

"Cair" offers rubber lined Butterfly Valves for HVAC & utilities. These Valves are truly 'Fit & Forget Valve', which requires minimum maintenance. The body lines which also functions as the soft seat, comes in an integrally moulded version & offers bi-directional sealing against vacuum upto the pressure of PN 10 / PN 16.

Size Range : 1.1/2" To 24"

Technical Specifications :

Body	CI (IS 210 Gr. FG 200 / 220) / WCB
Disc	CF8 / CF8M / CF3M / S.G.Iron / Teflon Coated / Power Coated / Nylon Coated
Seat	EPDM / Nitrile / Nylon / Hayplon / Viton
Shaft	AISI 410
Valve Type	Centric Disc Butterfly Valve with a single piece rubber lined body
Body Type	Short wafer (sandwiched between flanges)
Seat Type	Integrally moulded with the body
End Connection	Wafer Sandwiched (Lug Type On Request)
Pressure rating	PN 10 / PN 16 (On Request)
Oper. Temp. range	-25 °C to 130 °C (depending on MOC)
Seat leakage	Tight shut off
Operation	Hand lever for sizes from 40 NB to 300 NB Worm gear boxes for 200 NB to 500 NB.

Key Features :

- Integrally moulded seat liner on the body, which ensures excellent dimensional stability & guaranteed seat tightness.
- Seat liner extending on to the contact faces ensures perfect sealing and eliminates the need for separate flange gaskets.
- Narrow land disc ensures perfect sealing with least operating torque requirements.
- A fully universal body design ensures fitting of the valve between companion flanges of all popular standards (viz : ANSI, BS, DIN, JIS, IS etc.)
- The notch disc & band lever ensures locking of the valve in 8 intermediate position in addition to close and open position. Hand lever can be locked through pad lock.
- Body castings made of superior FG 260 grade cast iron to ensure additional strength.
- Valve disc made of stainless steel / ductile cast iron which enable protection against possible water hammer or pressure surges.
- A truly line size body bone to ensure maximum flow capacity with the lowest pressure drop.

Dimensions :

(All dimensions are in MM)

Valve Model	Valve Size		A	B	C	ØD	E	L	Weight (Approx)
	MM	Inch							
ECO-40	40	1.1/2	58	103	33	40	124	178	1.700
ECO-50	50	2	60	117	43	50	138	178	2.400
ECO-65	65	2.1/2	67	122	46	65	143	178	2.900
ECO-80	80	3	75	129	46	80	150	178	3.100
ECO-100	100	4	97	149	57	100	176	265	4.500
ECO-125	125	5	108	158	56	125	188	265	6.400
ECO-150	150	6	120	174	56	150	206	265	8.100
ECO-200	200	8	147	198	60	200	230	375	11.300
ECO-250	250	10	215	260	68	241	327	485	28.000
ECO-300	300	12	250	284	78	290	351	485	33.000
ECO-350	350	14	265	310	78	334	377	485	44.000
ECO-400	400	16	303	350	102	382	417	485	75.000
ECO-450	450	18	333	378	114	433	-	-	110.00
ECO-500	500	20	355	410	127	476	-	-	141.00
ECO-550	550	22	365	424	140	448	-	-	145.00
ECO-600	600	24	435	457	154	590	-	-	235.00

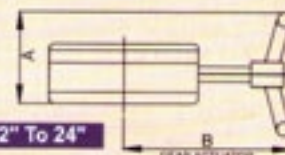
Butterfly Valve Low Torque Lever Operated

 marked also available on request.



