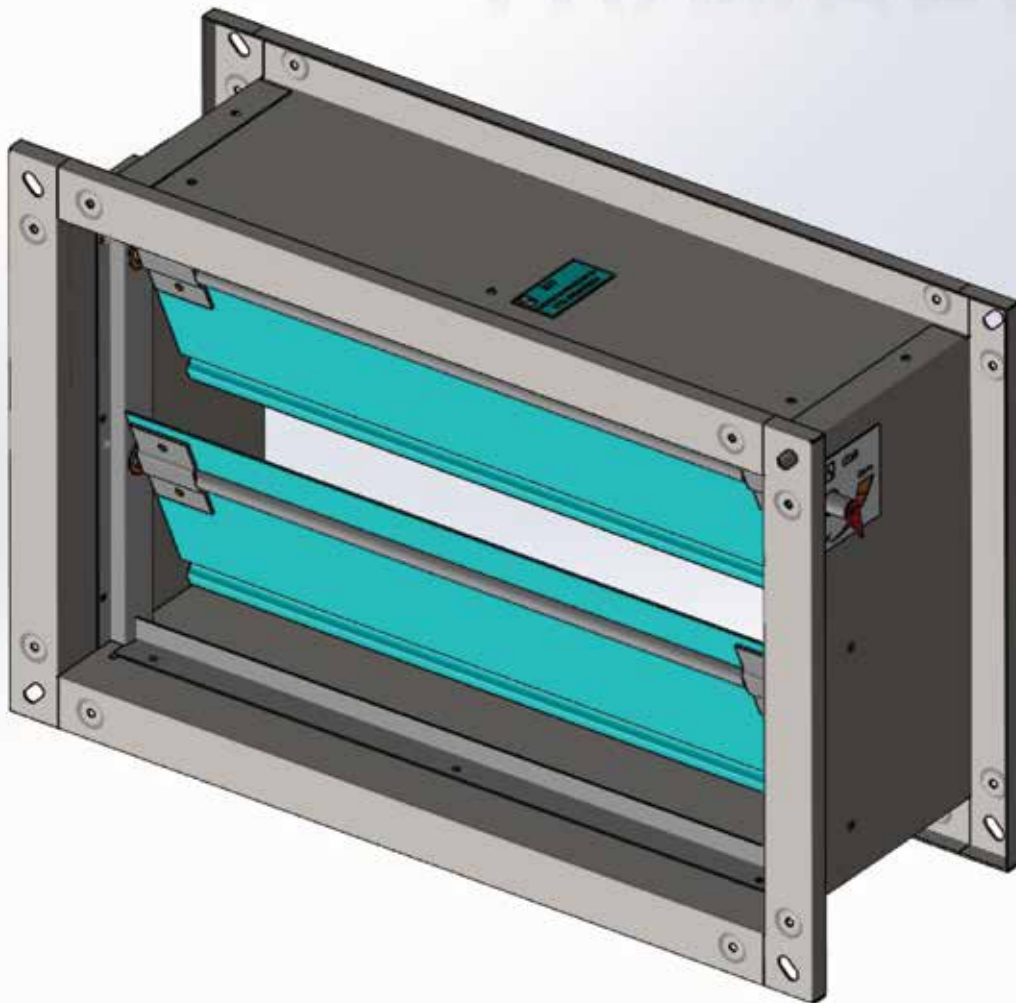


# DAMPERS

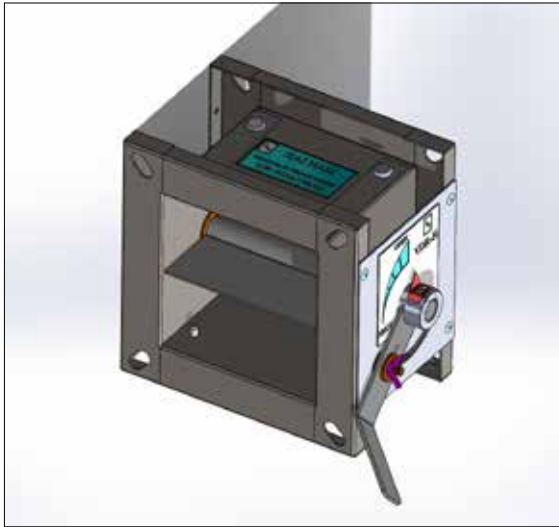


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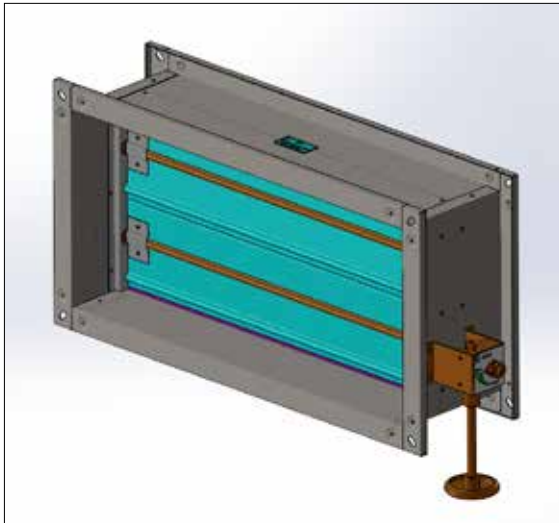
**A Reliable Partner**  
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# VOLUME CONTROL DAMPER



Rectangular volume control damper will be operated by lever handle once  $H < 200(\text{mm})$  as per above design. In this case,  $W = H$ .



