

Leakage Rated Ceiling Radiation Damper
UL 555S Leakage Class I
Application

Model CRD-501 is a round ceiling radiation damper with low leakage. The CRD-501 has been qualified to 3,000 fpm (15.2 m/s) and 4 in. wg (1.0 kPa) for operational closure in emergency smoke control situations, for use in HVAC system applications.

Ratings

Leakage: Class I
Pressure: 4 in. wg (1.0 kPa) - differential pressure
Maximum Velocity: 3000 fpm (15.2 m/s)
Temperature: 350°F (177°C) depending on the actuator.

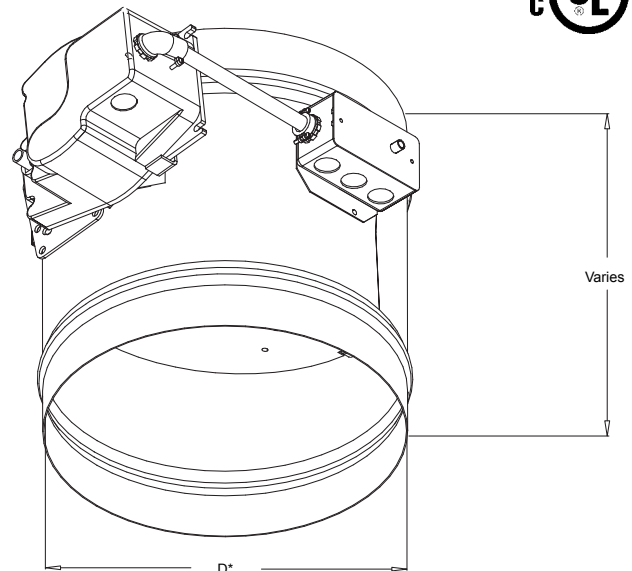
Construction	Standard	Optional
Frame Material	Galvanized steel	-
Frame/Sleeve Thickness	20 ga. (1mm)	16 ga. (1.5mm), 14 ga. (2mm)
Blade Material	Double skin galvanized steel	-
Blade Seal	Silicone	-
Blade Thickness	14 ga. (2mm) equivalent	
Axle Bearings	Bronze	Stainless steel
Axle Material	1/2 in. (13mm) Plated Steel	-
Closure Device	RRL	-
Closure Temperature	165°F (74°C)	212°F (100°C)

Diameter	Minimum	Maximum
in. (mm)	6 in. (152)	12 in. (305)

Model CRD-501 meets the requirements for smoke dampers established by:

National Fire Protection Association
 NFPA Standards 92A, 92B & 105
IBC International Building Codes

“UL CLASSIFIED (see complete marking on product)”
“UL CLASSIFIED to Canadian safety standards (see complete marking on product)”
 Standard 555S (Listing #R13317)
 Standard 555C (Listing #R13446)



