



Motorized Multi-Leaf Damper VCD-M

**DESCRIPTION:**

Multileaf dampers with gears can only have opposed action blades.

The internal gears transfer the synchronous rotational movement from the drive arm to the individual blades.

Standard blades width 100; min. flow resistance and noise; coupling and drive possibilities for all requirements.

Available in all intermediate sizes and special executions like high strength corrosion-resistant construction.

Rectangular volume control dampers are used for control of flow rate and pressure in ventilation ducts. Opposed blades in damper have aerodynamic structure that has the property of reducing the air friction. Flow rate is adjusted with actuator to OPEN - CLOSED

MATERIAL :

All of the product casing and blades are manufactured from extruded aluminium profile.

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
- 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

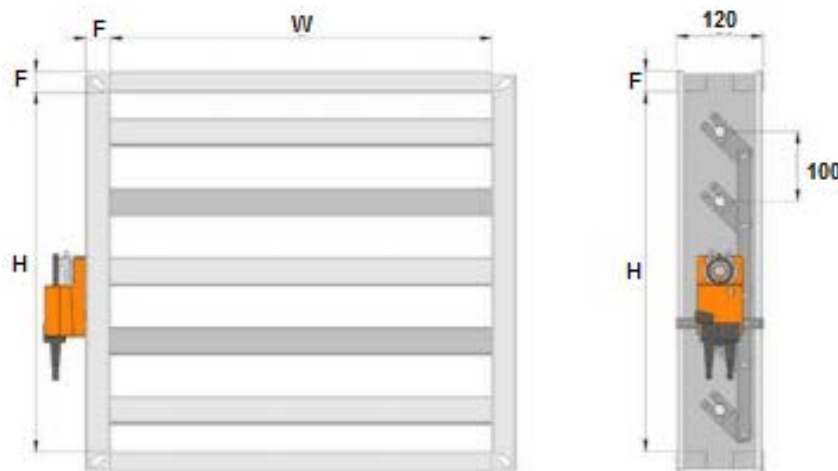


STANDARD SIZES (mm):

AVAILABLE SIZES (mm) - Always width x height												
HEIGHT	WIDHT											
	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

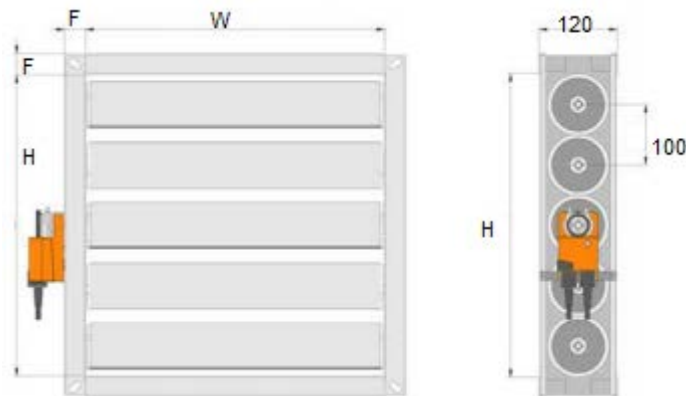
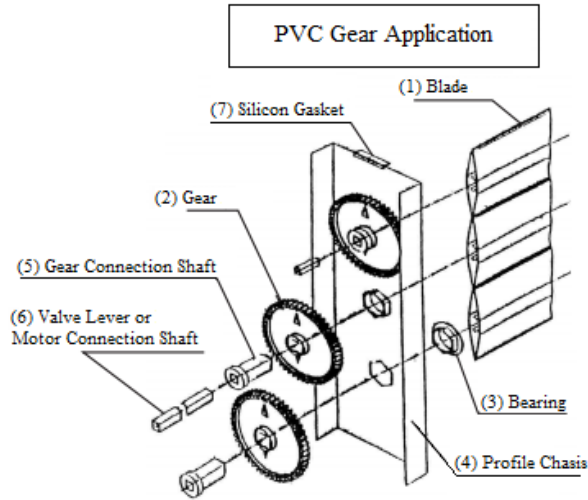
Volume Control Damper With Latch Command





