

**Multi-Leaf Damper
VCD**

**DESCRIPTION:**

These Volume Control Dampers are suitable for regulating or shutting off the air flow in air ducts with rectangular or square cross sections. The blades are manufactured from aluminum profiles and the frame is produced from aluminum. The blade action is realized 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

MATERIAL :

Frama and Blade made of Aluminum

FUNCTION :

- Multileaf dampers of Type VCD are used as an acting element in the volume flow and pressure control in air conditioning systems
- For low-leakage shut-off of ducts and openings in walls and ceiling slabs
- Powder-coated construction
- Aerofoil blades
- Low-maintenance, robust construction
- No parts with silicone
- Available in standard sizes and many intermediate sizes

INSTALLATION :

- Screw

CLASSIFICATION :

- Closed blade air leakage to EN 1751
- Test pressure up to 2000 Pa
- Class 2

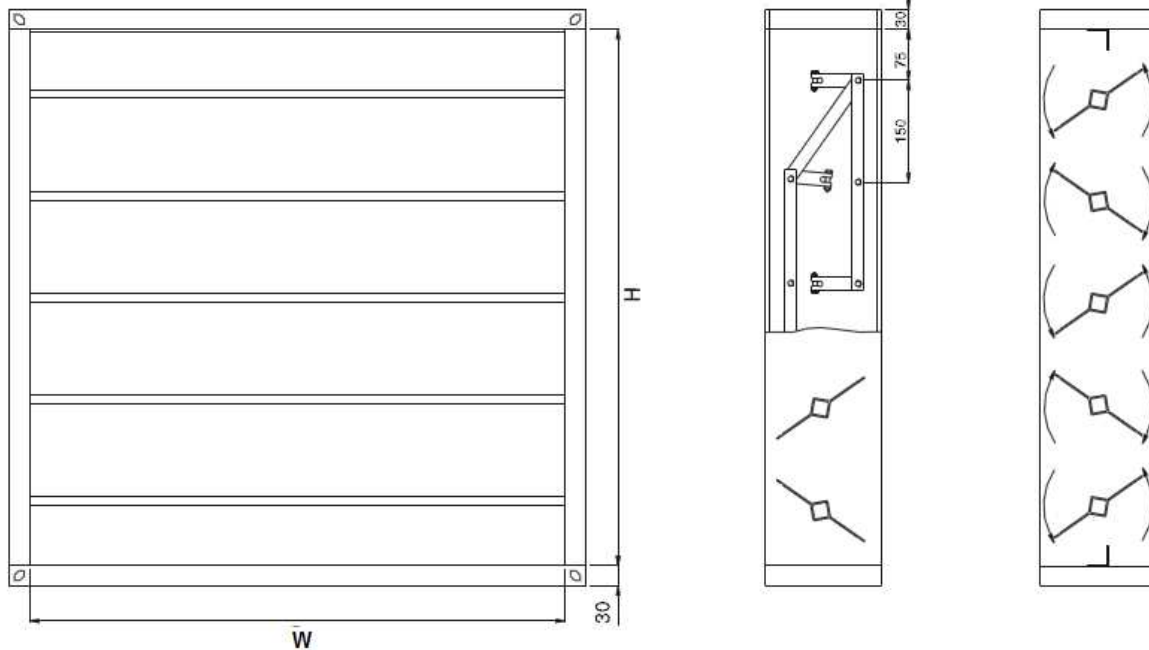


STANDARD SIZES (mm):

AVAILABLE SIZES (mm) - Always width x height												
	WIDHT											
HEIGHT	200	300	400	500	600	800	1000	1200	1400	1600	1800	2000
105	X	X	X	X	X	X	X	X	X	X	X	X
205	X	X	X	X	X	X	X	X	X	X	X	X
305	X	X	X	X	X	X	X	X	X	X	X	X
405	X	X	X	X	X	X	X	X	X	X	X	X
505	X	X	X	X	X	X	X	X	X	X	X	X
605	X	X	X	X	X	X	X	X	X	X	X	X
705	X	X	X	X	X	X	X	X	X	X	X	X
805	X	X	X	X	X	X	X	X	X	X	X	X
905	X	X	X	X	X	X	X	X	X	X	X	X
1005	X	X	X	X	X	X	X	X	X	X	X	X
1105	X	X	X	X	X	X	X	X	X	X	X	X
1205	X	X	X	X	X	X	X	X	X	X	X	X
1305	X	X	X	X	X	X	X	X	X	X	X	X
1405	X	X	X	X	X	X	X	X	X	X	X	X
1505	X	X	X	X	X	X	X	X	X	X	X	X
1605	X	X	X	X	X	X	X	X	X	X	X	X
1705	X	X	X	X	X	X	X	X	X	X	X	X

