	4-10	14×14	30
DN150	211	139	56	18.92	240	8-22	F07	90	70	4-10	14×14	40
DN200	235	175	60	22.1	295	8-22	F10	125	102	4-12	17×17	40
DN250	265	203	68	28.45	350	12-22	F10	125	102	4-12	22×22	40
DN300	305	242	78	31.6	400	12-22	F10	125	102	4-12	22×22	40

Parts Material Table		
No.	Part name	Parts materials
1	Body	Cast Iron / Ductile Iron
2	Disc	DI / CF8 / CF8M / C95400
3	Stem	SS410 / SS304 / SS316
4	Seat	EPDM / NBR / VITON / PTFE
5	Bushing	PTFE / Bronze
6	O-Ring	EPDM / NBR / VITON

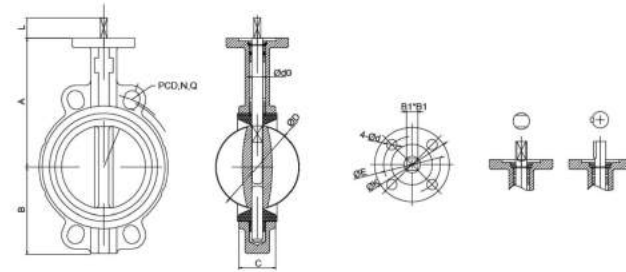


1. This corrosion resistant butterfly valve is a new-designed style with the PTFE liner ring inside.
 2. It can be fit for various corrosive and dangerous medium.
 3. Between the liner ring and the valve is the back liner which is made of high-elasticity rubber.

4. The liner ring disc adopts the double spherical surface sealing structure which is used to guarantee the reliable closing and sealing performance.
 5. With the ascendiant design, it will be safety and no leakage during the long-term use.

Size:DN40-DN300(1.5"-12") standard:

- Design standard: BS5155, API609, EN593
- Test standard: DIN3230 Part3, API598, EN12266-1
- Face to face standard: DIN3202K1, API609, EN558-1, ISO5752.
- Medium: water, sewage, oil, food, gas and so on.
- Flange connection: DIN2501 PN10/16, BS4504 PN10/16, ASME B16.1 125LB & 150LB, JISB2220 10K and so on.
- Working pressure: 10 bar / 16 bar
- Test pressure: Shell:15bar/24bar Seal: 11bar/17.6 bar



Material of main parts

Name	Material	Specification		
Body	Cast Iron	ASTM A126B		
	Ductile Iron	ASTM A536		
	Carbon Steel	A216 WCB		
	Stainless Steel	A351 CF8M A351 CF8		
Disc	Plated Ductile Iron	ASTM A536		
	Aluminum Bronze	B148-95400		
	Stainless Steel	A351 CF8M A351 CF8		
Stem	Stainless Steel	A276-410		
		A276-304		
		A276-316		
Seat	NBR(NITRILE) EPDM NEOPRENE(CR) VITON(FKM) NATURAL RUBBER(NR) PTFE			
			Stainless Steel	A182 F6A
				A182 F304
				A182 F316
Bushing	PTFE			
	Bronze	B62		
O-Ring	NBR EPDM VITON			

★ Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	d0	PCD	N-Q	ISO S211	ØK	ØE	N-Ød1	B1*B1	L
DN40	120	70	33	12.6	110	4-19	F05	65	50	4-7	9*9	26
DN50	140	80	43	12.6	125	4-19	F07	90	70	4-10	11*11	26
DN65	150	89	46	12.6	145	4-19	F07	90	70	4-10	11*11	30
DN80	158	95	46	12.6	160	8-19	F07	90	70	4-10	11*11	30
DN100	176	114	52	15.77	180	8-19	F07	90	70	4-10	11*11	30
DN125	190	127	56	18.92	210	8-19	F07	90	70	4-10	14*14	30
DN150	211	139	56	18.92	240	8-22	F07	90	70	4-10	14*14	40
DN200	235	175	60	22.1	295	8-22	F10	125	102	4-12	17*17	40
DN250	265	203	68	28.45	350	12-22	F10	125	102	4-12	22*22	40
DN300	305	242	78	31.6	400	12-22	F10	125	102	4-12	22*22	40

Parts Material Table		
No.	Part name	Parts materials
1	Body	Cast Iron / Ductile Iron
2	Disc	DI / CF8 / CF8M / C95400
3	Stem	SS410 / SS304 / SS316
4	Seat	EPDM / NBR / VITON / PTFE
5	Bushing	PTFE / Bronze
6	O-Ring	EPDM / NBR / VITON

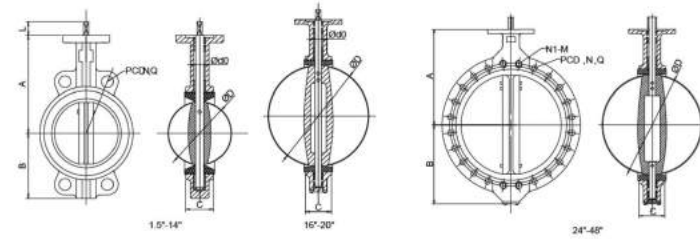


- 1.Small in size and light in weight, easy to install. It can be mounted wherever needed, suitable for various actuators.
- 2.Simple, compact structure, quick 90 degree on-off operation.
- 3.Disc has two-way bearing, perfect seal, without leakage under the pressure test.
- 4.Flow curve tending to straight-line. Excellent regulation performance.
- 5.Various kinds of materials, applicable to different medium.

- 6.Strong wash and brush resistance and can fit to bad working condition.
- 7.Center plate structure, small torque of open and close.
- 8.Long service life. Standing the test of 10,000 times opening and closing operation.
- 9.Can be used in cutting off and regulation medium.
- 10.Disc & stem are fastened by pin, more stable.

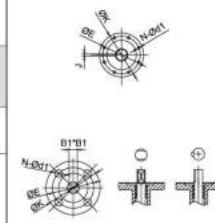
Size: DN40-DN1200(1.5"-48") standard:

- 1.Design standard:BS155, API609, EN593
2. Test standard:DIN3230 Part3, API598, EN12266-1
- 3.Face to face standard:DIN3202K1, API609, EN558-1, ISO5752
- 4.Medium: water, sewage, oil, food, gas and so on.
- 5.Flange connection:DIN2501 PN10/16, BS4504 PN10/16, ASME B16.1 125LB & 150LB, JISB2220 10K and so on.
6. Working pressure: 10 bar / 16 bar
7. Test pressure: Shell:15bar/24bar Seal: 11bar/17.6 bar



Material of main parts

Name	Material	Specification
Body	Cast Iron	ASTM A126B
	Ductile Iron	ASTM A536
	Carbon Steel	A216 WCB
	Stainless Steel	A351 CF8M A351 CF8
	Plated Ductile Iron	ASTM A536
Disc	Aluminum Bronze	B148-95400
	Stainless Steel	A351 CF8M A351 CF8
	Stainless Steel	A276-410 A276-304 A276-316
	Stainless Steel	A182 F6A A182 F304 A182 F316
Seat	NBR(NITRILE)	
	EPDM	
	NEOPRENE(CR)	
	VITON(FKM)	
	NATURAL RUBBER(NR)	
PTFE		
Pin	Stainless Steel	A182 F6A A182 F304 A182 F316
	PTFE	
Bushing	Bronze	B62
O-Ring	NBR	
	EPDM	
	VITON	



★ Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	d0	PCD	N-Q	N1-M	ISO 5211	ØK	ØE	N-Ød1	B1×B1	J	L
DN40	120	70	33	12.6	110	4-19	---	F05	65	50	4-7	9×9	---	26
DN50	161	80	43	12.6	125	4-19	---	F07	90	70	4-10	11×11	---	26
DN65	175	89	46	12.6	145	4-19	---	F07	90	70	4-10	11×11	---	30
DN80	181	95	46	12.6	160	8-19	---	F07	90	70	4-10	11×11	---	30
DN100	200	114	52	15.77	180	8-19	---	F07	90	70	4-10	11×11	---	30
DN125	213	127	56	18.92	210	8-19	---	F07	90	70	4-10	14×14	---	30
DN150	228	139	56	18.92	240	8-22	---	F07	90	70	4-10	14×14	---	40
DN200	260	175	60	22.1	295	8-22	---	F10	125	102	4-12	17×17	---	40
DN250	292	203	68	28.45	350	12-22	---	F10	125	102	4-12	22×22	---	40
DN300	337	242	78	31.6	400	12-22	---	F10	125	102	4-12	22×22	---	40
DN350	368	267	78	31.6	460	16-22	---	F10	125	102	4-12	22×22	---	40
DN400	400	309	102 ^②	33.15 ^②	515	16-26	---	F14	175	140	4-18	27×27	---	50
DN450	422	328	114 ^②	37.95 ^②	565	20-26	---	F14	175	140	4-18	27×27	---	70
DN500	480	361	127	41.12 ^②	620	20-26	---	F14	175	140	4-18	36×36	---	80
DN600	562	459	154	50.62 ^②	725	20-30	---	F16	210	165	4-23	36×36	---	80
DN700	624	520	165	63.35	840	20-30	4-M27	F25	300	254	8-18	---	2-18	85
DN800	672	591	190	63.35	950	20-33	4-M30	F25	300	254	8-18	---	2-18	95
DN900	720	656	203	74.7	1050	24-33	4-M30	F25	300	254	8-18	---	2-20	118
DN1000	800	721	216	84.7	1160	24-36	4-M33	F25	300	254	8-18	---	2-22	118
DN1200	941	864	256	104.7	1380	28-39	4-M36	F30	350	298	8-22	---	2-28	154

Note:

*The shaft end can be double D and key connection. From DN700 and above, the shaft end is double keys.

*The flange connection of the above table can be DIN2501 PN16, ASME B16.47-A 125/150LB, BS4504 PN10/PN16, JIS B2220 10K and so on.

*Please inform us if there is any dimension need to be adjusted.

①When working pressure is PN16, the diameter of the stems are different from PN10. (from DN400-DN600)

②DN400's valve face to face can be 85.7mm& 102mm, DN450's valve face to face can be 104mm& 114mm.

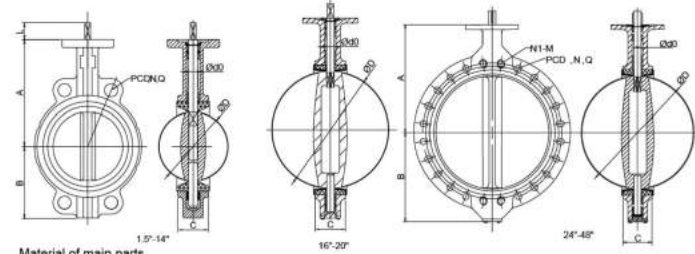


- 1.Small in size, light in weight, easy to install. It can be mounted wherever needed, suitable for various actuators.
- 2.Simple, compact structure, quick 90 degree on-off operation.
- 3.Disc has two-way bearing, perfect seal, zero leakage under the pressure test.
- 4.Flow curve tending to straight-line. Excellent regulation performance.
- 5.Various kinds of materials, applicable to different medium.

- 6.Strong wash and brush resistance and can fit to bad working condition.
- 7.Center plate structure, small torque of open and close.
- 8.Long service life. Standing the test of 10,000 times opening and closing operation.
- 9.Can be used in cutting off and regulation medium.
- 10.Without pin structure, function better.

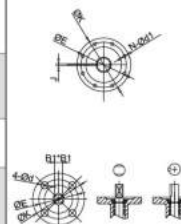
Size: DN40-DN1200(1.5"-48") standard:

1. Design standard: BS5155, API609, EN593
2. Test standard: DIN3230 Part3, API598, EN12266-1
3. Face to face standard : DIN3202K1, API609, EN558-1, ISO5752.
4. Medium: water, sewage, oil, food, gas and so on.
5. Flange connection: DIN2501 PN10/16, BS4504 PN10/16, ASME B16.1 125LB & 150LB, JISB2220 10K and so on.
6. Working pressure: 10 bar / 16 bar
7. Test pressure: Shell:15bar/24bar Seal: 11bar/17.6 bar



Material of main parts

Name	Material	Specification ASTM
Body	Cast Iron	ASTM A126B
	Ductile Iron	ASTM A536
	Carbon Steel	A216 WCB
Disc	Stainless Steel	A351 CF8M A351 CF8
	Plated Ductile Iron	ASTM A536
	Aluminum Bronze	B148-95400
Stem	Stainless Steel	A351 CF8M A351 CF8
	Stainless Steel	A276-410
	Stainless Steel	A276-304 A276-316
Seal	NBR(NITRILE)	
	EPDM	
	NEOPRENE(CR)	
	VITON(FKM)	
	NATURAL RUBBER(NR)	
Pin	Stainless Steel	A182 F6A A182 F304 A182 F316
	PTFE	
Bushing	Bronze	B62
O-Ring	NBR	
	EPDM	
	VITON	



★ Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	d0	PCD	N-Q	N1-M	ISO 5211	ØK	ØE	N-Ød1	B1×B1	J	L
DN40	120	70	33	12.6	110	4-19	---	F05	65	50	4-7	9×9	---	26
DN50	161	80	43	12.6	125	4-19	---	F07	90	70	4-10	11×11	---	26
DN65	175	89	46	12.6	145	4-19	---	F07	90	70	4-10	11×11	---	30
DN80	181	95	46	12.6	180	8-19	---	F07	90	70	4-10	11×11	---	30
DN100	200	114	52	15.77	180	8-19	---	F07	90	70	4-10	11×11	---	30
DN125	213	127	56	18.92	210	8-19	---	F07	90	70	4-10	14×14	---	30
DN150	226	139	56	18.92	240	8-22	---	F07	90	70	4-10	14×14	---	40
DN200	260	175	60	22.1	295	8-22	---	F10	125	102	4-12	17×17	---	40
DN250	292	203	68	28.45	350	12-22	---	F10	125	102	4-12	22×22	---	40
DN300	337	242	78	31.6	400	12-22	---	F10	125	102	4-12	22×22	---	40
DN350	368	267	78	31.6	460	16-22	---	F10	125	102	4-12	22×22	---	40
DN400	400	309	102 ^①	33.15 ^①	515	16-26	---	F14	175	140	4-18	27×27	---	50
DN450	422	328	114 ^①	37.95 ^①	565	20-26	---	F14	175	140	4-18	27×27	---	70
DN500	480	361	127	41.12 ^①	620	20-26	---	F14	175	140	4-18	36×36	---	80
DN600	562	459	154	50.62 ^①	725	20-30	---	F16	210	165	4-23	36×36	---	80
DN700	624	520	165	63.35	840	20-30	4-M27	F25	300	254	8-18	---	2-18	85
DN800	672	591	190	63.35	950	20-33	4-M30	F25	300	254	8-18	---	2-18	95
DN900	720	656	203	74.7	1050	24-33	4-M30	F25	300	254	8-18	---	2-20	118
DN1000	800	721	216	84.7	1160	24-36	4-M33	F25	300	254	8-18	---	2-22	118
DN1200	941	864	256	104.7	1380	28-39	4-M36	F30	350	298	8-22	---	2-28	154

Note:

*The shaft end can be double D and key connection. From DN700 and above, the shaft end is double keys.
 *The flange connection of the above table can be DIN2501 PN16, ASME B16.47-A 125/150LB, BS4504 PN10/PN16, JIS B2220 10K and so on.

*Please inform us if there is any dimension need to be adjusted.

①When working pressure is PN16, the diameter of the stems are different from PN10.(from DN400-DN600)

②DN400's valve face to face can be 85.7mm& 102mm, DN450's valve face to face can be 104mm&114mm.

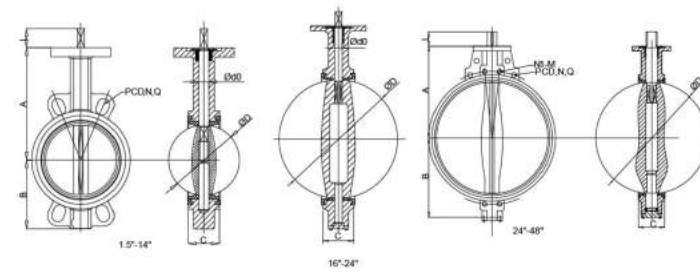


- 1.Small in size, light in weight, easy to install. It can be mounted wherever needed, suitable for various actuators.
- 2.Simple, compact structure, quick 90 degree on-off operation.
- 3.The disc is painted with Aksu, it can be used for drinking water system.
- 4.Flow curve tending to straight-line. Excellent regulation performance.
- 5.Various kinds of materials, applicable to different medium.

- 6.Strong wash and brush resistance and can fit to bad working condition.
- 7.Center plate structure, small torque of open and close.
- 8.Long service life. Standing the test of 10,000 times opening and closing operation.
- 9.Can be used in cutting off and regulation medium.
- 10.Without pin structure, function better.

