



The World's Leading Producer of Air Movement Products



Soler&Palau
Ventilation Group

February 2011

TD In-line Mixed Flow Duct Fans

Soler & Palau (S&P) USA and Canada are the most recent additions to, and are wholly owned subsidiaries of, Soler & Palau Ventilation Group which was founded in 1951. S&P is the World's leading producer of air movement products with an emphasis on developing and producing leading edge products to HVAC and other associated industries.

Over the past 50 years the company has expanded its product ranges and operations within Europe and beyond. Across the globe, S&P has established the most effective means through subsidiaries, distributors and partners for the distribution of products. Today S&P has facilities in many countries, among these are: Australia, Belgium, China, England, France, Germany, Holland, Italy, Portugal, Mexico, the USA and Canada. Worldwide, S&P is represented by an established and renowned network of distributors and partner companies.

TD-MIXVENT SERIES

Compact Size-TD Fans require minimum space

The S&P TD-MIXVENT series of in-line duct fans have been specially designed to maximize the airflow performance with minimal noise levels within the smallest and most compact of housing sizes. This makes the TD-MIXVENT series the ultimate solution for small to medium sized ventilation installations which require a high airflow to pressure ratio and occupy only the minimum space possible. Example: false ceiling voids, cabinets and many other limited space environments.



Internal parts can be easily removed for mounting & servicing

Easy to Install...fit and forget!

All the models in the TD-MIXVENT range have been designed with the professional contractor/engineer in mind. All models include a "removable body" feature that enables the motor-impeller assembly to be completely removed or replaced without the need to interfere with the attached ducting.

Multitude of features-high specification

All models within the TD-MIXVENT range incorporate a powerful mixed flow impeller and internal air vanes located at the discharge end of the fan housing. This impeller and guide vane combination provides a smooth laminar air flow which in turn minimizes turbulence and noise, and generates an **excellent air flow to pressure performance ratio**.

Description

The MIXVENT system has been designed to compliment the TD-MIXVENT range of in-line fans. All of the TD-fans include the combination of a powerful motor, factory installed, to a mixed flow impeller. This motor and impeller combination enables the TD-fans to deliver high airflow performances with minimum noise generation against high static pressures typically found in ducted ventilation systems. The unique design of the support brackets, allows the motor and impeller assembly to be fitted or removed without dismantling the adjacent ducting and therefore, facilitating any installation or maintenance. The internal aerodynamic design of the TD-MIXVENT fan enables the unit to generate large air volumes and pressures with the minimum of in-duct or radiated noise. As an additional standard advantage, TD-MIXVENT fans are fitted with a direct connection two-speed motor. The TD-fans offer the ideal in-line duct fan solution for a wide range of HVAC ventilation applications.

TD-MIXVENT Fan Kits

The TD ventilation kits enable simple and fast installation of a complete ventilation system. The kits include the powerful TD in-line fan providing efficient exhaust for bathrooms, toilets, washrooms and any other applications that require the removal of bad odors, stuffy and humid air. In addition to the fan, the kits include an interior round grille (with or without lights) and an exterior louvered shutter to provide the complete hardware required for a given ventilation system.



Mixed Flow Fans vs. Axial and Centrifugal Fans

Axial Fans

- Low noise levels
- High air volumes
- Very little static pressure capability*

Noise Level

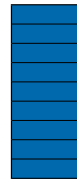
High



Low

Air Volume

High



Low

Static Pressure

High

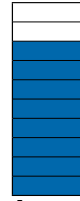


Low

Centrifugal Fans

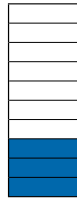
- Higher noise levels
- Lower air volumes
- Very high static pressure capability*

High



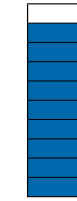
Low

High



Low

High



Low

Mixed Flow Fans**

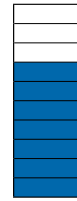
- Low noise levels
- High air volumes
- Significant static pressure capability*

