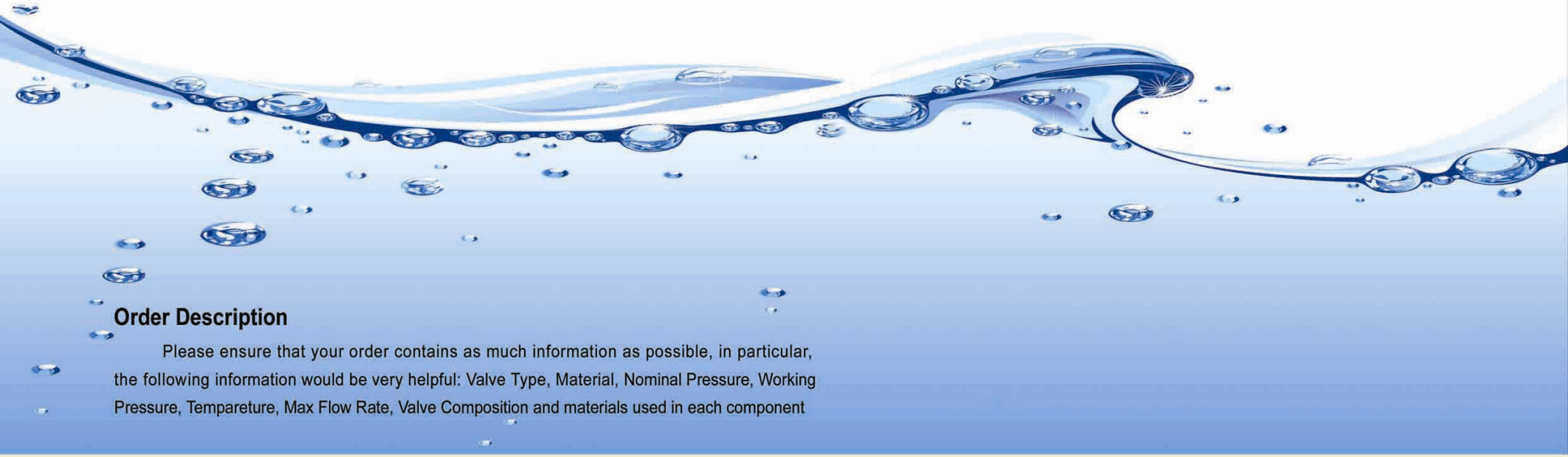
YORK VALVES-20120401

YORK VALVES

Butterfly Valve



Order Description

Please ensure that your order contains as much information as possible, in particular, the following information would be very helpful: Valve Type, Material, Nominal Pressure, Working Pressure, Tempareture, Max Flow Rate, Valve Composition and materials used in each component

York Valves

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Add the Following:
Web: www.yorkvalves.com
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YORK VALVES

Content Index

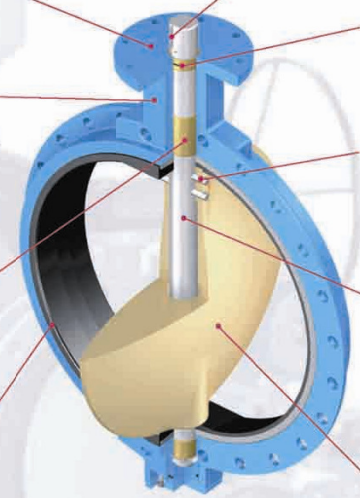
Characteristic of Product

- Small in size & light in weight and maintenance.It can be mounted wherever needed.
- Simple, compact structure,quick 90 degree on–off operation.
- Disc has two–way bearing, perfect seal, without leakage under the pressure test.
- Flow curve tending to straight–line.Excellent regulation performance.
- Various kinds of materials,applicable to different medium.
- Strong wash and brush resistance,and can fit to bad working condition.
- Center plate structure,small torque of open and close.
- Long service life.Standing the test of ten thousands opening and closing operation.
- Can be used in cutting off and regulating medium.

Typical application

- Water Works and Water Resource Project
- Environment Protection
- Public Facilities
- Power and Public Utilities
- Building Industry
- Petroleum、Chemical
- Steel、Metallurgy
- Paper making industry
- Food、Beverage

Note: York Valves would like to inform its customers that changes to design. Material, quality, size and specifications can take place without prior notice, in line with its "continual product improvement" policy.



Strong Precision Key:
Applicable to handle and other control device installation.

Driving Device Flange:
Available with handles, gear operators, electric or pneumatic actuators.

O-Ring: Primary and secondary stem seal.

Body:
Available in wafer and full lug style.

Taper Pin:
Precision taper pins connecting stem with disc, to ensure vibration proof and ease of access for maintenance

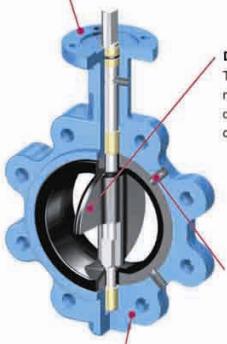
Integral Stem Design:
Ensures the dependable and positive disc control.

Bushing:
Reduce driving torque, support stem, separated with body, reduce wear of stem.

Disc:
High precision External disc profile Reach the requirement of bubble–tight, small start and stop torque, longer usage life of seat.

Side Seal:
Without flange gasket.

2" –8" Available with handle.



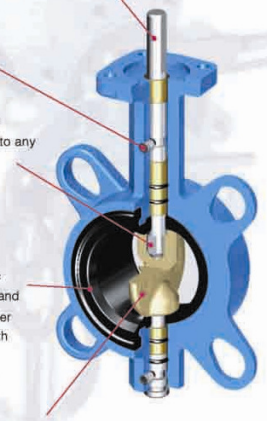
Disc Covered Rubber:
The disc part which has high medium contact, is rubber covered to ensure high corrosion resistance

Positioning Screw:
To ensures the seat is in the right position

Alignment features of lugged body allow easy installation between pipeline flanges, which is a real installation cost saving, and can be installed in the pipe end.

Double "D" or Square Cross:
Convenient to connect with various actuators, delivering more torque.

Set Screw:
Ensures Precise stem position



Two-Piece Stem Square Driver:
No–space connection applies to any scenario

Body Without Frame Structure:
The seat can separate the body and fluid medium In a precise manner and conve–nient connection with pipe flange.

Slim Disc:
The longitudinal section area of slim with disc is small, strong flow capacity.

Product Introdation

Series AD

DN50 – 300
2" –12"

PN1.0/1.6 MPa
150/200PSI

Series BD

DN50 – 600
2" –24"

PN 1.0 MPa
150PSI

Series ED

DN25 – 600
1" –24"

PN1.0/1.6 Mpa
150/200PSI

Series FD

DN40 – 300
1.5" –12"

PN1.0 MPa
150PSI

Series GD

DN50 – 300
2" –12"

PN1.6 MPa
175 PSI

Series HD

DN40 – DN600
1.5" –24"

PN1.0 /1.6MPa
150/200PSI

Series KD

DN50 – 300
2" –12"

PN1.6 MPa
200 PSI

Series MD

DN40 – 600
1.5" –24"

PN1.0/1.6 Mpa
150/200 PSI

Series MD

DN700 – 1200
28" –48"

PN1.0Mpa
150PSI

Series PD

DN50 – 300
2" –12"

PN1.0/1.6 Mpa
150/200 PSI

Series SD

DN50 – 150
2" –6"

PN1.6 Mpa
200 PSI

Series UD

DN750 – 1200
30" –48"

PN1.0 Mpa
150 PSI

Flange Connection Standard:

- Series AD, BD, ED, FD, KD, MD, PD, UD , YD according to ANSI B16.1, EN 1092, AS2129 .
- Series GD according to ANSI C606
- Series SD according to ANSI B1.20.1 and ISO 228–1

Face to Face Standard:

- Series MD, KD, PD, UD, YD according to ANSI B16.10;
- Series AD, BD, ED, FD according to EN 558–1.

Upper Flange Standard:

- All series meet ISO 5211.

Note: For product according to other standard , please consult factory.

Product Type Code

Example: MD37A1X3–16QB2: Series MD, Worm Gear, Wafer, Concentric Disc, EPDM Seat, 1.6 MPa (200PSI), DI Body, ALB Disc.

1 Series	Code
609 BFV	AD
Bonded Seat BFV	BD
Europe Soft–Seat BFV	ED
Lined Teflon BFV	FD
Grooved End BFV	GD
HPBV BFV	HD
Metal Seated BFV	JD
Long Neck BFV	KD
Mark BFV	MD
Australia BFV	PD
Screw End BFV	SD
U–Section BFV	UD
Heavy Duty BFV	VD
Europe Hard–Seat BFV	YD
2 Actuator	**Code**
Bare Shaft	0
Handle Lever	1
Worm Gear	3
Pneumatic	6
Electric Actuator	9
3 Connection	**Code**
Wafer	7A
Lug	7L
U–Section Flanged	7B
Grooved	8A
Screw	1A
4 Disc Structure	**Code**
Concentric	1
Single Eccentric	2
Double Eccentric	3

5 Seat Material	Code	
NR (Natural Rubber)	X1	J1
Hypalon	X2	J2
EPDM	X3	J3
Neoprene Rubber	X4	J4
NBR (BUNA-N)	X5	J5
Wear-Resistant Rubber	X6	J6
Viton	X7	J7
Silicon Rubber	X8	J8
Heat-Resistant EPDM	X9	J9
White NBR	XA	JA
White EPDM	XB	JB
(NSF) EPDM (NSF)	XC	JC
B26 Viton B26	XD	JD
Polyurethane	XE	JE
Teflon	F4	JF
X– Hard Seat		
J– Soft Seat		
6 Pressure Rating	**Code**	
1.0 Mpa (150 PSI Code : 150)	10	
1.6 Mpa (200 PSI Code : 200)	16	
2.0 Mpa (285 PSI Code : 285)	20	
2.5 Mpa (350 PSI Code : 350)	25	
7 Body Material	**Code**	
Cast Iron	Z	
Ductile Iron	Q	
WCB	C	
AL–Bronze	T	
CF8	P	
CF8M	R	
LC1	L	

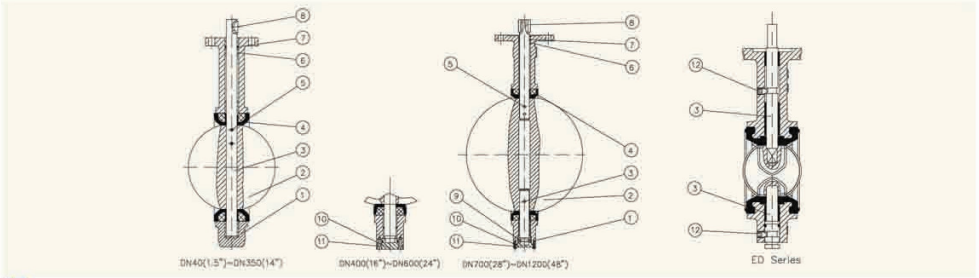
8 Disc Material	Code
Ductile Iron+Plated Ni	B1
AL-Bronze	B2
Disc Lined Rubber	B3
2507 Duplex Stainless Steel	B4
CF8M	B5
1.4529 Super Austenitic Stainless Steel	B6
CF8	B7
1.4469	B8
Monel	B9
CF3	BA
CF3M	BB
WCB	BC
Nylon 11 Coating	BN
EPOXY Coating	BE
PTFE Coating	BP
904L Super Austenitic Stainless Steel	BL
Hastelly AlloyB	BH
Ceramic Coating	BT
9 Connection	**Code**
	Y1
	Y2
	W1
	W2
	W3
	W4
	W5
	W6

