



## IN-LINE MIXED FLOW DUCT FANS ULTRA-QUIET

### TD-SILENT Series

**NEW**



Low profile "Mixed-flow" fans with sound-absorbent insulation. **Extremely quiet.**

Manufactured in plastic material, with a specifically designed internal skin to direct the sound waves in 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 controlable 230 V 50 Hz motor, of two speed motors.

Motors are IP44, 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.



TD-SILENT range,  
the quietest fans in the world in their class

### Low profile



The low profile of the TD-SILENT fans makes them the most effective solution for installations where the space of installation is limited such as false ceilings.

### Low noise level



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

### 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.

### Flexible washers



Bi-material inlet and outlet incorporating a flexible washer 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



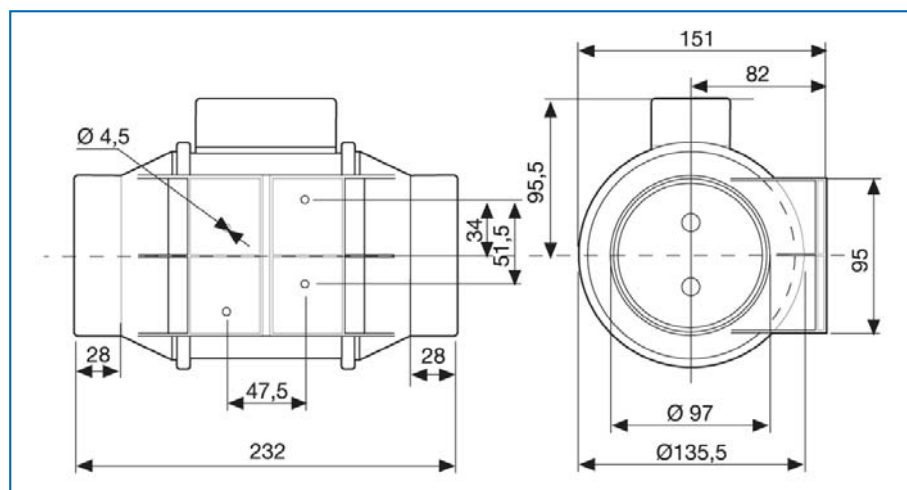
Remount the fan body by tightening the clamps

## Technical characteristics

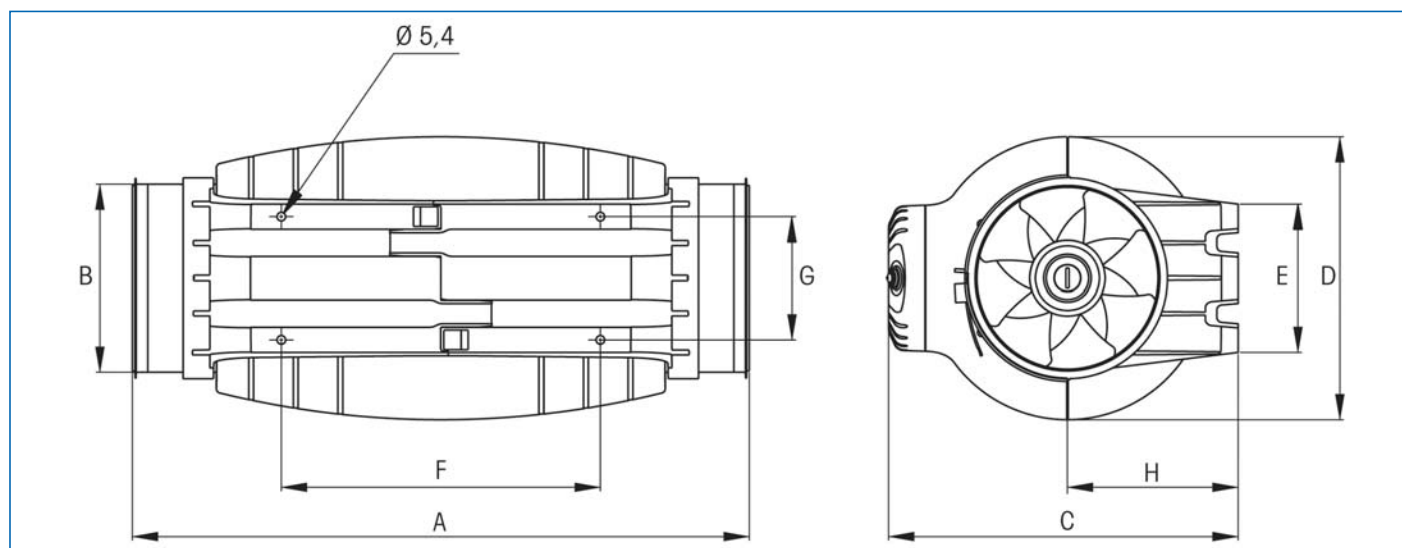
Model	Nom. speed (r.p.m.)	Maximum absorbed power (W)	Maximum absorbed current (A)	Duty at free discharge (m <sup>3</sup> /h)	Maximum operating temp. (°C)	Sound pressure level* (dB(A))	Ø Duct (mm)	Weight (Kg)
TD-160/100 N SILENT	2500	25	0,16	180	40	24	100	1,40
	2200	12	0,10	140		21		
TD-250/100 SILENT	2200	24	0,11	240	40	24	100	5,40
	1850	18	0,10	180		19		
TD-350/125 SILENT	2250	30	0,13	380	40	20	125	4,94
	1900	22	0,10	280		19		
TD-500/150-160 SILENT	2500	50	0,22	580	60	22	150 /160	6,00
	1950	44	0,19	430		17		
TD-800/200 SILENT	2780	95	0,45	880	60	19	200	8,70
	2480	90	0,43	700		18		
TD-1000/200 SILENT	2500	120	0,50	1100	60	21	200	8,70
	2000	100	0,45	800		20		

