

SUBMITTAL DATA

Precision/Flow™ SYSTEM CRB-10-S Constant Volume Regulator (for supply applications)

Application and Design:

Precision/Flow™ System CRB-10-S 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" wg to 0.80" w.g. They 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 constant volume low pressure systems, without the requirement for on-site balancing, electrical / pneumatic controls or sensors. System CRB-10-S requires no standard maintenance under normal conditions.

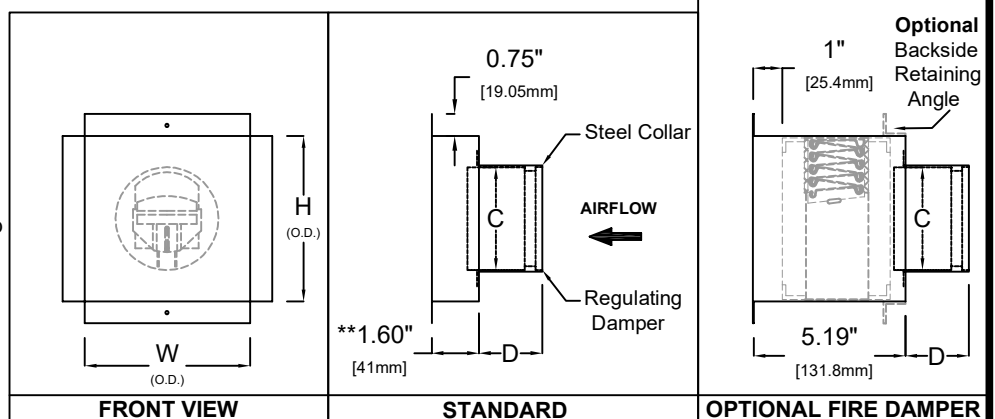
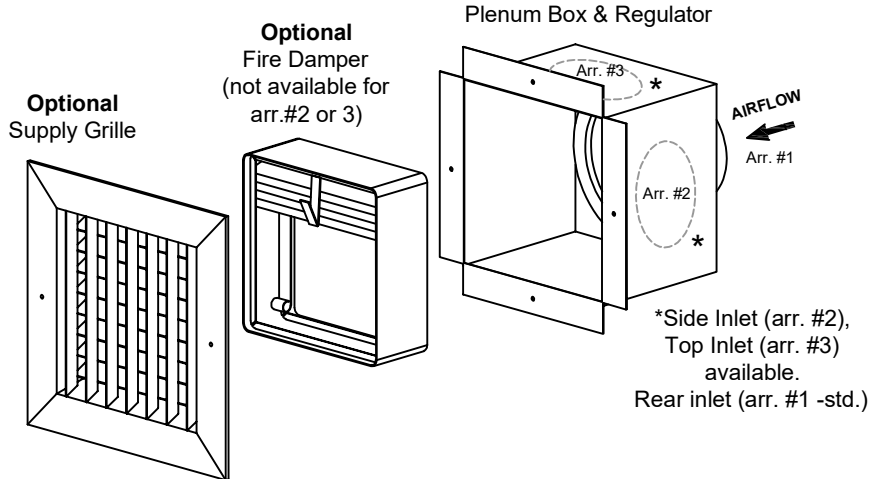
STANDARD CONSTRUCTION:

CRB Sleeve: 24 GA Galvanized Steel, 1.6" Deep
20 GA if Fire Damper Required
Regulating Damper: UL94V-0 ABS Plastic
UL 2043 classified, UL File #R38307

OPTIONS:

- Add Supply Grille (Double Deflection)
 - Removable Grille (No Screw Holes) Wedged in Via Stainless Spring Steel
- Grille & Box Powder Coated with Anti-Microbial Agent Added
- 1½ HR Fire Damper
 - Static
 - Dynamic
- 3 HR Fire Damper
 - Static
 - Dynamic
- Optional Ceiling Damper (arr. #1 Only)
- Additional Box Depth
- Retaining Angles (Backside Only)
- 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.



