Code No. LIT-1900206
Issued July 15, 2013

FD-1600 1-1/2 Hour Dynamic Rated Multi-Blade Fire Dampers

Description

The FD-1600 Fire Damper is designed to prevent the spread of fire with a 1-1/2 hour fire rating for use within a dynamic HVAC system during life safety situations.

The FD-1600 is Underwriters Laboratories Inc.® (UL) listed and tested to the latest UL-555 standards.

Refer to the *FD-1600 1-1/2 Hour Dynamic Rated Multi-Blade Fire Dampers Product Bulletin (LIT-1201630)* for important product information.

Features

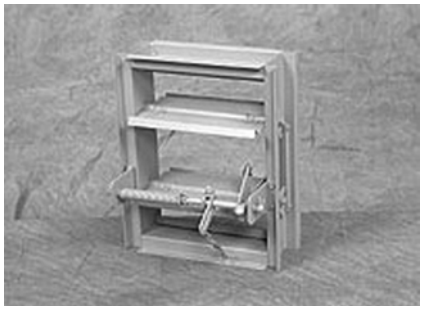
- 1-1/2 hour fire rating
- 5 inch x 1 inch hat channel frame reinforced with corner braces. Three-year warranty on materials and workmanship.
- shipping in as little as five working days from order entry

To Order

Specify the code number from the selection chart. Not all combinations are available.For information about available combinations, please contact your Johnson Controls representative.

FD-1600 fire dampers are available in one inch increments. Actual damper size is 1/4 in. less than nominal. All Johnson Controls® damper dimensions are from the outside edges of the damper frame.

All Johnson Controls Dampers are built to order, just in time, and cannot be returned due to customer ordering errors. All dampers are backed by a 3-year warranty, which covers defects in materials or workmanship when used in our defined applications. Refer to terms and conditions of sale for specifics.



FD-1600 1-1/2 Hour Dynamic Rated Multi-Blade Fire Dampers

FD-1600 Fire Damper Selection Chart

Code Number	F	O	W		N	-	w	w	w	x	h	h	h		

Application	F = Fire
Blade Operation	O = Opposed
Blade Type	W = 16 gauge galvanized steel
Heat-actuated Device	H = 350°F Fusible Link L = 165°F Fusible Link M = 212°F Fusible Link
Actuator Type	N = None
Width Dimensions	008 to 072, 1 inch increments
Height Dimensions	008 to 096, 1 inch increments
Factory-installed Options	E = Exact whole inch size, no undercut F = Angle L = Sleeve, 20 gauge, 20 in. length V = Transition to round or oval duct

Note: Maximum single panel size is 36 inches x 48 inches
Note: Not all combinations are available.

FD-1600 dampers include standard 16-gauge galvanized Triple-V steel blades and stainless steel bearings with the linkage concealed in the frame.

Example: FOWLN-020x020 is a fire damper with 16 gauge blades in opposed operation, with nominal dimensions of 20 inches wide x 20 inches high and 165°F fusible link.

Construction

Part	Construction
Frame	5 in. deep x 16-gauge galvanized steel
Blades	16-gauge galvanized steel, Triple V All blades are 6 in. nominal width and 8 in. maximum width.
Linkage	Concealed in the frame
Blade Pin	3/8 in. sq. steel, zinc plated
Bearings	Stainless steel
Side Seal	Flexible metal compression, stainless steel
Blade Seal	Stainless steel with extruded silicone
Sleeve	20-gauge galvanized steel, 20 in. long (optional)

Note: The optional sleeve is designed for use with standard breakaway connectors. Mounting angles are provided with the damper.

Performance Specifications

FD-1600 1-1/2 Hour Dynamic Rated Multi-Blade Fire Dampers	
Maximum Dynamic Rating	4 in. w.c. static pressure at 2000 fpm in either direction of air flow
Temperature Rating	165°F (74°C), 212°F (100° C), or 285°F (141°C) fusible link
Agency Listings	UL/cUL
Approx. Weight	7 lb per square foot

Note: Dampers are tested at an AMCA Certified Laboratory using instrumentation and procedures in accordance with AMCA Standard No. 500-89, Test Methods for Louvers, Dampers, and Shutters.

Submittal Specifications

Fire 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 and shall be 1-1/2 hour fire rated dampers for use where the duct passes through a fire rated barrier of less than three hours in accordance with the latest version of UL555S.

As part of the UL qualification, fire dampers shall have demonstrated a capacity to close under HVAC system operating conditions, with pressures up to 4 inches w.c. in the closed position and 2000 fpm air velocity in the open position.

The fire damper must be installed in accordance with the Standard NFPA-90B and Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) Fire Damper Guide, at the point where a duct passes through a required fire barrier. The blades, when closed, shall be within the plane of the fire barrier (wall or floor).