



FIRE SAFETY, AIR CONTROL, & DOOR SOLUTIONS

PRODUCT BROCHURE

INTRODUCTION

Duro Dyne Corporation has been manufacturing components for the Heating, Ventilating, and Air Conditioning industry since 1952. Over the years they have evolved into a leading manufacturer of sheet metal accessories and equipment for HVAC. Duro Dyne's extensive research and development program has introduced many cutting edge products to the industry, including Flexible Duct Connector, Vane Rail, Self-Drilling Screws, EZ Connector® and Pinspotter machines. Headquartered in Long Island, NY, with additional manufacturing and warehousing facilities in Ohio, Colorado and Canada, Duro Dyne is committed to innovation, excellent customer service, and providing the widest variety of quality products for the HVAC industry. Over the years Duro Dyne has established itself as the greatest name in sheet metal necessities.

PRODUCT SUMMARY

Fire dampers are offered for use in both static and dynamic systems

- **STATIC SYSTEMS** are those in which the system fans shut down during fire and smoke control.
- **DYNAMIC SYSTEMS** are those in which the system fans remain running during fire and smoke control.

CERTIFICATIONS

DuroDyne Fire Dampers are UL 555 approved and approved by the Standards and Appeals for use in New York City. Cal. 291-80-SA. Meets National Fire Protection Association - NFPA 90A.



STATIC FIRE DAMPERS

FRAME	BLADES	FUSIBLE LINKS
Roll-Formed 22ga galvanized steel	Roll-Formed 22ga galvanized steel	165°F or 212°F Replaceable

UL10A - BLADES IN AIR-STREAM

UL Classified UL555 - Meets NFPA 90A Standards



1 ½ Hour Rating

Vertical Sizes
4" x 4" to 60" x 60"
Multi-section up to
120" x 120"

Horizontal Sizes
4" x 4" to 34" x 60"
Multi-section up to
102" x 60"



3 Hour Rating

Vertical Sizes
4" x 4" to 48" x 48"

Horizontal Sizes
4" x 4" to 40" x 40"
Multi-section up to
80" x 40"

UL10B - BLADES OUT OF AIRSTREAM

UL Classified UL555 - Meets NFPA 90A Standards



1 ½ Hour Rating

Vertical Sizes
4" x 3" to 60" x 60"
Multi-section up to
120" x 120"

Horizontal Sizes
4" x 3" to 34" x 60"
Multi-section up to
102" x 60"

100% Free Area



3 Hour Rating

Vertical Sizes
4" x 4" to 48" x 48"

Horizontal Sizes
4" x 4" to 40" x 40"
Multi-section up to
80" x 40"

100% Free Area

UL10C - SQUARE DAMPER WITH ROUND COLLARS

UL Classified UL555 - Meets NFPA 90A Standards



1 ½ Hour Rating

Minimum Collar Size
3" Round
5" x 5" Rectangular

Maximum Collar Size
52" Round
58" x 52" Rectangular

100% Free Area



3 Hour Rating

Minimum Collar Size
3" Round
5" x 5" Rectangular

Maximum Collar Size
52" Round
58" x 52" Rectangular

100% Free Area

UL10D - THINLINE - 2" DEEP

UL Classified UL555 - Meets NFPA 90A Standards



1 ½ Hour Rating

Vertical Sizes
4" x 4" to 41" x 36"

Horizontal Sizes
4" x 4" to 41" x 36"

Register Mounting Tabs
available



3 Hour Rating

Vertical Sizes
4" x 4" to 41" x 36"

Horizontal Sizes
4" x 4" to 41" x 36"

Register Mounting Tabs
available

DYNAMIC FIRE DAMPERS

FRAME	BLADES	FUSIBLE LINKS
Roll-Formed 22ga galvanized steel (A-DY, B-DY, C-DY, D-DY Only) Roll-formed galvanized steel hat-section with staked corners and integral bracing (FDD-MB-3V Only)	Roll-Formed 22 ga galvanized steel (A-DY, B-DY, C-DY, D-DY Only) 16ga (3V) Roll-formed galvanized (FDD-MB-3V Only)	165°F or 212°F Replaceable (A-DY, B-DY, C-DY, D-DY Only) 165°F or 212°F (FDD-MB-3V Only)

