

Butterfly Valve Figure HB101/HB102

Applications :

HB Series offer several models

to best suit application need including:

- ◆ HB101 is **Wafer type**
- ◆ HB102 is **Lug type**
- ◆ Combination with Handle Lever, Gear Operator, Electric & Pneumatic Actuator

Technical Data :

- ◆ PN Nominal Pressure: PN10/PN16
- ◆ Bubble Tight Shut-Off:
250 PSI For DN50-DN300
150 PSI For DN350-DN1000
- ◆ Testing Pressure: 15/24 bar
- ◆ Temperature: -10°C to 120°C
- ◆ Suitable For: HVAC, Fire Protection, Sanitary, Circulation Water in Industries and Sewage, etc

Features :

- ◆ Bubble tight sealing with no leakage under the pressure test.
- ◆ Through shaft design.
- ◆ Replaceable rubber liner.
- ◆ Small in size and light in weight, easy installation and maintenance. It can be mounted wherever needed.
- ◆ Simple and compact construction.
- ◆ Minimized operating torque, energy saving.
- ◆ Low pressure loss. Excellent regulation performance.
- ◆ Long life service. Standing the test of ten thousand opening and closing.
- ◆ Wide selection of materials, applicable for various medium.
- ◆ Top mounting for ISO 5211.



Fig.HB101
(Wafer)



Fig.HB102
(Lug)

Butterfly Valve

Figure HB101/HB102

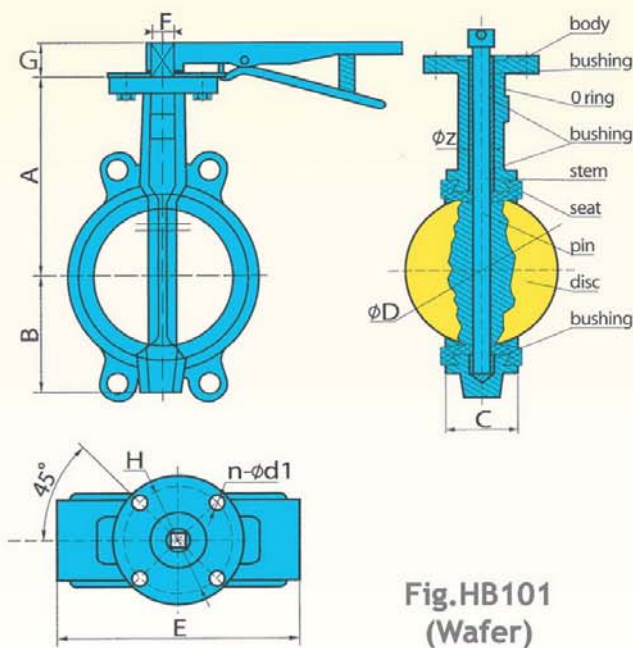


Fig. HB101
(Wafer)

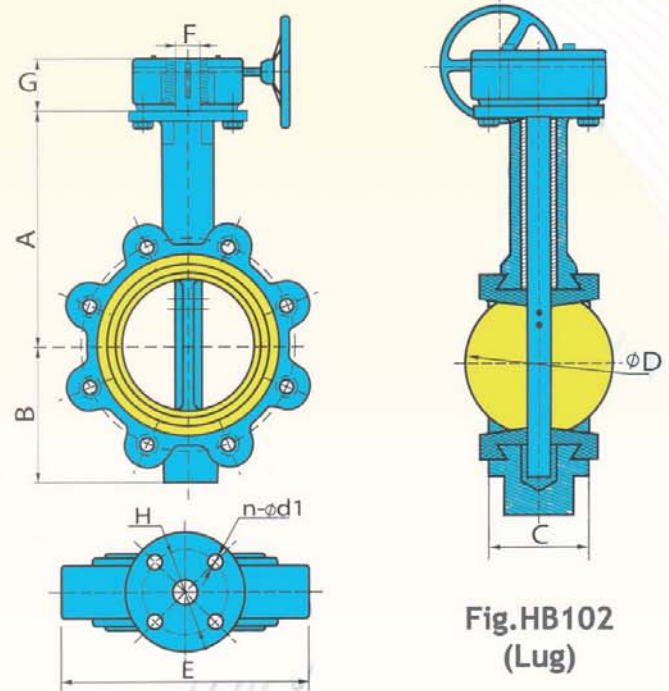


Fig. HB102
(Lug)

Dimensions of Wafer / Lug Type

Size (mm)	A	B	C	D	E	F	G	H	n-Ød1
50	143	55	41	56	118	12.6	32	50	4-7
65	155	64	44	68	137	12.6	32	50	4-7
80	162	72	44	81	143	12.6	32	50	4-7
100	181	90	51	106	156	15.77	32	70	4-10
125	197	101	55	131	190	18.92	32	70	4-10
150	210	114	55	153	212	18.92	32	70	4-10
200	240	145	64	205	268	22.1	45	102	4-12
250	286	178	65	255	325	28.45	45	102	4-12
300	309	204	77	307	403	31.6	45	102	4-12
350	368	267	78	476.2	436	31.6	45	102	4-12
400	400	309	86.5	539.7	488	33.15	51.2	140	4-18
450	422	328	105.6	577.8	539	38	51.2	140	4-18
500	480	361	131.8	635	593	41.15	64.2	140	4-18
600	562	459	152	749.3	816	50.65	70.2	165	4-22
700	624	520	163	863.6	895	63.35	82	254	8-18
800	672	591	188	977.9	1015	63.35	82	254	8-18
900	720	656	203	1085.8	1115	75	118	254	8-18
1000	800	721	210	1200.2	1230	85	142	254	8-18