Description of the Series Prodout:

Small size, light weight and easy to maintain, The above series of valves can be used as a device to cut–off or regulate the flow in various medium pipes. By selecting the correct materials, these valves can withstand worst case scenarios

Technical Data

Series		MD PD BD AD ED KD UD FD SD		HD	GD
DN Nominal Diameter		DN25~1200 (1"~48")	DN25~600 (1"~24")	DN50~600(2"~24")	2"~12"
PN Nominal Pressure		1.0MPa (150PSI)	1.6MPa (200PSI)	2.0MPa(285PSI)	175PSI
Testing Pressure	Shell	1.5MPa (225PSI)	2.4MPa (300PSI)	3.0MPa(428PSI)	875PSI
	Sealing	1.1MPa (165PSI)	1.76MPa (220PSI)	2.2MPa(314PSI)	350PSI
Working Temperature		-45~+150			
Suitable Mediums		Fresh water, Sewage, Sea water, Air, Vapour, Food, Medicine, Oils, Acids, Alkalis, Salts ect.			



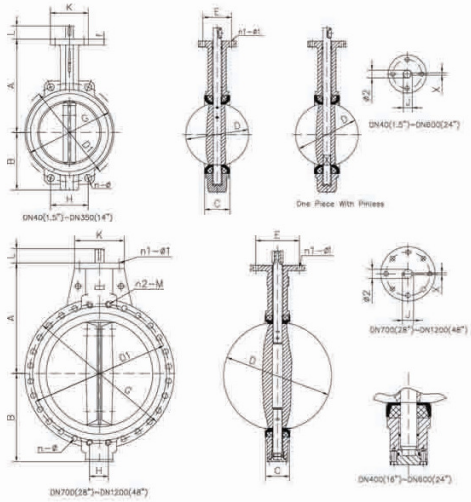
Material of Main Parts

1. Body	Code
CI	Z
DI	Q
WCB	C
ALB	T
CF8	P
CF8M	R
2. Disc	**Code**
DI	B1
ALB	B2
Rubber Lined Disc	B3
1.4469/2507 Duplex Stainless Steel	B4
CF8M	B5
1.4529 Super Austenitic Stainless Steel	B6
CF8	B7
Hastelloy Alloy	B8
Monel	B9
3. Stem	**Code**
416	
304	
316	
431	
17-4PH	

4. Seat	Code	℃ Temprature
NR	X1	-20~+85
Hypalon	X2	-18~+135
EPDM	X3	-45~+135 Intermittence -50~+150
Neoprene	X4	-7~+93 Intermittence -7~+107
NBR	X5	-12~+82 Intermittence -12~+93
Wear-Resistant Rubber	X6	-10~+50
Viton	X7	-23~+150
Silicon	X8	-40~+200
Heat-Resistant EPDM	X9	-20~+150
White NBR	XA	-12~+82 Intermittence -12~+93
White EPDM	XB	-45~+135 Intermittence -50~+150
EPDM(NSF)	XC	-45~+135 Intermittence -50~+150
Viton B26	XD	-23~+150
PTFE	F4	+10~+150

5. Taper Pin	Code
416	
316	
431	
17-4PH	
6. Bushing	**Code**
Lubrized Bronze	
PTFE	
7. O-Ring	**Code**
NBR	
EPDM	
8. Key	**Code**
45 1045	
9. Bearing	**Code**
Bearing Steel	
10. End Cover	**Code**
CI	
WCB	
CF8	
CF8M	
11. Bolt	**Code**
Q235 Gr.33 35 1035	
304	
12. HEX Screw	**Code**
Q235-A Gr.33	

Overall & Connection Dimensions & Weight for Wafer Butterfly Valve of Series MD

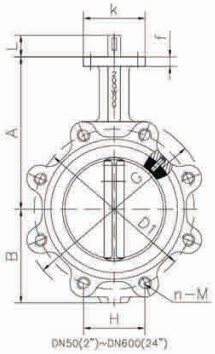


PN1.0/1.6 MPa (150/200PSI)

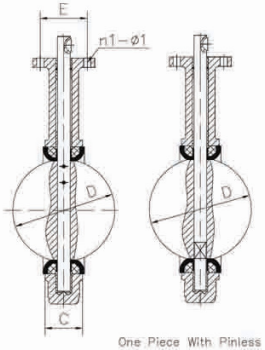
Size (mm)	Size (inch)	A	B	C	D	L	H	D1	n-ø	K	E	n1-ø1	ø2	G	n2-M	f	J	X	Weight (kg)
40	1.5	136	69	33	42.6	28	77.77	110	4-18	77	50	4-6.7	12.6	100	—	13	13.8	3	2.3
50	2	161	80	43	52.9	28	84.84	120	4-23	77	57.15	4-6.7	12.6	100	—	13	13.8	3	2.5
65	2.5	175	89	46	64.5	28	96.2	136.2	4-26.5	77	57.15	4-6.7	12.6	120	—	13	13.8	3	3.2
80	3	181	95	45.21	78.8	28	61.23	160	8-18	77	57.15	4-6.7	12.6	127	—	13	13.8	3	3.6
100	4	200	114	52.07	104	28	70.8	185	4-24.5	92	69.85	4-10.3	15.77	156	—	13	17.77	5	4.9
125	5	213	127	55.5	123.3	28	82.28	215	4-23	92	69.85	4-10.3	18.92	190	—	13	20.92	5	7
150	6	226	139	55.75	155.6	28	91.08	238	4-25	92	69.85	4-10.3	18.92	212	—	13	20.92	5	7.8
200	8	260	175	60.58	202.5	38	112.89 76.35	295	4-25 4-23	115	88.9	4-14.3	22.1	268	—	13	24.1	5	13.2
250	10	292	203	68	250.5	38	92.4	357	4-29	115	88.9	4-14.3	28.45	325	—	13	31.45	8	19.2
300	12	337	242	76.9	301.6	38	105.34	407	4-29	140	107.95	4-14.3	31.6	403	—	20	34.6	8	32.5
350	14	368	267	76.17	333.3	45	91.11	467	4-30	140	107.95	4-14.3	31.6	436	—	20	34.6	8	41.3
400	16	400	309	85.7	389.6	51	100.47	515	4-26	197	158.75	4-20.6	33.15	488	—	20	36.15	10	61
						60	102.42	525	4-30										
450	18	422	328	104.6	440.51	51	88.39	565	4-26	197	158.75	4-20.6	38	536	—	20	41	10	79
						60	91.51	585	4-30										
500	20	480	361	130.28	491.6	57	86.99	620	4-26	197	158.75	4-20.6	41.15	590	—	22	44.15	10	128
						75	101.68	650	4-33										
600	24	562	459	151.36	592.5	70	113.42	725	20-30	276	215.9	4-22.2	50.65	816	—	22	54.65	16	188
						75	120.46	770	20-36										
700	28	624	520	163	695	66	109.65	840	24-30	300	254	8-18	63.35	895	—	30	71.4	18	284
						70													
800	32	672	591	188	794.7	66	124	950	24-33	300	254	8-18	63.35	1015	—	30	71.4	18	368
						75													
900	36	720	656	203	864.7	110	117.57	1050	24-33	300	254	8-18	75	1115	4-M30	34	84	20	713
1000	40	800	721	216	965	135	129.89	1160	24-36	300	254	8-18	85	1230	4-M33	35	95	22	864
1200	48	940.7	864	254	1160	150	135.41	1380	28-39	350	298	8-22	105	1455	4-M36	35	117	28	1210

Note: DN700~DN1200 PN1.6MPa in a special order position

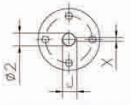
Overall Connection Dimensions & Weight for Lug Butterfly Valves Series MD



DN50(2")~DN600(24")



One Piece With Pinless



DN250(10")~DN600(24")

DN400(16")~DN600(24")

PN1.0/1.6 MPa(150/200PSI)

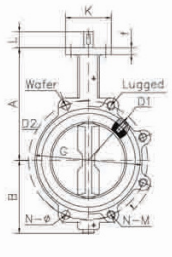
Size		A	B	C	D	L	H	D1	n–M	K	E	n1–ø1	ø2	G	J	X	f	Weight (kg)
mm	inch																	
50	2	161	80	43	52.9	28	88.38	125	4–M16	77	57.15	4–6.7	12.6	155	13.8	3	13	3.8
65	2.5	175	89	46	64.5	28	102.54	145	4–M16	77	57.15	4–6.7	12.6	179	13.8	3	13	4.2
80	3	181	95	45.21	78.8	28	61.23	160	8–M16	77	57.15	4–6.7	12.6	190	13.8	3	13	4.7
100	4	200	114	52.07	104	28	68.88	180	8–M16	92	69.85	4–10.3	15.77	220	17.77	5	13	9
125	5	213	127	55.5	123.3	28	80.36	210	8–M16	92	69.85	4–10.3	18.92	254	20.92	5	13	10.9
150	6	226	139	55.75	155.6	28	91.84	240	8–M20	92	69.85	4–10.3	18.92	285	20.92	5	13	14.2
200	8	260	175	60.58	202.5	38	112.89	295	8–M20	115	88.9	4–14.3	22.1	339	24.1	5	13	18.2
							76.35		12–M20									
250	10	292	203	68	250.5	38	90.59	350	12–M20	115	88.9	4–14.3	28.45	406	31.45	8	13	26.8
							91.88	355	12–M24									
300	12	337	242	76.9	301.6	38	103.52	400	12–M20	140	107.95	4–14.3	31.6	477	34.6	8	20	40
							106.12	410	12–M24									
350	14	368	267	76.17	333.3	45	89.74	460	16–M20	140	107.95	4–14.3	31.6	515	34.6	8	20	56
							91.69	470	16–M24									
400	16	400	309	85.7	389.6	51	100.48	515	16–M24	197	158.75	4–20.6	33.15	579	36.15	10	20	96
						60	102.42	525	16–M27									
450	18	422	328	104.6	440.51	51	88.38	565	20–M24	197	158.75	4–20.6	38	627	41	10	20	122
						60	91.51	585	20–M27									
500	20	480	361	130.28	491.6	57	96.99	620	20–M24	197	158.75	4–20.6	41.15	696	44.15	10	22	202
						75	101.68	650	20–M30									
600	24	562	459	151.36	592.5	70	113.42	725	20–M27	276	215.9	4–22.2	50.65	821	54.65	16	22	270
						75	120.46	770	20–M33									

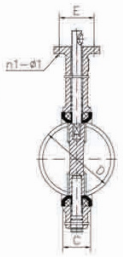
Note:

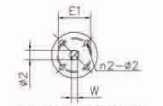
1. There are two dimensions in one column which show the different pressure gradient connections of PN1.0/PN1.6MPa.

