



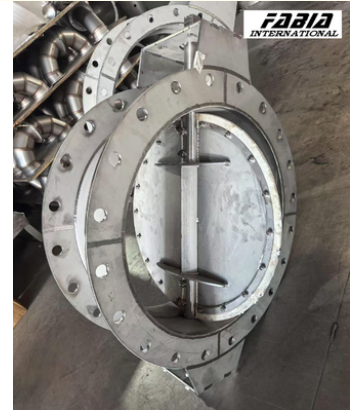
Flue Gas Butterfly Valve Industrial Butterfly Valve Air Valve

Our Product Introduction

for more products please visit us on fbballvalve.com

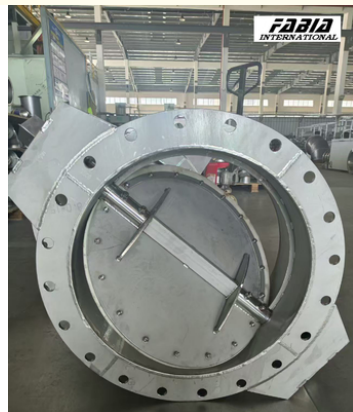
Basic Information

- Place of Origin: China
- Brand Name: FABIA
- Certification: ISO9001,CE,CCS,DNV
- Model Number: 1/8 inch 36 inch
- Minimum Order Quantity: 1 set
- Price: Negotiable
- Packaging Details: Cartons/Wooden cases
- Delivery Time: 15-30 work days
- Payment Terms: L/C,D/A,D/P,T/T,MoneyGram,Western Union
- Supply Ability: 100-1000 set per week

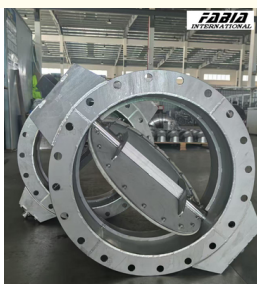


Product Specification

- Product Name: Pneumatic Industrial Butterfly Valve
- Valve Material: Stainless Steel
- Valve Type: Eccentric Butterfly Valve
- Valve Connection: Flange
- Valve Operation: Pneumatic
- Valve Application: Ventilation
- Valve Pressure: 150-300 PSI
- Valve Sealing: Soft Sealing
- Valve Size: 2-36 Inch
- Valve Temperature: 0-1000
- Highlight: industrial flue gas butterfly valve,
ventilation air butterfly valve,
butterfly valve with warranty



More Images



Product Description

Core Working Principles of Flue Gas Butterfly Valves:

Rotational Control Mechanism:

The disc rotates 90° to achieve rapid opening/closing and flow regulation. The bidirectional flow design accommodates both forward and reverse media directions.

Actuation & Positioning:

The electric actuator precisely controls the rotation angle via motor drive and gear reduction, ensuring responsive operation. Internal limit switches guarantee accurate positioning.

High-Temperature Sealing Optimization:

Planar sealing between the disc and seat—combined with elastic material seats—automatically adjusts contact pressure, thus ensuring reliable sealing integrity in high-temperature flue gas environments (e.g., desulfurization systems).

Introduction to Flue Gas Butterfly Valves

Flue gas butterfly valves are specialized control valves designed for high-temperature, high-pressure, and corrosive gas media (e.g., flue gas, dust, hot air). Widely used in industrial ventilation, environmental dust removal, and energy systems, they are systematically introduced below across five aspects: core definition, working principles, structural types, key features, and typical applications.

Definition & Overview

Flue gas butterfly valves utilize a circular disc structure to regulate, divert, merge, or switch media flow via rotational motion. They are primarily deployed in harsh environments such as high-temperature flues and desulfurization systems. Core functions include **flow regulation**, **pressure control**, and **media isolation**, offering advantages of **low flow resistance**, **rapid actuation**, and **ease of maintenance**.

Working Principles

The valve operates via an external drive (e.g., manual lever, electric/pneumatic actuator) rotating the valve stem to move the disc between 0° (closed) and 90° (open):

Open/Close Control:

Parallel to pipeline axis: **Full open** (minimal flow resistance).

Perpendicular to axis: **Fully sealed** (zero media leakage).

Sealing Mechanism:

Disc and seat form a sealing interface via **planar sealing** or elastic materials (e.g., EPDM rubber).

In closed position, the seat deforms under compression to generate sealing pressure (leakage class up to **ANSI Class VI**).

Actuation Modes:

Manual: Adjust opening via handwheel scale.

Electric/Pneumatic: Actuator receives 4–20mA signals for precise flow control and automated operation.

Structure & Classifications

Classified by eccentricity design:

Centerline Type:

Stem aligns with disc center; bidirectional sealing; ultra-low flow resistance; ideal for low-pressure, high-flow systems (e.g., ventilation ducts).

Eccentric Type:

Single/Double/Triple-offset designs reduce friction and enhance seal durability under high pressure/temperature (e.g., triple-offset suits extreme temperatures $\leq 650^{\circ}\text{C}$).

Material Selection:

Body: Carbon steel/stainless steel.

Disc/Seal Ring: Corrosion/wear-resistant alloys (304H stainless steel, duplex steel, Hastelloy®).

Seat: Tungsten carbide overlay for abrasion resistance.

Innovative Designs:

Four-bar linkage mechanism (drive arm, driven arm, etc.) vertically lifts the disc away from the seat during operation, minimizing friction and distributing pressure evenly to extend seal life.

1. Specification:

FABIA Valve Parameter List	
Valve type:	Flue Gas Butterfly Valve Industrial Butterfly Valve
Size:	2 inch 36 inch
Material:	WCB,GGG40,FCD,SS304,SS304L,SS316,SS316L,ST37(Q235B),SS410
Connection type:	Butt /Flange Connection
Driving model:	Manual/Worm gear drive/Pneumatic/Electric
Pressure rating:	PN0.1 PN16
Temperature:	-40 700
Model:	FB-DB.....



Fabia Valve Industry (Suzhou) Co., Ltd.



+8618913247051/+8618912658215/+8618260178084



sales@fabia-china.com



fbballvalve.com

Room 1305, Building 3, Jundi Business Plaza, No.3, Weihua Road, Suzhou Industrial Park