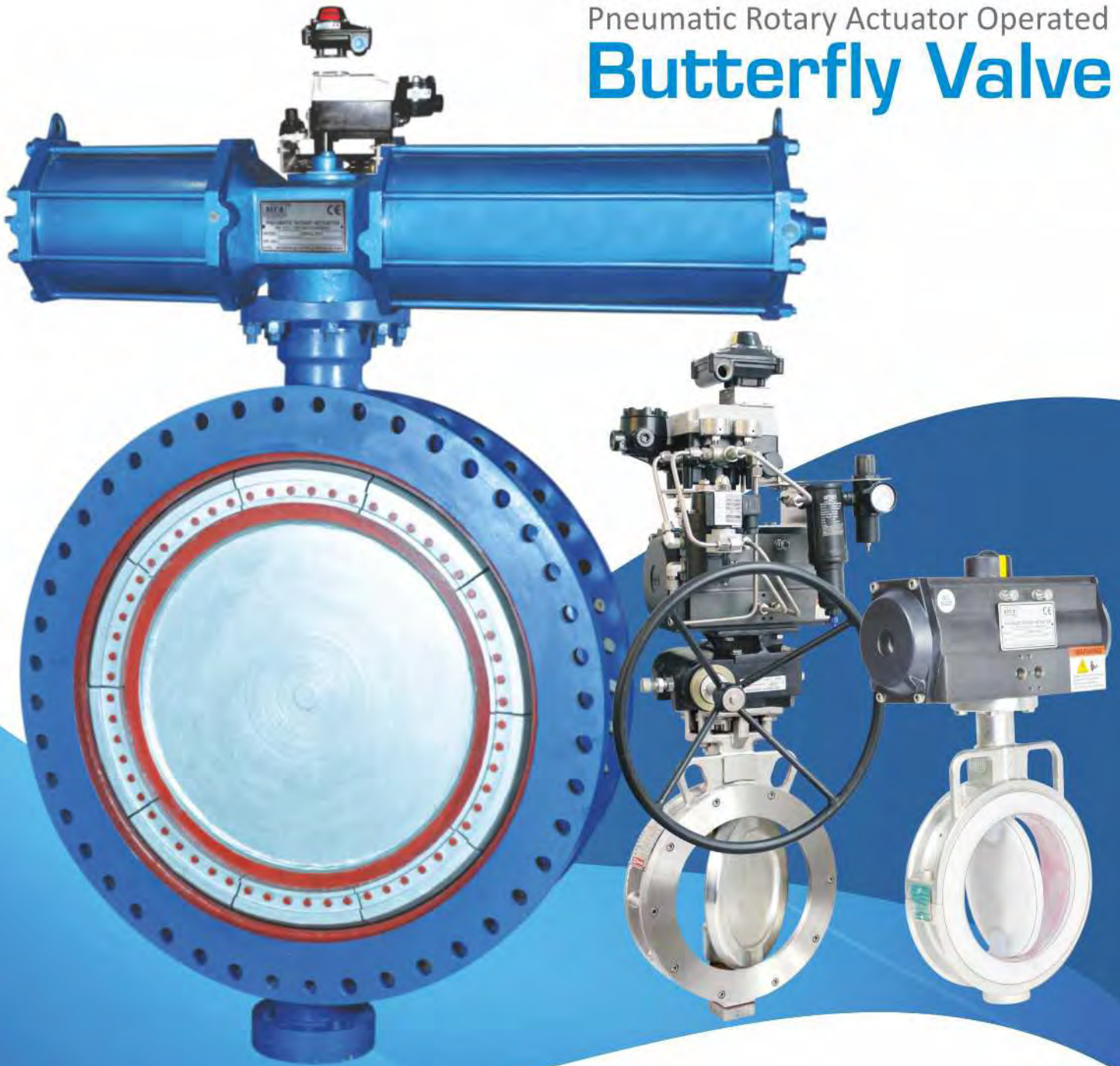


Your Solution Partner In
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Pneumatic Rotary Actuator Operated
Butterfly Valve



Mfg. & Mkt by :
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INDIA

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About Us :

Aira Euro Automation Pvt. Ltd. headquartered in Ahmedabad, Gujarat, India accredited with ISO 9001, from BVQI – LONDON is one of the leading manufacturer and exporter of automation and manual valves in the small sector in India having over 20-years of experience maintains one of the largest and most diversified markets of valves globally. We export our product in more than 20+ countries and have received excellent feedbacks.

We manufacture pneumatic actuator operated valves, automation valves. Pneumatic actuator operated valves can easily tolerate heavy loads, and are easily available and inexpensive too. Our products meet a wide range of users from different fields in fossil & cogeneration power, nuclear, refining, petrochemicals, pulp & paper, LNG & cryogenics, pharma industry.

We are continuously enhancing the ability of our staff and workers to become “customers preferred company.” The motto of our organization is to become a “One - stop shop” for our clients and customers. For this, we have fully dedicated staff in each field.

Our management and employees are more passionate about manufacturing quality products and are always striving to improve and to meet the expectations and desires of our clients and customers in the guidance of dedicated and experienced management.

For further clarification of our products & services, Please feel free to contact us.

Pub. On : October 2018 (Rev-01)

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Unit : 2



ISO Certification



ATEX Certificate for Micro Limit Switch



ATEX Certificate for solenoid Coil



API 6D Certificate for Ball Valve



ATEX Certificate for solenoid Coil



API 609 Certificate for Butterfly Valve

Pub. On : October 2018 (Rev-01)



Approval

TDS, SGS, MECON, LLOYDS, PDIL, RITES, ONGC, BVIS, UHDE, BHEL, NPCIL, BARC, SAIL, Indian Navy & many more. We have always kept our Design & Development Department on their toes, Even when a product has been positively accepted in the market, We have made changes for the better instead of resting on our laurels. Also we have full fledged in house flow testing facility.

Organisation Belief

"Customer Is The Top Priority" Continuous job training to it's employees and human resource development strengths have given a loyal, trained workforce with great motivation. We have a network of service and sales operations by qualified engineers and marketing personnel, by which the nationwide requirements are being fulfilled.

Reputation

Client's satisfaction with quality, fast action, rates, pre and post sales services.

Aim

To provide the most economic and quality product under the latest international manufacturing standards.



CE Ball Valve



CE Ball Valve



CE Actuator



IBR Certificate



Design Registered



Fire Safe Certificate : Ball Valve





CE : Micro Limit Switch



CE : Solenoid Coil & Positioner



CCEO : Solenoid Coil



CCEO : Solenoid Coil / Limit Switch / Positioner



BIS : Solenoid Coil / Limit Switch / Positioner



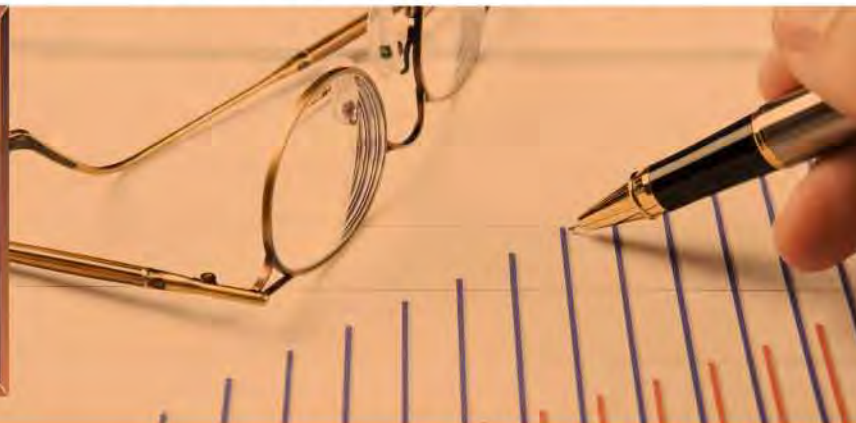
BIS : Solenoid Coil / Limit Switch / Positioner



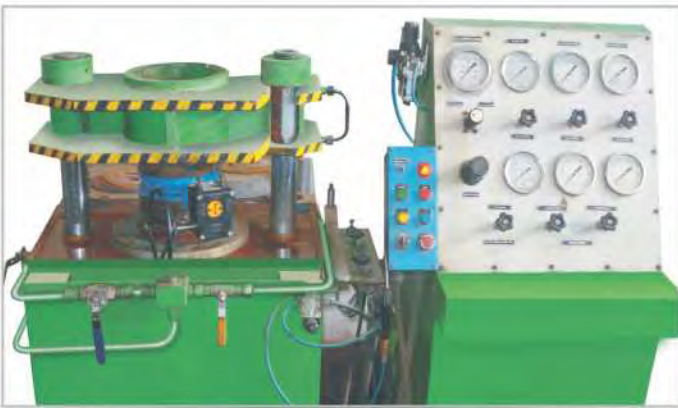
BIS : Solenoid Coil / Limit Switch / Positioner



DGMS Certificate : Positioner



Company Profile



Pub. On : October 2018 (Rev-01)

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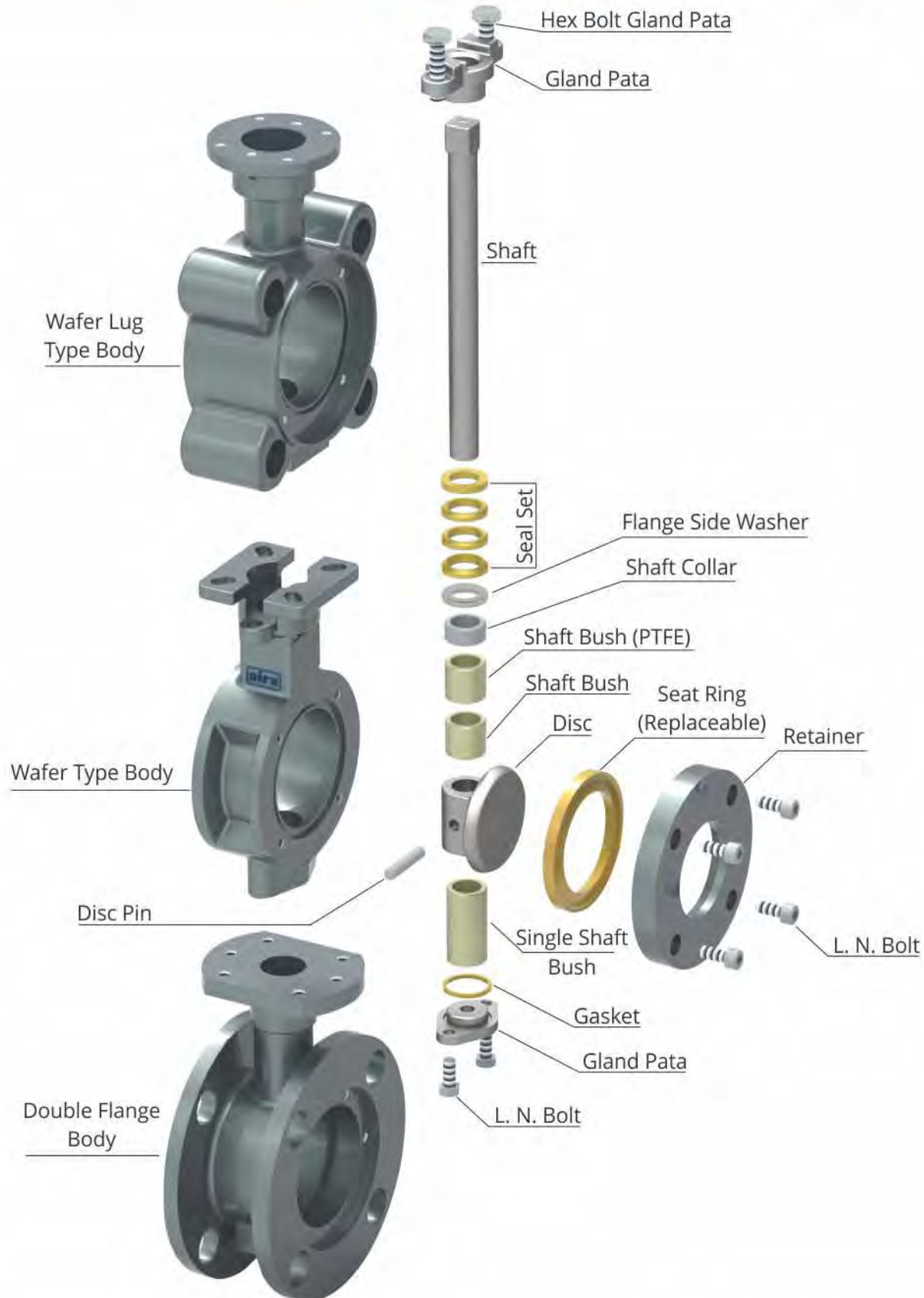
Rubber Lined Wafer Type Butterfly Valve



Pub. On : October, 2018 (Rev :- 01)

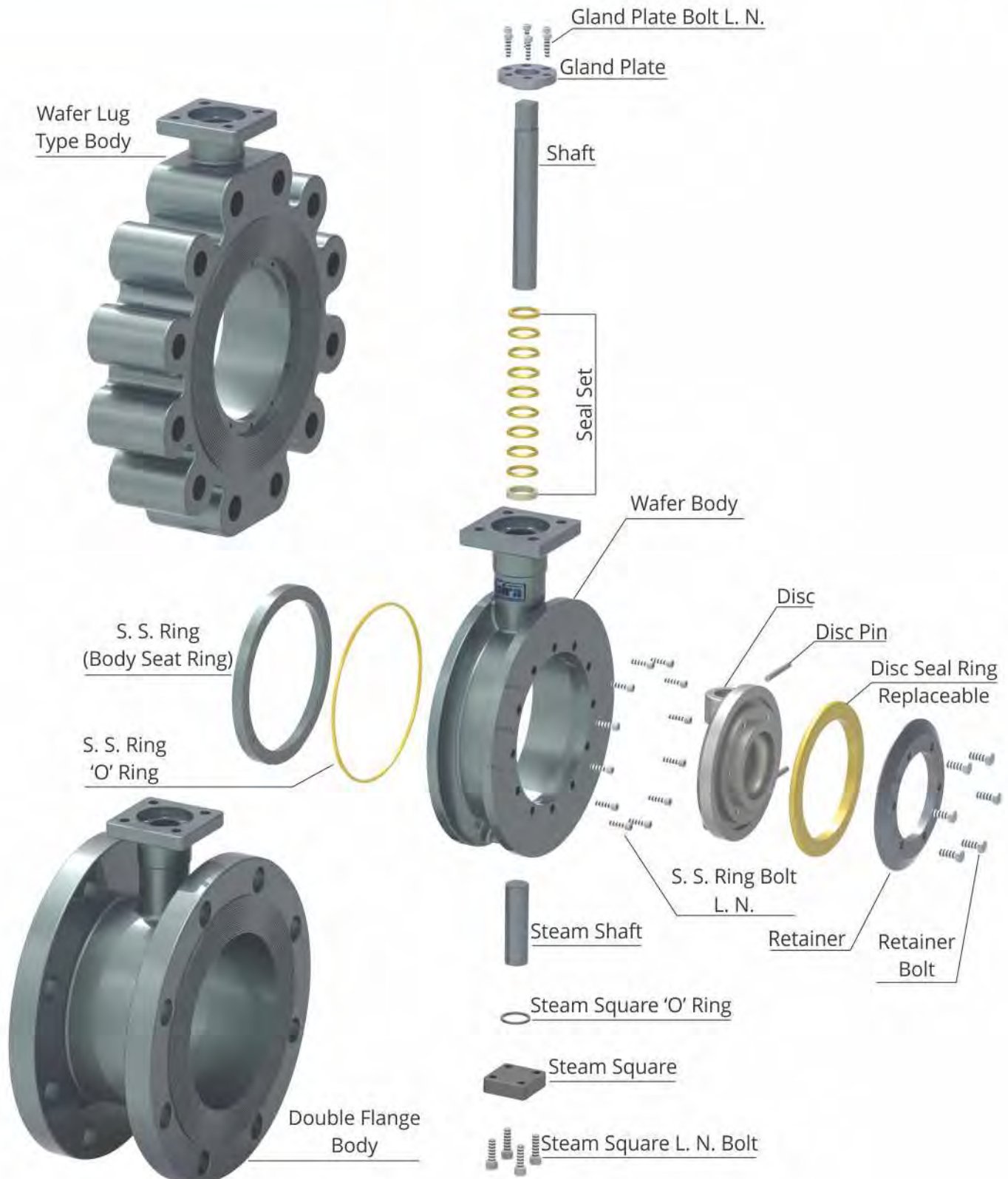
Note : Since, constant worldwide advancement in technology, We keep our rights reserved to make changes time to time in Technical specifications and Dimensions without prior notice.

High Performance Butterfly Valve Spherical Disc Valve



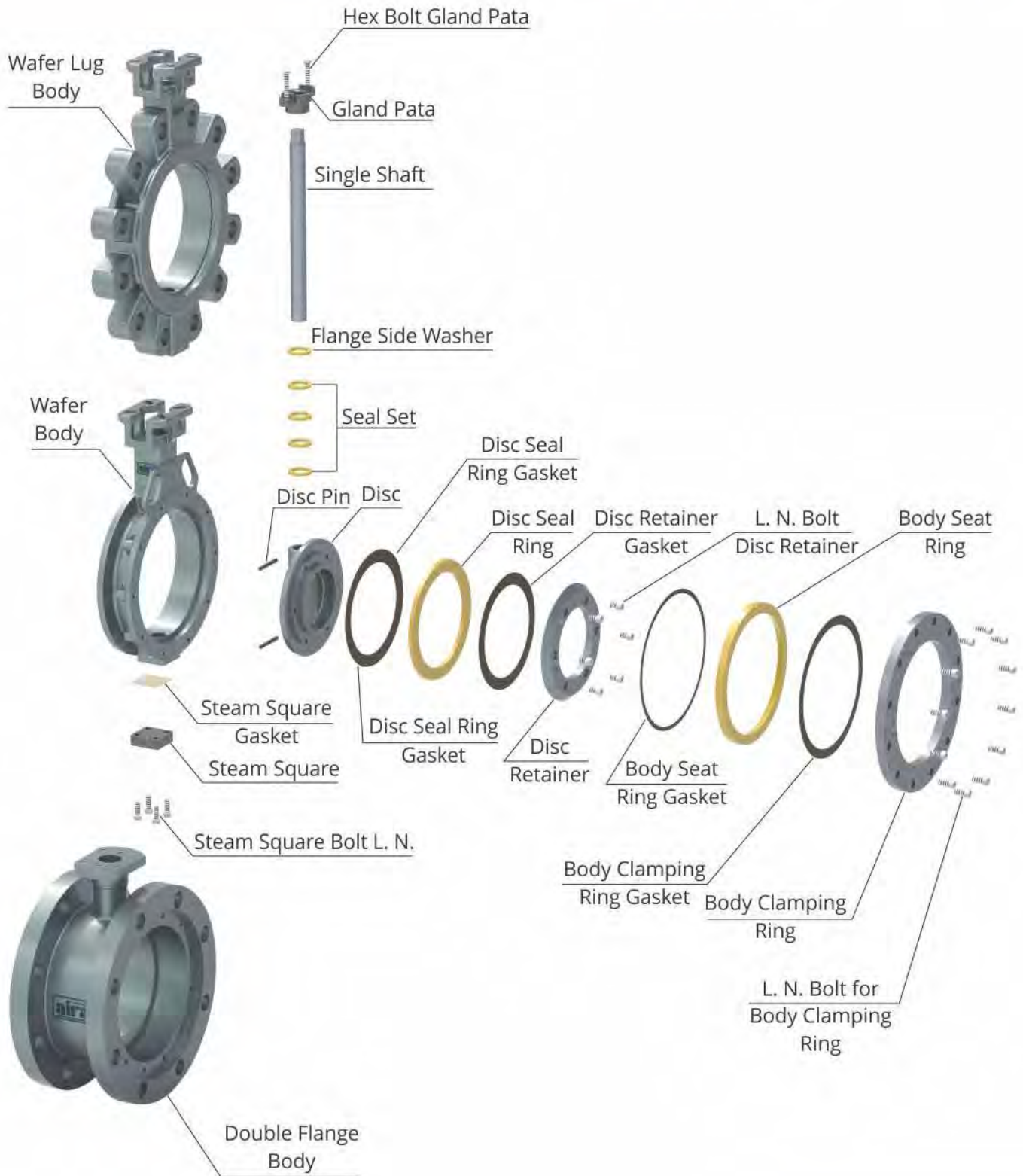
Pub. On : October, 2018 (Rev :- 01)

Double Eccentric Off - Set Disc Butterfly Valve



Pub. On : October, 2018 (Rev :- 01)

Tripple Eccentric Butterfly Valve



Pub. On : October, 2018 (Rev :- 01)

Rubber Lined Wafer Type Butterfly Valve



"aira" Offers Resilient-seated, butterfly valve for flange mounting to pipelines; concentric disc design; with replaceable liner. Suitable for use in cooling towers, waste-water applications, water treatment, water distribution, dams, gas main and service lines, pressure stations, gas storage tanks, power plants and gas pipelines industry.

