

With a wide range of production, up to 4,000mm in size, the eccentric butterfly valves are developed for applications in waterworks, power plants, desalination plants and other similar industrial plants, with compliance to AWWA C-504, BS 5155 JIS B2064. They are available in a variety of body and disc materials. Rubber linings, epoxy coating and cathodic protection are available for installation in corrosive atmospheric conditions.



The disc seat design facilitates easy replacement of the seat and maintains seat pressure of up to 40bar. Since the disc seated butterfly valves are capable of manual or remote operation, electric and pneumatic actuators can be provided according to client's requirements.

The valve shall be capable of bi-directional flow and provide bubble tight shut-off at full rated pressure.

#### **TYPE NUMBERING SYSTEM**

- AV-EWR Disc Sealed Eccentric WAFER type Butterfly valves.
- AV-EFR Disc Sealed Eccentric FLANGE type Butterfly valves.



#### STANDARDS COMPLIANCE

- The face to face dimension in accordance with KS/JIS, BS, AWWA, DIN or other STANDARDS are available upon request.
- Hard or soft rubber lined valve body & disc is available according to customer's request.



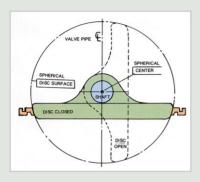
- SIZE: 80A (3inch) ~ 4000A (160inch)
- WORKING PRESSURE: 0 bar ~ 40 bar
- WORKING TEMPERATURE: -20 °C ~ +200 °C



#### APPLICABLE FLANGE

- KS/JIS 10K, 16K, 20K, 30K, 42K
- ANSI B 16.1 Class 125LB, 250LB
- ANSI B 16.5 Class 150LB, 300LB
- AWWA C207 Class D, E
- BS 4504, PN6, PN10, PN16, PN25, PN40
- ISO 2084, PN6, PN10, PN16, PN25, PN40
- DIN 2501, PN6, PN10, PN16, PN25, PN40

# Eccentric Disc Seated Butterfly Valves



# The Single or Double Eccentric Design

Applicable for butterfly valve with interchangeable soft seat.

- Circular unbroken seats on disc and in body.
- Simple maintenance.
- Change of seat ring by dismantling of the retaining ring only.
- Wide variety of seat materials available.

Suitable for installation in Medium Range Pressure System (<40 kg/cm²) No limitation on corrosiveness of medium with proper seat material.

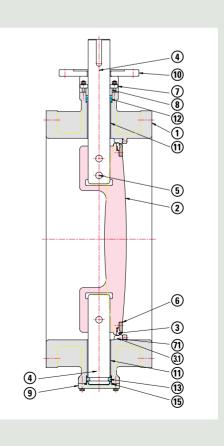
# **Operations**

The following operating actuator of the valve is available, depend on location and the condition of work and service for which the valve is installed.

- Manual lever operation
- Manual worm gear operation
- Single or double acting pneumatic actuator operation
- Hydraulic actuator operation
- Electric motor actuator operation

#### **Part List**

No	PART NAME	METERIAL
1	BODY	Ductile iron / Cast steel Stainless steel / Ni-AL Bronze
2	DISC	Ductile iron / Cast steel Stainless steel / Ni-AL Bronze
3	SEAT	NBR, EPDM, VITON
3.1	BODY SEAT	Stainless steel / Ni-AL Bronze
4	STEM	Stainless steel / Monel
5	DISC PIN	Stainless steel / Monel
6	RETAINER	Stainless steel / Ni-AL Bronze
7	PACKING GLAND	Ductile iron / Cast steel Stainless steel / Ni-AL Bronze
8	GLAND RING	Bronze / Stainless steel
9	BOTTOM COVER	Ductile iron / Cast steel Stainless steel / Ni-AL Bronze
10	STAND	Carbon steel / Cast steel Ductile iron / Stainless steel
11	STEM BEARING	Stainless Steel, Bronze, Oilless Bearing
12	V-PACKING	NBR, EPDM, VITON
13	THRUST PLATE	Bronze / Stainless steel
15	BOTTOM O-RING	NBR, EPDM, VITON
71	BODY SEAT O-RING	NBR, EPDM, VITON



#### **Applications**

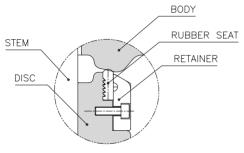
- Desalination
- Power plant
- Others

- Salt water service
- Sea water

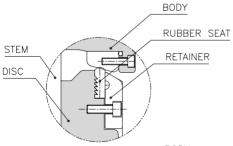
### **Hydro Test Specifications**

Series	ISO Series	AWWA Series
"Hydrostatic Shell test"	1.5 x maximum sevice pressure	2.0 x maximum sevice pressure
"Hydrostatic Seat test"	1.1 x working service pressure	working service pressure

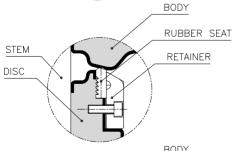
## **Design Features**



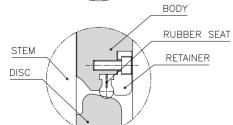
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- More suitable rubber seat can be adopted in accordance with characteristics of fluid.
- Rubber seat can be exchanged without dismantling of pipeline.



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- More suitable rubber seat can be adopted in accordance with characteristics of fluid.
- Rubber seat can be exchanged without dismantling of pipeline
- An additional ring is inserted in the body to replace seat ring on the contacting area between body seat and disc seat.
- The respective maintenance work is possible for seat and disc seat.



- It is designed rubber seat to be inserted in the disc.
- More suitable rubber seat can be adopted in accordance with characteristics of fluid.
- Rubber seat can be exchanged without dismantling of pipeline
- Corrosion prevention is available with special coating on the body and disc.



- It is designed rubber seat to be inserted in the body
- It is more effective design for the disc material of stainless steel.
- More suitable rubber seat can be adopted in accordance with characteristics of fluid.
- No sealing provision is required on the disc.