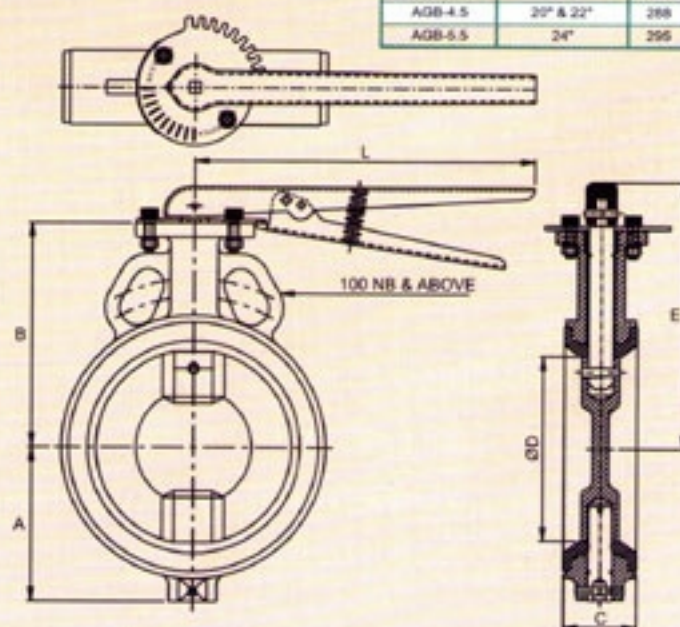
Standards :

- Design and manufacturing : API 609 category A/BS 5155 / MSS SP-67 / C-504
- Valve face to face dimensions : Short wafer as per ISO 5752 Tab 5 / API 609 Category A
- Top flange drilling : ISO 5211 Part II
- Inspection and testing : API 598 / BS 6755
- Flange standard conformity : ANSI 150, DIN PN6 / 10, JIS 5K / 10K BS10 Tab D & E, IS 6392 NP 0.6 / 1.0



Size Range : 1.1/2" To 24"

MODEL NO.	VALVE SIZE	A	B
AGB-0.5	1/2" to 8"	132	144.7
AGB-1.5	10" to 12"	196.5	240
AGB-2.5	14" to 18"	202	253
AGB-3.5	18"	229.5	282
AGB-4.5	20" & 22"	266	297.25
AGB-5.5	24"	295	298



"Cair" Offers PTFE Lined Butterfly Valve for Corrosive Application. The PTFE Seat Lined Covers the entire Wetted Surface of the body and Extends on to the Flanged Contact Faces, Thus elimination as possibility of any media contact with the body.

Size Range : 2" To 16"

Technical Specifications :

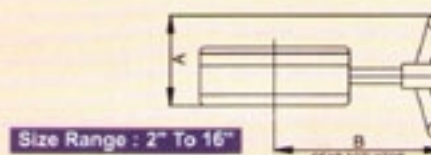
Body	CI (IS 210 Gr. FG 200 / 220 / WCB)
Disc	CF8 / CF8M / CF3M / Teflon Coated. / Powder Coated / Nylon Coated
Seat	PTFE
Shaft	AISI 410
Valve Type	Centric Disc Butterfly Valve with a PTFE lined body
Body Type	Short wafer (sandwiched between flanges), 2 Piece Body
Seat Type	Lined with the body
End Connection	Wafer Sandwiched (Lug Type On Request)
Pressure rating	PN 10 / PN 16 (On Request)
Oper. Temp. range	-25 °C to 200 °C (depending on MOC)
Seat Leakage	Tight shut off (Better than Class)
Operation	Hand lever for sizes from 40 NB to 150 NB Worm gear boxes for 200 NB to 300 NB.

Key Features :

- Full PN 10 pressure rating for the entire range of valve sizes from 50 NB to 400 NB.
- Bi-directional valve with sealing capability to hold rated shut off pressure in either direction
- Circularly moulded back up elastomer provides uniform contact pressure over the entire seat Without losing shaft bore shape, ensuring bubble tight closure every time.
- Unique triple sealing system for shaft sealing, eliminates any fugitive emission or secondary leakage.
- Self lubricated shaft bearings (PTFE coated stainless steel) for both drive end and non-drive end shaft ensures minimum bearing friction torque.
- Live loaded disc shoulder sealing arrangement through pusher and dice springs in both top and bottom shaft bores, acting on PTFE liner ensures leak free mechanical stem seal.
- Back up elastomer standardised in Viton to ensure excellent corrosion protection and maximum temperature resistance against media fumes and higher temperature.
- Disc springs and fasteners standardised on corrosion resistant stainless steel to ensure long service.
- A choice of exotic metallurgy for the dice, to meet any type of aggressive media.
- Low operating torque enable selecting of smaller size actuator.
- Perfect adaptability for converting from manual to actuated operation due to standardised top.

