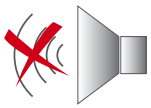
TD-SILENT - MODELS 160 TO 1000

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 360º, to facilitate easy connection of the power cable.

Motors

Speed controlable 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.

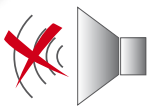
(Models 350, 500, 800 and 1000)

TD-SILENT-T models

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

TD-SILENT - MODELS 1300 AND 2000

Low profile "Mixed-flow" fans with soundabsorbent 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.
Removeable fan body with 2 speed motor, single phase 230V-50/60Hz speed controlable, Class F, external rotor aluminium motor with capacitor and thermal protection.



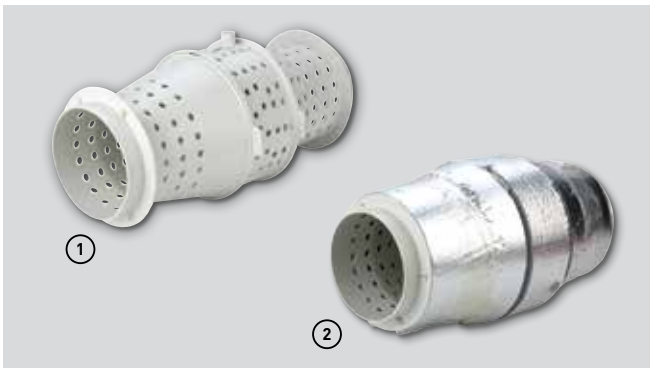
Additional information

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

(Model 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 360º
Connection box can be rotated 360º, 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.

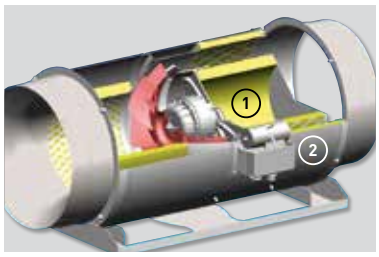
MODEL 160

SILENT-ELASTIC-BLOCKS
Model TD-160/100N SILENT offer very low noise level, with **a motor mounted on silentelastic-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.

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



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

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

IP55 REMOTE terminal box
Easy installation and connection.

TECHNICAL CHARACTERISTICS

TD-SILENT	Speed (rpm)	Maximum absorbed power (W)	Maximum absorbed current (A)	Airflow at free discharge (m^3/h)	Maximum operating temperature (ºC)	Sound pressure level* (dB(A))	Ø Duct (mm)	Weight (kg)	Wiring diagram*** (nº)
TD-160/100 N SILENT	2500 2200	25 12	0,16 0,10	180 140	-20/+40	24 21	100	1,4	9, 10
TD-250/100 SILENT	2200 1850	24 18	0,11 0,10	240 200	-20/+40	24 19	100	5,4	9, 10
TD-350/125 SILENT	2250 1900	30 22	0,13 0,10	360 300	-20/+40	20 19	125	5	9, 10
TD-500/150-160 SILENT**	2500 1950	50 44	0,22 0,19	570 430	-20/+60	22 17	150 /160	6	9, 10
TD-800/200 SILENT	2780 2480	95 90	0,45 0,43	900 790	-20/+60	19 18	200	8,7	9, 10
TD-1000/200 SILENT	2500 2000	120 100	0,50 0,45	1030 790	-40/+60	21 20	200	8,7	9, 10
TD-1300/250 SILENT	2570 2190	197 145	0,83 0,61	1270 1070	-40/+60	35 31	250	20,0	12, 13
TD-2000/315 SILENT	2680 2300	297 191	1,28 0,79	1760 1500	-40/+60	39 33	315	25,0	12, 13

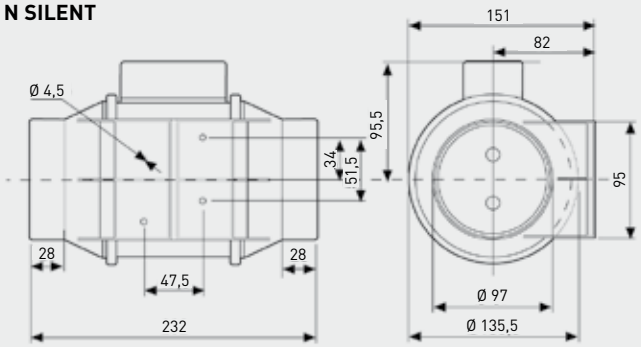
* Sound pressure level radiated at 3 m at free air conditions with rigid ducts at the inlet and at the outlet.
** It provides an additional rubber gasket for installation in 160 mm ducts.
*** See section of Wiring Diagrams.