Size Range : 1.1/2" to 48" (40 MM to 1200 MM)

Butterfly Valve Specification

Valve Type	Centric Disc Butterfly Valve with Single Piece Rubber Lined Body
Body Type	Short Wafer Type
Seat Type	Integrally Molded with The Body (Renewable Seat On Request) Upto 24"
End Connection	Wafer Type Suit 150#, Table 'D', Table 'E' & IS 6392 Table 11 (PN 10 / PN 16)
Pressure Rating	PN 10 / PN 16
Oper. Temp. Range	-20 °C to 80 °C For Nitrile Seat (Depending On MOC)
Seat Leakage	Tight Shut Off

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

Item	Type Of Test	Testing Pressure	Temperature	
			Normal	High
Actuator	Pneumatic Bubble Test	8 Kg/cm ²	-20 °C to 80 °C	High Temp. On Request
Valve Body	Hydraulic	15 Kg/cm ²	Max. 80 °C	High Temp. On Request
Seat	Hydraulic	10 Kg/cm ²	Max. 80 °C	High Temp. On Request

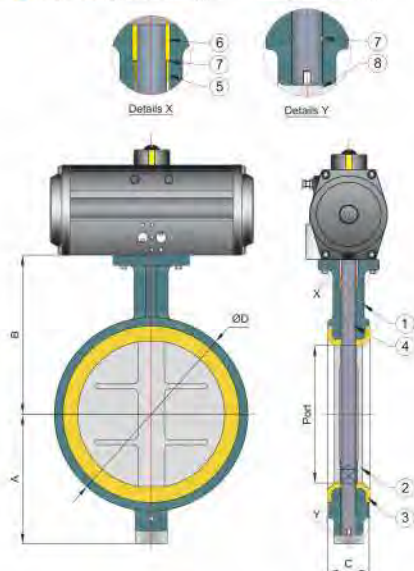
Standard

- Design And Manufacturer : API 609 category A / IS : 13095 / BS EN 593
- Valve Face To Face Dimension : Short Wafer As Per ISO 5752 TAB 5 / API 609 Category A ISO 5752 TAB 1 / BS EN - 593 / BS EN - 558
- Flange Standard Conformity : ASME B16.5 / 16.47 Series A Class 150,
- Inspection & Testing : API 598 / BS EN 12266 - 1
- Top Flange Drilling : ISO 5211

Equipped in - house State - of - art rubber lining machine for butterfly valve upto 72".

Size Range : Upto 1.1/2" to 3" (40 MM to 80 MM)

Sr. No.	Description	Material
1	Body	ASTM - A 126 Grade B (Gray Iron)
		ASTM - A 216 Grade WCB (Cast Steel)
		ASTM - A 536 Grade 65-45-12 (Ductile Iron)
		ASTM - A 351 Grade CF8 / CF8M / CF3M / CD4MCuN
2	Disc	ASTM - A 126 Grade B (Gray Iron) + Powder Coated
		ASTM - A 216 Grade WCB (Cast Steel) + Powder Coated
		ASTM - A 536 Grade 65-45-12 (Ductile Iron) + Powder Coated
		ASTM - A 351 Grade CF8 / CF8M / CF3M / CD4MCuN S.G.Iron with PTFE / Powder / Nylon Coated & Rubber Line
3	Seat	Nitrile / EPDM / Viton / Hypelon / Neopren
4	Shaft	AISI 410 / AISI 304 / AISI 316 / AISI 316L
5	Bearing Bush	Metal Bush PTFE Coated
6	Bush	Delrin
7	'O' Ring	Nitrile / EPDM / Viton / Hypelon / Neopren
8	Actuator	STD.

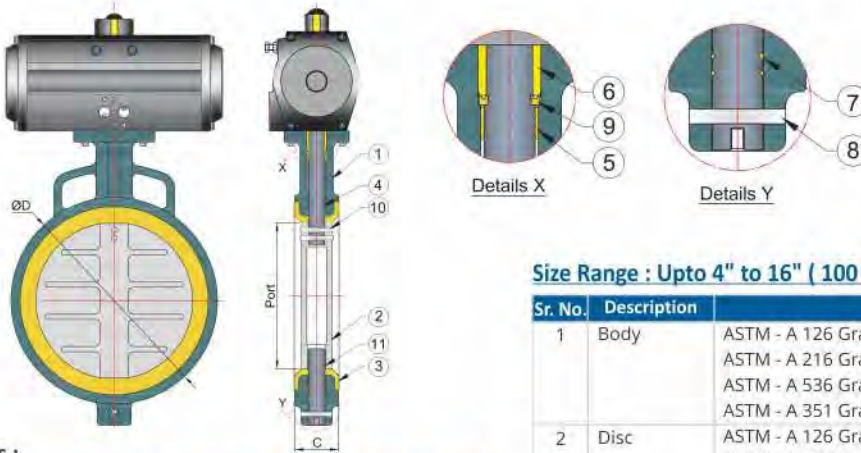


Dimensions :

Valve Model	Size		Port ±5MM	C ±2MM	ØD** ±5MM	Weight Approx. Kgs.
	Inch	MM				
ECO - IC - 40	1.1/2"	40	40	34	80	3
ECO - IC - 50	2"	50	50	44	95	3.25
ECO - IC - 65	2.1/2"	65	65	46	108	5
ECO - IC - 80	3"	80	80	46	124	5.25

(All Dimensions are in mm)

Rubber Lined Wafer Type Butterfly Valve



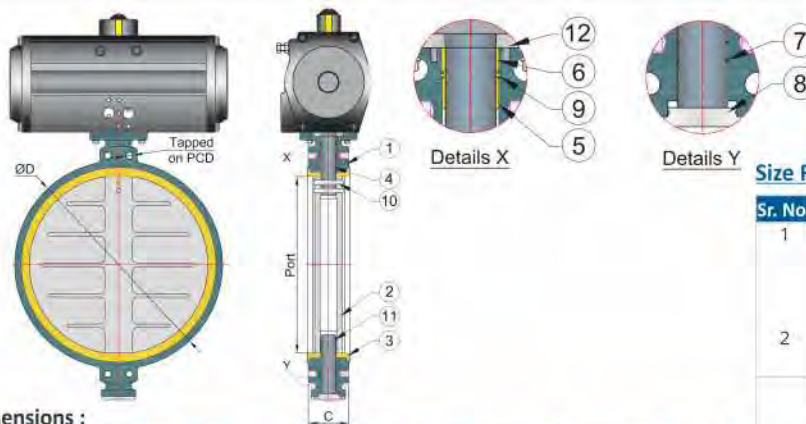
Dimensions :

Valve Model	Size		Port ±5MM	C ±2MM	ØD** ±5MM	Weight Approx.
	Inch	MM				
ECO - IC - 100	4"	100	100	52	150	6.5
ECO - IC - 125	5"	125	125	56	186	10.6
ECO - IC - 150	6"	150	150	56	205	11.5
ECO - IC - 200	8"	200	200	60	258.5	20
ECO - IC - 250	10"	250	241	68	321	24.900
ECO - IC - 300	12"	300	286	78	368	33.500
ECO - 350	14"	350	333	78	438	43
ECO - 400	16"	400	382	102	490	63

(All Dimensions are in mm)

Size Range : Upto 4" to 16" (100 MM to 400 MM)

Sr. No.	Description	Material
1	Body	ASTM - A 126 Grade B (Gray Iron) ASTM - A 216 Grade WCB (Cast Steel) ASTM - A 536 Grade 65-45-12 (Ductile Iron) ASTM - A 351 Grade CF8 / CF8M / CF3M / CD4MCuN
2	Disc	ASTM - A 126 Grade B (Gray Iron) + Powder Coated ASTM - A 216 Grade WCB (Cast Steel) + Powder Coated ASTM - A 536 Grade 65-45-12 (Ductile Iron) + Powder Coated ASTM - A 351 Grade CF8 / CF8M / CF3M / CD4MCuN
3	Seat	Nitrile / EPDM / Viton / Hypelton / Neopren
4	Shaft	AISI 410 / AISI 304 / AISI 316 / AISI 316L
5	Bearing Bush	Metal Bush PTFE Coated
6	Bush	PTFE
7	'O' Ring	Nitrile / EPDM / Viton / Hypelton / Neopren
8	Dowel Pin	M.S. / AISI 304 / AISI 316 / AISI 316L
9	'V' Seal	Nitrile / EPDM / Viton / Hypelton / Neopren
10	Taper Pin	AISI 304 / AISI 316 / AISI 316L
11	Bottom Pin	AISI 410 / AISI 304 / AISI 316 / AISI 316L



Dimensions :

Valve Model	Size		Port ±5MM	C ±2MM	ØD** ±5MM	PCD	Tapped ±5MM	Weight Approx.
	Inch	MM						
ECO - 450	18"	450	433	114	602	577.9	1" UNC	94
ECO - 500	20"	500	476	127	700	635	1" UNC	124.30
ECO - 600	24"	600	590	154	695	749.3	1.1/4" UNC	241.5
ECO - 650	26"	650	635	165	740	806.4	1.1/4" UNC	215
ECO - 700	28"	700	680	165	799	863.6	1.1/4" UNC	278.150
ECO - 750	30"	750	725	190	857	914.4	1.1/4" UNC	338.300
ECO - 800	32"	800	785	190	912	977.9	1.1/2" UNC	387.100
ECO - 850	34"	850	810	190	970	1028.7	1.1/2" UNC	---
ECO - 900	36"	900	885	203	1025	1085.8	1.1/2" UNC	484.8
ECO - 950	38"	950	935	216	1090	1149.4	1.1/2" UNC	---
ECO - 1000	40"	1000	965	216	1131	1200.2	1.1/2" UNC	---
ECO - 1100	44"	1100	1085	254	1245	1314.45	1.1/2" UNC	---
ECO - 1200	48"	1200	1170	254	1350	1422.4	1.1/2" UNC	---

(All Dimensions are in mm)

Size Range : Upto 18" to 48" (450 MM to 1200 MM)

Sr. No.	Description	Material
1	Body	ASTM - A 126 Grade B (Gray Iron) ASTM - A 216 Grade WCB (Cast Steel) ASTM - A 536 Grade 65-45-12 (Ductile Iron)
2	Disc	ASTM - A 351 Grade CF8 / CF8M / CF3M / CD4MCuN ASTM - A 126 Grade B (Gray Iron) + Powder Coated ASTM - A 216 Grade WCB (Cast Steel) + Powder Coated ASTM - A 536 Grade 65-45-12 (Ductile Iron) + Powder Coated ASTM - A 351 Grade CF8 / CF8M / CF3M / CD4MCuN
3	Seat	Nitrile / EPDM / Viton / Hypelton / Neopren
4	Shaft	AISI 410 / AISI 304 / AISI 316 / AISI 316L
5	Bearing Bush	Metal Bush PTFE Coated
6	Bush	PTFE
7	'O' Ring	Nitrile / EPDM / Viton / Hypelton / Neopren
8	Bottom Plate	IS 2062 Gr. B
9	'V' Seal	Nitrile / EPDM / Viton / Hypelton / Neopren
10	Taper Pin	AISI 304 / AISI 316 / AISI 316L
11	Bottom Pin	AISI 410 / AISI 304 / AISI 316 / AISI 316L
12	Gland Plate	IS 2062 Gr. B

Rubber Lined Concentric Disc Wafer Type Double Flange Butterfly Valve



"aira" Offers Resilient-seated, butterfly valve for flange mounting to pipelines; concentric disc design; with replaceable liner. Suitable for use in cooling towers, waste-water applications, water treatment, water distribution, dams, gas main and service lines, pressure stations, gas storage tanks, power plants and gas pipelines industry.

Size Range : 3" to 48" (80 MM to 1200 MM)

Butterfly Valve Specification

Valve Type	Centric Disc Butterfly Valve with Single Piece Rubber Lined Body
Body Type	Short Wafer Type Double Flange
Seat Type	Integrally Molded with The Body (Renewable Seat On Request)
End Connection	Wafer Type Suit 150#, Table 'D', Table 'E' & IS 6392 Table 11 (PN 10 / PN 16)
Pressure Rating	PN 10 / PN 16 (PN 20 On Request)
Oper. Temp. Range	-20 °C to 80 °C For Nitrile Seat (Depending On MOC)
Seat Leakage	Tight Shut Off (Class VI)

Accessories

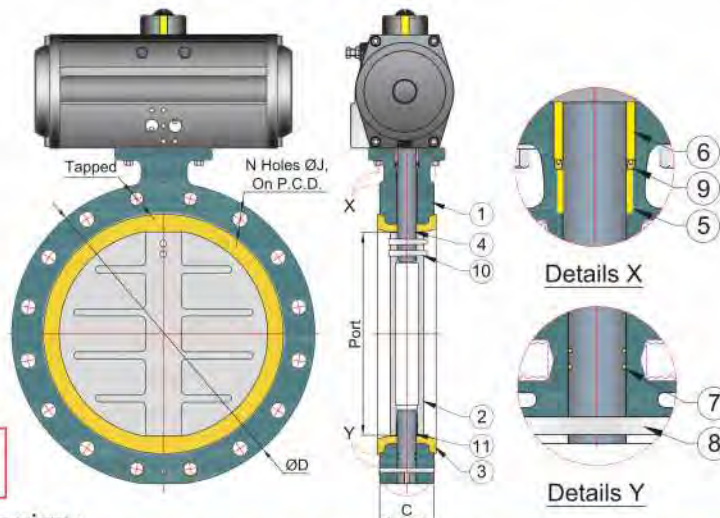
- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Decutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

TEST PRESSURE		
Testing	Body	Seat
Hydraulic PN 10	15 Kg/cm ²	11 Kg/cm ²
Hydraulic PN 16	17.6 Kg/cm ²	24 Kg/cm ²

Standard

- Design And Manufacturer : API 609 category A / IS : 13095 / BS EN 593
- Valve Face To Face Dimension: Short Wafer As Per ISO 5752 TAB 5 / API 609 Category A ISO 5752 TAB 1
- Flange Standard Conformity : ASME B 16.5 / 16.47 Series "A" 150#
ASME B16.147 Series "B" Dia On Request
- Inspection & Testing : API 598 / BS EN 12266 - 1
- Top Flange Drilling : ISO 5211

Equipped in - house State - of - art rubber lining machine for butterfly valve upto 72".



Dimensions :

Sr. No.	Description	Material
1	Body	ASTM - A 126 Grade B (Gray Iron)
		ASTM - A 216 Grade WCB (Cast Steel)
		ASTM - A 536 Grade 65-45-12 (Ductile Iron)
		ASTM - A 351 Grade CF8 / CF8M / CF3M / CD4MCuN
2	Disc	ASTM - A 126 Grade B (Gray Iron)
		ASTM - A 216 Grade WCB (Cast Steel)
		ASTM - A 536 Grade 65-45-12 (Ductile Iron)
		Ductile Iron with Teflon / Powder / Nylon / Coated & Rubber Line S.G.Iron with PTFE / Powder / Nylon Coated & Rubber Line
3	Seat	Nitrile / EPDM / Viton / Hypelom / Neopren
4	Shaft	AISI 410 / AISI 304 / AISI 316 / AISI 316L
5	Bearing Bush	Metal Bush PTFE Coated
6	Bush	PTFE
7	'O' Ring	Nitrile / EPDM / Viton / Hypelom / Neopren
8	Dowel Pin	M.S. / AISI 410 / AISI 304 / AISI 316 / AISI 316L
9	'V' Seal	Nitrile / EPDM / Viton / Hypelom / Neopren
10	Taper Pin	AISI 304 / AISI 316 / AISI 316L
11	Bottom Pin	AISI 410 / AISI 304 / AISI 316 / AISI 316L

Valve Model	Size		Port ±1MM	C ±2MM	ØD ±5MM	PCD ±0.5MM	N	ØJ	Tapped ±5MM
	Inch	MM							
DFW - 80	3"	80	80	46	190	152.4	4	19.05	--
DFW - 100	4"	100	100	52	230	190.5	8	19.05	--
DFW - 150	6"	150	150	56	280	241.3	8	22.2	--
DFW - 200	8"	200	200	60	345	298.5	8	22.2	--
DFW - 250	10"	250	241	68	405	362	12	25.4	--
DFW - 300	12"	300	286	78	485	431.8	12	25.4	--
DFW - 350	14"	350	333	78	535	476.3	12	28.6	--
DFW - 400	16"	400	382	102	595	539.8	16	28.6	--
DFW - 450	18"	450	433	114	635	577.9	16	31.75	1" UNC
DFW - 500	20"	500	476	127	700	635	20	31.75	1" UNC
DFW - 600	24"	600	590	154	815	749.3	20	34.9	1.1/4" UNC
DFW - 650	26"	650	635	165	870	806.4	24	34.9	1.1/4" UNC
DFW - 700	28"	700	680	165	925	863.6	28	34.9	1.1/4" UNC
DFW - 750	30"	750	725	190	985	914.4	28	34.9	1.1/4" UNC
DFW - 800	32"	800	785	190	1060	977.9	28	41.3	1.1/2" UNC
DFW - 900	36"	900	885	203	1170	1085.8	32	41.3	1.1/2" UNC
DFW - 1000	40"	1000	965	216	1290	1200.2	36	41.3	1.1/2" UNC
DFW - 1200	48"	1200	1170	254	1510	1422.4	44	41.3	1.1/2" UNC

(All Dimensions are in mm)

Note : (Valve F to F will be as per Wafer type) (Flange Thickness Non - STD As per Mfg. Std Wafer short Double Flange Body)

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Wafer Type Concentric Disc Lug Type Butterfly Valve

"aira" Offers Resilient-seated, butterfly valve for flange mounting to pipelines; concentric disc design; with replaceable liner. Suitable for use in cooling towers, waste-water applications, water treatment, water distribution, dams, gas main and service lines, pressure stations, gas storage tanks, power plants and gas pipelines industry.

Size Range : 1.1/2" to 48" (40 MM to 1200 MM)

Butterfly Valve Specification	
Valve Type	Centric Disc Butterfly Valve with Single Piece rubber lined body
Body Type	Short Wafer Type Lug
Seat Type	Integrally moulded with the body (Renewable Seat On Request)
End Connection	Wafer type double flange suit #150, Table 'D', Table 'E' & IS 6392 Table 11 (PN / PN 1.6)
Pressure	PN 10 / PN 16 (PN 20 On Request)
Temperature	-25 °C to 80 °C for Inrile Seat (Depending On MOC)
Seat Leakage	Tight Shut Off (Class VI)

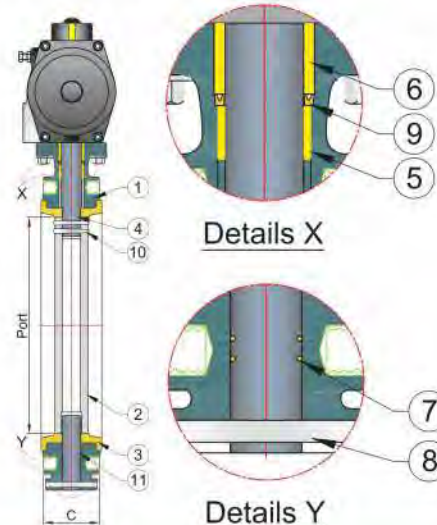
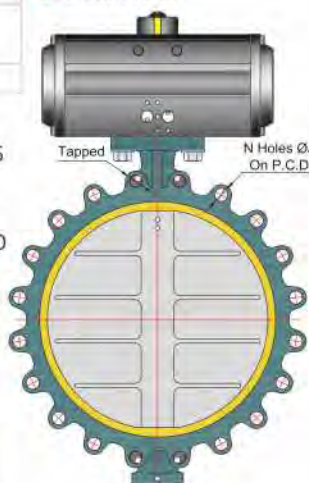
Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve



Standard

- Design And Manufacturer : API 609 category A / IS : 13095 / BS EN 593
- Valve Face To Face Dimension : Short Wafer As Per ISO 5752 TAB 5 / API 609 Category A ISO 5752 TAB 1 (BS 5155)
- Flange Standard Conformity : ASME B16.5 / ASME B 16.47 Series "A" Class 150.
- Inspection & Testing : API 598 / BS EN 12266 - 1
- Top Flange Drilling : ISO 5211



Equipped in - house State - of - art rubber lining machine for butterfly valve upto 72".