Rectangular volume control damper will be operated by crank handle once  $H \geq 200(\text{mm})$  as per above design.

## TYPE:

Rectangular volume control damper.

## ABBREVIATION: VDR-H SIZE

## RATINGS

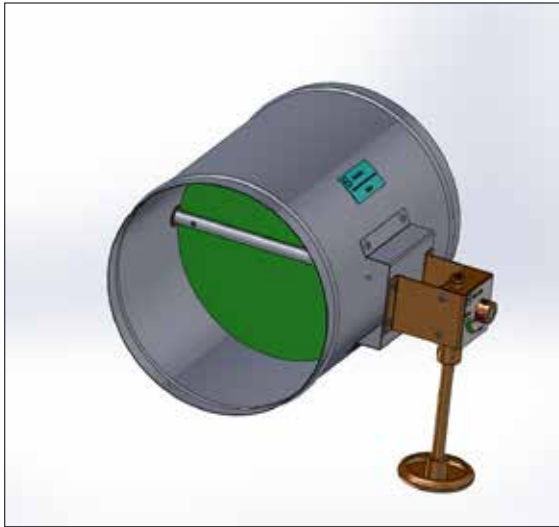
- Pressure range: 50 to 1000 Pa
- Volume flow range: 200 to 7000 (m<sup>3</sup>/h)
- Velocity: Up to 3000 fpm (Up to 15.2 m/s)

## MATERIALS

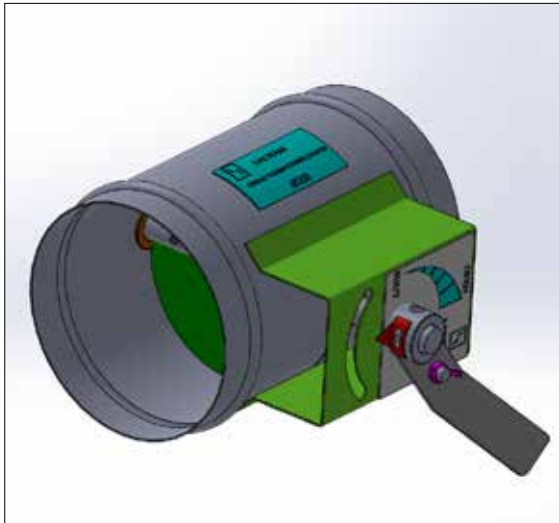
- Frame : ZAM steel 1.2 mm
- Blade : ZAM steel 1.2 mm

