

PROTECT YOUR BUILDING WITH CARNES SMOKE DAMPERS

UL 555S Listed

ULC S112.1 Listed

Carnes Smoke Dampers meet all the NFPA 90A, IBC Code and all other major code requirements for smoke dampers.

Class I **ES** Series
Smoke Dampers

Class II **ET** Series
Smoke Dampers



Model ESWA

- Crimped (3V) Blade
- Class I Leakage

Model ESYA

- Airfoil Blade
- Class I Leakage

Model ESZA

- True Round
- Class I Leakage



Model ETWA

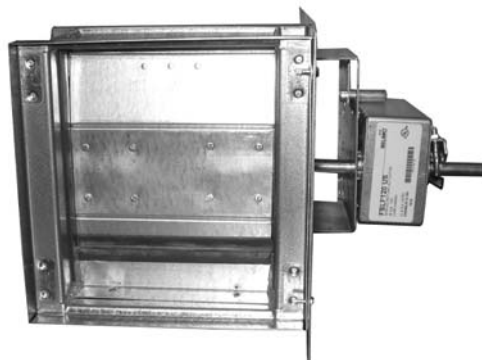
- Crimped (3V) Blade
- Class II Leakage

Model ETYA

- Airfoil Blade
- Class II Leakage

Model ETZA

- True Round
- Class II Leakage



Put Your Trust In Carnes

Carnes Smoke Damper Selection Guide

Carnes Model	Description of Damper
ESWA	Smoke damper, crimped (3V) blade, class I leakage
ESYA	Smoke damper, airfoil blade, class I leakage
ESZA	Smoke damper, true round, class I leakage
ETWA	Smoke damper, crimped (3V) blade, class II leakage
ETYA	Smoke damper, airfoil blade, class II leakage
ETZA	Smoke damper, true round, class II leakage

Smoke dampers are intended for installation in ducts and air transfer openings that are designed to resist the passage of air and smoke. The devices are installed to operate automatically, controlled by a smoke detection system and are capable of being positioned from a remote command station.

Smoke dampers may be required where ducts penetrate through smoke barriers, or at other locations within an engineered smoke control system. A smoke barrier is a continuous membrane, either vertical or horizontal, such as a wall, floor or ceiling assembly, which is designed and constructed to restrict the movement of smoke.

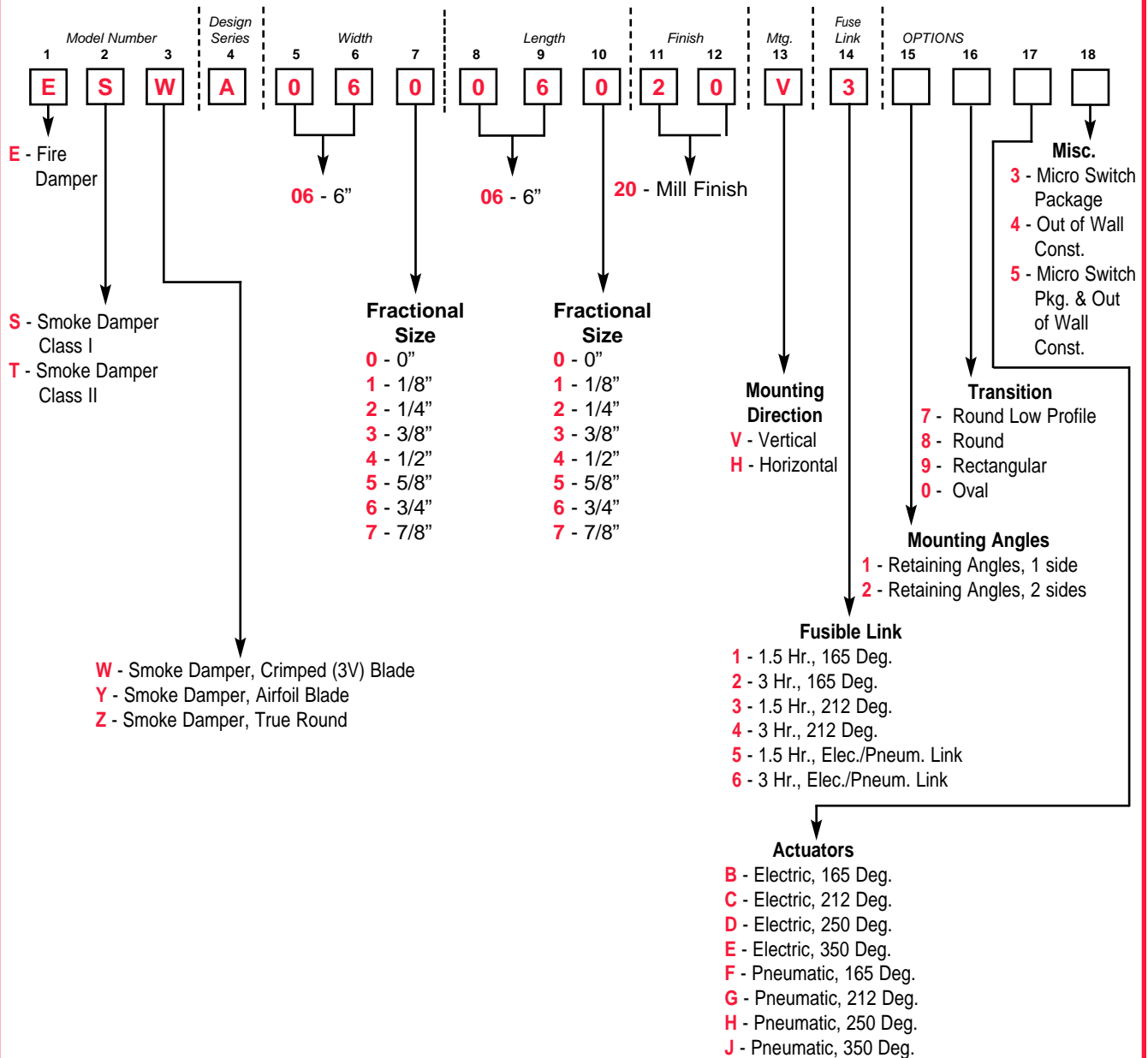
Smoke dampers can be used in HVAC systems where the fans are shut down in the event of a fire, and can also be used in smoke control systems designed to operate during a fire incident.¹