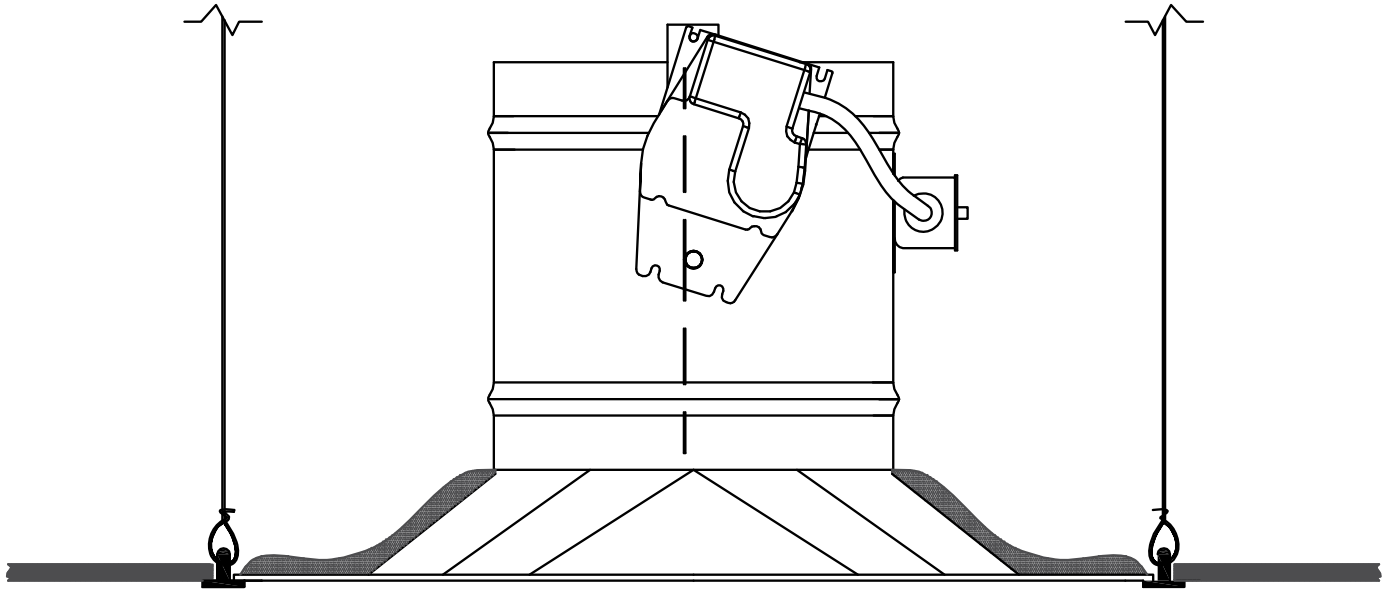
* D dimension furnished approximately 1/8 in. (3mm) undersize.

Optional Features:

- Electric or pneumatic actuators to accomplish smoke management and system functions.
- Clean wrap

Diameter in. (mm)	Frame/sleeve Length in. (mm)
<=7 (177)	9.75 (247)
> 7 and <=8 (>177 and <=203)	10.25 (260)
> 8 and <=9 >203 and <=228)	10.75 (273)
> 9 and <=10 (>228 and <=254)	11.25 (286)
> 10 and <=11 (> 254 and <=279)	11.75 (298)
> 11 and <=12 (> 279 and <=305)	12.25 (311)

Installation and Specifications



This is a typical Lay in Diffuser application. See Installation instructions for more application information.

Specifications

True Round Leakage Rated Ceiling Radiation Dampers meeting the following specifications shall be furnished and installed where shown on plans and/or as described in schedules. Dampers shall meet the requirements of the latest edition of NFPA 92A, 92B & 105.

Dampers shall be tested, rated and labeled in accordance with the latest edition of UL Standards 555S. Dampers shall be UL labeled for use in dynamic systems. The damper shall have a dynamic closure airflow rating equal to or greater than the airflow at the damper's installed location and a dynamic closure pressure rating of 4 in. wg (1kPa).

Dampers shall have a UL 555S leakage rating of Class I and a temperature rating of 250° F (121°C) minimum. Dampers shall have a UL555S operational airflow rating equal to or greater than the airflow at its installed location and an operational pressure rating of 4 in. wg (1 kPa). Damper actuators shall be factory mounted and qualified for use with the damper in accordance with UL555S.

Damper actuators shall be (specified select one of the following) electric type for 120 (or 24) volt operation or pneumatic type for 25 psi minimum operation (30 psi maximum). Manufacturer's submittal data shall indicate actuator space requirements around the damper.

All UL555S operational ratings and leakage ratings shall be qualified for airflow and pressure in either direction through the damper. UL ratings shall allow for mounting damper vertically or horizontally.

The Damper Manufacturer's submittal data shall certify all air performance pressure drop data is licensed in accordance with the AMCA certified ratings program for test figures 5.2, 5.3, and 5.5. Damper air performance data shall be developed in accordance with the latest edition of AMCA Standard 500-D.

Basis of design is Greenheck's model CRD-501.

