RUSKIN®

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

FSDR25C CORRIDOR DAMPER

UL555 and UL555S Leakage Class 1 Classified
FOR USE IN DYNAMIC AND STATIC SYSTEMS

APPLICATION

The FSDR25C is a "true round" Class 1 leakage rated Corridor damper. The FSDR25C is designed to be installed horizontally in "tunnel" corridor applications and is the ideal choice when round duct is used on a project. The FSDR25C is rated for maximum velocity of 3,000 fpm and 4" (102) static pressure. The integral frame and unique "cinch plate" design provide a low cost, easy to install, high performing damper.

STANDARD CONSTRUCTION

FRAME/SLEEVE
20 gage (.9) galvanized steel, standard 17" (432) long.

BLADES
Two-piece 14 gage (1.9) equivalent thickness galvanized steel.

BEARINGS
Stainless steel sleeve, pressed into frame.

BLADE SEALS
Silicone edge type sandwiched between two piece blade. Full circumference smoke seal to 450°F (232°C).

LINKAGE
Jackshaft to blade.

AXLE
1/2" (13) diameter.

CONTROLLED CLOSURE DEVICE (HEAT-ACTUATED)
EFL (Electric Fuse Link) – 165°F (74°C) standard. 212°F (100°C), 250°F (121°C), or 350°F (177°C) are options.
PFL (Pneumatic Fuse Link) – 165°F (74°C) standard. 212°F (100°C) or 285°F (141°C) are options.

DAMPER SIZES

MINIMUM SIZE
6" diameter (152).

MAXIMUM SIZE
Horizontal Installation – 24" diameter (610).
See page 2 for dimensional information.

OPTIONS

- **FM Approved** as Specification Tested Product.
- **TS150 FireStat** for reopenable operation in dynamic smoke management systems.
- **DSDF** Flow Duct Smoke Detector – Consult Ruskin.
- **SP100 Switch Package** to remotely indicate damper blade position.
- **Sleeve/Frame** of various lengths to insure field compliance with UL installation requirements.
- **Access Door** factory mounted in common sleeve to insure compliance with UL installation requirements.
- **MCP** control panels for test purposes or smoke management systems.

NOTES

1. Units furnished approximately 1/8" (3) smaller than given size.
2. Dimensions shown in parentheses ( ) indicate millimeters.

Model FSDR25C meets the requirements for fire/smoke 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 (#3225-245:107) and Smoke Damper Listing (#3230-245:108)
- **New York City (**BSA Listing #176-82-SM)

UL CLASSIFIED
UL555 Listing R5531, UL555S Listing R5531

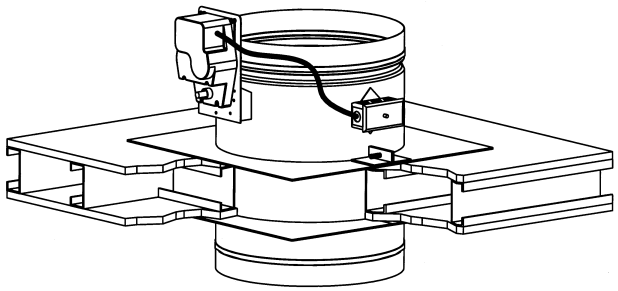
SEE COMPLETE MARKING ON PRODUCT

SPECIFICATION TESTED PRODUCT (OPTION)

FEATURES

The FSDR25C offers:

- 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.

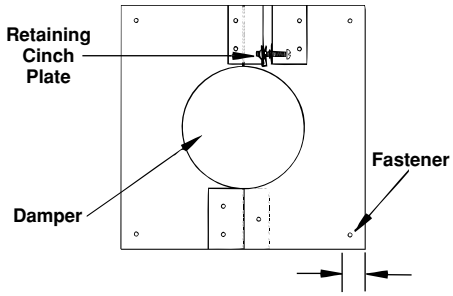


GENERAL INSTALLATION INFORMATION

A **square** opening in wood or metal stud “tunnel” corridor ceilings shall be a minimum of 1" (25) and a maximum of 2½" (64) larger than the damper diameter.

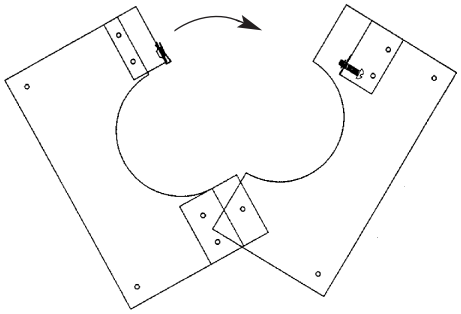
Factory supplied retaining "cinch" plates hold the damper within the ceiling opening. The plates must overlap the opening a minimum of ½" (13). The plate fits snugly around the integral sleeve. The plates are fastened directly to the ceiling.

RETAINING "CINCH" PLATE



Note:
Diameter + 6"
(152) = plate size

½" (13) Minimum Overlap of Wall/Floor Opening



REFER TO THE FSDR25 AND FSDR25C INSTALLATION INSTRUCTIONS FOR COMPLETE INSTALLATION DETAILS.

SUGGESTED SPECIFICATION

Corridor fire smoke dampers 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 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. Pressure drop shall not exceed .04" w.g. at 1000 CFM on a 12" diameter (305) damper. 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 Corridor fire smoke 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 shall be strengthened with a roll formed groove at one end. Damper blade shall consist of 2 pieces of 20 gage (1.0) galvanized steel, equivalent to 14 gage, 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 FSDR25C.

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

RUSKIN®

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