With (W-mm)	Height (H-mm)	Number of Blades	Operate
	100	1	lever handle
	150	1	lever handle
	200	1	crank handle
	250	2	crank handle
	300	2	crank handle
	350	2	crank handle
W < 1000	400	3	crank handle
W > 1000		6	
W < 1000	500	3	crank handle
W > 1000		6	
W < 1000	600	4	crank handle
W ≥ 1000		8	
W < 1000	700	5	crank handle
W ≥ 1000		10	
W < 1000	800	5	crank handle
W ≥ 1000		10	
W < 1000	900	6	crank handle
W ≥ 1000		12	
W < 1000	1000	7	crank handle
W ≥ 1000		14	
W < 1000	1100	7	crank handle
W ≥ 1000		14	
W < 1000	1200	8	crank handle
W ≥ 1000		16	

# VOLUME CONTROL DAMPER



Circular volume control damper will be operated by crank handle once  $\varnothing \geq 200(\text{mm})$  as per above design. In this case,  $H = \varnothing + 50 (\text{mm})$



Circular volume control damper will be operated by lever handle once  $\varnothing < 200(\text{mm})$  as per above design. In this case,  $H = W + 50 (\text{mm})$

## TYPE:

Circular volume control damper (handle)

## ABBREVIATION: VDC-H $\varnothing$

## RATINGS

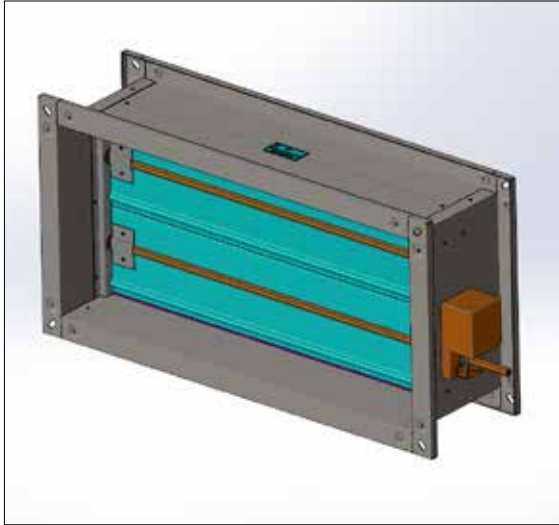
- Pressure range : 50 to 1000 Pa
- Velocity : Up to 2000 fpm (Up to 10.2 m/s)

## MATERIALS

- Frame : ZAM steel 0.8 mm to 1.2 mm
- Blade : ZAM steel 0.8 mm to 1.2 mm

Sizes D (mm)	Length (mm)	Operate
100	150	Lever handle
125	175	Lever handle
150	200	Lever handle
200	250	Crank handle
250	300	Crank handle
300	350	Crank handle
350	400	Crank handle
400	450	Crank handle
450	500	Crank handle
500	550	Crank handle

# MOTORISED DAMPER



## TYPE:

Rectangular motor damper

## ABBREVIATION: VDR-M SIZE

## RATINGS

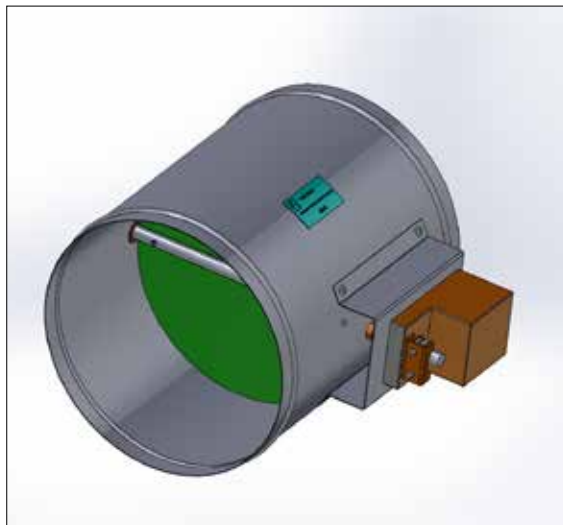
- Pressure range : 50 to 1000 Pa
- Volume flow range : 200 to 7000 (m<sup>3</sup>/h)
- Velocity : Up to 3000 fpm (Up to 15.2 m/s)