Dimensions :

Valve Model	Size		Port ±1MM	C ±2MM	PCD ±0.5MM	N	Ø	Tapped ±5MM
	Inch	MM						
FLB - 40	1.1/2"	40	40	33.5	98.55	4	15.75	----
FLB - 50	2"	50	50	43.5	120.65	4	19.05	----
FLB - 65	2.1/2"	65	65	46	139.7	4	19.05	----
FLB - 80	3"	80	80	46	152.4	4	19.05	----
FLB - 100	4"	100	100	52	190.5	8	19.05	----
FLB - 125	5"	125	125	56	215.9	8	22.2	----
FLB - 150	6"	150	150	56	241.3	8	22.2	----
FLB - 200	8"	200	200	60	298.5	8	22.2	----
FLB - 250	10"	250	241	68	362	12	25.4	----
FLB - 300	12"	300	286	78	431.8	12	25.4	----
FLB - 350	14"	350	333	78	476.3	12	28.6	----
FLB - 400	16"	400	382	102	539.8	16	28.6	----
FLB - 450	18"	450	433	114	577.9	16	31.75	----
FLB - 500	20"	500	476	127	635	20	31.75	1" UNC
FLB - 600	24"	600	590	154	749.3	20	34.9	1.1/4" UNC
FLB - 700	28"	700	680	165	863.6	28	34.9	1.1/4" UNC
FLB - 800	32"	800	785	190	977.9	28	41.3	1.1/2" UNC
FLB - 900	36"	900	885	203	1085.8	32	41.3	1.1/2" UNC
FLB - 1200	48"	1200	1170	254	1422.4	44	41.3	1.1/2" UNC

(All Dimensions are in mm)

Sr. No.	Description	Material
1	Body	ASTM - A 126 Grade B (Gry Iron)
		ASTM - A 216 Grade WCB (Cast Steel)
		ASTM - A 536 Grade 65-45-12 (Ductile Iron)
		ASTM - A 351 Grade CF8 / CF8M / CF3M / CD4MCuN
2	Disc	ASTM - A 126 Grade B (Gry Iron) + Powder Coated
		ASTM - A 216 Grade WCB (Cast Steel) + Powder Coated
		ASTM - A 536 Grade 65-45-12 (Ductile Iron) + Powder Coated
		ASTM - A 351 Grade CF8 / CF8M / CF3M / CD4MCuN Ductile Iron with PTFE / Powder / Nylon Coated & Rubber Line
3	Seat	Nitrile / EPDM / Viton / Hypelton / Neopren
4	Shaft	AISI 410 / AISI 304 / AISI 316 / AISI 316L
5	Bearing Bush	Metal Bush PTFE Coated
6	Bush	PTFE
7	'O' Ring	Nitrile / EPDM / Viton / Hypelton / Neopren
8	Dowel Pin	M.S. / AISI 410 / AISI 304 / AISI 316 / AISI 316L
9	'V' Seal	Nitrile / EPDM / Viton / Hypelton / Neopren
10	Taper Pin	AISI 304 / AISI 316 / AISI 316L
11	Bottom Pin	AISI 410 / AISI 304 / AISI 316 / AISI 316L



"aira" Offers Pneumatic Actuator Operated The butterfly or wafer damper can be a stack damper where sealing or tight shut-off is not all-important. This type is used as an isolating damper for flue-gas scrubbers. The butterfly damper is lightweight, simple, quickly actuated and often comparatively low in cost. In process work, oval shapes adapt to that shape of duct. Occasionally, a double-disc butterfly appears resembling a

circular two-bladed louver damper. The drive for a butterfly damper is also simple, needing only 90° of motion. The torque requirement can vary widely over damper life, if corrosion and thermal effects are severe.

Size Range : 1.1/2" to 20" (40 MM to 500 MM)

Butterfly Valve Specification

Valve Type	Wafer Type Damper Valve with Metal to Metal
Body Type	Short Wafer Type (Sandwiched between flanges) Damper
Seat Type	Metal to Metal
End Connection	Wafer Sandwiched (Lug Type On Request)
Pressure Rating	PN 6 (Maximum)
Oper. Temp. Range	-25 °C to 400 °C (Depending On MOC) (Upto 600 °C On Req.)
Seat Leakage	5% Leakage of full flow (Class 1 Available On Request)

TEST PRESSURE

Testing	Body	Seat
Hydraulic	10 Kg/cm ²	5% Leakage

Accessories

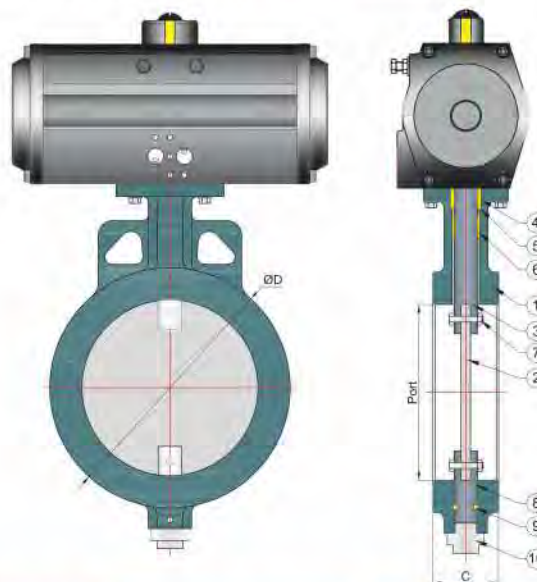
- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

Dimensions :

Valve Model	Valve Size		Port ±1 MM	C ±2 MM	ØD ±5 MM
	MM	Inch			
DP - 40	40	1.1/2"	40	33.5	85
DP - 50	50	2"	50	43.5	80
DP - 65	65	2.1/2"	65	46	102
DP - 80	80	3"	80	46	125
DP - 100	100	4"	100	52	139
DP - 125	125	5"	125	56	168
DP - 150	150	6"	150	56	204
DP - 200	200	8"	200	60	252
DP - 250	250	10"	245	68	316
DP - 300	300	12"	295	78	362
DP - 350	350	14"	340	78	405
DP - 400	400	16"	388	102	470
DP - 450	450	18"	450	90	540
DP - 500	500	20"	490	90	595

(All Dimensions are in mm)

Note : Big Sizes also available.



No.	Description	Material
1	Body	ASTM - A 126 Grade B (Gray Iron)
		ASTM - A 216 Grade WCB (Cast Steel)
		ASTM - A 536 Grade 65-45-12 (Ductile Iron)
		ASTM - A 351 Grade CF8 / CF8M / CF3M / CD4MCuN
2	Disc	IS 2062 Gr. B (M.S.) / AISI 304 / AISI 316
3	Shaft	AISI 410 / AISI 304 / AISI 316 / AISI 316L
4	Bush	PTFE
5	Graphoile Ring	Graphite
6	Bering Bush	Metal Bush PTFE Coated
7	Nut & Bolt	S. S. 202 / S. S. 304
8	Bottom Shaft	AISI 410 / AISI 304 / AISI 316 / AISI 316L
9	Graphoile Ring	Graphite
10	Bottom Cover	EN 8

"aira" Offers Pneumatic Actuator Operated The butterfly or Double Flange damper can be a stack damper where sealing or tight shut-off is not all-important. This type is used as an isolating damper for flue-gas scrubbers. The butterfly damper is lightweight, simple, quickly actuated and often comparatively low in cost. In process work, oval shapes adapt to that shape of duct. Occasionally, a double-disc butterfly appears resembling a circular two - bladed louver damper.

The drive for a butterfly damper is also simple, needing only 90° of motion. The torque requirement can vary widely over damper life, if corrosion and thermal effects are severe.

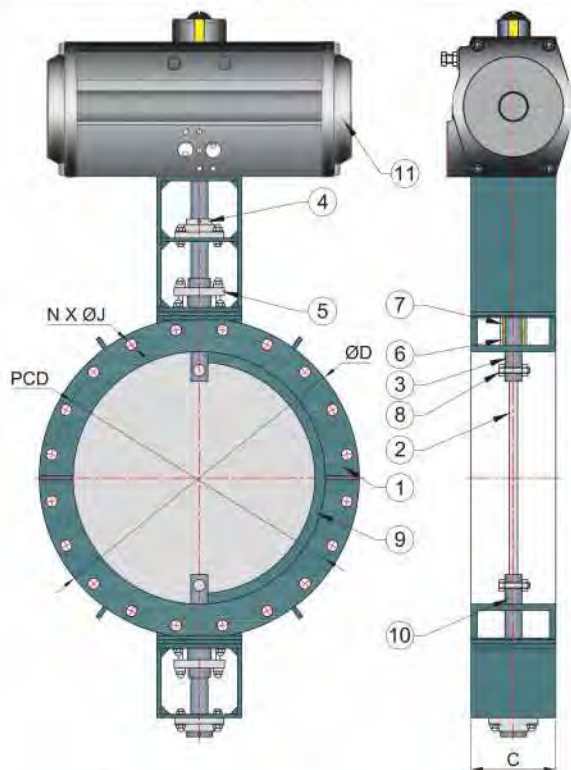
Size Range : 8" to 80" (200 MM to 2000 MM)

Butterfly Valve Specification

Valve Type	Centric Disc Damper Valve
Body Type	Double Flange
Seat Type	Metal to Metal
End Connection	PN 6, EN 1092 - 1 (ASME B 16.47 Series B)
Pressure Rating	5Kg/cm ²
Oper. Temp. Range	Upto 450 OC
Seat Leakage	5% Leakage Of Main Flow (Class - 1 Available On Request)

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Decutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve



Sr. No.	Description	Material
1	Body	IS 2062 Gr. B / AISI 304 (Fabricated)
2	Disc	IS 2062 Gr. B / AISI 304 (Fabricated)
3	Shaft	AISI 410
4	Bearing	Standard
5	Gland Pata	IS 2062 Gr. B / AISI 304
6	Bush	PTFE
7	Graphite Ring	Graphite
8	Hex Bolt	S.S. 304
9	Seat Ring	IS 2062 Gr. B / AISI 304
10	Bottom Shaft	AISI 410

Dimensions :

Valve Model	Size		C ±2MM	ØD ±5MM	ØJ	N	PCD ±0.5MM
	Inch	MM					
ATF-MS-G-200	8"	200	150	320	18	8	280
ATF-MS-G-250	10"	250	150	375	18	12	335
ATF-MS-G-300	12"	300	150	440	22	12	395
ATF-MS-G-350	14"	350	150	490	22	16	445
ATF-MS-G-400	16"	400	150	540	22	16	495
ATF-MS-G-450	18"	450	150	595	22	16	550
ATF-MS-G-500	20"	500	200	645	22	20	600
ATF-MS-G-600	24"	600	200	755	26	20	705
ATF-MS-G-650	26"	650	200	785	26	20	744
ATF-MS-G-700	28"	700	200	860	26	24	810
ATF-MS-G-750	30"	750	200	887	26	24	846
ATF-MS-G-800	32"	800	200	975	30	24	920
ATF-MS-G-850	34"	850	200	1005	30	24	957
ATF-MS-G-900	36"	900	250	1075	30	24	1020
ATF-MS-G-1000	40"	1000	250	1175	30	28	1120
ATF-MS-G-1200	48"	1200	250	1405	33	32	1340
ATF-MS-G-1400	56"	1400	300	1630	36	36	1560
ATF-MS-G-1600	64"	1600	300	1830	36	40	1760
ATF-MS-G-1800	72"	1800	300	2045	39	44	1970
ATF-MS-G-2000	80"	2000	300	2265	42	48	2180

(All Dimensions are in mm)

We can manufacture damper valve as per client's drawing & dimension.

Pub. On : October, 2018 (Rev :- 01)



"aira" Offers FEP / PFA lined valves are well suited for consistent performance requirements in highly corrosive applications involving chlorine, benzene, sulphuric acid Nitric Acid, Phosphoric acid, Hydrochloric acid & Sea Water, Virgin grade resin & thick fluoropolymer linings provide for superior resistance to corrosive chemical effects, Absorption & Swelling.

Size Range : 2" to 20" (50 MM to 500 MM)

Butterfly Valve Specification

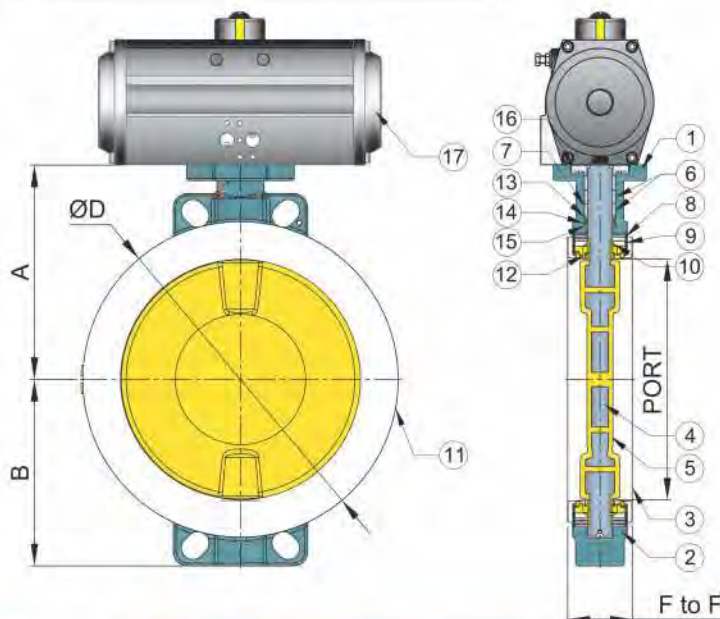
Valve Type	Centric Disc Butterfly Valve with FEP / PFA Lined Body / PTFE
Body Type	Short Wafer (Sandwiched between flanges) Two Piece Design
Seat Type	Muffler
End Connection	Wafer sandwiched (Lug Type On Request)
Pressure Rating	PN 6
Oper. Temp. Range	FEP - 160 °C / PFA - 200 °C
Seat Leakage	Tight Shut Off

Standard

- Design And Manufacturer : API 609 Category A / BS - EN - 593
- Valve Face To Face Dimension : API 609 Category A
- Top Flange Drilling : ISO 5211 II
- Inspection & Testing : API 598 / BS EN 12266 Part - I
- Flange Standard Conformity : 150#
- Spark Test : 15 kv DC

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve



Dimensions :

Valve Model	Valve Size		A	B	F to F	Weight (Approx.)	
	MM	Inch				S.G. Iron	CF8
THT - 50	50	2"	99.5	67	43.8	4.100	3.550
THT - 65	65	2.1/2"	115	67	47.5	5.750	5.350
THT - 80	80	3"	120	81	46.5	6.200	6.200
THT - 100	100	4"	158	96	54	8.900	7.650
THT - 125	125	5"	168	118	56.3	12.500	9.300
THT - 150	150	6"	198	121	60	15.100	12.650
THT - 200	200	8"	224	165	64	24.900	23.500
THT - 250	250	10"	236	198.8	74	35.150	36.600
THT - 300	300	12"	270	243.5	81	56.700	55.000
THT - 350	350	14"	299.5	260	90	---	---
THT - 400	400	16"	330.5	290	104.5	---	---
THT - 450	450	18"	395	310	116	---	---
THT - 500	500	20"	418.5	340	130	---	---

(All Dimensions are in mm)

Sr. No.	Description	Material
1	Body	C. I. / WCB / CF8 / CF8M / CF3M
2	Body Bottom	C. I. / WCB / CF8 / CF8M / CF3M
3	Muffler	PTFE / FEP
4	Flapper	C. I. / WCB / CF8 / CF8M / CF3M
5	Flapper Molding	PFA / FEP
6	Gland Bush	S. S. 304
7	Gland Bush	PTFE
8	Spring Washer	S. S. 304
9	Thrust Bush	S. S. 304
10	Small Bush	PTFE
11	L. N. Bolt	S. S. 304
12	'O' Ring	Viton
13	Base Seal	PTFE
14	U - Seal	PTFE
15	V - Seal	PTFE
16	Top Plate	S. S. 304

"PTFE SLEEVE" with MIRROR Finish Disc Butterfly Valve

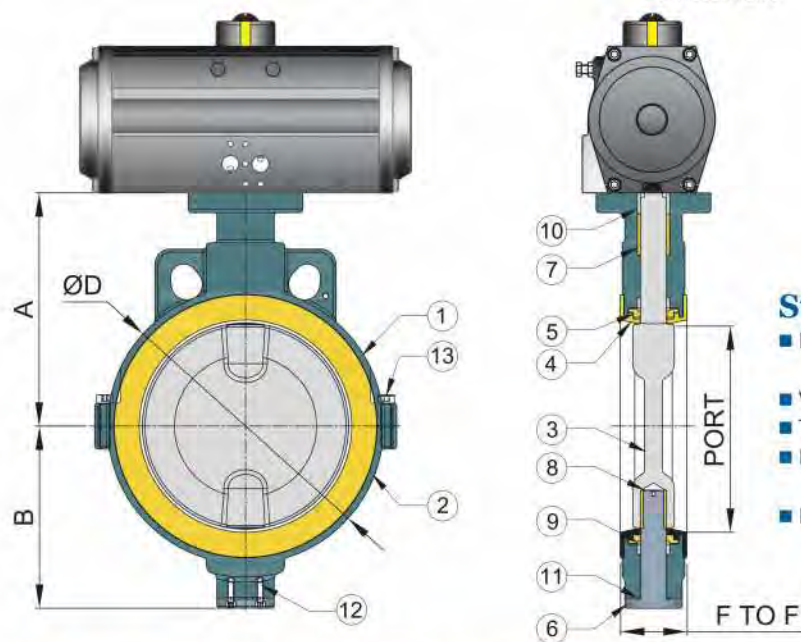
"aira" Offers PTFE lined valves are well suited for consistent performance requirements in highly corrosive applications involving chlorine, benzene, sulphuric acid Nitric Acid, phosphoric acid, hydrochloric acid and sea water. Virgin grade resins and thick fluoropolymer linings provide for superior resistance to corrosive chemical effects, absorption and swelling.

Size Range : 2" to 12" (50 MM to 300 MM)

Butterfly Valve Specification	
Valve Type	Centric Disc Butterfly Valve with PTFE Muffler
Body Type	Short Wafer (Sandwiched between flanges) Two Piece Design
Seat Type	Teflon Sleeve (PTFE)
End Connection	Wafer sandwiched (Lug Type On Request)
Pressure Rating	PN 6
Oper. Temp. Range	180 °C
Seat Leakage	Tight Shut Off

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve



Standard

- Design And Manufacturer : API 609 Category A / BS EN 593
- Valve Face To Face Dimension : API 609 Category A
- Top Flange Drilling : ISO 5211 II
- Inspection & Testing : API 598 / BS EN 12266 Part - I
- Flange Standard Conformity : ANSI 150, DIN PN 6 / 16

Sr. No.	Description	Material
1	Body	C. I. / WCB / CF8 / CF8M / CF3M
2	Body Bottom	C. I. / WCB / CF8 / CF8M / CF3M
3	Flapper	CF8 / CF8M / CF3M
4	Muffler	PTFE
5	Silicon Seat	Silicon
6	Trunnion Plate with Pin	S. S. 304
7	Bush Big	PTFE
8	Bush	PTFE
9	Bush Small	PTFE
10	Bush S. S.	S. S. 304
11	Ring - PTFE	PTFE
12	Trunnion Plate with Pin Fitting L. N. Bolt	S. S. 304
13	Body Fitting L. N. Bolt	S. S. 304

Dimensions :

Valve Model	Valve Size		A	B	F to F	Weight (Approx.)	
	MM	Inch				S.G. Iron	IC CF8
TECO - 50	50	2"	99.5	65	43	4.100	3.550
TECO - 65	65	2.1/2"	115	65	47.5	5.750	5.350
TECO - 80	80	3"	120	80	46.5	6.200	6.200
TECO - 100	100	4"	158	95	54	8.900	7.650
TECO - 125	125	5"	168	120	57	12.500	9.300
TECO - 150	150	6"	196.25	118.5	59	15.100	12.650
TECO - 200	200	8"	224	165	64	24.900	23.500
TECO - 250	250	10"	236	198.8	72	35.150	36.600
TECO - 300	300	12"	270	243.5	82	56.700	55.000

(All Dimensions are in mm)

Double Eccentric Off-Set Disc Wafer Type Butterfly Valve



"aira" Offers Double-offset wafer type butterfly valve (resilient-seated), available with long or short face-to-face length for use in most common flow control applications. Long service life, as the media does not come into contact with the bearing, and due to the wear-resistant, corrosion and infiltration-proof seat with weld overlay. Suitable for use water distribution, water treatment, pre-treated waste water, dams, power plants, industry and pressure management.