\*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



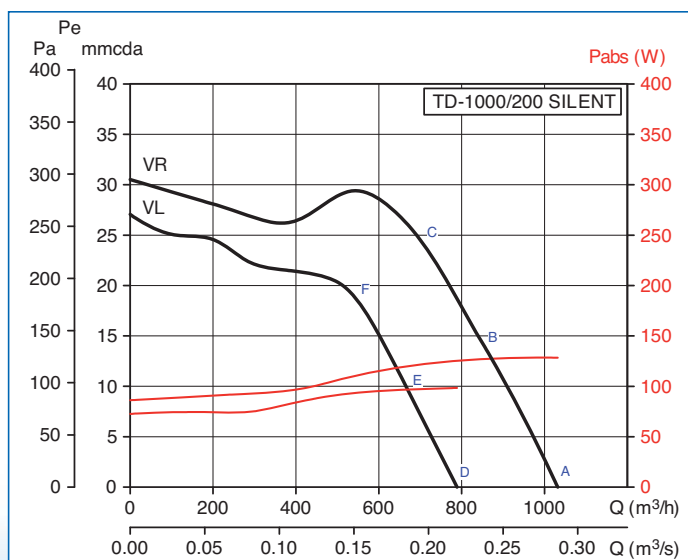
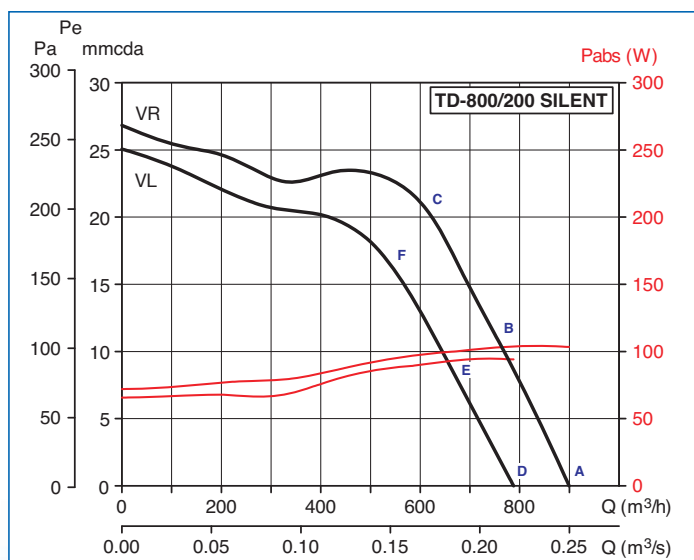
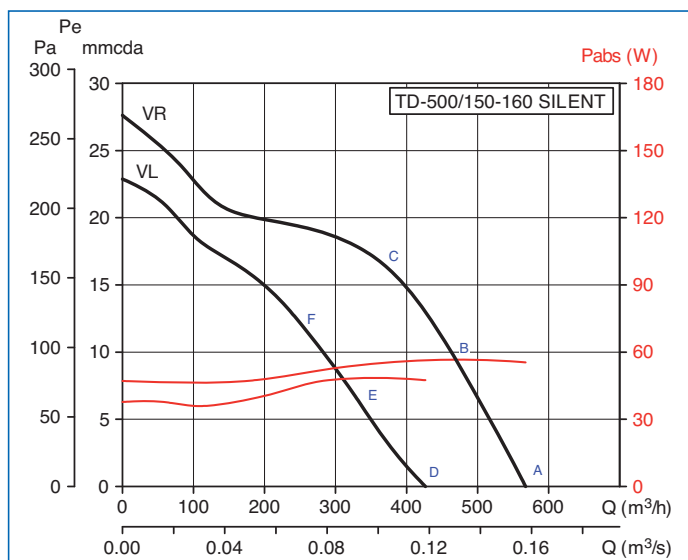
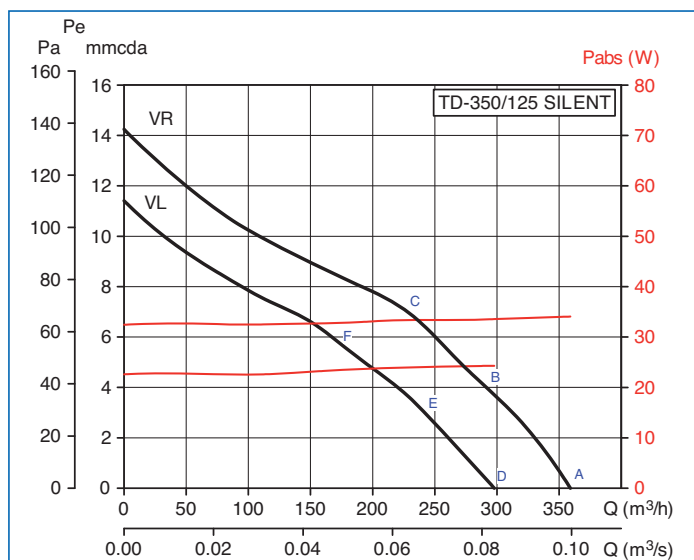
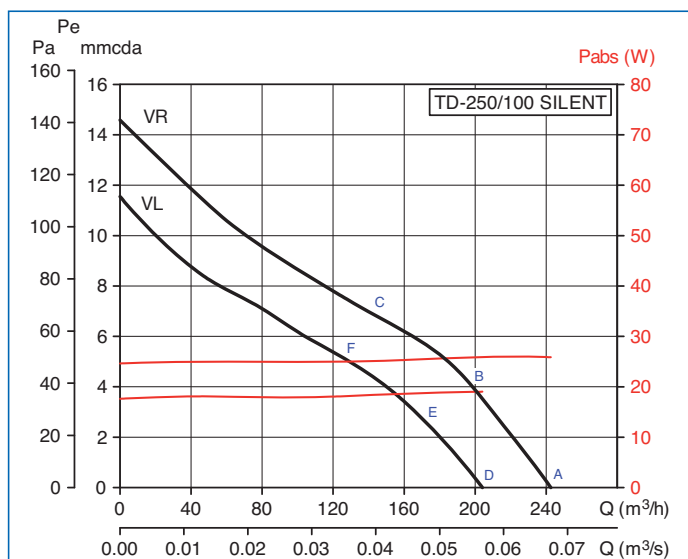