High



Low

High

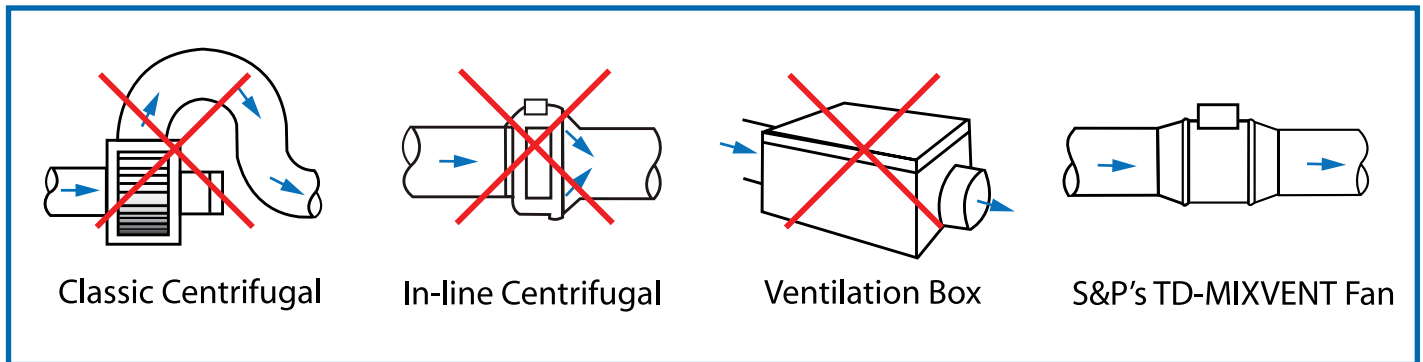


Low

High



Low



*Static pressure is the ability of the fan to overcome resistance such as long or complicated duct runs.

Mixed flow fans (TD series) offer the best of both axial and centrifugal fans and are suitable for most air movement applications. S&P's **TD-MIXVENT Series has all the benefits of a mixed flow fan, plus it requires minimal space and it is easy to install.

General details of the TD-MIXVENT range



Low profile mixed flow fans, manufactured in plastic material (up to model 200) or in **galvanized steel** sheet protected with Epoxy paint (model 250 and 315), with external terminal box, removable motor-impeller assembly and adjustable single-phase motor, Class B, IP44.



Construction characteristics

	100	100x	125	150	200	250	315
Polypropylene housing	•	•	•	•	•		
Steel housing with epoxy coating						•	•
ABS fan blades	•	•	•	•	•		
Aluminum fan blades						•	•
Thermal link via fuse	•						
Thermal link with automatic reset		•	•	•	•	•	•
Permanently lubricated ball bearings	•	•	•	•	•	•	•
Speed controllable 2-speed motor	•	•	•	•	•	•	•

The extensive range of the TD-MIXVENT series makes it an effective solution for a wide range of residential and light commercial ventilation installations.

Low Profile



The low profile of the fans in the TD-MIXVENT range makes them the ideal product for installations with low height limits, such as the case of suspended ceilings.

Easy to Install



Secure the support.



Make the connections.



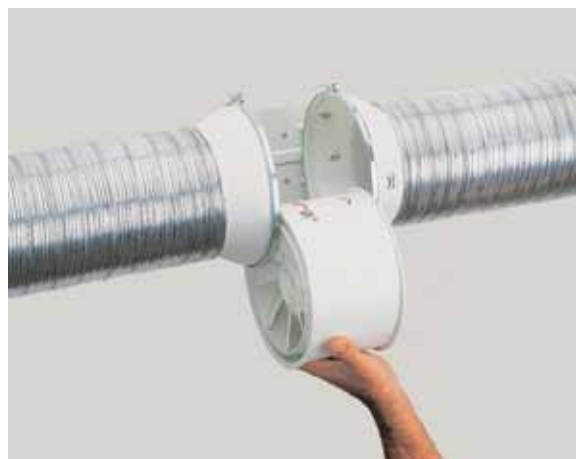
Connect the ducts.