Size Range : 2.1/2" to 48" (65 MM to 1200 MM)

Pressure / Temperature Rating

Pressure Rating	150# / PN 10 / PN 16 / PN 25 / PN 40
Operating Temperature	NBR -10 °C to +90 °C
Temperature	EPDM -20 °C to +120 °C
	VITON -0 °C to +220 °C
	PTFE -25 °C to +180 °C

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

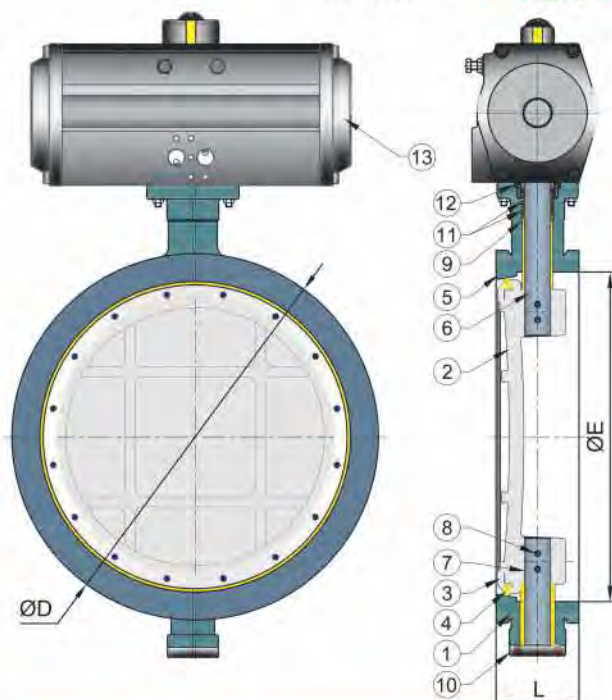


609 - 0055

Fire Safe Design Available On Request

Standard

- Design And Manufacturer : API 609 Category "B" / MSS SP - 68 BS EN - 593
- Valve Face To Face Dimension : API 609 Category "B" / ISO 5752 MSS SP-68 / BS EN - 558
- Flange Standard Conformity : ASME / ANSI B 16.5 Class 150 ASME / ANSI B 16.47 Series "A & B" Class 150 / DIN 1092 - 1
- Inspection & Testing : API 598 / BS EN 12266 - 1
- Pressure Temperature Rating : ASME B 16.34
- Top Flange Drilling : Bolt Hole ISO 5211
- Steam Dimensions : Square Drive to ISO 5211
- Leakage Class : Class VI as per ANSI B 16, 16.104 / FCI - 70 - 2, ISO - 5208



Dimensions :

Valve Model	Valve Size		L	ØD	ØE	Weight (Approx.)	
	MM	Inch				Sand Casting	IC Casting
BOD-65	65	2.1/2"	48	104.8	70	----	3
BOD-80	80	3"	48	127	86	----	3.8
BOD-100	100	4"	54	158	110	----	7
BOD-125	125	5"	56	185.87	120	----	9
BOD-150	150	6"	57	216	152	----	11
BOD-200	200	8"	64	270	200	----	17.5
BOD-250	250	10"	72	325	250	----	28
BOD-300	300	12"	81	373	306	----	37
BOD-350	350	14"	92	412	355	62	----
BOD-400	400	16"	102	472	400	97	----
BOD-450	450	18"	114	532	450	135	----
BOD-500	500	20"	127	584	505	170	----
BOD-600	600	24"	154	692.2	612	250	----
BOD-650	650	26"	165	749.3	640	315	----
BOD-700	700	28"	165	800.1	705	365	----
BOD-750	750	30"	190	857.25	725	490	----
BOD-800	800	32"	190	915	810	560	----
BOD-850	850	34"	205	965.2	850	635	----
BOD-900	900	36"	203	1022.35	900	700	----
BOD-1000	1000	40"	300	1124	1010	1070	----
BOD-1200	1200	48"	350	1359	1210	1920	----

(All Dimensions are in mm)

Sr. No.	Description	Material
1	Body	C.I. / WCB / CF8 / CF8M / D.I.
2	Disc	C.I. / WCB / CF8 / CF8M / D.I.
3	Retainer Ring	M.S. / CF8 / CF8M
4	Disc Seal Ring	NBR / EPDM / Viton
5	Body Seat Ring	S.S. 304 / 316
6	Shaft	S.S. 304 / 316 / 410
7	Stem Shaft	S.S. 304 / 316 / 410
8	Disc Pin	S.S. 304 / 316 / 410
9	Flange Side Washer	S.S. 304 / 316 / 410
10	Stem Square	M.S. / CF8 / CF8M
11	Gland Seal Set	PTFE / NBR / EDPM / Viton
12	Gland Plate	M.S. / CF8 / CF8M

Pub. On : October, 2018 (Rev :- 01)

Double Eccentric Off-Set Disc Double Flange Butterfly Valve 150#



"aira" Offers Double-offset wafer type butterfly valve (resilient-seated), available with long or short face-to-face length for use in most common flow control applications. Long service life, as the media does not come into contact with the bearing, and due to the wear-resistant, corrosion and infiltration-proof seat with weld overlay. Suitable for use water distribution, water treatment, pre-treated waste water, dams, power plants, industry and pressure management.

Size Range : 2.1/2" to 88" 150# (65 MM to 2200 MM)

Standard

- Design And Manufacturer : API 609 / BSEN 593 / IS 13095 / AWWA C - 504
- Valve Face To Face Dimension : API 609 (Short Pattern) / BSEN 558 (Short Pattern) IS 13095 (Short Pattern)
- Flange Standard Conformity : ASME B16.5 Class 150 (Upto 24") ASME B16.47 Series "A" Class 150 (26" to 48"), IS1538, BS 4504, IS 6392
- Inspection & Testing : API 598 / BS 6755 / BS EN 12266 - 1
- Pressure Temperature Rating : ASME B16.34
- Top Flange Dimensions : Bolt Hole ISO 5211
- Stem Dimensions : Square Drive To ISO 5211
- Leakage Class : Class VI As Per ASME B 16, 16.104 / FCI - 70 - 2, ISO 5208



Pressure / Temperature Rating

Pressure Rating	150# / PN 10 / PN 16 (PN 25 / PN 40 On Req.)
Operating Temperature	NBR -10 °C to +90 °C / EPDM -20 °C to +120 °C
VITON	-0 °C to +220 °C



609 - 0055

Fire Safe Design Available On Request

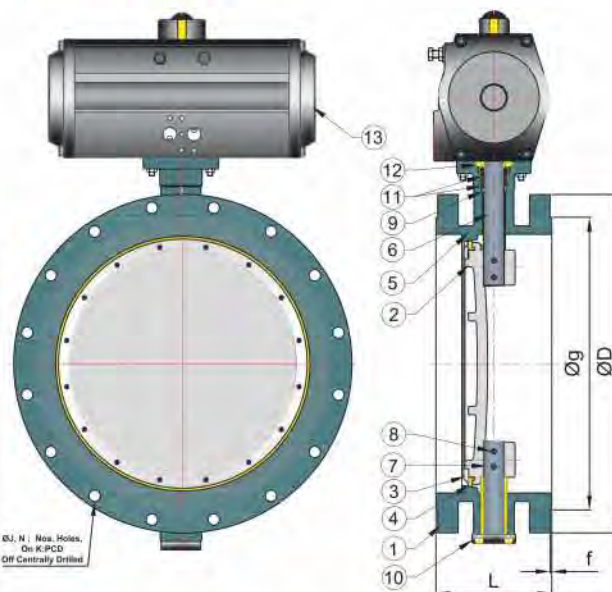
Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

Dimensions : 150#

Valve Model	Valve Size	L	ØD	Øg	f	ØJ	N	K:PCD	
MM	inch	API 609							
BOD - 65	65	2.1/2"	112	180	104.8	2	19.05	04	139.7
BOD - 80	80	3"	114	190	127	2	19.05	04	152.4
BOD - 100	100	4"	127	230	157.2	2	19.05	08	190.5
BOD - 125	125	5"	140	255	185.7	2	22.2	08	215.9
BOD - 150	150	6"	140	280	215.9	2	22.2	08	241.3
BOD - 200	200	8"	152	345	269.9	2	22.2	08	298.5
BOD - 250	250	10"	165	405	323.8	2	25.4	12	362
BOD - 300	300	12"	178	485	381	2	25.4	12	431.8
BOD - 350	350	14"	190	535	412.8	2	28.6	12	476.3
BOD - 400	400	16"	216	595	469.9	2	28.6	16	539.8
BOD - 450	450	18"	222	635	533.4	2	31.75	16	577.9
BOD - 500	500	20"	229	700	584.2	2	31.75	20	635
BOD - 600	600	24"	267	815	692.2	2	34.9	20	749.3
BOD - 650	650	26"	292	870	749	2	34.9	24	806.4
BOD - 700	700	28"	292	925	800	2	34.9	28	863.6
BOD - 750	750	30"	318	985	857	2	34.9	28	914.4
BOD - 800	800	32"	318	1060	914	2	41.3	28	977.9
BOD - 850	850	34"	324	1110	965	2	41.3	32	1028.7
BOD - 900	900	36"	330	1170	1022	2	41.3	32	1085.8
BOD - 1000	1000	40"	410	1290	1124	2	41.3	36	1200.2
BOD - 1050	1050	42"	410	1345	1194	2	41.3	36	1257.3
BOD - 1100	1100	44"	410	1405	1245	2	41.3	40	1314.4
BOD - 1200	1200	48"	470	1510	1359	2	41.3	44	1422.4
BOD - 2000	2000	80"	457	2362.2	---	---	50.8	64	2260.6
BOD - 2200	2200	88"	590	2475	---	---	43	52	2390

(All Dimensions are in mm)



Sr. No.	Description	Material
1	Body	C.I. / WCB / CF8 / CF8M / D.I
2	Disc	WCB / CF8 / CF8M / D.I
3	Retainer	M.S. / CF8 / CF8M
4	Disc Seal Ring	NBR / EPDM / Viton
5	Body Seat Ring	S.S. 304 / 316
6	Shaft	S.S. 304 / 316 / 410
7	Stem Shaft	S.S. 304 / 316 / 410
8	Disc Pin	S.S. 304 / 316 / 410
9	Flange Side Washer	S.S. 304 / 316 / 410
10	Stem Square	M.S. / CF8 / CF8M
11	Gland Seal Set	PTFE / NBR / EPDM / Viton / RPTFE
12	Gland Plate	M.S. / CF8 / CF8M

Pub. On : October, 2018 (Rev :- 01)



"aira" Offers Double-offset wafer type butterfly valve (resilient-seated), available with long or short face-to-face length for use in most common flow control applications. Long service life, as the media does not come into contact with the bearing, and due to the wear-resistant, corrosion and infiltration-proof seat with weld overlay. Suitable for use water distribution, water treatment, pre-treated waste water, dams, power plants, industry and pressure management.

Size Range : 2" to 24" Double Flange 300# & 600# (50 MM to 600 MM)

Pressure / Temperature Rating

Pressure Rating	150# (PN 10 / PN 16 / PN 25 / PN 40)
Operating Temperature	NBR : -10 °C to +90 °C
	EPDM : -10 °C to +90 °C
	Viton : -10 °C to +90 °C

Standard

- Design And Manufacturer : API 609 / BS 5155 / BS EN 593 / IS 13095 / AWWA C - 504
- Valve Face to Face Dimension : API 609 (Short Pattern) / BS EN 558 (Long Pattern) IS 13095
- Flange Standard Conformity : ASME / ANSI B 16.5 Class 300 & 600
- Inspection & Testing : API 598 / BS EN - 12266 - Part - 1



Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

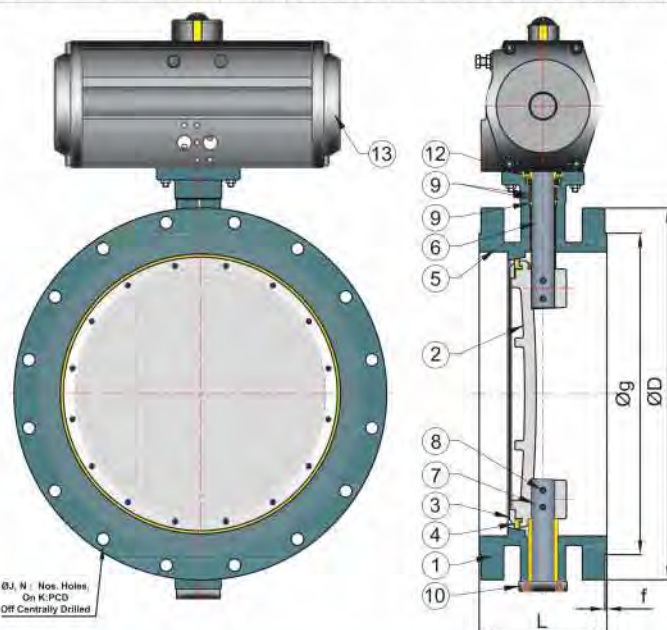
Valve Size		Valve Torque 300#						VALVE TORQUE 600#				
		10 Bar N - m	20 Bar N - m	25 Bar N - m	35 Bar N - m	40 Bar N - m	50 Bar N - m	30 Bar N - m	40 Bar N - m	60 Bar N - m	80 Bar N - m	100 Bar N - m
MM	Inch											
80	3"	55	62	70	75	76	80	----	----	----	----	----
100	4"	72	89	104	111	114	125	----	----	----	----	----
125	5"	96	127	137	148	160	178	----	----	----	----	----
150	6"	126	138	178	194	205	220	600	700	850	1000	1300
200	8"	205	252	281	304	328	354	1000	1150	1400	1650	2100
250	10"	325	468	503	560	594	663	1650	1900	2300	2800	3800
300	12"	465	685	777	868	937	1005	2400	2850	3450	4100	4900
350	14"	747	1126	1461	1776	1836	2021	3400	4300	5350	6300	7500
400	16"	1065	1654	2020	2204	2448	2700	5000	6900	8900	9700	11500
450	18"	1346	2143	2458	2938	3183	3428	7000	9400	12000	14500	17000
500	20"	2014	3056	3590	3852	4244	4570	8700	12000	15000	18000	21000
600	24"	3052	4578	5223	5876	6464	6921	15000	21000	25700	30500	36000

Double Eccentric Off-Set Disc Double Flange Butterfly Valve 300# & 600#

Butterfly Valve CV Values 300#

Butterfly Valve CV Values 600#

Valve Size		10°	20°	30°	40°	50°	60°	70°	80°	90°	10°	20°	30°	40°	50°	60°	70°	80°	90°
MM	Inch																		
80	3"	---	---	---	---	---	---	---	---	---	4	15.6	31.5	47.6	74.5	110	180	200	230
100	4"	---	---	---	---	---	---	---	---	---	8	27.9	56	90	130	190	310	350	400
125	5"	---	---	---	---	---	---	---	---	---	13.1	46	92	150	220	310	520	580	670
150	6"	17.4	61	120	190	290	420	680	770	870	19.9	70	140	220	330	480	780	890	1000
200	8"	27.2	100	200	300	460	640	1070	1200	1370	36.3	130	260	400	610	860	1430	1600	1830
250	10"	42	150	290	460	690	980	1630	1840	2090	56	200	390	620	920	1300	2170	2450	2780
300	12"	59	200	410	650	970	1390	2300	2600	2950	84	290	590	930	1400	1980	3290	3700	4200
350	14"	73	260	510	800	1200	1710	2840	3200	3640	100	370	730	1140	1700	2500	4060	4570	5200
400	16"	100	350	700	1100	1660	2360	39140	4410	5010	140	480	960	1500	2300	3220	5340	6020	6840
450	18"	120	440	870	1360	2040	2900	4810	5430	6170	1180	640	1260	2000	3000	4220	7000	7900	9000
500	20"	170	580	1160	1810	2720	3870	640	7250	8250	240	840	1680	2600	3950	5630	9300	10500	12000
600	24"	260	900	1800	2830	4250	6050	10000	11300	12900	380	1300	2630	4200	6200	8800	14600	16500	18700



No.	Description	Material
1	Body	WCB / CF8 / CF8M / D.I
2	Disc	WCB / CF8 / CF8M / D.I
3	Retainer	M.S. / CF8 / CF8M
4	Disc Seal Ring	NBR / EPDM / Viton
5	Body Seat Ring	S.S. 304 / 316
6	Shaft	S.S. 304 / 316 / 410
7	Stem Shaft	S.S. 304 / 316 / 410
8	Disc Pin	S.S. 304 / 316 / 410
9	Flange Side Washer	S.S. 304 / 316 / 410
10	Stem Square	M.S. / CF8 / CF8M
11	Gland Seal Set	NBR / EDPM / Viton
12	Gland Plate	M.S. / CF8 / CF8M

Dimensions :

Valve Model	Valve Size		300#							600#						
	MM	Inch	L	ØD	Øg	f	ØJ	N	K:PCD	L	ØD	Øg	f	ØJ	N	K:PCD
BOD - 50	50	2"	150	165	92.1	2	19.05	08	127	---	---	---	---	---	---	---
BOD - 65	65	2.1/2"	170	190	104.8	2	22.2	08	149.2	---	---	---	---	---	---	---
BOD - 80	80	3"	180	210	127	2	22.2	08	168.3	180	210	127	7	22.2	08	168.3
BOD - 100	100	4"	190	255	157.2	2	22.2	08	200.0	190	275	157.7	7	25.4	08	215.9
BOD - 125	125	5"	210	280	185.7	2	22.2	08	234.9	210	330	185	7	28.6	08	266.7
BOD - 150	150	6"	210	320	215.9	2	22.2	12	269.9	210	355	216	7	28.6	12	292.1
BOD - 200	200	8"	230	380	270	2	25.4	12	330.2	230	420	270	7	32.0	12	349.2
BOD - 250	250	10"	250	445	323.8	2	28.6	16	387.35	250	510	324	7	35.0	16	431.8
BOD - 300	300	12"	270	520	381	2	31.75	16	450.9	270	560	381	7	35.0	20	489.5
BOD - 350	350	14"	290	585	412.75	2	31.75	20	514.35	290	605	413	7	38.1	20	527.0
BOD - 400	400	16"	310	650	469.9	2	35.0	20	571.5	310	685	470	7	41.15	20	603.2
BOD - 450	450	18"	330	710	533.4	2	35.0	24	628.6	330	745	533.4	7	44.45	20	654.0
BOD - 500	500	20"	350	775	584.2	2	35.0	24	685.8	350	815	584.2	7	44.45	24	723.9
BOD - 600	600	24"	390	915	692.15	2	41.3	24	812.8	390	940	692.2	7	50.8	24	838.2

(All Dimensions are in mm)

Pub. On : October, 2018 (Rev :-01)

Wafer Type Triple Eccentric Butterfly Valve Metal & Soft Seated



"aira" Offers high performance triple eccentric butterfly valves are complete metal to metal seated valves suitable for both throttling and positive isolation applications. These valves are capable of bi-directional flow control, zero leakage, low fugitive emissions, steam - based applications (up to 550°C) and for cryogenic applications (down to -196° C) Due to the triple offset sealing system, the disc moves smoothly and free of friction at all points along the specially designed body seat & disc seal. This is because the third offset completely eliminates rubbing. When the disc is closed, the seal ring (on the disc) energises the seat (on the body) There by providing a snug - tight high - performance fit. The laminar seal is constructed with grafoil layers sandwiched between metal laminations. This resiliency of the seal flexes and energizes according to the compressive forces generated. and allows for minor body deformations due to temperature fluctuations without the risk of jamming. This provides a uniform wedging effect and ensures "Zero" leakage of the valve.

