

SUBMITTAL DATA

Precision/Flow™ SYSTEM CRB-10-E

Constant Volume Regulator (for exhaust or return applications)

Application and Design:

Precision/Flow™ System CRB-10-E is a factory set constant volume control damper composed of fire retardant plastics. It contains a self regulating airfoil damper blade and spring piston design to maintain a factory preset air volume flow. These dampers are designed to operate in a pressure range of 0.20" w.g. to 0.80" w.g. The regulators automatically adjust for variable duct pressures caused by building pressure, thermal stack effect, dust build-up, etc. This system also creates a very cost effective answer to balancing air systems for HVAC exhaust ventilation in high rise buildings, without the requirement for on-site balancing, electrical / pneumatic controls or sensors. System CRB-10-E requires no standard maintenance under normal conditions.

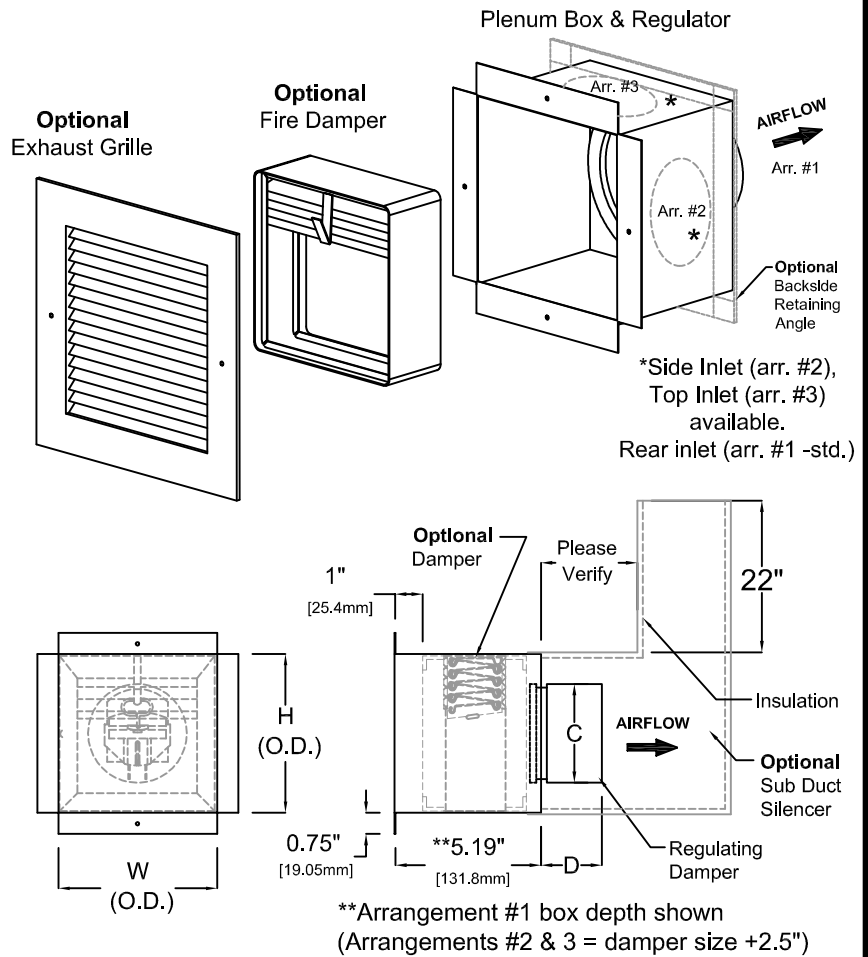
STANDARD CONSTRUCTION:

CRB Plenum: 24 GA Galvanized Steel
 20 GA if Fire Damper Required
 Regulating Damper: UL94V-0 ABS Plastic
 UL 2043 classified, UL File #R38307

OPTIONS:

- Add Exhaust Grille
 - Removable Grille (No Screw Holes)
Wedged in Via Stainless Spring Steel
- Grille and Box Powder Coated with Anti-Microbial Agent Added
- 1½ HR Fire Damper
 - Static
 - Dynamic
- 3 HR Fire Damper
 - Static
 - Dynamic
- Additional Box Depth
- Retaining Angles (For Backside of Box)
- Extra Low Pressure Systems (0.10" w.c.)
- Silencer Sub Duct 22" Long
- Alternate inlet location (fire damper option not available)
 - Side (arr. #2)
 - Top (arr. #3)

Range of Operation Static Pressure	
Minimum	0.20" w.c.
Maximum	0.80" w.c.



Box Size	Damper (nominal)	W	H	C	D
6x4 (152.4x101.6)	4 (101.6)	6 (152.4)	4 (101.6)	3.8 (96.5)	2.4 (61)
6x6 (152.4x152.4)	4 (101.6)	6 (152.4)	6 (152.4)	3.8 (96.5)	2.4 (61)
6x6 (152.4x152.4)	5 (127)	6 (152.4)	6 (152.4)	4.5 (114.3)	3 (76.2)
8x8 (203.2x203.2)	4 (101.6)	8 (203.2)	8 (203.2)	3.8 (96.5)	2.4 (61)
8x8 (203.2x203.2)	5 (127)	8 (203.2)	8 (203.2)	4.5 (114.3)	3 (76.2)
8x8 (203.2x203.2)	6 (152.4)	8 (203.2)	8 (203.2)	5.5 (139.7)	3.2 (81.3)
10x10 (254x254)	6 (152.4)	10 (254)	10 (254)	5.5 (139.7)	3.2 (81.3)
10x10 (254x254)	8 (203.2)	10 (254)	10 (254)	7.2 (182.9)	3.2 (81.3)
12x12 (304.8x304.8)	8 (203.2)	12 (304.8)	12 (304.8)	7.2 (182.9)	3.2 (81.3)
12x12 (304.8x304.8)	10 (254)	12 (304.8)	12 (304.8)	8.9 (226.1)	4.6 (116.8)
14x14 (355.6x355.6)	10 (254)	14 (355.6)	14 (355.6)	8.9 (226.1)	4.6 (116.8)