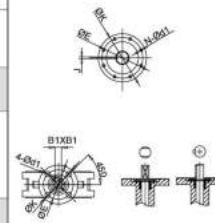
Size: DN40-DN1200(1.5"-48") standard:

- 1.Design standard:BS5155, API609, EN593
2. Test standard:DIN3230 Part3, API598, EN12266-1
- 3.Face to face standard:DIN3202K1, API609, EN558-1, ISO5752
- 4.Medium: water, sewage, oil, food, gas and so on.
- 5.Flange connection:DIN2501 PN10/16, BS4504 PN10/16, ASME B16.1 125LB & 150LB, JISB2220 10K and so on.
6. Working pressure: 10 bar / 16 bar
7. Test pressure: Shell:15bar/24bar Seal: 11bar/17.6 bar



Material of main parts

Name	Material	Specification ASTM
Body	Cast Iron Ductile Iron	ASTM A126B ASTM A536
Disc	Plated Ductile Iron Aluminum Bronze Stainless Steel	ASTM A536 B148-95400 A351 CF8M A351 CF8
Stem	Stainless Steel	A276-410 A276-304 A276-316
Seat	NBR(NITRILE) EPDM NEOPRENE(CR) VITON(FKM) NATURAL RUBBER(NR) PTFE	
Pin	Stainless Steel	A182 F6A A182 F304 A182 F316
Bushing	PTFE Bronze	
O-Ring	NBR EPDM VITON	B62



★ Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	d0	PCD	N-Q	N1-M	ISO 5211	OK	OE	N-Qd1	B1-B1	J	L
DN40	120	57	33	12.6	110	4-19	---	F05	65	50	4-7	9×9	---	26
DN50	140	65	43	12.6	125	4-19	---	F05	65	50	4-7	9×9	---	26
DN65	150	75	46	12.6	145	4-19	---	F05	65	50	4-7	9×9	---	30
DN80	158	93	46	12.6	160	8-19	---	F05	65	50	4-7	9×9	---	30
DN100	176	109	52	15.77	180	8-19	---	F07	90	70	4-10	11×11	---	30
DN125	190	125	56	18.92	210	8-19	---	F07	90	70	4-10	14×14	---	30
DN150	211	140	56	18.92	240	8-22	---	F07	90	70	4-10	14×14	---	40
DN200	235	170	60	22.1	295	8-22	---	F10	125	102	4-12	17×17	---	40
DN250	265	205	68	28.45	350	12-22	---	F10	125	102	4-12	22×22	---	40
DN300	305	238	78	31.6	400	12-22	---	F10	125	102	4-12	22×22	---	40
DN350	368	267	78	31.6	460	16-22	---	F10	125	102	4-12	22×22	---	40
DN400	400	309	102	33.15 ^①	515	16-26	---	F14	175	140	4-18	27×27	---	50
DN450	422	328	114	37.95 ^①	565	20-26	---	F14	175	140	4-18	27×27	---	70
DN500	480	361	127	41.12 ^①	620	20-26	---	F14	175	140	4-18	36×36	---	80
DN600	562	459	154	50.82 ^①	725	20-30	---	F16	210	165	4-23	36×36	---	80
DN700	624	520	165	63.35	840	20-30	4-M27	F25	300	254	8-18	---	2-18	85
DN800	672	591	190	63.35	950	20-33	4-M30	F25	300	254	8-18	---	2-18	95
DN900	720	656	203	74.7	1050	24-33	4-M30	F25	300	254	8-18	---	2-20	118
DN1000	800	721	216	84.7	1160	24-36	4-M33	F25	300	254	8-18	---	2-22	118
DN1200	941	864	256	104.7	1380	28-39	4-M36	F30	350	298	8-22	---	2-28	154

Note:

- *The shaft end can be double D and key connection. From DN700 and above, the shaft end is double keys.
- *The flange connection of the above table can be DIN2501 PN16, ASME B16.47-A 125/150LB, BS4504 PN10/PN16, JIS B2220 10K and so on.
- *Please inform us if there is any dimension need to be adjusted.
- ①When working pressure is PN16, the diameter of the stems are different from PN10.(from DN400-DN800)



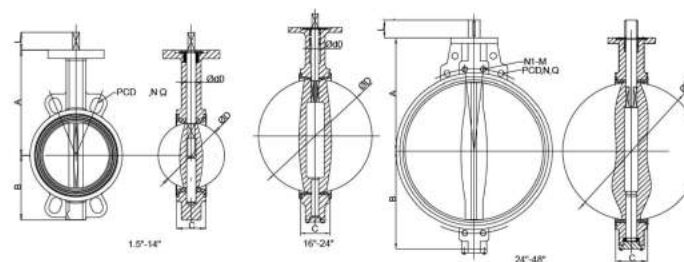
1. Small in size, light in weight, easy to install. It can be mounted wherever needed, suitable for various actuators.
2. Simple, compact structure, quick 90 degree on-off operation.
3. Disc has two-way bearing, perfect seal, zero leakage under the pressure test.
4. Flow curve tending to straight-line. Excellent regulation performance.
5. Vulcanized Seat, Good stability, Zero leakage.

6. It is widely used in desulfurization, outdoors.
7. Center plate structure, small torque of open and close.
8. Long service life. Standing the test of 10,000 times opening and closing operation.
9. Can be used in cutting off and regulation medium.
10. Without pin structure, function better.

Size: DN40-DN1200(1.5"-48")

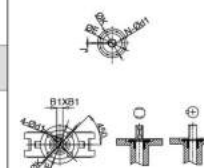
Standard:

1. Design standard: BS5155, API609, EN593
2. Test standard: DIN3230 Part3, API598, EN12266-1
3. Face to face standard: DIN3202K1, API609, EN558-1, ISO5752
4. Medium: water, sewage, oil, food, gas and so on.
5. Flange connection: DIN2501 PN10/16, BS4504 PN10/16, ASME B16.1 125LB & 150LB, JISB2220 10K and so on.
6. Working pressure: 10 bar / 16 bar
7. Test pressure: Shell: 15bar/24bar Seal: 11bar/17.6 bar



Material of main parts

Name	Material	Specification
Body	Cast Iron	ASTM A126B
	Ductile Iron	ASTM A536
Disc	Plated Ductile Iron	ASTM A536
	Aluminum Bronze	B148-95400
	Stainless Steel	A351 CF8M
		A351 CF8
Stem	Stainless Steel	A276-410
		A276-304
		A276-316
Seat	NBR(NITRILE)	
	EPDM	
	NEOPRENE(CR)	
	VITON(FKM)	
Pin	Stainless Steel	A182 F6A
		A182 F304
Bushing	PTFE	
	Bronze	B62
O-Ring	NBR	
	EPDM	
	VITON	



★ Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	d0	PCD	N-Q	N1-M	ISO 5211	ØK	ØE	N-Ød1	B1×B1	J	L
DN40	120	57	33	12.6	110	4-19	---	F05	65	50	4-7	9×9	---	26
DN50	140	65	43	12.6	125	4-19	---	F05	65	50	4-7	9×9	---	26
DN65	150	75	46	12.6	145	4-19	---	F05	65	50	4-7	9×9	---	30
DN80	158	93	46	12.6	160	8-19	---	F05	65	50	4-7	9×9	---	30
DN100	176	109	52	15.77	180	8-19	---	F07	90	70	4-10	11×11	---	30
DN125	190	125	56	18.92	210	8-19	---	F07	90	70	4-10	14×14	---	30
DN150	211	140	56	18.92	240	8-22	---	F07	90	70	4-10	14×14	---	40
DN200	235	170	60	22.1	295	8-22	---	F10	125	102	4-12	17×17	---	40
DN250	265	205	68	28.45	350	12-22	---	F10	125	102	4-12	22×22	---	40
DN300	305	238	78	31.6	400	12-22	---	F10	125	102	4-12	22×22	---	40
DN350	368	267	78	31.6	460	16-22	---	F10	125	102	4-12	22×22	---	40
DN400	400	309	102	33.15 [Ⓟ]	515	16-26	---	F14	175	140	4-18	27×27	---	50
DN450	422	328	114	37.95 [Ⓟ]	565	20-26	---	F14	175	140	4-18	27×27	---	70
DN500	480	361	127	41.12 [Ⓟ]	620	20-26	---	F14	175	140	4-18	36×36	---	80
DN600	562	459	154	50.62 [Ⓟ]	725	20-30	---	F16	210	165	4-23	36×36	---	80
DN700	624	520	165	63.35	840	20-30	4-M27	F25	300	254	8-18	---	2-18	85
DN800	672	591	190	63.35	950	20-33	4-M30	F25	300	254	8-18	---	2-18	95
DN900	720	656	203	74.7	1050	24-33	4-M30	F25	300	254	8-18	---	2-20	118
DN1000	800	721	216	84.7	1160	24-36	4-M33	F25	300	254	8-18	---	2-22	118
DN1200	941	864	256	104.7	1380	28-39	4-M36	F30	350	298	8-22	---	2-28	154

Note:

- *The shaft end can be double D and key connection. From DN700 and above, the shaft end is double keys.
- *The flange connection of the above table can be DIN2501 PN16, ASME B16.47-A 125/150LB, BS4504 PN10/PN16, JIS B2220 10K and so on.
- *Please inform us if there is any dimension need to be adjusted.
- ①When working pressure is PN16, the diameter of the stems are different from PN10, (from DN400-DN800)

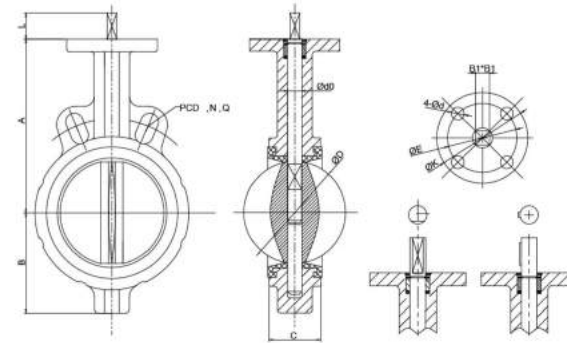


- 1.Small in size, light in weight, easy to install. It can be mounted wherever needed, suitable for various actuators.
- 2.Simple, compact structure, quick 90 degree on-off operation.
- 3.Disc has two-way bearing, perfect seal, zero leakage under the pressure test.
- 4.Flow curve tending to straight-line. Excellent regulation performance.
- 5.Various kinds of materials, applicable to different medium.

- 6.Strong wash and brush resistance and can fit to bad working condition.
- 7.Center plate structure, small torque of open and close.
- 8.Long service life. Standing the test of 10,000 times opening and closing operation.
- 9.Can be used in cutting off and regulation medium.
- 10.Without pin structure, function better.

Size:DN40-DN300(1.5"-12")
Standard:

- 1.Design standard:BS5155, API609, EN593
2. Test standard:DIN3230 Part3, API598, EN12266-1
- 3.Face to face standard:DIN3202K1, API609, EN558-1, ISO5752
4. Medium: water, sewage, oil, food, gas and so on.
- 5.Flange connection:DIN2501 PN10/16, BS4504 PN10&PN16, ASME B16.1 125LB & 150LB, JISB2220 5K&10K and so on.
6. Working pressure: 10 bar / 16 bar
7. Test pressure:
Shell:15bar/24bar
Seal: 11bar/17.6 bar



Material of main parts

Name	Material	Specification
Body	Cast Iron	ASTM A126B
	Ductile Iron	ASTM A536
Disc	Plated Ductile Iron	ASTM A536
	Aluminum Bronze	B148-95400
	Stainless Steel	A351 CF8M A351 CF8
		A276-410 A276-304 A276-316
Stem	Stainless Steel	
Seal	NBR(NITRILE)	
	EPDM	
	NEOPRENE(CR)	
	VITON(FKM)	
Pin	Stainless Steel	A182 F6A
		A182 F304
		A182 F316
Bushing	PTFE	
O-Ring	Bronze	B62
	NBR	
	EPDM	
	VITON	

★ Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	d0	PCD	N-Q	ISO S211	ØK	ØE	N-Ød1	B1×B1	L
DN50	140	61	43	12.6	125	4-19	F07	90	70	4-10	11×11	26
DN65	150	68	46	12.6	145	4-19	F07	90	70	4-10	11×11	30
DN80	158	76	46	12.6	160	8-19	F07	90	70	4-10	11×11	30
DN100	176	92	52	15.77	180	8-19	F07	90	70	4-10	11×11	30
DN125	190	107	56	18.92	210	8-19	F07	90	70	4-10	14×14	30
DN150	211	120	56	18.92	240	8-22	F07	90	70	4-10	14×14	40
DN200	235	151	60	22.1	295	8-22	F10	125	102	4-12	17×17	40
DN250	265	186	68	28.45	350	12-22	F10	125	102	4-12	22×22	40
DN300	305	211	78	31.6	400	12-22	F10	125	102	4-12	22×22	40

Part Name	Parts materials
Body	Cast Iron / Ductile Iron
Disc	DI / CF8 / CF8M / C95400
Stem	SS410 / SS304 / SS316
Seal	EPDM / NBR / VITON
Bushing	PTFE / Bronze
O-Ring	EPDM / NBR / VITON

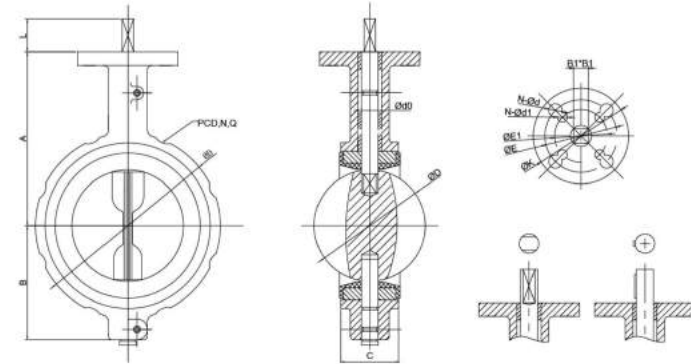


1. It is the perfect choice for work areas with space constraints.
2. Its shorter neck makes the BV112-C1 an ideal valve for trucks, trailers, tanks, or anywhere a compact valve may be desirable.
3. It is designed with notches in the body, to guide flange bolts during installation, and to keep the valve aligned with the flange during use.
4. It is designed with a two piece stem which allows for maximum flow values, and for repair of valve parts without special tools.

5. Its pressure rated to 200 PSI and is available in sizes 2" through 12". Provides a secondary seal to help prevent leakage through the stem journal.
6. Phenolic-backed resilient seat provides bubble tight shut-off up to 200 PSI.
7. The P.T.F.E. Stem bushings reduce torque requirements and help increase stem life by isolating the stem from the valve body.
8. Double D stem design provides extended stem life. Mounting pad & stem dimensions meet ISO 5211 requirements.

Size: DN40-DN300(1.5"-12")
Standard:

1. Design standard: BS5155, API609, EN593
2. Test standard: DIN3230 Part3, API598, EN12266-1
3. Face to face standard: DIN3202K1, API609, EN558-1, ISO5752
4. Medium: water, sewage, oil, food, gas and so on.
5. Flange connection: DIN2501 PN10/16, BS4504 PN10/16, ASME B16.1 125LB & 150LB, JISB2220 10K and so on.
6. Working pressure: 10 bar / 16 bar
7. Test pressure:
Shell: 15bar/24bar
Seal: 11bar/17.6 bar



Material of main parts

Name	Material	Specification
Body	Cast Iron Ductile Iron	ASTM ASTM A126B ASTM A536
Disc	Plated Ductile Iron Aluminum Bronze Stainless Steel	ASTM A536 B148-95400 A351 CF8M A351 CF8
Stem	Stainless Steel	A276-410 A276-304 A276-316
Seat	NBR(NITRILE) EPDM NEOPRENE(CR) VITON(FKM) NATURAL RUBBER(NR)	
Pin	Stainless Steel	A182 F6A A182 F304 A182 F316
Bushing	PTFE Bronze	
O-Ring	NBR EPDM VITON	B62

★ Other special material requested, please contact us directly.

Connecting dimensions(End flange ASME B16.1 150LB)

(Unit:mm)

SIZE	A	B	C	d0	D	PCD	N-Q	ØK	ØE	ØE1	N-Ød	N-Ød1	B1×B1	L
DN50	116	67	43	12.6	104	120.6	4-19	101.6	82.55	50	4-11.2	4-7	11×11	26
DN65	121	80	46	12.6	118	139.7	4-19	101.6	82.55	50	4-11.2	4-7	11×11	30
DN80	124	84	46	12.6	136	162.4	4-19	101.6	82.55	50	4-11.2	4-7	11×11	30
DN100	152	91	52	15.77	175	190.5	8-19	101.6	82.55	70	4-11.2	4-10	11×11	30
DN125	159	122	56	18.92	186	215.9	8-22.4	101.6	82.55	70	4-11.2	4-10	14×14	30
DN150	165	127	56	18.92	222	241.3	8-22.4	101.6	82.55	70	4-11.2	4-10	14×14	40
DN200	204	156	60	22.1	279	298.4	8-22.4	153.6	127	102	4-14.3	4-12	17×17	40
DN250	253	189	68	28.45	339	361.9	12-25.4	153.6	127	102	4-14.3	4-12	22×22	40
DN300	310	245	78	31.6	409	431.8	12-25.4	153.6	127	102	4-14.3	4-12	22×22	40

Part Name	Parts materials
Body	Cast Iron / Ductile Iron
Disc	DI / CF8 / CF8M / C95400
Stem	SS410 / SS304 / SS316
Seat	EPDM / NBR / VITON
Bushing	PTFE / Bronze
O-Ring	EPDM / NBR / VITON

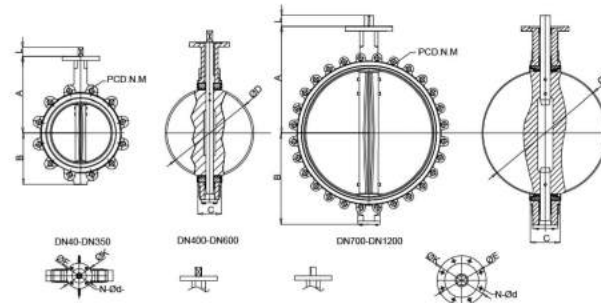


1. Small in size and light in weight, easy to install. It can be mounted wherever needed, suitable for various actuators.
2. Lug type butterfly valve can be used on the end of the pipeline.
3. Lug type butterfly valve has threaded metal inserts (usually stainless steel) installed in the valve's bolt holes.
4. The inserts are threaded on both ends, which allows this lug style valve to be installed into a system using two sets of bolts and no nuts for each hole.

5. The valve is installed between two flanges using a separate set of bolts for each side of the flange.
6. This setup permits either side of the piping system to be disconnected without disturbing the other side.
7. When used in the end of pipeline service, it has a reduced pressure rating. E.g, it rates 150 PSI when mounted between two flanges, while it rates just 75 PSI when mounted in the end of pipeline service.