## MATERIALS

- Frame : ZAM steel 1.2 mm
- Blade : ZAM steel 1.2 mm

With (W-mm)	Height (H-mm)	Number of Blades
	200	1
	250	2
	300	2
	350	2
W < 1000	400	3
W > 1000		6
W < 1000	500	3
W > 1000		6
W < 1000	600	4
W ≥ 1000		8
W < 1000	700	5
W ≥ 1000		10
W < 1000	800	5
W ≥ 1000		10
W < 1000	900	6
W ≥ 1000		12
W < 1000	1000	7
W ≥ 1000		14
W < 1000	1100	7
W ≥ 1000		14
W < 1000	1200	8
W ≥ 1000		16

# MOTORISED DAMPER



## TYPE:

Circular motor damper

## ABBREVIATION: VDC – M Ø

## RATINGS

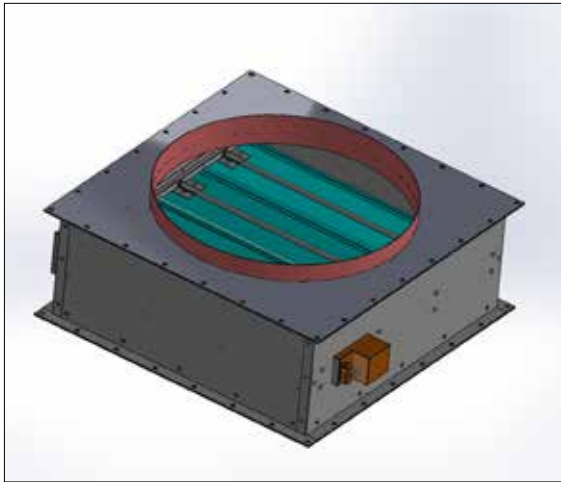
- Pressure range : Up to 4'w.g. (Up to 1000 Pa)
- Velocity : Up to 2000 fpm (Up to 10.2 m/s)

## MATERIALS

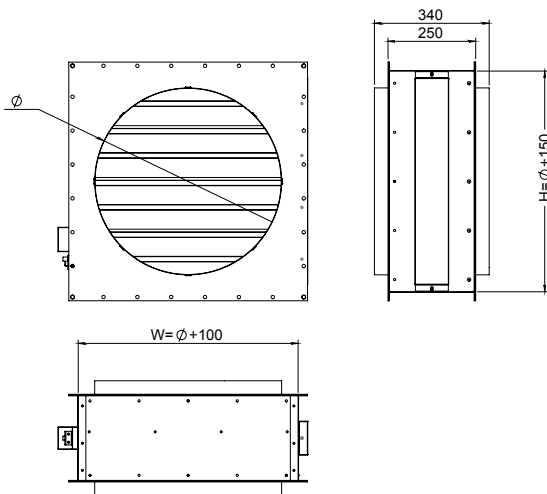
- Frame : ZAM steel 0.8 mm to 1.2 mm
- Blade : ZAM steel 0.8 mm to 1.2 mm

Sizes D (mm)	Length (mm)
100	150
125	175
150	200
200	250
250	300
300	350
350	400
400	450
450	500
500	550

# MOTORISED DAMPER



Rectangular-circular motor damper with duct  
 $\varnothing$ , then  $W = H = \varnothing + 100(\text{mm})$ ,  $D = 250(\text{mm})$ .



## TYPE:

Rectangular-circular motor damper.