2. Difference between Wafer and Lug types: Both types have the same construction and performance and are made of the same materials. The main difference between them is that Wafer valve is mounted between pipe flange (wafer–type) by bolts (or extended hexagon–head bolts). While Lug can be either mounted between two pipes by ordinary hexagon head bolts or mounted on the pipe end (lugged–type). As the valve is used at the end of the pipeline, the instructions for usage will be indicated in the contract.

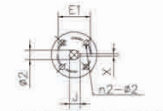
Overall Connection Dimensions & Weight for Wafer & Lug Butterfly Valve of Series PD







DN50(2")~DN200(8")

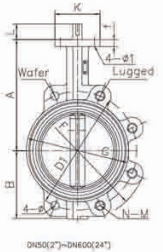


DN250(10")~DN300(12")

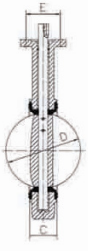
150/200PSI(PN1.0/1.6Mpa)

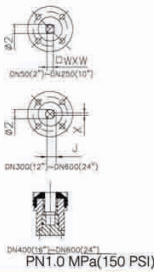
Size		A	B	C	D	L	D1	N–ø	K	E	n1–ø1	E1	n2–ø2	N–M	D2	G	ø2	f	J	W	X	Weight (kg)	
mm	inch																					Wafer	Lug
DN50	2	161	97	43	52.6	28	114	4–23	102	83	4–11	70	4–10	4–M16	120	100	12.6	13	—	9.52	—	2.5	3.8
DN65	2.5	175	96	46	64.3	28	127	4–26.6	102	83	4–11	70	4–10	4–M16	136.1	120	12.6	13	—	9.52	—	3.2	4.2
DN80	3	181	102	45.2	78.8	28	146	4–24 / 4–18	102	83	4–11	70	4–10	4–M16	152.4 / 160	127	12.6	13	—	9.52	—	3.6	4.7
DN100	4	200	121	52.1	104	28	178	4–17.6 / 4–25.8	102	83	4–11	70	4–10	8–M16	177.8 / 185.1	165	15.77	13	—	11.11	—	4.9	9
DN125	5	213	134	55.5	123.3	28	210	4–23	102	83	4–11	70	4–10	8–M16	215	185	18.92	13	—	12.7	—	7	10.9
DN150	6	226	146	55.8	155.7	28	235	4–25	102	83	4–11	70	4–10	8–M20	238.1	212	18.92	13	—	12.7	—	7.8	14.2
DN200	8	260	182	60.6	202.4	38	292	4–23 / 4–26	152	127	4–14	102	4–12	8–M20	296.1	268	22.1	13	—	15.87	—	13.2	18.2
DN250	10	292	193	68	250.4	38	356	4–22 / 4–29	152	127	4–14	102	4–12	12–M20	357	341	28.45	13	31.19	—	6.35	19.2	26.8
DN300	12	337	249	76.9	301.5	38	406	4–30.2 / 4–25.4	152	127	4–14	102	4–12	12–M24	406.4 / 431.8	400	28.45	20	31.19	—	6.35	32.5	40

Overall Connection Dimensions & Weight for Wafer & Lug Butterfly Valve of Series BD



DN50(2")~DN600(24")



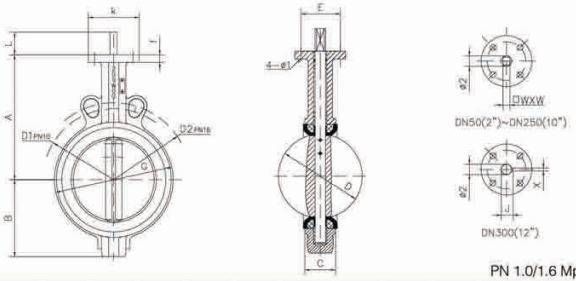


PN1.0 MPa(150 PSI)

Size		A	B	C	D	L	D1	ø	K	E	N–M	ø1	ø2	G	F	f	□wxw	J	X	Weight (kg)	
mm	inch																			Wafer	Lug
DN50	2	161	80	43	52.6	28	125	18	65	50	4–M16	7	12.6	89	155	13	9x9	—	—	2.7	4.1
DN65	2.5	175	89	46	64.3	28	145	18	65	50	4–M16	7	12.6	105	179	13	9x9	—	—	3.5	4.5
DN80	3	181	95	46	78.8	28	160	18	65	50	8–M16	7	12.6	120	190	13	9x9	—	—	3.9	5.1
DN100	4	200	114	52	104	28	180	18	90	70	8–M16	10	15.77	148	220	13	11x11	—	—	5.3	9.7
DN125	5	213	127	56	123.3	28	210	18	90	70	8–M16	10	18.92	170	254	13	14x14	—	—	7.6	11.8
DN150	6	226	139	56	155.7	28	240	22	90	70	8–M20	10	18.92	203	285	13	14x14	—	—	8.4	15.3
DN200	8	260	175	60	202.4	38	295	22	125	102	8–M20	12	22.1	255	339	13	17x17	—	—	14.3	36.2
DN250	10	292	203	68	250.4	38	350	22	125	102	12–M20	12	28.45	303	406	13	22x22	—	—	20.7	28.9
DN300	12	337	242	78	301.5	38	400	22	125	102	12–M20	12	31.6	355	477	20	—	34.34	6.35	35.1	43.2
DN350	14	368	267	78	333.3	45	460	23	125	102	16–M20	12	31.6	429	515	20	—	34.34	6.35	49.6	67.5
DN400	16	400	309	102	389.6	51	515	28	175	140	16–M24	18	33.15	480	579	20	—	36.6	7.9	73.2	115.2
DN450	18	422	328	114	440.5	51	565	28	175	140	20–M24	18	37.95	530	627	20	—	42.1	9.5	94.8	134.4
DN500	20	480	361	127	491.6	57	620	28	210	165	20–M24	23	41.12	582	696	22	—	45.33	9.53	153.6	242.4
DN600	24	562	459	154	592.5	70	725	31	210	165	20–M27	23	50.65	682	821	22	—	56.16	12.7	225.6	324

Note: Series BD can offer the PN1.6 MPa product.

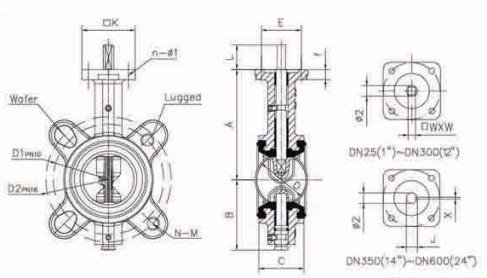
Overall Connection Dimensions & Weight for Wafer Butterfly Valve of Series AD



PN 1.0/1.6 Mpa(150/200PSI)

Size		A	B	C	D	D1	D2	ø2	K	L	G	E	ø1	□WXW	J	X	f	Weight(kg)
mm	inch																	
DN50	2	140	80	43	52	125	125	12.6	77	28	100	57.15	6.7	9x9	—	—	13	3.34
DN65	2.5	152	89	46	64	145	145	12.6	77	28	120	57.15	6.7	9x9	—	—	13	3.94
DN80	3	159	95	46	78	160	160	12.6	77	28	127	57.15	6.7	9x9	—	—	13	4.05
DN100	4	178	114	52	104	180	180	15.77	92	28	156	69.85	10.3	11x11	—	—	13	5.48
DN125	5	190	127	56	123	210	210	18.92	92	28	190	69.85	10.3	14x14	—	—	13	7.66
DN150	6	203	139	56	155	240	240	18.92	92	28	212	69.85	10.3	14x14	—	—	13	8.5
DN200	8	238	175	60	202	295	295	22.1	115	38	268	88.9	14.3	17x17	—	—	13	25
DN250	10	268	203	68	250	350	355	28.45	115	38	325	88.9	14.3	22x22	—	—	13	31.4
DN300	12	306	242	78	301	400	410	31.6	140	38	403	107.95	14.3	—	34.6	8	20	45.9

Overall Connection Dimensions & Weight for Wafer & Lug Butterfly Valve of Series ED

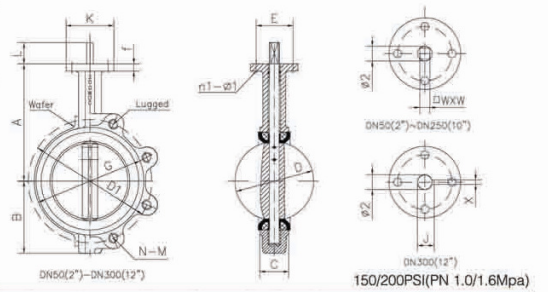


PN1.0/1.6 MPa (150/200PSI)

Size		A	B	C	D	D_1	D_2	N–M	L	ø2	K	E	n–ø1	f	J	□WXW	X	Weight (kg)	
mm	inch																	Wafer	Lug
DN25	1	110	55	33	24	85	85	4–M12	—	10	42	42	4–6	10	—	7	—	1	1.3
DN32	11/4	110	55	33	24	100	100	4–M16	—	10	42	42	4–6	10	—	7	—	1	1.3
DN40	1.5	125	78	33	39	110	110	4–M16	—	12.6	50	50	4–7	10	—	9x9	—	1.1	2.1
DN50	2	125	78	43	52	125	125	4–M16	28	12.6	50	50	4–7	10	—	9x9	—	1.3	2.8
DN65	2.5	136	84	46	64	145	145	4–M16	28	12.6	50	50	4–7	10	—	9x9	—	1.9	3.3
DN80	3	142	93	46	78	160	160	8–M16	28	12.6	50	50	4–7	10	—	9x9	—	2.5	5
DN100	4	163	107	52	104	180	180	8–M16	28	15.77	50	50	4–10	12	—	11x11	—	3.9	6
DN125	5	176.5	125	56	123	210	210	8–M16	28	18.92	50	50	4–10	12	—	14x14	—	4.7	8.6
DN150	6	194	141	56	155	240	240	8–M20	28	18.92	70	70	4–10	12	—	14x14	—	6.9	11
DN200	8	222	167	60	202	295	295	8–M20 12–M20	38	22.1	70	70	4–12	15	—	17x17	—	10.5	25
DN250	10	255	200	68	250	350	355	12–M20 12–M24	38	28.45	102	102	4–12	15	—	22x22	8	16.4	43
DN300	12	282	235	78	301	400	410	12–M20 12–M24	38	31.6	102	102	4–12	15	—	22x22	8	30.2	46
DN350	14	335	257	78	333.3	460	470	16–M20 16–M24	45	31.6	125	125	4–14	23	34.6	—	8	50.5	77
DN400	16	365	292	102	389.6	515	525	16–M24 16–M27	51 60	33.15	140	140	4–18	23	36.15	—	10	71.8	101
DN450	18	400	359	114	440.5	565	585	20–M24 20–M27	51 60	38	140	140	4–18	23	40.95	—	10	95.9	139
DN500	20	440	397	127	492	620	650	20–M24 20–M30	57 75	41.14	140	140	4–18	27	44.12	—	10	130.5	179
DN600	24	525	467	154	593	725	770	20–M27 20–M33	70 75	50.65	165	165	4–22	27	54.62	—	16	190.6	283

