



## INTRODUCTION

Since incorporation of **FEATHER** within very short time, **FEATHER** has gained a position of prominence in the field of process valves and automation systems for a host of applications in power, chemical, petrochemical, food and pharmaceutical industries. During this period, **FEATHER** established its presence all over in India. **FEATHER** has designed and manufactured its products using the latest cutting edge engineering tools and technologies.

**FEATHER** centric "Butterfly Valves" with loose replaceable liners are available in Wafer and Lug design with a range of handlever gearbox and actuator. The butterfly valves are designed with square driven anti-blowout shaft and slim disc with machined and polished disc edges resulting in low torques. State of the art manufacturing technologies, modern quality management methods ensures efficient production process resulting in consistent high quality standard over large quantities of valves.

## PRODUCT INFORMATION

### VALVE SERIES

- Wafer type – CBW
- Lug type – CBL

### RANGE

- Size : DN 50 to DN 600
- Pressure rating : PN 06 / PN 10 / PN 16 / ASME #150

### MAJOR APPLICATIONS

- Chemical
- Fertilizer
- Food and Beverage
- Paper and Pulp
- Mining
- Power
- Hot and cooling water
- Air-conditioning
- Compressed air
- Sewage treatment plant

### PRODUCT FEATURES

- "ZERO" leakage.
- Resilient seat bi-directional tight shut-off.
- Top mounting flange design as per ISO-5211 based on operating torque.
- Single piece Body compact design makes the valve cost competitive.
- Loose replaceable liner with integrated rigid back up ring extends long service life of the Valve.
- Slim disc with machined and polished edges reducing the friction between liner and disc.
- Low torque enables economic actuation.
- Blow out proof arrangement of shaft with standard mounting as per DIN 3337.
- Two piece shaft design offers enhanced maximum flow capacity.
- Special design of Lugs provides auto centering of Valve on pipeline for trouble free mounting between pipe flanges.
- Simple construction results in easy onsite maintenance with minimum tools.
- Raw Material variety ensures media compatibility.

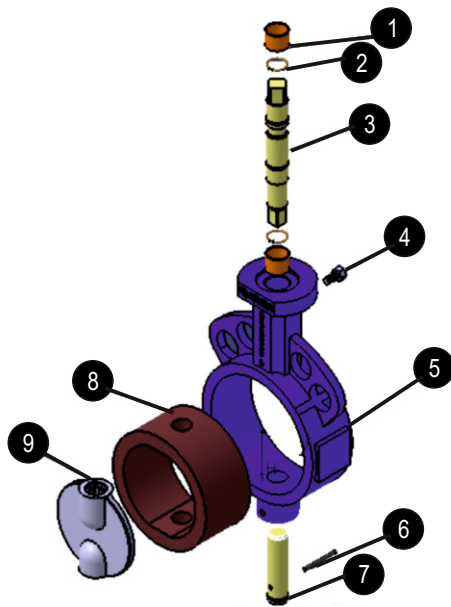
## REFERENCE STANDARDS

Design and Manufacturing	:	API 609 (Category A), ASME B16.34, BSEN 593
Face to Face	:	API 609 Series-A, BS 5155, EN 558-1 Series-20, ISO 5752 Series-20
End Connection	:	ANSI # 150, DIN PN 6/10/16, EN 1759-1, EN 1092-1, IS 6392 TABLE 10-20
Testing	:	API 598, EN 12266-1, DIN 3230-T3

## VALVE TORQUE

The drive torque required when calculating the size of automatic actuators for FEATHER butterfly valves can be obtained from the following table:

Shutoff Pressure in bar	Nominal Diameter of a Butterfly Valve (mm)													
	40/50	65	80	100	125	150	200	250	300	350	400	450	500	600
4	-	-	-	31	40	63	115	210	260	420	550	970	1250	2310
10	16	23	35	71	95	127	200	280	400	890	1190	1460	1800	3470
16	26	38	59	121	180	260	330	480	690	1520	2020	2490	3070	5760



9	DISC	1
8	RUBBER SEAT / LINER	1
7	LOWER SHAFT	1
6	SPRING DOWEL	1
5	BODY	1
4	LOCKING BOLT	1
3	UPPER SHAFT	1
2	SNAP RING	2
1	BUSH	2
SR NO.	PART NAME	QTY.