## ABBREVIATION: MD-SIZE

## RATINGS

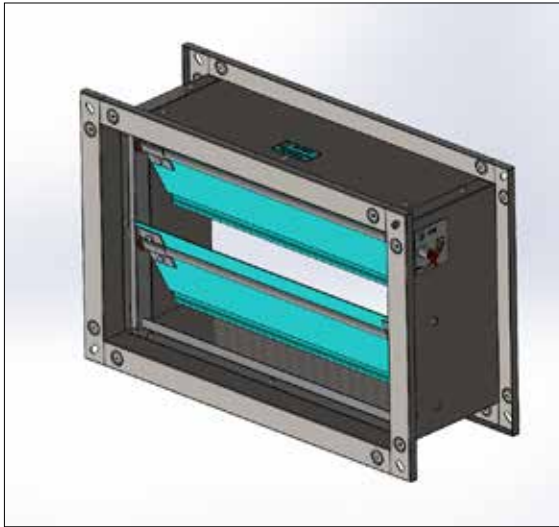
- Pressure range : Up to 4'w.g. (Up to 1000 Pa)
- Velocity : Up to 2000 fpm (Up to 10.2 m/s)

## MATERIALS

- Frame : ZAM steel 1.2 mm
- Blade : ZAM steel 1.2 mm

DIAMESION ( $\varnothing$ )	Number of Blades
100	1
150	2
200	2
250	2
300	3
350	3
400	3
450	3
500	4
550	4
600	5
700	5
800	6
900	7
950	7

# CHECK DAMPER



## TYPE:

Rectangular check damper

## ABBREVIATION: CDR-SIZE

## RATINGS

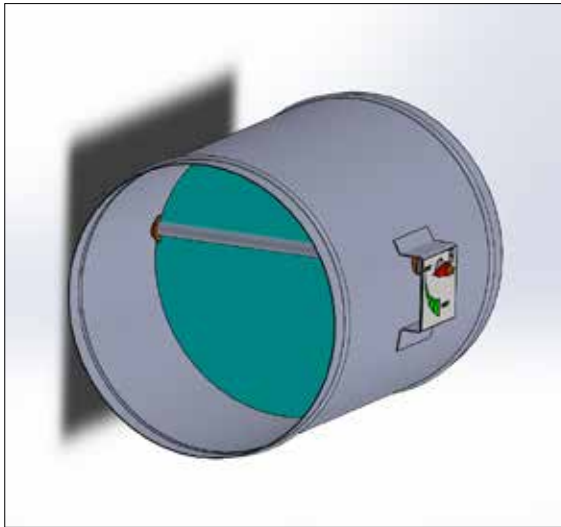
- Pressure range : 50 to 1000 Pa
- Volume flow range : 200 to 7000 (m<sup>3</sup>/h)
- Velocity : Up to 3000 fpm (Up to 15.2 m/s)

## MATERIALS

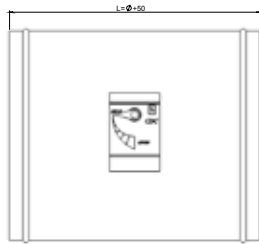
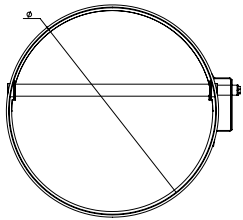
- Frame : ZAM steel 1.2 mm
- Blade : ZAM steel 0.6 mm

With (W-mm)	Height (H-mm)	Number of Blades
	200	1
	250	2
	300	2
	350	2
W <1000	400	3
W > 1000		6
W <1000	500	3
W > 1000		6
W <1000	600	4
W ≥1000		8
W <1000	700	5
W ≥1000		10
W <1000	800	5
W ≥1000		10
W <1000	900	6
W ≥1000		12
W <1000	1000	7
W ≥1000		14
W <1000	1100	7
W ≥1000		14
W <1000	1200	8
W ≥1000		16

# CHECK DAMPER



Circular check damper with duct  $\varnothing$ ,  
then  $D = \varnothing + 50(\text{mm})$



## TYPE:

Circular check damper

## ABBREVIATION: CDC- $\varnothing$

## RATINGS

- Pressure range : Up to 4" w.g. (Up to 1000 Pa)  
Velocity : Up to 2000 fpm (Up to 10.2 m/s)