Note: Series ED flange connection conforms to DIN 2501

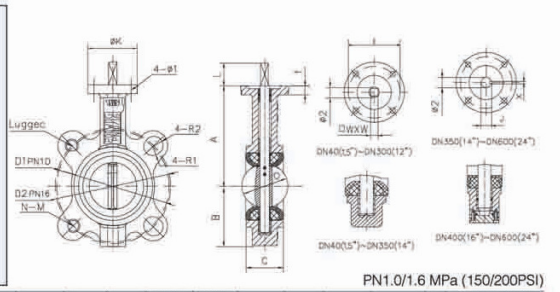
Overall & Connection Dimensions & Weight for Wafer & Lug Butterfly Valve of Series KD



150/200PSI(PN 1.0/1.6Mpa)

Size inch		A	B	C	D	D1	E	K	G	L	N–M	ø2	n1-ø1	f	J	□WXW	X	Weight (kg)	
mm	inch																	Wafer	Lug
DN50	2	161	80	43	52.6	120.65	57.15	77	100	28	4–5/8	12.6	4–6.7	13	—	9x9	—	2.4	3.8
DN65	2.5	175	89	46	64.3	139.7	57.15	77	120	28	4–5/8	12.6	4–6.7	13	—	9x9	—	3.0	4.2
DN80	3	181	95	45.2	78.8	152.4	57.15	77	127	28	4–5/8	12.6	4–6.7	13	—	9x9	—	3.4	4.7
DN100	4	200	114	52.1	104	190.5	69.85	92	156	28	8–5/8	15.77	4–10.3	13	—	11x11	—	4.6	9
DN125	5	213	127	55.5	123.3	215.9	69.85	92	190	28	8–3/4	18.92	4–10.3	13	—	14x14	—	6.6	10.9
DN150	6	226	139	55.8	155.7	241.3	69.85	92	212	28	8–3/4	18.92	4–10.3	15	—	14x14	—	7.3	14.2
DN200	8	260	175	60.6	202.4	298.45	88.9	115	268	38	8–3/4	22.1	4–14.3	15	—	17x17	—	12.4	18.2
DN250	10	292	203	68	250.4	361.95	88.9	115	325	38	12–7/8	28.45	4–14.3	18	—	22x22	—	18	26.8
DN300	12	337	242	76.9	301.5	431.8	107.95	140	403	38	12–7/8	31.6	4–14.3	20	34.34	—	6.35	30.6	40

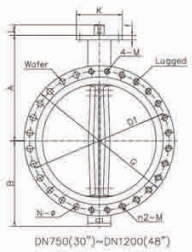
Overall Connection Dimensions & Weight of Series YD for Wafer Butterfly Valve

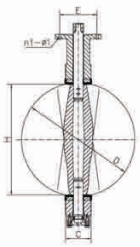


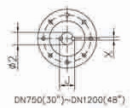
PN1.0/1.6 MPa (150/200PSI)

Size		A	B	C	D	D_1	D_2	N–M	L	ø2	øK	E	R1 (PN10)	R2 (PN16)	n–ø1	f	J	□WXW	X	Weight (kg)	
mm	inch																			Wafer	Lug
DN25	1	—	—	—	—	—	—	4–M12	—	—	—	—	—	—	—	—	—	—	—	—	—
DN32	11/4	—	—	—	—	—	—	4–M16	—	—	—	—	—	—	—	—	—	—	—	—	—
DN40	1.5	125	73	33	39	110	110	4–M16	28	12.6	65	50	R9.5	R9.5	4–7	10	—	9×9	—	1.8	2.1
DN50	2	125	73	43	52	125	125	4–M16	28	12.6	65	50	R9.5	R9.5	4–7	10	—	9×9	—	2.3	2.8
DN65	2.5	136	82	46	64	145	145	4–M16	28	12.6	65	50	R9.5	R9.5	4–7	10	—	9×9	—	3.3	3.3
DN80	3	142	91	45.21	78	160	160	8–M16	28	12.6	65	50	R9.5	R9.5	4–7	10	—	9×9	—	3.7	5
DN100	4	163	106	52.07	104	180	180	8–M16	28	15.77	90	50	R9.5	R9.5	4–10	12	—	11×11	—	5.2	6
DN125	5	176	128	55.5	123	210	210	8–M16	28	18.92	90	50	R9.5	R9.5	4–10	12	—	14×14	—	7.5	8.6
DN150	6	196	143	55.75	155	240	240	8–M20	28	18.92	90	70	R11.5	R11.5	4–10	12	—	14×14	—	8.7	11
DN200	8	228	170	60.58	202	295	295	8–M20 12–M20	38	22.1	125	70	R11.5	R11.5	4–12	15	—	17×17	—	15	25
DN250	10	258	204	68	250	350	355	12–M20 12–M24	38	28.45	125	102	R11.5	R14	4–12	15	—	22×22	—	23	43
DN300	12	292	239	76.9	301	400	410	12–M20 12–M24	38	31.6	125	102	R11.5	R14	4–12	15	—	22×22	—	35	46
DN350	14	336	267	76.17	333.3	460	470	16–M20 16–M24	45	31.6	150	125	R11.5	R14	4–14	18	34.6	—	8	45	77
DN400	16	365	267	85.7	389.6	515	525	16–M24 16–M27	51 60	33.15	175	140	R14	R15.5	4–18	23	36.15	—	10	65	101
DN450	18	400	315	104.6	440.5	565	585	20–M24 20–M27	51 60	38	175	140	R14	R14	4–18	23	40.95	—	10	86	139
DN500	20	440	348	130.28	492	620	650	20–M24 20–M30	57 75	41.14	175	140	R14	R14	4–18	27	44.12	—	10	130.5	179
DN600	24	525	467	151.36	593	725	770	20–M27 20–M33	70 75	50.65	210	165	R15.5	R15.5	4–22	27	54.62	—	16	190.6	283

Overall Connection Dimensions & Weight of for Wafer & Lug Butterfly Valve Series UD



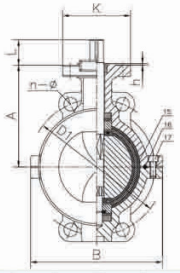


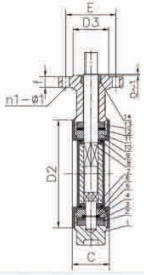


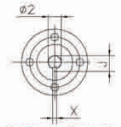
PN1.0MPa (150PSI)

Size		A	B	C	D	L	H	D1	N–ø	K	E	4–M	ø2	G	n_2 –M	n_1–$ø_1$	f	J	X	Weight(kg)
mm	inch																			
DN750	30	660	560	167	744	66	726	914.4	24–35	300	254	4–11/4–7UNC–2B	63.35	984	24–11/4–7UNC–2B	8–18	28	71.35	18	480
DN900	36	720	656	203	864.7	118	841	1085.8	28–41.3	300	254	4–11/2–6UNC–2B	75	1168	28–11/2–6UNC–2B	8–18	34	84	20	728
DN1050	42	858	777	251	1030	150	999	1257.3	32–41.3	300	254	4–11/2–6UNC–2B	95	1346	32–11/2–6UNC–2B	8–18	35	105	25	976
DN1200	48	941	864	276	1160	150	1127	1422.4	40–41.3	350	298	4–11/2–6UNC–2B	105	1511	40–11/2–6UNC–2B	8–22	35	117	28	1374

Overall Connection Dimensions & Weight for Wafer Butterfly Valve of Series FD







PN1.0 MPa(150PSI)

Size		D1	D2	K	E	D3	A	B	C	L	n–ø	h	ø2	n1–ø1	f	J	X	Weight(kg)
mm	inch																	
DN40	1.5	110	85	65	50	35	105	110	33	35	4–18	2	16	4–8	13	18	5	2.8
DN50	2	125	100	65	50	35	105	110	43	35	4–18	2	16	4–8	13	18	5	3.6
DN65	2.5	145	120	65	50	35	115	135	46	35	4–18	2	16	4–8	13	18	5	4
DN80	3	160	135	90	70	55	125	145	46	55	8–18	2	20	4–10	13	22.5	6	5.5
DN100	4	180	155	90	70	55	135	175	52	55	8–18	2	20	4–10	13	22.5	6	7.8
DN125	5	210	185	125	102	70	160	210	56	75	8–18	2	22	4–12	13	24.5	6	8.736
DN150	6	240	210	125	102	70	180	235	56	75	8–23	2	24	4–12	13	27	8	14.8
DN200	8	295	265	150	125	85	220	290	60	85	12–23	2	28	4–14	13	31	8	21.5
DN250	10	355	320	150	125	85	255	340	68	85	12–25	2	30	4–14	13	33	8	36.4
DN300	12	410	375	175	140	100	290	395	78	95	12–25	3	35	4–18	20	38	10	46.3

Material of Main Parts

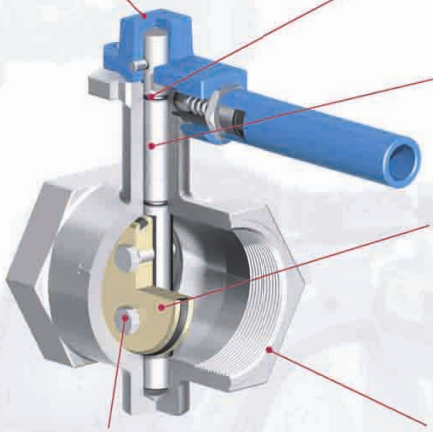
No.	Name	Material	No.	Name	Material
1	Body	WCB	10	Seat	PTFE
2	Lower Washer	35 ASTM A570 GR33	11	Upon Clamp Ring	H62
3	Aerosil Washer	SI	12	Aerosil Washer	SI
4	Check Ring	65Mn	13	Upper Washer	35 ANSI 1035
5	Shim	35 ANSI 1035	14	Bushing	H62
6	Lower Clamp Ring	H62	15	Aerosil Bar	SI
7	Disc	+F4 CF8+PTFE	16	Spacer Bar	PTFE
8	Stem	2Cr13	17	Screw	35 ANSI 1035
9	O–Ring	FPM	—	—	—

Note: Series FD DN350–DN600 in a special order position.

Special Handle:
Easy and convenient operation.

O-Ring:
Primary and secondary stem seal.

Integral Stem Design:
Ensures dependable and positive disc control.



Disc:
Standard polished bronze disc with replaceable Buna N O–Ring. An optional Viton O–Ring material is also available. Both disc and stem O–Rings are easily replaced in the field.