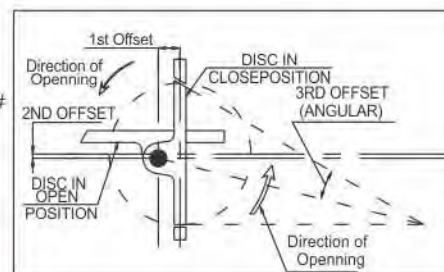
**Size Range : 1.1/2" to 48" (Above 48" On Request)
(40 MM to 1200 MM)**

Standard

- Design And Manufacturer : API 609 Category "B" / BS EN 593
- Valve Face to Face Dimension: API 609 / BS EN 558
- Flange Conformity : ANSI B16.5, 16.47 150# /300# / 600#
- Inspection & Testing : FCI - 70-2 / B16,104 / ISO 5208 / BS EN 12266 - 1
- Pressure Temperature Rating : ASME B 16.34
- Top Mounting Standard : ISO 5211
- Stem Square Drive : ISO 5211
- Leakage Class : IV / V / VI



609 - 0055



600# On Request

Pressure / Temperature Rating

Pressure Rating	150# PN 10 / PN 16 / PN 20 & 300# PN 25 / PN 40
Operating Temperature	NBR : -10 °C to +90 °C / EPDM : -10 °C to +120 °C / Viton : -10 °C to +220 °C / PTFE : -10 °C to +180 °C / RPTFE : -10 °C to +220 °C / TFM : -10 °C to +250 °C / S. S. 304 + Graphoil Laminated 400 °C / S. S. 304 + Inconel 625 Graphite Laminated Above 400 °C

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Boardn Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

Cv Value 150#

Valve Size		Cv at 90 °C
MM	Inch	
80	3"	100
100	4"	219
125	5"	426
150	6"	633
200	8"	1511
250	10"	2467
300	12"	4024
350	14"	5200
400	16"	6870
500	20"	11718
600	24"	18621
700	28"	25694
750	30"	30507
800	32"	37570
900	36"	44626
1000	40"	58541
1050	42"	62536
1200	48"	81680

Valve Torque 150#

Valve Size		5 Bar	10 Bar	20 Bar
MM	Inch			
80	3"	24	28	42
100	4"	35	43	69
125	5"	55	78	115
150	6"	76	100	174
200	8"	182	198	353
250	10"	397	447	788
300	12"	590	758	1329
350	14"	510	842	1519
400	16"	754	1090	1900
500	20"	1578	2068	3703
600	24"	1485	2640	4751
700	28"	2818	4838	8779
750	30"	3148	9120	16178
800	32"	3572	9748	17947
900	36"	4922	16882	31199
1000	40"	9034	23653	43468
1050	42"	10342	25299	46711
1200	48"	13639	35789	67626

Valve Torque 300#

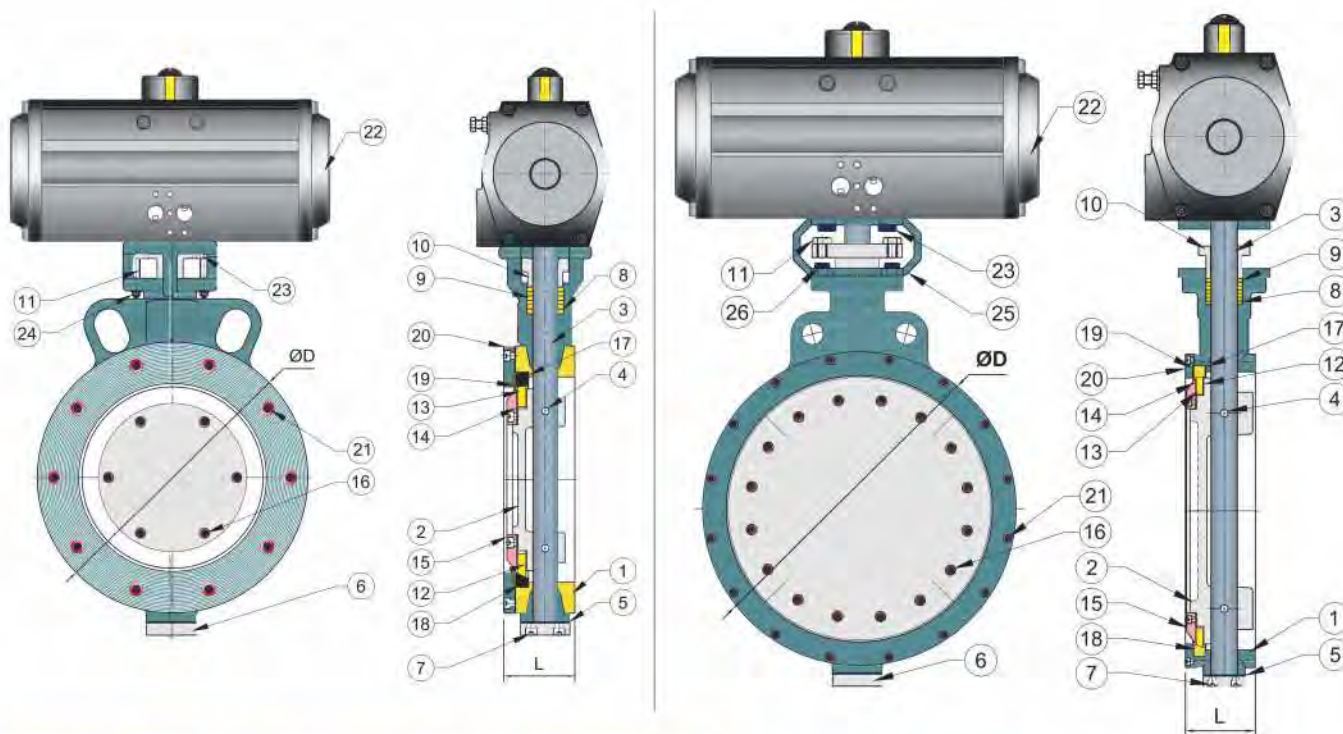
Valve Size		10 Bar	20 Bar	50 Bar
MM	Inch			
80	3"	41	52	89
100	4"	66	88	153
125	5"	140	193	452
150	6"	373	426	1009
200	8"	633	788	1900
250	10"	930	1329	3189
300	12"	1143	1843	4471
350	14"	1886	2791	8783
400	16"	2541	3703	9031
500	20"	3379	5827	13881
600	24"	4833	8780	21624

Tight Shut-off Leakage Class VI

We have successfully carried out proof of design test on these metal seated butterfly valve.

Pub. On : October, 2018 (Rev :-01)

Wafer Type Triple Eccentric Butterfly Valve Metal & Soft Seated



No.	Description	Material
1	Body	WCB / CF8 / CF8M / CF3M
2	Disc	WCB / CF8 / CF8M / CF3M
3	Shaft	S. S. 304 / 316 / 410 / S17-4PH / Monel / Inconel
4	Disc Pin	S. S. 304 / S. S. 316 / S. S. 410
5	Steam Square Gasket	S. S. 304 / 316 / Inconel 625 + Graphite
6	Steam Square	CF8 / CF8M / CF3M
7	L. N. Bolt Steam Square	Alloy Steel
8	Flange Side Washer	S. S. 304 / 316 / 410
9	Seal Set	Graphoil / Graphite / PTFE / EPDM
10	Gland Pata	CF8 / CF8M / CF3M
11	Hex Bolt Gland Pata	Alloy Steel
12	Disc Seal Ring Gasket	S. S. 304, S. S. 316, Inconel 625 + Graphite / Asbasetose
13	Disc Seal Ring	S. S. 304, 316 + Graphoil Laminated / NBR / EPDM / Viton / PTFE / CFT / GFT / RPTFE
14	Retainer Gasket	S. S. 304, S. S. 316, Inconel 625 + Graphite / Asbasetose
15	Retainer	CF8 / CF8M / CF3M
16	L. N. Bolt Retainer	Alloy Steel
17	Body Seat Ring Gasket	S. S. 304, S. S. 316, Inconel 625 + Graphite / Asbasetose
18	Body Seat Ring	CF8 / CF8M / CF3M
19	Body Clamping Ring Gasket	S. S. 304, S. S. 316, Inconel 625 + Graphite / Asbasetose
20	Body Clamping Ring	CF8 / CF8M / CF3M
21	L. N. Bolt Body Clamping Ring	Alloy Steel
22	Actuator	Std.
23	Hex Bolt Actuator	Alloy Steel
24	Locking Hex Bolt Nut	Alloy Steel
25	Bracket	WCB / CF8 / CF8M / CF3M
26	Hex Bolt Bracket	Alloy Steel

600# On Request

Dimensions : 150# & 300#

Valve Model	Valve Size		150#		300#		150# Weight Approx.
	MM	Inch	L	ØD	L	ØD	
TOB-40	40	1.1/2"	42	82	---	---	3,200
TOB-50	50	2"	45	95.5	45	92	4,050
TOB-65	65	2.1/2"	48	104	48	104.8	4,700
TOB-80	80	3"	48	126	48	127	5,650
TOB-100	100	4"	54	158	54	157.2	8,800
TOB-125	125	5"	57	186	59	185.7	11,100
TOB-150	150	6"	57	216	59	215.9	15,950
TOB-200	200	8"	64	270	73	269.9	24,850
TOB-250	250	10"	72	325	83	323.8	39,700
TOB-300	300	12"	81	381	92	381	58,472
TOB-350	350	14"	92	412	117	412.8	86,650
TOB-400	400	16"	102	472	133	469.9	145,750
TOB-450	450	18"	114	532	149	533.4	175,470
TOB-500	500	20"	127	584	159	584.2	294,960
TOB-600	600	24"	154	692.2	181	692.2	268,600
TOB-650	650	26"	165	749.3			313,170
TOB-700	700	28"	165	800			338,880
TOB-750	750	30"	190	857			465,610
TOB-800	800	32"	190	915			497,920
TOB-850	850	34"	205	965.2			542,420
TOB-900	900	36"	205	1022			585,060
TOB-1000	1000	40"	300	1124			846,080
TOB-1050	1050	42"	300	1194			964,300
TOB-1200	1200	48"	350	1359			1323,460

(All Dimensions are in mm)

Note : 40mm to 500mm Valve with Actuator Weight & Above without Actuator Weight.

Pub. On : October, 2018 (Rev :-01)

Double Flange Triple Eccentric Butterfly Valve Metal & Soft Seated

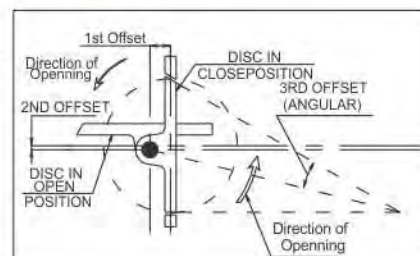


"aira" Offers high performance triple eccentric butterfly valves are complete metal to metal seated valves suitable for both throttling and positive isolation applications. These valves are capable of bi-directional flow control, zero leakage, low fugitive emissions, steam - based applications (up to 550°C) and for cryogenic applications (down to -196° C) Due to the triple offset sealing system, the disc moves smoothly and free of friction at all points along the specially designed body seat & disc seal. This is because the third offset completely eliminates rubbing. When the disc is closed, the seal ring (on the disc) energises the seat (on the body) There by providing a snug - tight high - performance fit. The laminar seal is constructed with grafoil layers sandwiched between metal laminations. This resiliency of the seal flexes and energizes according to the compressive forces generated. and allows for minor body deformations due to temperature fluctuations without the risk of jamming. This provides a uniform wedging effect and ensures "Zero" leakage of the valve.

**Size Range : 1.1/2" to 48" (Above 48" On Request)
(40 MM to 1200 MM)**

Standard

- Design And Manufacturer : API 609 Category "B" / BS EN 593
- Valve Face to Face Dimension : API 609 / BS EN 558
- Flange Conformity : ANSI B16.5, 16.47 150# / 300# / 600#
- Inspection & Testing : FCI - 70-2 / B16,104 / ISO 5208 / BS EN 12266 - 1
- Pressure Temperature Rating : ASME B 16.34
- Top Mounting Standard : ISO 5211
- Stem Square Drive : ISO 5211
- Leakage Class : IV / V / VI



609 - 0055

Fire Safe Design Available On Request

600# On Request

Pressure / Temperature Rating

Pressure Rating	150# PN 10 / PN 16 / PN 20 & 300# PN 25 / PN 40
Operating Temperature	NBR : -10 °C to +90 °C / EPDM : -10 °C to +120 °C / Viton : -10 °C to +220 °C / PTFE : -10 °C to +180 °C / RPTFE : -10 °C to +220 °C / TFM : -10 °C to +250 °C / S. S. 304 + Graphoil Laminated 400 °C / S. S. 304 + Inconel 625 Graphite Laminated Above 400 °C

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Boardn Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

Cv Value 150#		
Valve Size		Cv at 90 °C
MM	Inch	
80	3"	100
100	4"	219
125	5"	426
150	6"	633
200	8"	1511
250	10"	2467
300	12"	4024
350	14"	5200
400	16"	6870
500	20"	11718
600	24"	18621
700	28"	25694
750	30"	30507
800	32"	37570
900	36"	44626
1000	40"	58541
1050	42"	62536
1200	48"	81680

Valve Torque 150#				
Valve Size		5 Bar	10 Bar	20 Bar
MM	Inch			
80	3"	24	28	42
100	4"	35	43	69
125	5"	55	78	115
150	6"	76	100	174
200	8"	182	198	353
250	10"	397	447	788
300	12"	590	758	1329
350	14"	510	842	1519
400	16"	754	1090	1900
500	20"	1578	2068	3703
600	24"	1485	2640	4751
700	28"	2818	4838	8779
750	30"	3148	9120	16178
800	32"	3572	9748	17947
900	36"	4922	16882	31199
1000	40"	9034	23653	43468
1050	42"	10342	25299	46711
1200	48"	13639	35789	67626

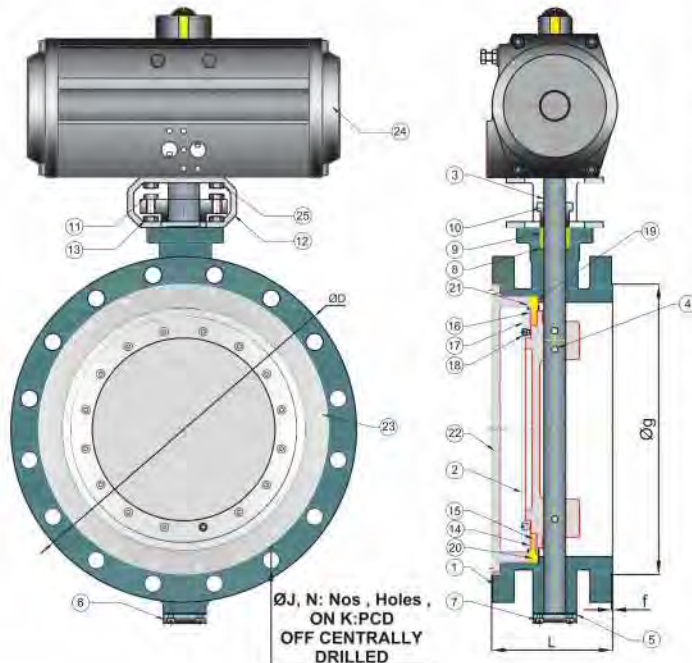
Valve Torque 300#				
Valve Size		10 Bar	20 Bar	50 Bar
MM	Inch			
80	3"	41	52	89
100	4"	66	88	153
125	5"	140	193	452
150	6"	373	426	1009
200	8"	633	788	1900
250	10"	930	1329	3189
300	12"	1143	1843	4471
350	14"	1886	2791	8783
400	16"	2541	3703	9031
500	20"	3379	5827	13881
600	24"	4833	8780	21624

Tight Shut-off Leakage Class VI

We have successfully carried out proof of design test on these metal seated butterfly valve.

Pub. On : October, 2018 (Rev :-01)

Double Flange Triple Eccentric Butterfly Valve Metal & Soft Seated



ØJ, N: Nos , Holes ,
ON K:PCD
OFF CENTRALLY
DRILLED

600# On Request

No.	Description	Material
1	Body	WCB / CF8 / CF8M
2	Disc	WCB / CF8 / CF8M
3	Shaft	S. S. 304 / 316 / 410 / 17-4PH / Monel / Inconel
4	Disc Pin	S. S. 304 / 316 / 410
5	Stem Square Gasket	S. S. 304, S. S. 316, Inconel 625 + Graphite / Asbestos
6	Stem Square	CF8 / CF8M / CF3M
7	L. N. Bolt Stem Square	Alloy Steel
8	Flange Side Washer	S. S. 304 / 316 / 410
9	Seal Set	Graphoil / PTFE / Graphite / EPDM
10	Gland Pata	CF8 / CF8M / CF3M
11	Hex Bolt Gland Pata	Alloy Steel
12	Bracket	WCB / CF8 / CF8M
13	Hex bolt Bracket	Alloy Steel
14	Disc Seal Ring Gasket	S. S. 304, S. S. 316, Inconel 625 + Graphite / Asbestos
15	Disc Seal Ring	S. S. 304 / 316 with Graphoil Laminated / NBR / EPDM / VITON / PTFE / CFT / GFT / RPTFE
16	Retainer Gasket	S. S. 304, S. S. 316, Inconel 625 + Graphite / Asbestos
17	Retainer	CF8 / CF8M / CF3M
18	L. N. Bolt Retainer	Alloy Steel
19	Body Seat Ring Gasket	S. S. 304, S. S. 316, Inconel 625 + Graphite / Asbestos
20	Body Seat Ring	CF8 / CF8M / CF3M
21	Body Clamping Ring Gasket	S. S. 304, S. S. 316, Inconel 625 + Graphite / Asbestos
22	Body Clamping Ring	WCB / CF8 / CF8M
23	L. N. Bolt Body Clamping Ring	Alloy Steel
24	Actuator	Aluminum
25	Hex Bolt Actuator	Alloy Steel

Dimensions : (150# & 300#)

Valve Model	Valve Size		150#							Weight (Approx.)	300#						
	MM	Inch	L	ØD	Øg	f	ØJ	N	K:PCD		L	ØD	Øg	f	ØJ	N	K:PCD
TOB-40-FD	40	1.1/2"	106	125	73	2	15.9	4	98.4	6.208	---	---	---	---	---	---	
TOB-50-FD	50	2"	108	150	92.1	2	19.05	4	120.7	7.450	150	165	92.1	2	19.05	8	127
TOB-65-FD	65	2.1/2"	112	180	104.8	2	19.05	4	139.7	10.970	170	190	104.8	2	22.2	8	149.2
TOB-80-FD	80	3"	114	190	127	2	19.05	4	152.4	13.247	180	210	127	2	22.2	8	168.3
TOB-100-FD	100	4"	127	230	157.2	2	19.05	8	190.5	20.128	190	255	157.2	2	22.2	8	200
TOB-125-FD	125	5"	140	255	185.7	2	22.2	8	215.9	26.053	200	280	185.7	2	22.2	8	235
TOB-150-FD	150	6"	140	280	215.9	2	22.2	8	241.3	33.854	210	320	215.9	2	22.2	12	269.9
TOB-200-FD	200	8"	152	345	269.9	2	22.2	8	298.5	52.321	230	380	269.9	2	25.4	12	330.2
TOB-250-FD	250	10"	165	405	323.8	2	25.4	12	362	76.649	250	445	323.8	2	28.6	16	387.4
TOB-300-FD	300	12"	178	485	381	2	25.4	12	431.8	115.770	270	520	381	2	31.75	16	450.8
TOB-350-FD	350	14"	190	535	412.8	2	28.6	12	476.3	155.450	290	585	412.8	2	31.75	20	514.4
TOB-400-FD	400	16"	216	595	469.9	2	28.6	16	539.8	226.300	310	650	469.9	2	34.9	20	571.5
TOB-450-FD	450	18"	222	635	533.4	2	31.75	16	577.9	268.520	330	710	533.4	2	34.9	24	628.6
TOB-500-FD	500	20"	229	700	584.2	2	31.75	20	635	408.740	350	775	584.2	2	34.9	24	685.8
TOB-600-FD	600	24"	267	815	692.2	2	34.9	20	749.3	422.520	390	915	692.2	2	41.3	24	812.8
TOB-650-FD	650	26"	292	785	711	2	22.2	36	744.5	380.970							
TOB-700-FD	700	28"	292	835	762	2	22.2	40	795.3	425.980							
TOB-750-FD	750	30"	318	885	813	2	22.2	44	846.1	541.540							
TOB-800-FD	800	32"	318	940	864	2	22.2	48	900.1	576.320							
TOB-850-FD	850	34"	324	1005	921	2	25.4	40	957.3	658.820							
TOB-900-FD	900	36"	330	1055	972	2	25.4	44	1009.3	711.520							
TOB-1000-FD	1000	40"	410	1175	1080	2	28.6	44	1120.8	997.500							
TOB-1050-FD	1050	42"	410	1225	1130	2	28.6	48	1171.6	1129.20							
TOB-1200-FD	1200	48"	470	1390	1289	2	31.8	44	1335.1	1150.90							

(All Dimensions are in mm)

Note : 40mm to 500mm Valve with Actuator Weight & Above without Actuator Weight.

Pub. On : October, 2018 (Rev :-01)

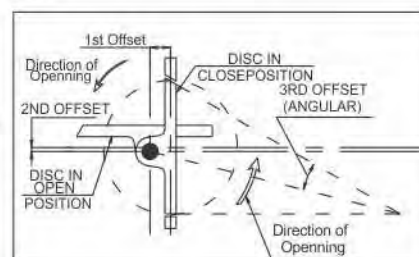


"aira" Offers high performance triple eccentric butterfly valves are complete metal to metal seated valves suitable for both throttling and positive isolation applications. These valves are capable of bi-directional flow control, zero leakage, low fugitive emissions, steam - based applications (up to 550°C) and for cryogenic applications (down to -196° C) Due to the triple offset sealing system, the disc moves smoothly and free of friction at all points along the specially designed body seat & disc seal. This is because the third offset completely eliminates rubbing. When the disc is closed, the seal ring (on the disc) energises the seat (on the body) There by providing a snug - tight high - performance fit. The laminar seal is constructed with grafoil layers sandwiched between metal laminations. This resiliency of the seal flexes and energizes according to the compressive forces generated. and allows for minor body deformations due to temperature fluctuations without the risk of jamming. This provides a uniform wedging effect and ensures "Zero" leakage of the valve.