Size: DN40-DN1200(1.5"-48")
Standard:

- 1.Design standard: BS5155, API609, EN593
2. Test standard: DIN3230 Part3, API598, EN12266-1
- 3.Face to face standard: DIN3202K1, API609, EN558-1, ISO5752
- 4.Medium: water, sewage, oil, food, gas and so on.
- 5.Flange connection: DIN2501 PN10/16, BS4504 PN10/16, ASME B16.1 125LB & 150LB, JISB2220 10K and so on.
6. Working pressure: 10 bar / 16 bar
7. Test pressure:
Shell:15bar/24bar
Seal: 11bar/17.6 bar



Main parts

Name	Material	Specification
		ASTM
Body	Cast Iron	ASTM A126B
	Ductile Iron	ASTM A536
	Carbon Steel	A216 WCB
	Stainless Steel	A351 CF8M A351 CF8
Disc	Plated Ductile Iron	ASTM A536
	Aluminum Bronze	B148-954
	Stainless Steel	A351 CF8M A351 CF8
Stem	Carbon Steel	A216 WCB
	Carbon Steel	A216 WCB
Stem	Stainless Steel	A276-410
		A276-304
		A276-316
		A276-316L

Name	Material	Specification
		ASTM
Seat	NBR(NITRILE)	EPDM
		NEOPRENE(NR)
		VITON(FKM)
		NATURAL RUBBER(NR)
		PTFE
PIN	Stainless Steel	A182 F6A
		A182 F304
		A182 F316
Bushing	PTFE	Bronze
		B62
O-Ring	NBR	EPDM
		VITON

★ Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	φD	PCD	N-Q	ISO 5211	φK	φE	N-Qd1	B1×B1	J	L
DN40	120	70	33	12.6	110	4-M16	F05	65	50	4-7	9×9	---	26
DN50	161	80	43	12.6	125	4-M16	F07	90	70	4-10	11×11	---	26
DN65	175	89	46	12.6	145	4-M16	F07	90	70	4-10	11×11	---	30
DN80	181	95	46	12.6	160	8-M16	F07	90	70	4-10	11×11	---	30
DN100	200	114	52	15.77	180	8-M16	F07	90	70	4-10	11×11	---	30
DN125	213	127	56	18.92	210	8-M16	F07	90	70	4-10	14×14	---	30
DN150	226	139	56	18.92	240	8-M20	F07	90	70	4-10	14×14	---	40
DN200	260	175	60	22.1	295	8-M20	F10	125	102	4-12	17×17	---	40
DN250	292	203	68	28.45	350	12-M20	F10	125	102	4-12	22×22	---	40
DN300	337	242	78	31.6	400	12-M20	F10	125	102	4-12	22×22	---	40
DN350	368	267	78	31.6	460	16-M20	F10	125	102	4-12	22×22	---	40
DN400	400	309	102 ^②	33.15 ^②	515	16-M24	F14	175	140	4-18	27×27	---	50
DN450	422	328	114 ^②	37.95 ^②	565	20-M24	F14	175	140	4-18	27×27	---	70
DN500	480	361	127	41.12 ^②	620	20-M24	F14	175	140	4-18	36×36	---	80
DN600	562	459	154	50.82 ^②	725	20-M27	F16	210	165	4-23	36×36	---	80
DN700	624	520	165	63.35	840	24-M27	F25	300	254	8-18	---	2-18	85
DN800	672	591	190	63.35	950	24-M30	F25	300	254	8-18	---	2-18	95
DN900	720	656	203	74.7	1050	28-M33	F25	300	254	8-18	---	2-20	118
DN1000	800	721	216	84.7	1160	28-M33	F25	300	254	8-18	---	2-22	118
DN1200	941	864	276	104.7	1380	32-M26	F30	350	298	8-22	---	2-28	154

Note:

- *The shaft end can be double D and key connection. From DN700 and above, the shaft end is double keys.
- *The flange connection of the above table can be DIN2501 PN16, ASME B16.47-A 125/150LB, BS4504 PN10/PN16, JIS B2220 10K and so on.
- *Please inform us if there is any dimension need to be adjusted.
- ①When working pressure is PN16, the diameter of the stems are different from PN10.(from DN400-DN600)
- ②DN400's valve face to face can be 85.7mm& 102mm, DN450's valve face to face can be 104mm&114mm.

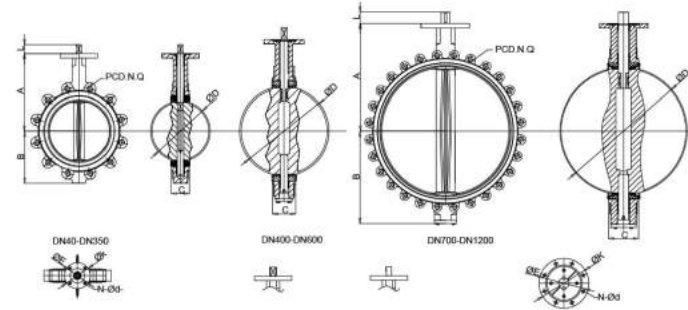


1. Small in size and light in weight, easy to install. It can be mounted wherever needed, suitable for various actuators.
2. Lug type butterfly valve can be used on the end of the pipeline.
3. Lug type butterfly valve has threaded metal inserts (usually stainless steel) installed in the valve's bolt holes.
4. The inserts are threaded on both ends, which allows this lug style valve to be installed into a system using two sets of bolts and no nuts for each hole.

5. The valve is installed between two flanges using a separate set of bolts for each side of the flange.
6. This setup permits either side of the piping system to be disconnected without disturbing the other side.
7. When used in the end of pipeline service, it has a reduced pressure rating. E.g, it rates 150 PSI when mounted between two flanges, while it rates just 75 PSI when mounted in the end of pipeline service.

Size: DN40-DN1200(1.5"-48")
Standard:

- 1.Design standard: BS5155, API609, EN593
- 2.Test standard: DIN3230 Part3, API598, EN12266-1
- 3.Face to face standard: DIN3202K1, API609, EN558-1, ISO5752
- 4.Medium: water, sewage, oil, food, gas and so on.
- 5.Flange connection: DIN2501 PN10/16, BS4504 PN10/16, ASME B16.1 125LB & 150LB, JISB2220 10K and so on.
6. Working pressure: 10 bar / 16 bar
7. Test pressure:
Shell:15bar/24bar
Seal: 11bar/17.6 bar



Main parts

Name	Material	Specification
		ASTM
Body	Cast Iron	ASTM A128B
	Ductile Iron	ASTM A536
	Carbon Steel	A216 WCB
	Stainless Steel	A351 CF8M A351 CF8
Disc	Plated Ductile Iron	ASTM A536
	Aluminum Bronze	B148-954
	Stainless Steel	A351 CF8M A351 CF8
	Carbon Steel	A216 WCB
Stem	Carbon Steel	A216 WCB
	Stainless Steel	A276-410 A276-304 A276-316 A276-316L

Name	Material	Specification
		ASTM
Seal	NBR(NITRILE)	
	EPDM	
	NEOPRENE(NR)	
	VITON(FKM)	
	NATURAL RUBBER(NR)	
Bushing	PTFE	
	Bronze	B62
O-Ring	NBR	
	EPDM	
	VITON	

*Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	øD	PCD	N-Q	ISO 5211	ØK	ØE	N-Øø1	B1×B1	J	L
DN40	120	70	33	12.6	110	4-M16	F05	65	50	4-7	9×9	---	26
DN50	161	80	43	12.6	125	4-M16	F07	90	70	4-10	11×11	---	26
DN65	175	89	46	12.6	145	4-M16	F07	90	70	4-10	11×11	---	30
DN80	181	95	46	12.6	160	8-M16	F07	90	70	4-10	11×11	---	30
DN100	200	114	52	15.77	180	8-M16	F07	90	70	4-10	11×11	---	30
DN125	213	127	56	18.92	210	8-M16	F07	90	70	4-10	14×14	---	30
DN150	226	139	56	18.92	240	8-M20	F07	90	70	4-10	14×14	---	40
DN200	260	175	80	22.1	295	8-M20	F10	125	102	4-12	17×17	---	40
DN250	292	203	88	28.45	350	12-M20	F10	125	102	4-12	22×22	---	40
DN300	337	242	78	31.6	400	12-M20	F10	125	102	4-12	22×22	---	40
DN350	368	267	78	31.6	460	16-M20	F10	125	102	4-12	22×22	---	40
DN400	400	309	102 ^①	33.15 ^①	515	16-M24	F14	175	140	4-18	27×27	---	50
DN450	422	328	114 ^①	37.95 ^①	565	20-M24	F14	175	140	4-18	27×27	---	70
DN500	480	361	127	41.12 ^①	620	20-M24	F14	175	140	4-18	36×36	---	80
DN600	624	459	154	50.82 ^①	725	20-M27	F16	210	165	4-23	36×36	---	80
DN700	624	520	165	63.35	840	24-M27	F25	300	254	8-18	---	2-18	85
DN800	672	591	190	63.35	950	24-M30	F25	300	254	8-18	---	2-18	95
DN900	720	656	203	74.7	1050	28-M33	F25	300	254	8-18	---	2-20	118
DN1000	800	721	216	84.7	1160	28-M33	F25	300	254	8-18	---	2-22	118
DN1200	941	864	276	104.7	1380	32-M26	F30	350	298	8-22	---	2-28	154

Note:

*The shaft end can be double D and key connection. From DN700 and above, the shaft end is double keys.

*The flange connection of the above table can be DIN2501 PN16, ASME B16.47-A 125/150LB, BS4504 PN10/PN16, JIS B2220 10K and so on.

*Please inform us if there is any dimension need to be adjusted.

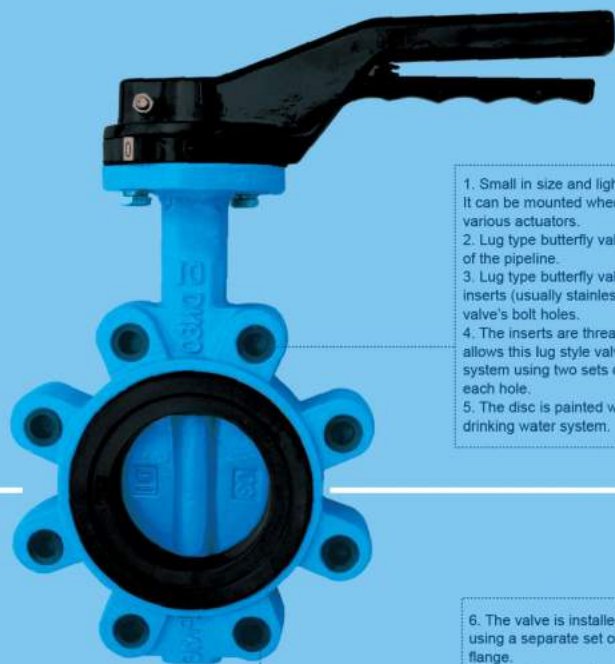
①When working pressure is PN16, the diameter of the stems are different from PN10.(from DN400-DN600)

②DN400's valve face to face can be 85.7mm& 102mm, DN450's valve face to face can be 104mm&114mm.



Shanxi Solid Industrial Co.,Ltd

Non Backed Lug Butterfly Valve Series: BV221-D2



1. Small in size and light in weight, easy to install. It can be mounted wherever needed, suitable for various actuators.
2. Lug type butterfly valve can be used on the end of the pipeline.
3. Lug type butterfly valve has threaded metal inserts (usually stainless steel) installed in the valve's bolt holes.
4. The inserts are threaded on both ends, which allows this lug style valve to be installed into a system using two sets of bolts and no nuts for each hole.
5. The disc is painted with Akzo, it can be used for drinking water system.

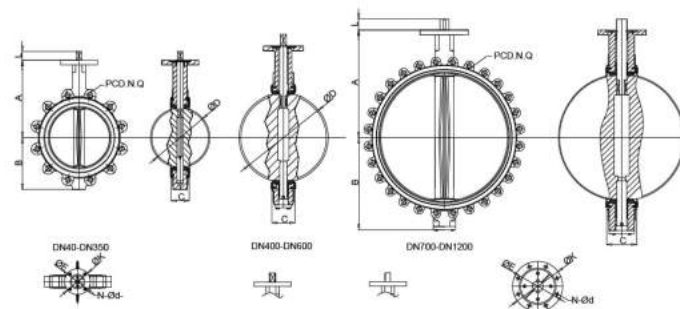
6. The valve is installed between two flanges using a separate set of bolts for each side of the flange.
7. This setup permits either side of the piping system to be disconnected without disturbing the other side.
8. When used in the end of pipeline service, it has a reduced pressure rating. E.g, it rates 150 PSI when mounted between two flanges, while it rates just 75 PSI when mounted in the end of pipeline service.

Size: DN40-DN1200(1.5"-48")
Standard:

- 1.Design standard: BS5155, API609, EN593
2. Test standard: DIN3230 Part3, API598, EN12266-1
- 3.Face to face standard: DIN3202K1, API609, EN558-1, ISO5752
- 4.Medium: water, sewage, oil, food, gas and so on.
- 5.Flange connection: DIN2501 PN10/16, BS4504 PN10/16, ASME B16.1 125LB & 150LB, JISB2220 10K and so on.
6. Working pressure: 10 bar / 16 bar
7. Test pressure:
- Shell: 15bar/24bar
- Seal: 11bar/17.6 bar



Shanxi Solid Industrial Co.,Ltd



Main part

Name	Material	Specification	Name	Material	Specification	
		ASTM			ASTM	
Body	Cast Iron	ASTM A126B	Seat	NBR(NITRILE)		
	Ductile Iron	ASTM A536		EPDM		
	Carbon Steel	A216 WCB		NEOPRENE(NR)		
	Stainless Steel	A351 CF8M		VITON(FKM)		
		A351 CF8		NATURAL RUBBER(NR)		
Disc	Plated Ductile Iron	ASTM A536	Bushing	PTFE		
	Aluminum Bronze	B148-954		Bronze	B62	
	Stainless Steel	A351 CF8M		O-Ring	NBR	
		A351 CF8			EPDM	
	Carbon Steel	A216 WCB			VITON	
Carbon Steel	A216 WCB					
Stem	Stainless Steel	A276-410				
		A276-304				
		A276-316				
		A276-316L				

★Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	d0	PCD	N-Q	ISC 6211	ØK	ØE	N-Ød1	B1*B1	J	L
DN40	120	70	33	12.6	110	4-M16	F05	65	50	4-7	9*9	---	26
DN50	161	80	43	12.6	125	4-M16	F07	90	70	4-10	11*11	---	26
DN65	175	89	46	12.6	145	4-M16	F07	90	70	4-10	11*11	---	30
DN80	181	95	46	12.6	160	8-M16	F07	90	70	4-10	11*11	---	30
DN100	200	114	52	15.77	180	8-M16	F07	90	70	4-10	11*11	---	30
DN125	213	127	56	18.92	210	8-M16	F07	90	70	4-10	14*14	---	30
DN150	226	139	56	18.92	240	8-M20	F07	90	70	4-10	14*14	---	40
DN200	260	175	60	22.1	295	8-M20	F10	125	102	4-12	17*17	---	40
DN250	292	203	68	28.45	350	12-M20	F10	125	102	4-12	22*22	---	40
DN300	337	242	78	31.6	400	12-M20	F10	125	102	4-12	22*22	---	40
DN350	368	267	78	31.6	460	16-M20	F10	125	102	4-12	22*22	---	40
DN400	400	309	102 ^①	33.15 ^①	515	16-M24	F14	175	140	4-18	27*27	---	50
DN450	422	328	114 ^②	37.95 ^②	565	20-M24	F14	175	140	4-18	27*27	---	70
DN600	480	361	127	41.12 ^③	620	20-M24	F14	175	140	4-18	36*36	---	80
DN600	662	459	154	50.62 ^③	725	20-M27	F16	210	165	4-23	36*36	---	80
DN700	624	520	165	63.35	840	24-M27	F25	300	254	8-18	---	2-18	85
DN800	672	591	190	63.35	950	24-M30	F25	300	254	8-18	---	2-18	95
DN900	720	656	203	74.7	1050	28-M33	F25	300	254	8-18	---	2-20	118
DN1000	800	721	216	84.7	1160	28-M33	F25	300	254	8-18	---	2-22	118
DN1200	941	864	276	104.7	1380	32-M26	F30	350	298	8-22	---	2-28	154

Note:

*The shaft end can be double D and key connection. From DN700 and above, the shaft end is double keys.

*The flange connection of the above table can be DIN2501 PN16, ASME B16.47-A 125/150LB, BS4504 PN10/PN16, JIS B2220 10K and so on.

*Please inform us if there is any dimension need to be adjusted.

①When working pressure is PN16, the diameter of the stems are different from PN10.(from DN400-DN600)

②DN400's valve face to face can be 85.7mm& 102mm, DN450's valve face to face can be 104mm&114mm.



Shanxi Solid Industrial Co.,Ltd

U Section Butterfly Valve (Pin) Series: BV311-A1



Features:
 1.Light in weight, easy to install, take apart and maintain. The valve can be installed on kinds of standard flange.
 2.Simple structure, compact and 90°C open & close rapidly.
 3.Small operation torque and save strength.
 Tianjin Outshine butterfly valve can be assembled together with lever, worm gear, pneumatic & electric actuators.

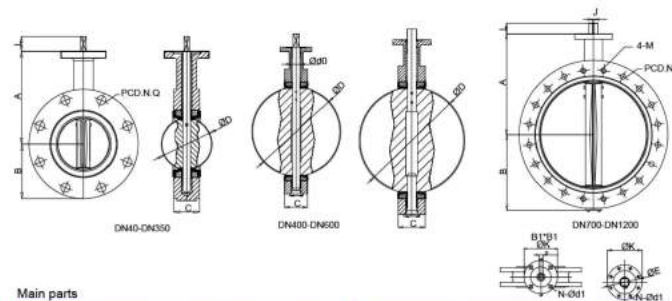
4.The seal is adopted Phenolic resin and it is changeable.
 5.Open & close experiments more than 10,000-times and long service life.
 6.When closed completely, air & hydraulic test, zero leakage.
 7.Various parts materials can be chosen, and our butterfly valves can be used in various environments.

Size: DN40-DN1200 (1.5"-48") standard:

- Design standard: BS5155, API609, EN593
 - Test standards: DIN3230 Part3, API598, EN12266-1
 - Face to face standards : DIN3202K1, API609, EN558-1, ISO5752.
 - Flange connection: DIN 2501 PN10 & PN16, BS4504 PN10&PN16, ASME B16.1 125LB and 150LB, JISB2220 10K.
- Working pressure : 10bar/16bar
 Test pressure :
 Shell: 15bar/24bar
 Seal: 11bar/17.6bar
 Medium: water, sewage, oil, gas and so on.