Flexibility in Location



The fans can be connected at any point along the ventilation duct: along the duct or at the end.

Easy Maintenance



Removable body, for repair or cleaning, **without the need to touch the ducts.**



TD-MIXVENT

Technical Specifications

Performance characteristics

All models include a direct two speed motor connection.

Model	Nom. RPM	Volts	Max. Watts	Speed	CFM v Static Pressure (SP) Ins. WG							Max. SP	Max operating temp. (°F)	Wgt. (lbs)	Duct Dia. Ins.
					0"	0.125"	0.25"	0.375"	0.5"	0.75"	1.0"				
TD-100	2431	120	23	LS	97	81	51	-	-	-	-	.4	104	2	4"
	2516	120	26	HS	101	85	57	-	-	-	-	.4	104	2	4"
TD-100x	1556	120	20	LS	100	77	48	-	-	-	-	.375	104	4.4	4"
	2096	120	33	HS	135	113	90	53	-	-	-	.55	104	4.4	4"
TD-125	1633	120	24	LS	149	110	73	-	-	-	-	.35	104	4.4	5"
	2146	120	38	HS	197	168	133	86	22	-	-	.55	104	4.4	5"
TD-150	1709	120	54	LS	218	193	163	128	105	24	-	.8	140	4.4	6"
	2289	120	65	HS	293	273	250	227	206	131	35	1.15	140	4.4	6"
TD-200	2322	120	139	LS	476	422	373	317	260	40	-	1.38	140	8.8	8"
	2781	120	184	HS	538	495	458	418	367	190	10	1.625	140	8.8	8"
TD-250	2400	115	162	LS	541	475	418	355	295	218	170	2.03	140	19.8	10"
	3200	115	241	HS	754	715	680	640	606	520	405	2.53	140	19.8	10"
TD-315	2000	115	208	LS	751	670	545	420	285	190	130	1.62	140	30.9	12.4"
	2500	115	335	HS	1050	990	932	850	770	600	420	2.95	140	30.9	12.4"

Performance certified is for installation Type D: Ducted Inlet, Ducted Outlet. Performance ratings do not include the effects of appurtenances.

LS= Low Speed
HS = High Speed



Soler & Palau USA certifies that the TD range shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



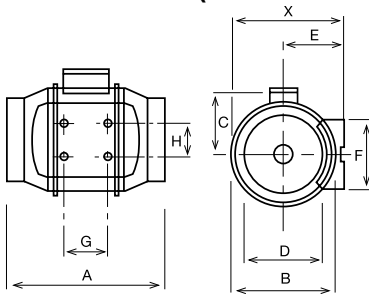
The TD-MIXVENT Models 100, 100x and 150 are California Title 24 compliant and meet ASHRAE 62.2 when installed with a CVC and other TD models are compliant when installed with a 3 way switch and remotely mounted speed control.



Sound characteristics

Fan sound levels are measured in sones. At this time there are no sone level test standards available through HVI due to the fact that remote mounted fan noise levels are in proportion to the following: type of duct, length of duct, fan distance from the intake source and other miscellaneous factors. However, it is generally accepted that remote mounted venting is usually quieter than standard (in room) venting.

Dimensions (inches/mm)