Size Range : 1.1/2" to 24" (Above 24" On Request) (40 MM to 600 MM)

Standard

- Design And Manufacturer : API 609 Category "B" / BS EN 593
- Valve Face to Face Dimension : API 609 / BS EN 558
- Flange Conformity : ANSI B16.5, 16.47 150# / 300# / 600#
- Inspection & Testing : FCI - 70-2 / B16,104 / ISO 5208 / BS EN 12266 - 1
- Pressure Temperature Rating : ASME B 16.34
- Top Mounting Standard : ISO 5211
- Stem Square Drive : ISO 5211
- Leakage Class : IV / V / VI



600# On Request

Pressure / Temperature Rating

Pressure Rating	150# PN 10 / PN 16 / PN 20 & 300# PN 25 / PN 40
Operating Temperature	NBR : -10 °C to +90 °C / EPDM : -10 °C to +120 °C / Viton : -10 °C to +220 °C / PTFE : -10 °C to +180 °C / RPTFE : -10 °C to +220 °C / TFM : -10 °C to +250 °C / S. S. 304 + Graphoil Laminated 400 °C / S. S. 304 + Inconel 625 Graphite Laminated Above 400 °C

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Boardn Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

Cv Value 150#		
Valve Size		Cv at 90 °C
MM	Inch	
80	3"	100
100	4"	219
125	5"	426
150	6"	633
200	8"	1511
250	10"	2467
300	12"	4024
350	14"	5200
400	16"	6870
500	20"	11718
600	24"	18621

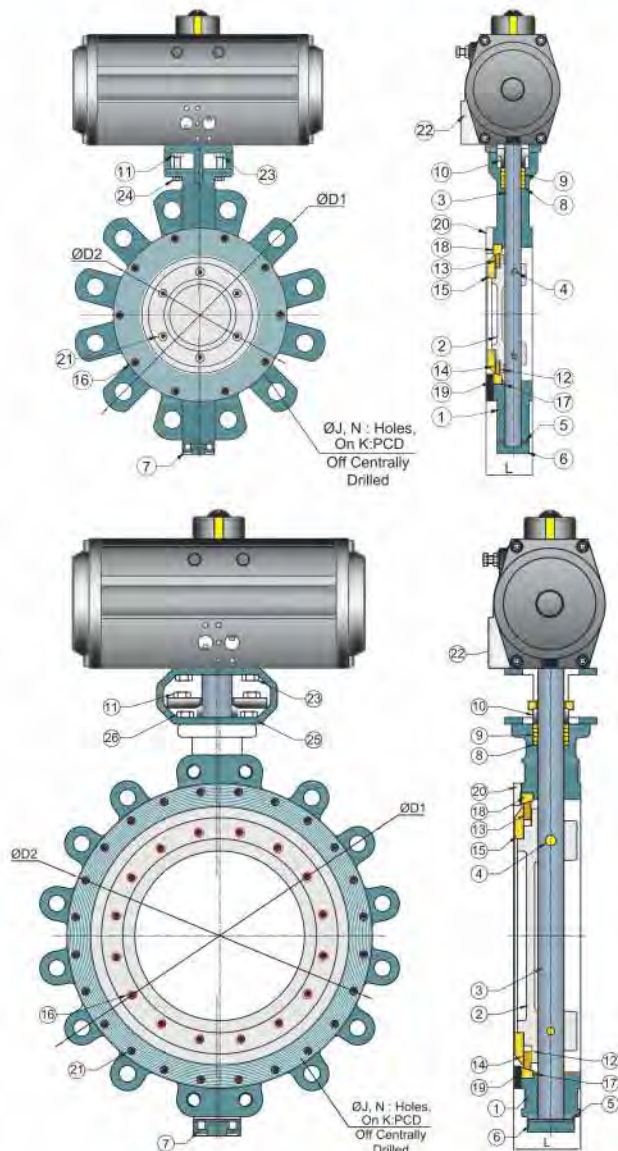
Valve Torque 150#				
Valve Size		5 Bar	10 Bar	20 Bar
MM	Inch			
80	3"	24	28	42
100	4"	35	43	69
125	5"	55	78	115
150	6"	76	100	174
200	8"	182	198	353
250	10"	397	447	788
300	12"	590	758	1329
350	14"	510	842	1519
400	16"	754	1090	1900
500	20"	1578	2068	3703
600	24"	1485	2640	4751

Valve Torque 300#				
Valve Size		10 Bar	20 Bar	50 Bar
MM	Inch			
80	3"	41	52	89
100	4"	66	88	153
125	5"	140	193	452
150	6"	373	426	1009
200	8"	633	788	1900
250	10"	930	1329	3189
300	12"	1143	1843	4471
350	14"	1886	2791	8783
400	16"	2541	3703	9031
500	20"	3379	5827	13881
600	24"	4833	8780	21624

Tight Shut-off Leakage Class VI

We have successfully carried out proof of design test on these metal seated butterfly valve.

Lug Type Triple Eccentric Butterfly Valve Metal & Soft Seated



No.	Description	Material
1	Body	WCB / CF8 / CF8M / CF3M
2	Disc	WCB / CF8 / CF8M / CF3M
3	Shaft	S. S. 304 / 316 / 410 / 17-4PH / Monel / Inconel
4	Disc Pin	S. S. 304 / 316 / 410
5	Steam Square Gasket	S. S. 304 / 316 / Inconel 625 + Graphite
6	Steam Square	CF8 / CF8M / CF3M
7	L. N. Bolt For Steam Square	Alloy Steel
8	Flange Side Washer	S. S. 304 / 316 / 410
9	Seal Set	Graphoil / Graphite / PTFE / EPDM
10	Gland Pata	CF8 / CF8M / CF3M
11	Hex Bolt For Gland Pata	Alloy Steel
12	Disc Seal Ring Gasket	S. S. 304 / 316 / Inconel 625 + Graphite
13	Disc Seal Ring	S S 304 / 316 + Graphoil Laminated / NBR / EPDM / Viton / PTFE / RPTFE / CFT / GFT
14	Disc Retainer Gasket	S. S. 304 / 316 / Inconel 625 + Graphite
15	Disc Ratainer	CF8 / CF8M / CF3M
16	L. N. Bolt For Ratainer	Alloy Steel
17	Body Seat Ring Gasket	S. S. 304 / 316 / Inconel 625 + Graphite
18	Body Seal Ring	CF8 / CF8M / CF3M
19	Body Clamping Ring Gasket	S. S. 304 / 316 / Inconel 625 + Graphite
20	Body Clamping Ring	CF8 / CF8M / CF3M
21	L. N. Bolt For Body Clamping Ring	Alloy Steel
22	Actuator	Std.
23	Hex Bolt For Actuator	Alloy Steel
24	Nut For Gland Pata	Alloy Steel
25	Bracket	WCB / CF8 / CF8M / CF3M
26	Hex Bolt For Bracket	Alloy Steel

600# On Request

Dimensions :

Valve Model	Valve Size		150#						300#					
	MM	Inch	L	ØD1	ØD2	ØJ	N	K.PCD	L	ØD1	ØD2	ØJ	N	K.PCD
TOB-40-LT	40	1.1/2"	42	125	82	15	4	99	---	---	---	---	---	---
TOB-50-LT	50	2"	45	150	95.5	19.05	4	120.7	45	165	92	19.05	8	127
TOB-65-LT	65	2.1/2"	48	180	104	19.05	4	139.7	48	190	104.8	22.2	8	149.2
TOB-80-LT	80	3"	48	190	126	19.05	4	152.4	48	210	127	22.2	8	168.3
TOB-100-LT	100	4"	54	230	158	19.05	8	190.5	54	255	157.2	22.2	8	200
TOB-125-LT	125	5"	57	255	186	22.2	8	215.9	59	280	185.7	22.2	8	235
TOB-150-LT	150	6"	57	280	216	22.2	8	241.3	59	320	215.9	22.2	12	269.9
TOB-200-LT	200	8"	64	345	270	22.2	8	298.5	73	380	269.9	25.4	12	330.2
TOB-250-LT	250	10"	72	405	325	25.4	12	362	83	445	323.8	28.6	16	387.4
TOB-300-LT	300	12"	81	485	381	25.4	12	431.8	92	520	381	31.75	16	450.8
TOB-350-LT	350	14"	92	535	412	28.6	12	476.3	117	585	412.8	31.75	20	514.4
TOB-400-LT	400	16"	102	595	472	28.6	16	539.8	133	650	469.9	34.9	20	571.5
TOB-450-LT	450	18"	114	635	532	31.75	16	577.9	149	710	533.4	34.9	24	628.6
TOB-500-LT	500	20"	127	700	584	31.75	20	635	159	775	584.2	34.9	24	685.8
TOB-600-LT	600	24"	154	815	692.2	34.9	20	749.3	181	915	692.2	41.3	24	812.8

(All Dimensions are in mm)

Pub. On : October, 2018 (Rev :-01)

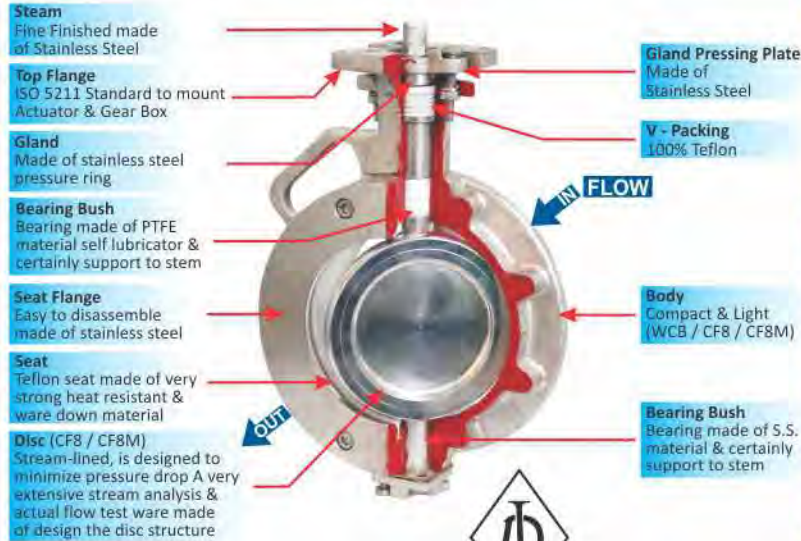
High Performance Butterfly Valve (Spherical Disc Valve)



"aira" Offers High performance butterfly valves for bi-directional* shut-off and modulating service for standard industrial process lines. Materials of construction options include Carbon Steel, Stainless Steels, Duplex Grade Steel and high quality custom materials for desired applications.

5 Special Effects

- Compact Design - Full Port - Offers Mass Flow
- Simple Structure, Light & Smooth - Takes Very Short Time for Opening & Closing with Very Low Torque
- Easy Maintenance - Replaceable Seals Design
- Self Sealing - Self Cleaning The Under Cut Disc Segment & Seal Tends To Wipe Away The Material Form The Sealing Area,
- Gland Pressing Plate - Ensure Complete Utilization of Gland Seals
- Weight
- Space
- Pressure Range
- Multiple Operations
- Maintenance Ease
- Torque & Economy



609 - 0055

Application

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

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

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner.
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

Standard

- Design And Manufacturer : API 609 Category "B" / BS EN 593
- Valve Face to Face Dimension ; API 609 Category "B" / BS EN 593
- Flange Standard Conformity : ASME / ANSI B 16.5 Class 150 & 300
- Inspection & Testing : API 598 / EN 12266 Part - 1

CV Value in GPM

Valve Size	CV Full Open 90° (GPM) Class 150	
	MM	Inch
(40)	1.1/2"	70
(50)	2"	92
(65)	2.1/2"	150
(80)	3"	260
(100)	4"	460
(125)	5"	760
(150)	6"	1350
(200)	8"	2200
(250)	10"	3200
(300)	12"	4700
(350)	14"	5800
(400)	16"	8000
(450)	18"	10500
(500)	20"	14000
(600)	24"	21000
(650)	26"	23400
(700)	28"	27000
(750)	30"	33300
(800)	32"	40200
(900)	36"	56500

Torque Value

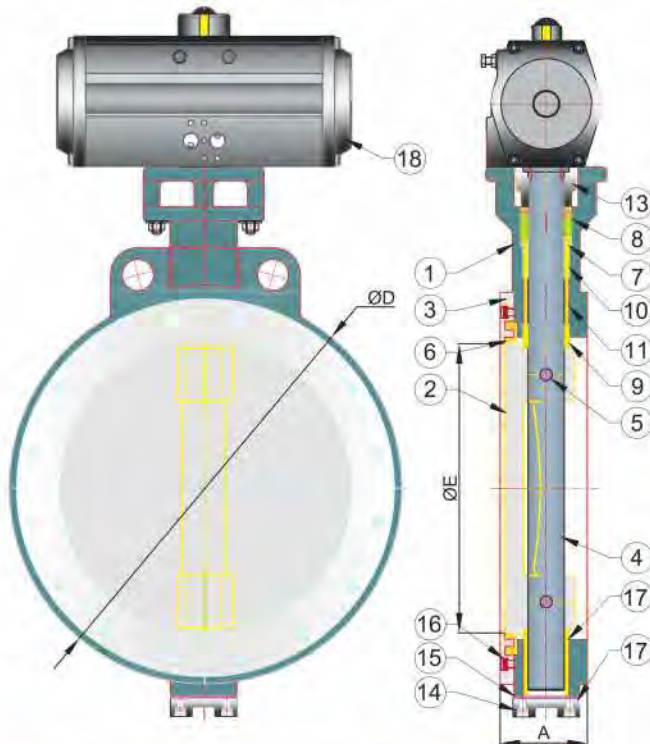
Valve Size	Differential Pressure (AP)				
	MM	Inch	5 Kg/cm ²	10 Kg/cm ²	15 Kg/cm ²
(40)	1.1/2"	0.8	1.0	1.2	1.5
(50)	2"	0.9	1.2	1.5	1.7
(65)	2.1/2"	1.6	2.2	2.4	3.0
(80)	3"	3.0	3.4	4.2	5.0
(100)	4"	4.0	4.6	5.4	6.4
(125)	5"	5.8	8.0	9.5	11.5
(150)	6"	9.0	11.5	12.5	14.5
(200)	8"	14.0	17.5	24.0	28.0
(250)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

Standards	Series 5150 (40 NB To 600 NB)	Series 6150 (650 NB To 1200 NB)
Design and manufacturing	API 609 Category B / BS EN 593	MSS SP - 68
Valve face to face dimensions	API 609 Category B	BS EN 593
Flange Standard conformity	ANSI B 16.5 Class 150	ASME / ANSI B 16.47 Series 'A' Class 150
Inspection & testing Standard	API 598 / EN 12266 Part - 1	API 598 / EN 12266 Part - 1
Fire safe testing	API 607	API 607
Pressure temperature rating	ASME / ANSI B 16.34	ASME / ANSI B 16.34

Pub. On : October, 2018 (Rev :-01)

High Performance Butterfly Valve (Spherical Disc Valve)

Technical Specifications	
Size Range	1.1/2" to 36"
Construction Type	Double Eccentric Disc Design
Body	WCB / CF8 / CF8M
Disc	CF8 / CF8M
Seat	PTFE / GFT / CFT / TFM
Shaft	AISI 410 / 304 / 316
Plate Mounting	Namur Standard
Pressure Rating	ANSI 150 / 300 / 600 Class
End Connection	Wafer / Sandwiched / Lug Type / Double Flange
Operating Temp. Range	-25 °C to 180 °C (Soft Seating)
Operating	Pneumatic Actuator Operated



Dimensions :

Valve Model	Valve Size		150#			Weight (Approx.)
	MM	Inch	L	ØE	ØD	
BHP - 40	40	1.1/2"	42	40	82	3.100
BHP - 50	50	2"	45	50.8	95	3.900
BHP - 65	65	2.1/2"	48	60.6	108	4.750
BHP - 80	80	3"	48	72	127	6.550
BHP - 100	100	4"	54	100	159	7.850
BHP - 125	125	5"	57	123	186	12.600
BHP - 150	150	6"	57	143	217	17.600
BHP - 200	200	8"	64	192	270	26.950
BHP - 250	250	10"	72	239	322	41.250
BHP - 300	300	12"	82	290	382	61.400
SDV - 350	350	14"	92	242	436	46.900
SDV - 400	400	16"	102	270.5	495	66.850
SDV - 450	450	18"	114	362	540	117.000
SDV - 500	500	20"	127	400	595	146.500
SDV - 600	600	24"	154	454	705	290.000
SDV - 650	650	26"	165	478	755	360.000
SDV - 700	700	28"	165	505	810	390.000
SDV - 750	750	30"	190	542	855	475.000
SDV - 800	800	32"	190	580	913	524.000
SDV - 900	900	36"	203	640	1032	675.000

(All Dimensions are in mm)

Sr. No.	Description	Material
1	Body	WCB / CF8 / CF8M / CF3M
2	Disc	CF8 / CF8M / CF3M
3	Retainer	CF8 / CF8M / CF3M / M. S.
4	Shaft	AISI 304 / 316 / 410
5	Disc Pin	AISI 304 / S. S. 316
6	Seat Ring	PTFE / CFT / GFT / TFM
7	Flange Side Washer	S. S. 304 / S. S. 316
8	Gland Seat Set	PTFE / CFT / GFT / TFM
9	Shaft Collar	S. S. 304 / S. S. 316
10	Shaft Bush	S. S. 304 / S. S. 316
11	Shaft Bush	PTFE / CFT / GFT / TFM
12	Single Shaft Bush	S. S. 304 / S. S. 316
13	Gland Pata	CF8 / CF8M
14	Steam Square	CF8 / CF8M / M. S.
15	Gasket For Steam Square	Graphoil / Graphite / Asbestos
16	L. N. Bolt For Retainer	S. S. 304 / S. S. 316 / H. T.
17	L. N. Bolt For Steam Square	S. S. 304 / S. S. 316 / H. T.
18	Actuator	STD.

Pub. On : October, 2018 (Rev :-01)

AWWA C - 504 & AWWA C - 516 Standard Large Diameter Double Flange Butterfly Valve



"aira" Offers Double-offset flanged butterfly valve (resilient-seated) according to the AWWA C504 standard. Long service life, as the medium does not come into contact with the bearing, and due to the wear-resistant, corrosion and infiltration-proof seat with weld overlay. Suitable for use water distribution, water treatment, pretreated waste water, dams, power plants, industry and pressure management.

**Size Range : 50" to 104" (1250 MM to 2600 MM)
(12" to 48" On Request)**

Standard

- Design And Manufacturer : AWWA C-504 / AWWA - C-516
- Valve Face to Face : AWWA C-504 / AWWA - C-516
Dimensions Upto 72"
- Valve Face to Face : As Per Manufacturer Standard
Dimensions Upto 72"
- Flange Standard Conformity : AWWA C-207 Class "D" / Class "B"
- Inspection & Testing : AWWA C-504
- Pressure Rating : PN 2.5 / PN 6 / PN 10 / PN 16
- Leakage Class : VI (Six)

PN 6 Pressure / Temperature Rating

Testing	Body	Seat
Hydraulic	9 Kg/cm ²	6.6 Kg/cm ²

Pressure / Temperature Rating

Pressure Rating	PN 10 / PN 6
Operating Temperature	-50 °C to +180 °C

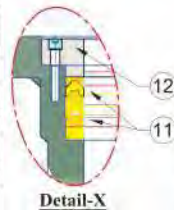
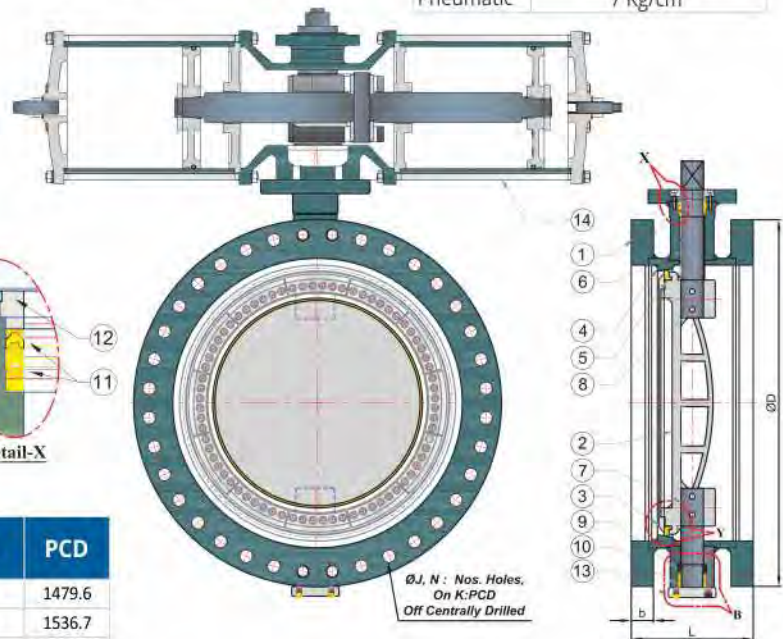
PN 10 Pressure / Temperature Rating

Testing	Body	Seat
Hydraulic	15 Kg/cm ²	11 Kg/cm ²
Pneumatic	7 Kg/cm ²	

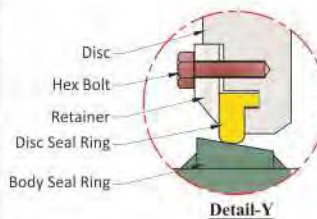


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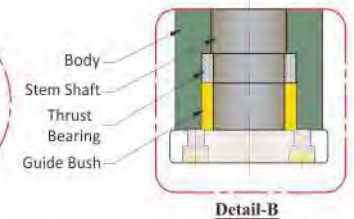
Sr. No.	Description	Material
1	Body	IS 2062 Gr. B M. S.
2	Disc	IS 2062 Gr. B M. S.
3	Retainer	IS 2062 Gr. B / ASTM A - 240 ASTM A - 351 Gr. CF8 / CF8M
4	Body Seat Ring	ASTM A - 479 Type 304 / 316
5	Disc Seal Ring	EPDM / NBR / Viton
6	Shaft	ASTM A - 479 Type 410 / 304 / 316
7	Stem Shaft	ASTM A - 479 Type 410 / 304 / 316
8	Disc Pin	ASTM A - 479 Type 410 / 304 / 316
9	Bearing	Double Thrust Bearing
10	Guide Bush	Bronze
11	Seal Set	EPDM / NBR / Viton
12	Gland Plate	M. S.
13	Stem Plate	IS 2062 Gr. B
14	Actuator	STD.



