

ULTRA-QUIET IN-LINE MIXED FLOW DUCT FANS

TD-SILENT series

Low profile “Mixed-flow” fans with sound-absorbent insulation. Extremely quiet. Certified of Approval Noise Abatement Society (TD-350, TD-500, TD-800 and TD-1000 models).

Manufactured in plastic material, with a specifically designed internal skin to direct the sound waves at the right angle for them to be captured by the sound-absorbent material (1). Fitted with rubber gaskets on the inlet and outlet to absorb vibrations, a body that can be dismantled. Connection box can be rotated 360°, to facilitate easy connection of the power cable.

Motors

Speed controllable 230V-50Hz motor, of two speed motors. IP44.

Motors are class B, with ball bearings and safety thermal overload protection.

(1) Except the TD-160 SILENT, that is fitted with the special floating motor system patented by S&P.

Additional information

The models offer solutions to ventilation problems, especially in places where people work and low sound level is required.

TD-SILENT-T models

TD-SILENT versions fitted with a run-on-timer adjustable between 1 and 30 minutes and onespeed motor not suitable for speed control.

TD-SILENT models 1300 - 2000

Low profile “Mixed-flow” fans with sound absorbent insulation. Extremely quiet. Certified of Approval Noise Abatement Society (TD-2000 model). Constructed from sheet steel with epoxy polyester paint, acoustic insulation (MO) glass fibre, within outer shell.

Aerodynamic inlet to improve airflow and reduce sound. Detachable fan unit without demounting duct connections. IP44.

External terminal box IP55.

Removable fan body with 2 speed motor, single phase 230V-50/60Hz speed controlable, Class F, external rotor aluminium motor with capacitor and thermal protection.

Additional information

The models offer solutions to ventilation problems, especially in places where people work and low sound level is required.



TD-SILENT - MODELS 250 TO 1000

TD-SILENT - MODELS 1300 AND 2000

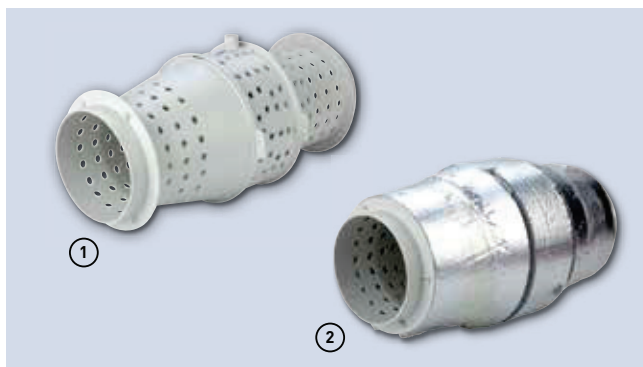


MODELS 250 TO 1000



Low profile

The low profile of the TD-SILENT fans makes them the most effective solution for installations where space is very limited, especially in ceiling voids.



Low noise level

Sound waves produced inside the TD, are directed through the perforated inner skin (1) and absorbed by the layer of sound absorbent material (2).



Easy maintenance

Bi-material support brackets, which in addition to simplifying installation, serve as joint seals.



Connection box rotated 360°

Connection box can be rotated 360°, to facilitate easy connection of the power cable.



Rubber seals

Bi-material inlet and outlet incorporating a rubber seal to facilitate installation and absorb vibrations.



Support bracket

Support bracket for installing on a wall or ceiling, incorporating twin-material support brackets for the motor section that absorbs vibration.

Easy to mount



Loosen and open clamps on both sides.



Remove the fan body.



Remove the terminal box lid.



Connect electrical supply.



Remount the fan body by tightening the clamps.



MODELS WITH RUN-ON-TIMER

Models TD-SILENT-T (from models 250 to 1000) are fitted with an adjustable timer between 1 and 30 minutes and are supplied with a one-speed motor not suitable for speed control.

MODEL 160



SILENT-ELASTIC-BLOCKS
Model TD-160/100N SILENT offer very low noise level, with a motor mounted on **silenteelastic- blocks** which absorb the vibrations.

