

IN-LINE CENTRIFUGAL DUCT FANS VT Series



DESCRIPTION

The VT series of circular in-line duct centrifugal fans consists of 14 model variations within 7 nominal model sizes of 100, 125, 150, 160, 200, 250 and 315mm respectively. Each model diameter is available in two versions, high performance model (type L) and a low performance model variation (type B).

The VT range of fans delivers airflow performances from 290 up to 1900 m³/hr.

APPLICATIONS

The VT series of fans are ideally suited for a wide range of general residential, commercial and industrial exhaust or supply ventilation applications. Typical applications would include the following:

RESIDENTIAL – Bathrooms, toilets, utility rooms.

COMMERCIAL – Cafes, bars, offices, restaurants.

INDUSTRIAL – Spot ventilation, equipment cooling, workshop ventilation.

CONSTRUCTION

All VT fans are manufactured from high grade corrosion resistant pressed galvanised steel. All models are supplied as standard with a pre-wired wiring junction box.

All models (except VT-100B & VT-25B) include an enclosed type, single phase, external rotor motor with factory matched backward curved non-stalling impeller.

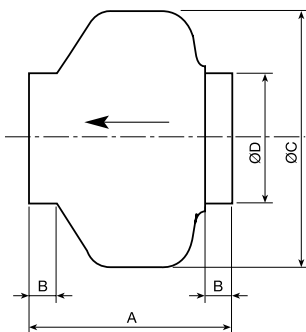
All models are fully speed controllable using either electronic or autotransformer voltage regulation controllers.

The following specifications apply:

- Single phase 230V 50Hz
- IP44, Class B insulation
- Operating temperatures -40° up to +40°
- All motors include sealed for life ball bearing assemblies
- All motors include an internal safety thermal overload protection device as standard

TECHNICAL CHARACTERISTICS

Model Type	Nom. Speed (r.p.m.)	Maximum Absorbed Power (W)	Maximum Absorbed Current (A)	Maximum Air Volume (m ³ /h)	Sound Pressure Level (dB (A) @ 3m)	Max. Temperature (°C)	Weight (kg)
VT-100 B	2550	85	0,60	235	38	40	3
VT-100 L	2500	78	0,33	290	47	60	3
VT-125 B	2500	87	0,60	280	39	40	3
VT-125 L	2450	80	0,35	410	47	60	3
VT-150 B	2100	70	0,30	560	46	60	5
VT-150 L	2700	120	0,53	700	50	60	5
VT-160 B	2200	70	0,30	600	45	60	5
VT-160 L	2750	130	0,55	760	51	60	5
VT-200 B	2250	125	0,50	830	47	60	5
VT-200 L	2600	170	0,72	1000	52	60	5
VT-250 B	2300	130	0,55	935	49	60	6
VT-250 L	2750	180	0,80	1100	54	60	6
VT-315 B	2300	235	1,00	1440	52	50	8
VT-315 L	2700	350	1,45	1890	55	50	8



DIMENSIONS (mm)

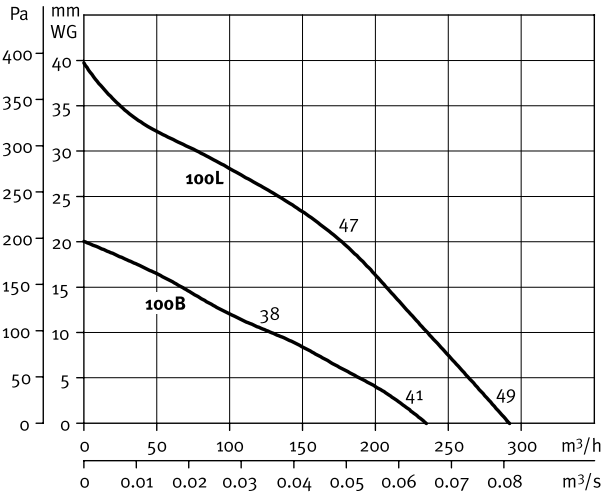
Type	A	B	C	D
VT-100 L	194	23	243	98
VT-125 L	195	27	243	123
VT-150 L	214	24	333	147
VT-160 L	222	28	333	157
VT-200 L	223	25	333	198
VT-250 L	206	27	333	248
VT-315 L	230	25	401	312