TD-SILENT T (Models TD-SILENT with run-on timer)	Speed (rpm)	Maximum absorbed power (W)	Maximum absorbed current (A)	Airflow at free discharge (m^3/h)	Maximum operating temperature (ºC)	Sound pressure level* (dB(A))	Ø Duct (mm)	Weight (kg)
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	8,5
TD-1000/200 SILENT T	2500	120	0,5	1100	-40/+60	21	200	8,5

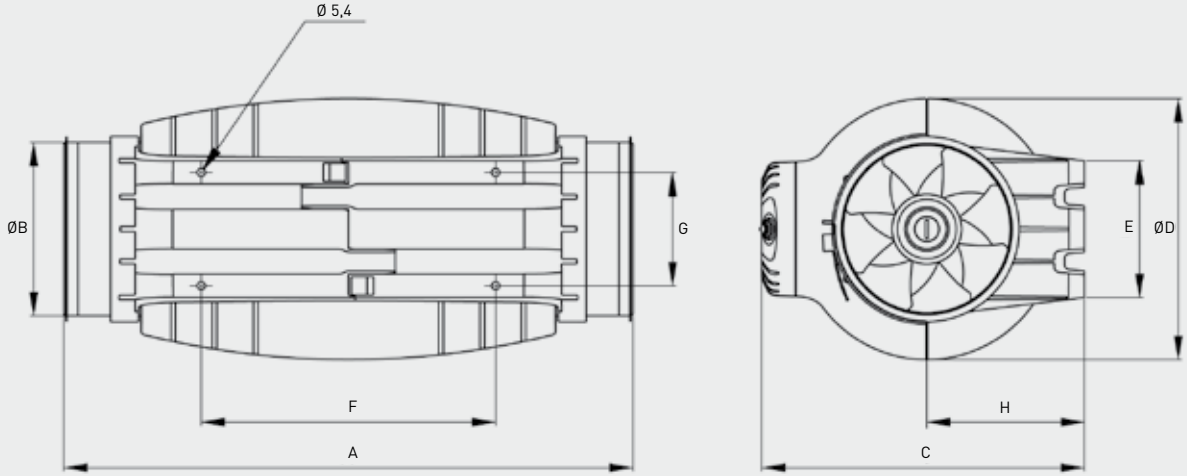
* Sound pressure level radiated at 3 m at free air conditions with rigid ducts at the inlet and at the outlet.

DIMENSIONS (mm)

