



Young Regulator Co.

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Submit CVR-HP-XX 05/2015

Constant Volume Regulator

High Pressure (0.6" - 2.4" wc)

CVR-HP-xx

Application and Design

Constant Volume Regulators (CVR) are designed to save significant amounts of energy and money by limiting airflow and therefore not over-ventilating or over-serving a space. They are engineered with a specifically shaped free area and a wing-like damper (Aero-Gate)[®]. When pressure increases, the increased flow causes the Aero-Gate to rise and block more of the free area. The CVR is adjustable[®] to provide various maximum flow profiles over its rated pressure range. (See Back for performance curves) The product is precision molded of fire-resistant ABS plastic. They have been used in Europe for years and are starting to gain a larger market in North America as well. Constant Volume Regulators may contribute to meeting coveted USGBC Leed Building Certification.

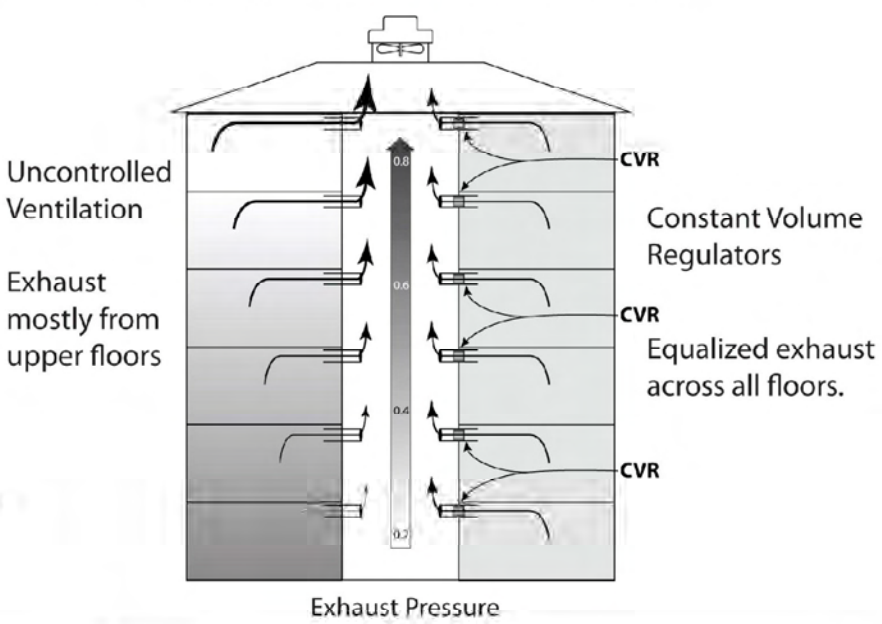
If there are areas that over-condition because of ductwork limitations, a CVR can limit the air entering the space. Conversely it can limit bathroom exhaust or equalize the flow across a multi-story exhaust chase. It can regulate intake air from the outside to ensure a small positive pressure in a mechanical room. In short it is a very versatile tool.

The CVR is a natural part of the Young Regulator Co. solution set. After all, Regulator is our middle name.



SIZE INFORMATION		Pressure Range 0.6 to 2.4InWc
Diameter	Flow Ranges	
3"	15-55 CFM	
4"	15-55, 60-90 CFM	
5"	15-55, 60-90, 115-180 CFM	
6"	15-55, 60-90, 115-180, 200-300 CFM	
8"	55-105, 105-180, 200-300, 350-480 CFM	
10"	105-180, 200-300, 350-510, 530-720 CFM	

STANDARD CONSTRUCTION	
Construction	Molded in a specialty engineered ABS plastic
Safety Ratings	UL 2043 European Fire and Smoke Rating - M1
Mounting	Friction Fit in appropriately sized duct
Color	Black



QUANTITY	DIAMETER	CFM SET PT.	NOTES
			High Pressure Applications (0.6 to 2.4 inwc)
PROJECT	LOCATION		
CONTRACTOR	DESIGN SPECIFIER		

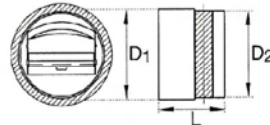
High Pressure Constant Volume Regulator - Performance Data

High Pressure CVR - Part Numbers and Flow Ranges			
YR Part #	Diameter	Flow Range (CFM)	
		Min	Max
CVR-HP-03	3	15	55
CVR-HP-04L	4	15	55
CVR-HP-04H	4	60	90
CVR-HP-05L	5	15	55
CVR-HP-05M	5	60	90
CVR-HP-05H	5	115	180
CVR-HP-06L	6	15	55
CVR-HP-06ML	6	60	105
CVR-HP-06MH	6	105	180
CVR-HP-06H	6	200	300
CVR-HP-08L	8	55	105
CVR-HP-08ML	8	105	180
CVR-HP-08MH	8	200	300
CVR-HP-08H	8	350	480
CVR-HP-10L	10	105	180
CVR-HP-10ML	10	200	300
CVR-HP-10MH	10	350	510
CVR-HP-10H	10	530	720

