FULL LUG BUTTERFLY VALVE

PN16 V1216

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
- Precision machining of disc for low operating torque
- Design conforms to BS EN 593 / BS 5155 / MSS SP-67 / API 609
- WRAS and NSF approved option available upon request
- Applicable for Building Services, Air-Conditioning, Fire Protection, Cold Water Plumbing, Hot Water System, Water Supply Works, Water Treatment Plant, General Industries



TECHNICAL SPECIFICATIONS

Size	DN40 ... DN1200
Body Design	Lugged
Working Pressure	16bar
Shell Test Pressure (x1.5)	24bar
Seat Test Pressure (x1.1)	17.6bar
Working Temperature	-20°C ... 110°C (EPDM) -10°C ... 80°C (NBR) 5°C ... 120°C (PTFE)
Suitable Media	Water
Operator	Lever, Wormgear, Electric Actuator
Connection	BS 4504 PN10 / PN16 EN1092-2 PN10 / PN16 JIS B2239 10K (DN40 ... DN500) ANSI Class 125 / 150 (DN40 ... DN800)
Optional Accessories	Chain Wheel, Limit Switch

MATERIAL SPECIFICATIONS

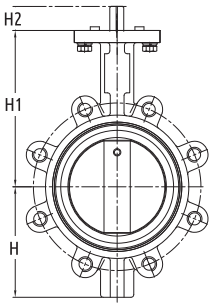
Part	Material
Body	Ductile Iron
Disc	Ductile Iron Epoxy coated Ductile Iron Aluminium Bronze Stainless Steel 304 Stainless Steel 316
Seat	EPDM NBR PTFE (DN50...DN150, W/P 16bar; DN200...DN600, W/P 10bar)
O-Ring	EPDM NBR

Part	Material
Stem	Stainless Steel 410 Stainless Steel 431 (DN600 and above) Stainless Steel 316 (DN40 ... DN150, optional) Stainless Steel 420 (for ALBC disc DN300 and above)
Taper Pin	Stainless Steel 416 (for Ductile Iron disc) Stainless Steel 316 (for SS304 / SS316 / ALBC disc)
Bushing	PTFE (DN40 ... DN600) Luberized Bronze (DN700)
Washer	Stainless Steel 304

Fivalco reserves the right to alter the information in this document without prior notice. Fivalco shall not be liable for technical errors or omissions contained herein.
Images are for illustrative purposes only. Refer to local sales representatives for detail catalogues, technical data and specifications.

FULL LUG BUTTERFLY VALVE

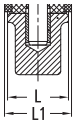
PN16 V1216



DIMENSIONS (VALVE BODY)

(mm)

DN (mm)	40	50	65	80	100	125	150	200	250	300	350
DN (inch)	1½	2	2½	3	4	5	6	8	10	12	14
H	66	68.6	76	95	110	129.4	142	176	212	248.5	269
H1	130	141.2	150.4	156.4	167.9	186.5	205.7	230.6	269.9	327.8	368
H2	22	22	22	22	25	25	25	25	27	27	40
L	33	42	44.5	44.5	51	54.5	54.5	59.6	67	75.5	75.5
L1	36.8	46.1	49.1	49.1	55.3	58.8	59.1	64.1	71.8	79.5	79.5



DN (mm)	400	450	500	550	600	650	700	800	900	1000	1200
DN (inch)	16	18	20	22	24	26	28	32	36	40	48
H	309	327	361	424	459	475	521	576	635	713	850
H1	400	422	480	533	562	540	626	666	722	806	938
H2	52	52	64	70	70	70	95	95	130	130	150
L	102	114	127	-	-	-	-	-	-	-	-
L1	106.5	118.5	131.5	151	156	172	165	188	203	216	276

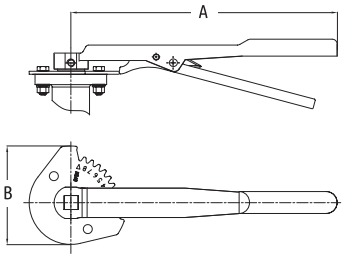
Note : DN650 only available in ANSI Class 150 Flange.

DIMENSIONS (VALVE OPERATOR)

Malleable Iron / Stainless Steel Lever
Stainless Steel SUS304 Top Indicator Plate

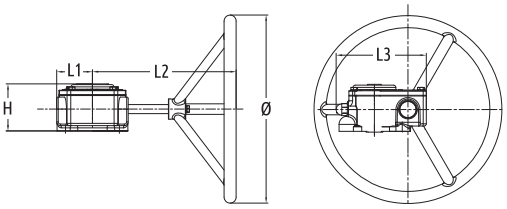
(mm)

DN (mm)	40-80	100-125	150	200-250	300
DN (inch)	1.5-3	4-5	6	8-10	12
A	195	266	328	386	391
B	95	109	109	164	164