TD-160/100 N SILENT



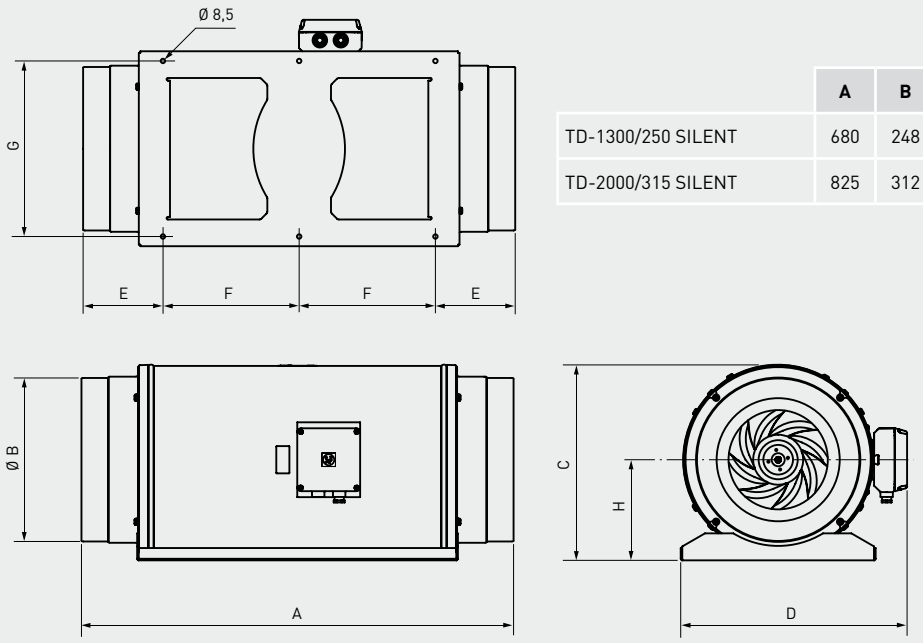
TD-SILENT 250 to 1000



	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.

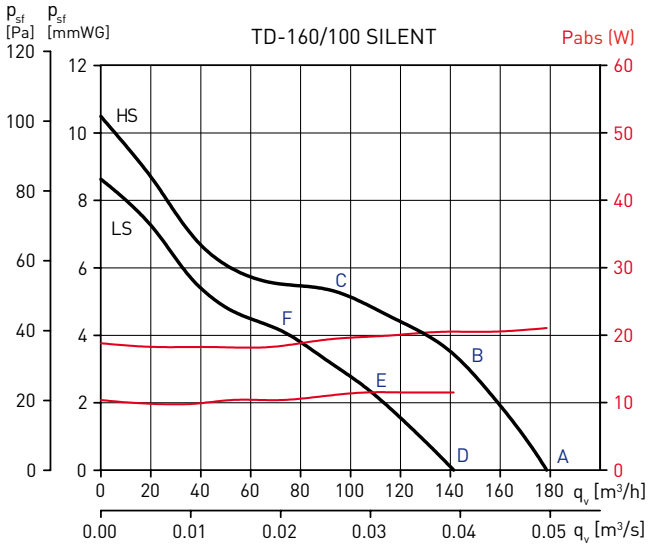
TD-SILENT 1300 and 2000

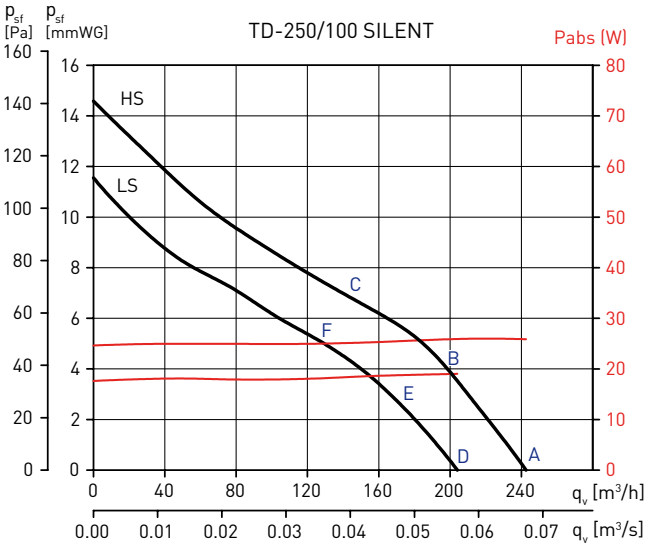


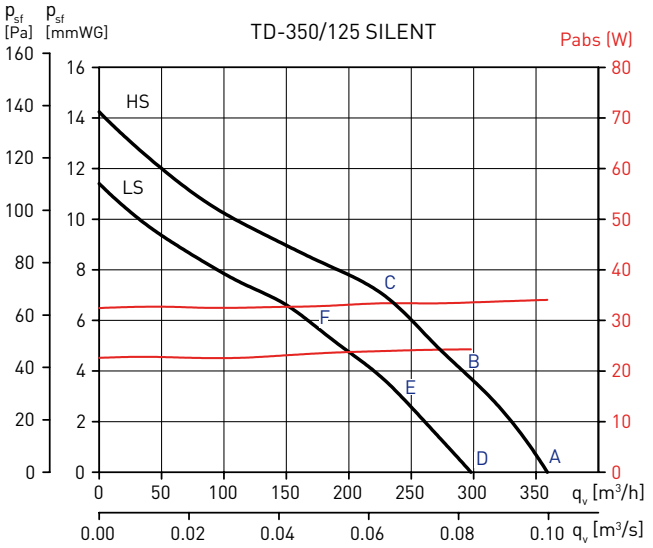
	A	B	C	D	E	F	G	H
TD-1300/250 SILENT	680	248	331	387	140	200	280	171
TD-2000/315 SILENT	825	312	373	432	152	260	335	192