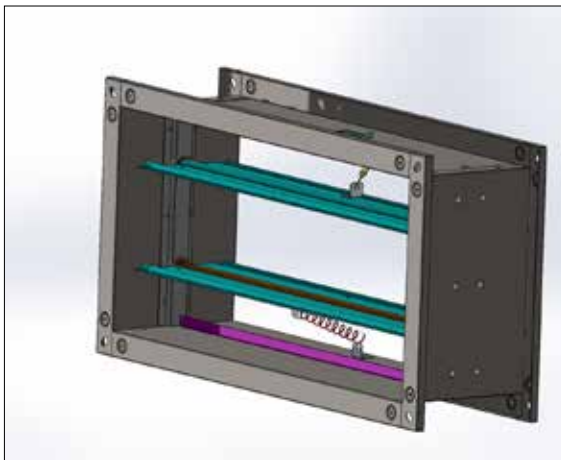
## MATERIALS

- Frame : ZAM steel 0.8 mm to 1.2 mm
- Blade : ZAM steel 0.6 mm to 1.2 mm

Sizes D (mm)	Length (mm)
100	150
125	175
150	200
200	250
250	300
300	350
350	400
400	450
450	500
500	550



# FIRE DAMPER



*Operation principle: when there is trouble in the pipeline fire, temperatures greater than 75°C, the thermal fuse is melted then spring pull the blades closed the wind to prevent fire spread to other areas.*

## TYPE:

Rectangle fire smoke damper (Fuse)

## ABBREVIATION: FDR-F SIZE

## RATINGS

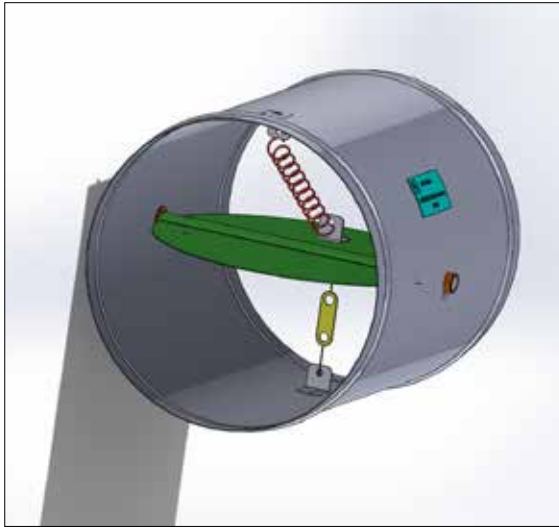
- Pressure range : 50 to 1000 Pa
- Volume flow range : 200 to 7000 (m<sup>3</sup>/h)
- Velocity : Up to 3000 fpm (Up to 15.2 m/s)

## MATERIALS

- Frame : ZAM steel 1.2 mm
- Blade : ZAM steel 1.2 mm

With (W-mm)	Height (H-mm)	Number of Blades
	100	1
	150	1
	200	1
	250	2
	300	2
	350	2
W <1000	400	3
W > 1000		6
W <1000	500	3
W > 1000		6
W <1000	600	4
W ≥1000		8
W <1000	700	5
W ≥1000		10
W <1000	800	5
W ≥1000		10
W <1000	900	6
W ≥1000		12
W <1000	1000	7
W ≥1000		14
W <1000	1100	7
W ≥1000		14
W <1000	1200	8
W ≥1000		16

# FIRE DAMPER



*Operation principle: when there is trouble in the pipeline fire, temperatures greater than 75°C, the thermal fuse is melted then spring pull the blades closed the wind to prevent fire spread to other areas.*



## TYPE:

Circular fire smoke damper (Fuse)