**Arrangement #1 box depth shown
(Arrangements #2 & 3 Depth = damper size +2.5")

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-S

(Constant Volume Regulator for Supply Applications)

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

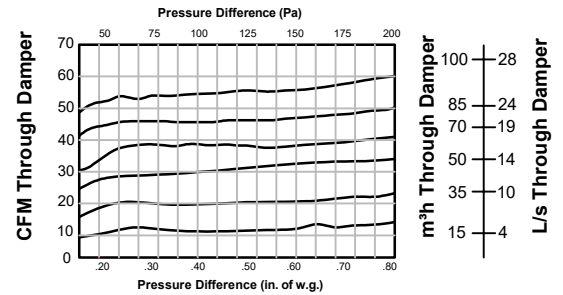
DRAWN BY:	DATE:	REV. DATE:	REV. NO.	APPROVED BY:	DWG. NO.:
VD	9-17-14	6-25-21	16	CLJ	L-4



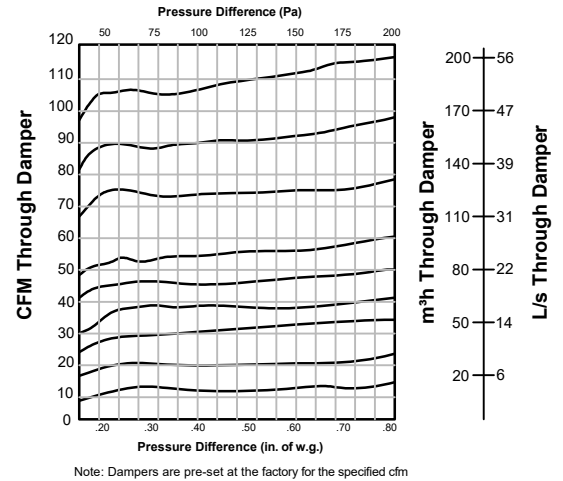
SYSTEM CR PERFORMANCE DATA

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.

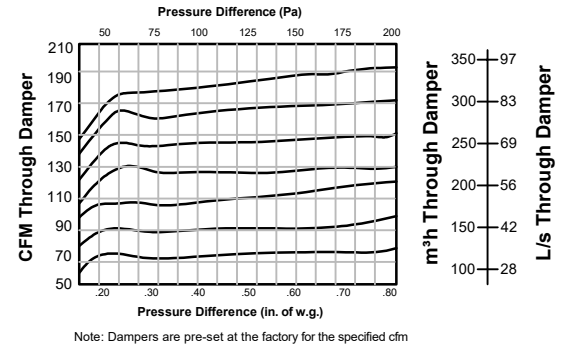
Damper size:
4" [101.6mm]
nominal
(100m)



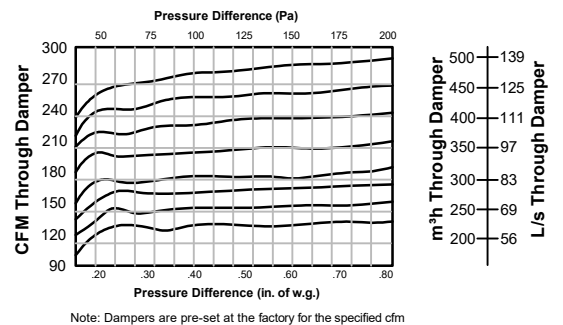
Damper size:
5" [127mm]
nominal
(125 mm)



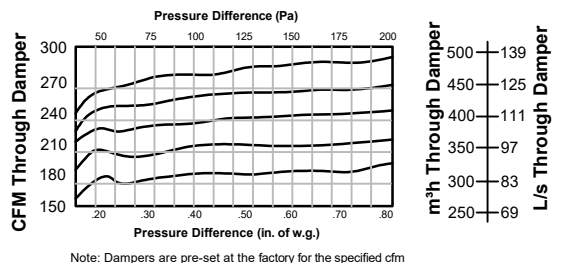
Damper size:
6" [152.4mm]
nominal
(150 mm)



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



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



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
---------------------	-------------------	------------	----------	---------------------