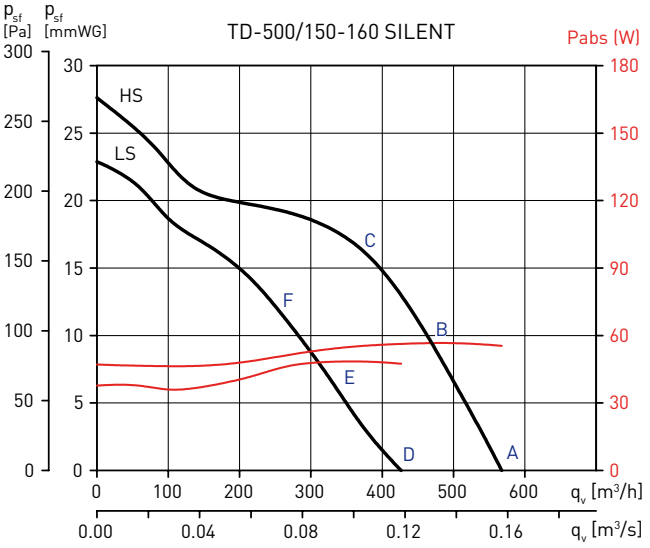
PERFORMANCE CURVES

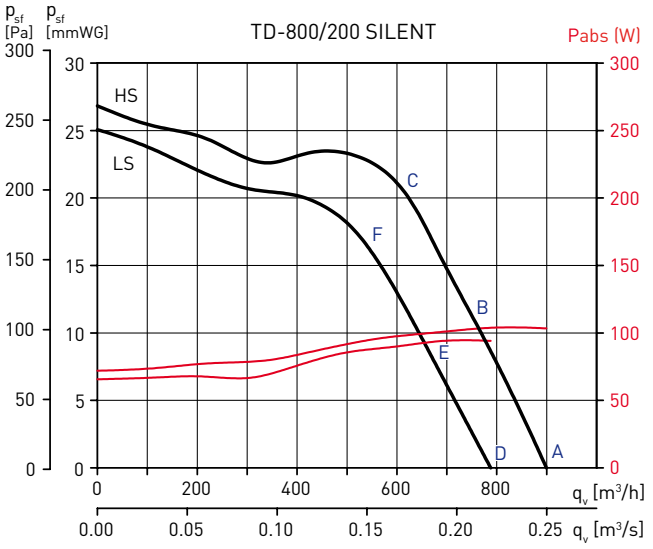
- q_v: Airflow in m^3/h and m^3/s.
- p_{sf}: Static pressure in mmWG and Pa.
- Dry air at 20ºC and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