Body:
Body use spiral NPT to connect with the pipeline, to save installation space; body electroplated

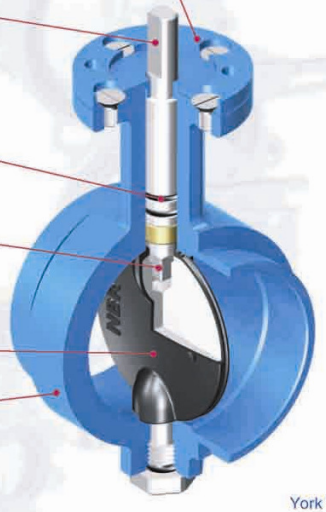
Hexagonal Head Bolt:
The way the Axis connecting plate to facilitate the replacement of ring.

Driving Device Flange:
Available with handles, gear operators.

Flat Stem End:
Convenient to connect with various actuators, deliver more torque.

O-Ring:
Primary and secondary stem seal.

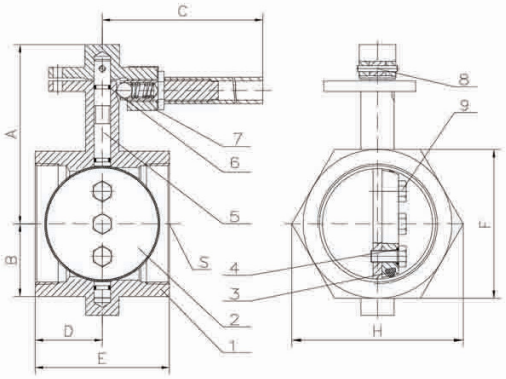
Two-Piece Stem Square Driver:
No–space connection applies to Worse case scenarios



Disc Coating:
Disc is encapsulated with various synthetic elastomers to accommodate varied service requirements.

Body:
Available in Grooved End with EPOXY coating on inside and outside of body.

Overall Connection Dimensions & Weight of Series SD Butterfly Valve



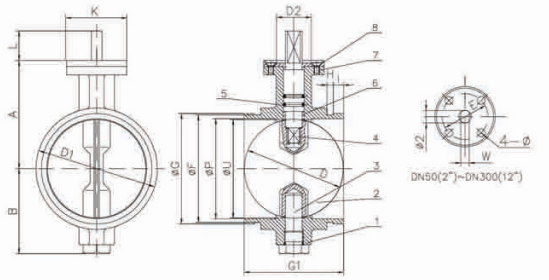
200 PSI(PN1.6Mpa)

Size		A	B	C	D	E	F	H	S	Weight (kg)
mm	inch									
DN50	2	105.41	57.15	203.2	53.98	107.95	76.2	87.9	2"-111/2NPT	4.8
DN80	4	152.91	69.85	203.2	61.72	123.7	103.12	119.1	3"-8NPT	7.1
DN100	6	161.04	93.73	203.2	65.02	130.05	134.87	155.7	4"-8NPT	10.1
DN150	8	231.24	120.65	330.2	88.9	177.8	196.85	277.3	6"-8NPT	21.8

Material of Main Parts

NO.	Name	Material
1	Body	HT200 ASTM A126-84 CL B
2	Disc	ZCuZn40Pb2 ASTM B148-90 C95400
3	Disc O-Ring	NBR
4	O-Ring	NBR
5	Stem	Y1Cr13 416
6	Stem O-Ring	NBR
7	Handle Extension	Q235-A Gr.33
8	Cone Pin	35 1035
9	Disc Stud	Y1Cr13 416

Overall Connection Dimensions & Weight of Series GD Butterfly Valve



175 PSI(PN1.6Mpa)

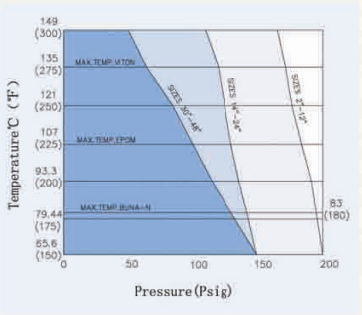
Size		A	B	D	D1	D2	L	H	E	F	G	G1	I	P	w	U	K	ø1	ø2	Weight (kg)
mm	inch																			
50	2	98.3	61	51.1	78	35	32	9.53	50	57.15	60.33	81.5	15.88	50.8	9.52	49.5	77	7	12.7	2.6
65	2.5	111.25	65	63.2	92	35	32	9.53	50	69.09	73.03	97.8	15.88	63.5	9.52	61.7	77	7	12.7	3.8
80	3	117.35	75	76	105	35	32	9.53	50	84.94	88.9	97.8	15.88	76.2	9.52	74.5	77	7	12.7	4.6
100	4	136.65	90	99.5	132	55	32	9.53	70	110.08	114.3	115.8	15.88	101.6	11.1	98	92	10	15.88	5.8
150	6	161.8	130	150.3	185	55	45	9.53	70	163.96	168.28	148.8	15.88	152.4	17.53	148.8	92	10	25.4	13.8
200	8	196.9	165	200.6	239	70	45	11.13	102	214.4	219.08	133.6	19.05	203.2	20.02	198.8	125	12	28.58	16.1
250	10	228.6	215	250.7	295	70	45	12.7	102	268.28	273.05	159.8	19.05	254	24	248.8	125	12	34.93	34.2
300	12	266.7	258	301	350	70	45	12.7	102	318.29	323.85	165.1	19.05	304.8	26.92	299.1	125	12	38.1	58.4

Material of Main Parts

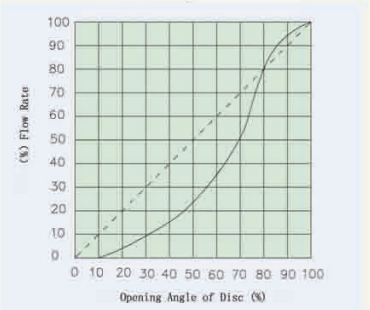
NO.	Name	Code Name	Material	Number
1	Body		ASTM A536 65-45-12	1
2	Disc		ASTM A536 65-45-12+Rubber	1
3	Stem(Lower)		1Cr17Ni2 431	1
4	Stem(Upper)		1Cr17Ni2 431	1
5	O-Ring	GB819-85	NBR	3
6	Bushing		F4 PTFE	1
7	Screw		Q235-A Zn-PLATED	4
8	Cover		Q235-A Ni-PLATED	1

P-T Diagram & Performance Curve of Flow Rate for All Series

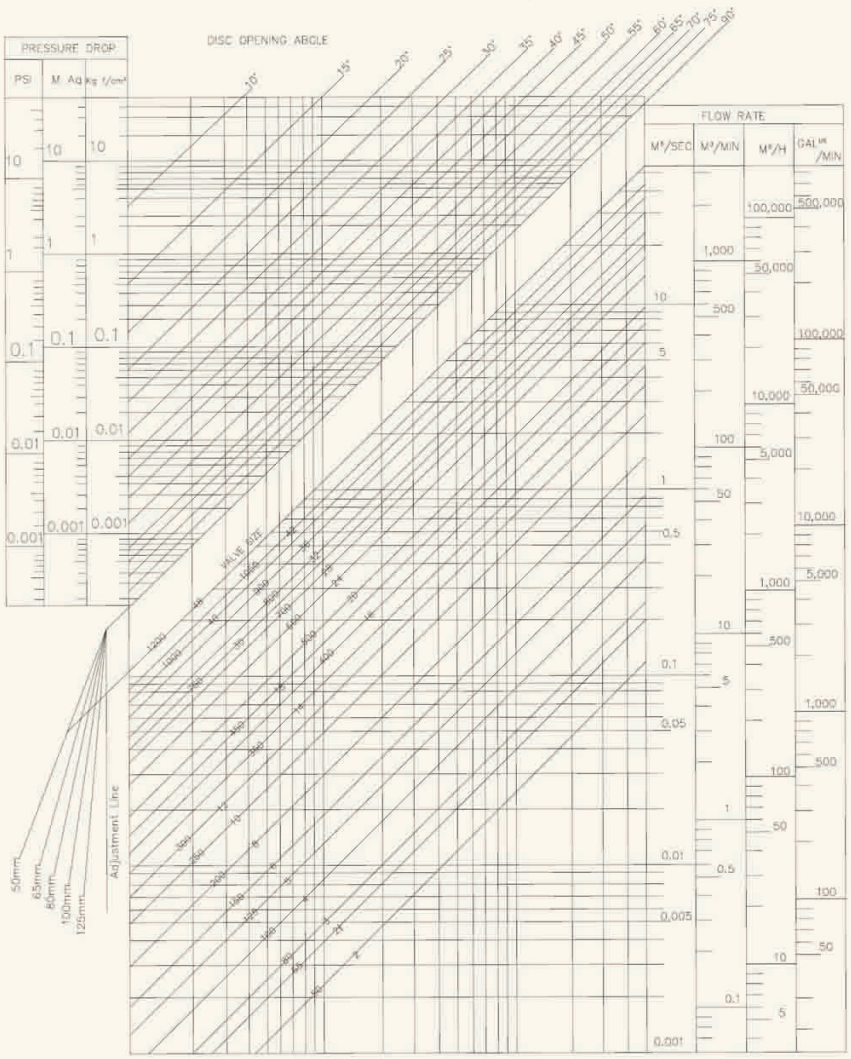
P-T



Performance Curve of Velocity



Flow Rate-Head Loss Diagram



The curve On the left shows the relationship between valve opening and rate of flow at a constant pressure differential. Generally Butterfly Valves are most suitable for controlling flow but are not recommended for flow control where the valve opening is below 30. (Ideal: 30° to 70°)

CHEMICAL RESISTANCE GUIDE

EXPLANATION OF RATINGS

A– Excellent
B– Good
C– Fair
P– Poor

This guide has been prepared to aid in selecting the proper material for various media.This information is intended only as a general guide and should not be taken as guarantee. To insure reliable performance, contact us for suggested elastomer the planned media and pressure conditions.