UL10A-DY - BLADES IN AIR-STREAM

UL Classified UL555 - Meets NFPA 90A Standards



1 ½ Hour Rating

Vertical Mount - With Spring
4" x 4" to 24" x 24"

Airflow Pressure Ratings
Up to 2,000 FPM at 4" W.C.

UL10B-DY BLADES OUT OF AIRSTREAM

UL Classified UL555 - Meets NFPA 90A Standards



1 ½ Hour Rating

Vertical Mount - With Spring
4" x 3" to 24" x 24"

Airflow Pressure Ratings
Up to 2,000 FPM at 4" W.C.

UL10C-DY (SQUARE DAMPER WITH ROUND COLLARS)

UL Classified UL555 - Meets NFPA 90A Standards



1 ½ Hour Rating

Vertical Mount - With Spring
Minimum Collar Size: Round:
3" to 8"

Airflow Pressure Ratings
Up to 2,000 FPM at 4" W.C.

UL10D-DY - THINLINE - 2" DEEP

UL Classified UL555 - Meets NFPA 90A Standards



1 ½ Hour Rating

Vertical Mount - With Spring
4" x 4" to 12" x 12"

Airflow Pressure Ratings
Up to 2,000 FPM at 4" W.C..

FDD-MB-3V - MULTI-BLADE (LARGER THAN 24 X 24)

UL Classified UL555 - Meets NFPA 90A Standards



1 ½ Hour Rating

Vertical Sizes:
Larger than 24" x 24" to 36" x 48"
Multiple Sections: 108" x 96"

Horizontal Sizes:
Larger than 24" x 24" to 36" x 48"
Multiple Sections: 72" x 96"

Airflow Pressure Ratings
Up to 2,000 FPM at 4" W.C.



3 Hour Rating

Vertical Sizes:
Larger than 24" x 24" to 36" x 48"

Horizontal Sizes:
Larger than 24" x 24" to 36" x 48"

Airflow Pressure Ratings
Up to 2,000 FPM at 4" W.C.

FIRE DAMPER QUESTIONNAIRE

1. How is the damper being installed:

- GRAVITY DROP/ Vertical Mount – (Standing Up) – In A Wall
(Ductwork running horizontally)
- SPRING LOADED/ Horizontal Mount (Laying Down) – In A Floor or Ceiling
(Ductwork running vertically)

2. What type/style of damper?

- 4" Frame - Blades in air stream – UL10A
- 4" Frame - Blades outside of air stream – UL10B
- 4" Frame - Square Damper to Round Collars – UL10C
- 2" Frame – UL10D – THINLINE (TL)

3. What are the duct dimensions? W _____ X H _____

Always indicate the width first. The width dimension IS the blade length dimension.

REQUIRED DAMPER SPECIFICATIONS:

THIS INFORMATION SHOULD BE PROVIDED IN THE JOB SPECIFICATIONS OR IN THE BUILDING CODE

Static System or Dynamic System

- Static System – HVAC system shuts down during a fire condition
- Dynamic System – HVAC system remains in operation during a fire condition

Fusible link

- 165°
- 212°

Fire Resistance Rating? (Wall or Floor Installation)

- 1 ½ Hour
- 3 Hour

OPTIONS:

Sleeve

What sleeve gauge and length is required?

- Sleeve – 20ga
Length: (8" min) _____
- Sleeve – 18ga
Length: (8" min) _____
- Sleeve - 16ga
Length: (8" min) _____

Does the sleeve require TDF/TDC connections

- Yes
- No

Retaining Angles:

- Yes
- No

COMBINATION FIRE/SMOKE DAMPERS

Note: Designed and tested to exceed all U.L., U.L.C and N.F.P.A. requirements for fire dampers as well as to meet or exceed all U.L. (555S) and N.F.P.A. requirements for smoke dampers. Intended for use where building codes call for the fire damper to also operate as a smoke damper.