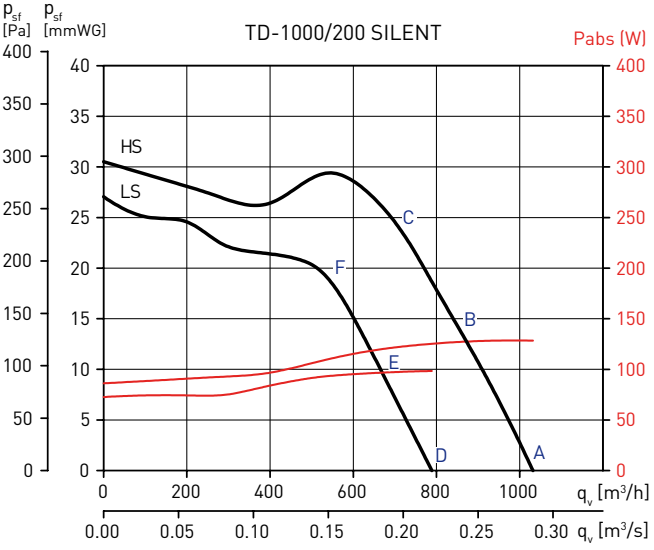






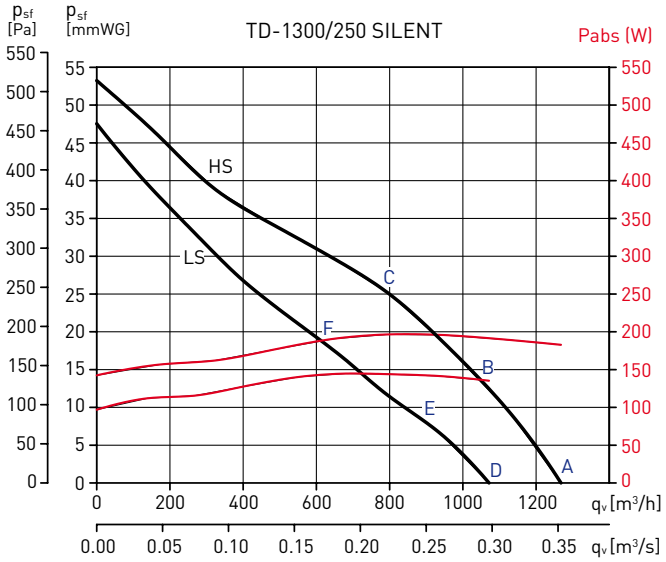


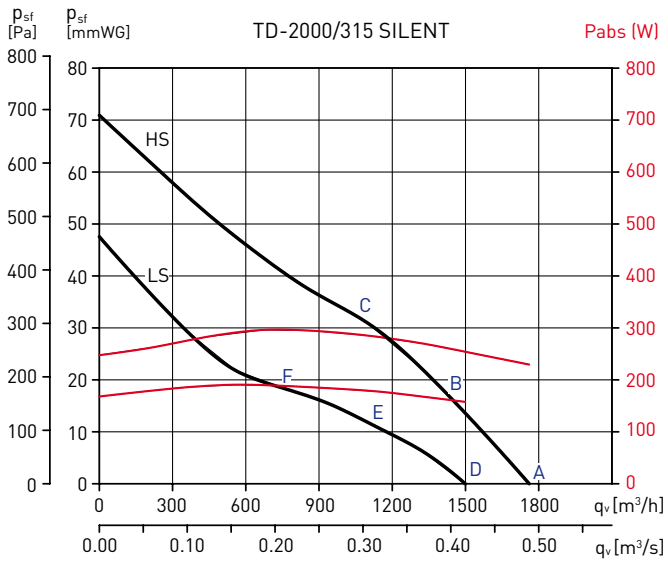




PERFORMANCE CURVES

- q_v: Airflow in m^3/h and m^3/s.
- p_{sf}: Static pressure in mmWG and Pa.
- Dry air at 20ºC 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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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*
HS	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*
LS	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*
HS	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*
LS	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*
HS	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*
LS	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*
HS	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*
LS	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

