

3900 Dr. Greaves Rd.

Kansas City, MO 64030

(816) 761-7476

FAX (816) 765-8955

STYLE G

•

FSD60, FSD60-2, FSD60-V, FSD37, FSD36, FSD35

11/2 HOUR UL555 RATED, UL555S LEAKAGE CLASS 1, 2, 3 RATED

APPLICATION

Style G combination fire/smoke dampers feature the damper offset in a sleeve with 3/4" (19) full length grille mounting flanges shipped loose for field installation. The damper fits flush in the wall opening and the customer supplied grille installs over and completely conceals the mounting flanges.

STANDARD CONSTRUCTION

FRAME

5" x 16 gage (127 x 1.6) galvanized, hat-shaped channel, structurally superior to 13 (2.3) gage channel frame.

BLADES

Airfoil-shaped or triple-v groove depending on damper model. Refer to the specific model spec sheet.

BEARINGS

Stainless steel sleeve, pressed into frame.

JAMB SEALS

Stainless steel, flexible metal compression type.

BLADE SEALS

Silicone edge type for smoke seal to $450^\circ F$ (232°C) and galvanized steel for flame seal to 1900°F (1038°C). FSD35 Style G has no blade seals.

LINKAGE

Concealed in frame.

CONTROLLED CLOSURE DEVICE

(HEAT-ACTUATED)

EFL (Electric Fuse Link) – $165^{\circ}F$ (74°C) standard. 212°F (100°C), 250°F (121°C), 350°F (177°C) available. PFL (Pneumatic Fuse Link) – $165^{\circ}F$ (74°C) standard. 212°F (100°C), 285°F (141°C).

DAMPER SIZES

MINIMUM SIZE

FSD60, FSD37 (Leakage Class 1) FSD60-2, FSD36 (Leakage Class 2) – 8"w x 6"h (203 x 152) FSD60-V (Leakage Class 2) – 6"w x 8"h (152 x 203) FSD35 (Leakage Class 3) – 5"w x 6"h (127 x 152)

MAXIMUM SIZE

FSD60, FSD60-2, FSD37, FSD36, FSD35 – 32"w x 48"h (813 x 1219) or 48"w x 32"h (1219 x 813) FSD60-V – 48"w x 32"h (1219 x 813)

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.
- GA, Grille Access Type for through the grille access to actuator and control devices.
- OW, Out of Wall Type for out of wall/floor installations.
- Sleeve of various lengths and gages 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.

Style G dampers meet the requirements for combination 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 (refer to specific model data sheet for CSFM listing).
- New York City (BSA Listing #176-82-SM)

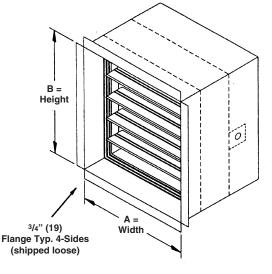


UL CLASSIFIED

UL555 Listing R5531, UL555S Listing R5531

FEATURES

- The damper offers:
- EFL (Electric Fuse Link) or PFL (Pneumatic Fuse Link) heatactuated 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.



NOTES

- 1. Dampers are furnished approximately 1/4" (6) smaller than given opening dimensions.
- 2. Dimensions shown in parentheses () indicate millimeters.

- 1. Size the damper (A x B).
- 2. Determine the wall thickness. The minimum wall thickness is 5" (127).
- Determine the grille depth. Grille must not exceed 1¹/₂" (38). Consult Ruskin when grilles greater than 1¹/₂" (38) are used.
- 4. Choose the minimum sleeve length required from the table below.Table is based on a 5" (127) wall. For walls with depths greater than 5" (127), add the difference to the sleeve length indicated (see the example).

EXAMPLE:

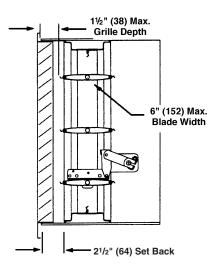
Application requires a damper which is less than 20" (508) tall supplied with an electric actuator and a TS-150. The wall depth is 5" (127), therefore, the required sleeve length is 17" (432). If the wall depth is 8" (203) deep, the required sleeve length is 20" (508).

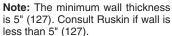
| ACTUATOR TYPE | SLEEVE LENGTH (MINIMUM) | | | |
|-----------------------|-------------------------|--------------------------------------|---------------------------------------|--|
| | WITH EFL/PFL | | WITH TS150/SP100 | |
| ELECTRIC | UNITS OVER 10" (254) | 10" (254) HIGH AND UNDER UNITS | UNITS OVER 21" (533) (see note) | 21" (533) HIGH AND UNDER UNITS (see note) |
| All models (see note) | 14" (356) | 17" (432) | 14" (356) | 17" (432) |
| | | | | |
| PNEUMATIC | UNITS OVER 10" (254) | 10" (254) HIGH AND UNDER UNITS | UNITS OVER 28" (711) | 28" (711) HIGH AND UNDER UNITS |
| 331-4827 | 14" (356) | 17" (432) | 14" (356) | 17" (432) |
| | | | UNITS OVER 32" (813) | 32" (813) HIGH AND UNDER UNITS |
| 331-2961 | 14" (356) | 17" (432) | 14" (356) | 17" (432) |
| | | | UNITS OVER 40" (1016) | 40" (1016) HIGH AND UNDER UNITS |
| 331-3060 | 14" (356) | 17" (432) | 14" (356) | 17" (432) |

Note: The 21" (533) dimension becomes 32" (813) when the MS4120, MS8120, GGD221 or FSNF120 are utilized.

DAMPER SLEEVE DIMENSIONAL DATA

FSD60 SHOWN







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