Model	X	A	B	C	D	E	F	G	H
TD-100	5 15/16	9 1/8	5 7/16	3 3/4	3 7/8	3 1/4	3 3/4	1 7/8	2 1/16
	151	232	138	96	98	82	95	48	52
TD-100x	7 3/8	11 15/16	6 15/16	4 1/2	3 13/16	3 15/16	3 9/16	3 1/8	2 3/8
	188	303	176	115	97	100	90	80	60
TD-125	7 3/8	10 3/16	6 15/16	4 1/2	4 13/16	3 15/16	3 9/16	3 1/8	2 3/8
	188	258	176	115	123	100	90	80	60
TD-150	8 3/8	11 5/8	7 7/8	5	5 13/16	4 7/16	5 1/8	3 1/8	2 3/8
	212	295	200	127	147	112	130	80	60
TD-200	9 3/16	11 7/8	8 9/16	5 9/16	7 13/16	4 7/8	5 1/2	3 15/16	3 11/16
	233	302	217	141	198	124	140	100	94
TD-250	11 7/16	15 3/16	10 11/16	7 9/16	9 3/4	6 1/8	6 5/8	5 11/16	5 1/2
	291	386	272	192	248	155	168	145	140
TD-315	14	17 11/16	13 1/4	8 13/16	12 5/16	7 3/8	8 1/4	7 3/16	7
	356	450	336	224	312	188	210	182	178

MIXVENT FILTER System (TD-MIXVENT + MFL Filtering Box)

This system is used when the characteristics of the installation require filtered external air to be introduced, to prevent the entry of dust and impurities to the area being ventilated. The MIXVENT FILTER system is composed of a standard TD-MIXVENT fan (from model 100) coupled to a filtering box from the MFL series.

The MFL filtering boxes are the Gravimetric EU3 type, which are capable of filtering between 80-95% of particles greater than 10 microns.



The MFL filtering boxes have an easy open cover, in order to quickly change the filtering element.

Dimensions (inches/mm)

Type	A	B	D	E	F
MFL-100	7 7/8 / 200	7 7/8 / 200	3 15/16 / 100	6 1/16 / 154	7 11/16 / 196
MFL-125	7 7/8 / 200	7 7/8 / 200	4 15/16 / 125	6 1/16 / 154	7 11/16 / 196
MFL-150	8 11/16 / 220	8 11/16 / 220	6 5/16 / 160	6 1/16 / 154	7 11/16 / 196
MFL-200	9 9/16 / 243	9 5/8 / 244	7 7/8 / 200	6 1/16 / 154	7 15/16 / 202
MFL-250	11 9/16 / 293	11 7/8 / 294	9 13/16 / 250	6 1/16 / 154	8 1/8 / 206
MFL-315	13 7/16 / 342	13 1/2 / 343	12 3/8 / 315	6 1/16 / 154	8 1/8 / 206

TD-MIXVENT Assembly Accessories

Specific assembly accessories for the following series



MCA

Backdraft dampers are installed at the fans' discharge. They prevent the entry of odors, air currents and prevent heat leaks when the exhauster is not in operation. For application to models in the TD and TDx2.

Model	Type TD and TDx2
MCA-100	100
MCA-125	125
MCA-150	150
MCA-200	200
MCA-250	250
MCA-315	315

Dimensions (inches/mm)

Model	A	B	C	D
MCA-100	4 3/16 107	4 3/8 111	1 1/4 31	3 11/16 94
MCA-125	4 3/16 107	5 3/8 136	1 1/4 31	4 11/16 119
MCA-150	4 3/4 121	6 7/16 163	1 3/8 35	5 13/16 147
MCA-200	5 3/16 131	8 7/16 214	1 3/8 35	7 3/4 197
MCA-250	6 3/16 164	10 3/8 264	1 5/8 42	9 3/4 248
MCA-315	8 1/16 205	13 330	1 15/16 50	12 5/16 312



MAR

Connections for rectangular ducts enable devices from the TD and TDx2 series to be connected to a rectangular duct.