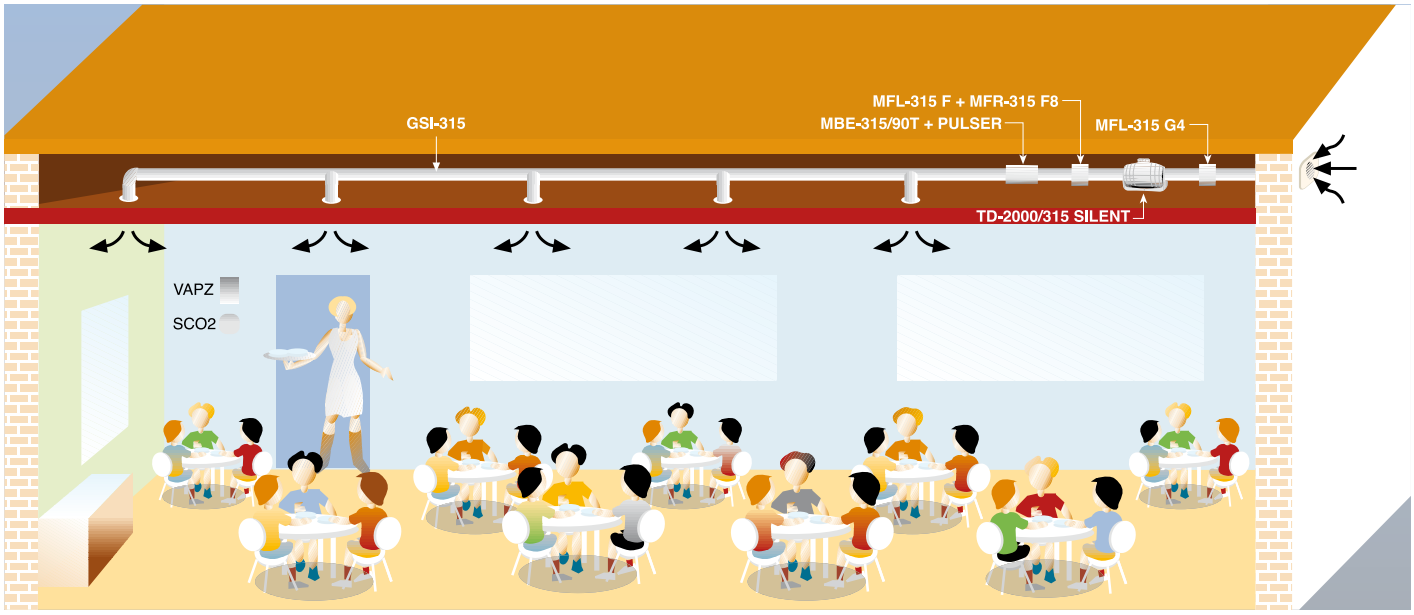
	TD-2000/315 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
HS	Inlet	A	34	48	60	63	66	64	59	55	70	50
		B	34	49	63	62	65	64	60	55	70	50
		C	37	56	64	63	63	62	58	52	70	50
	Radiated	A	23	36	44	50	57	54	49	43	60	40
		B	23	37	47	49	56	54	50	43	60	40
		C	26	44	48	50	54	52	48	40	58	38
	Outlet	A	42	54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

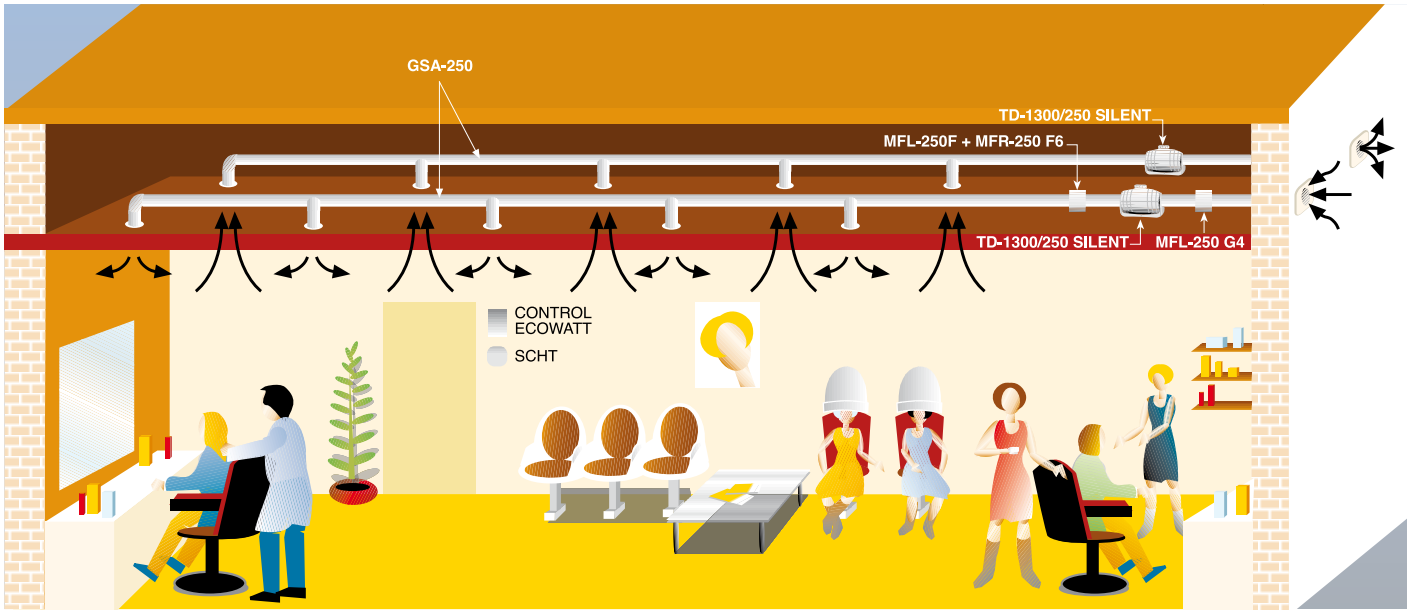
	TD-2000/315 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
LS	Inlet	D	37	47	59	57	60	58	54	48	65	45
		E	34	47	59	56	58	56	53	47	64	44
		F	32	48	59	55	56	54	51	43	63	43
	Radiated	D	27	40	43	45	52	49	45	37	55	35
		E	24	40	43	44	50	47	44	36	54	34
		F	22	41	43	43	48	45	42	32	52	32
	Outlet	D	34	52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