Standards :

Design and manufacturing	API 609 category A/BS 5155 / MSS SP-67 / C-504
Valve face to face dimensions	Short wafer as per ISO 5752 Tab 5 / API 609 Category A
Top flange drilling	ISO 5211 Part II
Inspection and testing	API 598 / BS 6755 / FCI-702
Flange standard conformity	ANSI 150, DIN PN 10 / 16



Size Range : 2" To 16"

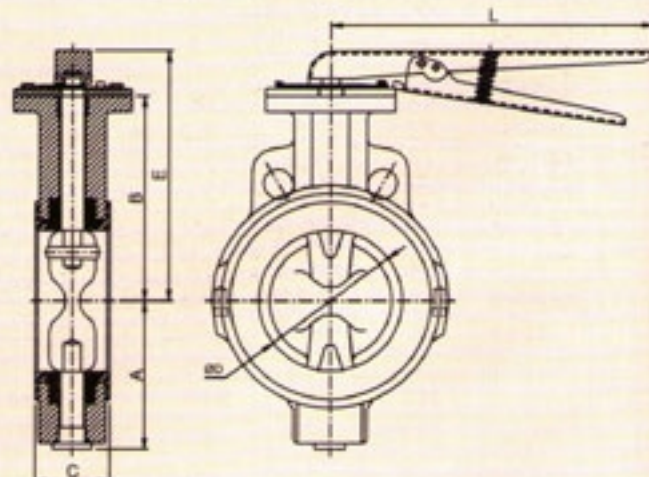
DIMENSIONS:

MODEL NO.	VALVE SIZE	A	B
AGB-0.5	1/2" to 8"	132	144.7
AGB-1.5	10" to 12"	196.5	240
AGB-2.5	14" to 16"	202	253
AGB-3.5	18"	229.5	262
AGB-4.5	20" & 22"	288	257.25
AGB-5.5	24"	295	298

Dimensions :

(All dimensions are in MM)

Valve Model	Valve Size		A	B	C	ØD	E	L	Weight (Approx)
	MM	Inch							
ECO-50	50	2	70.5	114	37.5	50	143.5	178	2.400
ECO-65	65	2 1/2	80	121	40.2	65	151	178	2.900
ECO-80	80	3	84.5	129	40.5	80	159	178	3.100
ECO-100	100	4	100.5	145	46.5	100	175	265	4.500
ECO-125	125	5	113.5	163	50.3	125	175	265	6.400
ECO-150	150	6	132.5	175	50.3	150	207	265	8.100
ECO-200	200	8	163	198	54.5	200	230	375	11.300
ECO-250	250	10	203	245	61	241	280	375	25.500
ECO-300	300	12	208	250	72.2	287.8	285	375	32.600
ECO-400	400	16	303	350	102	383.2	-	-	72



"Cair" Offers PTFE Lined Damper Valve for Corrosive Application. The PTFE Seat Lined Covers the entire Wetted Surface of the body and Extends on to the Flanged Contact Faces, Thus elimination as possibility of any media contact with the body.

Size Range : 1.1/2" To 20"

Technical Specifications :

Body	CI (IS 210 Gr. FG 200 / 220) WCB
Disc	CF8 / CF8M / CF3M / WCB / Power Coated
Seat	Metal to Metal
Shaft	AISI 410
Valve Type	Centric Disc Butterfly Valve with Metal to Metal
Body Type	Short wafer (sandwiched between flanges)
Seat Type	Metal to Metal
End Connection	Wafer Sandwiched (Lug Type On Request)
Pressure rating	PN 10 (Maximum)
Oper. Temp. range	-25 °C to 200 °C (depending on MOC) Up to 600 °C
Seat Leakage	Tight shut off (Better than Class) 0.5 % leakage
Operation	Hand lever for sizes from 40 NB to 150 NB Worm gear boxes for 200 NB to 300 NB.