Model	Type TD - TDx2 - TDx3 TWIN	Nominal dim. of ducting L x H (in/mm)
MAR-100	100	9 x 6 224 x 140
MAR-125	125	9 x 6 224 x 140
MAR-150	150	11 x 7 280 x 180
MAR-200	200	12 x 8 315 x 200
MAR-250	250	16 x 10 400 x 250
MAR-315	315	20 x 12 500 x 315

Dimensions (inches/mm)

Model	A	B	C	E	F	G
MAR-100	10 3/8 264	7 1/16 180	1 5/16 33	6 5/16 160	9 5/8 244	3/8 9
MAR-125	10 3/8 264	7 1/16 180	1 5/16 33	6 5/16 160	9 5/8 244	3/8 9
MAR-150	12 5/8 320	8 11/16 220	1 7/16 37	7 7/8 200	11 13/16 300	3/8 9
MAR-200	14 355	9 7/16 240	1 7/16 37	8 11/16 220	13 3/16 335	3/8 9
MAR-250	17 5/16 440	11 7/16 290	1 5/8 42	10 5/8 270	16 9/16 420	3/8 9
MAR-315	21 1/4 540	14 355	2 1/16 52	14 355	20 1/2 520	3/8 9



MRJ

Grilles fit on the suction and the discharge sides of the installation. They prevent the entry of foreign bodies which could damage the fan. For application to the models in the TD and TDx2.

Model	Type TD - TDx2 - TDx3 - TWIN
MRJ100	100
MRJ125	125
MRJ150	150
MRJ200	200
MRJ250	250
MRJ315	315



MBR

Flanges enable TD devices to connect in a series.

Model	Duct Size
MBR-125	125
MBR-150	150
MBR-200	200
MBR-250	250

TD-MIXVENT Electrical Accessories

CVC - Continuous Ventilation Control

S&P's CVC allow a new or existing bath fan to run continuously on a low speed. In conjunction with an S&P TD fan a CVC will immediately improve the air quality in the home and reduce the damaging effects of moisture and mold.

The CVCs are designed to meet the requirements of ASHRAE 62.2 and the International Residential Code. In areas where ASHRAE 62.2 is not a requirement, the CVC is still an economical choice to improve indoor air quality.



CVC Model	Fan Model*	Application	Max. Flow	Continuous Flow @ .25"SP
CVC-100	TD-100	Single Inlet	101 CFM	20 CFM
CVC-100x	TD-100x	Single Inlet	135 CFM	20 CFM
CVC-150	TD-150	Single Inlet	218 CFM	20 CFM
		Dual Inlet	293 CFM	40 CFM

Vent Lights

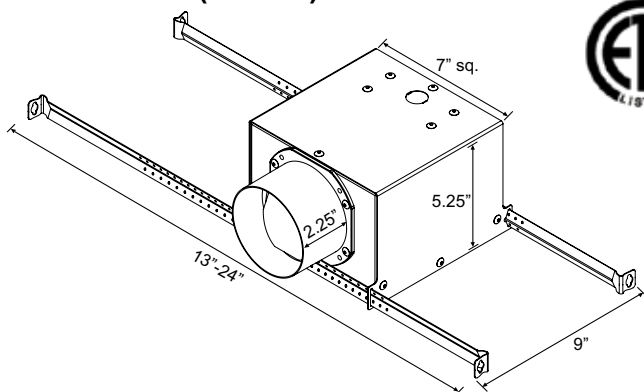
Available with LED Bulbs



S&P's new Vent Lights give you ventilation that is "Out-of-Sight and Out-of-Mind"! The Vent Lights appear to be a regular can light, and when combined with a remotely mounted fan, the noise and unsightly look of the traditional bathroom fan are gone! The Vent Lights are aesthetically pleasing grilles with lights that will match any bathroom decor. These vent lights are designed to be used exclusively with one of S&P's remotely mounted inline fans (TD, PV, SWF) for virtually silent bathroom ventilation. Inline fans give you the option to mount your grille over the shower, toilet, tub, or in multiple locations (dual vent).

Model	Description
VLH-100	Vent Light with PAR30 Halogen Bulb
VLF-100	Vent Light with Energy Star Rated Compact Fluorescent Bulb
VLED-100	Vent Light with PAR30 LED Bulb

Dimensions (inches)



Features:

- Longer duct collar for 4" duct
- Extendable hanger bars up to 24"
- 7.5" grille
- Built-in backdraft damper
- 3 bulb options

Why Choose the Vent Light with LED Bulbs?

