

### DESCRIPTION

**VALMATIC™** Rubbers Lined Butterfly Valve is designed for perfect shut off in both directions. This valve featured with one piece through shaft ensures dependable and positive disc control. The body is protected with fusion bonded epoxy coating and is not in contact with line media, hence corrosion free. The valve seat is stretch resistant and can be easily field replaced without the requirement of any special tools.

**VALMATIC™** Rubbers Lined Butterfly Valve is wafer type designed for installation between flanges without requiring any gaskets and drilled in accordance to major flange standards example DIN, BS, ANSI and JIS. They can be installed in horizontal and vertical positions on the piping systems. It is widely used in HVAC, Fire Protection System, Irrigations, Water Treatment Plant, Palm Oil and Refinery Plant, Petrochemical and Power Plant.

### APPLICATION

Suitable for water, oil, air, gases and others non-aggressive media (Refer to corrosion resistance table for valve materials selection).

### SPECIFICATION

- Face to Face Dimensions - BS 5155, ISO 5752, MSS SP67 and API 609
- Standard Compliance - Conform to BS 5155, MSS SP67 and API 609
- End Connection - Wafer Type to suit DIN, BS, ANSI and JIS Flanges
- Pressure Rating - 16 Bar for DN 50 to DN 300  
10 Bar for DN 350 to DN 1200
- Temperature (Seat) - -10 to 80°C NBR, -15 to 120°C EPDM, -10 to 150°C Viton
- Top Flange Dimensions - ISO 5211
- Actuation - Lever Operated for DN 50 to DN 200 (Gear Operated on request)  
Gear Operated for DN 250 to DN 1200
- Optional - Pneumatic or Electric Actuated

### MATERIALS

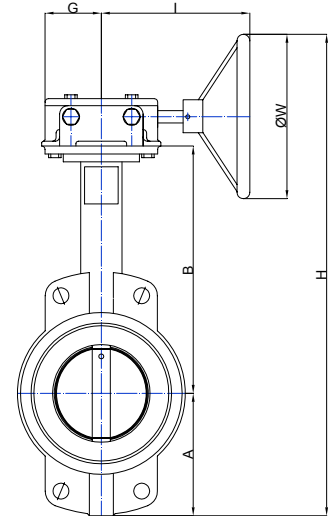
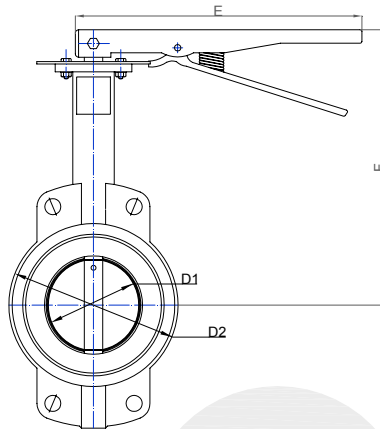
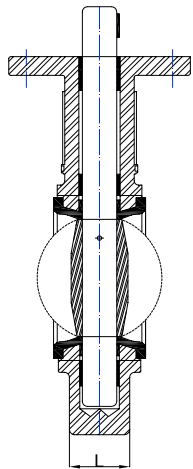
No.	Parts	Material
1.	Body	*Cast Iron/Ductile Iron/Al. Bronze/ Stainless Steel
2.	Bushing	*PTFE Teflon/Lubricated Bronze
3.	Shaft	*Stainless Steel AISI 416/ AISI 304/AISI 316
4.	Seat	*NBR (Buna-N)/EPDM/Viton
5.	Disc	*Ductile Iron/Al. Bronze/Stainless Steel
6.	Taper Pin	Stainless Steel
7.	O-Ring	NBR (Buna-N) Rubber
8.	Key	Carbon Steel