Size Range : 1.1/2" To 8"

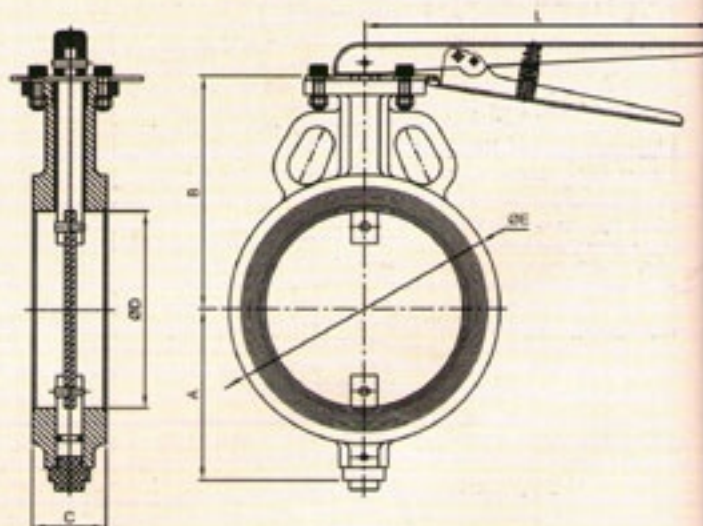
DIMENSIONS: (In MM)

MODEL NO.	VALVE SIZE	A	B
AGB - 0.5	1.1/2"	124	178
AGB - 1.5	2"	138	178
AGB - 2.5	2.1/2"	143	178
AGB - 3.5	3"	150	178
AGB - 4.5	4"	176	265
AGB - 5.5	5"	188	265
AGB - 6.5	6"	206	265
AGB - 7.5	8"	245	375

Dimensions :

(All dimensions are in MM)

Valve Model	Valve Size MM	Valve Size Inch	A	B	C	ØD	ØE	L	Weight (Approx)
DP - 40	40	1.1/2	58	103	33	40	124	178	2
DP - 50	50	2	60	117	43	50	138	178	3
DP - 65	65	2.1/2	67	122	46	65	143	178	4
DP - 80	80	3	75	129	46	80	150	178	5
DP - 100	100	4	97	149	57	100	176	265	6
DP - 125	125	5	108	158	56	125	188	265	6.5
DP - 150	150	6	120	174	56	150	206	265	9
DP - 200	200	8	147	198	60	200	230	375	12
DP - 250	250	10	219	270	68	245	316	-	-
DP - 300	300	12	246	287	78	292	369	-	-
DP - 350	350	14	286	325	80	340	449	-	-
DP - 400	400	16	292	355	102	390	459	-	-
DP - 450	450	18	322	358	89	450	528	-	-
DP - 500	500	20	386	415	92	480	612	-	-



Spherical Disc Valve

High Performance Butterfly Valve

5 Special Effects

1. Compact Design - Full Port - Offers Mass Flow
2. Simple Structure, Light & Smooth - Takes Very Short Time For Opening & Closing With Very Low Torque
3. Easy Maintenance - Replaceable Seals Design
4. Self Sealing - Self Cleaning The Under Cut Disc Segment And Seal Tends To Wipe Away The Material From The Sealing Area,
5. Gland Pressing Plate - Ensures Complete Utilization of Gland Seals

Application

- Hygienic Powder & Slurries, especially in Pharmaceutical Industries.
- Chemical and Dyeing Fluids in Textile Processing
- Brine Waters & Oils.
- Stream Lines, Air / Gas Lines / Vacuum.

Spherical Disc Valve has been Proved as Superior to Other Valves in Many Aspects, Particularly in.....