CHEMICALS	BUNA-N	EPDM	HYPALON	NEOPRENE	VITON	BRONZE	DUCTILE IRON	STAINLESS STEEL
Acetone	P	B	P	P	P	A	A	A
Air	A	A	A	A	A	A	A	A
Alcohol, Butyl	B	B	B	B	A	B	A	A
Alcohol, Ethyl	A	A	B	B	–	B	A	B
Alcohol, Methyl	B	A	A	A	A	B	A	A
Asphalt	C	P	–	–	B	A	A	A
Aluminum Acetate	C	B	–	–	C	P	P	A
Ammonia Gas	B	A	P	B	P	A	–	A
Ammonia Liquid	C	A	P	B	P	P	–	A
AnilineDies	P	B	C	C	B	P	B	A
Barium Nitrate	A	A	B	A	A	P	A	A
Beer	A	A	A	B	A	B	P	–
Beet Sugar Liquors	–	A	A	B	C	A	B	A
Benzene(Benzol)	P	P	P	P	B	B	A	B
Brines Saturted	B	B	B	B	B	B	P	B
Butane	P	A	B	B	B	A	A	B
Calcium Chloride	C	A	A	A	A	B	A	B
Carbon Tetrachloride	P	P	–	–	C	P	C	A
Chlorinate (10ppm)	C	B	–	–	B	P	–	B
Citric Acid	B	B	A	A	–	P	P	A
Diesel Oil Fuels	A	P	C	C	A	A	A	A
Dioxane	P	P	B	B	P	A	A	A
Ethylene Glycol	A	A	A	A	A	B	A	B
Freon	B	A	A	A	P	B	B	A
Fructose	A	A	–	–	A	–	A	P
Fule Oil	A	P	C	C	A	B	B	A
Gas Natural	B	P	A	A	A	B	A	A
Gas Sour	C	P	–	–	B	B	B	B
Gasoline Refined	A	P	B	B	A	B	A	A
Glucose	A	B	A	A	–	A	A	–
Grease	A	P	–	–	A	P	A	A
Ink Newsprint	B	A	–	B	B	P	A	A
JP-4 Fuel	A	P	P	P	A	A	A	A
Kerosene	A	P	C	B	A	A	A	A
Ketones	P	A	P	P	P	A	A	A
Latex	A	C	C	C	B	–	A	A
Linseed Oil	A	C	B	B	A	A	A	A

CHEMICALS	BUNA-N	EPDM	HYPALON	NEOPRENE	VITON	BRONZE	DUCTILE IRON	STAINLESS STEEL
LPG	A	P	P	C	B	A	A	B
Mineral Oils	A	P	B	B	A	A	A	A
Minewater	A	B	C	C	A	C	P	–
Molasses	A	P	A	A	B	A	A	A
Natpha	B	P	P	P	B	B	A	P
Nitric Acid 10%	P	B	A	B	A	P	P	B
Nitric Acid 100%	P	P	–	–	C	P	P	B
Ntrogen	–	A	–	–	–	A	A	A
Oleic Acid	B	C	B	B	C	B	C	B
Oxygen	C	A	A	A	A	A	A	A
Paints, Solvents	P	A	–	–	–	A	A	A
Paraffin	A	P	A	A	A	A	B	A
Phenol Gas	P	C	C	C	B	P	P	A
Tar	C	P	–	C	B	A	A	A
Salt Water	A	A	A	B	A	C	P	A
Sewage	A	B	A	A	A	C	B	B
Soap Solutions	A	A	A	A	A	B	B	A
Sugar	A	A	B	B	A	P	B	A
Sulfate Liquor	P	C	B	B	B	P	–	A
Sulfite Liquor	C	A	B	B	B	P	B	B
Sufuric Acid 0-77%	C	B	B	P	B	P	P	B
Sufuric Acid 100%	P	P	B	P	P	P	P	P
Tannic Acid (Tannin)	B	A	A	A	B	B	B	B
Toluol (tolurene)	C	P	P	P	B	A	A	A
Trichlorethylene	–	P	P	P	B	A	–	A
Turpentine	C	P	C	C	A	A	A	A
Varnish	B	P	–	–	B	B	–	–
Vinegar	P	A	A	B	A	P	P	A
Water and Lime	A	A	B	B	A	P	P	A

BODY:		TRIM:	
CI	85℉～418℉	BUNA-N	+10℉～180℉
DI	-34℉～598℉	EPDM	-30℉～275℉
WCB	-34℉～733℉	HYPALON	-20℉～275℉
CF8	-515℉～1408℉	NEOPRENE\FDA	-20℉～200℉
CF8M	-515℉～940℉	VITON	-20℉～400℉
		CF8 & CF8M	-450℉～600℉
		ALB	-460℉～450℉

Note: If the medium is out of the guide above, please contact us.

Definition of Cv Value

Cv=When valve entirely opened, pressure difference in both sides of valve will be 1 pound/inch2, when fluid is 60° F clean water, flow volume of per gallon/min. flowing through valve.

$Cv=Q\sqrt{\frac{G}{\Delta P}}$ Whereas: G=Specific gravity, clean water will be 1.0 Q=Max.flow rate P=Pressure difference, 1b/In2

All Series Except Series ED, HD

Size		Flow in Gpm@1PSI P@Various Disc Angles								Full 90° Open
mm	inch	10°	20°	30°	40°	50°	60°	70°	80°	
50	2	0.1	5	12	24	45	64	90	125	135
65	2.5	0.2	8	20	37	65	98	144	204	220
80	3	0.3	12	22	39	70	116	183	275	302
100	4	0.5	17	36	78	139	230	364	546	600
125	5	0.8	29	61	133	237	392	620	930	1022
150	6	2	45	95	205	366	605	958	1437	1579
200	8	3	89	188	408	727	1202	1903	2854	3136
250	10	4	151	320	694	1237	2047	3240	4859	5340
300	12	5	234	495	1072	1911	3162	5005	7507	8250
350	14	6	338	715	1549	2761	4568	7230	10844	11917
400	16	8	464	983	2130	3797	6282	9942	14913	16388
450	18	11	615	1302	2822	5028	8320	13168	19752	21705
500	20	14	791	1674	3628	6465	10698	16931	25396	27908
600	24	22	1222	2587	5605	9989	16528	26157	39236	43116
700	28	36	1813	3639	6636	10000	14949	22769	34898	49500
750	30	47	2357	4731	8627	13000	19434	29600	45367	64350
800	32	51	2387	4791	8736	13788	20613	31395	48117	68250
900	36	60	3021	6063	11055	17449	26086	39731	60895	86375
1000	40	84	4183	8395	15307	24159	36166	55084	84425	119750
1050	42	118	5860	11711	21430	33823	50632	77118	11820	167650
1200	48	177	8784	17567	32145	50735	75948	115677	17730	251475

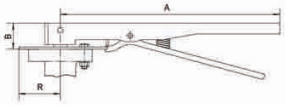
Series ED

Size		Flow in Gpm@1PSI P@Various Disc Angles								Full 90° Open
mm	inch	10	20	30	40	50	60	70	80	
25	1	0.1	1.1	3.4	6.9	11	17	29	46	52
32	1.25	0.1	1.1	3.4	6.9	11	17	29	46	52
40	1.5	0.2	1.5	6.5	10	16	25	38	70	95
50	2	0.4	2	9	17	28	46	77	139	154
65	2.5	0.6	4	13	28	50	84	140	252	280
80	3	0.8	7	21	48	86	143	238	428	475
100	4	1	11	34	76	137	228	380	684	760
125	5	1.5	16	47	104	188	313	522	940	1044
150	6	2	31	94	209	376	627	1045	1881	2090
200	8	3	62	185	412	742	1236	2060	3708	4120
250	10	4	127	380	845	1521	2536	4226	7607	8453
300	12	5	157	471	1047	1884	3140	5233	9419	10465
DN350(14")–DN600(24") Cv Value The Same With Series MD										

Series HD

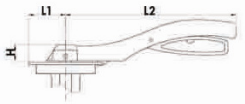
Size		Flow in Gpm@1PSI P@Various Disc Angles								Full 90° Open
mm	inch	10°	20°	30°	40°	50°	60°	70°	80°	
DN50(2")–DN125(5") Cv Value The Same With Series MD										
150	6	0.8	34	94	153	257	422	706	1154	1320
200	8	2	56	154	251	422	693	1158	1892	2165
250	10	3	87	238	385	654	1073	1794	2931	3353
300	12	4	153	417	681	1145	1879	3142	5132	5827
350	14	6	183	500	816	1372	2252	3765	6150	7037
400	16	8	271	740	1208	2031	3333	5573	9104	10416
450	18	11	318	867	1417	2382	3909	6535	10676	12215
500	20	14	415	1133	1851	3112	5107	8538	13948	15959
600	24	22	543	1482	2421	4069	6678	11165	18240	20869

Overall Dimension & Weight of Handle Lever



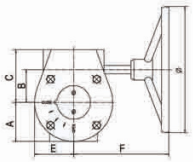
Size mm(inch)	A	B	R	Weight (kg)
50(2")~150(6")	266.7	32	52	0.9
200(8")~300(12")	359	50	75.2	2.3

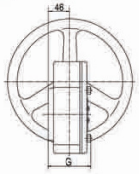
Overall Dimension & Weight of Aluminum Handle Lever



Size mm(inch)	L1	L2	H	Weight (kg)
50(2")~80(3")	47	170	29	0.35
100(4")~150(6")	47	215	33	0.67

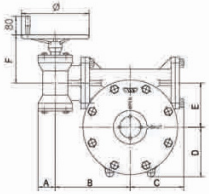
Overall Dimension & Weight of Worm Gearing

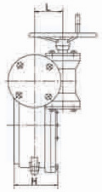




Type	Size mm (inch)	A	B	C	E	F	G	ø	Weight (kg)
3D$_B$-15	50(2)~150(6)	53	45	71	53	174	70	150	5.2
3D$_B$-50	200(8)~250(10)	76	63	76	76	237	86	300	13
3D$_B$-120	300(12)~350(14)	82	78	86	82	225	88	300	15

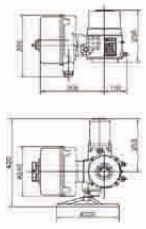
Overall Dimension & Weight of Secondary Worm Gearing



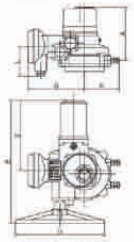


Type	Size mm (inch)		A	B	C	D	E	F	H	L	ø	Weight (kg)
	PN1.0MPa	PN1.6/2.0MPa										
3D-30/250	400(16")~500(20")	400(16")~450(18")	45	181	103.5	103.5	94	160	110	57	300	56.9
3D-30/400	600(24")	500(20")	46	199.5	131	131	125	176	128	66	400	72.37
3D-60/800	700(28")~800(32")	600(24")	55	228	146	146	140	215	157	88	400	124
3D-120/1500	900(36")~1000(40")	600(24")~700(28")	55	243	170	170	162.5	240	170	88	400	158
3D-120/2500	1050(42")~1200(48")	800(32")~1000(40")	70	302	250	180	236	255	209	126	450	370
3D-200/4000	1400(56")	1100(44")~1200(48")	70	414	362	248	345	255	287	150	500	420

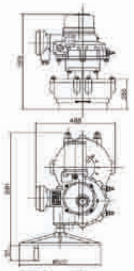
Performance Data, Overall Dimensions & Weight of Series 802 Electric Actuator



