



## APPLICATION

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

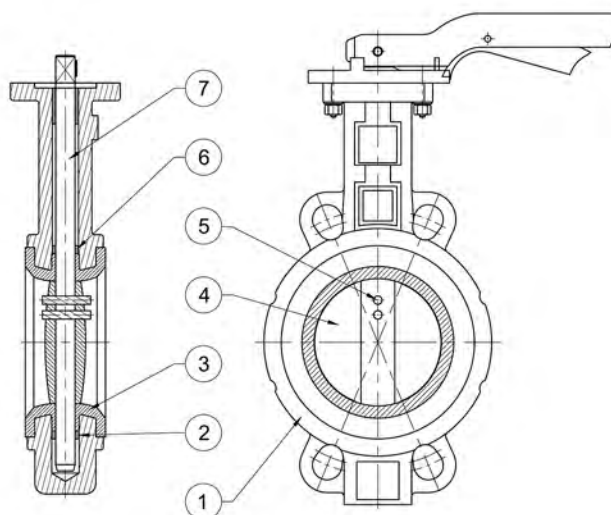
## SPECIFICATION

Face to Face Dimension	BS EN 558-1 and API 609
Standard Compliance	Conform to BS EN593 and API 609
End Connection	Wafer type to suit DIN, BS, ANSI and JIS Flanges
Pressure Rating	16 Bar for DN 50 to DN 600 10 Bar for DN 700 to DN 1200 (optional 16 Bar)
Temperature (Seat)	-10°C to 80°C NBR, -15°C to 120°C EPDM -10°C to 150°C Viton, -45°C to 180°C PTFE
Top Flange Dimensions	ISO 5211
Actuation	Lever Operated for DN 50 to DN 200 (Gear Operated on Request) Gear Operated for DN 250 & above
Optional	Pneumatic or Electric Actuated

## MATERIALS

PARTS	FIG. 3W
1. Body	*Ductile Iron / Carbon Steel / Stainless Steel
2. Bushing	PTFE
3. Seat	*NBR (Buna-N) / EPDM / Viton / PTFE (Teflon)
4. Disc	*Ductile Iron / Al. Bronze / Stainless Steel
5. Taper Pin	Stainless Steel
6. O-Ring	NBR (Buna-N) Rubber
7. Shaft	*Stainless Steel AISI 410 / AISI 304 / AISI 316

\*Note : Standard Material



# BUTTERFLY VALVE RUBBER LINED

## DUCTILE IRON / CARBON STEEL / STAINLESS STEEL



**FIG 3W**

## FLOW COEFFICIENTS (Cv VALUE)

Opening Angle (Degree)	Size (mm)													
	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.

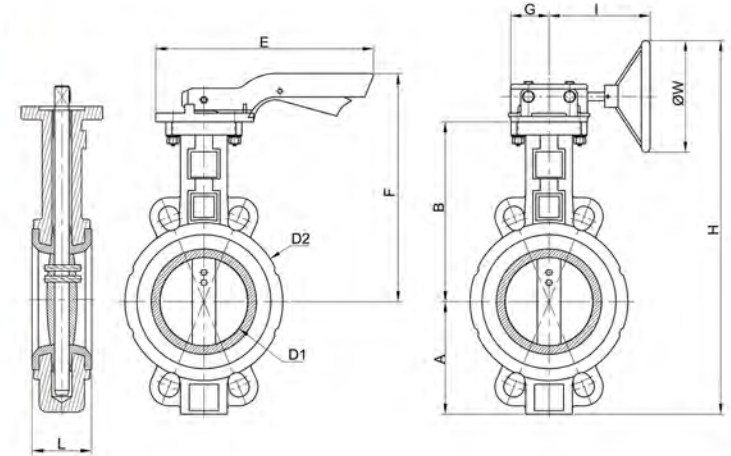


## BUTTERFLY VALVE RUBBER LINED DUCTILE IRON / CARBON STEEL / STAINLESS STEEL

### DIMENSIONS (mm)

SIZE (mm)	50	65	80	100	125	150	200	250	300	350	400	450	500	600
<b>L</b>	43	46	46	52	56	56	60	68	78	78	102	114	127	154
<b>A</b>	79	88	99	110	122	145	171	207	232	259	304	325	395	459
<b>B</b>	126	134	157	167	180	203	228	266	291	332	363	397	480	498
<b>D1</b>	53	64	79	104	123	156	202	250	302	333	390	441	492	530
<b>D2</b>	100	120	127	156	190	212	268	325	376	436	488	539	593	695
<b>E</b>	35	35	35	35	35	35	44	-	-	-	-	-	-	-
<b>F</b>	267	267	267	267	267	267	361	-	-	-	-	-	-	-
<b>G</b>	53	53	53	53	53	53	84	84	77	77	130	133	138	138
<b>H</b>	385	408	420	458	484	509	672	732	817	873	975	1062	1206	1365
<b>I</b>	148	148	148	148	148	148	226	226	238	238	270	277	338	338
<b>ØW</b>	150	150	150	150	150	150	300	300	300	300	300	400	400	400
<b>Weight (Kg)</b>	3	4	5	6	8	9	18	25	38	54	80	110	135	180

\*Valve size DN 700 to DN 1200 upon request.



### I-TORK ELECTRIC ACTUATOR SPECIFICATION

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

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

SIZE (mm)	50	65	80	100	125	150	200	250	300	350	400	450	500	600
<b>At 10 Bar ΔP</b>	12	15	26	40	100	110	190	200	330	500	900	1200	2400	3900
<b>Actuator (ITQ)</b>	0040	0040	0040	0080	0160	0160	0240	0240	0350	0800	1100	2000	3000	6000
<b>At 16 Bar ΔP</b>	15	18	30	60	120	150	230	260	400	700	1100	1600	2500	4300
<b>Actuator (ITQ)</b>	0040	0040	0040	0080	0160	0160	0240	0350	0500	0800	2000	2000	3000	6000

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

\*The specification is subject to change without further notice