- Weight ● Space ● Pressure Range
- Multiple Operations ● Maintenance Ease
- Torque & Economy

Material of Construction

Size Range	1.1/2" to 48"
Construction Type	Double Eccentric Disc Design
Body	WCB/CF8/CF8M/CAST IRON
Disc	WCB/CF8/CF8M
Seat	PTFE (available EPDM / Metal to Metal)
Shaft	AISI 410 / 304 / 316
Plate Mounting	NAMUR Standard
Pressure Rating	ANSI 150 class / ANSI 300 Class (On Request)
End Connection	Wafer Sandwiched / Lug type (On Request)
Operating Temp. Range	-25°C to 180°C (Soft Seating) -25°C to 600°C (Metal to Metal Seating)
Operation	Hand Lever, Worm Gear Box Pneumatic Actuated, Electrical Actuated

Precised & Strong Durable to 240° C / 600 ° C Temperature
And 10 Kg/Cm² / 20 Kg/Cm² Pressure



Cair
INDUSTRIAL VALVES



CV Value in GPM.

Size	Cv (GPM)	Full Open Class 150
1.1/2" (40)		70
2" (50)		92
2.1/2" (65)		150
3" (80)		260
4" (100)		460
5" (125)		760
6" (150)		1350
8" (200)		2200
10" (250)		3200
12" (300)		4700
14" (350)		5800
16" (400)		8000
18" (450)		10500
20" (500)		14000
24" (600)		21000
26" (650)		23400
28" (700)		27000
30" (750)		33300
32" (800)		40200
36" (900)		56500
40" (1000)		70000
48" (1200)		90000

Torque Values in Kgf.m

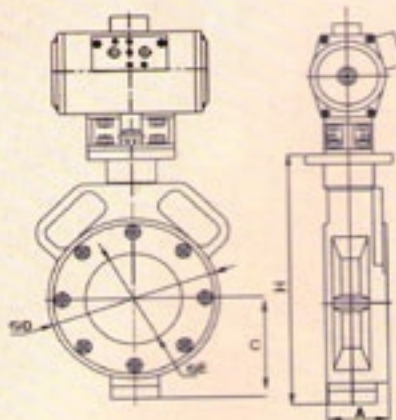
Size	Differential Pressure (AP)			
	5 kg/cm ²	10 kg/cm ²	15 kg/cm ²	20 kg/cm ²
1.1/2" (40)	0.8	1.0	1.2	1.5
2" (50)	0.9	1.2	1.5	1.7
2.1/2" (65)	1.6	2.2	2.4	3.0
3" (80)	3.0	3.4	4.2	5.0
4" (100)	4.0	4.6	5.4	6.4
5" (125)	5.8	8.0	9.5	11.5
6" (150)	9.0	11.5	12.5	14.5
8" (200)	14.0	17.5	24.0	28.0
10" (250)	23.5	26.5	28.0	30.0
12" (300)	32.0	36.0	40.0	50.0
14" (350)	50.0	65.0	83.5	108.5
16" (400)	69.4	94.5	120.0	160.0
18" (450)	95.5	128.0	157.2	205.0
20" (500)	122.5	193.3	210.0	293.4
24" (600)	213.3	293.4	366.7	440.1
26" (650)	265	350	400	510
28" (700)	300	395	480	595
30" (750)	321	420	519	617
32" (800)	481	630	780	920
36" (900)	518	663	850	992
40" (1000)	641	850	1060	1300
48" (1200)	850	1166	1485	1632

Standards :	Series 5500 (40 NB TO 600 NB)	Series 5501 (650 NB TO 1200 NB)
Design and manufacturing	API 609 CATAGORY B.	MSS SP - 68
Valve face to face dimensions	API 609 CATAGORY B / ANSI B 16.10	ISO 5752 SERIES 20, MSS SP - 68
Flange standard conformity	ANSI B 16.5 CLASS 150	ASME / ANSI B 16.47 SERIES 'A'
Inspection & testing Standard	API 598 / ANSI FCI 70 - 2	API 598 / BS 6755
Fire safe testing	API 607	API 607
Pressure temperature rating	ASME / ANSI B 16.34	ASME / ANSI B 16.34