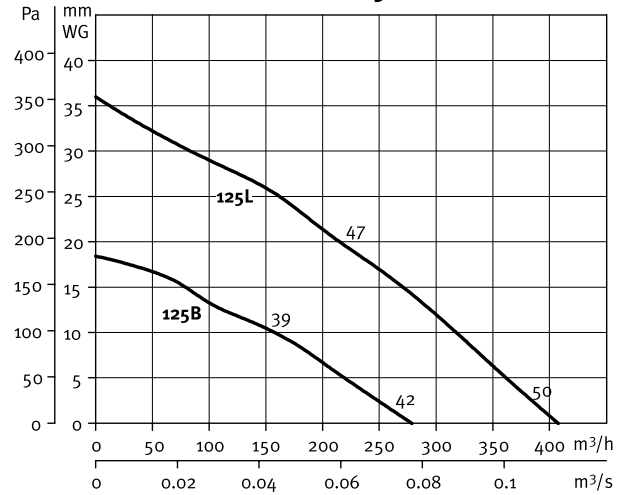
AIRFLOW PERFORMANCE CHARACTERISTICS

- Airflow in m^3/h & m^3/s - Static pressure in mmWG and Pa
- Dry air at 20°C and 760 mmHg
- According to BS 848, part 1; AMCA 210- 85 and ASHRAE 51- 1985

