Code No. LIT-1900529
Issued July 15, 2013

RL-1000 10-Gauge Round Control Damper

Description

Since 1905, Johnson Controls has developed and refined air control products by providing the highest quality control dampers that fit your application and size requirements. Now we are including round industrial style dampers in our product offering.

RL-1000 dampers are available in sizes up to 60 inches (152 cm) diameter with galvanized steel or 304 stainless steel frames with no seals, neoprene seals, or silicone seals.

RL-1000 dampers are heavy duty control dampers for medium pressure industrial and Heating, Ventilating, and Air Conditioning (HVAC) systems. These dampers are built with solid steel construction and an all-welded frame with a continuous plated steel axle. These dampers are equipped with blade seals for low leakage applications

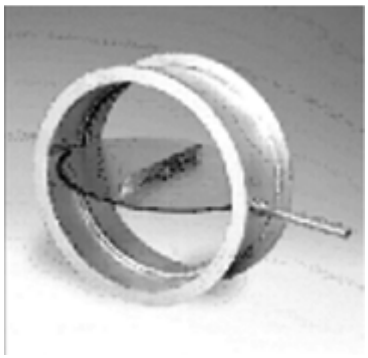
Refer to the *RL-1000 10-Gauge Round Control Damper Product Bulletin (LIT-12011432)* for important product information.

Features

- 3-Year Warranty on Materials and Workmanship
- 15 to 25 Working-Day Standard Shipping after Order Entry

Repair Information

If the RL-1000 Heavy Duty Round Control Damper fails to operate within its specifications, replace the unit. For a replacement RL-1000 Damper, contact the nearest Johnson Controls® representative.



RL-1000 Heavy Duty Round Control Damper

Selection Chart

	Code Number	FIELD					
		1	2	3	4	5	6
Product Family	R = Round Dampers	R	G	G	d	d	X
Application	G = Control – 10 gauge shroud						
Shroud/Seal	B = Galvanized/No Seals N = Galvanized/Neoprene Seals G = Galvanized/Silicone Seals S = 304 Stainless Steel/Silicone Seals						
dd = Diameter	04 in. through 60 in. in increments of 1 in.						
Actuator	M = Manual Locking Quadrant N = None						

Performance Data

To determine leakage at static pressure differentials higher than 1 inch water gage, multiply leakage at 1 inch (determined from the Damper Leakage Table) by correction factor for higher static pressure (determined from the Leakage Correction Factor Table).

Leakage ratings are based on AMCA Standard 500 using Test Setup Apparatus Figure 5.5. Torque applied holding damper closed at 10 lb·in/sq. ft (1.13 N·m/m^3) of damper with minimum of 20 lb·in (2.26 N·m).

Dampers may tolerate higher pressures and velocities than those listed here. Conservative ratings are presented intentionally in an effort to avoid misapplication. Consult your Johnson Controls® representative when damper is to be applied in conditions exceeding recommended maximums.

Damper Leakage

Damper Width	Maximum System Pressure, in. w.g. (kPa)	Maximum System Velocity, fpm (mps)	Leakage with Seals[1]		Leakage without Seals[1]	
			% of Maximum Flow	Total cfm (lps)	% of Maximum Flow	Total cfm (lps)
60 in. (1,524 mm)	6.0 (1.5)	4,000 (20.3)	0.057	45 (21.2)	0.286	225 (106)
48 in. (1,219 mm)	6.0 (1.5)	4,000 (20.3)	0.069	35 (16.5)	0.2348	175 (82.6)
36 in. (914 mm)	8.0 (2.0)	5,000 (25.4)	0.079	28 (13.2)	0.353	125 (59)
24 in. (610 mm)	8.0 (2.0)	6,000 (30.5)	0.132	25 (11.8)	0.450	85 (40.1)
12 in. (305 mm)	10.0 (2.48)	6,000 (30.5)	0.318	15 (7.08)	1.060	50 (23.6)