Pressure Drop 0.6 to 2.4 IWG

Dimension Table

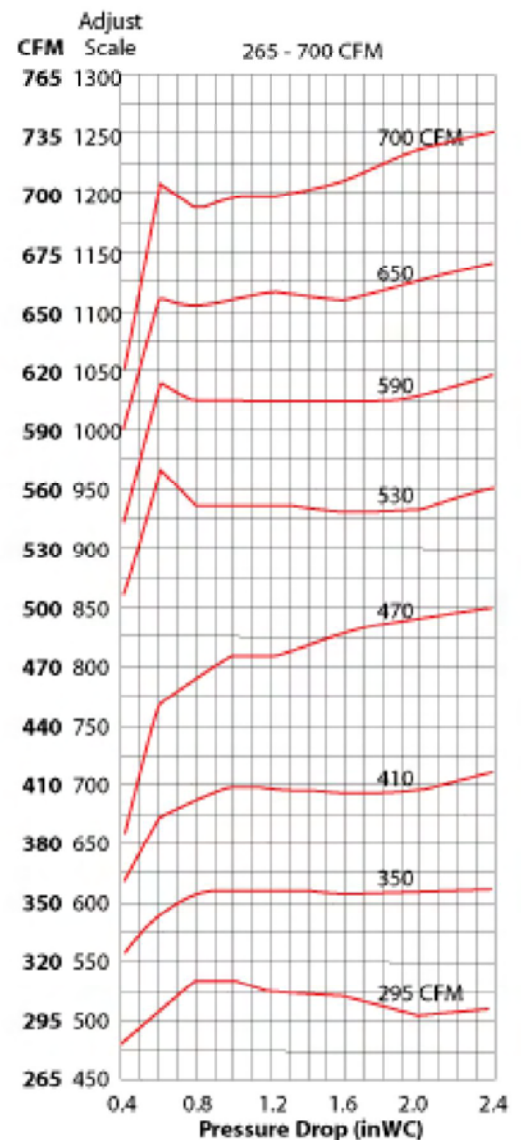
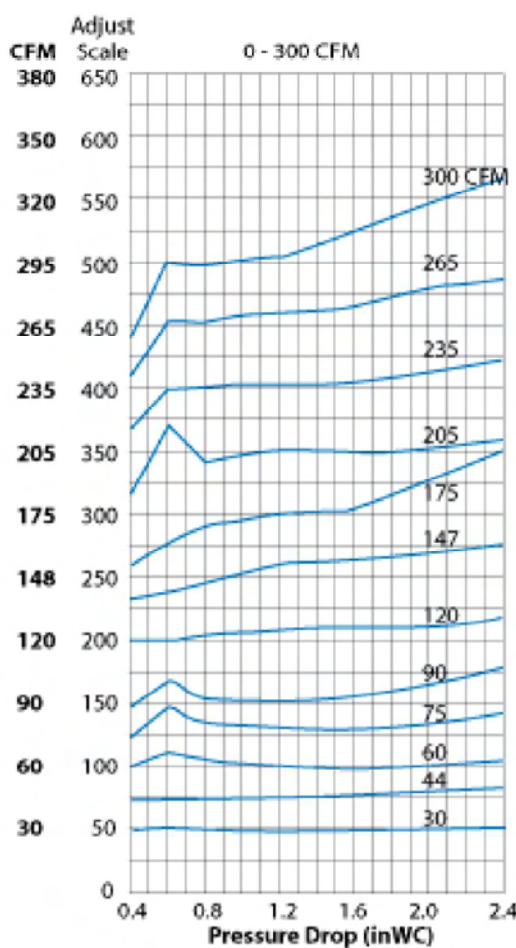
Nominal Dia.	Body (D1)	Insert (D2)	Length (L)
3	3.04	2.85	2.18
4	3.75	3.63	2.34
5	4.70	4.56	3.50
6	6.08	5.75	3.78
8	7.65	7.50	2.34
10	9.50	9.50	3.67



High Pressure Constant Volume Regulators Performance Curves

Specify a diameter and a flow for each part based on job requirements.

Performance Curves indicate flow through the part at a given pressure. To choose a part move across the chart to the appropriate static pressure. Move up the chart to the desired flow. Trace the best fit line to the left to find the adjustment scale, that will produce the desired flow.



(Back)