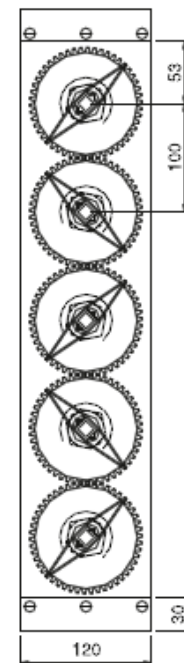
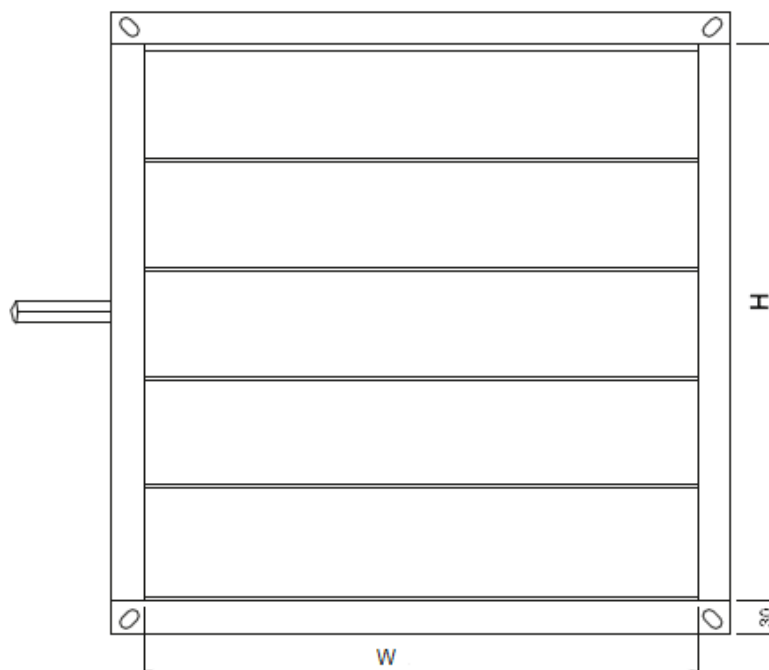
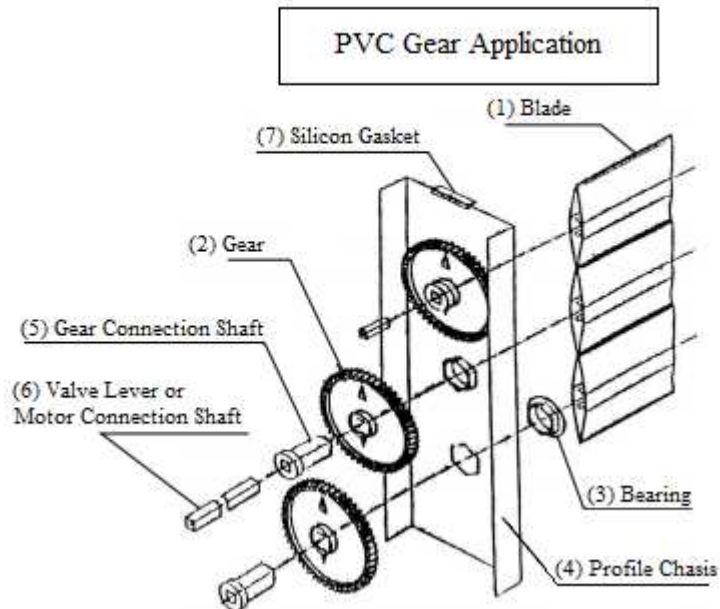
DRAWING