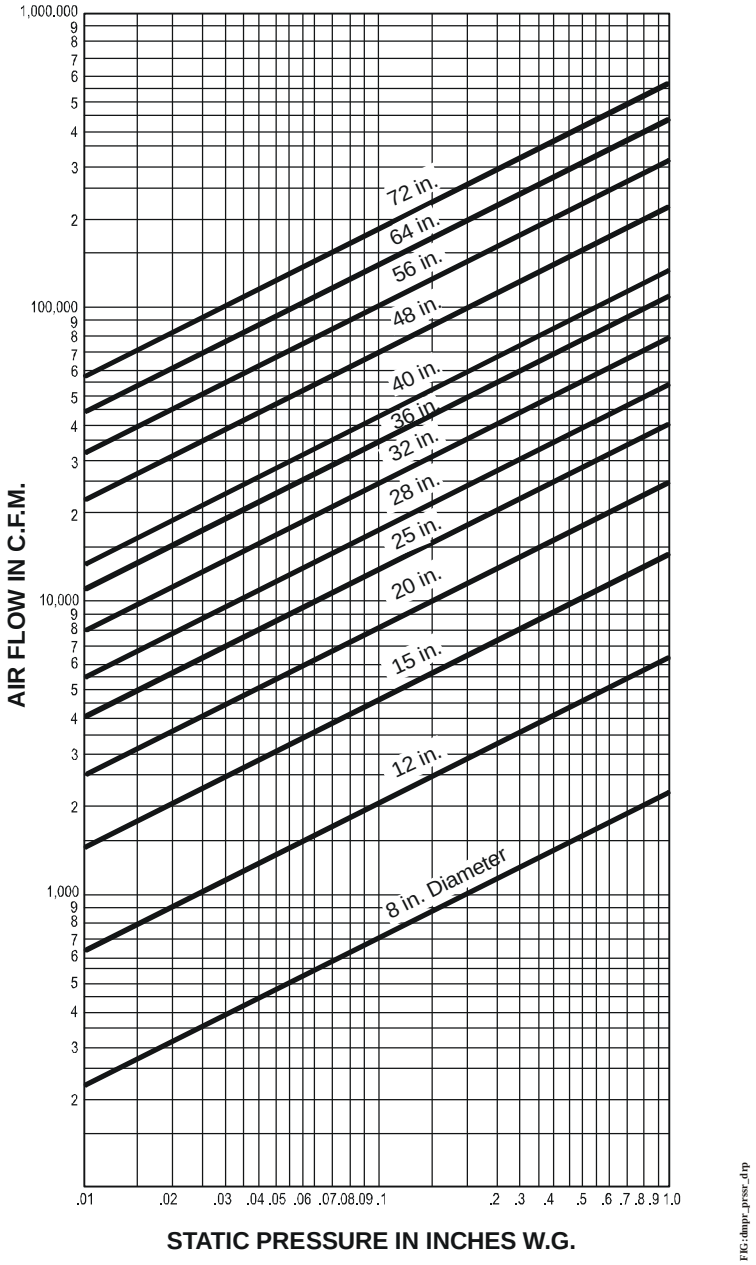
1. Leakage information based on pressure differential of 1 inch w.g. (0.25 kPa).

Leakage Correction Factor

Static Pressure, in. w.g. (kPa)	1 (0.25)	2 (0.50)	3 (0.75)	4 (1.0)	5 (1.25)	6 (1.50)	7 (1.75)	8 (2.0)	9 (2.25)	10 (2.50)
Correction Factor	1.0	1.4	1.7	2.0	2.2	2.4	2.6	2.8	3.0	3.2

RL-1000 10-Gauge Round Control Damper (Continued)

Performance curves (see Pressure Drop) based on AMCA Standard 500 using test setup apparatus figure 5.3 (damper installed with duct upstream and downstream). Static pressure and CFM are corrected to .075 lb/cu ft air density.



Pressure Drop

 www.johnsoncontrols.com