

TD In-Line Mixed Flow Duct Fans

For High Air Flow to Pressure Ratio Applications (Minimum Space)

Catalog TD06-May 2008



The World's Leading Producer of Air Movement Products





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 Ventilation Group 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 our 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 casing 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, cupboards and many other limited space environments.



Internal parts can be easily removed for mounting & servicing

Easy to Install...fit and forget!

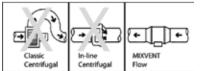
All the models in the TD-MIXVENT range have been designed with the professional contractor/engineer in mind. All models include a "removable body" feature that enables the motor-impeller assembly to be completely removed or replaced without the need to interfere with the attached ducting.

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 casing. 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 complement the TD-MIXVENT range of in-line fans. All of the TD-fans include the combination of a powerful factory motor matched 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 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. In addition, all motors are suitable for speed control regulation using electronic or auto-transformer controllers. 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 the simple and fast installation of a complete ventilation system. The kits include the powerful TD in-line fan providing efficient extraction 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 air valve (BOC/BOR-100); exterior mounted grill (GR-100); ten feet of flexible aluminum ducting (GSA-100) and a roll of tough ducting tape to provide the complete hardware required for a given ventilation system.

Applications

The TD fans are ideally suited for a wide range of residential, commercial and industrial exhaust and intake ventilation applications. Typical applications would include the following:



Residential

- Bathrooms
- Warm or Cool Air Transfer
- Kitchen Range Hoods
- Utility Rooms



Commercial

- Locker Rooms
- Conference Rooms
- Bars & Restaurants
- Cafeterias
- Offices
- Make-Up Air Applications



Industrial

- Welding Fume Extraction
- Spot Ventilation
- Equipment Cooling
- Workshops & Smoking Areas

Technical Specifications

Warranty

Five (5) year limited warranty.

Range

The TD-MIXVENT consists of ten (10) 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, 200 and 200x are manufactured in tough reinforced plastic, models 250, 315, 355 and 400 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, 200x, 250, 315, 355 and 400 which are constructed from epoxy-polyester coated metal.

TD 250 and 315 are UL listed for outdoor use.

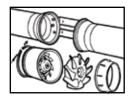
Impellers

The impeller blades for models 100, 100x, 125 and 150 and 200x are molded in tough ABS plastic. Models 200, 250, 315, 355 and 400 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, 200x, 250, 315, 355 and 400:

Single-phase induction asynchronous motor, with permanent capacitor and external rotor in die cast aluminum. Models 150, 200, 200x and 315 include direct two speed connection and are also suitable for voltage speed control. Models 355 and 400 are single speed.

- · Suitable for working airstreams up to 140° F (60°C).
- · Class I electrical insulation
- · IP 44 Protection
- · Thermal Overload Protection
- · Class B Motor Insulation
- Sealed For Life, ball bearings



Accessories



BOC/BOR Interior Air Valve



MCA Backdraft Shutter



MBR Connector



MAR Rectangular Duct Adapter



TBTD Twin Fan Connection Kits

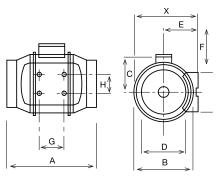


MRJ Grill



TD MIXVENT

Dimensions inches/mm



Model	Х	Α	В	С	D	E	F	G	Н
TD-100	5 15/16 151	9 1/8 232	5 ^{7/16}	3 3/4	3 ^{7/8} 98	3 1/4 82	3 ^{3/4} 95	I ^{7/8} 48	2 1/16
TD-100x	7 ^{3/8} 188	11 ^{15/16} 303	6 ^{15/16} 176	4 ^{1/2}	3 ^{13/16} 97	3 ^{15/16}	3 9/16	3 1/8 80	2 3/8 60
TD-125	7 ^{3/8} 188	10 ^{3/16} 258	6 ^{15/16}	4 ^{1/2}	4 ^{13/16}	3 ^{15/16}	3 %16	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}	4 7/16 112	5 ^{1/8}	3 1/8 80	2 3/8 60
TD-200	9 3/16 233	11 ^{7/8} 302	8 ^{9/16} 217	5 %16 141	7 ^{13/16} I 98	4 ^{7/8}	5 ^{1/2}	3 15/16 1 0 0	3 11/16
TD-200x	9 3/16 233	11 ^{7/8} 302	8 ^{9/16} 217	5 %16 141	7 ^{13/16} I 98	4 ^{7/8}	5 ^{1/2}	3 ^{15/16}	311/16
TD-250	11 ^{7/16} 29 I	15 ^{3/16} 386	10 ^{11/16} 272	7 ^{9/16}	9 ^{3/4} 248	6 ^{1/8}	6 ^{5/8}	5 ^{11/16}	5 ^{1/2}
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	73/16	7 178

Performance

Model	Nom. RPM	Volts	Max. Watts	Speed	CFM v Static Pressure (SP) Ins. WG								Duct
					0"	0.125"	0.25"	0.375"	0.5"	0.75"	1.0"	Max. SP	Dia. Ins.
TD 100	2431	115	23	LS	97	81	51	16	-	-	-	0.4	4"
	2516	115	26	HS	101	85	57	19	-	-	-	0.5	4"
TD 100x	1556	115	20	LS	100	77	48	-	-	-	-	0.4	4"
	2096	115	33	HS	135	113	90	53	-	-	-	0.6	4"
TD 125	1633	115	24	LS	149	110	73	-	-	-	-	0.4	5"
	2146	115	38	HS	197	168	133	86	22	-	-	0.6	5"
TD 150	1709	115	54	LS	218	193	163	128	105	24	-	0.9	6"
	2289	115	65	HS	293	273	250	227	206	131	35	1.2	6"
TD 200	2322	115	139	LS	476	422	373	317	260	40	-	0.9	8"
	2781	115	184	HS	538	495	458	418	367	190	10	1.0	8"
TD 200x	1935	115	122	LS	419	393	363	327	295	215	107	1.2	8"
	2467	115	169	HS	478	457	432	402	372	285	192	1.3	8"
TD 250	2400	115	162	LS	541	475	418	355	295	218	170	2	10"
	3200	115	241	HS	754	715	680	640	606	520	405	2.5	10"
TD 315	2000	115	208	LS	75 I	670	545	420	285	190	130	1.6	12.4"
	2500	115	335	HS	1050	990	932	850	770	600	420	2.9	12.4"

LS = Low Speed HS = High Speed

Performance certified is for installation type D-Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test.



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 Series fans are California Title 24 compliant and meet ASHRAE 62.2 when installed with 3 way switch and remotely mounted speed control.

Sound

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 random factors. It is generally accepted that remote mounted venting is usually quieter than standard (in room) venting.



Distributed By:

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