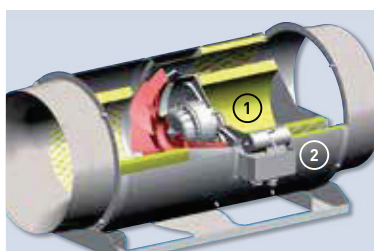


MODELS 1300 AND 2000



Low profile - compact

Low profile fans TD-1300/250 SILENT and TD-2000/315 SILENT are ideal for installations where space is very limited, especially in ceiling voids.



Low noise level

- ① Acoustic insulation (M0) glass fibre.
- ② Outer shell.
- ③ Aerodynamic inlet to improve air flow and reduce sound.
- ④ Attenuating perforated skin.



Easy maintenance

Detachable fan unit for maintenance, or cleaning, without demounting duct connections.



Support bracket

Suitable for wall or ceiling mounting. Fixing brackets to the motor-body included.



IP55 terminal box

Easy installation and connection.

TECHNICAL DATA

TD-SILENT	Speed (r.p.m.)	Maximum absorbed power (W)	Maximum absorbed current (A)	Duty at free discharge (m ³ /h)	Maximum operating temp. (°C)	Sound pressure level* (dB(A))	Ø Duct (mm)	Weight (Kg)
TD-160/100 N SILENT	2500 2200	25 12	0,16 0,10	180 140	-20/+40	24 21	100	1,4
TD-250/100 SILENT	2200 1850	24 18	0,11 0,10	240 200	-20/+40	24 19	100	5,4
TD-350/125 SILENT	2250 1900	30 22	0,13 0,10	360 300	-20/+40	20 19	125	5
TD-500/150-160 SILENT**	2500 1950	50 44	0,22 0,19	570 430	-20/+60	22 17	150 /160	6
TD-800/200 SILENT	2780 2480	95 90	0,45 0,43	900 790	-20/+60	19 18	200	8,7
TD-1000/200 SILENT	2500 2000	120 100	0,50 0,45	1030 790	-40/+60	21 20	200	8,7
TD-1300/250 SILENT	2570 2190	197 145	0,83 0,61	1270 1070	-40/+60	35 31	250	20,0
TD-2000/315 SILENT	2680 2300	297 191	1,28 0,79	1760 1500	-40/+60	39 33	315	25,0

TIMER MODELS

TD-250/100 SILENT T	2200	24	0,11	240	-20/+40	24	100	5,5
TD-350/125 SILENT T	2250	30	0,13	380	-20/+40	20	125	5
TD-500/150-160 SILENT T	2500	50	0,22	580	-20/+60	22	150/160	6
TD-800/200 SILENT T	2780	95	0,45	880	-20/+60	19	200	8,7
TD-1000/200 SILENT T	2500	120	0,5	1100	-40/+60	21	200	8,7

* Sound pressure level radiated at 3 m at free air conditions with rigid ducts at the inlet and at the outlet.

** It provides an additional rubber gasket for installation in 160 mm ducts.

* Sound pressure level radiated at 3 m at free air conditions with rigid ducts at the inlet and at the outlet.

PERFORMANCE DATA

Airflow m³/s @ Static Pressure Pa

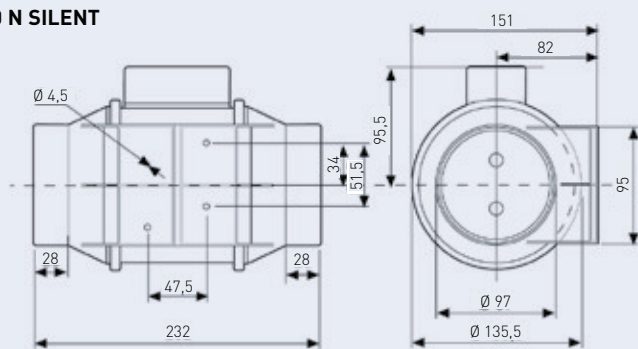
Model	0	25	50	75	100	125	150	175	200	250	300	400	500	600
TD-250/100 SILENT	0.067	0.060	0.052	0.035	0.020	0.009								
TD-350/125 SILENT	0.100	0.089	0.075	0.059	0.030	0.011								
TD-500/150-160 SILENT	0.161	0.156	0.150	0.144	0.137	0.129	0.120	0.105	0.040	0.022				
TD-800/200 SILENT	0.244	0.238	0.230	0.223	0.214	0.205	0.194	0.183	0.171	0.044				
TD-1000/200 SILENT	0.306	0.291	0.277	0.264	0.253	0.243	0.233	0.224	0.214	0.191				
TD-1300/250 SILENT	0.353	0.343	0.332	0.322	0.310	0.298	0.284	0.270	0.255	0.222	0.177	0.082		
TD-2000/315 SILENT	0.492	0.478	0.464	0.450	0.436	0.423	0.408	0.395	0.380	0.349	0.313	0.215	0.137	0.070