Shanxi Solid Industrial Co.,Ltd



Main parts

Name	Material	Specification
		ASTM
Body	Cast iron	ASTM A128B
	Ductile Iron	ASTM A536
	Carbon Seel	A216 WCB
	Stainless Steel	A351 CF8M
A351 CF8		
Disc	Plated Ductile Iron	ASTM A536
	Aluminum Bronze	B148-954
	Stainless Steel	A351 CF8M
		A351 CF8
Stem	Carbon Seel	A216 WCB
	Stainless Steel	A276-410
		A276-304
		A276-316
		A276-316L

Name	Material	Specification
		ASTM
Seat	NBR(NITRILE)	
	EPDM	
	NEOPRENE(NR)	
	VITON(FKM)	
	NATURAL RUBBER(NR)	
PIN	Stainless Steel	A182 F6A
		A182 F304
		A182 F316
Bushing	PTFE	
	Bronze	B62
O-Ring	NBR	
	EPDM	
	VITON	

*Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	d0	PCD	N-Q	ISO 5211	OK	OE	N-Ød1	B1-B1	J	4-M	L
DN40	120	70	33	12.6	110	4-19	F05	65	50	4-7	9×9	---	---	26
DN50	161	83	43	12.6	125	4-19	F07	90	70	4-10	11×11	---	---	26
DN65	175	93	46	12.6	145	4-19	F07	90	70	4-10	11×11	---	---	30
DN80	181	95	46	12.6	160	8-19	F07	90	70	4-10	11×11	---	---	30
DN100	200	114	52	15.77	180	8-19	F07	90	70	4-10	11×11	---	---	30
DN125	213	127	56	18.92	210	8-19	F07	90	70	4-10	14×14	---	---	30
DN150	226	139	56	18.92	240	8-22	F07	90	70	4-10	14×14	---	---	40
DN200	260	175	60	22.1	295	8-22	F10	125	102	4-12	17×17	---	---	40
DN250	292	203	68	28.45	350	12-22	F10	125	102	4-12	22×22	---	---	40
DN300	337	242	78	31.6	400	12-22	F10	125	102	4-12	22×22	---	---	40
DN350	368	267	78	31.6	460	16-22	F10	125	102	4-12	22×22	---	---	40
DN400	400	309	102 ^①	33.15 ^①	515	16-26	F14	175	140	4-18	27×27	---	---	50
DN450	422	328	114 ^②	37.95 ^②	565	20-26	F14	175	140	4-18	27×27	---	---	70
DN500	480	361	127	41.12 ^②	620	20-26	F14	175	140	4-18	36×36	---	---	80
DN600	562	459	154	50.82 ^②	725	20-30	F16	210	165	4-23	36×36	---	---	80
DN700	624	520	165	63.35	840	20-30	F25	300	254	8-18	---	2-18	4-M27	85
DN800	672	591	190	63.35	950	20-33	F25	300	254	8-18	---	2-18	4-M30	95
DN900	720	656	203	74.7	1050	24-33	F25	300	254	8-18	---	2-20	4-M30	118
DN1000	800	721	216	84.7	1160	24-36	F25	300	254	8-18	---	2-22	4-M33	118
DN1200	941	864	276	104.7	1380	28-39	F30	350	298	8-22	---	2-28	4-M36	154

Note:

- *The shaft end can be double D and key connection. From DN700 and above, the shaft end is double keys.
- *The flange connection of the above table can be DIN2501 PN16, ASME B16.47-A 125/150LB, BS4504 PN10/PN16, JIS B2220 10K and so on.
- *Please inform us if there is any dimension need to be adjusted.
- ①When working pressure is PN16, the diameter of the stems are different from PN10, (from DN400-DN600)
- ②DN400's valve face to face can be 85.7mm& 102mm, DN450's valve face to face can be 104mm&114mm.

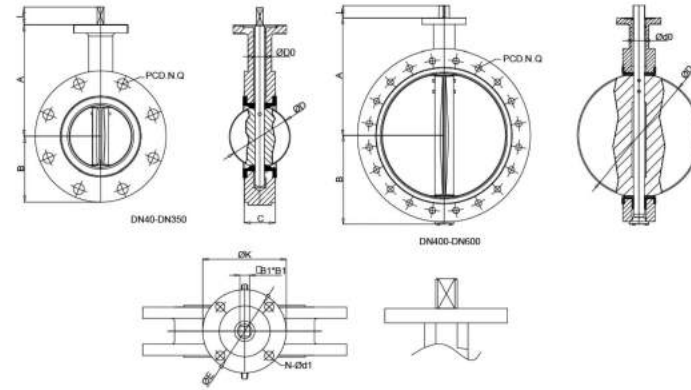


Features:
 1.Light in weight, easy to install,take apart and maintain. The valve can be installed on kinds of standard flange.
 2.Simple structure, compact and 90 ° open & close rapidly.
 3.Small operation torque and save strength. Our butterfly valve can be assembled together with lever, worm gear, pneumatic & electric actuators.

4.U shaped cross section strengthened the valve body and can bear 25bars pressure.
 5.The seat is vulcanized on U-section valve body, there will be fewer leakage point and will have longer service life.
 6.When closed completely, air & hydraulic test, zero leakage.
 7.Many parts materials can be chosen, and our butterfly valves can be used in various environments.

Size: DN40-DN1200 (1.5"-48")
 standard:

- 1: Design standard: BS5155, API609, EN593
- 2: Test standards: DIN3230 Part3, API598, EN12266-1.
- 3: Face to face standards : DIN3202K1, API609, EN558-1, ISO5752.
- 4: Medium: water, sewage, oil, food, gas and so on.
- 5: Flange connection: DIN2501 PN10/16, BS4504 PN10/16,ASME B16.1 125LB & 150LB, JISB2220 10K and so on.
- 6: Working pressure: 25 bar
 Test pressure: Shell:28.8bar
 Seal:27.5bar



Main parts

Name	Material	Specification	Name	Material	Specification
		ASTM			ASTM
Body	Ductile Iron	ASTM A536	Seal	NATURAL RUBBER(NR)	
	Carbon Steel	A216 WCB		FULL PTFE	
	Stainless Steel	A351 CF8M			A182 F6A
	Plated Ductile Iron	A351 CF8	Stainless Steel		A182 F304
Disc	Aluminum Bronze	ASTM A536			A182 F316
	Stainless Steel	B148-954	Bushing	PTFE	
		A351 CF8M		Bronze	B62
Stem	Stainless Steel	A351 CF8	O-Ring	NBR	
		A276-431		EPDM	
Seat	NBR(NITRILE)			VITON	
	EPDM				
	NEOPRENE(NR)				
	VITON(FKM)				

★Other special material requested, please contact us directly.

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	dD	PCD	N-Q	ISO 52.1.1	ØK	ØE	N-Ød1	B1+B1	L
DN40	120	70	33	12.6	98.6	4-19	F05	65	50	4-7	9×9	26
DN50	161	83	43	12.6	120.6	4-19	F07	90	70	4-10	11×11	26
DN65	175	93	46	12.6	139.7	4-19	F07	90	70	4-10	11×11	30
DN80	181	95	46	12.6	152.4	8-19	F07	90	70	4-10	11×11	30
DN100	200	114	52	15.77	190.5	8-19	F07	90	70	4-10	11×11	30
DN125	213	127	56	18.92	215.9	8-23	F07	90	70	4-10	14×14	30
DN150	226	140	56	18.92	241.3	8-23	F07	90	70	4-10	14×14	40
DN200	260	175	60	22.1	198.6	8-23	F10	125	102	4-12	17×17	40
DN250	292	203	68	28.45	362	12-26	F10	125	102	4-12	22×22	40
DN300	337	242	78	31.6	431.8	12-26	F10	125	102	4-12	22×22	40
DN350	368	267	78	31.6	476.3	12-29	F10	125	102	4-12	22×22	40
DN400	400	309	102	33.15 ^①	539.8	16-29	F14	175	140	4-18	27×27	50
DN450	422	328	114	37.95 ^①	577.9	16-32	F14	175	140	4-18	27×27	70
DN500	480	361	127	41.12 ^①	635	20-32	F14	175	140	4-18	36×36	80
DN600	562	459	154	50.82 ^①	749.3	20-35	F16	210	165	4-23	36×36	80

Note:

*The shaft end can be double D and key connection.

*The flange connection of the above table can be DIN2501 PN16, ASME B16.47-A 125/150LB, BS4504 PN10/PN16, JIS B2220 10K and so on.

*Please inform us if there is any dimension need to be adjusted.

①When working pressure is PN16, the diameter of the stems are different from PN10.(from DN400-DN600)



1 Body: Shall be two piece wafer or lug design with extended neck to allow for 2" piping insulation. Flange locating holes shall be provided on wafer bodies to allow for quick and precise alignment during valve installation. PTFE impregnated steel bearing shall be provided in the upper and lower valve journal for precision alignment of the upper and lower stem. Reinforced PTFE gaskets shall be placed between body halves to eliminate potential leak path and contamination from environmental conditions.

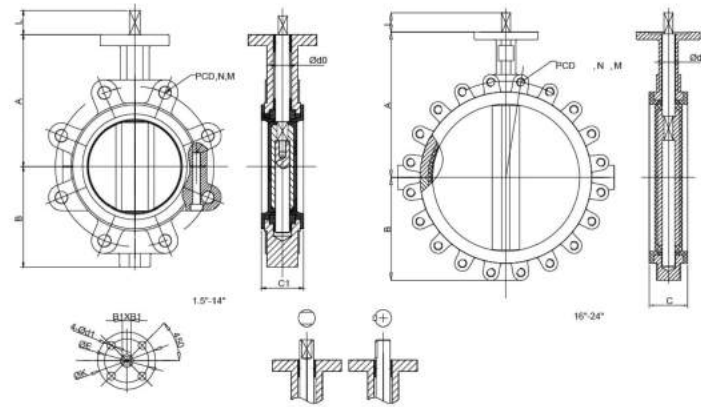
2. Disc: Disc edge and hub on metal discs shall be spherically machined and hand polished for minimum torque and maximum sealing capability. PTFE discs shall have 1/8" (3mm) minimum thickness of pure, virgin PTFE encapsulated over the following metals: 1.5" - 24" (40mm-600mm) Valves - PTFE encapsulated over SS316/SS304/WCB.

3. Seat: Shall be designed to reduce seating/unseating torque and reduce wear on the contacting parts. Materials shall be pure, virgin PTFE, with 1/8" (3mm) minimum thickness.

The design shall include a resilient seat energizer extending completely around the seat including the disc hub area to provide uniform force sufficient for tight shut-off. The seat shall totally encapsulate the body isolating it from the line media.



5005 5007 5014 5015 5017 5018 5021 6016 6021 3013 3014 1023



Material of main parts

Name	Material	Specification
		ASTM
Body	Ductile Iron	ASTM A536
	Carbon Steel	A216 WCB
Disc	Stainless Steel	A351 CF8M
	WCB+PTFE Stainless Steel+PTFE	A351 CF8
Stem	Stainless Steel	A276-410
		A276-304 A276-316
Seat	PTFE	
Bushing	PTFE	
	Bronze	B62
O-Ring	NBR	
	EPDM VITON	

★Other special material requested, please contact us directly.

(Unit:mm)

SIZE	A	B	C	d0	PCD	N-M	ISO 5211	ØK	ØE	N-Ød1	B1×B1	L
DN40	136	74	33	12.6	110	4-16	F07	90	70	4-10	11×11	30
DN50	136	74	43	12.6	125	4-16	F07	90	70	4-10	11×11	30
DN65	138	82	46	12.6	145	4-16	F07	90	70	4-10	11×11	30
DN80	148	90	46	12.6	160	8-16	F07	90	70	4-10	11×11	30
DN100	158	116	52	15.77	180	8-16	F07	90	70	4-10	11×11	30
DN125	174	132	56	18.92	210	8-16	F07	90	70	4-10	14×14	30
DN150	180	145	56	18.92	240	8-20	F07	90	70	4-10	14×14	40
DN200	229	180	60	22.1	295	8-20	F10	125	102	4-12	17×17	40
DN250	269	216	68	28.45	350	12-20	F10	125	102	4-12	22×22	40
DN300	288	230	78	31.6	400	12-20	F10	125	102	4-12	22×22	40
DN350	337	284	78	31.6	460	16-20	F10	125	102	4-12	22×22	45
DN400	367	322	102	38	515	16-24	F14	175	140	4-18	27×27	50
DN450	433	365	114	38	565	20-24	F14	175	140	4-18	27×27	50
DN500	466	396	127	42	620	20-24	F14	175	140	4-18	36×36	65
DN600	520	446	154	50.65	725	20-27	F16	210	165	4-23	36×36	70

Note:

*The shaft end can be double D and key connection.

*The flange connection of the above table can be DIN2501 PN16, ASME B16.47-A 125/150LB, BS4504 PN10/PN16, JIS B2220 10K and so on.

*Please inform us if there is any dimension need to be adjusted.



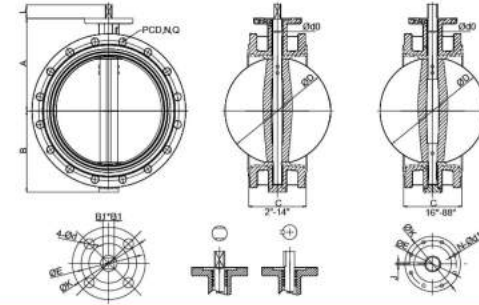
Features:

1. The double flanged butterfly valve is mainly assembled by valve body, valve disc, shaft, seat and actuator. 90° open & close rapidly and the torque is small, easy to operate. The valve seat is vulcanized on the valve body and can make the valve body completely separated from the medium, can be used in bad environments and have long service life. When the valve is closed, bi-directional zero leakage.
2. Compact construction results in low weight, less space in storage and installation.
3. Central shaft position, 100% bidirectional bubble tight shut off makes installation acceptable at any direction.
4. Full bore body gives low resistance to flow.

5. No cavities in the flow passage, easy to clean and disinfect for potable water system etc.
6. Liner creates seal with mating flanges so no media is in contact with the valve body.
7. ISO 5211 top flange for easy fitting of actuators. Low operating torques results in easy operation and economical actuator sizing.
8. PTFE lined bearing on shaft allows for low friction & wear.
9. without using lubricants.
10. Lining bonded to the body to ensure no corrosion between body and lining, longer life, suitable for vacuum service, eg. at the suction side of the pump, suitable for end of line use.

Function:

Isolating valve (on/off), regulating valve. Double flanged butterfly valve can be used at end of pipe line, maximum pressure not larger than 50% of the rated pressure.



Name	Material	Specification
Body	Cast Iron	ASTM A126B
	Ductile Iron	ASTM A536
	Carbon Steel	A216.WCB
	Stainless Steel	A351.CF8M A351.CF8
Disc	Plated Ductile Iron	ASTM A536
	Aluminum Bronze	B148-954
	Stainless Steel	A351.CF8M A351.CF8
Stem	Carbon Steel	A216.WCB
	Carbon Steel	A216.WCB
	Stainless Steel	A276-410 A276-304 A276-316 A276-316L
Seat	NBR(NITRILE)	
	EPDM	
	NEOPRENE(NR)	
	VITON(FKM)	
PIN	NATURAL RUBBER(NR)	
	PTFE	
Bushing	Stainless Steel	A182 F6A A182 F304 A182 F316
	PTFE	
	Bronze	
O-Ring	NBR	B62
	EPDM	
	VITON	

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	A	B	C	ΦD	PCD	N-Q	JSD 5211	ΦK	ΦE	N-Φd1	B1-B1	J	L
DN50	110	80	108	12.6	125	4-19	F07	90	70	4-10	11×11	---	26
DN65	134	80	112	12.6	145	4-19	F07	90	70	4-10	11×11	---	30
DN80	131	95	114	12.6	160	8-19	F07	90	70	4-10	11×11	---	30
DN100	150	114	127	15.77	180	8-19	F07	90	70	4-10	11×11	---	30
DN125	170	114	140	18.92	210	8-19	F07	90	70	4-10	14×14	---	30
DN150	180	139	140	18.92	240	8-22	F07	90	70	4-10	14×14	---	40
DN200	210	175	152	22.1	295	8-22	F10	125	102	4-12	17×17	---	40
DN250	245	203	165	28.45	350	12-22	F10	125	102	4-12	22×22	---	40
DN300	278	242	178	31.6	400	12-22	F10	125	102	4-12	22×22	---	40
DN350	328	250	190	31.6	460	16-22	F10	125	102	4-12	22×22	---	40
DN400	376	310	216	33.15 ^①	515	16-26	F14	175	140	4-18	27×27	---	50
DN450	407	332	222	37.95 ^①	565	20-26	F14	175	140	4-18	27×27	---	70
DN500	433	358	229	41.12 ^①	620	20-26	F14	175	140	4-18	36×36	---	80
DN600	508	423	267	50.62 ^①	725	20-30	F16	210	165	4-23	36×36	---	80
DN700	560	479	292	63.35	840	24-30	F25	300	254	8-18	---	2-18	85
DN800	620	533	318	63.35	950	24-33	F25	300	254	8-18	---	2-18	95
DN900	692	602	330	75	1050	28-33	F25	300	254	8-18	---	2-20	118
DN1000	735	656	410	85	1160	28-36	F25	300	254	8-18	---	2-22	118
DN1200	917	781	470	105	1380	32-39	F30	350	298	8-22	---	2-28	154
DN1400	1000	925	530	120	1590	36-42	F35	415	356	8-32	---	2-32	200
DN1600	1150	1041	600	140	1820	40-48	F35	415	356	8-32	---	2-36	200
DN1800	1200	1156	670	160	2020	44-48	F40	475	406	8-40	---	2-40	200
DN2000	1360	1350	760	160	2230	48-48	F40	475	406	8-40	---	2-40	200
DN2200	1500	1430	800	180	2440	52-56	F48	560	483	12-40	---	2-45	300

Note:

- *The shaft end can be double D and key connection. DN700 and above are double key shaft end.
- *The table above: Flange connection is DIN2501 PN10, the flange connection can also meet DIN2501 PN16, ASME B16.47-A 125LB/150LB, BS4504, PN10/16, JISB2220 10K.
- *Please inform us if there is any dimension need to be adjusted.
- ① If working pressure is PN16, the shaft diameter is different from the above .