## ABBREVIATION: FDC-F PHI

## RATINGS

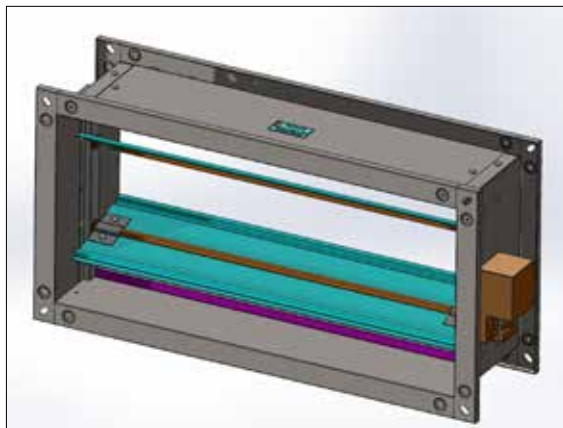
- Pressure: Up to 4'w.g. (Up to 1000 Pa)
- Velocity : Up to 2000 fpm (Up to 10.2 m/s)

## MATERIALS

- Frame : ZAM steel 0.8 mm to 1.2 mm
- Blade : ZAM steel 0.8 mm to 1.2 mm

Sizes D (mm)	Length (mm)
100	150
125	175
150	200
200	250
250	300
300	350
350	400
400	450
450	500
500	550

# FIRE DAMPER



*Operation principle: when there is trouble in the pipeline fire, temperatures greater than 75°C, the thermal sensor will send signal to motor to close the blades let prevent fire spread to other areas.*

## TYPE:

Rectangule fire smoke damper (Motor)

## ABBREVIATION: FDR-M SIZE

## RATINGS

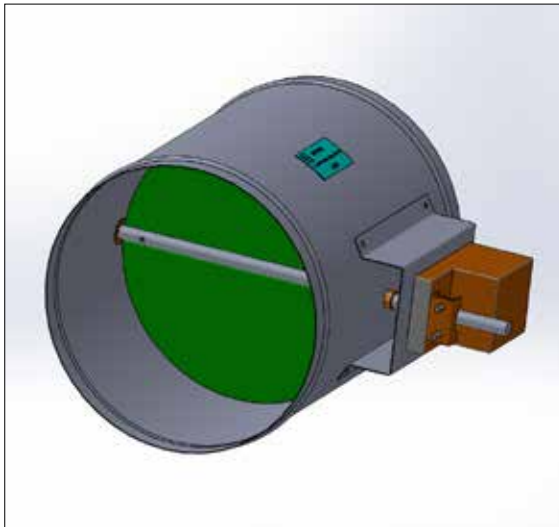
- Pressure range : 50 to 1000 Pa
- Volume flow range : 200 to 7000 (m<sup>3</sup>/h)
- Velocity : Up to 3000 fpm (Up to 15.2 m/s)

## MATERIALS

- Frame : ZAM steel 1.2 mm
- Blade : ZAM steel 1.2 mm

With (W-mm)	Heigt (H-mm)	Number of Blades
	200	1
	250	2
	300	2
	350	2
W <1000	400	3
W > 1000		6
W <1000	500	3
W > 1000		6
W <1000	600	4
W ≥1000		8
W <1000	700	5
W ≥1000		10
W <1000	800	5
W ≥1000		10
W <1000	900	6
W ≥1000		12
W <1000	1000	7
W ≥1000		14
W <1000	1100	7
W ≥1000		14
W <1000	1200	8
W ≥1000		16

# FIRE DAMPER



*Operation principle: when there is trouble in the pipeline fire, temperatures greater than 75°C, the thermal sensor will send signal to motor to close the blades let prevent fire spread to other areas.*

## TYPE:

Circular fire smoke damper (Motor)

## ABBREVIATION: FDC-M PHI

## RATINGS

- Pressure : Up to 4'w.g. (Up to 1000 Pa)
- Velocity : Up to 2000 fpm (Up to 10.2 m/s)

## MATERIALS

- Frame : ZAM steel 0.8 mm to 1.2 mm
- Blade : ZAM steel 0.8 mm to 1.2 mm

Sizes D (mm)	Length (mm)
100	150
125	175
150	200
200	250
250	300
300	350
350	400
400	450
450	500
500	550







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