TIMER MODELS

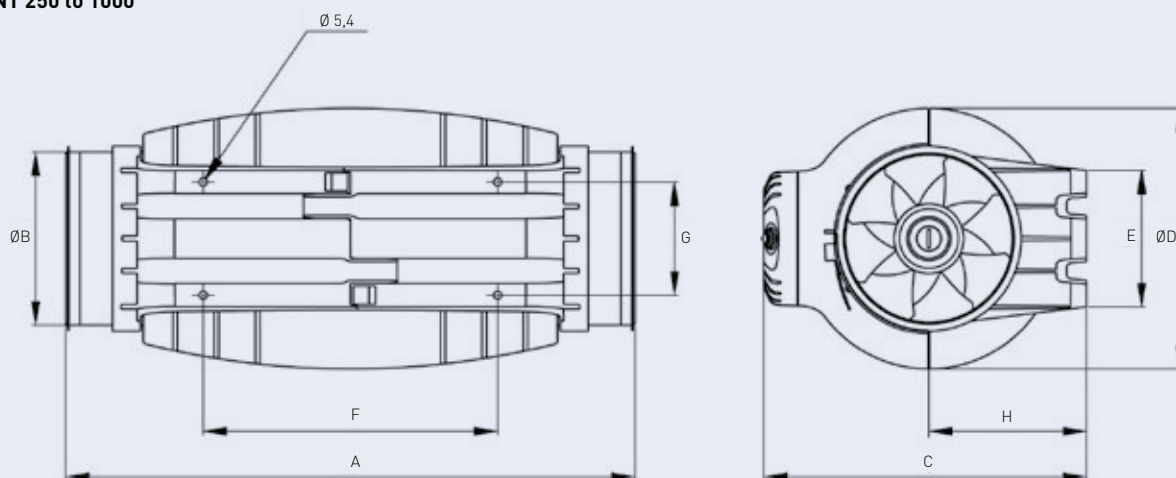
TD-250/100 SILENT T	0.067	0.060	0.051	0.035	0.020	0.009								
TD-350/125 SILENT T	0.106	0.090	0.075	0.059	0.030	0.011								
TD-500/150-160 SILENT T	0.161	0.156	0.150	0.144	0.137	0.130	0.120	0.105	0.040	0.022				
TD-800/200 SILENT T	0.250	0.241	0.232	0.223	0.214	0.204	0.194	0.183	0.171	0.044				
TD-1000/200 SILENT T	0.287	0.279	0.270	0.262	0.253	0.244	0.234	0.224	0.214	0.191				

DIMENSIONS (mm)

TD-160/100 N SILENT



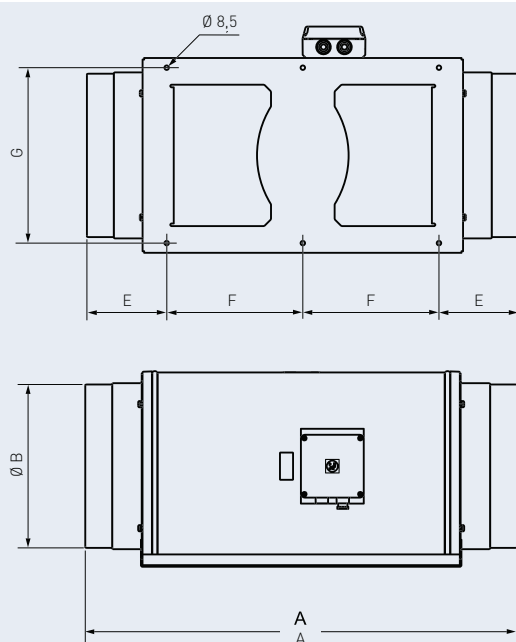
TD-SILENT 250 to 1000



	A	ØB	C	ØD	E	F	G	H
TD-250/100	575	97	252	204	100	250	83	121
TD-350/125	462	123	252	204	100	250	83	121
TD-500/150-160*	484	147	274	221	116	250	96	134
TD-800/200	568	198	327	264	145	340	129	164
TD-1000/200	568	198	327	264	145	340	129	164

* It provides an additional rubber gasket for installation in 160 mm ducts.

