

# FULL LUG BUTTERFLY VALVE

PN25 F1225



## FEATURES & SPECIFICATIONS

- Higher strength for disc with pinned single shaft ensure optimal alignment
- Centrally mounted disc and hydrodynamic design minimize pressure loss
- Can be installed at horizontal or vertical pipe line
- Phenolic backed rubber seat is non-collapsible, stretch resistant and easily replaceable
- Excellent flow characteristic with flow in either direction
- Design conforms to BS EN 593 / BS 5155 / MSS SP-67 / API 609
- Precision machining of disc for low operating torque



## TECHNICAL SPECIFICATIONS

Size	DN50 ... DN600
Body Design	Lugged
Working Pressure	25bar
Shell Test Pressure (x1.5)	37.5bar
Seat Test Pressure (x1.1)	27.5bar
Working Temperature	-20°C ... 110°C (EPDM Seat) -10°C ... 80°C (NBR Seat) 5°C ... 120°C (PTFE Seat) -10°C ... 135°C (FPM Seat)
Applicable Medium	Water, Oil, Gas
Operator	Lever, Wormgear, Electric Actuator
Connection	BS 4505 PN25 EN1092-2 PN25 JIS B2239 20K ANSI B16.1 Class 150
Optional Accessories	Chain Wheel, Limit Switch

## MATERIAL SPECIFICATIONS

Part	Material	Part	Material
Body	Ductile Iron	Stem	Stainless Steel 410
	Stainless Steel 304		Stainless Steel 431
	Stainless Steel 316		Stainless Steel 316
Disc	Ductile Iron	Taper Pin	Stainless Steel 316
	Aluminium Bronze		Stainless Steel 410
	Stainless Steel 304	O-Ring	NBR
	Stainless Steel 316		Bushing
Seat	EPDM		
	NBR		
	PTFE (Teflon)		
	FPM (Viton)		

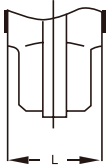
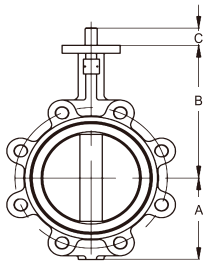
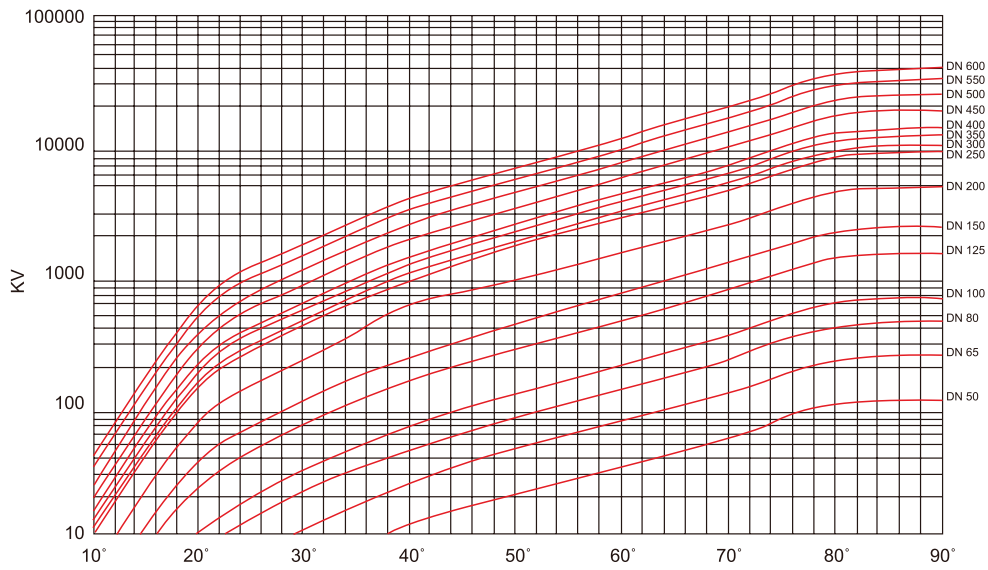
## VALVE COEFFICIENT (FULL OPEN)