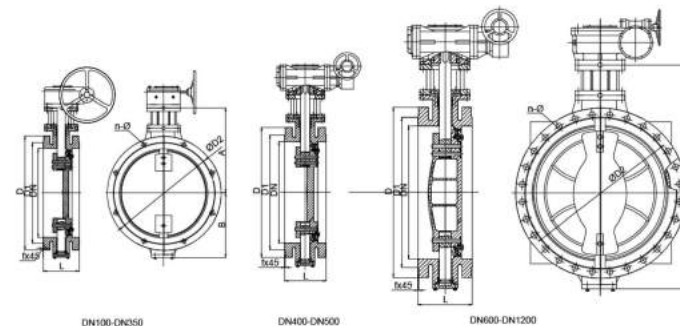
Features:
 Double flange double eccentric butterfly valve can reduce friction and have longer service life. "T" structure of the disc sealing ring. The sealing pair is linear sealing. Replacing materials of the disc ring, "O" -ring, disc and shaft, the valve can be used for various medium and temperature.



We suggest that the valve is used in single direction, it can be Bi-direction, but if you need, you should tell us when you order.

Size: DN100-DN1800 (4"-72")

- 1: Design standard: BS5155, MSS SP 68
 - 2: Test standard: DIN3230Part3, API598, EN12266-1
 - 3: Face to face standards: DIN3202 F4, EN558 13/14 series, ISO5752 13/14 series
 - 4: Flange connection: DIN 2501 PN10/PN16, BS4504 PN10/PN16, ASME B16.1 125LB/150LB, JIS B2220 10K.
- Medium: water, oil, gas and so on.
 Working pressure: 10bar/16bar
 Test pressure:
 Shell: 15bar/24bar
 Seal: 11bar/17.6bar



Main parts materials

Name	Material	Specification
		ASTM
Body	Ductile Iron	ASTM A536
Disc	Plated Ductile Iron	ASTM A536
Stem	Stainless Steel	A276-410
Disc Sealing	NBR(NITRILE)	
	EPDM	
Pin	Stainless Steel	A182 F6A
Clamping ring	Steel	
Bushing	PTFE	
Connecting bracket	Ductile Iron	ASTM A536
Packing gland	Ductile Iron	ASTM A536
Packing	EPDM	
	NBR	

Connecting dimensions(End flange EN1092-1 PN16)

(Unit:mm)

DN	D	D1	D2	fx45°	L		n-Ø	A	B
					Long	Middle			
100	220	158	180	3	190	127	8-19	234	122
125	250	180	210	3	200	140	8-19	255	141
150	285	213	240	3	210	140	8-23	279	153
200	340	268	295	3	230	152	12-23	349	216
250	405	320	355	3	250	165	12-28	406	219
300	460	370	410	4	270	178	12-28	542	267
350	520	437	470	4	290	190	16-28	583	315
400	580	482	525	4	310	216	16-31	620	350
450	640	548	585	4	330	222	20-31	667	373
500	715	609	650	4	350	229	20-34	702	428
600	840	720	770	5	390	267	20-37	759	450
700	910	800	840	5	430	292	24-37	885	528
800	1025	905	950	5	470	318	24-40	1013	573
900	1125	1001	1050	5	510	330	28-40	1071	639
1000	1255	1110	1170	5	550	410	28-43	1234	723
1200	1485	1330	1390	5	630	470	32-49	1343	833
1400	1686	1530	1590	5	--	530	36-49	1668	1078
1600	1930	1750	1820	5	--	600	40-56	1778	1218
1800	2130	1950	2020	5	--	670	44-56	2044	1426

Note:

- *The shaft end can be double D and key connection.DN700 and above are double key shaft end.
- *The table above: Flange connection is DIN2501 PN10 but at the same time, the flange connection can also meet DIN2501 PN10, ASME B16.47-A 125LB/150LB, BS4504, PN10/16,JISB2220 10K.
- *Please inform us if there is any dimension need to be adjusted.



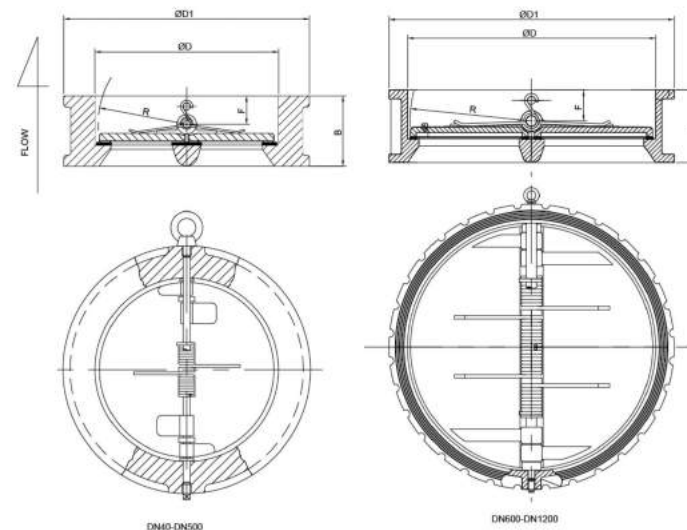
- Features:
- 1.Short in length,installed easily.
 - 2.Small and light, tightly sealed, easy in maintenance.
 - 3.Two torsion springs are used excreting on each of the pair valve plates. Which close the plates quickly and automatically.
 - 4.The quick-close action prevent the medium from flowing back and reduce water hammer pressure.

- 5.Can be installed both horizontally and vertical descending on pipeline.
- 6.Safe and reliable in operation, high interference-resistance.

Size: DN40-DN1200 (1.5"-48")

Standard:

- 1: Design and manufacture: BS5153, EN12334
- 2: Test and inspection: DIN3230Part3, API598, EN12266-1
- 3: Face to face(end to end): BS155, EN558-1,ISO5752-16
- 4: Flanged connection:DIN 2501 PN10&PN16 BS4504 PN10&PN16 ASME B16.1 125LB&150LB



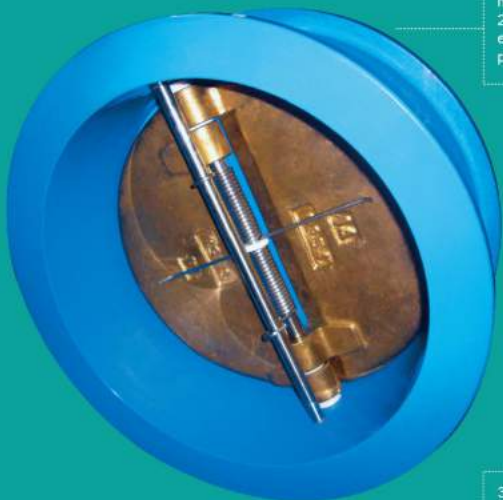
Materials of main parts

Name	Material	Specification ASTM
Body	Cast Iron	ASTM A126B
	Ductile Iron	ASTM A536
	Carbon Steel	A216 WCB
	Stainless Steel	A351 CF8M A351 CF8
Disc	Plated Ductile Iron	ASTM A536
	Aluminum Bronze	B148-95400
	Stainless Steel	A351 CF8M A351 CF8
Stem	Stainless Steel	A276-410
	NBR(NITRILE)	A276-304 A276-316
Seat	EPDM	
	NEOPRENE(CR)	
	VITON(FKM) NATURAL RUBBER(NR)	

★ Other special material requested, please contact us directly.

(Unit:mm)

SIZE	AS2192 E	ASME 150LB	PN10	PN16	OD	B	R	F
	OD1	OD1	OD1	OD1				
DN40	84	82	92	57	43	25	19	
DN50	96	101	107	65	43	28.8	19	
DN65	109	120	127	80	46	35.1	20	
DN80	128	133	142	94	64	43.4	26	
DN100	160	171	162	117	64	52.8	27	
DN125	192	194	192	145	70	65.7	30	
DN150	218	219	218	170	76	78.6	31	
DN200	270	276	273	224	89	104.4	33	
DN250	334	337	328	265	114	127	50	
DN300	380	407	378	310	114	148.3	43	
DN350	444	447	438	360	127	172.4	45	
DN400	495	510	489	410	140	197.4	52	
DN450	558	546	539	450	152	217.8	58	
DN500	615	603	592	616	152	241	58	
DN600	723	717	694	733	178	295.4	73	
DN700	812	720	810	804	229	338.5	98	
DN800	948	825	916	909	241	385.5	100	
DN900	1058	927	1017	1011	241	428.5	100	
DN1000	1138	1158	1124	1124	300	491.5	110	
DN1200	1370	1380	1340	1340	350	588	148	



Features:
 1.Small and light, tightly sealed, easy in maintenance.
 2.Two torsion springs are used excreting on each of the pair valve plates. Which close the plates quickly and automatically.

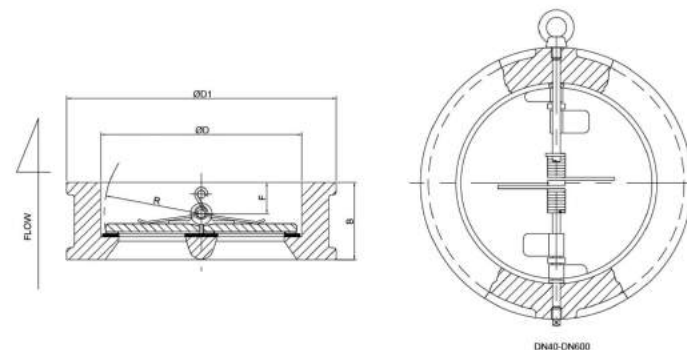
3.The quick-close action prevent the medium from flowing back and reduce water hammer pressure.
 4.Can be installed both horizontally and vertical descending on pipeline.
 5.Safe and reliable in operation, high interference-resistance.

Size: DN40-DN600 (1.5"-24")

Standard:

- 1: Design and manufacture: API609
- 2: Test and inspection: API598
- 3: Face to face(end to end): API594
- 4: Flanged connection: ASME B16.1 125LB & 150LB

Application: water,oil,gas etc
 Working Conditions
 Suitable temperature: 0 C ~ 160 C
 Working Pressure:10bar/16bar
 Testing Pressure:
 Shell: 15bar/17.6bar
 Seal: 11bar/24bar



Material of main parts

Name	Material	Specification
		ASTM
Body	Cast Iron	ASTM A126B
	Ductile Iron	ASTM A536
	Carbon Steel	A216 WCB
	Stainless Steel	A351 CF8M A351 CF8
Disc	Plated Ductile Iron	ASTM A536
	Aluminum Bronze	B148-95400
	Stainless Steel	A351 CF8M A351 CF8
Stem	Stainless Steel	A276-410
		A276-304
		A276-316
Seat	NBR(NITRILE) EPDM NEOPRENE(CR) VITON(FKM) NATURAL RUBBER(NR)	

★ Other special material requested, please contact us directly.

(Unit:mm)

SIZE	ASME 150LB		OD	B	R	F
	OD1					
DN50	101		65	60	28.8	19
DN65	120		80	67	36.1	20
DN80	133		94	73	43.4	28
DN100	171		117	73	52.8	27
DN125	194		145	83	65.7	30
DN150	219		170	98	78.6	31
DN200	276		224	127	104.4	33
DN250	337		265	146	127	50
DN300	407		310	181	148.3	43
DN350	447		360	184	172.4	46
DN400	510		410	191	197.4	52
DN450	546		450	203	217.8	58
DN500	603		505	219	241	58
DN600	717		624	222	295.4	73

Features:

- 1.Short in length, installed easily, long service life.
- 2.Small and light, tightly sealed, easy in maintenance.
- 3.Two torsion springs are used excreting on each of the pair valve plates. Which close the plates quickly and automatically.
- 4.The quick-close action prevent the medium from flowing back and reduce water hammer pressure.



- 5.Can be installed both horizontally and vertical descending on pipeline.
- 6.Safe and reliable in operation, high interference-resistance.
- 7.Keep the medium completely isolated with valve body, protect the medium without pollution.

Size: DN40-DN600 (1.5"-24")

Standard:

1: Design and manufacture: BS5153, EN12334

2: Test and inspection: DIN3230Part3, API598, EN12266-1

3: Face to face(end to end): BS155, EN558-1, ISO5752-16

4: Flanged connection: DIN 2501 PN10&PN16 BS4504 PN10&PN16 ASME B16.1 125LB&150LB

Application: water,oil,gas etc

Working Conditions

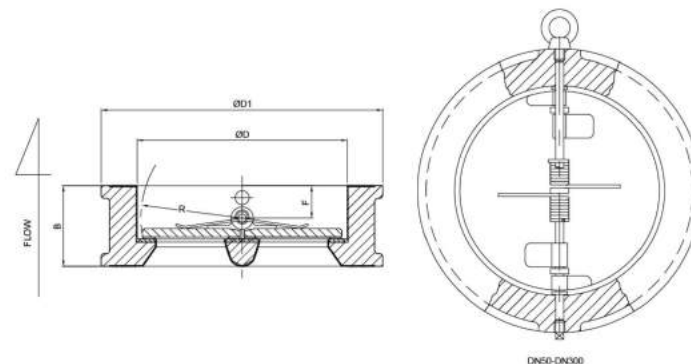
Suitable temperature: 0°C~160°C

Working Pressure:10bar/16bar

Testing Pressure:

Shell: 15bar/17.6bar

Seal: 11bar/24bar



Material of main parts

Name	Material	Specification
		ASTM
Body	Cast Iron Ductile Iron Carbon Steel Stainless Steel	ASTM A126B ASTM A536 A216 WCB A351 CF8M A351 CF8
Disc	Plated Ductile Iron Aluminum Bronze Stainless Steel	ASTM A536 B148-95400 A351 CF8M A351 CF8
Stem	Stainless Steel	A276-410 A276-304 A276-316
Seat	NBR(NITRILE) EPDM NEOPRENE(CR VITON(FKM) NATURAL RUBBER(NR)	

★ Other special material requested, please contact us directly.

(Unit:mm)

SIZE	AS2192 E	ASME 150LB	PN10	PN16	OD	B	R	F
	OD1	OD1	OD1	OD1				
DN50	96	101		107	65	43	28.6	19
DN65	109	120		127	80	46	36.1	20
DN80	128	133		142	94	64	43.4	28
DN100	160	171		162	117	64	52.8	27
DN125	192	194		192	145	70	65.7	30
DN150	218	219		218	170	76	78.6	31
DN200	270	276		273	224	89	104.4	33
DN250	334	337		328	265	114	127	50
DN300	380	407		378	310	114	148.3	43

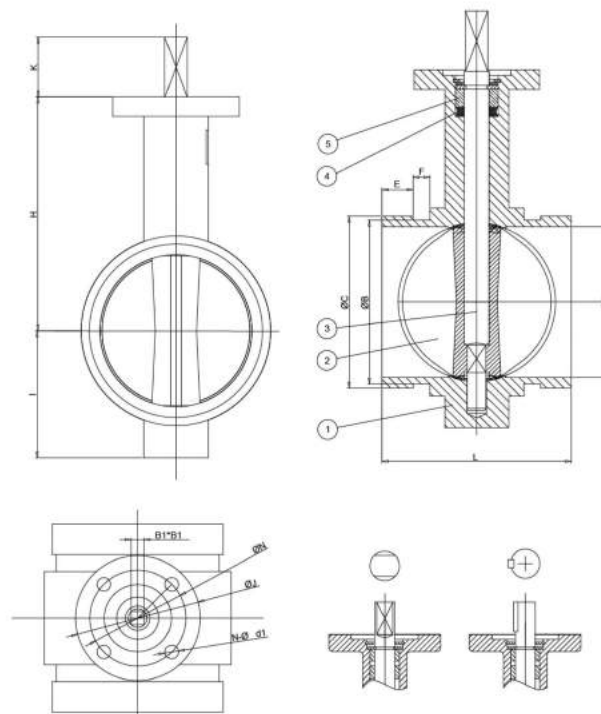


- Product Features:**
1. Grooved-End Bubble Tight Shut off Valve
 2. Rubber Seal Molded on Disc
 3. A brasion Resisting
 4. Working pressure up to 200 PSI
 5. Workign temperature up to 180 F

Parts Standard Material
 Body: Ductile Iron
 Stem: 410 Stainless Steel
 Disc: Ductile Iron Encapsulated (Buna or EPDM)

Working Pressure: PN16(200PSI)

The grooved end butterfly valve offers an easily installed choice to cumbersome, multi-bolt wafer and lug type or flanged valve. The size of grooved end butterfly valve we can offer is from DN50-DN300, the material is cast iron/ductile iron body and ductile iron coated rubber disc. The working temperature can be -5°C ~ +120°C
 Mounting Flange: ISO5211
 End: ANSI/AWWA C606
 Face to Face: AWWA C606
 Type: Grooved



(Unit:mm)

SIZE	A	B	C	E	F	H	I	K	L	B1*B1	J	N	N-Dd1
DN50	50	57.15	60.3	15.88	7.93	119	63	30	82.4	11×11	90	70	4-10
DN65	61	69.09	73	15.88	7.93	125	68.5	30	96.8	11×11	90	70	4-10
DN80	78	84.94	88.9	15.88	7.93	131.5	80	30	96.8	11×11	90	70	4-10
DN100	101	110.08	114.3	15.88	9.53	151	94	30	115.8	11×11	90	70	4-10
DN125	127	137.03	141.3	15.88	9.53	171.5	108	30	147.6	14×14	90	70	4-10
DN150	150	163.96	168.3	15.88	9.53	183	123	30	147.6	14×14	90	70	4-10
DN200	202	214.4	219.1	19.05	11.1	205.4	149.4	40	133.4	17×17	125	102	4-12
DN250	253	268.3	273	19.05	12.7	250	186	40	158.8	22×22	125	102	4-12
DN300	303	318.3	323.9	19.05	12.7	275	213	40	163.6	22×22	125	102	4-12

Parts Material Table

No.	Part name	Parts materials
1	Body	Cast Iron / Ductile Iron
2	Disc	DI+EPDM / NBR /VITON
3	Stem	SS410 / SS304 / SS316
4	Bushing	PTFE
5	X-Ring	EPDM / NBR

NOTE: Shaft head types of double D head and round with key are optional.