Consult factory for sizes not shown

Sizes in inches (millimeters)

Job Name: _____
 Location: _____
 Architect: _____
 Engineer: _____
 Contractor: _____

Precision/Flow™ SYSTEM CRB-10-E
 (Constant Volume Regulator for Exhaust or Return Applications)

CRB-10-E-1 (arrangement #1, standard)
 CRB-10-E-2 (arrangement #2)
 CRB-10-E-3 (arrangement #3)

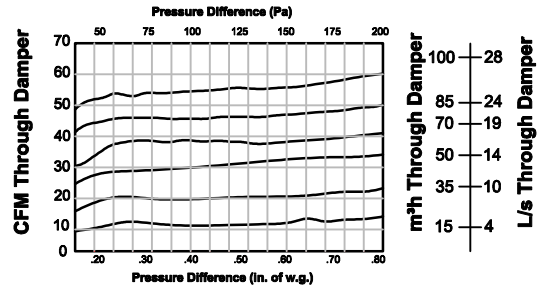
DRAWN BY: CLJ	DATE: 8-10-10	REV. DATE: 9-2-16	REV. NO. 19	APPROVED BY: BGT	DWG. NO.: L-3
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SYSTEM CR PERFORMANCE DATA

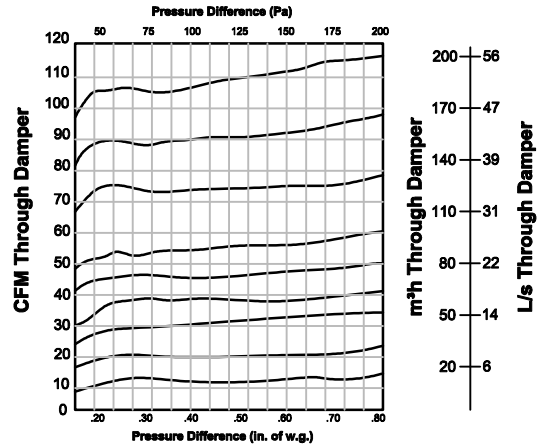
The charts to the right, show the approximate constant volume airflow through the damper at a given pressure differential. The ideal pressure differential across the damper to provide the desired factory set constant airflow volume is between 0.2" w.g.(50 Pa) and 0.8"w.g. (200 Pa). As shown if the pressure across the damper falls below 0.2" w.g. (50 Pa) then the airflow volume will be reduced. Likewise if the pressure across the damper increases to over 0.8" w.g. (200 Pa), then the airflow volume will be increased. Please note that these dampers are factory set to the specific airflow. They cannot be field modified to another desired airflow. The graphs shown are averages and can vary by 5%. The maximum air temperature is 140°F (60° C). The charts shown are at 68°F (20°C) and 1 atmosphere pressure.

**Damper size:
4" [101.6mm]
nominal
(100m)**



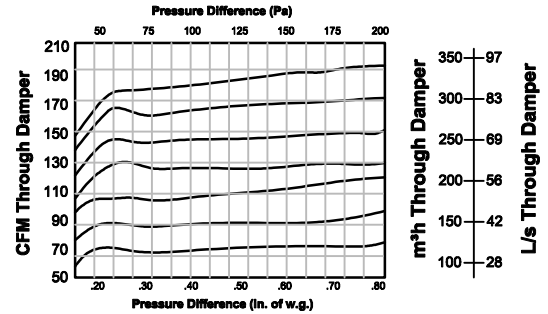
Note: Dampers are pre-set at the factory for the specified cfm

**Damper size:
5" [127mm]
nominal
(125 mm)**



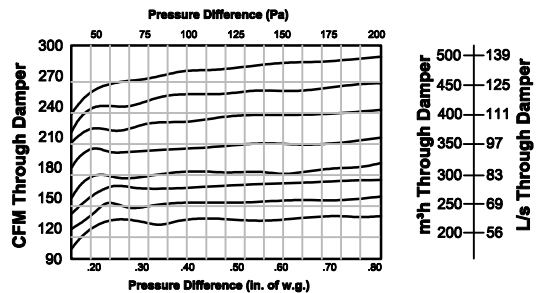
Note: Dampers are pre-set at the factory for the specified cfm

**Damper size:
6" [152.4mm]
nominal
(150 mm)**



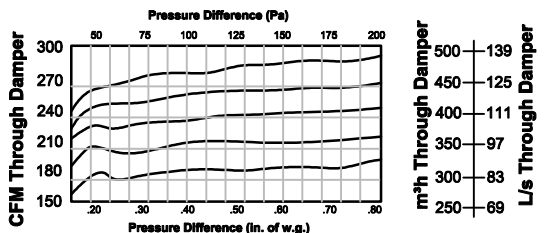
Note: Dampers are pre-set at the factory for the specified cfm

**Damper size:
8" [203.2mm]
nominal
(200 mm)**



Note: Dampers are pre-set at the factory for the specified cfm

**Damper size:
10" [254mm]
nominal
(250 mm)**



Note: Dampers are pre-set at the factory for the specified cfm

Range of Operation Static Pressure	
Minimum	.2" w.g.
Maximum	.8" w.g.

DRAWN BY: BR/CLJ	DATE: 11-26-14	REV. DATE:	REV. NO.	APPROVED BY: CLJ
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