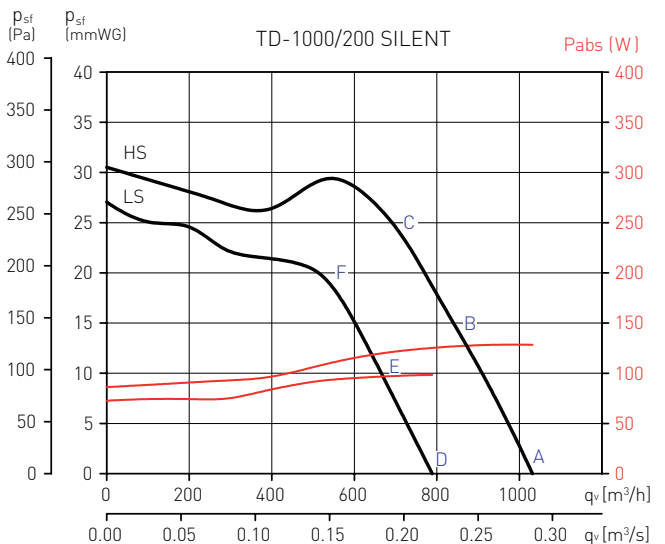
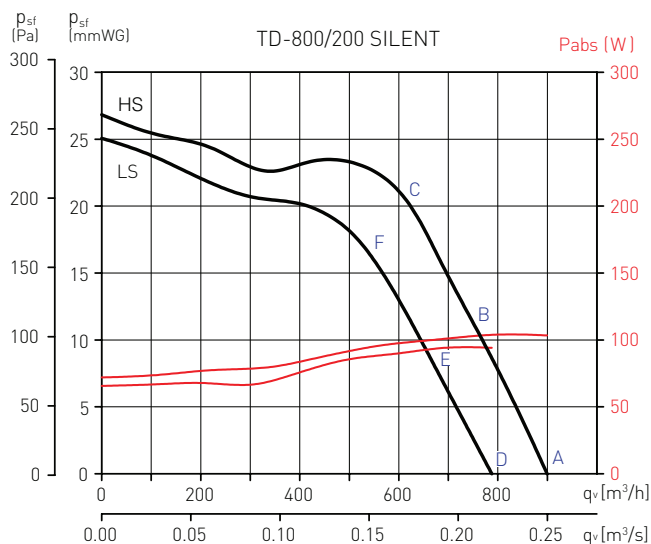
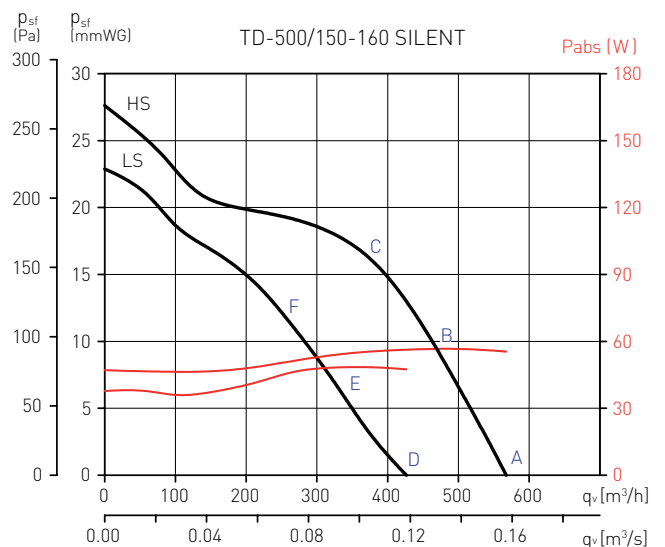
