



**MODEL FSD-RD-211 TRUE ROUND  
COMBINATION FIRE / SMOKE DAMPER**  
U.L. 555 CLASSIFIED 1 1/2 HOURS / U.L. 555S CLASSIFIED CLASS I

U.L. 555S CLASSIFIED  
AT 250°F OR 350°F  
DEPENDING UPON  
MOTOR/OPERATOR  
\*SEE MOTOR/OPERATOR SCHEDULE

**Standard Construction:**

**Frame:** Roll-formed galvanized steel, 16" (406 mm) long, integral sleeve.

**Blades:** Double thickness galvanized steel, 14 ga. equivalent with welded channel re-inforcement.

**Bearings:** Bronze Oilite press-fit into frame.

**Axles:** 3/8" (9.5 mm) square plated steel.

**Jackshaft:** 1/2" (12.7 mm) diameter plated steel.

**Seals:** Pressure sensitive 450°F silicone sandwiched between blades.

**Linkage:** Jackshaft to blade.

**Fusible Link:** 165°F standard, 212°F available.

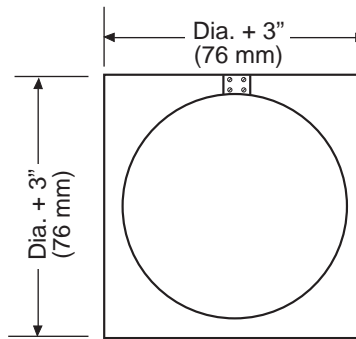
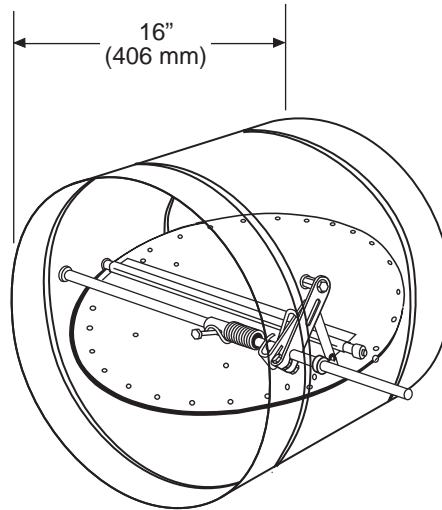
**Spring:** Stainless steel.

**Finish:** Mill galvanized.

**Sizes:** 8" - 24" (203 mm - 610 mm) diameter.

**Retaining Plates:** 2-20 ga. galvanized steel complete with angle clips.

- Note:**
- Retaining plate on operator side of damper is installed at the factory.
  - Dampers are furnished approximately 1/8" (3.2 mm) smaller than given duct dimensions.



Retaining Plate (2 Supplied)



LISTED AND LABELLED BY:



**FEATURES**

- The FSD-RD-211 series Combination Fire/Smoke Dampers have been designed and tested to exceed all U.L., U.L.C. and N.F.P.A. requirements for fire dampers as well as smoke dampers. They are intended for use where building codes call for the fire damper to also operate as a smoke damper.

- U.L. 555 and U.L.C. S112 listed and labelled as a 1-1/2 hour fire damper.

- U.L. and U.L.C. listed for vertical and horizontal mountings.

- U.L. 555S / U.L.C. S112.1 listed and labelled as a Leakage Class I rated Smoke Damper with 2,000 FPM airflow in both directions. Class I provides for a maximum leakage of 8 cfm per sq. ft. at 4.0 inches static pressure. As we are constantly expanding our U.L./U.L.C. listings, we suggest you contact the factory for current information.

- Actuator shaft permits operation by any standard electric or pneumatic damper motor. Fusible link/actuator (DLT-1) provides an automatic override system to close and latch damper in the fire mode. Also available with automatic resettable/override release options: Model STO/R (single thermostat) and DTO/R (dual thermostat override) to provide the fire fighter with complete discretionary control of smoke functions during a fire/smoke emergency. (See STO/R and DTO/R submittal drawings for complete details). Spring return type damper motor controlled by a smoke detector is recommended to provide proper operation in the smoke mode.

**SUGGESTED SPECIFICATION:**

Combination Fire/Smoke Dampers shall be Model: FSD-RD-211 by NCA Manufacturing. Fire/Smoke Dampers shall bear the Underwriters' Laboratories labels for both Fire Dampers and Smoke Dampers. U.L. 555S / U.L.C. S112.1 rating shall be Class I with leakage in cfm per sq. ft. not to exceed 8 cfm per sq. ft. at 4.0 inches static pressure for any size. Units shall also be listed to operate at a minimum of 2,000 FPM at 350°F (177°C).

**Manufacturer's Recommendations**

All moving parts of the damper must be inspected and cycled at intervals not greater than every six months and in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.

Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.

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FSD-RD - 02-05

Project:

Contractor:

Location:

Address:

Architect:

P.O. Number:

Engineer:

Date:

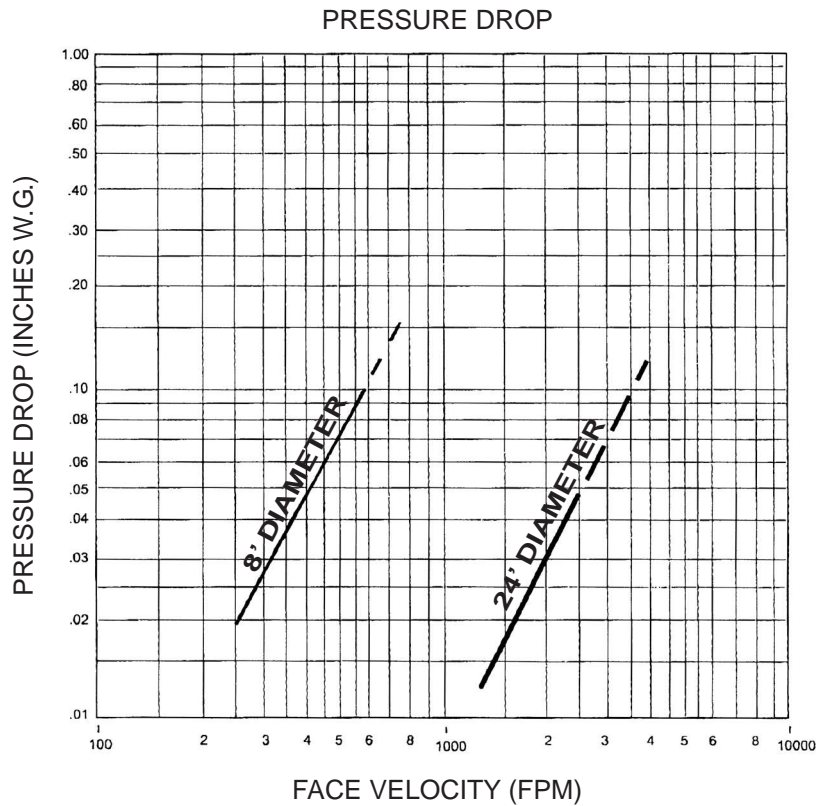


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**PERFORMANCE DATA**

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Pressure drop testing was done by an independent laboratory to AMCA Standard 500-D, Fig. 5.3 ductwork upstream & downstream.



FSD-RD - 02-05

LEAKAGE OBTAINED IN TEST OF 8" DIAMETER AND 24" DIAMETER  
WAS LESS THAN 1 CFM/SQ. FT.