8021



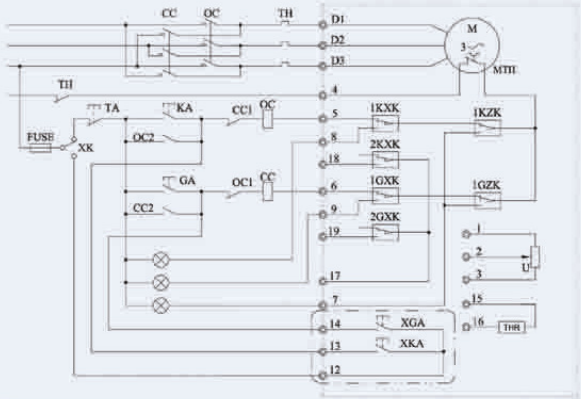
8022、8023



8023、3011

Type	Size mm (inch)		Max.Output Torque(N.m)	Output Speed(r/min)	Motor Power(w)	Time for 90° Turning(s)	A	B	D	E	G	H	L	Weight (kg)
	PN1.0MPa	PN1.6/2.0MPa												
802.10-1	50-100 (2"-4")	50-100 (2"-4")	100	1	25	15	The dimensions refer to 8021 outline sketch							38
802.20-1	125-150 (5"-6")	125-150 (5"-6")	200	1	45	15								
802.60-1	200-300 (8"-12")	200-250 (8"-10")	600	1	180	15	298	570-662	400	333-425	253	156	132	56
802.150-0.5	350-450 (14"-18")	300-350 (12"-14")	1500	0.5	370	30								
802.250-1	500 (20")	400-450 (16"-18")	2500	1	750	15	333	660-825	500	380-545	288	185	132	100
802.500-0.5	600 (24")	500-600 (20"-24")	5000	0.5	750	30								
802.1000-0.2	700-800 (28"-32")	——	10000	0.2	1100	75	The dimensions refer to8023/3011 outline sketch.							203

Diagram of Electric Principle of Controller for Series 802 Electric Actuator

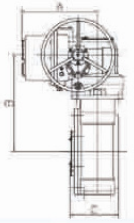


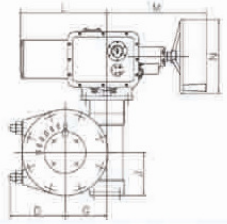
Overall Dimensions of Controller for Series 802 Electric Actuator

Overall dimensions of type BFA controller

Opening size of type BEA controller

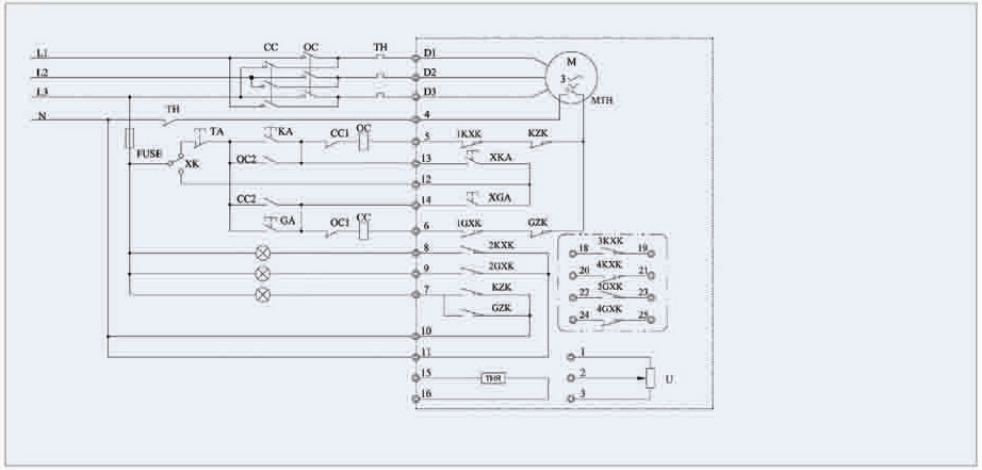
Performance Data, Overall Dimensions & Weight of 903-402 Electric Actuator





Type	Size mm (inch)	Max.Output Torque(N.m)	Output Speed (r/min)	Motor Power (kw)	Time for 90° Turning(s)	A	B	C	D	G	J	L	M	N	Weight (kg)
903/402.1000-0.3	900(36")-1050(42")	10000	0.32	1.1	50	311	390	195	230	170	188	342-527	400	300	190
903/402.2500-0.3	1200(48")	25000	0.32	2.2	50	334	452	228	255	202	232	364-548	450	400	295

Diagram of Electric Principle of Type 903-402 Electric Actuator



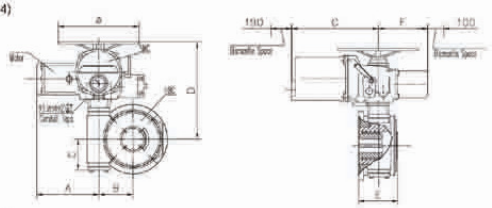
Overall Dimensions of Controller for Series 903-402 Electric Actuator

Overall Dimensions of Type DFK Controller

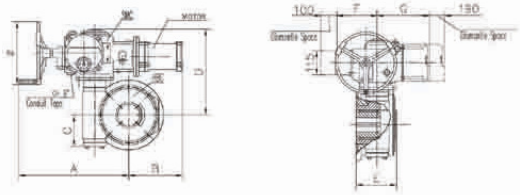
Opening size of type DFK controller

Performance Data, Overall Dimensions & Weight of SMC/HBC Electric Actuator

SMC(03-04)

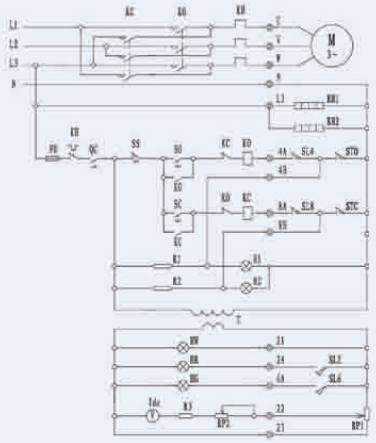


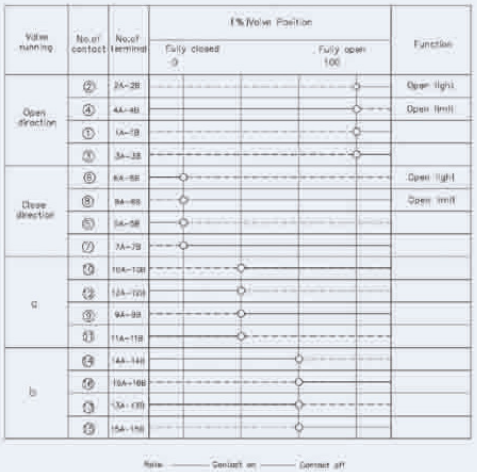
SMC(00-02)



Type	Size mm(inch)		Max.Output Torque(N.m)	Output Speed(r/min)	Motor Power(kw)	Time for 90° Turning(s)	A	B	C	D	E	F	G	ø	Weight (kg)
	PN1.0MPa	PN1.6MPa													
SMC-04/H0BC	200(8")~250(10")	200(8")~250(10")	600	1	0.2	15	243	64	121	422	160	185	346	508	74
SMC-03/H1BC	300(12")~450(18")	300(12")~450(18")	2000	1	0.4	15	470	89	145	491	188	202	373	508	120
SMC-03/H2BC	500(20")~600(24")	500(20")	3000	0.5	0.4	30	470	108	172	504	202	202	373	508	140
SMC-00/H3BC	700(28")~800(32")	600(24")	7800	0.5	1.1	30	552	408	203	497	240	251	364	305	220
SMC-0/H4BC	900(36")~1050(42")	700(28")~800(32")	17500	0.3	1.5	45	607	373	238	568	258	273	367	305	320
SMC-0/H5BC	1200(48")	1200(48")	27000	0.3	2.2	45	677	375	267	610	280	304	393	305	520

Diagram of Electric Principle of Type SMC/HBC Electric Actuator





Electric-Actuated Butterfly Valve

Features:
Ideal for pipelines in the industries of petroleum processing, chemical, food, medicine, textile, paper-making, power generation, ship-building, metallurgy, water supply and drainage systems. They are used along with programmable controller as well as other automatic instruments for automatically regulating and remotely controlling the level, flow and pressure of liquids.

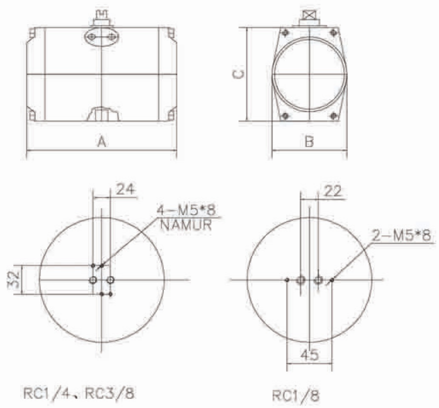
Main Technical Data of Actuator for Automatic Electric-Actuated Butterfly Valve

Main Technical Data			
Power Supply	380V	50HZ	3-Phase
Input Signal	4-20mA		
Output Turn Angle	0-90°		
Sensitivity	±0.25-0.5mA Continuous Adjustable		
Line Speed	3% Superior to 3%		

Overall Dimension of Type BFB Controller

Note: Normal type electric-actuated butterfly valve can be fitted with Series "LQ" or 802 actuators, and the fitted controller is of BFA type. The actuator of the automatic electric-actuated butterfly valve is composed of the actuator of normal type valve and Type BFB automatic adjusting controller. Series 802 automatic butterfly valves are suitable for flow intermittent adjusting only and intermittence time should not be over 20 minutes.

Pneumatic Actuator, Performance Date & Overall Dimension of Series 63000



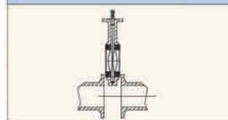
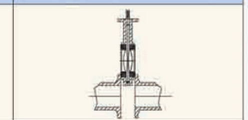
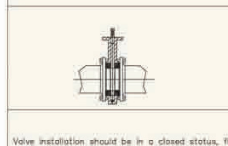
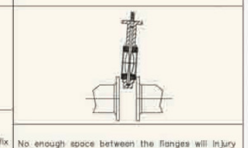
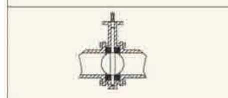
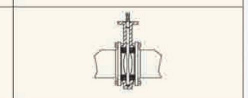
Performance Data

Type		Size mm (inch)		Cylinder Inlet	Magnet valve Inlet	Electric Positioner	Max.Output	Output Turn Angle	Air Pressure (MPa)
		PN1.0MPa	PN1.6MPa						
63083RA-W	Open&Close	50(2")~100(4")	50(2")~100(4")	RC1/8	G1/4"	RC1/4	70	90° ±5°	0.5
	Adjusting				—				
63110RA-W	Open&Close	125(5")~150(6")	125(5")~150(6")	RC1/4	G1/4"		158	90° ±5°	0.5
	Adjusting				—				
63143RA-W	Open&Close	200(8")	200(8")	RC1/4	G1/4"		392	90° ±5°	0.5
	Adjusting				—				
63160RA-W	Open&Close	250(10")	250(10")	RC1/4	G1/4"		550	90° ±5°	0.5
	Adjusting				—				
63200RA-W	Open&Close	300(12")~350(14")	300(12")	RC1/4	G3/8"		1070	90° ±5°	0.5
	Adjusting				—				
63235RA-W	Open&Close	400(16")~450(18")	350(14")~400(16")	RC1/4	G3/8"		2000	90° ±5°	0.5
	Adjusting				—				
63280RA-W	Open&Close	500(20")	450(18")~500(20")	RC3/8	G3/8"		3100	90° ±5°	0.5
	Adjusting				—				
63350RA-W	Open&Close	600(24")~700(28")	600(24")	RC3/8	G3/8"		5712	90° ±5°	0.5
	Adjusting				—				
63400RA-W	Open&Close	800(32")		RC1/2	G1/2"		8139	90° ±5°	0.5
	Adjusting				—				