S&P's respect for the environment extends to its Vent Lights with the optional LED Bulb. The benefits to the LED Bulbs include:

- Built to last a minimum of 60,000 hours, plus the LED's use a fraction of the energy that a traditional incandescent or halogen lamp uses
- LED's contain no mercury so they are easy to dispose of, unlike other energy efficient bulbs
- The LED lamps run cool and are shock resistant, making them safer for use in your home

Additional general assembly accessories



BOR/BOC
Round plastic/metal adjustable grille



PG
Round grille without built-in backdraft damper



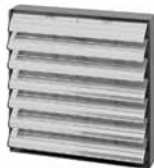
PGD
Round grille with built-in backdraft damper



MBR
Connection Flanges



PER-W
Plastic louver shutter



PER
High pressure aluminum louver shutter



GRA
Aluminum exterior fixed grilles



MFL
Filtering Box



SR
Reducer



SY
Y sheet metal adapter



ID
Flexible round duct



SIL
Acoustic attenuators

Electrical accessories



EPBT
Electronic push button timer



SCS
Speed control slide type



SC
Speed control

Bathroom Ventilation Concerns. . .

Solved!



If the strongest, quietest, bathroom exhaust system is what you seek...look no further. S&P offers the perfect solution with the most options. The TD-MIXVENT fan kits provide all the hardware needed to complete a simple in-line ducted ventilation installation. The kit includes a powerful TD in-line fan and exterior and interior grilles (with or without lights). Available in both Standard Exhaust Kits, for venting a single location, and Deluxe Exhaust Kits, for venting multiple locations with one fan.

The TD-MIXVENT fan kit is the ideal solution for any simple in-line ducted fan installation. **All TD kits have standard 7-year warranty.**



Standard Exhaust Kits



KIT-TD100

- 1 TD100 exhaust fan
- 1 plastic round grille (PG-100)
- 1 exterior louvered grille (PER-100W)
- Integral mounting bracket

KIT-TD100x

- 1 TD100x exhaust fan
- 1 plastic round grille (PG-100)
- 1 exterior louvered grille (PER-100W)
- Integral mounting bracket

KIT-TD150

- 1 TD150 exhaust fan
- 1 plastic round grille (PG-150)
- 1 exterior louvered grille (PER-150W)
- Integral mounting bracket

Deluxe Exhaust Kits



KIT-TD150-DV

- 1 TD150 exhaust fan
- 2 plastic round grilles (PG-150)
- 1 exterior louvered grille (PER-150W)
- 1 Y-fitting (SY-6)
- Integral mounting bracket

IMPORTANT: If venting in an non-insulated attic space, or in a cold climate, insulated flexible duct is strongly recommended for condensation issues.

Lighted Standard Exhaust Kits



KIT-TD100XL

- 1 TD100x exhaust fan
- 1 Vent Light with LED Bulb (VLED-100)
- Integral mounting bracket

KIT-TD100XH

- 1 TD100x exhaust fan
- 1 Vent Light with Halogen Bulb (VLH-100)
- Integral mounting bracket

KIT-TD100XF

- 1 TD100x exhaust fan
- 1 Vent Light with Fluorescent Bulb (VLF-100)
- Integral mounting bracket

Lighted Deluxe Exhaust Kits



KIT-TD150L

- 1 TD150 exhaust fan
- 2 Vent Lights with LED Bulb (VLED-100)
- 1 Y-fitting (SY44-6)
- Integral mounting bracket

KIT-TD150H

- 1 TD150 exhaust fan
- 2 Vent Lights with Halogen Bulb (VLH-100)
- 1 Y-fitting (SY44-6)
- Integral mounting bracket

KIT-TD150F

- 1 TD150 exhaust fan
- 2 Vent Lights with Fluorescent Bulb (VLF-100)
- 1 Y-fitting (SY44-6)
- Integral mounting bracket

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