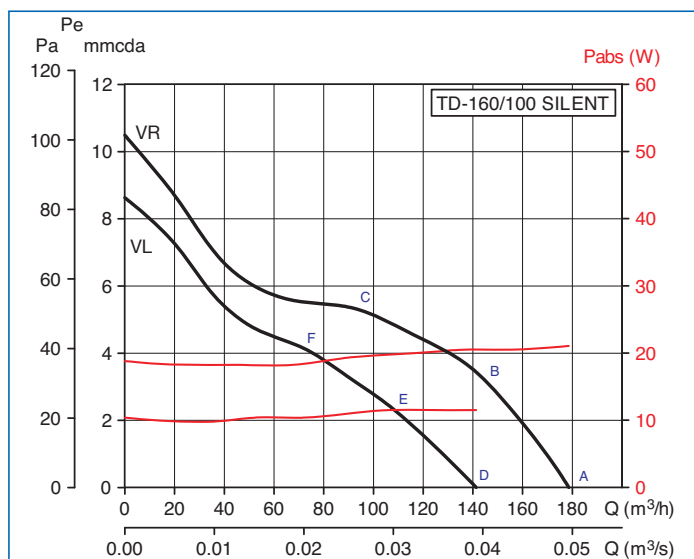
TD-SILENT 250 to 1000	A	B Ø	C	D Ø	E	F	G	H
TD-250/100	575	97	252	204	100	250	83	121
TD-350/125	462	123	252	204	100	250	83	121
TD-500/150-160*	484	147	274	221	116	250	96	134
TD-800/200	568	198	327	264	145	340	129	164
TD-1000/200	568	198	327	264	145	340	129	164