FRAME	BLADES	HEAT RESPONSIVE DEVICES	OPTIONS
Roll-formed galvanized steel hat-section with staked corners and integral bracing	16ga. (3V) Roll-formed galvanized	Fusible links - 165°F and 212°F Heat Sensor - 165°F, 212°F and 350°F	Blade Position Indication Switches Electric Heat Sensor STOR DTOR 20ga sleeve or 20ga side plate TDF Connection Available

MODEL FSD-3V-211

U.L. 555S Classified / Class I U.L. 555 Classified 1 ½ Hours



Minimum Size
8" w x 6" h

Maximum UL Listed Size
Single Section: 36" w x 48" h

Multiple Assembly
Vert: 108" w x 96" h
Horz: 72" w x 96" h

U.L. 555S listed and labeled as a Leakage Class I rated (smoke) damper with airflow in both directions. Class I provides for a maximum leakage of 4cfm per sq. ft. at 1.0" static pressure and a maximum of 8cfm per sq. ft. at 4.0" static pressure.

MODEL FSD-3V-212

U.L. 555S Classified / Class II U.L. 555 Classified 1 ½ Hours



Minimum Size
6" w x 6" h

Maximum UL Listed Size
Single Section: 36" w x 48" h

Multiple Assembly
Vert: 108" w x 96" h
Horz: 72" w x 96" h

U.L. 555S listed and labeled as a Leakage Class II rated (smoke) damper with airflow in both directions. Class II provides for a maximum leakage of 10cfm per sq. ft. at 1.0" static pressure and a maximum of 20cfm per sq. ft. at 4.0" static pressure.

MODEL FSD-3V-231

U.L. 555S Classified / Class I U.L. 555 Classified 3 Hours



Minimum Size
8" w x 6" h

Maximum UL Listed Size
Single Section: 36" w x 36" h

Multiple Assembly
Vert: 72" w x 36" h
Horz: 72" w x 36" h

U.L. 555S listed and labeled as a Leakage Class I rated (smoke) damper with airflow in both directions. Class I provides for a maximum leakage of 4cfm per sq. ft. at 1.0" static pressure and a maximum of 8cfm per sq. ft. at 4.0" static pressure.

MODEL FSD-3V-232

U.L. 555S Classified / Class II U.L. 555 Classified 3 Hours



Minimum Size
6" w x 6" h

Maximum UL Listed Size
Single Section: 36" w x 48" h

Multiple Assembly
Vert: 72" w x 48" h
Horz: 72" w x 48" h

U.L. 555S listed and labeled as a Leakage Class II rated (smoke) damper with airflow in both directions. Class II provides for a maximum leakage of 10cfm per sq. ft. at 1.0" static pressure and a maximum of 20cfm per sq. ft. at 4.0" static pressure.

FIRE SMOKE DAMPER QUESTIONNAIRE

1. What leakage class is required?

- CLASS I
- CLASS II

2. What blade type is required?

- 3V (Triple V)
- AIRFOIL

3. What are the duct dimensions? W _____ x H _____

Always indicate the width first even if shorter than the height. The width dimension will dictate the length of the blades.