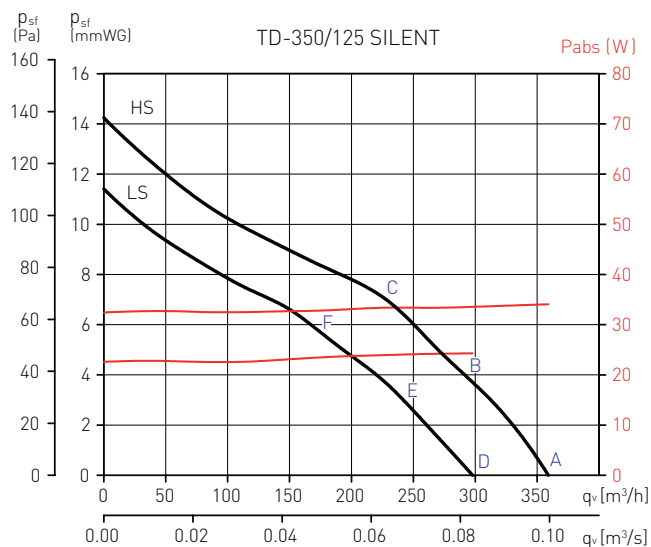
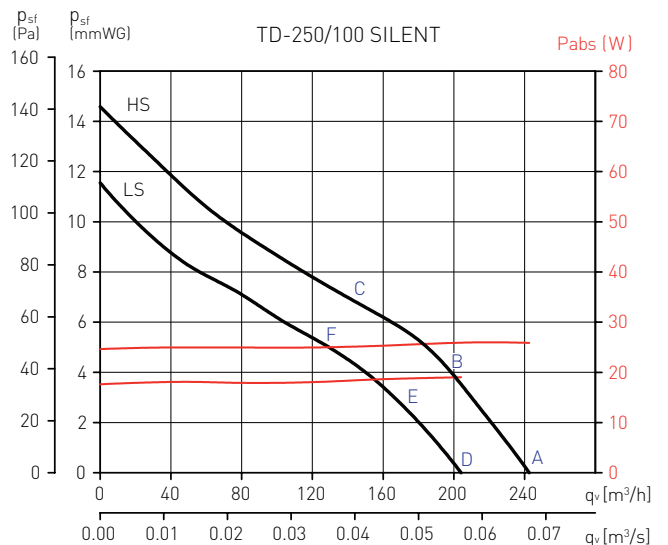
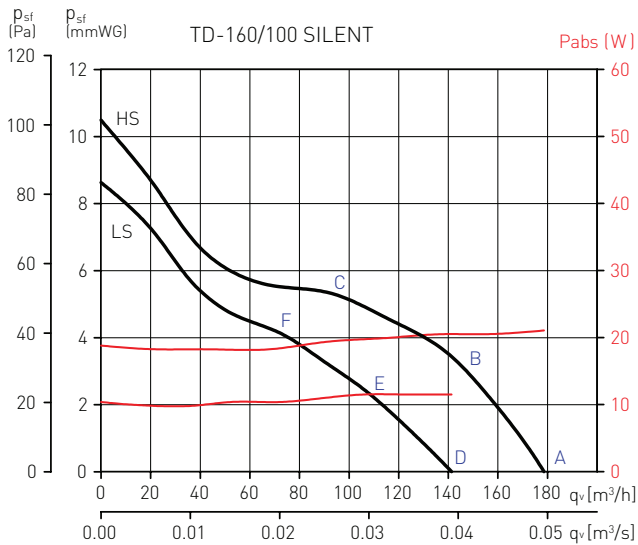
TD-SILENT 1300 and 2000