Product Features:
 1. Grooved-End Bubble Tight Shut off Valve
 2. Rubber Seal Molded on Disc
 3. A brasion Resisting
 4. Working pressure up to 200 PSI
 5. Workign temperature up to 180 F

Parts Standard Material
 Body: Ductile Iron
 Stem: 410 Stainless Steel
 Disc: Ductile Iron Encapsulated (Buna or EPDM)

Working Pressure: PN16(200PSI)

The grooved end butterfly valve offers an easily installed choice to cumbersome, multi-bolt wafer and lug type or flanged valve. The size of grooved end butterfly valve we can offer is from DN50-DN300, the material is cast iron/ductile iron body and ductile iron coated rubber disc.

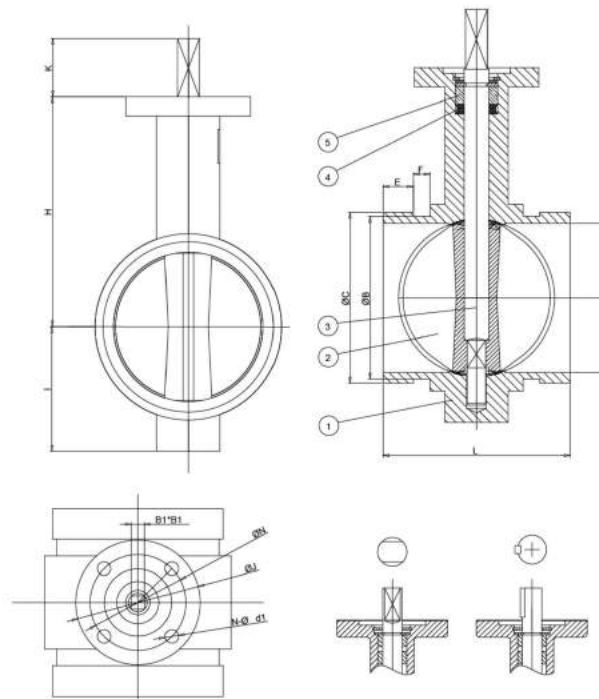
The working temperature can be -5°C ~ +120°C

Mounting Flange: ISO5211

End: BS

Face to Face: MSS SP-67

Type: Grooved



(Unit:mm)

SIZE	A	B	C	E	F	H	I	K	L	B1*B1	J	N	N-odd
DN50	50	60.3	67	16	11	119	63	30	90	11*11	90	70	4-10
DN65	61	69.1	73	6	11	125	68.5	30	97	11*11	90	70	4-10
DN80	78	88.9	97	16	11	131.5	80	30	97	11*11	90	70	4-10
DN100	101	114.3	122.5	16	11	151	94	30	116	11*11	90	70	4-10
DN125	127	137	141.3	16	11	171.5	108	30	134	14*14	90	70	4-10
DN150	150	165.1	175	16	11	183	123	30	134	14*14	90	70	4-10
DN200	202	219	232	20.5	11	205.4	149.4	40	148	17*17	125	102	4-12
DN250	253	278	286	20.5	11	250	186	40	160	22*22	125	102	4-12
DN300	303	323.9	336.5	20.5	11	275	213	40	166	22*22	125	102	4-12

Parts Material Table		
No.	Part name	Parts materials
1	Body	Cast Iron / Ductile Iron
2	Disc	DI+EPDM / NBR /VITON
3	Stem	SS410 / SS304 / SS316
4	Bushing	PTFE
5	X-Ring	EPDM / NBR

NOTE: Shaft head types of double D head and round with key are optional.



1. The HBV801 is the most cost-effective flow control valve for threaded applications.
 2. Its simple design allows for smooth operation and long valve life, with minimal maintenance.
 3. The HBV801 features a durable one-piece cast iron body, which is nickel plated for corrosion resistance, and a solid 410 stainless steel stem for superior strength.

4. The HBV 801's simplistic design allows for easy field repair without special tools or equipment.
 5. The HBV801 is pressure rated to 200 PSI and is available in sizes 2"-6" NPT.

Type:H2200-SE
 Size:2"-6"

1. Body

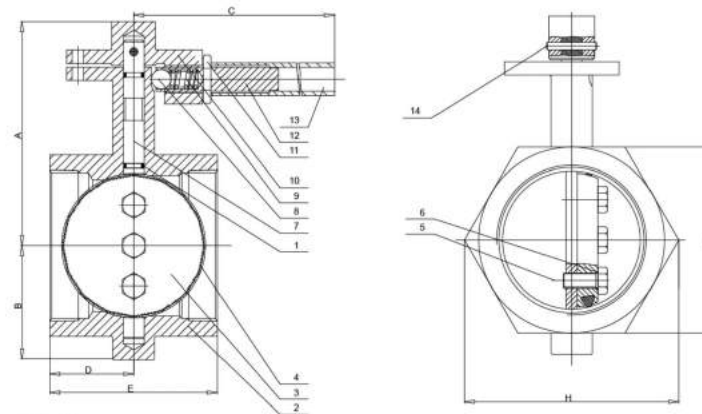
The HBV801 has a durable cast iron body, with nickel plating for corrosion prevention.

2.Locking handle

The HBV801 is designed to accept a pad lock for increased safety and security on the job site.

3.Disc

A polished aluminum-bronze disc with replaceable O-ring seat is standard. BUNA-N is used as a standard soft goods material, however Viton soft goods are available on request.



Technical Data (Unit:mm)

Size	Nominal Pressure (PSI)	Shell Testing Pressure (PSI)	Sealing Testing Pressure (PSI)	Testing Medium		Suitable Medium	Working Temperature
				Shell	Sealing		
2"-6"	200	300	220	Water	Water	Gas, Oil, Water etc.	-23°C~93°C

Materials of main parts

NO.	Name	Material
1	Stem O-Ring	NBR
2	Body	HT200
3	Disc	ASTM B148-90 C95400
4	Disc O-ring	NBR
5	Disc Stud	1Cr13
6	Stud O-Ring	NBR
7	Stem	1Cr13
8	Handle Ball	Steel
9	Handle Spring	1Cr18Ni9
10	Handle	QT450-10
11	Handle Lock Nut	Q235-A
12	Handle Stub	Q235-A
13	Handle Extension	Q235-A
14	Cone Pin	35(AISI 1035)

Dimension and weight

DN (SIZE)	A	B	C	D	E	F	H	(Kg) WEIGHT
DN50 (2")	105.41 (4.15)	57.15 (2.25)	203.2 (8.00)	53.98 (2.13)	107.95 (4.25)	76.2 (3.00)	87.88 (3.46)	4.8
DN80 (3")	152.91 (6.02)	69.85 (2.75)	203.2 (8.00)	61.72 (2.43)	123.70 (4.87)	103.12 (4.06)	119.13 (4.69)	7.1
DN100 (4")	161.04 (6.34)	93.73 (3.69)	203.2 (8.00)	65.02 (2.56)	130.05 (5.12)	134.87 (5.31)	155.70 (6.13)	10.1
DN150 (6")	231.24 (9.10)	120.65 (4.75)	330.2 (13.00)	88.9 (3.50)	177.8 (7.00)	196.85 (7.75)	277.33 (10.92)	21.8



Features:
 1.Flat plate design, floating seats, bypass design, all lead to lower operating torque.
 2.The sealing surface of the valve adopts abrasion-resistant and anti-corrosive materials which can lengthen the performance life of the valve.
 3.The Wedge is replaceable without needing to remove the valve from the pipelines.
 4.It is designed with straight through bore type with non-rising stem, inside screw and bolted bonnet. This valve provides positive shutoff with minimal pressure drop and flow turbulence.

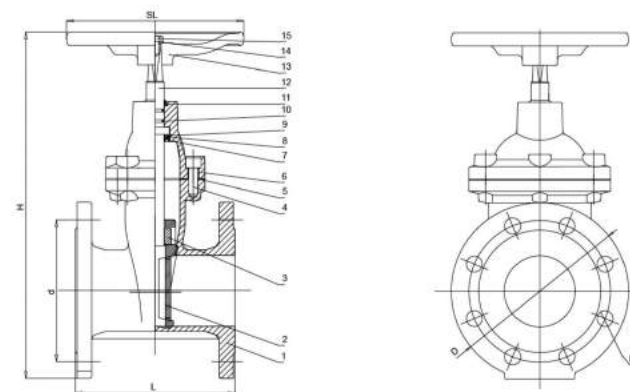
5.This gate Valve allows for two-way flow direction and used for closing or opening the medium flow. This valve can be installed in horizontal and vertical positions in the piping systems.
 6.The valve adopts full-shut structure which has good protection function and can be used in all weather.
 7.Can use all sorts of piping flange standards and flange seal face form, meet various needs of the project and use requirements.

Size: DN50-DN600 (2"-24")
 Standard:

- 1: Design and manufacture: DIN3352
- 2: Test and inspection: EN12266
- 3: Face to face(end to end): DIN3352 F4,DIN3352 F5
- 4: Flanged connection: DIN 2501 PN10&PN16

Application:
 It is widely used in process industries such as palm oil and refinery plant, fire protection system and cooling system,tap water industry, sewage treatment, shipping construction, petroleum, chemicals, food, pharmacy, textile, electric power, metallurgy and energy system's pipeline to adjust and shut off fluids.

Working Pressure:10bar/16bar
 Testing Pressure:
 Shell: 15bar/24bar
 Seal: 11bar/17.6bar



Name	Material	Specification
		ASTM
Body	Cast Iron	ASTM A126B
	Ductile Iron	ASTM A536
Disc	Ductile Iron	ASTM A536
Stem nut	Carbon Steel	A216 WCB
Bolt	Carbon Steel	A216 WCB
Washer	NBR	
Bonnet	Ductile Iron	ASTM A536
O-ring	EPDM	
Washer	NBR	
Conca	Carbon Steel	A216 WCB
O-ring	EPDM	
Dust-ring	EPDM	
Stem	Stainless Steel	A276-410
Hand wheel	Ductile Iron	ASTM A536
Washer	Carbon Steel	A216 WCB
Bolt	Carbon Steel	A216 WCB

★ Other special material requested, please contact us directly.

Connecting dimensions

(Unit:mm)

SIZE	Dimensions					DIN2501 PN16		DIN2501 PN10	
	L(F4)	L(F5)	D	H	SL	d	N-Ø	d	N-Ø
DN50	150	250	165	320	145	125	4-18	125	4-18
DN65	170	270	185	360	145	145	4-18	145	4-18
DN80	180	280	200	390	175	160	8-18	160	8-18
DN100	190	300	220	450	175	180	8-18	180	8-18
DN125	200	325	250	490	245	210	8-18	210	8-18
DN150	210	350	285	560	245	240	8-23	240	8-23
DN200	230	400	340	660	295	295	12-23	295	8-23
DN250	250	450	405	760	355	355	12-27	350	12-22
DN300	270	500	460	850	355	410	12-27	400	12-22
DN350	290	550	520	1100	460	470	16-27	460	16-22
DN400	310	600	580	1200	500	525	16-30	515	16-26
DN500	350	700	715	1480	550	650	20-30	620	20-26
DN600	390	800	840	1608	550	770	20-36	725	20-30



Features:
 1. Adjustable scraper/gland for low torque, easy installation, little or no maintenance required.
 2. Seat is flush with the bottom of the port, eliminating any pockets in the bottom of the Valve to collect material in media such as slurries, pellets or powders.
 3. Rubber seat has a molded-in steel rubber seat replacement is quick and easy.
 4. Reinforcement and is bolted in place to prevent it from being shifted out of position by gate movement.

5. Machined Stainless Steel gate and stem for corrosion resistance and durability, gate is with shearing function, it can have all debris automatically.
 6. Enclosed brass stem bushing provides reduced operating torque and protection of the stem bushing from harsh environments.
 7. Full packing seal around gate to minimize packing leakage, seals even in reverse flow.
 8. Easy conversion from handwheel operator to cylinder, bevel gear or electric motor operator using cast yoke.

Size: DN50-DN300 (2"-12")

Standard:

- 1: Design and manufacture: BS5150-1990
- 2: Test and inspection: DIN3230 Part3
- 3: Face to face(end to end): DIN3202 K1,EN558-1,ISO5752
- 4: Flanged connection: DIN 2501 PN10

Application:

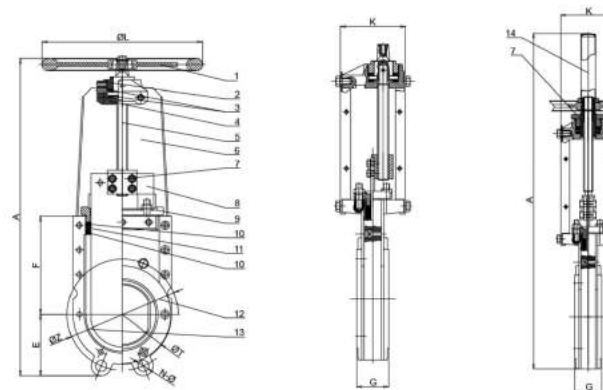
Suitable for mining, power, chemical, petroleum, pulp and paper, slurries, ashes, sewage food processing, etc.

Working Pressure: 10bar/16bar

Testing Pressure:

Shell: 15bar/24bar

Seal: 11bar/17.6bar



Parts material table

NO.	Name	QTY.	Material	Note
14	Sheathed	1	Steel	Steel
13	Disc-ring	1	NBR	EPDM
12	Body	1	DI	CI
11	Seal ring	1	NBR	NBR
10	Packing	2	PTFE	PTFE
9	Packing gland	1	DI	DI
8	Disc	1	SS304	SS316
7	Screw nut	1	Brass	Brass
6	Support plate	2	Steel	Steel
5	Stem	1	SS410	SS304
4	Cover	1	DI	DI
3	Bearing	2	Steel	Steel
2	Press sleeve	1	Brass	Brass
1	Handwheel	1	QT400	HT250

Connecting dimensions(End flange EN1092-1 PN10)

(Unit:mm)

SIZE	ØZ	N-Ø	G	ØT	E	F	A(dark)	A(Light)	ØL	K(dark)	K(Light)
DN50	125	4-18(M16)	43	104	58	100	318	400	160	70	70
DN65	145	4-18(M16)	46	127	67	120	375	485	180	85	85
DN80	160	8-18(M16)	46	138	90	132	438	553	220	85	85
DN100	180	8-18(M16)	52	158	99	160	513	641	260	105	105
DN125	210	8-18(M16)	56	188	123	175	595	740	300	111	127
DN150	240	8-23(M20)	56	212	143	195	661	833	300	111	127
DN200	295	8-23(M20)	60	268	170.5	215	780	1020	350	132	168
DN250	350	12-23(M20)	68	320	203.5	260	928	1210	380	155	199
DN300	400	12-23(M20)	78	370	231	320	1085	1420	420	161	184



Features:
 1.It is designed with straight through bore type with rising stem, outside screw & yoke, bolted bonnet and stainless steel trim. The opened and closed position of the valve is easily distinguished by the stem position.
 2.This valve can be installed in horizontal and vertical positions in the piping systems.
 3. The torque for opening and closing is small, so it is easy to open or close reliably and quickly.

4.It allows for two-way flow direction and used for closing or opening the medium flow.
 5.The Wedge is replaceable without needing to remove the valve from the pipelines.
 6.Short length structure, good sealing performance.
 7.Simple shape, good casting process, widely used.

Size: DN50-DN600 (1.5"-16")

Standard:

1: Design and manufacture: DIN 3352

2: Test and inspection: EN12266 API 598

3: Face to face(end to end): DIN3202 F4/F5

4: Flanged connection: DIN/BS/ISO/EN ,PN10/16,ANSI B16.5,CLASS150,JIS 10K,AS2129 D/E ,BS D/E

(1) Please confirm the F-F dimension before order

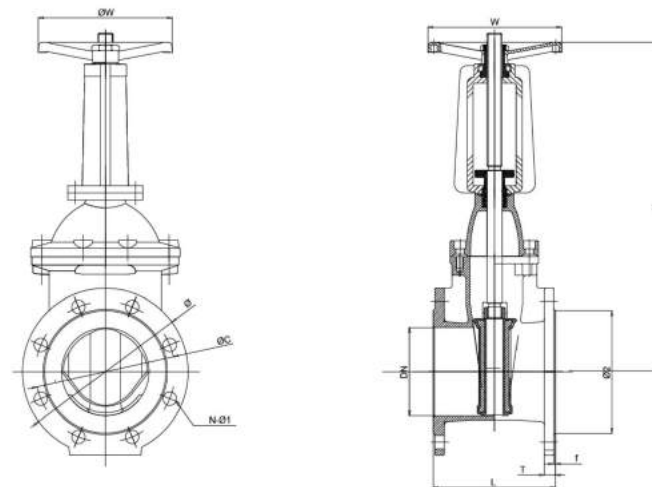
(2) DN40-DN350 the seat with phenolic resin backup,above DN350 the seat backup is aluminum

Application:

It is widely used in process industries such as palm oil and refinery plant, fire protection system and cooling system,tap water industry, sewage treatment, shipping construction, petroleum, chemicals, food, pharmacy, textile, electric power, metallurgy and energy system's pipeline to adjust and shut off fluids.