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



## ■ Performance curves

- Q = Air volume in, m<sup>3</sup>/hr and m<sup>3</sup>/s.
- Pe = Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801, AMCA 210-99 Standards and BS 848 part 2:1985.



## 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. VR, fast speed. VL, slow 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*
VR	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
	DISCHARGE	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

VL	TD-160/100 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
	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
	DISCHARGE	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*
VR	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
	DISCHARGE	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*	
VL	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
	DISCHARGE	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

VR	TD-350/125 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
	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
	DISCHARGE	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

VL	TD-350/125 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
	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
	DISCHARGE	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

	TD-500/150 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
VR	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
	DISCHARGE	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*	
VL	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
	DISCHARGE	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*
VR	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
	DISCHARGE	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

VL	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
	DISCHARGE	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

\*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. VR, fast speed. VL, slow speed. Performance data in accordance with ISO 13347-3 2004.

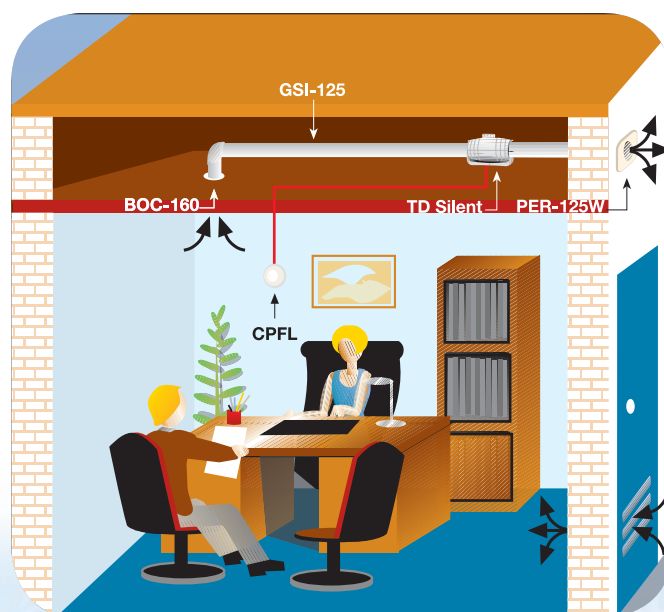
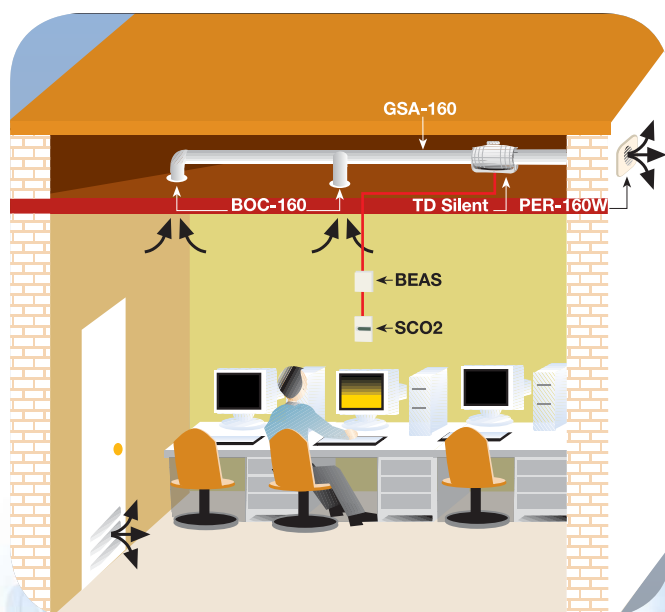
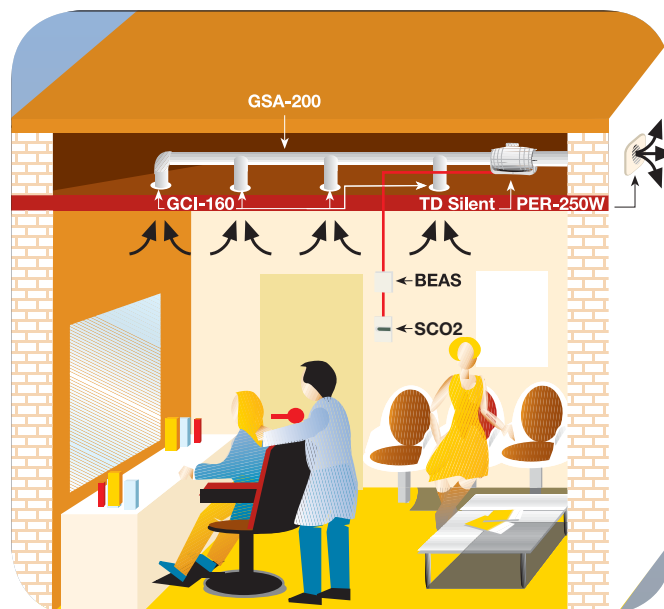
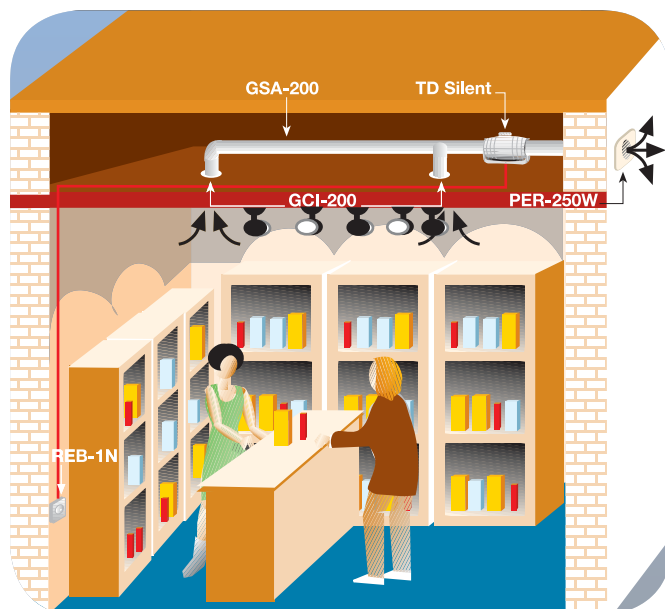
VR	TD-1000/200 SILENT		63	125	250	500	1.000	2.000	4.000	8.000	LwA	LpA*
	INLET	A	28	43	49	58	62	65	61	53	68	48
		B	27	42	46	56	60	61	56	49	65	45
		C	25	42	47	58	61	61	56	50	66	45
	RADIATED	A	14	35	32	36	39	39	27	19	44	24
		B	13	34	29	34	37	35	22	15	42	21
		C	11	34	30	36	38	35	22	16	42	22
	DISCHARGE	A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

VL	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
	DISCHARGE	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

\* 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 fansystems 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