Volume Control Damper with External Pvc Gear

DAMPER PARTS



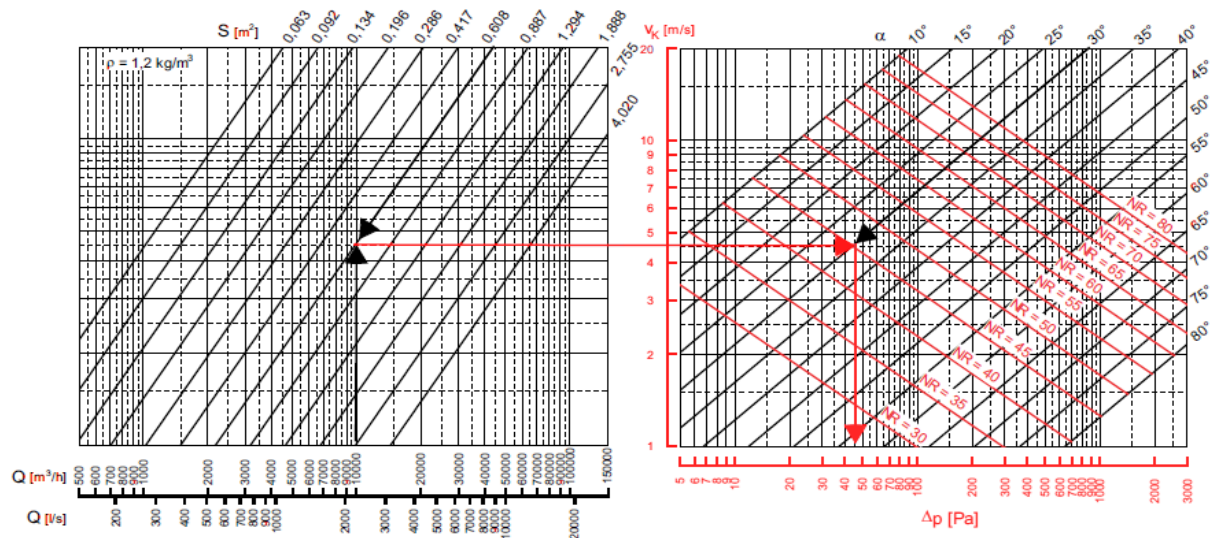


SELECTION TABLES

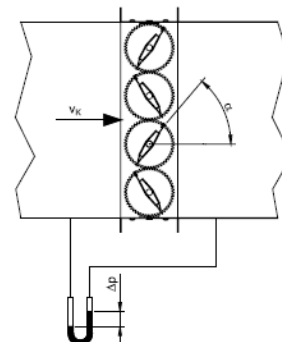
VCD-M EFFECTIVE AREA TABLE (m2)

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

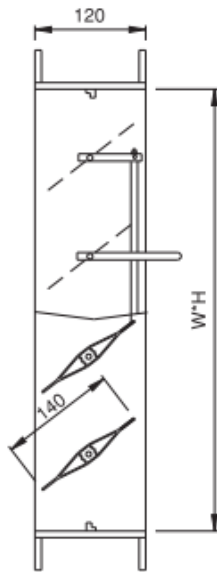
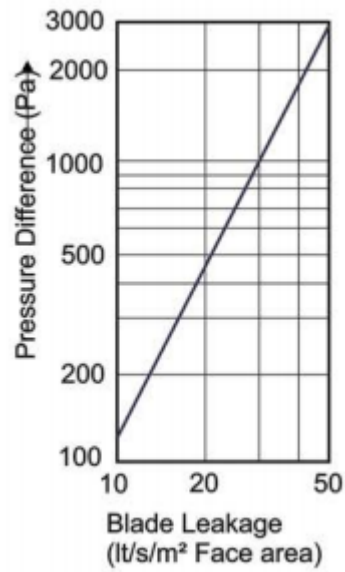
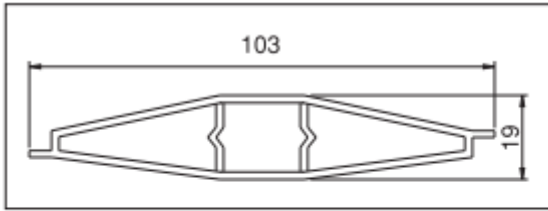