NOTE: Single Section Max: 36w x 48h

Multiple Section Max: Vertical Mount: 108w x 96h

Horizontal Mount: 72w x 96h

SLEEVE OR SIDE PLATE INFORMATION

4. What sleeve gauge and length is required?

- Sleeve – 20ga
Length: (18" min) _____
- Sleeve – 18ga
Length: (18" min) _____
- Sleeve - 16ga
Length: (18" min) _____

5. What side plate gauge and length if required?

- Side Plate-20ga Side Plate-18ga Side Plate-16ga

6. Does the sleeve require TDF/TDC connections

- Yes No

7. Are Retaining Angles required:

- Yes No

ACTUATOR INFORMATION

8. What voltage actuator is required?

- 120 Volt
- 24 Volt

9. Where is the actuator to be mounted?

- External (*Outside damper sleeve; out of airstream*)
- Internal (*Inside damper sleeve; in the airstream*)

OPTIONS

10. Does the damper require a fusible link?

- 165°
- 212°
- 350°

11. Does the damper require a heat sensor?

- STOR (Single Heat Sensor) (*choose one*)
 - 165°
 - 212°
 - 350°
- DTOR (Dual Heat Sensor) (*choose two*)
 - 165°
 - 212°
 - 350°

12. Does the damper require open/close status switches?

- Yes No

CONTROL DAMPERS

FRAME	BLADES	LINKAGE	EXTENDED DRIVE PIN
Roll-formed galvanized steel hat section with staked corners and integral bracing. Bronze oilite bearings press-fit into frame	16ga. Roll-formed galvanized steel. 5.25" wide	Concealed in frame. Linkage bars are .125" thick plated steel	Removable 1/2" round diameter, plated steel

OBD/PBD SERIES

Control Dampers



OBD/PBD Standard

8" x 8" to 48" x 48"

Multi-section Unlimited. Supplied with jackshafting. Consult factory.

Options

6" Shaft / 9" Shaft

Manual Hand Quadrant

May be made to accommodate higher than the recommended 2.5" w.c. static pressure



OBD/PBD Low Leakage

8" x 8" to 48" x 48"

Multi-section unlimited. Supplied with jackshafting. Consult factory.

Extruded vinyl seals (50F - 250F).

Tested to AMCA Standard 500.

Leakage Cfm/Sq.Ft.:

1.0" w.g./3.5

2.5" w.g./5.0

4.0" w.g./7.0

CONTROL DAMPER QUESTIONNAIRE

1. Do you require Low Leakage (blade seals)

- Yes No

2. Damper Dimensions W _____ X H _____

Always indicate the width first even if shorter than the height. The width dimension will dictate the length of the blades.

NOTE: Jackshaft is required for multi-sections (Perimeters are listed below)

- Up to 48" (w) BUT less than 24" (h) - NO JACKSHAFT
- Over 36" (w) AND over 36" (h) – JACKSHAFT REQUIRED
- Over 48" (w) with ANY height dimension – JACKSHAFT REQUIRED

3. What type of control damper?

- Opposed Blade
 Parallel Blade

4. Does the damper require an actuator?

- Yes
* What voltage?
 120 Volt – 2 Position
 24 Volt – 2 Position

No – 6" Shaft will be supplied

- * Hand Quadrant?
 Yes
 No

SMOKE DAMPERS

MODEL SSD-3V-201

U.L. 555S Classified / Class I U.L. 555 Classified 1 ½ Hours



Minimum Size
8" w x 6" h

Maximum UL Listed Size
Single Section: 36" w x 48" h

Multiple Assembly
Vert: 144" w x 96" h
Horz: 144" w x 96" h

U.L. 555S listed and labeled as a Leakage Class I rated (smoke) damper with airflow in both directions. Class I provides for a maximum leakage of 8cfm per sq. ft. at 4.0" static pressure.

MODEL SSD-3V-202

U.L. 555S Classified / Class II U.L. 555 Classified 1 ½ Hours



Minimum Size
6" w x 6" h

Maximum UL Listed Size
Single Section: 36" w x 48" h

Multiple Assembly
Vert: 144" w x 48" h
Horz: 144" w x 48" h

U.L. 555S listed and labeled as a Leakage Class I rated (smoke) damper with airflow in both directions. Class I provides for a maximum leakage of 10cfm per sq. ft. at 1.0" static pressure and a maximum of 20cfm per sq. ft. at 4.0" static pressure.