Volume Control Damper With Latch Command



Volume Control Damper with External Pvc Gear

DAMPER PARTS



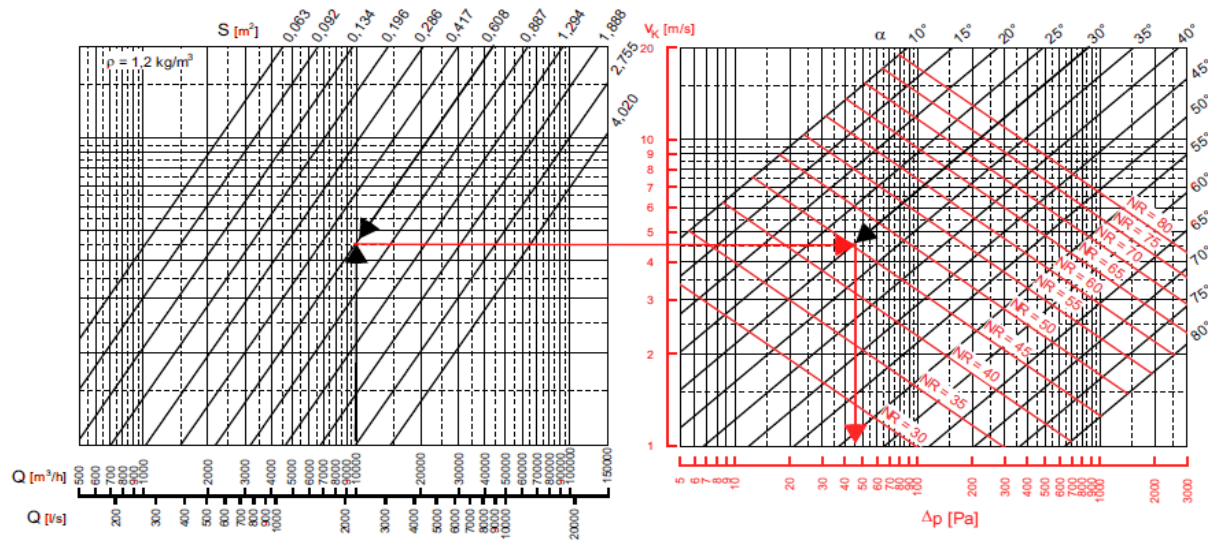


SELECTION TABLES

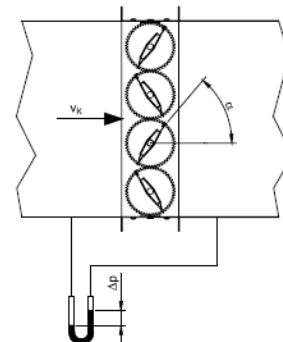
VCD - EFFECTIVE AREA TABLE (m²)

