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Overview TD-MIXVENT & TD-SILENT Series

Compact Size-TD Fans require minimum space

The S&P TD-MIXVENT & TD-SILENT 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 & TD-SILENT 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.

Easy to Install...fit and forget!

All the models in the TD-MIXVENT & TD-SILENT 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 & TD-SILENT 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

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 & TD-SILENT fans enable the units 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.



Mixed Flow Fans vs. Axial & Centrifugal Fans

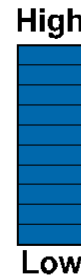
Axial Fans

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

Noise Level



Air Volume



Static Pressure



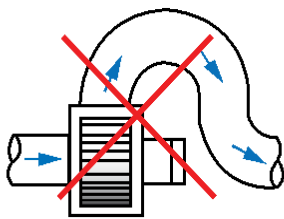
Centrifugal Fans

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

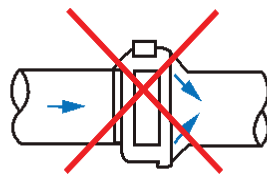


Mixed Flow Fans**

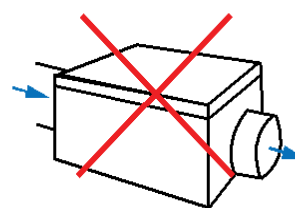
- Low noise levels
- High air volumes
- Significant static pressure capability*



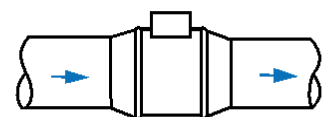
Classic Centrifugal



In-line Centrifugal



Ventilation Box



S&P's TD Fan

*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 & **TD-SILENT** 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.

TD-MIXVENT Installation & Maintenance

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

1



Secure the support.

2



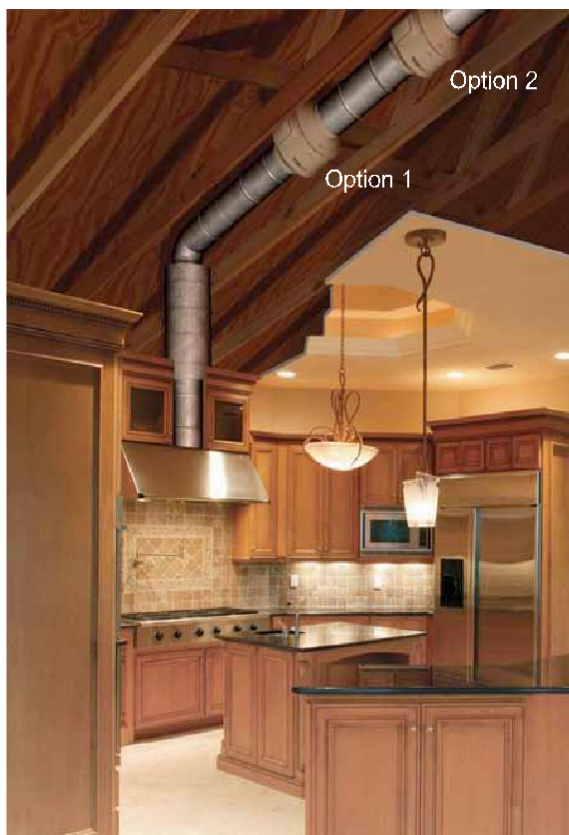
Make the connections.

3



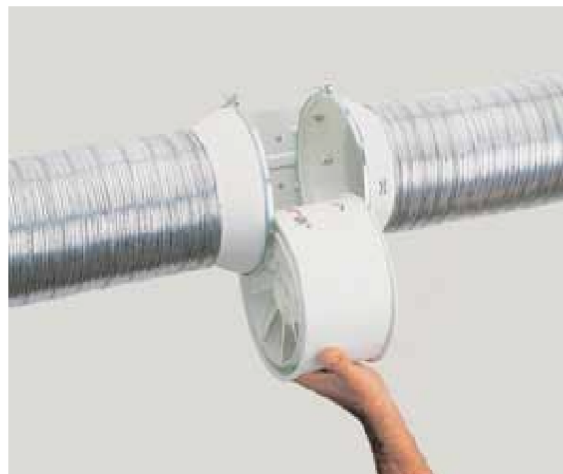
Connect the ducts.

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



Warranty

Five (5) year limited warranty.

Range

The TD-MIXVENT series consists of seven (7) nominal sized in-line fans. All models are specifically designed for direct connection in-line with industry standard diameter round ducting.

Construction

The TD-MIXVENT models 100, 100x, 125, 150, and 200 are manufactured in tough reinforced plastic, models 250 and 315 have a metal casing and are finished in a tough epoxy-polyester paint coating. The TD fan duct connection flanges are manufactured from reinforced plastic, except for models 200, 250 and 315 which are constructed from epoxy-polyester coated metal.

Impellers

The impeller blades for models 100, 100x, 125, 150 and 200 are molded in tough ABS plastic. Models 250 and 315 are metal.

Motors

Models 100, 100x and 125 :

Single-phase, 120V 60Hz, shaded pole induction asynchronous motor in die cast aluminum. All motors include direct two speed connection and are also suitable for voltage speed control.

- Class II electrical insulation (model 100) & Class I (models 100x and 125)
- IP 44 Protection
- Class B Motor Insulation
- Safety auto reset Thermal Overload Protection (fuse type)
- Self-lubricating sleeve bearings.
- Suitable for working airstreams up to 104° F (40°C).

Models 150, 200, 250 and 315:

- Single-phase induction asynchronous motor, with permanent capacitor and external rotor constructed of die cast aluminum. Models 150, 200 and 315 include direct two speed connection and are also suitable for voltage speed control.
- Class I electrical insulation
- IP 44 Protection
- Thermal Overload Protection
- Class B Motor Insulation
- Sealed For Life, ball bearings
- Suitable for working airstreams up to 140° F (60°C).

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.



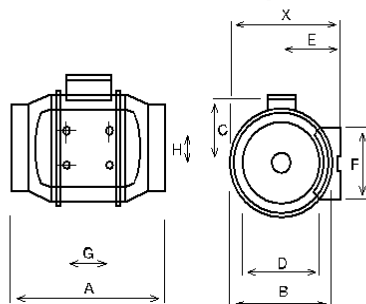
The TD-MIXVENT Models 100, 100x and 150 are California Title 24 compliant and meet ASHRAE 62.2 when installed with a CVC and other TD models are compliant when installed with a 3 way switch and remotely mounted speed control.

UL US
TD 250 & 315
are UL listed for
outdoor use.

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

TD-MIXVENT KIT Bathroom Kits

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 a 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