Detail-X



Detail-Y



Detail-B

Dimensions :

Valve Size		L	ØD	b	ØJ	N	PCD
MM	Inch						
1250	50"	381	1568.5	51	44.45	44	1479.6
1300	52"	381	1626	51	44.45	44	1536.7
1350	54"	381	1682.8	54	44.45	44	1593.8
1400	56"	381	1770	57.15	44.45	52	1670
1500	60"	381	1854.2	57.15	44.45	52	1758.95
1600	64"	381	1915	60	44.45	52	1820
1650	66"	457	2032	63.5	44.45	52	1930.4
1800	72"	457	2197.1	66.5	44.45	60	2095.5
1950	78"	457	2362.2	69.9	50.8	64	2260.6
2000	80"	457	2449	70	50.8	64	2342
2100	84"	457	2533.7	73	50.8	64	2425.7
2200	88"	457	2800	77	58	68	2673.5
2400	96"	533	2876.6	82.6	58	68	2755.9
2500	100"	610	3048	82.6	63.5	72	2908.3
2600	104"	610	3138	86	63.5	72	2994

Upto 3 Meter On Request.

(All Dimensions are in mm)

Pub. On : October, 2018 (Rev :-01)

Pharmaceutical Application Butterfly Valve



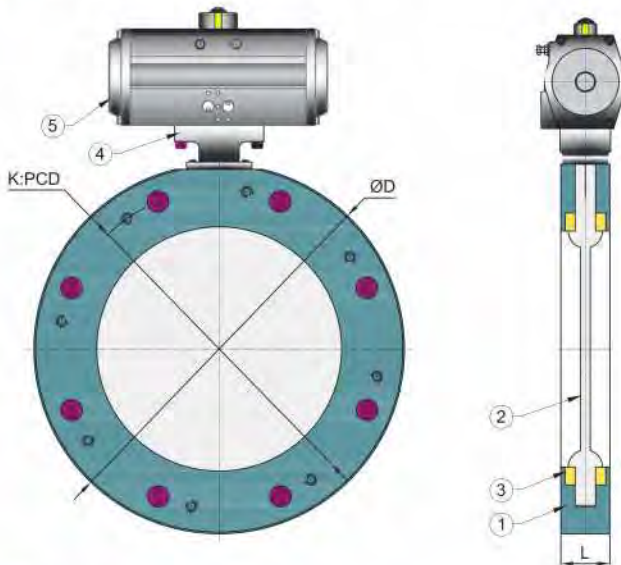
"aira" Offers Pharmaceutical grade, ultra-sanitary butterfly valves for the control of dry bulk materials. Meeting the stringent requirements of the pharmaceutical, cosmetic, biotech, food and fine chemical industries. Sleek design offers weight and space utilization. One piece crevice free disc, polished to mirror finish to maximize flow and easy maintenance. Air Actuated, Modulating Control.

Size Range : 2.1/2" to 16" (65 MM to 400 MM)

Pressure / Temperature Rating	
Working Pressure	Max. 3 Kg/cm ² (On Hydraulic)
Operating Temperature	150 °C

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage(Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Boardn Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve



Sr. No.	Description	Material
1	Body	CF8 / CF8M
2	Disc	CF8 / CF8M
3	Seat	Silicon
4	Bracket	S.S.
5	Actuator	Std.

Dimensions :

Valve Model	Valve Size		Port	L	ØD	N	ØJ	K:PCD	Weight (Approx.)
	MM	Inch							
PBV - 50	50	2"							On Request
PBV - 65	65	2.1/2"							On Request
PBV - 80	80	3"	76	28	130	4	8	110	----
PBV - 100	100	4"	98	28	163	4	11	140	3.200
PBV - 150	150	6"	150	30	227	6	11	202.8	6.200
PBV - 200	200	8"	200	30	279	6	11	255	8.910
PBV - 250	250	10"	250	30	354.5	6	11	327	14.960
PBV - 300	300	12"	300	35	405	8	13.5	378	19.630
PBV - 350	350	14"							On Request
PBV - 400	400	16"							On Request

Other Big Size Available On Request.

(All Dimensions are in mm)

Pub. On : October, 2018 (Rev :-01)

Pharmaceutical Application Butterfly Valve



"aira" Offers Pharmaceutical grade, ultra-sanitary butterfly valves for the control of dry bulk materials. Meeting the stringent requirements of the pharmaceutical, cosmetic, biotech, food and fine chemical industries. Sleek design offers weight and space utilization. One piece crevice free disc, polished to mirror finish to maximize flow and easy maintenance. Air Actuated, Modulating Control.

Size Range : 1" to 22" (25 MM to 550 MM)

Pressure / Temperature Rating

Working Pressure	Max. 3 Kg/cm ² (On Hydraulic)
Operating Temperature	150 °C

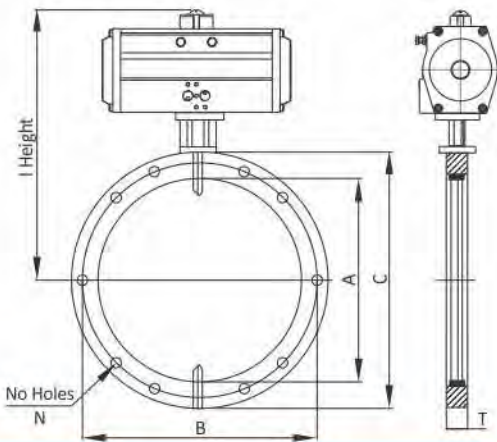
Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage(Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Boardn F + R Combination with Pressure Gauge
- Air Lock Valve

Dimensions :

Valve Model	Valve Size		A	B	C	N	Hole Dia	T	I Height
	MM	Inch							
APBS - 25	25	1"	25	65	85	4	6.35	25	Depends on Actuator Model Number
APBS - 40	40	1.1/2"	38	74	95	4	6.35	25	
APBS - 50	50	2"	50	97	118	4	7.9	26	
APBS - 65	65	2.1/2"	63	105	127	4	7.9	26	
APBS - 80	80	3"	76	128	144	4	7.9	26	
APBS - 100	100	4"	100	142	160	4	7.9	25	
APBS - 125	125	5"	127	175	200	6	9.5	25	
APBS - 150	150	6"	150	203	225	6	9.5	25	
APBS - 200	200	8"	200	264	285	6	9.5	28	
APBS - 250	250	10"	250	298	335	6	11	28	
APBS - 300	300	12"	300	360	385	8	14.5	30	
APBS - 325	325	13"	330	385	420	8	14.5	32	
APBS - 350	350	14"	350	415	440	8	14.5	35	
APBS - 400	400	16"	400	460	490	10	17.5	35	
APBS - 450	450	18"	457	508	540	10	17.5	35	
APBS - 500	500	20"	508	565	600	12	17.5	35	
APBS - 550	550	22"	558	625	675	12	17.5	40	

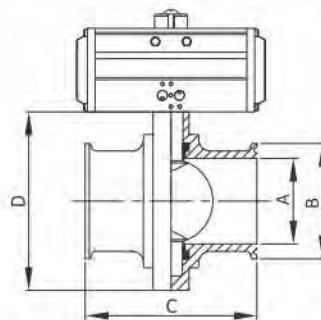
(All Dimensions are in mm)



TC END Butterfly Valve



"aira" Offers Sanitary butterfly valves are designed and manufactured to perform reliably in the most hostile production environments. Each valve is meticulously constructed using the finest materials. Valve come standard with a 4 position handle design for multiple flow options and feature specially designed integrated actuator mounting holes to precision align optional actuators, Valve are precisely CNC machined from 304 / 316 stainless steel and feature an I. D. finish of less than 0.6mm R.A. body bolts are crossthreaded to help ensure a tight seal.



Dimensions :

Valve Model	Valve Size		A	B	C	D
	MM	Inch				
TCB - 25	25	1"	22.1	50.5	60.0	75.0
TCB - 40	40	1.1/2"	34.8	50.5	60.0	77.0
TCB - 50	50	2"	47.5	64.0	60.0	90.0
TCB - 65	65	2.1/2"	60.2	77.5	60.0	110.0
TCB - 80	80	3"	72.2	91.0	74.0	128.0
TCB - 100	100	4"	97.6	119.0	90.0	154.0
TCB - 150	150	6"	148.4	167.0	85.0	200.0
TCB - 200	200	8"	199.2	217.0	88.0	250.0
TCB - 250	250	10"	250	268	90.0	300.0
TCB - 300	300	12"	300	319	90.0	350.0

(All Dimensions are in mm)

Aluminum Pressure Die Cast Butterfly Valve

"aira" Offers A low weight wafer type valve (body:aluminium) which is optimally suited for applications with soft seating(Nitrile / EPDM) requirements. Suitable for all water application, like HVAC, Plumbing , Fire Fighting, Water Treatment Plant.

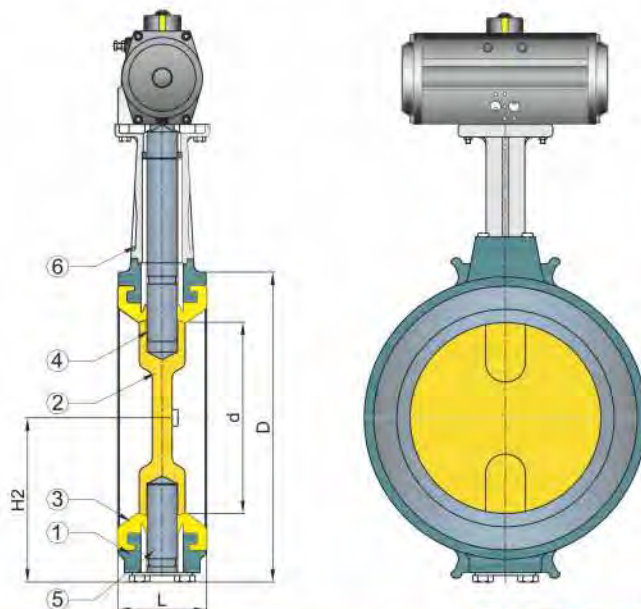
Size Range : 1.1/2" to 12" (40 MM to 300 MM)

Standard

- Design And Manufacturer : 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 II
- Flange Standard Conformity : ANSI 150, DIN PN 6 / 16
- Inspection & Testing : API 598 / BS EN - 12266 - 1

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage(Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Boardn Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve



Dimensions :

Valve Model	Valve Size		d	H2	L	D	Weight Approx.
	MM	Inch					
MKV - 40	40	1.1/2"	40	60	33	78	0.650
MKV - 50	50	2"	50	66	43	93	1.000
MKV - 65	65	2.1/2"	65	74	46	118	1.550
MKV - 80	80	3"	80	83	46	129	1.750
MKV - 100	100	4"	100	94	52	149	2.150
MKV - 125	125	5"	125	122	56	184	3.850
MKV - 150	150	6"	150	135	56	214	4.500
MKV - 200	200	8"	196	161	60	259	7.250
MKV - 250	250	10"	317	On Req.	72	On Req.	On Req.
MKV - 300	300	12"	371	On Req.	82	On Req.	On Req.

(All Dimensions are in mm)

Sr. No.	Description	Material
1	Body	Aluminum Pressure Die Cast
2	Disc	CF8M
3	Seat	EPDM
4	Top Shaft	S. S. 304
5	Bottom Shaft	S. S. 304
6	Bracket	Aluminum Pressure Die Cast

Pub. On : October, 2018 (Rev :-01)



"aira" Offers ISO 5211 Standard Pneumatic Rotary Actuator Operated UPVC Butterfly Valve now come with an update design that offers angle switching control. Increased neck height makes it easier to install. Sealing surface and through hole are processed on CNC machines for reliable and enhanced sealing performance.

Size Range : 1.1/2" to 8" (40 MM to 200 MM)

Valve Specification

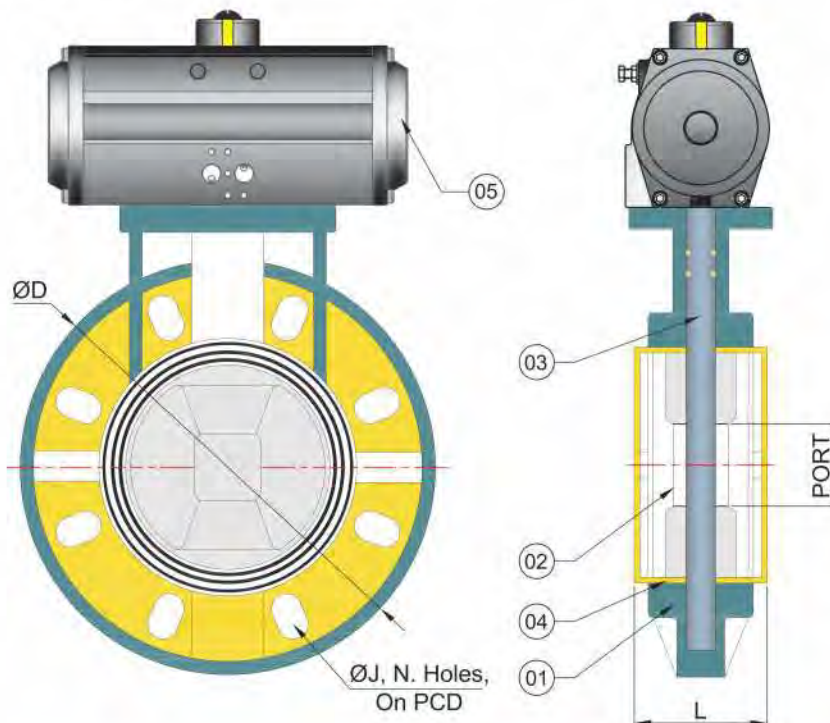
Pressure	Upto 4 to 6 Kg/cm ²
Temperature	Upto 80 °C
Ends	Wafer Type

Advantages

- Improved PP disc to enhance the performance.
- Thickness body and seal to extend the service life.
- Materials meet drinking water standard.
- 100% pure virgin material, CaCO₃ free (Chalk)
- UV resistant powder added.

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage(Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Boardn Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve



Dimensions :

Valve Model	Valve Size		Port	L	ØD	ØJ	N	PCD	Weight Approx.
	MM	Inch							
UPB - 50	50	2"	54	44.5	160	20	4	120	1.150
UPB - 65	65	2.1/2"	67	48	184	21	4	143	1.200
UPB - 80	80	3"	83	53	198	21	8	155	1.700
UPB - 100	100	4"	101	57	231	21	8	183	2.300
UPB - 125	125	5"	127	68	257	24	8	213	4.100
UPB - 150	150	6"	152	73	285	24	8	240	4.800
UPB - 200	200	8"	200	92	340	24	8	296	7.750

(All Dimensions are in mm)

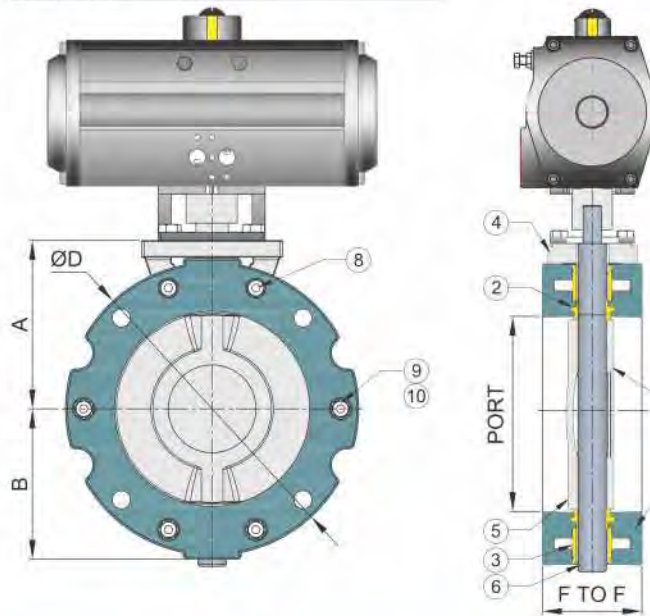
Sr. No.	Description	Material
1	Body	UPVC
2	Disc	UPVC
3	Shaft	AISI 410
4	Seat	NBR
5	Actuator	STD.

PP Butterfly Valve Available On Request.

"aira" Offers Butterfly Valve CMT Series are designed to regulating the flow of product and are widely use in all type of BULK SOLIDS PROCESSING PLANTS where intereption of gravity - fed or pneumatically conveyed DRY POWDER or GRANULES is required. The CMT series of butterfly valves are currently used in a wide range of industry such as Food, Chemical, Pharmaceutical, Cosmetic, Building / Construction, Laboratory, Animal Feed. CMT series butterfly valve are commonly installed / fitted beneath hoppers, Silos, Storage Tanks, Bins, Screw Conveyors, Weighing Systems, Liquid tanks and for material interception in the line of mechanical or pneumatic transport etc....

Size Range : 4" to 16" (100 MM to 400 MM)

Pressure / Temperature Rating	
Working Pressure	0.2 to 5 Kg/cm ²
Operating Temperature	80 °C



Pneumatic Actuator Operated Butterfly Valve

Pneumatic Piston Type Actuator Operated Butterfly Valve

**Model : CMT - WT
CMT - DT**

**Model : CMT - PDP
CMT - PPK**

- A) Double Flange**
- B) One Side Flange & Other Side Collar Type**

Accessories

- On / OFF Indicator
- NAMUR Standard Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - On Request)
- Pneumatic & Electro-Pneumatic valve positioner
- Declutchable Manual Over - Ride
- Limit Switches for On / Off Indication at Panel Boardn Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

Dimensions :

Valve Model	Valve Size		F to F	ØD	Only Valve Weight Approx.
	MM	Inch			
CMT-DT-100	100	4"	218	220	4.000
CMT-DT-150	150	6"	77	228	5.000
CMT-DT-200	200	8"	77	278	6.500
CMT-DT-250	250	10"	77	328	7.500
CMT-DT-300	300	12"	77	378	9.000
CMT-DT-350	350	14"	85	440	16.000
CMT-DT-400	400	16"	85	530	20.500

(All Dimensions are in mm)

Sr. No.	Description	Material
1	Body	Aluminum (Gravity / Die Cast)
2	Muffler	EPDM
3	Shaft Nut	Nylon - 66
4	Bracket	Aluminum (Gravity / Die Cast)
5	Disc	S. G. Iron
6	Disc Shaft	M. S.
7	Disc Plate	S. S.
8	Bracket Fitting L. N. Bolt	S. S. 304
9	Fitting L. N. Bolt	S. S. 304
10	Fitting Nut	S. S. 304

Inflatable Seated with Replaceable Seat (Muffler) Butterfly Valve

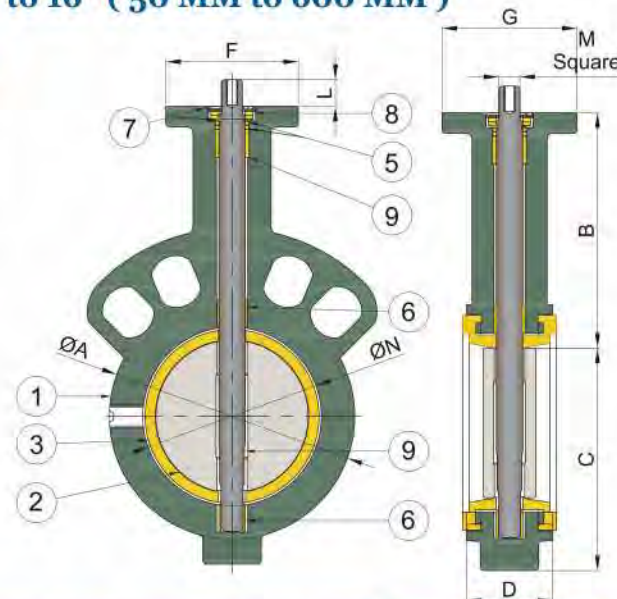
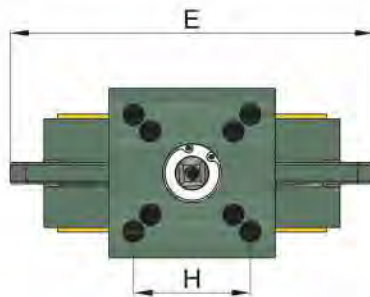


"aira" Offers An inflatable seated butterfly valve designed for dry bulk solids or liquid slurry & Powder applications is available from **aira**. The valve is ideally suited for abrasive materials such as sand, feldspar, fly ash and most other dry, granular materials, which reduce valve life. The inflatable seat design provides a better seal by utilizing air pressure to expand the seat against the disc, providing more sealing area and an even pressure distribution against the disc every time. The seat automatically compensates for wear when it inflates against the disc, extending valve life considerably. Because the **aira** disc only makes casual contact with the seat during opening and closing, torque requirements are substantially lower. This ease of movement also allows the disc to come to a perfect 90-degree position every time. Additionally, the smooth profile of the disc helps material flow easier and reduces build-up. For unique fail-safe monitoring, a pressure switch can be utilized to verify a perfect seal. Valve design is a one-piece housing with separate shaft and disc. Standard sizes range from 2" (50mm) to 30" (750mm). The valves are available in a wide variety of construction materials. **aira's** unique butterfly valve design uses air pressure to expand the seat against the disc, providing even pressure distribution for a bubble-tight seal, every time. Because the seat makes only casual contact with the disc during valve opening and closing, there is minimal disc impingement. This is in contrast to conventional butterfly valves where disc impingement leads to shaving of the seat, decreasing the overall performance and valve life. Substantially less torque is required to open and close the **aira** butterfly valve, thus a smaller actuator can be used resulting in lower overall valve cost. In actual comparison tests and documented field applications, the **aira** butterfly valve outperformed all other valves. In fact, a **aira** valve even in extremely abrasive applications, is not uncommon. For dry solids, gases and slurry applications, the **aira** inflatable seated butterfly valve is unsurpassed. The **aira** inflatable seated butterfly valves are designed for the most severe conditions. The seat is designed for heavy duty applications and higher operating pressures. Standard valve sizes range from 2" (50mm) to 24" (600mm) and fit both ANSI and metric flanges. A full line of actuators, limit switches and controls are available to suit individual applications.