	A	B	C	D	E	F	G	H
TD-1300/250 SILENT	680	248	331	387	140	200	280	171
TD-2000/315 SILENT	825	312	373	432	152	260	335	192

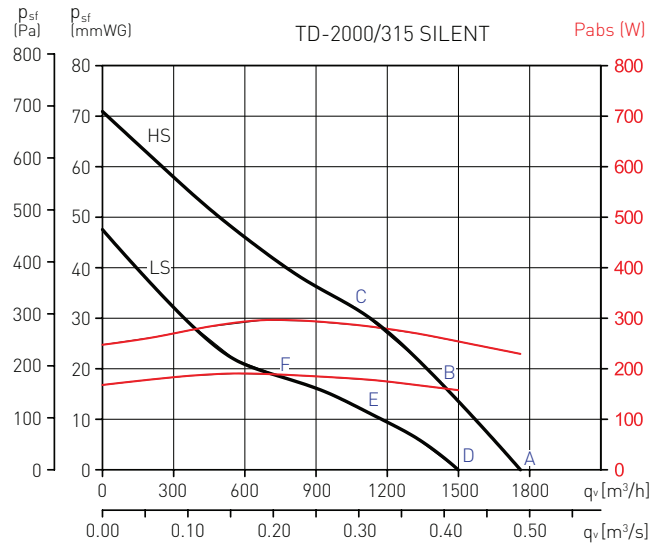
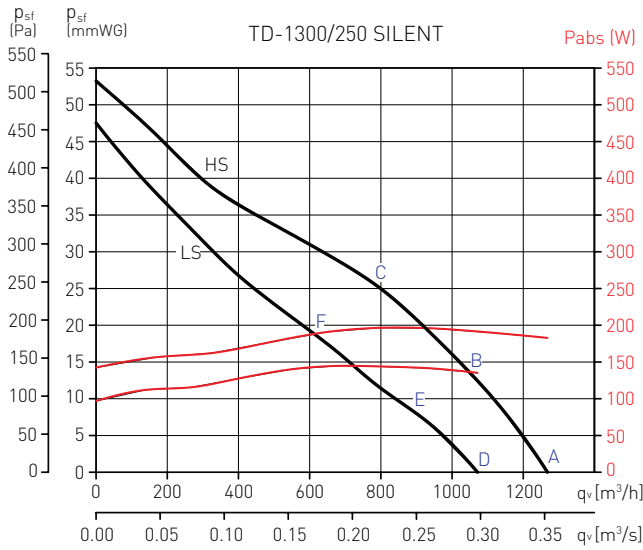
PERFORMANCE CURVES

- q_v : Air volume in m^3/h and m^3/s .
- p_{sf} : Static pressure in mmWG and Pa.
- Dry air at $20^\circ C$ and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.
- HS: High speed
- LS: Low speed



PERFORMANCE CURVES

- q_v : Air volume in m^3/h and m^3/s .
- p_{sf} : Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.



ACOUSTIC CHARACTERISTICS

Sound power spectrum: The sound levels shown in these tables are sound power levels at the discharge, radiated and inlet, in dB(A) for frequency ranges at points of the curve: [A or D] free discharge, [B or E] medium pressure, [C or F] maximum pressure. (HS) high speed, (LS) low speed. Performance data in accordance with ISO 13347-3 2004.

TD-160/100 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*	
HS	Inlet	A	24	32	39	46	52	49	40	31	54	34
		B	23	32	40	46	51	47	39	30	54	33
		C	23	34	43	47	51	47	39	30	54	33
HS	Radiated	A	24	24	37	34	36	41	32	21	44	24
		B	23	24	38	35	35	39	31	20	44	24
		C	23	26	41	36	35	39	31	20	44	24
HS	Outlet	A	30	34	37	48	51	47	41	31	54	33
		B	29	35	37	48	49	46	39	30	53	33
		C	28	36	39	49	50	45	39	30	54	33

TD-160/100 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*	
LS	Inlet	D	23	26	37	43	49	45	36	27	51	31
		E	22	27	39	43	47	43	35	26	50	30
		F	22	29	41	44	48	44	35	27	51	31
LS	Radiated	D	23	17	35	32	33	37	28	17	41	21
		E	22	18	37	32	31	36	27	17	41	21
		F	22	21	39	33	32	36	27	17	42	22
LS	Outlet	D	29	32	34	45	48	44	37	27	51	30
		E	28	32	35	45	46	42	35	27	50	29
		F	28	33	36	46	47	42	36	27	51	30

TD-250/100 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*	
HS	Inlet	A	26	32	46	53	53	44	38	30	57	36
		B	24	36	46	53	52	44	38	30	56	36
		C	25	35	42	51	55	47	40	34	57	37
HS	Radiated	A	26	28	40	40	36	31	25	18	44	24
		B	24	32	40	40	35	31	25	18	44	24
		C	25	31	36	38	38	34	27	22	43	23
HS	Outlet	A	30	33	45	53	46	40	36	28	55	34
		B	26	35	43	52	45	40	36	28	54	33
		C	26	35	39	51	49	42	38	31	54	33