SMOKE DAMPER QUESTIONNAIRE

1. What leakage class is required?

- CLASS I
- CLASS II

2. What blade type is required?

- 3V (Triple V)
- AIRFOIL

3. What are the duct dimensions? W _____ x H _____

Always indicate the width first even if shorter than the height. The width dimension will dictate the length of the blades.

NOTE: Single Section Max: 36w x 48h

Multiple Section Max: CLASS I: 144w x 96h

CLASS II: 144w x 48h

SLEEVE OR SIDE PLATE INFORMATION

4. What sleeve gauge and length is required?

- Sleeve – 20ga
Length: (18" min) _____
- Sleeve – 18ga
Length: (18" min) _____
- Sleeve - 16ga
Length: (18" min) _____

5. What side plate gauge and length if required?

- Side Plate-20ga Side Plate-18ga Side Plate-16ga

6. Does the sleeve require TDF/TDC connections

- Yes No

7. Are Retaining Angles required:

- Yes No

ACTUATOR INFORMATION

8. What voltage actuator is required?

- 120 Volt
- 24 Volt

9. Where is the actuator to be mounted?

- External (*Outside damper sleeve; out of airstream*)
- Internal (*Inside damper sleeve; in the airstream*)

OPTIONS

12. Does the damper require open/close status switches?

- Yes No

LOUVERS

MODEL LVR-S

Extruded Aluminum Louver - 1" Flange - Birdscreen



Aluminum 6063-T5 Alloy Head, Sill & Jamb

Minimum Height = 12"

Extruded 12 Gauge (.081 thick)

Standard Finish = Mill Finish

ACCESS DOORS

DOOR	OPTIONS	WALK-THRU DOORS
Hinged or Cam Design	Available in Galvanized, Galvanneal, Stainless Steel or Aluminum	Available in custom sizes. Please contact your Duro Dyne Territory Manager for more information.

INSULATED ACCESS DOORS



Hinged

Gasket
Moisture, oil and grease resistant neoprene

Insulation
Filled with 1" 1½ lb fiberglass

K factor
.26+.03@75F

Label
Product label leaves space for project notes



Cam

Gasket
Moisture, oil and grease resistant neoprene

Insulation
Filled with 1" 1½ lb fiberglass

K factor
.26+.03@75F

Label
Product label leaves space for project notes

SELF-STICK INSULATED ACCESS DOORS



Hinged

Gasket
1" wide gasketed frame for fastening and sealing integrity

Easy Installation
Easy to position - No "dove tails" to align and bend



Cam

Gasket
1" wide gasketed frame for fastening and sealing integrity

Easy Installation
Easy to position - No "dove tails" to align and bend

VISION PANEL ACCESS DOORS



Hinged

Window
Allows viewing of inside ductwork. Two layers of shatter proof Lexan creates an insulated air pocket

Gasket
Door to frame & frame to duct neoprene gasket for airtight seal

Insulation
Filled with 1" closed cell foam



Cam

Window
Allows viewing of inside ductwork. Two layers of shatter proof Lexan creates an insulated air pocket

Gasket
Door to frame & frame to duct neoprene gasket for airtight seal

Insulation
Filled with 1" closed cell foam

WALK-THRU ACCESS DOORS



Hinged - Heavy-Duty

Opening Size
Minimum 18" w x 36" h
Maximum 24" w x 72" h

Handles
36" h to 60" h - 2 SP-20 Handles
61" h to 72" h - 3 SP-20 Handles

Frame
14ga galvanized steel - mitered welded corners

Door
20ga galvanized steel - 1" Deep - Insulated



High-Pressure, Self-Stick, Cam

Four cams & latches on doors up to 12", eight on larger sizes

No frame "dove tails" to align & bend

Gasket
1" wide gasketed frame for fastening and sealing integrity

Insulation
Filled with 1" 1½ lb fiberglass

INSULATED ACCESS DOORS

NOTES





To order, please email
fire dampers@durodyne.com
or contact your local
sales representative.

durodyne.com
631.249.9000