PRACTICAL EXAMPLES OF INSTALLING TD SILENT RANGE

TD Silent range offers one of the most versatile fan systems on the market today. Due to its flexibility it can be used in a multitude of small or medium fan installations. Especially in places where working people and the ventilation system works for many hours, in these cases the sound level becomes an essential element for comfort.

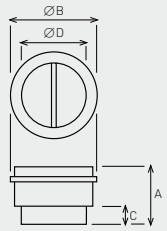




MOUNTING ACCESSORIES

MCA-S

Non-return flaps to be installed at the fan discharge. They prevent heat leakages when the extractor is not operating.



MCA-S	TD-SILENT* range
MCA - 250 S	250/100
MCA - 350 S	350/125
MCA - 500/150 S	500/150
MCA - 500/160 S	500/160
MCA - 800-1000 S	800/200 - 1000/200

MCA-S	A	Ø B	C	Ø D
MCA - 250 S	107	109	31,5	94,5
MCA - 350 S	107	136	31,5	119,5
MCA - 500/150 S	121	163,5	35	147
MCA - 500/160 S	121	173,5	35	157
MCA - 800-1000 S	131,5	214	35	197,5

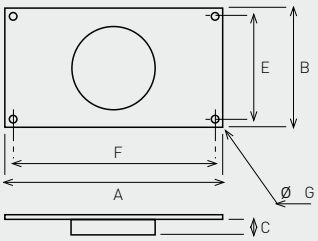
MCA	TD-SILENT* range
MCA - 1000	1300/250
MCA - 2000	2000/315

MCA	A	Ø B	C	Ø D
MCA - 1000	164	264,5	42	248
MCA - 2000	205	330	50	312

(*) TD-1300/250 SILENT and TD-2000/315 SILENT models use non-return flaps MCA (see TD Series accessories).

MAR-S

Rectangular duct adapters enable connection to rectangular ducting.



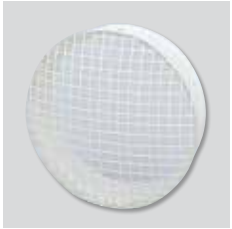
MAR-S	TD-SILENT* range	Nominal dimensions of the duct L XH (mm)
MAR - 250-350 S	250/100 - 350/125	224 x 140
MAR - 500 S	500/150	280 x 180
MAR - 800-1000 S	800/200-1000/200	315 x 200

MAR-S	A	B	C	E	F	Ø G
MAR - 250-350 S	264	180	33,3	160	244	9
MAR - 500 S	320	220	37	200	300	9
MAR - 800-1000 S	355	240	37	220	335	9

MAR	TD-SILENT* range	Nominal dimensions of the duct L XH (mm)
MAR - 1000	1300/250	400 x 250
MAR - 2000	2000/315	500 x 315

MAR	A	B	C	E	F	Ø G
MAR - 1000	440	290	42	270	420	9
MAR - 2000	540	355	52	355	520	9

(*) TD-1300/250 SILENT and TD-2000/315 SILENT models use rectangular duct adapters MAR (see TD Series accessories).