DN (mm)	50	65	80	100	125	150	200	250
DN (inch)	2	2½	3	4	5	6	8	10
Cv	135	220	302	600	1022	1579	3136	5340

DN (mm)	300	350	400	450	500	550	600
DN (inch)	12	14	16	18	20	22	24
Cv	8250	11917	16388	21705	27908	35170	43116

Cv = 1.17Kv



## DIMENSIONS - VALVE BODY

(mm)

DN (mm)	50	65	80	100	125	150	200	250
DN (inch)	2	2½	3	4	5	6	8	10
A	68.6	76	99	119	129	142	176	209
B	141.2	150.4	156.5	168	186.5	205.7	230.6	269.9
C	15	19	19	19	19	19	25	32
L	42	45	45	51	55	55	60	67

DN (mm)	300	350	400	450	500	550	600
DN (inch)	12	14	16	18	20	22	24
A	248.5	267	309	327	389	433	453
B	327.8	368	400	422	480	533	562
C	32	40	52	52	64	70	70
L	76	76	102	114	127	151	151

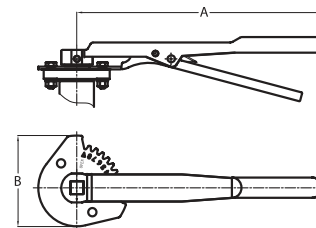
## DIMENSIONS - VALVE OPERATOR

Malleable Iron / Stainless Steel Lever

Stainless Steel SUS304 Top Indicator Plate

(mm)

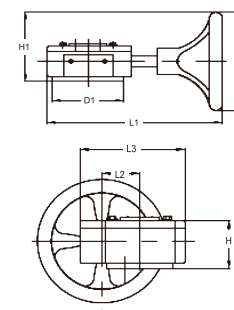
DN (mm) (inch)	50-80 2-3	100-125 4-5	150 6	200 8
A	266	266	328	386
B	95	109	109	164



Cast Iron 1-Stage Worm Gear and Handwheel

Carbon Steel Gear Box Shaft

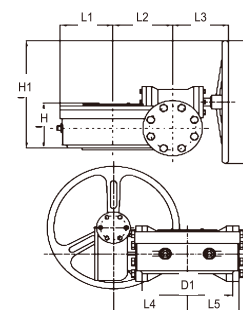
VALVE DIAMETER	D1	∅	H	H1	L1	L2	L3
DN50 - DN80	108	145	65	113	212	45	129
DN100 - DN150	108	145	65	113	212	45	129
DN200 - DN250	146	285	70	182	305	62	171
DN300 - DN350	165	285	77	182	300	85	198
DN400	165	285	77	182	300	85	198
DN450 - DN550	234	385	103	247	423	120	280



Cast Iron 2-Stage Worm Gear and Handwheel

Carbon Steel Gear Box Shaft

VALVE DIAMETER	D1	∅	H	H1	L1	L2	L3	L4	L5
DN600	197	285	124	276	107	100	160	175	107



## INSTALLATION & OPERATION GUIDE

1. Ensure sufficient space for valves for easy installation, operation, maintenance and replacement.
2. Verify the valves are suitable for the operating condition such as medium, operating pressure / temperature, etc.
3. Check the I.D. of the flange and pipe to ensure free disc movement.
4. Valves shall be mounted on flanges only after the counter flanges have been welded to pipe and cooled down to the atmospheric temperature. Welding heat may damage the rubber seat of the valves. Never weld the flanges with valves installed. No gasket is required for installation of rubber seated butterfly valves.
5. Position the valves carefully between flanges. Accurate centering between flanges is essential to prevent any damages and problems during operation.
6. Valves should be installed by placing bolts through the hole and tightening carefully, ensuring even contact between the flange and seat. Too tight of space may cause damages to the seat and should be avoided.
7. Cross tighten all the bolts diagonally to distribute the loads evenly over the valves.
8. Turning the valves to ensure sufficient disc clearance.
9. Valves equipped with manual operators must be operated manually. Excessive external force on the operation of valve may damage the valve and / or operator.
10. Blind flange with short pipe should be used for dead end installation.