\*Note: Standard Material

### FLOW COEFFICIENTS (Cv VALUE)

Opening Angle (Degree)	Size (DN)													
	50	65	80	100	125	150	200	250	300	350	400	450	500	600
10°	0.1	0.2	0.3	0.5	0.8	2	3	4	5	6	8	11	14	22
20°	5	8	12	17	29	45	89	151	234	338	464	615	791	1222
30°	12	20	22	36	61	95	188	320	485	715	983	1302	1674	2587
40°	24	37	39	78	133	205	408	694	1072	1549	2130	2822	3658	5605
50°	45	65	70	139	237	366	727	1237	1911	2761	3797	5028	6465	9989
60°	64	98	116	230	392	605	1202	2047	3162	4568	6282	8320	10698	16528
70°	90	144	183	364	620	958	1903	3240	5005	7230	9942	13168	16931	26157
80°	125	204	275	546	930	1437	2854	4859	7507	10844	14913	19752	25396	39236
90°	135	220	302	600	1022	1579	3136	5340	8250	11917	16388	21705	39236	43116

The Cv Value is the water flow rate in USGPM at 68°F which passing through the valve cause a pressure drop of 1 PSI.



### DIMENSIONS (mm)

Size (DN)	50	65	80	100	125	150	200	250	300	350	400	450	500	600
A	112	121	127	146	159	171	220	248	287	312	363	378	417	526
B	161	175	181	200	213	226	260	292	337	368	400	422	480	562
L	43	46	46	52	56	56	60	68	78	78	102	114	127	154
D1	53	64	79	104	123	156	202	250	302	333	390	441	492	530
D2	100	120	127	156	190	212	268	325	376	436	488	539	593	695
E	35	35	35	35	35	35	44	-	-	-	-	-	-	-
F	267	267	267	267	267	267	361	-	-	-	-	-	-	-
G	53	53	53	53	53	53	84	84	77	77	130	133	138	138
H	385	408	420	458	484	509	672	732	817	873	975	1062	1206	1365
I	148	148	148	148	148	148	226	226	238	238	270	277	338	338
ØW	150	150	150	150	150	150	300	300	300	300	300	400	400	400
Weight (Kg)	3.34	3.94	4.05	5.48	7.66	8.5	25	31.4	45.9	54	118	138	167	260

Valve size DN 700 to DN 1200 upon request.

### I-TORK ELECTRIC ACTUATOR SPECIFICATION



Enclosure	- Weatherproof IP 67, NEMA 4 and 6
Main Power Supply	- 110/220VAC/1 Ph/50/60 Hz +/- 10% - 380/440VAC/3 Ph/50/60 Hz +/- 10%
Motor	- Squirrel Cages induction motor
Limit Switches	- 2 each for Open and Close (SPDT 250VAC/10A rating)
Torque Switches	- 1 each for Open and Close (except ITQ 0080 & 0100)
Stall Protection	- Built-in Thermal protection
Travel Angle	- 90° +/- 5° (0 to 100%)
Position Indicator	- Continuous mechanical indicator with arrow
Manual override	- De-clutchable (except ITQ 0080)
Space Heater	- 5W (110/220 VAC) for anti-condensation
Cable Entries	- PF 3/4" TAP (except ITQ 0080 2-M20 X 1.5)
Ambient temperature	- Up to 70°C (with position controller up to 60°C)
Ambient humidity	- 90% RH maximum (non-condensing)
Optional	- Explosion proof, Remote Position Control, Local Control

### OPERATING TORQUE (Nm) AND RECOMMENDED ELECTRIC ACTUATOR

Size (DN)	50	65	80	100	125	150	200	250	300	350	400	450	500	600
At 10 Bar ΔP	6.1	7.7	10.9	18.6	29	47	86.4	143	214	550	755	1012	1350	2110
Actuator (ITQ)	0080	0080	0080	0080	0080	0080	0100	0160	0240	0800	0800	1100	1500	3000
At 16 Bar ΔP	6.6	8.6	11.6	20	31	51	96	162	245	-	-	-	-	-
Actuator (ITQ)	0080	0080	0080	0080	0080	0080	0100	0240	0350	-	-	-	-	-

ΔP = Differential Pressure. The torque values listed are applicable for liquids media. For dry media service, we recommend to increase the torque by 20%.



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