

## **Industrial Butterfly Damper (IBFD)- EB Air Series**

EB Air series Flat dish Air Tight Damper is designed for isolation applications. This damper is designed for strict leakage under de contamination applications. The damper had leakage performance up to 10 in wg (2.5KPa). The frame is flanged for easy mounting and the seal is mechanically fastened to the flat dish. Both the silicone seal and Tandem axle's seals provide the Air Tight performance.

### **Construction details;**

#### **Frame:**

The body can be made of galvanized/Satin Coat or 304/316L SS finish. The flange is available with optional mounting holes, which can be customized to match the opposite flange.

#### **Tandem Seal:**

Tandem seals in steel housing shall be provided where the damper drive shaft penetrates the damper casing to prevent the leakage of air . The seal housing shall be made to provide easy access to the seals for maintenance.

#### **Flat Blade:**

Round, butterfly style blade is engineered and robustly built for high pressure and zero leakage seal.

#### **Flat Blade Seal:**

Silicone rubber blade seal is standard and eliminates leakage around the blade. The seal is replaceable, if required at site for maintenance.

#### **Bearings:**

Ball Bearings with grease are mounted external to the damper for easy movement of the shaft with less torque. Bearings are self lubricating and require no maintenance during the life of the operation.

#### **Actuators**

Actuators can be wide ranging and are factory mounted .Pneumatic / Electric Spring return, fast acting actuators are recommended for most applications. Manual Gear/ Hand wheel/ Pneumatic can also be used in cases where damper blade requires to be maintained at a certain position

## Data Rating

Pressure: 10 in wg (2.5KPa) – differential pressure

Velocity: 1000- 3500 fpm

Temperature: -50F – 270F (up to 140 C)

Construction details;

Frame/ Body: Galvanized / Satin Coated or 304/ 316L SS) ( 10-14ga)

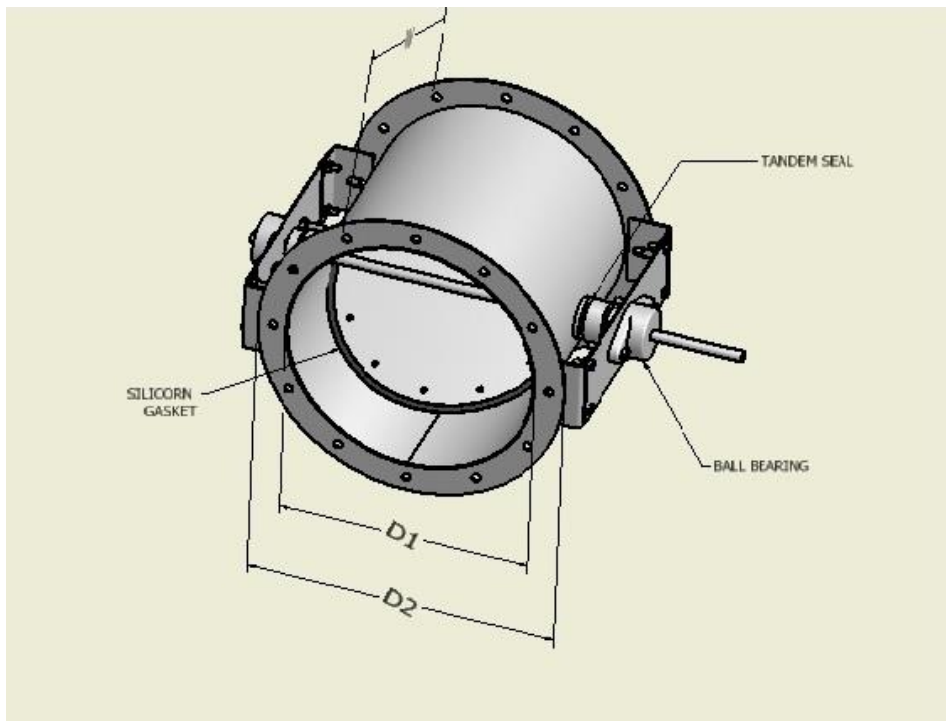
Blade: Painted or 304/316SS

Blade thickness: 10- 14 ga.

Blade Seal/gasket: Silicon rubber mechanically fastened

Axle seal: Tandem Seal

Bearing: Lubricated, ball



Diameter (D1) Inches (mm)	Frame Depth (W) Inches (mm)	Flange Width (D1-D2) Inches (mm)	Axle Diameter Inches (mm)	Blade Thickness gauge ( mm)
5.92 (150)	6.0 (152)	1.5 (38)	0.5 (13)	12 (2.7)
12 (305)	8.0 (203)	1.5 (38)	0.75 (19)	12 (2.7)
24 (610)	8.0 (203)	1.5 (38)	0.75 (19)	12 (2.7)
28 (711)	8 (203)	2 (51)	1.0 (25)	12 (2.7)

**Available Sizes:**

**Minimum size: 5.96 in. (150 mm) diameter**

**Maximum size: 36 in (914 mm) diameter (For Custom Damper sizes matching to the duct dimension please contact Factory)**

**Specifications:**

Industrial grade Air Tight isolation dampers meeting following specifications shall be furnished and installed where shown on the plan/specifications as described on schedules.

Air Tight damper shall consist of round body, flat blade fastened to a mechanical shaft capable of rotating merged on full length with tandem seal both side and outboard ball bearings. Blade can be serviced at the field. Bearing shall be bolted to outboard mounting plates and will have grease fitting for self lubrication. Tandem seal shall prevent leakage around the axle. Damper shall be tested according to AMCA standard 500D in congruence to 10 in wg (2.5 Kpa) prior to shipping. Damper manufacturer shall provide pressure and velocity details/ limitations prior to application and shall be submitted for approval showing damper operation parameters.

**Basis of design: EB Air model -IBFD sizes: 6, 8, 10, 12, 16, 20, 24, 28, 36 (Industrial Flat Dish Butterfly Damper)**

**Pressure Drop 12 inch (305mm) dia Damper**