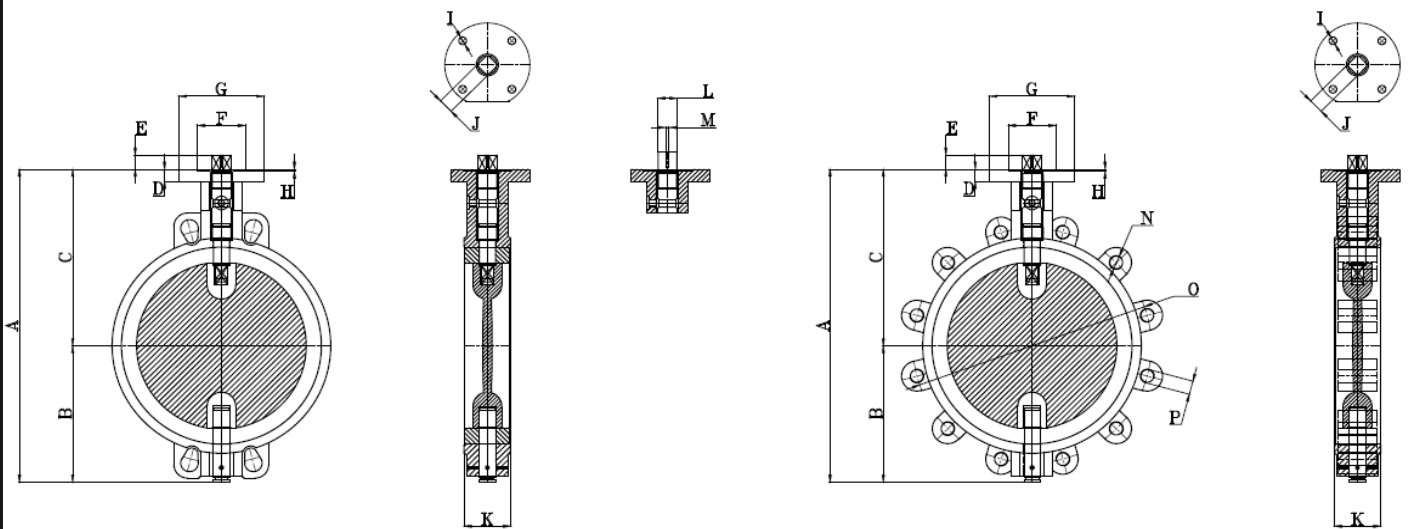
### DN50 - 600

WAFER BODY

SHAFT END  
DN50 - DN400

SHAFT END  
DN450 - DN600

LUG BODY



Dimensions in mm bare shaft

PARAMETER	CLASS	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300	DN350	DN400	DN450	DN500	DN600		
A	--	211	225	240	286.5	314	343.5	398	466	542	595	673	734	818	938		
B	--	81	87	96	111.5	128	126.5	169	203	242	265	303	334	368	428		
C	--	130	138	144	175	186	217	229	263	300	330	370	400	450	510		
D	--	13	13	14	14	15	15	15	18	18	21	22	22	22	25		
E	--	16	16	16	16	19	19	19	24	24	29	29	65	65	80		
F	--	35	35	35	35	55	55	55	70	70	100	100	100	100	130		
G	--	65	65	65	65	90	90	90	125	125	175	175	175	175	210		
H	--	3	3	3	3	3	3	3	3	3	4.5	4.5	4.5	4.5	5.5		
I	--	50 X4 X7 (F05)				70 X4 X9 (F07)				102 X4 X11 (F10)			125 X4 X13 (F12)		140 X4 X18 (F14)		165 X4 X22 (F16)
J	--	14	14	14	14	17	17	17	22	22	27	27	--	--	--		
K	--	43	46	46	52	56	56	60	68	78	78	102	114	127	154		
L	--	--	--	--	--	--	--	--	--	--	--	--	DIA 45	DIA 45	DIA 70		
M	--	--	--	--	--	--	--	--	--	--	--	--	14	14	20		
N	PN06	4	4	4	4	8	8	8	12	12	12	16	16	20	20		
N	PN10	4	4	8	8	8	8	8	12	12	16	16	20	20	20		
N	PN16	4	4	8	8	8	8	12	12	12	16	16	20	20	20		
N	#150	4	4	4	8	8	8	8	12	12	12	16	16	20	20		
O	PN06	110	130	150	170	200	225	280	335	395	445	495	550	600	705		
O	PN10	125	145	160	180	210	240	295	350	400	460	515	565	620	725		
O	PN16	125	145	160	180	210	240	295	355	410	470	525	585	650	770		
O	#150	120	139.7	152.4	190.5	215.9	241.3	298.5	362	431.8	476.3	539.8	577.9	635	749.3		
P	PN06	M12, 14	M12, 14	M16, 18	M16, 18	M16, 18	M16, 18	M16, 18	M16, 18	M20, 22	M20, 22	M20, 22	M20, 22	M20, 22	M24, 26		
P	PN10	M16, 18	M16, 18	M16, 18	M16, 18	M16, 18	M20, 22	M20, 22	M20, 22	M20, 22	M20, 22	M24, 26	M24, 26	M24, 26	M27, 30		
