

**COATING FINISHES OPTIONS:**

- None
- Specify : \_\_\_\_\_

**MATERIAL OPTIONS:**

- Stainless Steel 304 (SUS304, 2B finish)
  - Stainless Steel 316 (SUS316L, 2B finish)
  - Galvanized Steel
- \*For other materials please consult factory.

**ACTUATOR:**

- On/Off electric
- Modulating
- Spring return

**RATING:**

1. Internal leakage across the damper while closed, shall not exceed  $0.001\text{m}^3/\text{s}/\text{m}^2$  or  $1\text{ l/s}/\text{m}^2$  at 2500Pa or less than 0.01% at 2500Pa based on 10m/s. There shall be no external leakage through the damper under all conditions.

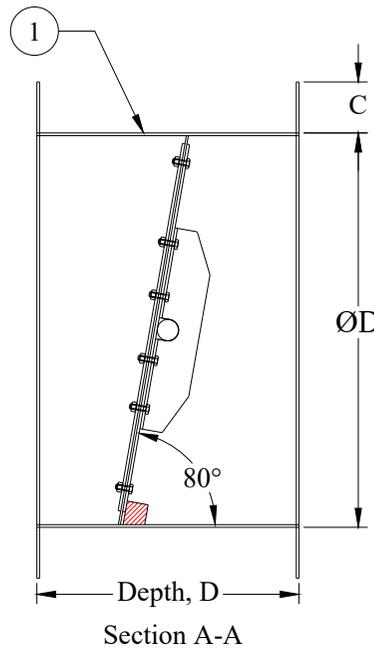
**NOTE:**

1. If damper width or height is greater than 500mm the flange width C, will be 50mm, otherwise the flange width will be 38mm.
2. By standard, product is mill finished.

**DAMPER SIZE:**

Min. size:  $\text{Ø}150\text{mm}$   
 Max. size:  $\text{Ø}1150\text{mm}$

**Submittal**



**TABLE 2:**

Nominal Height, H	Depth, D
150-399	200
400-549	250
550-749	300
750-949	350
950-1099	400
1100-1150	450

ITEM	DESCRIPTIONS	MATERIALS	REMARKS
1	Frame	2-3mm thk.	Refer to Table 1
2	Blade	2.5-3mm thk.	Refer to Table 1
3	Flange	2.5-3mm thk.	38mm for size $\leq 500\text{mm}$ , 50mm for size $> 500\text{mm}$
4	Packing gland	SUS304 / SUS316L	
5	Packing	Teflon in square shape, 4 layers	Refer to Table 1
6	Blade seal	Silicon rubber, 1.5mm thk.	Hardness, 50 Duro
7	Blade shaft	SUS304 / SUS316L	Refer to Table 1
8	Stiffener	2-3mm thk.	Refer to Table 1
9	Bearing	With Teflon insert	
10	Stopper	$\text{Ø}16\text{-}25\text{mm}$	Refer to Table 1
11	Mounting base	2-3mm thk.	Refer to Table 1
12	Operator	Electric Actuator	

NOTE : Refer to material options for item 1, 2, 3, 8, 9, 10 and 11.

**TABLE 1:**

Nominal Diameter, ØD	Frame thk	Stiffener thk	Blade thk	Flange thk	Mounting base thk	Blade shaft dia.	Packing
150-499	2	2	2.5	2.5	2	16	6 x 6
500-799	2	2	2.5	2.5	2	20	6 x 6
800-1150	3	3	3	3	3	25	8 x 8

**CONSTRUCTION:**

1. Frame is constructed of heavy gage stainless steel with flanges fully welded to both ends. Holes are pre-cut on the flanges with maximum distance (SP) of 100mm.
2. Blade is constructed of double skin with silicon rubber in between and stiffeners as required for higher blade strength.
3. Blade shaft is constructed of stainless steel. Diameter of blade axle is  $\text{Ø}16\text{mm}$ ,  $\text{Ø}20\text{mm}$  or  $\text{Ø}25\text{mm}$  depending on size.
4. Blade seal is constructed of silicon, 1.5mm thk. and is specially designed to provide tight seal when the blade is closed.
5. Shaft seal is constructed of comparison type packing gland continuously welded to damper frame; packing is made of Teflon material and well be replaced if necessary.
6. Flange dimension, C varies with damper size as required for higher structure strength.
7. Depth dimension, D varies with damper size (refer to Table 2) to prevent blade seal from rubbing against adjacent duct connection.

In the interest of product improvement, we reserved the right to make changes without notice.

All dimensions are in mm.

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	Project :		Chk. By : Yuxiang <i>Yuxiang</i>	Dwg. No. : DGZEP003-R3	N.T.S
			App. By : Wong <i>Wong</i>		