RUSKIN®

3900 Dr. Greaves Rd. • Kansas City, MO 64030 • (816) 761-7476 • FAX (816) 765-8955

DFSDR1
ROUND CORRIDOR FIRE/SMOKE DAMPER AND CEILING DAMPER
1 HOUR UL555 RATED, UL555S LEAKAGE CLASS 1 RATED AND UL555C RATED

APPLICATION

The DFSDR1 is a true round, Leakage Class 1, Corridor Fire/Smoke Damper. It is also UL classified and labeled as a ceiling damper in accordance with UL555C. As a Corridor Fire/Smoke Damper it is designed for installation in tunnel corridor ceilings constructed from metal studs. As a UL555C ceiling damper it is designed for installation in fire rated floor/ceiling and roof/ceiling assemblies to provide protection where HVAC components penetrate the ceiling membrane.

IMPORTANT NOTE

The DFSDR1 is shipped with thermal insulation blankets (refer to the typical installation diagrams on page 2). The blankets are required when the DFSDR1 will install as a ceiling damper. The blankets are not required when the DFSDR1 will install as a Corridor fire/smoke damper.

STANDARD CONSTRUCTION

FRAME
20 gage (1.0) galvanized steel, 12" (305) depth.

BLADES
20 gage (1.0) galvanized steel.

BEARINGS
Stainless steel sleeve pressed into frame.

MOUNTING
Horizontal.

CONTROLLED CLOSURE DEVICE (HEAT-ACTUATED)
EFL (Electric Fuse Link) - 165°F (74°C) standard. 212°F (100°C), 250°F (121°C), 350°F (177°C) available.

PFL (Pneumatic Fuse Link) - 165°F (74°C) standard. 212°F (100°C), 285°F (141°C).

DIFFUSER (FIELD SUPPLIED)
Steel.

DAMPER SIZES

6" (152), 8" (203), 10" (254), 12" (305) damper.

OPTIONS

- **FM Approved** as Specification Tested Product.
- **TS150 FireStat** for reopenable operation in dynamic smoke management systems.
- **SP100 Switch Package** to remotely indicate damper blade position.
- **MCP** control panels for test purposes or smoke management systems.
- **Retaining Angle** 1½" x 1½" x 16 gage (38 x 38 x 1.6) angle

NOTES
1. DFSDR1 is ordered "actual size" to install over diffuser neck
2. Dimensions shown in parentheses ( ) indicate millimeters

The DFSDR1 meets the requirements for fire, smoke, combination fire smoke and ceiling dampers established by:

- **National Fire Protection Association** NFPA Standards 90A, 92A, 92B and 101
- **BOCA National Building Codes**
- **ICBO Uniform Building Codes**
- **SBCCI Standard Building Codes**
- **ICC International Building Codes**
- **CSFM California State Fire Marshal** Fire Damper Listing (#3225-0245:113 and Smoke Damper Listing (#3230-0245:114)

UL CLASSIFIED
UL555 Listing R5531, UL555S Listing R5531, UL555C Listing R8039

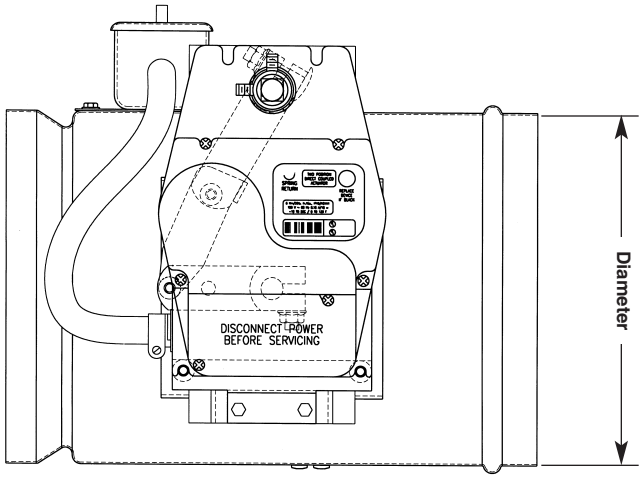
SEE COMPLETE MARKING ON PRODUCT

FM Approvals
Specification Tested Product (Option)

FEATURES

The DFSDR1 combination fire and smoke dampers offer:

- EFL (Electric Fuse Link) or PFL (Pneumatic Fuse Link) heat-actuated release devices permit controlled (rather than instantaneous) closure through the damper actuator. The EFL and PFL allow the damper to automatically reopen after a test, smoke detection or power failure condition.
- EFL is standard on dampers with electric actuators.
- PFL is standard on dampers with pneumatic actuators.
- EFL's may be ordered on dampers with pneumatic actuators but require an additional EP switch.