Spherical Disc Valve

High Performance Butterfly Valve

Pneumatic Actuator Operated Spherical Disc Valve



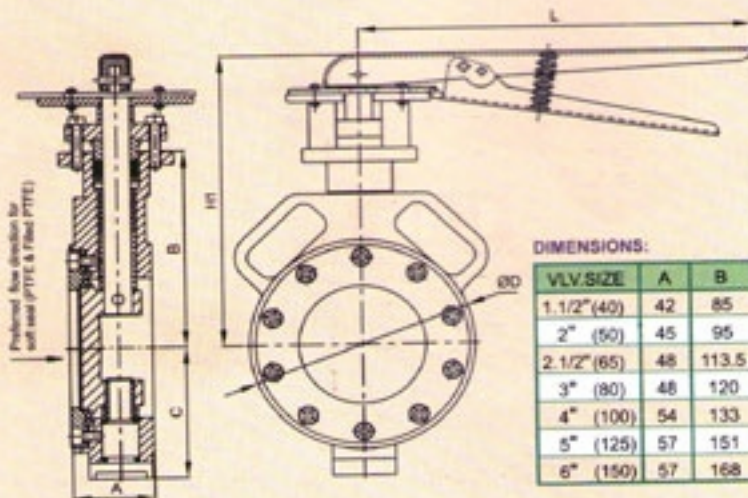
DIMENSIONS:

All Dimensions are in (mm.)

VLV.SIZE	A	C	H	SE	SD	Weight
1.1/2" (40)	42	59.5	144.5	38	82	1.600
2" (50)	45	68.5	163.5	50.8	95	2.200
2.1/2" (65)	48	74.5	188	60.6	108	3.000
3" (80)	48	80	200	72	127	3.800
4" (100)	54	95	228	100	159	5.600
5" (125)	57	117	268	123	186	7.700
6" (150)	57	132	300	143	217	10.400
8" (200)	64	157	385	192	270	15.000
10" (250)	71	172	396	239	323	25.750
12" (300)	81	200	465	290	380	36.000
14" (350)	92	224	534	335	406	48.900
16" (400)	102	250.5	592	387.5	490	66.850
18" (450)	114	355	745	425	540	117.000
20" (500)	127	384	805	475	594	146.500
24" (600)	154	460	980	560	705	290.000
26" (650)	165	455.72	938.5	608	755	360.000
28" (700)	165	480	988	661.5	810	390.000
30" (750)	190	512	1047	696	855	475.000
32" (800)	190	550.2	1126.4	755	913	524.000
36" (900)	203	605	1255	864	1032	675.000
40" (1000)	On Request					
48" (1200)	On Request					

Pneumatic Operating Pressure 45 PSI to 150 PSI

Handle Operated Spherical Disc Valve



DIMENSIONS:

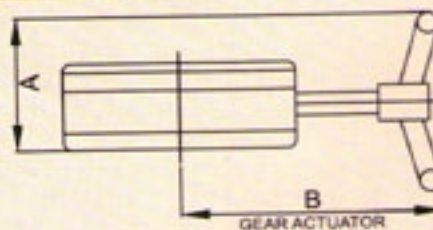
All Dimensions are in (mm.)

VLV.SIZE	A	B	C	SD	H1	L	Weight
1.1/2" (40)	42	85	59.5	82	146	265	2.250
2" (50)	45	95	68.5	95	150	265	2.600
2.1/2" (65)	48	113.5	74.5	108	172	265	3.550
3" (80)	48	120	80	127	181	265	4.300
4" (100)	54	133	95	159	197	265	6.100
5" (125)	57	151	117	186	231	265	8.600
6" (150)	57	168	132	217	245	265	11.050



Worm Gear Operated Spherical Disc Valve

Size Range : 1.1/2" To 36"



DIMENSIONS:

(in MM)

MODEL NO.	VALVE SIZE	A	B
AGB-0.5	1 1/2" & 6"	132	145
AGB-1.5	8"	196.50	240
AGB-2.5	10" & 16"	202	253
AGB-3.5	18"	229.5	262
AGB-4.5	20"	288	257.25
AGB-6.5	24" & 26"	295	298
AGB-7.5	28" & 30"	410	315
AGB-8.5	32" & 36"	460	320

SALIENT FEATURES

- High torque capacities
- Adjustable travel stops
- Metallic compact housing
- Minimum friction