



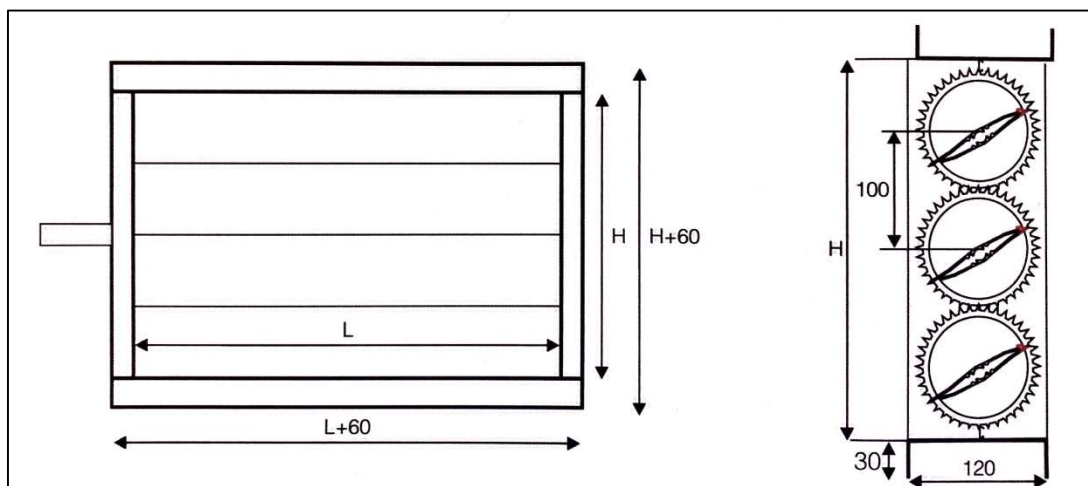
Volume Control Damper

General Information:

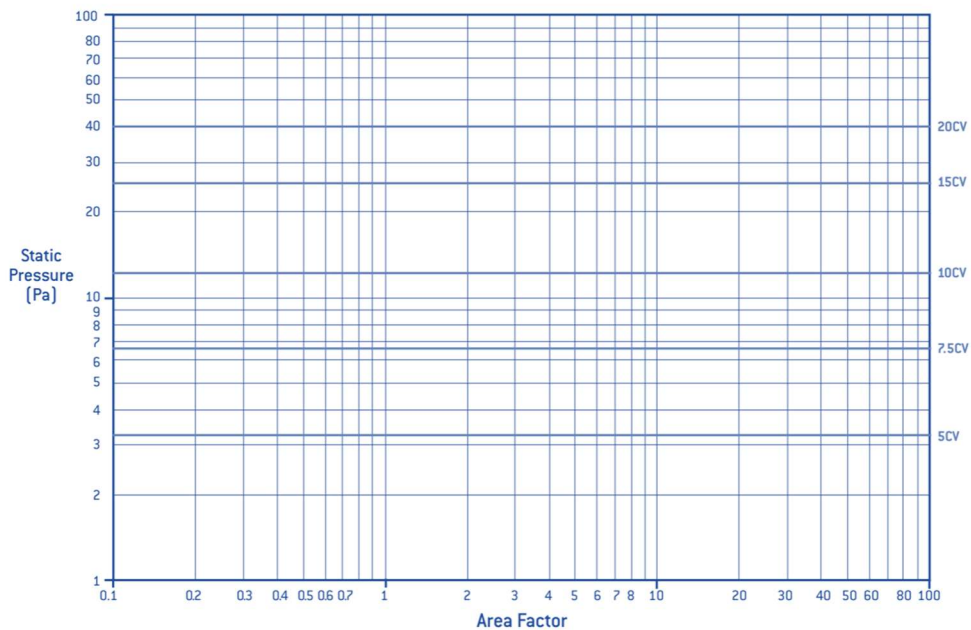
Volume Control Damper [VCD] is suitable for helping regulate or shut off air flow in duct systems. The blades are manufactured from aluminium profiles and the frame is produced from galvanized steel sheets. The blade action is realised with the help of gears by a linkage mechanism. All of the dampers are produced either with damper actuators or with actuator bases or with a manual locking quadrant.

Features:

- Frame depth is 152mm
- Flange is 35mm
- Optional side seals and blade seals
- High temperature seals available for smoke relief
- Optional aluminium and steel
- Size manufactured on request



VOLUME CONTROL DAMPER AREA FACTOR																				
Duct Height(mm)	No. of Blades	Duct Width (mm)																		
		300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
120	1	17.34	14.86	13.01	11.56	10.40	9.46	8.67	8.00	7.43	6.94	6.50	6.12	5.78	5.48	5.20	4.95	4.73	4.52	17.34
306	2	8.74	7.48	6.55	5.82	5.24	4.77	4.36	4.03	3.75	3.49	3.28	3.08	2.91	2.76	2.62	2.49	2.38	2.28	8.74
452	3	5.83	5.00	4.38	3.89	3.50	3.18	2.92	2.69	2.50	2.34	2.19	2.06	1.95	1.84	1.75	1.66	1.59	1.52	5.83
598	4	4.38	3.75	3.28	2.92	2.63	2.39	2.19	2.02	1.88	1.75	1.64	1.55	1.46	1.38	1.31	1.25	1.19	1.14	4.38
744	5	3.50	3.01	2.63	2.33	2.10	1.91	1.75	1.61	1.50	1.40	1.31	1.24	1.17	1.10	1.05	1.00	0.96	0.92	3.50
890	6	2.92	2.50	2.19	1.94	1.76	1.60	1.46	1.34	1.25	1.17	1.09	1.03	0.98	0.92	0.88	0.84	0.79	0.76	2.92
1036	7	2.50	2.15	1.88	1.67	1.50	1.36	1.25	1.15	1.07	1.00	0.94	0.88	0.83	0.79	0.75	0.72	0.68	0.65	2.50
1182	8	2.19	1.88	1.64	1.46	1.31	1.19	1.10	1.01	0.94	0.87	0.82	0.77	0.73	0.69	0.66	0.62	0.60	0.57	2.19
1328	9	1.95	1.67	1.46	1.30	1.17	1.06	0.98	0.90	0.83	0.78	0.73	0.69	0.65	0.62	0.58	0.55	0.53	0.51	1.95
1474	10	1.75	1.50	1.31	1.17	1.05	0.95	0.88	0.81	0.75	0.70	0.66	0.62	0.58	0.55	0.53	0.50	0.48	0.46	1.75
1620	11	1.59	1.37	1.20	1.06	0.95	0.87	0.80	0.73	0.68	0.64	0.59	0.56	0.53	0.50	0.48	0.46	0.44	0.41	1.59
1766	12	1.46	1.25	1.10	0.97	0.88	0.79	0.73	0.68	0.63	0.59	0.55	0.52	0.48	0.46	0.44	0.41	0.40	0.38	1.46



Selection Guide

1. Find the Area Factor in VOLUME CONTROL DAMPER AREA FACTOR with Height and Width.
2. Calculate the Conversion Velocity number (CV) by Area Factor and Air Flow Rate.

$$CV = Area\ Factor \times Air\ Flow\ Rate \left(\frac{m^3}{s} \right)$$

3. Find Static Pressure (Pa) in the chart by Area Factor and Conversion Velocity number.