SPECIFICATION

"True round" corridor fire/smoke damper and ceiling dampers designed for installation in metal stud tunnel corridor ceiling penetrations or in penetrations of fire rated floor/ceiling and roof/ceiling assemblies, meeting or exceeding the following specifications shall be furnished and installed at locations shown on plans or as described in schedules. Dampers shall meet the requirements of NFPA90A, 92A and 92B. Dampers shall be classified by Underwriters Laboratories as a "Corridor Damper" and shall have a fire rating of 1 hour in accordance with the latest edition of UL555 and shall be classified as Leakage Class I Smoke Dampers in accordance with the latest version of UL555S. Dampers also shall be classified as Ceiling Dampers in accordance with the latest edition of UL555C. Dampers shall be warranted to be free from defects in material and workmanship for a period of 5 years after date of shipment.

In addition the dampers and their actuators shall have a UL555S elevated temperature rating of 250°F (121°C) or 350°F (177°C) depending upon the actuator. Appropriate electric or pneumatic actuators shall be installed by the damper manufacturer at time of damper fabrication. Electric actuators shall have been energized hold open tested for a period of at least 1 year with no spring return failures.

Each damper shall be equipped with a "controlled closure" quick detect heat-actuated release device to prevent duct and HVAC component damage. Instantaneous damper closure through the use of fusible links is unacceptable.

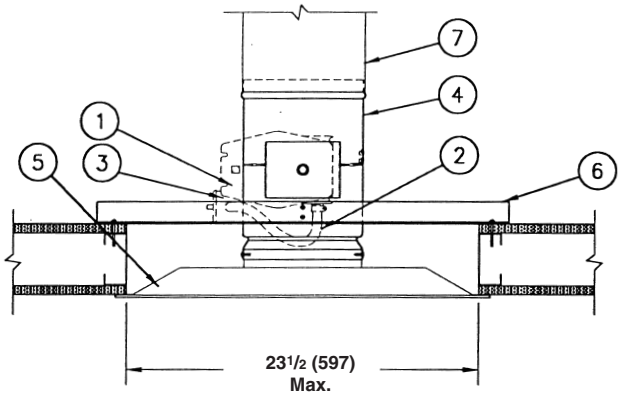
Damper frame shall be a single piece of minimum 20 gage (1.0) galvanized steel formed in to an integral sleeve. Integral frame/sleeve shalt be strengthened with roll formed grooves at each end. Damper blade shall consist of 2 pieces of 20 gage (1.0) galvanized steel mechanically fastened together. Bearings shall be stainless steel turning in an extruded hole in the frame. Blade edge seals shall be silicone rubber mechanically locked in to and fully encompassing the blade edge (adhesive type seals are not acceptable). Dampers shall be Ruskin model DFSDR1.

(Consult Ruskin for detailed CSI *MasterFormat* Specification).

TYPICAL INSTALLATIONS

ITEM DESCRIPTION

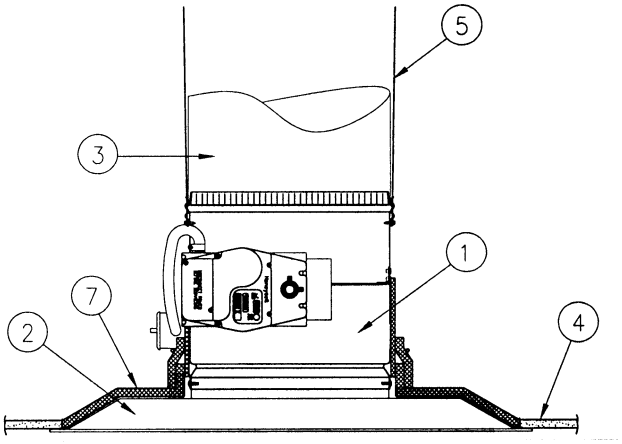
1. Actuator (location may vary)
2. Flex Conduit
3. TS150 FireStat, EFL (electric fuse link) or PFL (pneumatic fuse link) **(location may vary)**
4. Integral Sleeve Damper Frame
5. Steel Surface Mount Ceiling Diffuser **(supplied by others)**
6. Mounting Angles and Fasteners
7. Duct (Flexible or Hard)



DFSDR1 AS CORRIDOR DAMPER

ITEM DESCRIPTION

1. Integral Sleeve Damper Frame
2. Surface Mount or Lay-In Ceiling Diffuser
3. Duct (Flexible or Hard)
4. U.L. Classified fire-rated ceiling. Refer to the UL Fire Resistance Directory for design information.
5. 12 Gage Steel Wire
6. 16 MSG x 1 1/2" Channel
7. Thermal Blanket Insulation



DFSDR1 AS CEILING DAMPER

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