S [m ²]		B [mm]																	
		300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
H [mm]	210	0,063	0,084	0,105	0,126	0,147	0,168	0,189	0,210	0,231	0,252	0,273	0,294	0,315	0,336	0,357	0,378	0,399	0,420
	310	0,093	0,124	0,155	0,186	0,217	0,248	0,279	0,310	0,341	0,372	0,403	0,434	0,465	0,496	0,527	0,558	0,589	0,620
	410	0,123	0,164	0,205	0,246	0,287	0,328	0,369	0,410	0,451	0,492	0,533	0,574	0,615	0,656	0,697	0,738	0,779	0,820
	510	0,153	0,204	0,255	0,306	0,357	0,408	0,459	0,510	0,561	0,612	0,663	0,714	0,765	0,816	0,867	0,918	0,969	1,020
	610	0,183	0,244	0,305	0,366	0,427	0,488	0,549	0,610	0,671	0,732	0,793	0,854	0,915	0,976	1,037	1,098	1,159	1,220
	710	0,213	0,284	0,355	0,426	0,497	0,568	0,639	0,710	0,781	0,852	0,923	0,994	1,065	1,136	1,207	1,278	1,349	1,420
	810	0,243	0,324	0,405	0,486	0,567	0,648	0,729	0,810	0,891	0,972	1,053	1,134	1,215	1,296	1,377	1,458	1,539	1,620
	910	0,273	0,364	0,455	0,546	0,637	0,728	0,819	0,910	1,001	1,092	1,183	1,274	1,365	1,456	1,547	1,638	1,729	1,820
	1010	0,303	0,404	0,505	0,606	0,707	0,808	0,909	1,010	1,111	1,212	1,313	1,414	1,515	1,616	1,717	1,818	1,919	2,020
	1110	0,333	0,444	0,555	0,666	0,777	0,888	0,999	1,110	1,221	1,332	1,443	1,554	1,665	1,776	1,887	1,998	2,109	2,220
	1210	0,363	0,484	0,605	0,726	0,847	0,968	1,089	1,210	1,331	1,452	1,573	1,694	1,815	1,936	2,057	2,178	2,299	2,420
	1310	0,393	0,524	0,655	0,786	0,917	1,048	1,179	1,310	1,441	1,572	1,703	1,834	1,965	2,096	2,227	2,358	2,489	2,620
	1410	0,423	0,564	0,705	0,846	0,987	1,128	1,269	1,410	1,551	1,692	1,833	1,974	2,115	2,256	2,397	2,538	2,679	2,820
	1510	0,453	0,604	0,755	0,906	1,057	1,208	1,359	1,510	1,661	1,812	1,963	2,114	2,265	2,416	2,567	2,718	2,869	3,020
	1610	0,483	0,644	0,805	0,966	1,127	1,288	1,449	1,610	1,771	1,932	2,093	2,254	2,415	2,576	2,737	2,898	3,059	3,220
	1710	0,513	0,684	0,855	1,026	1,197	1,368	1,539	1,710	1,881	2,052	2,223	2,394	2,565	2,736	2,907	3,078	3,249	3,420
	1810	0,543	0,724	0,905	1,086	1,267	1,448	1,629	1,810	1,991	2,172	2,353	2,534	2,715	2,896	3,077	3,258	3,439	3,620
	1910	0,573	0,764	0,955	1,146	1,337	1,528	1,719	1,910	2,101	2,292	2,483	2,674	2,865	3,056	3,247	3,438	3,629	3,820
	2010	0,603	0,804	1,005	1,206	1,407	1,608	1,809	2,010	2,211	2,412	2,613	2,814	3,015	3,216	3,417	3,618	3,819	4,020

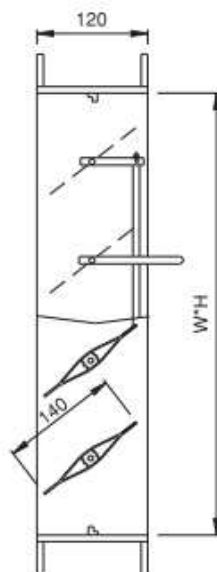
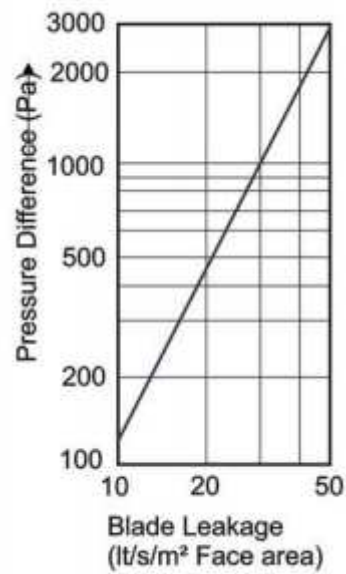
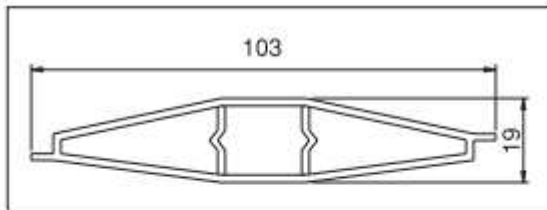
VCD - PRESSURE DROP AND NOISE LEVELS



