



Young Regulator Co.

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Submit CVRF5 1-2019

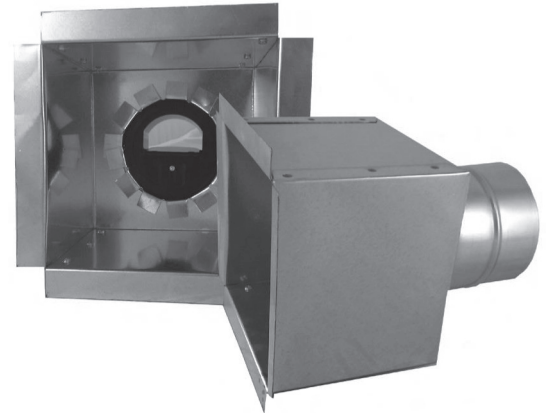
Model CVRF5

Constant Volume Regulator in

Deep Back Exit Box

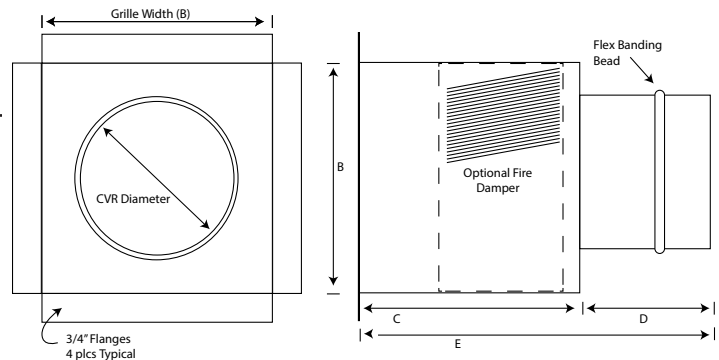
Application and Design

Constant Volume Regulators (CVR) are designed to save energy and money by preventing over-ventilating or over-serving spaces. They are engineered with a specifically shaped free area and a wing-like damper. When pressure increases, the increased flow causes the damper to rise and block more of the free area. The CVR is adjustable. Each size unit can provide a range of flow profiles over its rated pressure range. The product is precision molded of fire-resistant ABS plastic. Constant Volume Regulators may contribute to meeting coveted USG BC Leed Building Certification.



CVRF5 features the CVR mounted in a 5.75" deep grille Fitting with a steel sleeve to protect the CVR. It will accommodate a fire damper. Made of heavy 24 ga. galvanized steel; standard square sizes provide aesthetic flexibility and cost savings.

Custom Sizes available.



PRODUCT PARAMETERS		CVR Size Flow				
Pressure Range	0.2 to 0.8 InWC	See Table on Back				
Accuracy	Desired Set point \pm 10% Below 50 CFM \pm 15%					
STANDARD CONSTRUCTION						
Sheet Metal Fitting	24 Gauge Galvanized Steel	CVR Diameter (A)	Grille LxW (B)	Enclosure Depth (C)	Collar Depth (D)	Total Depth (E)
Construction	Molded UL94 VO ABS Plastic	4	6x6	5.75	3.4	9.15
Safety Ratings	UL2043 Flame and Smoke European Fire and Smoke M1	5	6x6	5.75	3.4	9.15
		6	8x8	5.75	4.5	10.25
Mounting	Friction fit - Rubber Gasket	8	10x10	5.75	4.5	10.25
Grille	By Others	10	12x12	5.75	6	11.75

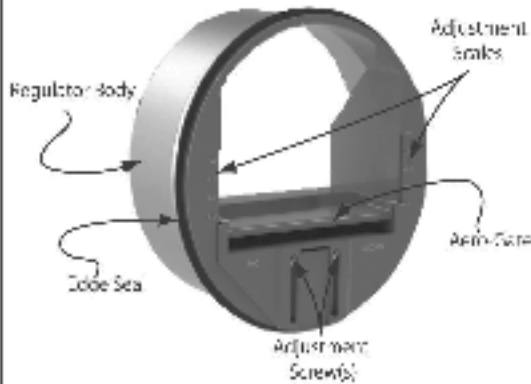
CVRF5	Supply/Return	Diameter	CFM Set Point	Grille Size	Exit Orientation	Quantity	Notes
CVRF5	S/R						
CVRF5	S/R						
CVRF5	S/R						
Project					Location		
Contractor					Design Specifier		

Constant Volume Regulators Performance Data

The CVR is a precision control. Choose the size to meet your performance criteria. Each diameter regulator is adjustable over a range of flow rates. Choose the correct part from the table below. Ensure that both fitting diameter and flow rates match your requirements.

Adjustment Process

Constant Volume Regulator (CVR)



1. Select the maximum flow rate (in CFM) from the Performance Curve Table (right).
2. Note the Adjust Scale number next to the desired flow.
3. Loosen the adjustment screw using a Torx® T-10 bit.
4. Adjust the carriage that holds the Aero-Gate up and down to line up the top of the Carriage with the desired Adjust Scale number.



In the picture the CVR is set to 50 on the Adjust Scale. That equates to 30 CFM.

5. Retighten Adjustment Screw. Finger tight is sufficient. Do not over-tighten the screw(s).

CVR Available Flow Ranges (CFM) & Sound Data

	Diameter (Inches)					
	3	4	5	6	8	10
Part #	CVR-03	CVR-04I	CVR-05I	CVR-06I		
CFM Range	10-30	10-30	10-30	10-30		
		CVR-04H	CVR-05M	CVR-06M1		
		30-60	30-60	30-60		
			CVR-05H	CVR-06M2	CVR-08I	
			60-105	60-105	60-105	
				CVR-06H	CVR-08M	CVR-10I
				105-175	105-175	105-175
					CVR-08H	CVR-10M
					175-295	175-295
						CVR-10H
						295-410

Constant Volume Regulator Combined Performance Curves