Working Pressure:10bar/16bar

Testing Pressure: Shell: 15bar/24bar Seal: 11bar/17.6bar



Name	Material	Specification
Body	Ductile Iron	ASTM
Disc	Ductile Iron +EPDM	ASTM A536
	Ductile Iron +NBR	
Stem	Stainless Steel	A276-410
Mat	Bronze	
Packing	EPDM NBR	
Stand	Ductile Iron	ASTM A536

Connecting dimensions(End flange DIN3352 PN10)

(Unit:mm)

DN	L	H	W	1.0 MPa					1.6 MPa						
				Ø	ØC	Ø2	f	T	n-d	ØC	Ø2	f	T	n-d	
40	140	240	301	180	150	110	84	3	18	4-19	110	84	3	18	4-19
50	150	250	312	180	165	125	99	3	19	4-19	125	99	3	19	4-19
65	170	270	337	180	185	145	119	3	19	4-19	145	119	3	19	4-19
80	180	280	403	200	200	160	133	3	19	8-19	160	133	3	19	8-19
100	190	300	434	200	220	180	154	3	19	8-19	180	154	3	19	8-19
125	200	325	536	250	250	210	184	3	19	8-19	210	184	3	19	8-19
150	210	350	577	250	285	240	210	3	19	8-23	240	210	3	19	8-23
200	230	400	630	320	340	295	265	3	20	8-23	295	265	3	20	12-23
250	250	450	862	380	405	350	319	3	22	12-23	355	319	3	22	12-28
300	270	500	991	380	460	400	370	4	24.5	12-23	410	370	4	24.5	12-28
350	290	550	1164	450	520	460	429	4	26.5	16-23	470	429	4	26.5	16-28
400	310	600	1284	450	580	515	480	4	28	16-28	525	480	4	28	16-31

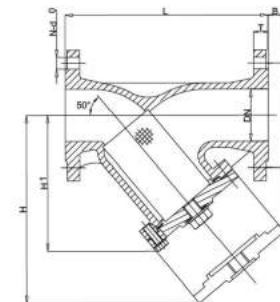
- 1.Strainers are the special equipment which are used for medium purification in pipe line.
- 2.Small size, light weight, easy installation and maintenance.
- 3.Flow resistant is small and media purification is thorough.
- 4.Remove dirt quickly and easily.



- 5.working temperature is -15 C ~+200 .
- 6.Media: water, gas, oil, etc.
- 7.When ordering, please provide detail of valve model, nominal pressure, size, working pressure, max flow, what media, the way to install, connection standard of valve and pipeline.

Y-type Filter

Flanged Y-Strainer DN40-DN300
 Use standard: DIN2501PN10/PN16, ASME B16.1 Class 150
 Design standards: BS5153
 Face to Face: DIN3202 F1



Material of main parts

Body	Cast Iron	Ductile Iron
Cover	Cast Iron	Ductile Iron
Screen	Stainless Steel 304	
Sealing Pad	Rubber	

Major shape and structure size

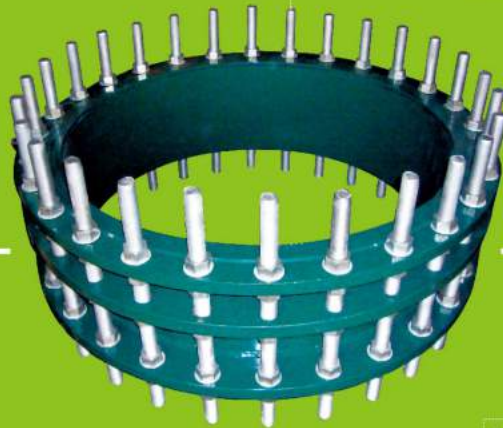
DN	SIZE	L	H	H 1	B	T
DN40		200	183	106	40	20
DN50		230	204	114	45	20
DN65		290	226	121	45	20
DN80		310	261	146	45	22
DN100		350	308	178	55	22
DN125		400	372	222	65	24
DN150		480	437	262	70	24
DN200		600	570	350	85	26
DN250		730	798	423	230	32
DN300		850	866	435.5	350	32

(Unit:mm)

SIZE	Connecting flange											
	PN10				PN16				ANSI150LB			
	K	N	M	d0	K	N	M	d0	K	N	M	d0
1.5"	110	4	16	18	110	4	16	18	98.5	4	1/2	16
2"	125	4	16	18	125	4	16	18	120.6	4	5/8	19
2.5"	145	4	16	18	145	4	16	18	139.7	4	5/8	19
3"	160	8	16	18	160	8	16	18	152.4	4	5/8	19
4"	180	8	16	18	180	8	16	18	190.5	8	5/8	19
5"	210	8	16	18	210	8	16	18	215.9	8	3/4	22.4
6"	240	8	20	22	240	8	20	22	241.3	8	3/4	22.4
8"	295	8	20	22	295	12	20	22	298.4	8	3/4	22.4
10"	350	12	20	22	355	12	24	27	361.9	12	7/8	25.4
12"	400	12	20	22	410	12	24	27	431.8	12	7/8	25.4

Y-type Filter

Dismantling Joints are fitted on pipe system and have widely used in petrochemical, chemical engineering, textile machinery, electricity industry, water supply, and gas electric station, known for compensating errors of pipe lengths and easy installation as well as dismantling.



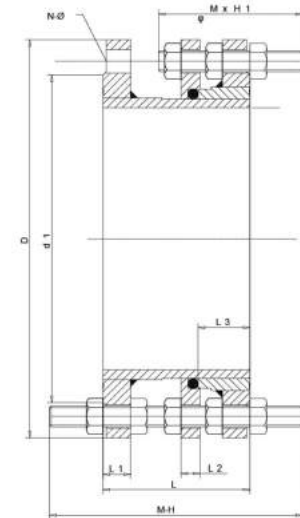
Note:
Expansion adjustment length is
DN50-DN250=40mm,
DN300-DN700=50mm,
DN800-DN1200=60mm,
DN1400-DN2000=70mm

Expansion joint

The product is formed in Expansion joint and used in various pipes of valve,bent joint's connection.The Features of the product are reliable in seal,no leakage,and easy to install and dismantle. Can be taken as more materials to suit more medium.



Expansion Joint (1.6Mpa) (DN80-DN2000)

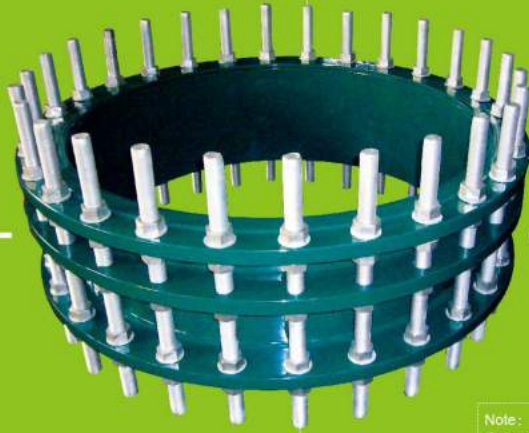


Dimensions(mm)

DN	L	L1	L2	L3	D	d	d1	N-φ	MXH	MXH1
80	180	16	14	70	200	160	138	8-18	16-320	16-190
100	180	18	16	80	220	180	158	8-18	16-320	16-190
125	180	20	16	80	250	210	188	8-18	16-340	16-210
150	180	20	16	80	285	240	212	8-22	20-350	20-220
200	180	22	16	80	340	295	268	12-22	20-350	20-220
250	180	22	16	80	405	355	320	12-26	24-350	24-230
300	200	24	22	80	460	410	378	12-26	24-380	24-240
350	200	26	22	80	520	470	438	16-26	24-380	24-240
400	200	28	24	80	580	525	490	16-30	27-400	27-250
450	200	30	24	80	640	585	540	20-30	27-400	27-250
500	200	32	24	100	715	650	610	20-33	30-400	30-250
600	210	34	28	100	840	770	725	20-36	33-430	33-280
700	210	36	28	100	910	840	793	24-36	33-430	33-280
800	310	38	28	110	1025	950	900	24-39	36-580	36-310
900	310	38	30	110	1125	1050	1000	28-39	36-580	36-310
1000	310	40	32	110	1255	1170	1116	28-42	39-600	39-320
1200	320	42	34	120	1485	1390	1330	32-48	45-600	45-335
1300	320	42	34	120	1585	1490	1430	32-48	45-600	45-335
1400	320	46	36	130	1685	1590	1530	36-48	45-600	45-340
1500	400	50	36	140	1820	1710	1640	36-56	52-650	52-340
1600	360	52	36	140	1930	1820	1750	40-56	52-650	52-365
1800	360	58	38	140	2130	2020	1950	44-56	52-680	52-370
2000	380	62	38	150	2345	2230	2150	48-62	56-710	56-400

Note:
Expansion adjustment length is DN50-DN250=40mm,
DN300-DN700=50mm,DN800-DN1200=60mm,DN1400-DN2000=70mm

Dismantling Joints are fitted on pipe system and have widely used in petrochemical, chemical engineering, textile machinery, electricity industry, water supply, and gas electric station, known for compensating errors of pipe lengths and easy installation as well as dismantling.



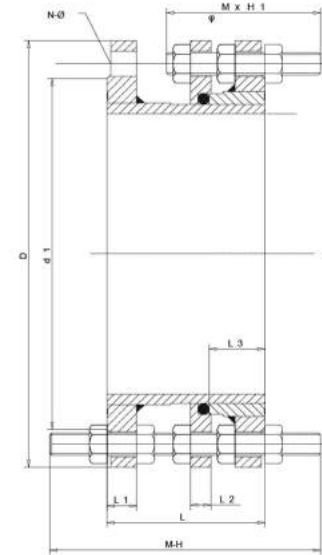
Note:
Expansion adjustment length is
DN50-DN250=40mm,
DN300-DN700=50mm,
DN800-DN1200=60mm,
DN1400-DN2000=70mm

Expansion joint

The product is formed in Expansion joint and used in various pipes of valve,bent joint's connection.The features of the product are reliable in seal,no leakage,and easy to install and dismantle. Can be taken as more materials to suit more medium.



Expansion Joint (1.0Mpa) (DN80-DN2000)



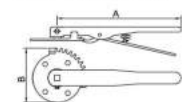
Dimensions(mm)

DN	L	L1	L2	L3	D	d	d1	N-φ	M-H	M-H1
80	160	16	16	70	200	160	138	8-18	12-320	12-180
100	170	18	16	80	220	180	158	8-18	16-320	16-180
125	170	20	16	80	250	210	184	8-18	16-340	16-200
150	180	20	16	80	285	240	212	8-22	20-350	20-210
200	180	20	16	80	340	295	268	8-22	20-350	20-210
250	180	20	16	80	395	350	320	12-22	20-350	20-210
300	200	22	22	80	445	400	370	12-22	20-380	20-220
350	200	22	22	80	505	460	430	16-22	20-380	20-220
400	200	24	24	80	565	515	482	16-26	24-400	24-240
450	200	26	24	80	615	565	532	20-26	24-400	24-240
500	200	28	24	100	670	620	585	20-26	24-400	24-240
600	210	30	28	100	780	725	685	20-30	27-430	27-260
700	210	30	28	100	895	840	800	24-30	27-430	27-260
800	310	32	28	110	1015	950	905	24-33	30-580	30-300
900	310	32	30	110	1115	1050	1005	28-33	30-580	30-300
1000	310	34	32	110	1230	1160	1110	28-36	33-600	33-320
1200	320	38	32	120	1455	1380	1330	32-39	36-600	36-340
1400	320	42	34	130	1675	1590	1535	36-42	39-600	39-340
1600	360	46	34	140	1915	1820	1760	40-48	45-680	45-365
1800	360	50	36	140	2115	2020	1960	44-48	45-680	45-365
2000	380	54	36	150	2325	2230	2170	48-48	45-710	45-400

Note:

Expansion adjustment length is DN50-DN250=40mm,
DN300-DN700=50mm,DN800-DN1200=60mm,DN1400-DN2000=70mm

Type 1 Malleable Iron Lever

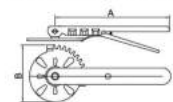


Material Specification	
Part	Material
Lever	Malleable Iron
Top Plate	Carbon Steel Stainless Steel 304 Stainless Steel 316

Dimensions(mm)

DN	mm	DN40	DN50-150	DN200-250	DN300
	inch	1.5"	2"-6"	8"-10"	12"
A		230	266	355	505
B		104	104	161	161

Type 4 Stainless steel handles



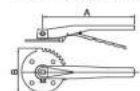
Material Specification	
Part	Material
Lever	Stainless Steel 304 Stainless Steel 316
Top Plate	Stainless Steel 304 Stainless Steel 316

Dimensions(mm)

DN	mm	DN40	DN50-150	DN200-300
	inch	1.5"	2"-6"	8"-12"
A		230	260	350
B		104	104	161



Type 2 Malleable Iron Lever

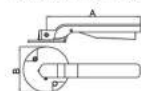


Material Specification	
Part	Material
Lever	Malleable Iron
Top Plate	Carbon Steel

Dimensions(mm)

DN	mm	DN40	DN50-150	DN200-300
	inch	1.5"	2"-6"	8"-12"
A		207	263	330
B		104	104	161

Type 5 Aluminum Alloys Lever



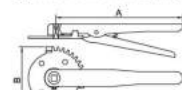
Material Specification	
Part	Material
Lever	Aluminum A Alloys
Top Plate	Aluminum A Alloys

Dimensions(mm)

DN	mm	50-80	100-150
	inch	2"-3"	4"-6"
A		200	275
B		65	90



Type 3 Carbon steel stamping Lever

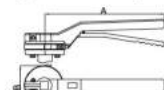


Material Specification	
Part	Material
Lever	Malleable Iron
Top Plate	Carbon Steel

Dimensions(mm)

DN	mm	DN50-100	DN125-150
	inch	2"-4"	5"-6"
A		207	263
B		104	104

Type 6 Aluminum Alloys Lever

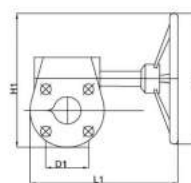


Material Specification	
Part	Material
Lever	Aluminum Alloys
Top Plate	Aluminum Alloys

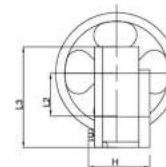
Dimensions(mm)

DN	mm	DN40-100	DN125-150	DN200-300
	inch	1.5"-4"	5"-6"	8"-12"
A		200	325	400
B		90	90	125

Gear Box



Single Transmission



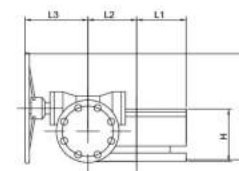
Material Specification

Part	Material
Housing	Cast Iron
Cover	Cast Iron
Worm	Carbon Steel
Worm Gear	Ductile Iron
Shaft	Carbon Steel
Handwheel	Cast Iron

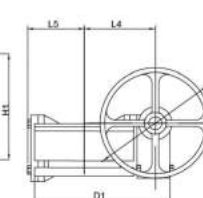
Dimensions

Model	Center Valve Size(mm)	Eccentricity Valve Size(mm)	D1	Ø	H	L1	L2	L3	Output (N.M)	Rate
3D-15	50-150	50-125	108	145	113	212	45	129	200	24:1
3D-50	200-250	150-200	146	285	182	305	62	171	500	30:1
3D-120	300-350	250-300	165	285	182	300	85	198	1200	50:1
XJ80	400-450	350-400	234	385	247	423	120	280	2500	80:1
XJ300	500-800	450-500	276	385	270	490	122	316	4000	293.5:1

Gear Box



Double Transmission



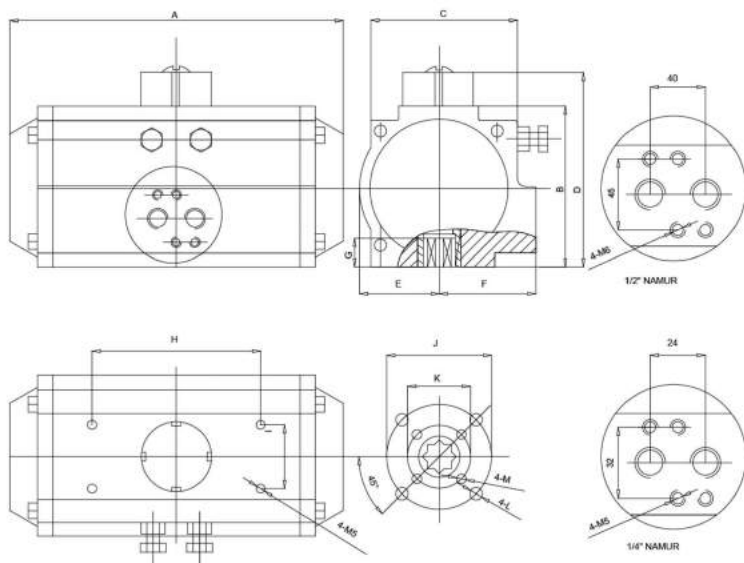
Material Specification

Part	Material
Housing	Cast Iron
Cover	Cast Iron
Worm	Carbon Steel
Worm Gear	Ductile Iron
Shaft	Carbon Steel
Handwheel	Cast Iron

Dimensions

Model	Center Valve Size(mm)	Eccentricity Valve Size(mm)	D1	Ø	H	L1	L2	L3	L4	L5	Output (N.M)	Rate
3DE-30/250	400-450	400	197	285	125	107	100	156	168	107	2500	560:1
3DE1-30/250	500	450	197	285	124	107	100	160	175	107	2500	560:1
3DE1-30/400	600	500	276	385	136	131	125	160	193	131	4000	560:1
3D-60/800	700-750	600	300	425	158	173	162	197	244.5	173	8000	704:1
3DE-60/800	800-900	700-750	300	425	149	146	140	197	230	146	8000	704:1
3D-120/1500	1000-1100	800-900	300	425	185	201	196	203	279	201	15000	680:1
3D-120/2500	1200	1000-1100	350	425	216	185	240	203	311	255	25000	850:1

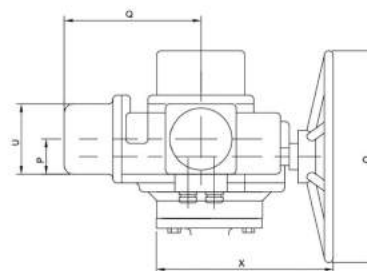
Double acting pneumatic actuators



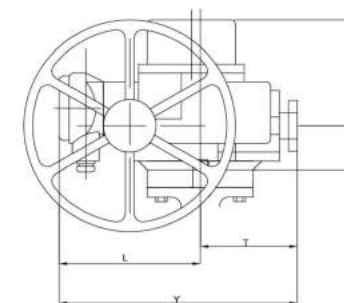
Dimensions(mm)

Model	Air pressure	Output torque	Valve size	A	B	C	D	E	F	G	H	I	N	J	K	L	M	Air interface
AT52	0.5MPa	20	DN40-DN50	160	72	66.5	92	30	41.5	14	80	30	11	F05	F03	M6	M5	1/8"
AT63	0.5MPa	36.2	DN65-DN80	190	88	72	108	36	47	18	80	30	14	F07	F05	M8	M6	1/8"
AT75	0.5MPa	58.5	DN100	206	100	81	120	42	53	20	80	30	14	F07	F05	M8	M6	1/8"
AT83	0.5MPa	71.5	DN100	216	109	92	129	46	57	21	80	30	17	F07	F05	M8	M6	1/8"
AT92	0.5MPa	112.6	DN125	260	117	98	137	50	58.5	22	80	30	17	F07	F05	M8	M6	1/8"
AT105	0.5MPa	162.9	DN150	286	133	110	153	58	62	26	80	30	22	F10	F07	M10	M8	1/4"
AT125	0.5MPa	288.8	DN200	340	155	126	175	67.5	75	28	80	30	22	F10	F07	M10	M8	1/4"
AT140	0.5MPa	435.2	DN250	412	173	138	193	75	77	32	80	30	27	F10	F07	M10	M8	1/4"
AT160	0.5MPa	662.2	DN300	480	198	158	218	87	87	34	80	30	27	F12	F10	M12	M10	1/4"
AT180	0.5MPa	1067.5	DN350	538	232	189	262	103	103	40	130	30	36	F14	--	M16	--	1/4"
AT210	0.5MPa	1466.5	DN400	568	257	210	287	113	113	40	130	30	36	F14	--	M16	--	1/4"
AT240	0.5MPa	2298.3	DN450-DN500	660	291	245	321	130	130	49	130	30	46	F16	--	M20	--	1/4"
AT270	0.5MPa	3232.2	DN600	740	330	273	360	147	147	49	130	30	46	F16	--	M20	--	1/4"

Electric Actuator



Single Transmission



Limit Switches

A pair of limit switches are activated by means of simple, reliable & adjustable cam plates, mounted directly onto, and driven by center column. The unique cam plate design does not allow over travel of limit switches.