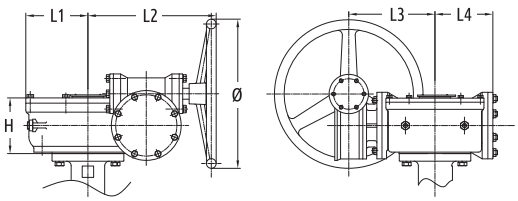
Ductile Iron 1-Stage Worm Gear and Handwheel (IP67 Protection)
Stainless Steel SUS410 Gear Box Shaft

VALVE DIAMETER	H	ø	L1	L2	L3
DN50 - DN80	51	150	34	160	106
DN100 - DN200	51	150	45	190	106
DN250 - DN300	62.5	250	47.5	260	123
DN350	65	300	62.5	270	154
DN400	90	300	70	320	175
DN450	90	400	70	320	175
DN500	97	400	93.5	370	214
DN600	97	500	93.5	370	214



Cast Iron 2-Stage Worm Gear and Handwheel
Carbon Steel Gear Box Shaft

VALVE DIAMETER	H	ø	L1	L2	L3	L4
DN700 - DN800	158	425	173	359	245	173
DN900 - DN1200	185	425	201	399	279	201



Fivalco reserves the right to alter the information in this document without prior notice. Fivalco shall not be liable for technical errors or omissions contained herein.
Images are for illustrative purposes only. Refer to local sales representatives for detail catalogues, technical data and specifications.

FULL LUG BUTTERFLY VALVE

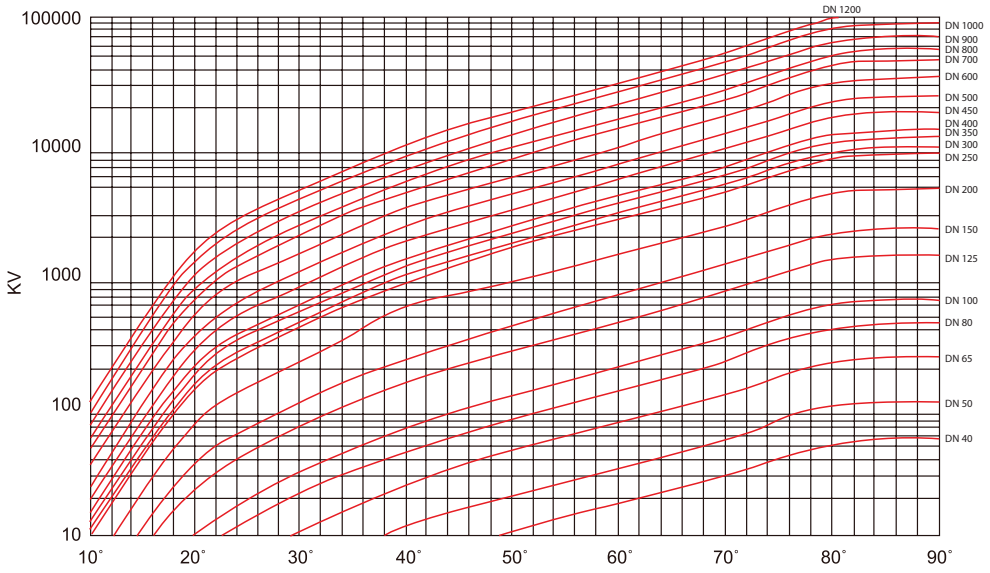
PN16 V1216

VALVE COEFFICIENT (FULL OPEN)

Cv = 1.17Kv

DN (mm)	40	50	65	80	100	125	150	200	250	300	350
DN (inch)	1½	2	2½	3	4	5	6	8	10	12	14
Cv	69	135	220	302	600	1022	1579	3136	5340	8250	11917

DN (mm)	400	450	500	600	700	750	800	900	1000	1200
DN (inch)	16	18	20	24	28	30	32	36	40	48
Cv	16388	21705	27908	43116	49500	59800	68250	86375	119750	154000



OPERATING TORQUE

Unit : N.m

DN (mm)	40	50	65	80	100	125	150	200	250	300	350
DN (inch)	1½	2	2½	3	4	5	6	8	10	12	14
Wet	15.1	15.1	17.2	23.1	39.8	61.9	102	192	323	490	625
Dry	24.2	24.2	32.7	43.7	72.8	108	174	330	549	799	969

DN (mm)	400	450	500	600	700	750	800	900	1000	1200
DN (inch)	16	18	20	24	28	30	32	36	40	48
Wet	846	1131	1431	2301	4253	4897	5600	6834	11603	16321
Dry	1307	1787	2288	3711	6380	7345	8400	10251	17405	24482

Fivalco reserves the right to alter the information in this document without prior notice. Fivalco shall not be liable for technical errors or omissions contained herein.
Images are for illustrative purposes only. Refer to local sales representatives for detail catalogues, technical data and specifications.