TD-250/100 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*	
LS	Inlet	D	22	38	42	47	48	38	32	26	52	31
		E	23	34	43	46	48	39	32	27	51	31
		F	24	33	39	49	54	43	35	29	56	35
LS	Radiated	D	22	33	35	34	28	24	19	17	39	19
		E	23	29	36	33	28	25	19	18	39	19
		F	24	28	32	36	34	29	22	20	40	20
LS	Outlet	D	26	36	40	47	41	34	29	24	49	29
		E	25	34	41	46	42	35	31	25	49	28
		F	25	33	38	49	46	37	33	26	51	31

TD-350/125 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*	
HS	Inlet	A	22	28	41	53	49	44	37	30	55	35
		B	22	27	39	51	49	42	37	30	54	33
		C	23	31	48	53	51	46	41	32	56	36
HS	Radiated	A	22	23	32	39	32	25	18	14	41	20
		B	22	22	30	37	36	23	18	14	40	20
		C	23	26	39	39	34	27	22	16	43	22
HS	Outlet	A	29	30	43	53	50	45	38	30	56	35
		B	25	27	40	50	47	40	36	29	52	32
		C	24	31	46	52	47	42	40	32	54	34

TD-350/125 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*	
LS	Inlet	D	21	27	42	46	51	38	31	25	53	32
		E	22	29	40	46	53	39	34	26	54	34
		F	30	33	41	51	52	46	40	33	55	35
LS	Radiated	D	18	22	34	33	34	20	13	13	39	18
		E	19	24	32	33	36	21	16	14	39	19
		F	27	28	33	38	35	28	22	21	41	21
LS	Outlet	D	24	27	43	45	46	38	30	25	50	29
		E	23	29	40	45	47	35	32	26	50	29
		F	29	34	41	49	46	41	38	31	52	31

* Sound pressure level radiated at 3 m. in free field condition, with rigid ducts at the inlet and outlet.

ACOUSTIC CHARACTERISTICS

Sound power spectrum: The sound levels shown in these tables are sound power levels at the discharge, radiated and inlet, in dB(A) for frequency ranges at points of the curve: (A or D) free discharge, (B or E) medium pressure, (C or F) maximum pressure. (HS) high speed, (LS) low speed.
Performance data in accordance with ISO 13347-3 2004.

TD-500/150 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
Inlet	A	24	35	51	58	57	56	51	47	63	42
	B	25	33	48	56	55	54	46	42	60	40
	C	24	33	49	57	53	52	46	40	60	39
Radiated	A	12	21	42	39	37	35	23	18	45	25
	B	13	19	39	37	35	33	18	13	43	22
	C	12	19	40	38	33	31	18	11	43	22
Outlet	A	38	38	52	60	58	53	49	43	63	43
	B	35	35	53	58	57	50	44	38	62	41
	C	30	33	50	57	56	48	42	36	60	40

TD-500/150 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
Inlet	D	28	33	46	54	53	51	45	38	58	38
	E	25	31	41	50	48	44	37	30	53	33
	F	25	37	48	56	52	49	42	35	59	38
Radiated	D	23	25	34	37	38	35	26	23	43	22
	E	20	23	29	33	33	28	18	15	38	17
	F	20	29	36	39	37	33	23	20	43	23
Outlet	D	26	33	47	53	51	47	41	33	56	36
	E	25	31	44	50	48	41	33	27	53	33
	F	26	37	50	55	50	43	37	31	57	37

TD-800/200 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
Inlet	A	27	40	48	57	61	61	57	50	66	45
	B	25	38	46	55	58	58	54	46	63	42
	C	23	38	47	57	59	58	53	48	64	43
Radiated	A	12	31	29	35	37	36	24	18	42	21
	B	10	29	27	33	34	33	21	14	39	19
	C	8	29	28	35	35	33	20	16	40	19
Outlet	A	49	50	51	59	62	62	59	51	67	47
	B	42	45	49	58	59	58	55	47	64	44
	C	36	42	50	58	59	57	54	47	64	43

