



# Young Regulator Co.

7100 Krick Rd • Walton Hills, OH 44146

P: 440-232-9700 • F: 440-232-8266

www.youngregulator.com

Submit CVRF5 7-2018

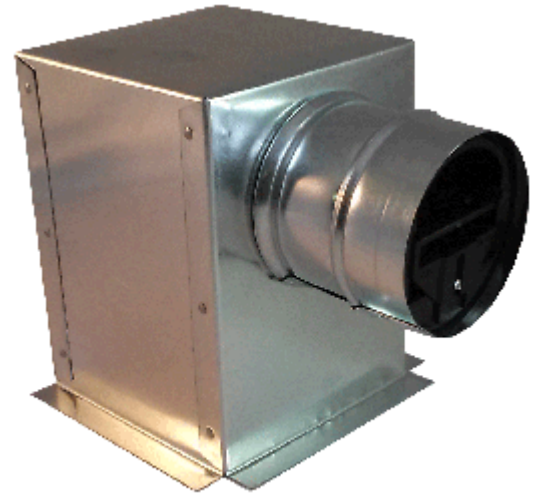
## Model CVRF8

*CVR installed in Low-Profile Side Tap Box sized to accomodate a Fire/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 accomodate a fire/radiation damper. It is made of heavy-duty 24 ga. galvanized steel; standard square sizes provide aesthetic flexibility and cost savings. Custom Sizes available.



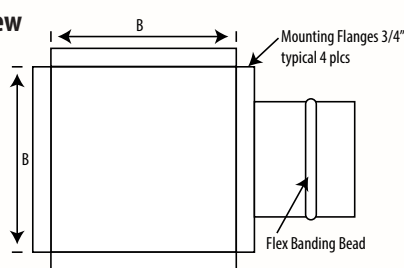
#### PRODUCT PARAMETERS

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

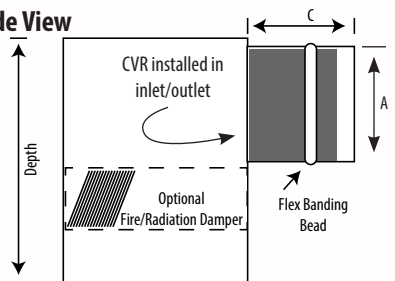
#### STANDARD CONSTRUCTION

Sheet Metal Fitting	24 Gauge Galvanized Steel
Construction	Molded UL94 VO ABS Plastic
Safety Ratings	UL2043 Flame and Smoke European Fire and Smoke M1
Mounting	Friction fit - Rubber Gasket
Grille	By Others

Top View



Side View



	Diameter (A)	(B)	(depth)	(C)	
Construction	4	6x6	8.0	3.5	See Table on Back
Safety Ratings	5	6x6	8.0	3.5	
	6	8x8	10.0	4.5	
Mounting	8	10x10	Custom Sizes		
Grille	10	12x12	Contact Factory		

CVRF8	Supply/Return	Diameter	CFM Set Point	Grille Size	Exit Orientation	Quantity	Notes
CVRF8	S/R	4" Supply	TBD	8x8	Side	144	
CVRF8	S/R	4" Return	TBD	8x8	Side	144	
CVRF8	S/R				Side		

<b>Project</b>	<b>Location</b>
<b>Contractor</b>	<b>Design Specifier</b>

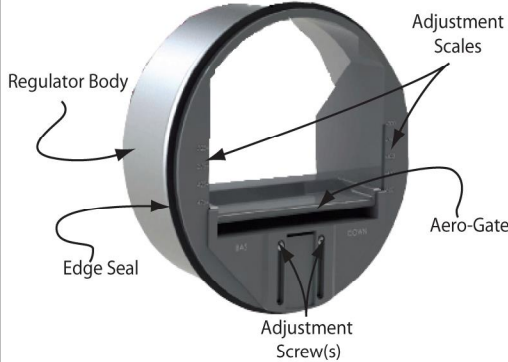
## Constant Volume Regulators Performance Data

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.

CVR Available Flow Ranges (CFM) & Sound Data						
	Diameter (inches)					
	3	4	5	6	8	10
Part #	CVR-03	CVR-04L	CVR-05L	CVR-06L		
CFM Range	10-30	10-30	10-30	10-30		
		CVR-04H	CVR-05M	CVR-06ML		
		30-60	30-60	30-60		
			CVR-05H	CVR-06MH	CVR-08L	
			60-105	60-105	60-105	
				CVR-06H	CVR-08M	CVR-10L
				105-175	105-175	105-175
					CVR-08H	CVR-10M
					175-295	175-295
						CVR-10H
						295-410

### 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).

### Constant Volume Regulator Combined Performance Curves

