



Young Regulator Co.

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Submit CVRF8 2020

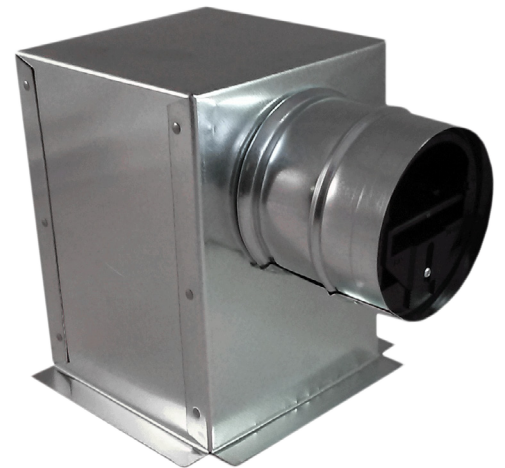
Model CVRF8

CVR installed in Low-Profile Side Tap Box sized to accommodate a Ceiling Radiation Damper

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 USGBC Leed Building Certification.

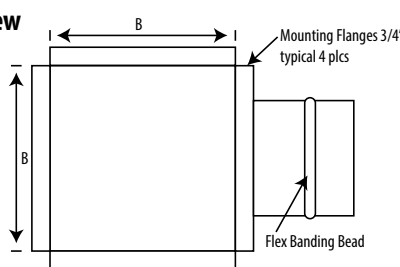
CVRF8 features the CVR mounted in a grille Fitting with a side tap steel sleeve to protect the CVR. Generally used in ceiling applications, it will accommodate a fire/adiation damper. It is made of heavy-duty 26 ga. galvanized steel; standard square sizes provide aesthetic flexibility and cost savings.



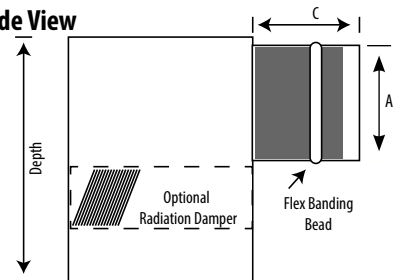
Custom Sizes available.

PRODUCT PARAMETERS	
Pressure Range	0.2 to 0.8 InWC
Accuracy	Desired Set point $\pm 10\%$ Below 50CFM $\pm 15\%$
STANDARD CONSTRUCTION	

Top View



Side View



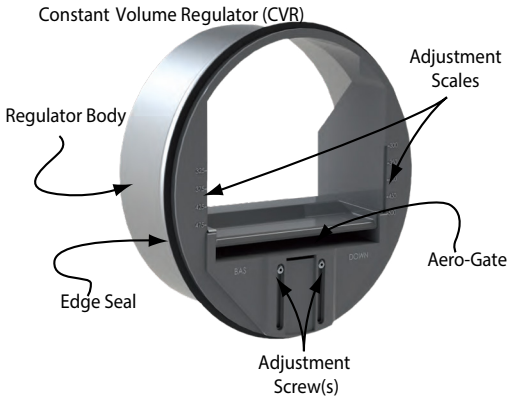
Sheet Metal Fitting	26 Gauge Galvanized Steel	CVR Diameter (A)	Grille LxW (B)	Enclosure Depth (depth)	Collar Depth (C)	CVR Size and Flow Data
Construction	Molded UL94 V0 ABS Plastic	4	6x6	8.0	3.5	See Table on Back
Safety Ratings	UL2043 Flame and Smoke European Fire and Smoke M1	5	6x6	8.0	3.5	
		6	8x8	10.0	4.5	
Mounting	Friction fit - Rubber Gasket	8	10x10	Custom Sizes Contact Factory		
Grille	By Others	10	12x12			

CVRF8	Supply/Return	Diameter	CFM Set Point	Grille Size	Exit Orientation	Quantity	Notes
CVRF8	S/R				Side		
CVRF8	S/R				Side		
CVRF8	S/R				Side		
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



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).

Young Regulator Part #	Nominal Diameter (in)	Flow Range (CFM)	Noise dB(A)	Body Diameter/Gasket (in)	Length (in)
CVR-04-L	4	10-30	26-38	3.74/4.12	2.73
CVR-04	4	30-60	26-44	3.74/4.12	2.73
CVR-05	5	60-105	33-47	4.68/5.06	3.47
CVR-06-L	6	60-105	33-47	5.69/6.07	3.55
CVR-06	6	105-175	34-45	5.69/6.07	3.55
CVR-08	8	175-300	33-53	7.41/7.79	3.55
CVR-10	10	300-420	46-55	9.56/9.94	4.95
Custom	Other Profiles available. Contact the factory for custom orders!				

Constant Volume Regulator Combined Performance Curves