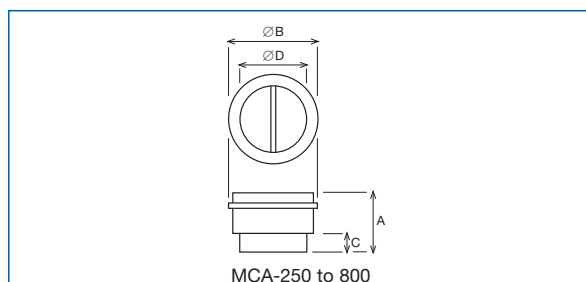
TD-SILENT



### MCA

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

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



Model MCA	A	Ø B	C	Ø D
MCA - 250	107	111	31,5	94,5
MCA - 350	107	136	31,5	119,5
MCA - 500/150	121	163,5	35	147
MCA - 500/160	121	173,5	35	157
MCA - 800	131,5	214	35	197,5

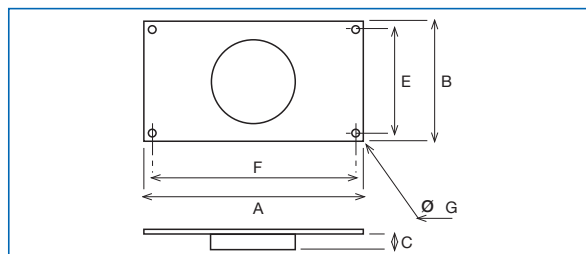
In-Line duct fans



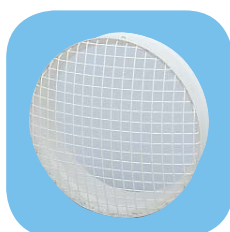
### MAR

Rectangular Duct Adapters enable connection to rectangular ducting.

Model MAR	TD-SILENT range	Nominal dimensions of the duct L x H
MAR - 250	160/100N - 250/100	224 x 140
MAR - 350	350/125	224 x 140
MAR - 500/150	500/150	280 x 180
MAR - 500/160	500/160	280 x 180
MAR - 800	800/200-1000/200	315 x 200



Model MAR	A	B	C	E	F	Ø G
MAR - 250	264	180	33,3	160	244	9
MAR - 350	264	180	33,5	160	244	9
MAR - 500/150	320	220	37	200	300	9
MAR - 500/160	320	220	37	200	300	9
MAR - 800	355	240	37	220	335	9



### MRJ

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

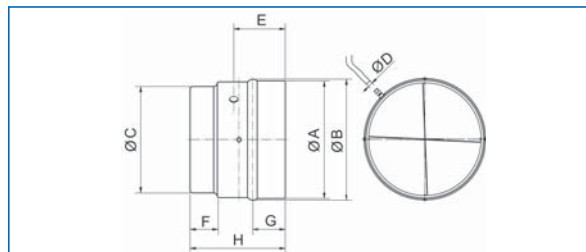
Model MRJ	TD-SILENT range
MRJ - 250	160/100N - 250/100
MRJ - 350	350/125
MRJ - 500/150	500/150
MRJ - 500/160	500/160
MRJ - 800	800/200 - 1000/200



### MPC

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

Model	TD-SILENT range
MPC-350	350/125
MPC-500/150	500/150
MPC-500/160	500/160
MPC-800	800/200 - 1000/200



Model	A	B	C	D	E	F	G	H
MPC-350	136	132	120	6	58	32	37	107
MPC-500/150	164	158	147	6	64	35	40	121
MPC-500/160	174	168	157	6	64	35	40	121
MPC-800	214	208	198	6	70	35	40	132

## ■ 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 that 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 (CO<sub>2</sub> probe for relative humidity % RH).



**SCO2-A**  
Ambient CO<sub>2</sub> and temperature sensor.

**SCO2-AD**  
Ambient CO<sub>2</sub> and temperature sensor, with display.

**SCHT-AD**  
Ambient CO<sub>2</sub>, temperature and relative humidity with display.



**CPFL-S / CPFL-E**  
Presence Detector for wall fitting, sensitive to infrared radiation by bodies in movement, with a 360° detecting angle. Power supply: 1-230 V.



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



**REMP**  
**Motorised damper**, opening proportionally and controlled by the BEAS control module. Power supply: 24 VAC or 24 VD, depending on the models.

