

# SEFSDR-511

## Application

Model SEFSDR-511 is a severe environment 316SS combination fire smoke damper with round style blade. The SEFSDR-511 has been qualified to 3000 fpm (15.2 m/s) and 4 in. wg (1 kPa) for operation and dynamic closure in emergency fire smoke situations. Model SEFSDR-511 may be installed vertically (with blades running horizontal) or horizontally and is rated for airflow and leakage in either direction.

### Ratings

UL 555 Fire Resistance Rating

Fire Rating: 1 1/2 Hour Dynamic Closure Rating: Actual ratings are size dependant Maximum Velocity: 3000 fpm (15.2 m/s) Maximum Pressure: 4 in. wg (1 kPa)

#### **UL 555S Leakage Rating**

Leakage Class: I Operational Rating: Actual ratings are actuator dependant Maximum Velocity: 3000 fpm (15.2 m/s) Maximum Pressure: 4 in. wg (1 kPa) Maximum Temperature: 350° F (177°C) — Depending on actuator

## **Standard Construction**

Frame/Sleeve:20 ga. (1mm) 316 stainless steel integral<br/>sleeveBlade:Double skin 316 stainless steel (14 ga.<br/>[2mm] equivalent) round style bladeSeal:Extruded silicone rubber blade seal<br/>1/2 in. (13mm) dia. 316 stainless steelBearing:316 stainless steel sleeve typeFusible Link:UL listed 165°F (74°C) -not 316SS

#### **Size Limitations**

Minimum Size:6 in. (152mm) diameterMaximum Size:24 in. (610mm) diameter

#### **Optional Features**

- OCI (Open closed indication switches) -not 316SS
- 165°F (74°C), 212°F (100°C), and 350°F (177°C) RRL not 316SS.
  TOR (remote override of 165° F (74°C) closure allows damper to
- perform smoke management functions during a fire emergency) -not 316SS.
- Electric or pneumatic actuators to accomplish smoke management and system functions.
- One retainer plate required, additional retainer plate available
- 14 ga. (2mm) or 16 ga. (1.5mm) frame/sleeve



## **Combination Fire Smoke Dampers**

Round Stainless Steel Blade UL 555S Leakage Class I UL555 1 1/2 Hour Fire Resistance Rating

Model SEFSDR-511 meets the requirements for fire dampers, smoke dampers and combination fire smoke dampers established by:

#### **National Fire Protection Association**

NFPA Standards 80, 90A, 92A, 92B 101 & 105

IBC International Building Codes

**New York City** (MEA listing #260-91-M) **California State Fire Marshall** 

Listing #: 3225-0981:112 (fire)

Listing #: 3230-0981:113 (smoke)

"UL CLASSIFIED (see complete marking on product)" "UL CLASSIFIED to Canadian safety standards

(see complete marking on product)" Standard 555 (Listing #R13317) Standard 555S (Listing #R13447)



\* Dimensions furnished approximately 1/8 in. (3mm) undersize.



Installation instructions available at www.greenheck.com.



# **Specifications**

True round combination fire smoke dampers meeting the following specifications shall be furnished and installed where shown on plans and/or as described in schedules. Dampers shall meet the requirements of the latest edition of NFPA 80, 90A, 92, 92A, 101 & 105.

Damper shall be constructed of 20 ga. (1mm) 316 stainless steel frame; blades constructed of double skin 316 stainless steel round style blades; silicone rubber blade seals;  $\frac{1}{2}$ in. 316 stainless steel axles; 316 stainless steel bearings. Damper is provided with one retainer plate.

Dampers shall be tested, rated and labeled in accordance with the latest edition of UL standards 555 and 555S. Dampers shall have a UL 555 fire damper of 1 1/2 hours.

Each damper shall be equipped with a heat responsive device which has been tested and approved for use with the damper assembly in accordance with UL555. The heat responsive device shall have a temperature rating of (specifier select one of the following) 165° F (74°C), 212° F (100°C), 286° F (141°C), or 350° F (177°C).

Damper actuators shall be factory mounted and qualified for use with the damper in accordance with UL555S. Damper actuators shall be (specifier select one of the following) electric type for 120 (or 24) volt operation or pneumatic type for 25 psi minimum (30 psi maximum) operation. Manufacturer's submittal data shall indicate actuator space requirements around the damper.

Dampers shall have a UL555S leakage rating of Class I and a temperature rating of 250°F (121°C) minimum. Dampers shall have a UL555S operational airflow equal to or greater than the airflow at its installed location and an operational pressure rating of 4 in. wg (1 kPa).

All UL555 and UL555S dynamic closure ratings and leakage ratings shall be qualified for airflow and pressure in either direction through the damper. UL ratings shall allow for mounting damper vertically or horizontally.

The Damper manufacturer's submittal data shall certify all air performance pressure drop data is tested in accordance with the AMCA certified ratings program for test figures 5.2, 5.3, and 5.5. Damper air performance shall be developed in accordance with the latest edition of AMCA standard 500-D.

Basis of design is Greenheck's model SEFSDR-511.



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