MRJ-S

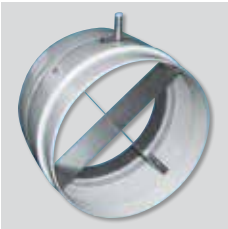
Grilles mounted at the inlet or outlet of the fan, to prevent the entry of any foreign objects that could damage the fan.

MRJ-S	TD-SILENT* range
MRJ - 250-350 S	250/100 - 350/125
MRJ - 500/150-160 S	500/150 - 500/160
MRJ - 800-1000 S	800/200 - 1000/200

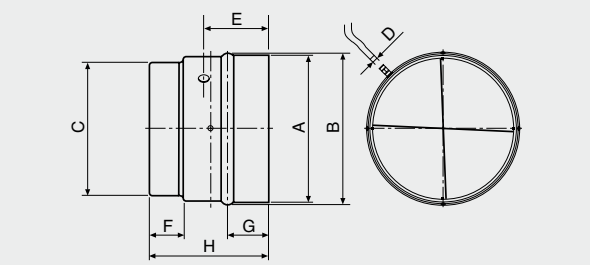
MRJ	TD-SILENT* range
MRJ - 1000	1300/250
MRJ - 2000	2000/315

(*) TD-1300/250 SILENT and TD-2000/315 SILENT models use grilles MRJ (see TD Series accessories).

MOUNTING ACCESSORIES



MPC-S
Flow detectors designed to correctly measure pressures at the inlet of series TD devices with airflow straightner.



MPC-S	TD-SILENT* range
MPC-250 S	250/100
MPC-350 S	350/125
MPC-500/150 S	500/150 - 500/160
MPC-500/160 S	500/160
MPC-800-1000 S	800/200 - 1000/200

MPC-S	A	B	C	D	E	F	G	H
MPC-250 S	108	108,7	94,5	6	58	31,5	36,5	105,5
MPC-350 S	136	132	120	6	58	32	37	107
MPC-500/150 S	164	158	147	6	64	35	40	121
MPC-500/160 S	174	168	157	6	64	35	40	121
MPC-800-1000 S	214	208	198	6	70	35	40	132

MPC	TD-SILENT* range
MPC-1000	1300/250
MPC-2000	2000/315

MPC	A	B	C	D	E	F	G	H
MPC-1000	265	260	248	6	85	42	47	164
MPC-2000	329	318	312	6	106	50	55	204

(*) TD-1300/250 SILENT and TD-2000/315 SILENT models use flow detectors MPC (see TD Series accessories).

MBR-S
Flanges allowing the coupling of TD-Silent fans in series.

MBR-S	Ø of the conduct
MBR-250-350 S	125
MBR-500 S	150
MBR-800-1000 S	200

(*) TD-1300/250 SILENT and TD-2000/315 SILENT models use flange MBR (see TD Series accessories).

ELECTRICAL ACCESSORIES

REGUL 2
2 speed switch.

REB
Single phase electronic speed controller.

CONTROL ECOWATT AC/4A
Control element for demand controlled ventilation systems in public, commercial residential buildings it automatically modifies the fan speed to adapt it to the needs defined in the system, measured with sensors.

VAPZ
Electronic single phase regulator that controls the fan speed with a simple contact (presence detector) or an analogical input, 0-10 V or 4-20 mA (from CO_2 probe or relative sensor).

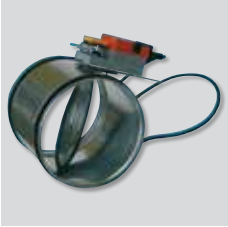
SCO2-A
Ambient CO_2 and temperature sensor.

SCO2-AD
Ambient CO_2 and temperature sensor, with display.

SCHT-AD
Ambient CO_2, temperature and relative humidity with display.

CPFL-S / CPFL-E
Presence detector for ceiling mount, sensitive to infrared radiation by bodies in movement, with a 360º detecting angle.
Power supply: 1-230 V.

TDP-S / TDP-D
Presure sensor. Enables you to control the pressure in the fan inlet.
Presure range: 0-2500 Pa.
Output signal: 0-10V/4-20 mA.



REMP
Motorised damper, opens proportionately and is controlled by the BEAS control module.
Power supply: 24 VAC or 24 VD, depending on the models.