TD-800/200 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
Inlet	D	25	37	48	55	61	57	53	46	64	43
	E	24	35	48	52	58	54	49	42	61	40
	F	29	38	51	58	58	55	50	45	63	42
Radiated	D	12	26	30	34	38	33	21	15	41	20
	E	11	24	20	31	35	30	17	11	38	18
	F	16	27	33	37	35	31	18	14	41	20
Outlet	D	45	47	52	56	59	58	54	46	64	43
	E	37	45	54	53	55	54	50	42	61	40
	F	31	44	54	57	56	53	50	43	62	41

TD-1000/200 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
Inlet	A	28	43	49	58	62	65	61	53	68	48
	B	27	42	46	56	60	61	56	49	65	45
	C	25	42	47	58	61	61	56	50	66	45
Radiated	A	14	35	32	36	39	39	27	19	44	24
	B	13	34	29	34	37	35	22	15	42	21
	C	11	34	30	36	38	35	22	16	42	22
Outlet	A	50	50	52	59	65	65	61	54	70	49
	B	43	46	49	58	61	60	57	50	66	45
	C	35	44	51	59	60	59	56	50	65	45

TD-1000/200 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
Inlet	D	27	38	48	54	61	57	53	46	64	43
	E	23	37	49	52	59	54	49	42	61	41
	F	26	39	52	57	59	56	51	45	63	43
Radiated	D	14	29	32	33	40	33	21	14	42	22
	E	10	28	33	31	38	30	17	10	41	20
	F	13	30	36	36	38	32	19	13	42	22
Outlet	D	44	45	53	55	59	58	54	46	64	43
	E	35	41	53	52	55	54	50	41	60	40
	F	28	40	54	58	57	54	50	44	62	42

TD-1300/250 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
Inlet	A	30	42	60	59	62	61	58	52	67	47
	B	32	43	62	60	61	60	56	51	67	47
	C	36	47	63	60	58	58	55	48	67	47
Radiated	A	26	31	46	42	55	48	39	38	57	37
	B	28	32	48	43	54	47	37	37	56	36
	C	32	36	49	43	51	45	36	34	54	34
Outlet	A	33	45	60	68	72	65	54	48	74	54
	B	30	46	61	69	71	63	52	47	74	54
	C	32	51	62	69	67	60	51	44	72	52

TD-1300/250 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
Inlet	D	30	40	59	55	59	57	53	47	64	44
	E	35	40	57	56	56	55	51	46	63	43
	F	38	45	59	57	53	53	49	42	63	43
Radiated	D	24	32	44	39	53	44	34	33	54	34
	E	29	32	42	40	50	43	32	32	52	32
	F	32	37	44	41	47	40	30	28	50	30
Outlet	D	30	43	58	63	72	59	50	43	73	53
	E	29	44	57	65	66	57	47	41	69	49
	F	32	48	59	65	62	55	45	38	68	48

TD-2000/315 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
Inlet	A	34	48	60	63	66	64	59	55	70	50
	B	34	49	63	62	65	64	60	55	70	50
	C	37	56	64	63	63	62	58	52	70	50
Radiated	A	23	36	44	50	57	54	49	43	60	40
	B	23	37	47	49	56	54	50	43	60	40
	C	26	44	48	50	54	52	48	40	58	38
Outlet	A	42	54	67	69	73	66	52	49	76	56
	B	38	55	66	67	73	65	51	49	75	55
	C	36	61	68	71	68	62	49	46	74	54

TD-2000/315 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
Inlet	D	37	47	59	57	60	58	54	48	65	45
	E	34	47	59	56	58	56	53	47	64	44
	F	32	48	59	55	56	54	51	43	63	43
Radiated	D	27	40	43	45	52	49	45	37	55	35
	E	24	40	43	44	50	47	44	36	54	34
	F	22	41	43	43	48	45	42	32	52	32
Outlet	D	34	52	62	63	67	60	47	43	70	50
	E	34	53	60	62	66	58	44	41	69	49
	F	31	55	64	61	61	55	41	37	68	48

* Sound pressure level radiated at 3 m. in free field condition, with rigid ducts at the inlet and outlet.