Overall Dimensions & Weight

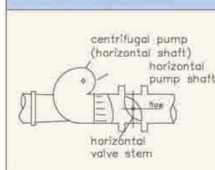
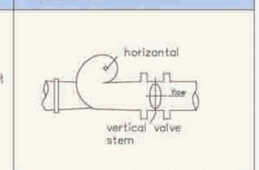
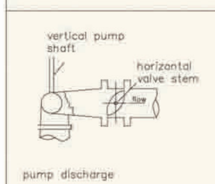
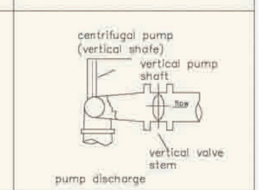
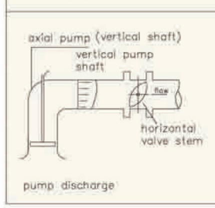
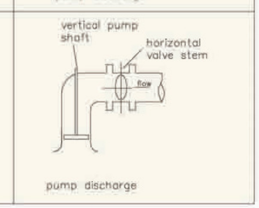
Type	A	B	C	Weight(kg)	Type	A	B	C	Weight(kg)
63083RA-W	184	91	110	3	63235RA-W	622	265	300	75
63110RA-W	396	120	140	6.5	63280RA-W	655	360	340	90
63143RA-W	337	160	180	13.5	63350RA-W	860	380	402	186.5
63160RA-W	380	185	200	20	63400RA-W	918	440	480	289
63200RA-W	490	225	245	40					

Iustallation Instruction

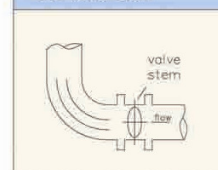
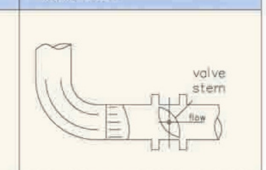
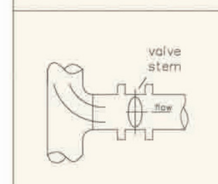
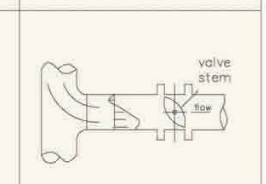
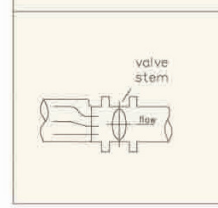
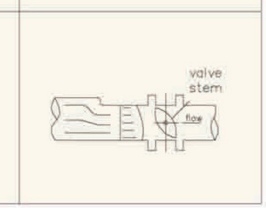
Right way for the installation	Wrong way for the installation
	
Hold the flange to the maximum distance to ensure that there is a certain space.	No enough space between the flanges will injury valve seat.
	
Valve installation should be in a closed status, fix all screws and nuts, not to tighten nuts.	No enough space between the flanges will injury valve seat.
	
Hold the butterfly valves to the maximum, check for scratches make sure the valve is fixed well, nuts are fixed tight along the diagonals one by one.	To install the Valve in the opening position, the disc will be easily damaged.

1.The standard of pipe welding flange must be the same as butterfly valve
2. Clean-up the inside and surface of the valve before the installation, make sure no dirt and impurities.
3.Valve installation must be in a closed position to ensure that the valve plate never touch the pipe and flange.
4.Valve seat as the flange's end-gasket and connection seal, no need any other seal when installation.
5.The butterfly valve can be installed in horizontal, vertical and any angle pipeline, and can be used as Bi-direction.
6.To confirm the flange is welded in accuracy, no more welding allowed after butterfly valve and pipe flange are connected together, in order to avoid the rubber parts been burned and the anti-corrosion coating been damaged
7.Butterfly Valves can not be installed on the corner of the pipeline.
8.Electric valve is only allowed installation vertically indoor if there is no any other special instruction in the contract.
9.If the abnormalities of valve opening and closing occurred, we should check out the reasons and debug the problems. No allowed force open with knocking, smashing and using crowbar
10.The butterfly valves should be indoor storage with dry and ventilation conditions, no harmful substances around.

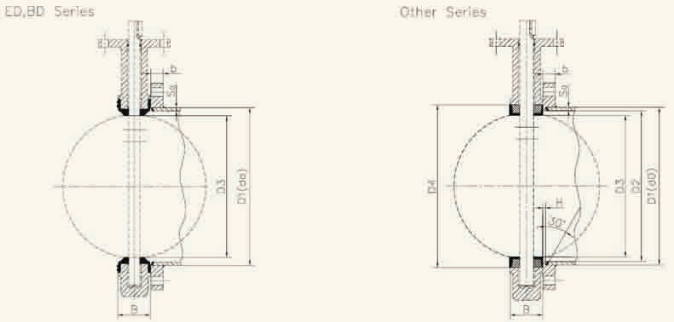
Installing a valve at apump outlet

Wrong direction of the valve stem	Right direction of the valve stem
	
	
	

Installing an elbow or a reducer

Right direction of the valve stem	Wrong direction of the valve stem
	
	
	

Tubing Dimension



Size (mm)	DN	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900	1000	1050	1200
Size (inch)		1.5	2	2.5	3	4	5	6	8	10	12	14	16	18	20	24	28	30	32	36	40	42	48
Outer Diameter of Pipe	d_0	46	57	73	89	108	133	159	219	273	325	377	426	478	529	630	720	770	820	920	1020	1070	1224
Inner Diameter of Flange	D1	48	59	75	91	110	135	161	221	275	327	379	429	481	532	633	723	773	823	923	1023	1073	1228
Diameter of Projecting Hole of Flange	D2	40	50	65	80	100	125	150	208	255	308	340	405	455	505	605	705	750	810	900	1000	1050	1200
Thickness of Projecting Part of Flange	H*	4	4	4	4	4	4	4	5	6	6	7	7	8	8	8	9	9	9	9	9	10	10
Flange Thickness	b*	22	22	24	24	26	28	28	30	32	32	34	38	42	48	50	52	54	54	56	58	60	64
Chord Dimension of Protruding Part of Disc	D3	22	32	46	64	90	111	145	192	242	292	322	380	428	473	572	675	725.5	770	840	940	999	1126
Outer Diameter of Seat	D4	62	76	89	104	135	159	188.4	238.2	292.4	344	375.4	439.2	489	534	653.7	744	797	850	947	1053	1115	1250
Face to Face Dimension of the Valve	B	33	42	44.7	45.2	52.1	54.4	55.8	60.6	65.6	77	76.5	86.5	105.6	131.8	152	163	167	188	203	216	251	276
Min.Thickness of Pipe	S_0*	3	3.5	4	4	4	4	4.5	6	8	8	9	9	9	9	9	10	10	10	10	10	10	12

Note: The dimensions with asterisks "*" are for reference only. Which can be specified by customers.
The flange dimensions adopted by different countries are shown in Fig.2. and comprison table.

Size & Quantity of Bolts for Valve Installation

Size		1.0MPa					1.6MPa				
		Stud Bolt (for Wafer Valve)			Hexagon Head Bolt (for Lug Valve)		Stud Bolt (for Wafer Valve)			Hexagon Head Bolt (for Lug Valve)	
mm	inch	Qty	Dia×L1	Length	Qty	Dia×L1	Qty	Dia×L1	Length	Qty	Dia×L1
40	1.5	4	M16×100	120	4×2	M16×38	4	M16×100	120	4×2	M16×38
50	2	4	M16×110	130	4×2	M16×40	4	M16×110	130	4×2	M16×40
65	2.5	4	M16×120	140	4×2	M16×45	4	M16×120	140	4×2	M16×45
80	3	8	M16×120	140	8×2	M16×45	8	M16×120	140	8×2	M16×45
100	4	8	M16×130	150	8×2	M16×50	8	M16×130	150	8×2	M16×50
125	5	8	M16×130	150	8×2	M16×50	8	M16×130	150	8×2	M16×50
150	6	8	M20×140	165	8×2	M20×50	8	M20×140	165	8×2	M20×50
200	8	8	M20×150	175	8×2	M20×55	12	M20×150	175	12×2	M20×55
250	10	12	M20×160	185	12×2	M20×60	12	M24×160	185	12×2	M24×60
300	12	12	M20×170	195	12×2	M20×65	12	M24×170	200	12×2	M24×65
350	14	16	M20×170	195	16×2	M20×65	16	M24×170	200	16×2	M24×65
400	16	16	M24×190	220	16×2	M24×75	16	M27×200	230	16×2	M27×75
450	18	20	M24×220	250	20×2	M24×80	20	M27×220	254	20×2	M27×80
500	20	20	M24×260	290	20×2	M24×90	20	M30×260	294	20×2	M30×90
600	24	20	M27×290	324	20×2	M27×100	20	M33×290	334	20×2	M33×100
700	28	24	M27×300	334	–	–	20	M33×300	341	4×2	M33×90
800	32	24	M30×330	364	–	–	24	M36×330	375	–	–
900	36	24	M30×350	388	4×2	M30×100	–	–	–	–	–
1000	40	24	M33×370	411	4×2	M33×100	–	–	–	–	–
1200	48	28	M36×425	470	4×2	M36×115	–	–	–	–	–

U-Section

			Wafer Type				Lug Type				
750	30	24	$1\frac{1}{4}$–7×14.17UNC	---	4×2	$1\frac{1}{4}$–7×3.74UNC	–	–	–	28×2	$1\frac{1}{4}$–7×3.74UNC
900	36	24	$1\frac{1}{2}$–6×16.54UNC	---	4×2	$1\frac{1}{2}$–6×4.13UNC	–	–	–	28×2	$1\frac{1}{2}$–6×4.13UNC
1050	42	28	$1\frac{1}{2}$–6×18.9UNC	---	4×2	$1\frac{1}{2}$–6×4.53UNC	–	–	–	32×2	$1\frac{1}{2}$–6×4.53UNC
1200	48	36	$1\frac{1}{2}$–6×20.47UNC	---	4×2	$1\frac{1}{2}$–6×4.72UNC	–	–	–	40×2	$1\frac{1}{2}$–6×4.72UNC

Note:
1. The stud bolts are in accordance with GB898–88bm=1.25d.
2. The hexagon head bolts are in accordance with GB5780–86.
3. The hexagon head bolts are used at the two necks of 900 (36") 1000 (40") PN1.0MPa . Tpye Wafer valve body. The quantity.is 4×2 and listed in the column of hexagon–headed bolt.
4. The length of fastener is based on the flange thickness drawing on page of 24 consumer should modify the length acording to the pipe flange standard.