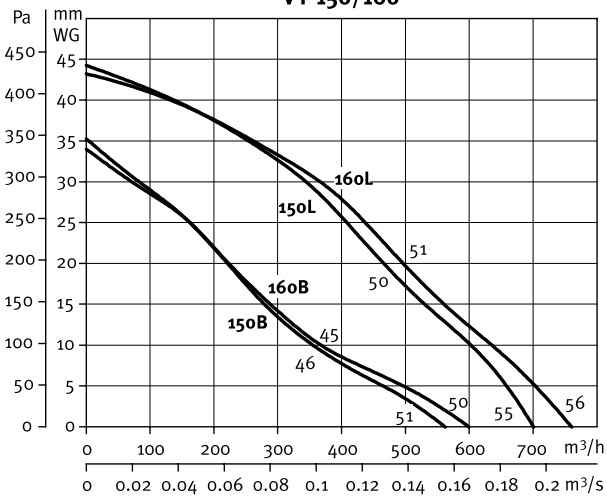
VT-100



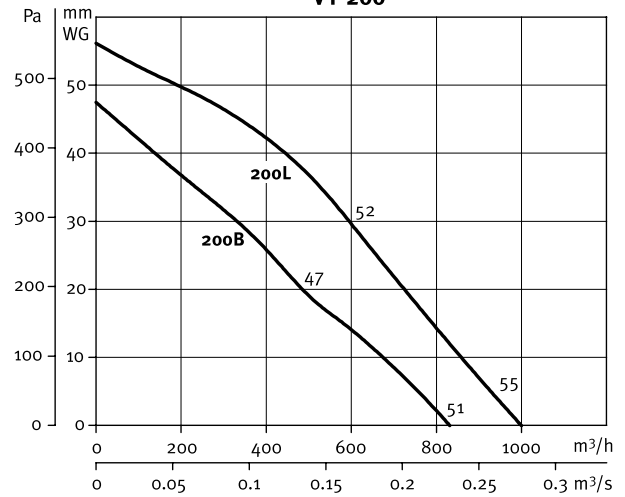
VT-125



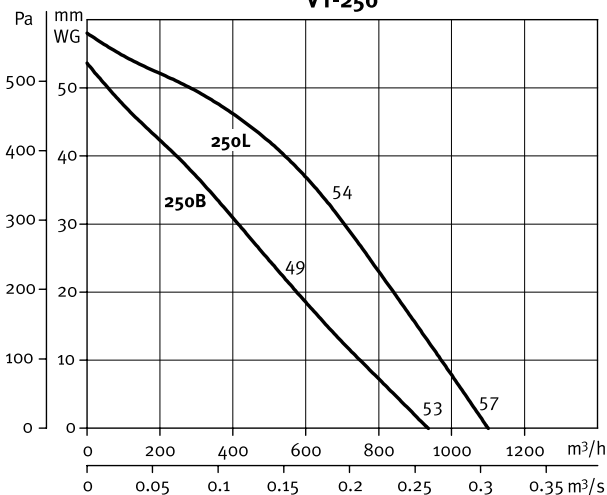
VT-150/160



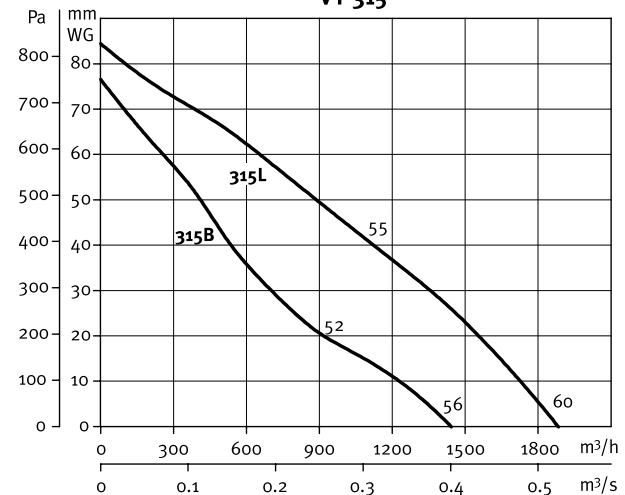
VT-200



VT-250



VT-315





ACOUSTIC PERFORMANCE CHARACTERISTICS

The sound levels illustrated in the tabulated performance data, correspond to the values of sound pressure dB(A), measured in free field conditions at a distance of 3 m from the inlet duct, with ducted inlet and outlet. The following table illustrates the in duct and radiated sound power level spectrums (LwA).

Sound power level spectrum

LwA in Duct	63	125	250	500	1000	2000	4000	8000
VT-100 L	41	47	61	58	64	59	51	41
VT-100 B	34	41	51	47	55	52	48	38
VT-125 L	37	44	60	62	62	60	53	42
VT-125 B	33	40	51	52	53	53	51	40
VT-150 L	38	50	61	67	65	62	56	42
VT-150 B	33	47	53	64	60	56	49	35
VT-160 L	39	49	61	67	66	63	57	43
VT-160 B	33	47	53	62	59	56	49	36
VT-200 L	40	51	61	68	67	65	63	54
VT-200 B	36	43	50	56	56	55	50	39
VT-250 L	41	54	64	69	70	68	66	55
VT-250 B	39	48	58	64	65	62	59	48
VT-315 L	42	55	66	68	71	70	65	60
VT-315 B	43	54	65	66	67	66	62	54

LwA Radiated	63	125	250	500	1000	2000	4000	8000
VT-100 L	43	38	41	42	46	41	36	29
VT-100 B	38	26	27	31	43	40	38	31
VT-125 L	39	37	40	42	49	43	38	30
VT-125 B	36	29	31	33	44	40	41	31
VT-150 L	41	35	42	55	53	48	41	31
VT-150 B	30	34	42	49	49	45	41	35
VT-160 L	41	35	42	55	53	48	41	31
VT-160 B	31	34	40	49	49	44	41	33
VT-200 L	38	43	41	46	52	49	43	34
VT-200 B	31	33	34	45	46	50	41	35
VT-250 L	34	47	38	47	49	44	42	31
VT-250 B	38	39	40	47	46	46	43	37
VT-315 L	39	47	50	54	58	54	51	42
VT-315 B	39	40	45	50	50	52	49	38