Size Range : 4" to 16" (50 MM to 600 MM)

Valve Specification

Temperature Limits	180 °C
Air Supply	135 PSIG (9.3 Bar) maximum to seat, varies with MOC & Application
Working Pressure	1.6 MPa
Operating Torque	Varies with Application



Dimensions : (Butterfly Valve Dimensions in Inch)

Valve Model	Valve Size		A	B	C	D	E	F	G	H	L	M	N
	MM	Inch											
ILM - 50	50	2"	4.52	4.50	2.91	1.62	6.50	4.00	2.12	3.25	0.78	0.43	1.99
ILM - 80	80	3"	5.65	5.56	3.57	1.75	8.19	4.00	2.12	3.25	0.81	0.43	2.89
ILM - 100	100	4"	6.88	7.58	4.42	2.00	8.88	4.00	2.12	3.25	0.70	0.43	3.88
ILM - 125	125	5"	7.75	7.95	6.05	2.12	9.62	4.00	2.12	3.25	0.86	0.55	4.92
ILM - 150	150	6"	8.75	7.95	6.05	2.12	10.69	4.00	2.12	3.25	0.86	0.55	5.88
ILM - 200	200	8"	11.12	9.87	7.24	2.50	14.00	5.25	2.75	4.31	0.88	0.75	7.86
ILM - 250	250	10"	13.31	10.56	8.06	2.50	17.50	5.25	2.75	4.31	0.93	0.75	9.81
ILM - 300	300	12"	15.50	14.28	9.52	3.00	20.25	4.00	4.00	2.84	1.25	0.87	11.83
ILM - 350	350	14"	17.72	16.00	10.50	3.00	22.00	4.00	4.00	2.84	1.02	0.87	13.08
ILM - 400	400	16"	19.75	16.93	12.40	4.25	24.75	7.63	4.62	3.48	1.29	1.06	15.02
ILM - 450	450	18"	21.46	15.84	13.30	4.25	26.84	7.37	4.75	3.48	1.29	1.06	17.13
ILM - 500	500	20"	23.75	17.38	14.38	5.00	30.00	7.37	5.50	3.90	1.57	1.42	18.68
ILM - 600	600	24"	28.00	19.12	16.49	5.94	34.50	8.00	5.75	3.90	1.48	1.42	22.65

Sr. No.	Description	Material
1	Body	S. G. Iron
2	Flapper	CF8 / CF8M
3	Sleeve	EPDM
4	Shaft	S.S. 304
5	'O' - Ring	HI - Nitrile
6	DU Bush	Steel / PTFE
7	Circlip	S.S. 304
8	Sealing Gasket	PTFE
9	Teflon Bush	Teflon

Pub. On : October, 2018 (Rev :-01)

<p>Model : APP-1200-L APP-1200-R</p>     	<p>“aira” Rotary / Liner Type Pneumatic - Pneumatic Valve Positioner</p> <p>Input Signal : 3 ~ 15psi (0.2-1.0 kgf/cm²) Supply Air Pressure : 100 psi Max. (7.0 kgf/cm²) Standard Stroke : 10 ~ 80mm Air Piping Connection : 1/4" NPT (F) Temperature : -20 °C to 70 °C Pressure Gauge : Stainless Steel Explosion-Proof : Ex 'd' II CT6 Degree of Protection : IP66 Pressure Gauge : Stainless Steel 0-2 kg/cm² 0-4 kg/cm² / 0-10 kg/cm² Output Characteristics Linearity : Within ± 1.0% F.S. Sensitivity : Within 0.2% F.S. Hysteresis : Within 0.2% F.S. Repeatability : Within ± 0.75% F.S. Air Consumption : 5.0 LPM (1.4 kg/cm²) Supply Flow Capacity : 80 LPM (1.4 kg/cm²) Supply Material : Aluminium Die cast Body Weight : 1.8 Kg. (Approx)</p>	<p>Model : AEP-1000-L AEP-1000-R</p>     	<p>“aira” Rotary / Liner Flameproof cum Waetherproof Electro Pneumatic Valve Positioner</p> <p>Input Signal : 4~20 mA DC Input Resistance : 235 ±15 Supply Air Pressure : 20 ~ 100psi (7.0 kg/cm²) Standard Stroke : 10 ~ 80mm Air Piping Connection : 1/4" NPT (F) Conduit Connection : 1/2" NPT (F) Explosion-proof : Ex 'd' II CT6 Degree of Protection : IP66 Temperature : -20 °C to 70 °C Pressure Gauge : Stainless Steel 0-2 kg/cm² 0-4 kg/cm² / 0-10 kg/cm² Output Characteristics : Rotary Linearity : Within ± 1.0% F.S. Sensitivity : Within 0.2% F.S. Hysteresis : Within 0.75% F.S. Repeatability : Within ± 0.5% F.S. Air Consumption : 5.0 LPM (1.4 kg/cm²) Supply Flow Capacity : 80 LPM (1.4 kg/cm²) Supply Material : Alluminium Die Cast Body Weight : 2.8 Kg. With a terminal box</p>
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 	<p>“aira” Weatherproof Micro Limit Switch Box Dom Indicator Type On/Off Indicator</p> <p>Type : Mechanical Switch X 2 / Proximity Sensors P&F Make Model : LA4 - FLP - 01 Switch : Honywell V15 / Honywell V15 / NJ2-V3-N (Upto 8V) / NBB3-V3-Z4 (Upto 10 to 60 VDC) Type : 1 NO + 1 NC / 2 NO + 2 NC Switch Rating : AC 250V 3A, 125V 5A & DC 250V 0.2A, 125V 0.4A, 30V 4A Enclosure Protection : IP 67 Temperature : -20 °C ~ 80 °C Conduit Entry : NPT 1/2" (PT 1/2", PF 1/2, M20, PG 13.5) Terminal Mounting Bracket : 8 Points / Namur VDI / VDE 3845, ISO 5211 Material : Aluminum Pressure Die Cast</p>	    	<p>“aira” Flameproof Limit Switch Box</p> <p>Type : Mechanical Switch X 2 / Proximity Sensors P&F Make Model : MLS - BX - FLP - 01 Switch : Honywell V15 / Honywell V15 PCB Type / NJ2-V3-N (Upto 8V) / NBB3-V3-Z4 (Upto 10 to 60 VDC) Type : 1 NO + 1 NC / 2 NO + 2 NC Switch Rating : AC 250V 3A, 125V 5A & DC 250V 0.2A, 125V 0.4A, 30V 4A Enclosure Protection : IP 67 Temperature : -20 °C ~ 80 °C Conduit Entry : NPT 1/2" (PT 1/2", PF 1/2, M20, PG 13.5) Terminal Mounting Bracket : 8 Points / Namur VDI / VDE 3845, ISO 5211 Material : Aluminum Pressure Die Cast</p>
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 	<p>“aira” Flameproof Micro Limit Switch Box with Stainless Steel 304 / 316</p> <p>Type : Mechanical Switch X 2 / Proximity Sensors P&F Make Model : LS4 - FLP-01 Switch : Honywell V15 / Honywell V15 PCB Type / NJ2-V3-N (Upto 8V) / NBB3-V3-Z4 (Upto 10 to 60 VDC) Type : 1 NO + 1 NC / 2 NO + 2 NC Switch Rating : AC 250V 3A, 125V 5A & DC 250V 0.2A, 125V 0.4A, 30V 4A Enclosure Protection : IP 67 Temperature : -20 °C ~ 80 °C Conduit Entry : NPT 1/2" (PT 1/2", PF 1/2, M20, PG 13.5) Terminal Mounting Bracket : 8 Points / Namur VDI / VDE 3845, ISO 5211 Material : Stainless Steel 304 / 316</p>	  	<p>“aira” Weatherproof Limit Switch Box</p> <p>Type : Mechanical Switch X 2 / Proximity Sensors P&F Make Model : MMLS - BX - WP - 01 Switch : Honywell ZM / NJ2 - V3 - N (Upto 8 Voltage) / NBB - V3 - Z4 (Upto 10 to 60 VDC) Type : 1 NO + 1 NC Switch Rating : AC 250V 3A, 125V 5A & DC 250V 0.2A, 125V 0.4A, 30V 4A Enclosure Protection : IP 67 Temperature : -20 °C ~ 80 °C Conduit Entry : NPT 1/2" (PT 1/2", PF 1/2, M20, PG 13.5) Terminal Mounting Bracket : 8 Points / Namur VDI / VDE 3845, ISO 5211 Material : Aluminum Pressure Die Cast</p>
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“aira” 3/2 Way Namur Direct Acting Solenoid Valve

Model	: NAM-SA-32
Coil Voltage	: All Std. Voltage Available
Frequency	: 50 - 60 Hz
Connection Type	: 1/4" (BSP / NPT)
Conduit	: PF 1/2"
Coil Insulation Grade	: Class "F"
Temperature	: -20 °C ~ 70 °C (-4 ~ 158 °F)
MOC	: Aluminium
Seals	: NBR (Viton On Request)
Working Pressure	: Upto 8 BAR

This 3/2 Namur is suitable for actuator model : 5412-S / ARA-49S / ARA-50S



“aira” 3/2 & 5/2 Way Convertible Poppet Type Single Namur Solenoid Valve

Model	: OTX - PPT - 32 / OTX - PPT - 52
Coil Voltage	: All Std. Voltage Available
Frequency	: 50 - 60 Hz
Connection Type	: 1/4" (BSP / NPT)
Conduit	: PF 1/2"
Coil Insulation Grade	: Class "F"
Temperature	: -20 °C ~ 70 °C (-4 ~ 158 °F)
MOC	: Aluminium
Seals	: NBR (Viton On Request)
Working Pressure	: Upto 8 BAR



“aira” 3/2 & 5/2 Way Convertible Poppet Type Double Namur Solenoid Valve

Model	: 2OTX - PPT - 52
Coil Voltage	: All Std. Voltage Available
Frequency	: 50 - 60 Hz
Connection Type	: 1/4" (BSP / NPT)
Conduit	: PF 1/2"
Coil Insulation Grade	: Class "F"
Temperature	: -20 °C ~ 70 °C (-4 ~ 158 °F)
MOC	: Aluminium
Seals	: NBR (Viton On Request)
Working Pressure	: Upto 8 BAR



“aira” 3/2 & 5/2 Way Convertible Spool Type Single Namur Solenoid Valve

Model	: AMV-NAM-220
Coil Voltage	: All Std. Voltage Available
Frequency	: 50 - 60 Hz
Connection Type	: 1/4" (BSP / NPT)
Conduit	: PF 1/2"
Coil Insulation Grade	: Class "F"
Temperature	: -20 °C ~ 70 °C (-4 ~ 158 °F)
Body Material	: Aluminium
Seals	: NBR (Viton On Request)
Working Pressure	: Upto 8 BAR



“aira” 3/2 & 5/2 Way Convertible Spool Type Double Namur Solenoid Valve

Model	: 2AMV-NAM-220
Coil Voltage	: All Std. Voltage Available
Frequency	: 50 - 60 Hz
Connection Type	: 1/4" (BSP / NPT)
Conduit	: PF 1/2"
Coil Insulation Grade	: Class "F"
Temperature	: -20 °C ~ 70 °C (-4 ~ 158 °F)
Body Material	: Aluminium
Seals	: NBR (Viton On Request)
Working Pressure	: Upto 8 BAR



“aira” AJ Series 3/2 Way Direct Acting Solenoid Valve (Normally Open & Closed)

Model	: AJDS-09-202
Size	: 1/4" BSP
Body	: Aluminium Pressure Die Cast
Orifice	: 2 MM
Pressure	: 7 Kg/cm ² / 10 Kg/cm ²
Temp.	: Upto 50 °C
Leakage	: Bubble Tight
Frequency	: 50 ~ 60 Hz
Coil Insulation Grade	: Class "F"
Media	: Air (Filtered & Lubricated)
Voltage	: All Std. Voltage Available



“aira” Filter + Regulator Air Combination

Model	: 4FQ / 8 FQ / FRJ
Air Connection	: 1/4" BSP
Max. Supply Pressure	: 4FQ: 0.5 to 4 Kg/cm ² 8FQ: 0.5 to 8 Kg/cm ² 1 to 9 Kg/cm ²
Gauge Connection	: 1/8"
Ambient Temperature	: -20 °C ~ 120 °C (High Temp.) -40 °C ~ 120 °C (low Temp.)
Mini Filtering Size	: 5 Micron
Material	: Aluminium Pressure Die Cast

(4FQ / 8FQ) (FRJ)



“aira” Air Volume Booster

Model	: VLB
Size	: 1/4" to 1" BSP
MOC	: Aluminium / S. S. 304 / 316
Seals	: NBR
Max. Supply Pressure	: Max. 1Mpa (10 Bar)
Max. Output Pressure	: Max. 0.7 Mpa (7 Bar)
Temperature	: -20 °C ~ 70 °C (Standard) -20 °C ~ 120 °C (High) -40 °C ~ 70 °C (Low)
Linearity	: 1 : 1
Hysteresis	: 1%



“aira” Single & Double Air Lock Valve

Model	: SALV / DALV
Material	: Aluminum / Stainless Steel 304
Max. Supply Pressure	: Max. 10.2 Kg/cm ² (142 PSI)
Max. Single Pressure	: Max. 7.1 Kg/cm ² (1000 PSI)
Setting Pressure Range	: 1.4-7.1 Kg/cm ² (20 ~ 100 PSI)
Flow Capacity (Cv)	: 0.9
In/Output Port Connection	: 1/4" NPT
Signal Port Connection	: 1/4" NPT
Differential Pressure	: Below 0.1 Kg/cm ² (1.4 PSI)
Hysteresis	: 1%
ambient Temp.	: -20 °C ~ 70 °C

DALV SALV



“aira” Manual Override Clutch Type (MO)

Model	: AMO
Torque	: 200 Nm to 10000 Nm
Body	: Aluminium Pressure Die Cast / S. G. Iron
Lever Wheel	: Stainless Steel
Hand Wheel	: S. S. / M. S. (Fabricated)

Installations

- Indian Oil
- Reliance Industries Limited
- ONGC
- Hindalco
- Godrej
- Indian Railway
- Vedanta
- Voltas
- NTPC
- Gujarat State Fertilizers & Chemical Ltd.
- L & T
- Gail
- Hindustan Petroleum
- BHEL
- IFFCO
- BARC
- Thermax
- Essar

Application

- | | | |
|--------------------------------|----------------------------------|-----------------------------------|
| ■ Process & Chemical | ■ Steel Plants | ■ Fertilizers |
| ■ Refineries & Petrochemicals | ■ Solvent Extraction Plants | ■ Textiles |
| ■ Drugs & Pharmaceuticals | ■ Sewage | ■ Sugar |
| ■ Thermal Power Stations | ■ Cooling Water | ■ Nuclear & Atomic Power Stations |
| ■ Dyes & Intermediates | ■ Ship Yards & Marine Management | ■ Paints & Varnishes |
| ■ Breweries & Distilleries | ■ LPG Bottling Plants | ■ Soaps & Detergents |
| ■ Steel Plants | ■ Water Works | ■ Slurry & Ash handling |
| ■ Onshore & Offshore Platforms | ■ Pulp & Paper | ■ Food & Oil Industry |
| | | ■ Effluent & Water Treatment |

This Product is Generally made to use on the High Pressure Piping System, It is Widely Applied for Major Industrial Sectors



Ship Yards & Marine Management
Thermal Power Station

Dyes & Intermediates

Chemical and Dyeing Fluids in Textile Processing

Solvent Extraction Plants

Marine Tankers- Ship Building

On Shore Off Shore Plants

Nuclear & Atomic Power Stations

Military Application

Foundary

Pulp & Paper Plants

Water Treatment - Purification

Process & Chemical

Food Plants

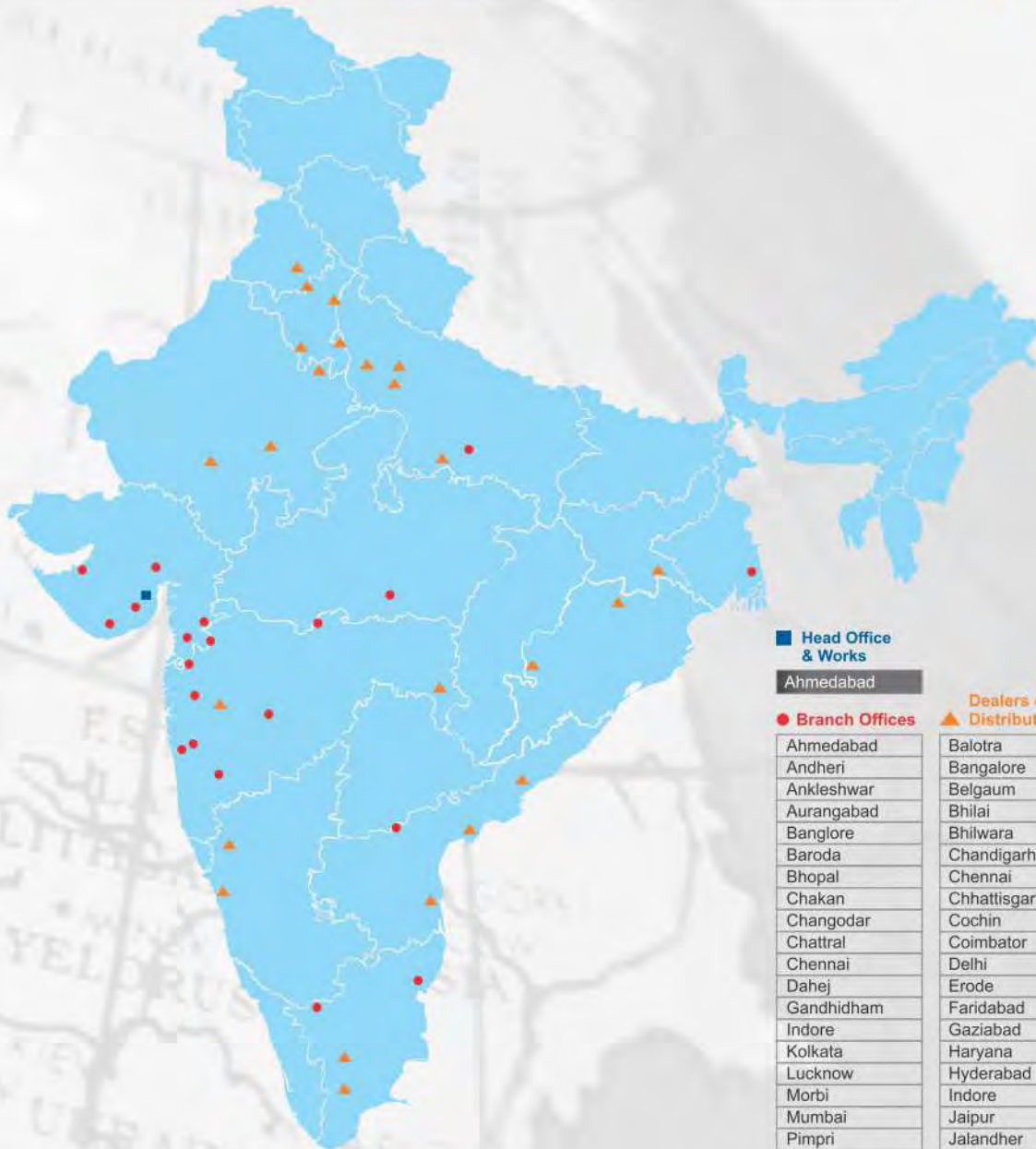
Steel & metal Plants

Tobacco Industries

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