- Q [m³/h] [l/s] through air flow rate
- S [m²] Damper surface area
- v_k [m/s] velocity relating to the effective outlet area S
- Δp [Pa] total pressure loss
- α angle of inclination of the blade
- NR noise rating (ISO standard, in relation to 10⁻¹² W) taking no account of the attenuation of the room

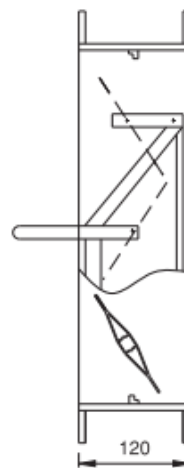




BLADE TYPE



Parallel Bladed



Opposite Bladed



Damper Blade Position



Closed Position



%50 Open



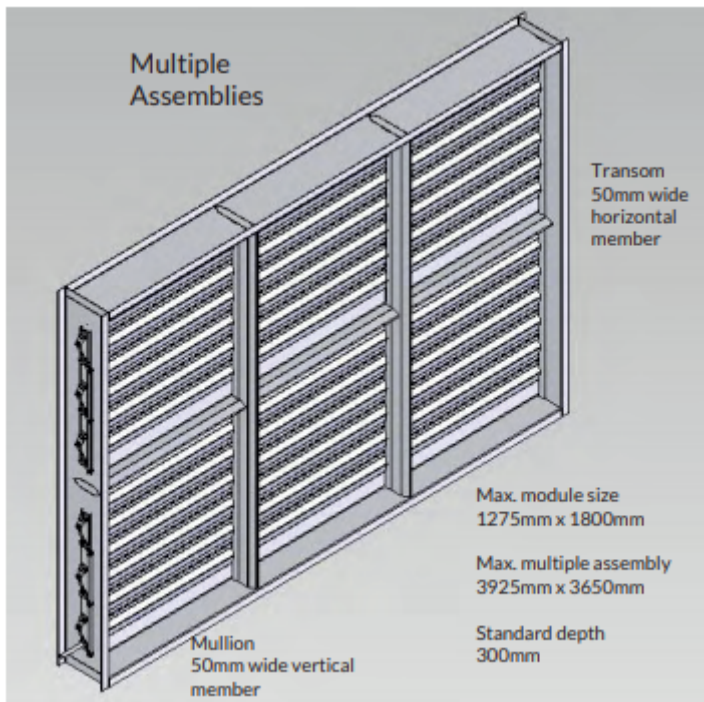
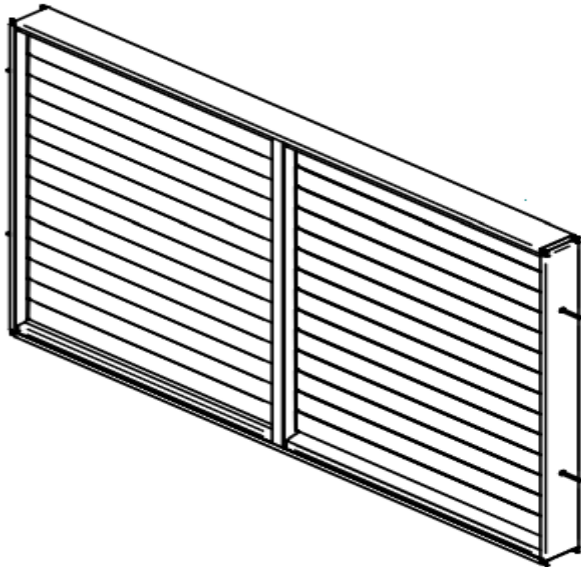
%100 Open



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

* We choose the actuator.