P	PN16	M16, 18	M16, 18	M16, 18	M16, 18	M16, 18	M20, 22	M20, 22	M24, 26	M24, 26	M24, 26	M27, 30	M27, 30	M30, 33	M33, 36		
P	#150	5/8"	5/8"	5/8"	5/8"	3/4"	3/4"	3/4"	7/8"	7/8"	1"	1"	1-1/8"	1-1/8"	1-1/4"		

## PRODUCT SELECTION CODE

SERIES	ENDS	SIZE	RATING	BODY	DISC	LINER	SHAFT	-	OPERATOR	SPECIAL
CBW	0	50	06	01	01	EB	41		B	Z
CBL	1	65	10	02	02	NB	42		G	
		80	16	03	03	VB	43		H	
		100	A5	04	04	EW			M	
		125		05	05	SW			P	
		150		06	06					
		200		07	07					
		250		08	08					
		300		09	09					
		350		10	10					
		400								
450										
500										
600										

### SERIES

CBW WAFER  
CBL LUG

### RATING

06 PN06  
10 PN10  
16 PN16  
A5 #150

### LINER

EB EPDM(BLACK)  
NB NITRILE(BLACK)  
VB VITON(BLACK)  
EW EPDM(WHITE)  
SW SILICON(WHITE)

### -

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### ENDS

0 STANDARD  
1 SPECIAL

### SIZE

50 250  
65 300  
80 350  
100 400  
125 450  
150 500  
200 600

### BODY & DISC

01 CAST IRON  
02 DUCTILE IRON  
03 WCB  
04 SS 304  
05 SS 316  
06 SS 316L  
07 CF8M  
08 CF3M  
09 CF8  
10 CF3

### SHAFT

41 SS 410  
42 SS 304  
43 SS 316

### SPECIAL

Z ANY OTHER

### OPERATOR

B BARE SHAFT  
G GEAR OPERATOR  
H HANDLEVER OPERATOR  
M ACTUATOR WITH MANUAL OVERRIDE  
P PNEUMATIC ACTUATOR

### Example

SERIES	ENDS	SIZE	RATING	BODY	DISC	LINER	SHAFT	-	OPERATOR	SPECIAL
CBW	0	150	16	01	07	EB	42	-	G	Z

This code stands for Wafer Type Butterfly Valve with, Standard End Connection, DN150, PN 16, Cast Iron Body, CF8M Disc, Black EPDM Liner, SS 304 Shaft, Gear operated without special requirements.

## FEATHER FLOW CONTROL SYSTEMS PVT. LTD.

### WORKS

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Authorised Dealer



AN ISO 9001  
COMPANY

www.featherflow.in