UL555S Classified Leakage Ratings for Smoke Dampers

Leakage Class	Leakage, cfm/ft ² (L/S/m ²)		
	4" w.c. (1.0kPA)	8" w.c. (2.0kPA)	12" w.c. (3.0kPA)
I	8 (40.6)	11 (55.9)	14 (71.1)
II	20 (102)	28 (142)	35 (178)

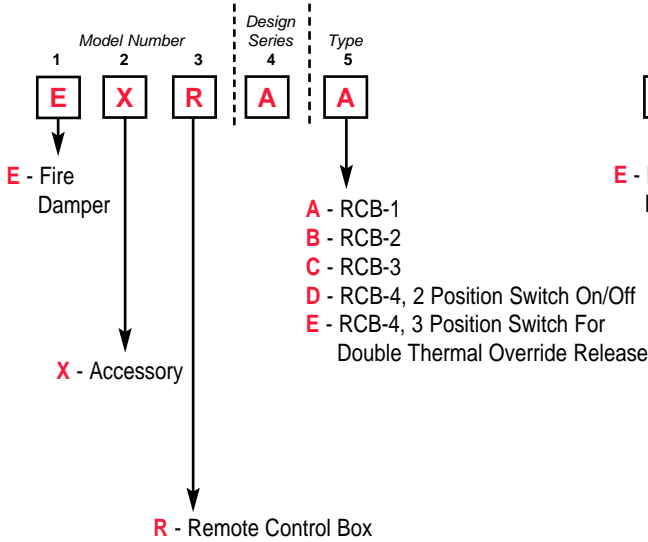
1. Information provided per UL Marking and Application Guide: Dampers for Fire Barrier and Smoke Applications & Ceiling Dampers, April 2003.

Smoke Damper Model Breakdown

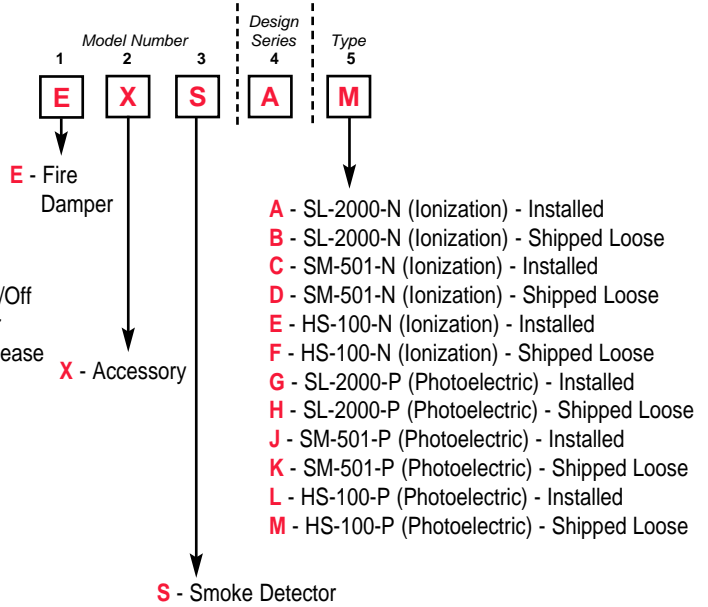


Fire and Smoke Damper Accessory Models

Remote Control Box



Smoke Detector



Damper Sleeve