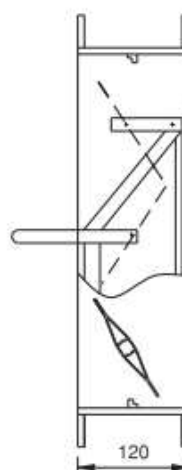
- Q [m³/h] [l/s] through air flow rate
 S [m²] Damper surface area
 v_k [m/s] velocity relating to the effective outlet area S
 Δp [Pa] total pressure loss
 α angle of inclination of the blade
 NR noise rating (ISO standard, in relation to 10^{-12} W) taking no account of the attenuation of the room



BLADE TYPE



Parallel Bladed



Opposite Bladed



Damper Blade Position



Closed Position



%50 Open



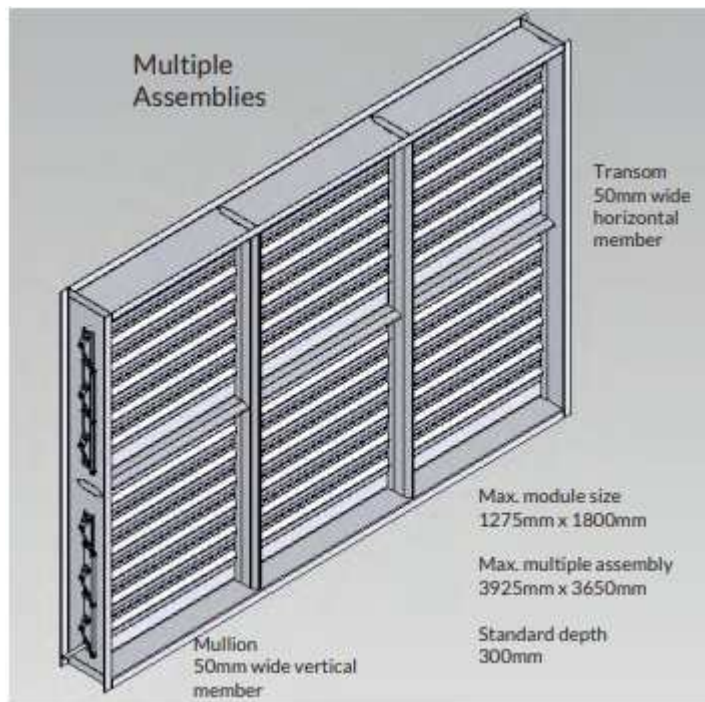
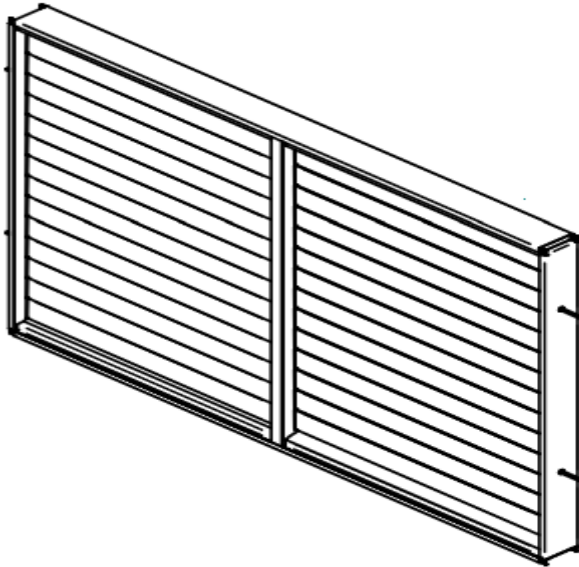
%100 Open



Installation & Assembly

Larger dampers can be constructed by joining multiple assemblies together. An approved fire-resistant sealant should be inserted between the damper and duct to ensure a good seal.

Each section shall have a drive spindle which can be linked together externally or driven independently



**ORDER CODE**

VCD -	S	00	00	N 505x500
				<p>N: Neck Size F: Frame Size</p> <p>00: No Mounting SM: Screw Mounting</p>
<p>A: Aluminum (Standard) G: Galvanized Metal Sheet (Optional)</p>				<p>00: No coating RAL----: Powder Coating</p>