Actuator

Handle

Fig. HA501

Gear Operator

Fig. HA502

Flange drilling is available on request such as : GB9112-88, DIN2501, BS4504, ISO2084, ISO2531, BS10-E, AS2129 Table D/E, JIS 10K/16K, Universal.



Butterfly Valve

Figure HB101/HB102

*Rate Flow Co-Efficient (Cv) Angle of Disc Opening (Degrees)

Size (mm)	10°	20°	30°	40°	50°	60°	70°	80°	90°
50	0.1	5	12	24	45	64	90	125	135
65	0.2	8	20	37	65	98	144	204	220
80	0.3	12	22	39	70	116	183	275	302
100	0.5	17	36	78	139	230	364	546	600
125	0.8	29	61	133	237	392	620	930	1022
150	2	45	95	205	366	605	958	1437	1579
200	3	89	188	408	727	1202	1903	2854	3136
250	4	151	320	694	1237	2047	3240	4859	5340
300	5	234	495	1072	1911	3162	5005	7507	8250
350	6	338	715	1549	2761	4568	7230	10844	11917
400	8	464	983	2130	3797	6282	9942	14913	16388
450	11	615	1302	2822	5028	8320	13168	19752	21705
500	14	791	1674	3628	6465	10698	16931	25396	27908
600	22	1222	2587	5605	9989	16528	26157	39236	43116
700	30	1663	3522	7630	12599	20036	30482	46899	58696
800	45	2387	4791	8736	13788	20613	31395	48117	68250
900	60	3021	6063	11055	17449	26086	39731	60895	86375
1000	84	4183	8395	15307	24159	36166	55084	84425	119750

Liquid : Cv = $Q \sqrt{\frac{S.G.}{\Delta P}}$

Where : Q = Flow Through Valve (USGPM)
 S.G. = Specific Gravity (Water = 1)
 ΔP = Pressure Drop Across Valve (PSI)

*Through Shaft Design

Size mm	*Seating Torque (Nm) (Normal Condition)	
	Wet	Dry
50	15	34
65	22	45
80	25	55
100	41	90
125	72	150
150	100	198
200	250	511
250	443	894
300	552	1055
350	612	
400	817	
450	1022	
500	1250	

Continuous improvement of international standard technology



Safety Factor condition
 x 1.2 : Operate less than 1 time per day
 x 1.6 : Dry, Cement, Abrasives Operate

*BUNA-N, EPDM, VITON
 *DN50-300 (Torque at 200 PSI)
 *DN350-500 (Torque at 150 PSI)

Butterfly Valve

Figure HB101/HB102

Materials :

BODY	DISC	SHAFT	SEAT
Cast Iron	304 S.S.	316 S.S.	EPDM
Ductile Iron	316 S.S.	410 S.S.	Buna - N
316 S.S.	Ductile Iron		Hypalon
Carbon Steel	Aluminum Bronze		PTFE
			NBR
			Neoprene

Actuators :

Figure HA501 Handles is made of Cast Iron

Figure :	mm (inch)	A	B	R	Weight(kg)
HA501 - T	50-100 (2"-4")	266.7	32	52	0.9
HA501 - M	125-150 (5"-6")	310	32	52	1.04
HA501 - L	200-300 (8"-12")	359	40	75.2	2.3

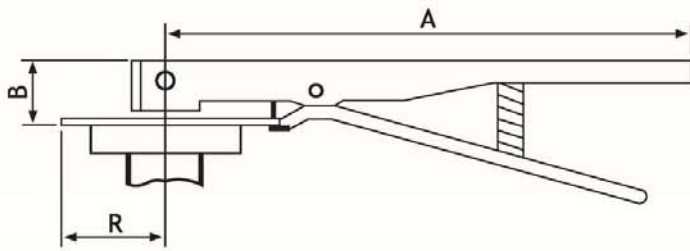


Fig.HA501

Gear Operator HA502

Dimension

Figure :	mm (inch)	A	B	C	E	F	G	Ø	D	D1	Weight(kg)
HA502 - T	50-80 (2"-3")	52	45	74	52	152.5	75	150	90	70	5.2
HA502 - 15T	100-150 (4"-6")	52	45	74	52	152.5	75	150	100	80	5.2
HA502 - 20M	200 (8")	75	62.75	101	75	250	86	300	100	80	13
HA502 - 25M	250 (10")	75	62.75	101	75	250	86	300	125	102	13
HA502 - L	300-350 (12"-14")	81	80	118	81	227	83	200	125	102	15

Fig.HA502