Dimensions(mm)

Type	QT03	QT04	QT06	QT09	QT16	QT19	QT26	QT38	QT50	QT60	QT80	QT100
Flange	F05	F05	F07	F07	F07	F07	F10	F10	F10	F10	F12	F12
ISO5211	F07	F07	--	--	F10	F10	F12	F12	F12	F14	F14	F14
u	170	170	170	170	170	170	170	170	170	170	170	170
P	72	72	72	72	72	72	72	72	72	72	72	72
Q	166	166	166	166	187	187	192	192	192	209	209	209
X	241	241	241	241	272	272	290	290	290	331	331	331
O	200	200	200	200	250	250	350	350	350	350	350	350
Z	256	256	256	256	263	263	298	298	298	342	342	342
H	60	60	60	60	64	64	70	70	70	78	78	78
L	102	102	102	102	125	125	145	145	145	175	175	175
T	75	75	75	75	85	85	100	100	100	115	115	115
Y	208	208	208	208	239	239	274	274	274	306	306	306
J	196	196	196	196	199	199	228	228	228	264	264	264

**Definition of Cv Value
(Flow Coefficient)**

The valve Cv is the flow rate of Pure water at 80 °F passing through the valve when the disc is fully opened and the differential pressure between the two ends of the valve is 1Lbf/in2.

V:Max.flow (in US gal/min)
G:Specific gravity(1 for water)
ΔP:Differential Pressure in valve(Lbf/in2)

$$Cv = V \sqrt{\frac{G}{\Delta P}}$$

Cv=1.17Kv

**Definition of Kv Value
(Flow Coefficient)**

The valve Kv is the flow rate of Pure water at 15 °C passing through the valve when the disc is fully opened and the differential pressure between the two ends of the valve is 1bar.

Q:Max.flow (m3/h)
G:Medium density (g/cm3)(1 for water)
ΔP:Differential Pressure in valve(100Kpa)i.e.(bar)

$$Kv = Q \sqrt{\frac{G}{\Delta P}}$$

Kv=0.855Cv

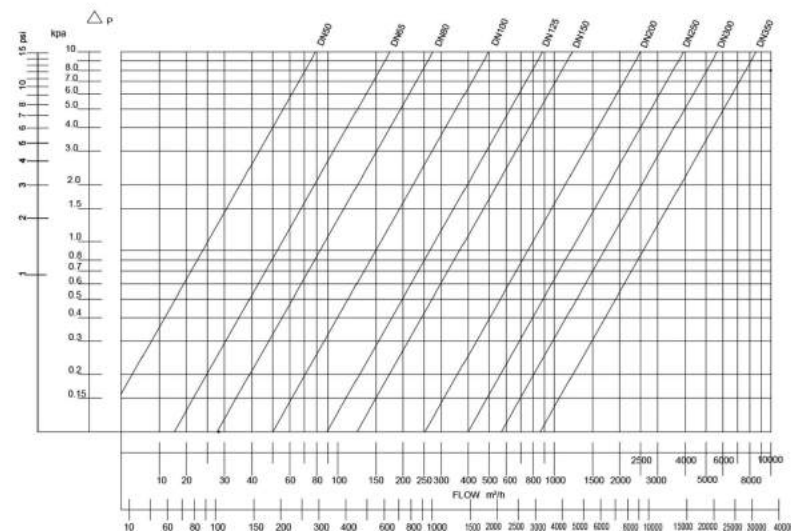
Cv Value of CONCENTRIC BUTTERFLY VALVE

Size	10"	20"	30"	40"	50"	60"	70"	80"	90"
50mm	0.06	3	7	15	27	44	70	105	115
65mm	0.1	6	12	25	45	75	119	178	196
80mm	0.2	9	18	39	70	116	183	275	302
100mm	0.3	17	36	78	139	230	364	546	600
125mm	0.5	29	61	133	237	392	620	930	1022
150mm	0.8	45	95	205	366	605	958	1437	1579
200mm	2	89	188	408	727	1202	1903	2854	3136
250mm	3	151	320	694	1237	2047	3240	4859	5340
300mm	4	234	495	1072	1911	3162	5005	7507	8250
350mm	6	338	715	1549	2761	4568	7230	10844	11917
400mm	8	464	983	2130	3797	6282	9942	14913	16388
450mm	11	615	1302	2822	5028	8320	13168	19752	21705
500mm	14	791	1647	3628	6465	10698	16931	25396	27908
600mm	22	1222	2587	5605	9989	16528	26157	39236	43116
700mm	36	1813	3639	6636	10000	14949	22769	34898	49500
750mm	37	2080	4406	9546	17010	28147	44545	66818	73426
800mm	45	2387	4791	8736	13788	20613	31395	48117	38250
900mm	260	3050	6730	12740	20220	32500	52500	79600	87500
1000mm	84	4183	8395	15307	24159	36166	55084	84425	119750
1050mm	350	4095	9040	17108	27150	43640	70500	106890	117500
1200mm	455	5365	11840	22400	30600	51200	92300	140000	154000

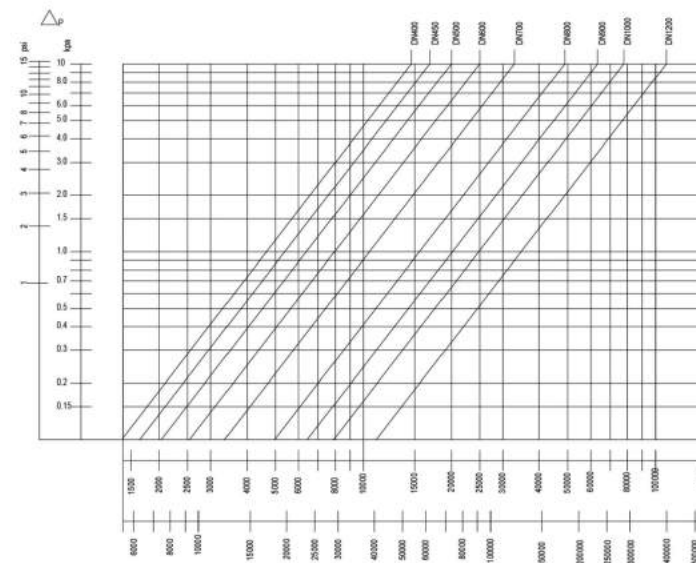
Kv Value of CONCENTRIC BUTTERFLY VALVE

Size	10"	20"	30"	40"	50"	60"	70"	80"	90"
50mm	0.05	2.6	6.0	13	23	38	60	90	99
65mm	0.09	5	10	21	39	64	102	153	168
80mm	0.17	8	15	33	60	99	157	236	259
100mm	0.26	15	31	67	119	197	312	468	514
125mm	0.43	25	52	114	203	336	531	797	876
150mm	0.69	39	81	176	314	518	821	1231	1353
200mm	1.7	76	161	350	623	1030	1631	2446	2687
250mm	2.8	129	274	595	1080	1754	2776	4164	4576
300mm	3	201	424	919	1638	2710	4289	6433	7069
350mm	5	290	613	1327	2366	3914	6195	9292	10212
400mm	7	398	842	1825	3254	5363	8519	12779	14043
450mm	9	527	1116	2418	4308	7129	11284	16925	18599
500mm	12	678	1411	3109	5540	9187	14508	21762	23914
600mm	19	1047	2217	4803	8560	14163	22414	33621	36946
700mm	31	1554	3118	5686	8569	12810	19511	29904	42416
750mm	32	1782	3775	8180	14576	24119	38171	57256	62919
800mm	39	2045	4105	7486	11815	17663	26902	41231	32776
900mm	223	2614	5767	10917	17326	27849	44987	68209	74979
1000mm	72	3584	7194	13117	20702	30991	47201	72344	102614
1050mm	300	3509	7746	14660	23265	37395	60411	91594	100686
1200mm	390	4597	10146	19195	26221	43873	79092	119966	131962

Valve pressure drop curve table



FLOW GALLON/MIN m³/h



FLOW GALLON/MIN m³/h

Rubber seat butterfly valve torques(N.m)

SIZE		PN6 (85PSI)		PN10 (165PSI)		PN16 (250PSI)	
		DRY	WET	DRY	WET	DRY	WET
DN40	1.5"	11.5	8	18.5	9	22	11
DN50	2"	20.3	12.5	22.1	13.9	24.2	15.1
DN65	2.5"	26.1	13.8	29.2	15.4	32.7	17.2
DN80	3"	39.9	21	41.1	21.7	43.7	23.1
DN100	4"	60.5	34.9	67.8	37.1	72.8	39.8
DN125	5"	85.1	53.5	101	57.9	108	61.9
DN150	6"	149	84.5	165	93.9	174	102
DN200	8"	264	154	297	173	330	192
DN250	10"	423	249	486	286	549	323
ND300	12"	605	371	699	429	799	490
DN350	14"	699	466	825	550	970	625
DN400	16"	948	632	1133	755	1307	846
DN450	18"	1247	831	1518	1012	1788	1131
DN500	20"	1639	1093	2026	1350	2308	1431
DN600	24"	2519	1679	3166	2111	3711	2301
DN700	28"	4511	3008	4903	3269	6850	5670
DN750	30"	5222	3482	5677	3785	7916	6782
DN800	32"	5939	3762	6456	4304	9180	7840
DN900	36"	7363	4949	7879	5252	13876	10150
DN1000	40"	12539	8359	13377	8917	---	---
DN1050	42"	14300	9538	15291	10193	---	---
DN1100	44"	16301	10867	17390	11592	---	---
DN1200	48"	17585	11723	18816	12735	---	---
DN1400	56"	33800	28610	38600	31420	---	---
DN1600	64"	51380	43450	57910	49765	---	---
DN1800	72"	70381	59670	75820	63570	---	---
DN2000	80"	79560	62687	81703	69865	---	---
DN2200	88"	79860	69480	95760	78545	---	---

★ The above torque values apply only to rubber seat butterfly valves.

Torque values do not include a safety factor, proposed to increase by the safety value of 25%.

Teflon Seat butterfly valve torques(N.m)

SIZE		PN6 (85PSI)		PN16 (250PSI)	
		DRY	WET	DRY	WET
DN40	1.5"	31.3	19.4	36.2	23
DN50	2"	39.1	24.3	45.2	28.2
DN65	2.5"	48.8	35	61	32.1
DN80	3"	74.6	39.4	81.8	43
DN100	4"	119.3	65.3	136	74.3
DN125	5"	175	100.6	202	116
DN150	6"	278	158	325	191
DN200	8"	494	287	617	358
DN250	10"	790	465	1026	603
ND300	12"	1132	694	1493	916
DN350	14"	1814	1153	1905	1269
DN400	16"	2398	1394	2518	1534
DN450	18"	3340	2047	3508	2252
DN500	20"	4122	2449	4329	2694
DN600	24"	7044	3882	7396	4270

★ The above torque values apply only to PTFE seat butterfly valves.

Torque values do not include a safety factor, proposed to increase by the safety value of 30%.

Double eccentric double flanged butterfly valve torques(N.m)

SIZE		PN6	PN10	PN16
DN100	4"	55	70	240
DN125	5"	100	140	265
DN150	6"	121	175	340
DN200	8"	190	328	574
DN250	10"	290	545	847
ND300	12"	490	894	1358
DN350	14"	804	1269	1905
DN400	16"	1074	1534	2528
DN450	18"	1328	2252	3508
DN500	20"	1550	2694	4329
DN600	24"	3189	4270	7396
DN700	28"	3640	6425	9873
DN750	30"	3917	8680	11716
DN800	32"	5143	9022	13765
DN900	36"	6950	11877	19398
DN1000	40"	9187	15630	27626
DN1200	48"	8632	22688	33920
DN1400	56"	22887	27762	63639
DN1600	64"	26897	36978	93255
DN1800	72"	36730	56668	126914

★ The above torque values apply only to rubber seat butterfly valves.

Torque values do not include a safety factor, proposed to increase by the safety value of 30%.

Main Spare Part Material Quality:

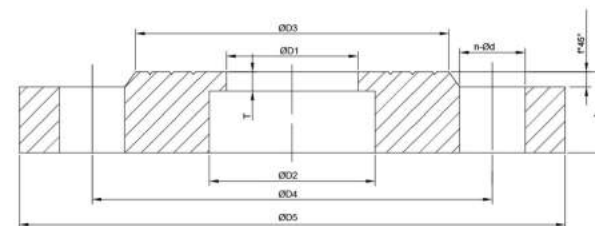
Body		Disc		Shaft		Bushing		Seat	
Material name	Code	Material name	Code	Material name	Material name	Material name	Code	Suitable temperature	
Cl	Z	Electricplating DI	B1	Stainless steel Carbon steel	Lubricated bronze PTFE	Natural rubber	X1	-20~+85	
DI	Q	AL-bronze	B2			Hypalon	X2	-18~+135	
AL-bronze	T	ZG1Cr18Ni9Ti SS304	B3			EPDM	X3	-5~+115	
ZG1Cr18Ni9Ti SS304	P	CF8M SS316	B5			Neoprene	X4	-7~+93	
CF8M SS316	R					NBR	X5	-5~+96	
Carbon steel	C					Abrasion resistant rubber	X6	-10~+50	
						Viton	X7	-18~+160	
						Heat resistant EPDM	X9	-5~+140	
						PTFE	F4	+5~+85	

Main Spare Part Material Quality:

Material	Applicable Temperature (°C)	Abrasion resistant											Feature	
		Fresh water	Sea water	Salt	Strong base	Weak base	Weak acid	Natural gas	Alcohol	Steam	Oil	Food		
Seat	Natural Rubber	-20~+85												High elasticity
	Hypalon	-18~+135												Oxidation resistant
	EPDM	-5~+115												Aging resistant
	Neoprene	-7~+93												Light-proof, Aging resistant
	NBR	-5~+86												Oil resistant
	Viton	-18~+160												High temperature resistant, corrosion resistant
Disc	Electric Plating DI	-30~+350												Heat resistant
	Aluminum Bronze	-273~+232												Heat resistant, corrosion resistant
	Stainless steel	-268~+316												High temperature resistant, corrosion resistant

Applicable
 Not applicable, flow rate higher than 1.5m/s

Flange for Butterfly Valve



Outline Dimensions & Connection Dimensions(mm)

DN	D1	D2	D3	D4	D5	b	f	T	n-d
50	50	59	102	125	165	18/22	3	5	4-18
65	65	75	122	145	185	20/24	3	6	4-18
80	80	91	133	160	200	20/24	3	6	8-18
100	100	110	158	180	220	22/26	3	6	8-18
125	125	135	184	210	250	24/28	3	6	8-18
150	150	161	212	240	285	24/28	3	6	8-23
200	208	221	268	295	340	24/30	3	8	8-23/12-23
250	255	275	320	350/355	395/405	26/32	3	10	12-23/12-26
300	308	327	370	400/410	445/460	28/32	4	10	12-23/12-26
350	340	379	430	460/470	505/520	28/34	4	11	16-23/16-26
400	405	429	482	515/525	565/580	30/38	4	11	16-26/16-30
450	455	481	532/548	565/585	615/640	30/42	4	11	20-26/20-30
500	505	532	585/609	620/650	670/715	32/48	4	11	20-26/20-33
600	605	633	685/720	725/770	780/840	36/50	5	11	20-30/20-36
700	705	723	800	840	895/910	40/52	5	13	24-30/24-36
800	810	823	905	950	1015/1025	44/54	5	13	24-33/24-39
900	900	923	1005	1050	1115/1125	46/56	5	13	28-33/28-39
1000	1000	1023	1110	1160/1170	1230/1255	50/58	5	13	28-36/28-42
1200	1200	1223	1328	1380/1390	1455/1485	56/62	5	13	32-39/32-49

Note: There are dimensions of PN1.0Mp products above "f" and of PN1.6Mpa products under "f".