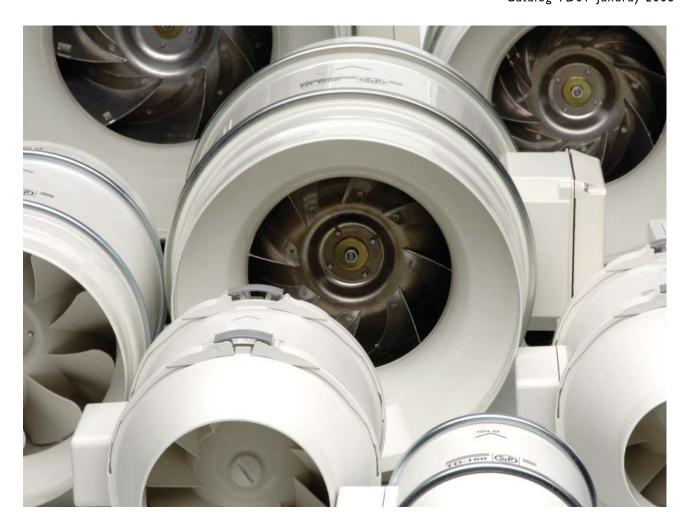


## TD In-Line Mixed Flow Duct Fans

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

Catalog TD01-Januray 2006



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# Air Movement Products

**Soler & Palau (S&P) USA and Canada** are the most recent additions to, and are wholly owned subsidiaries of, Soler & Palau Group S.A. which was founded in 1951. S&P Group is the World's leading supplier 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 many companies, 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

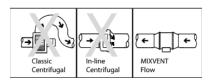
body" feature that enables the motor-impeller assembly to be completely removed or replaced without the need to interfere with the attached ducting.

#### 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 compliment the TD-MIXVENT range of in-line fans. All of the TD-fans include the combination of a powerful motor factory 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 eight (8) 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 and 150 are manufactured in tough reinforced plastic, models 200, 200x, 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, 200x, 250 and 315 which are constructed from epoxy-polyester coated metal.

#### **Impellers**

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

- Single-phase induction asynchronous motor, with permanent capacitor and external rotor in die cast aluminum.
  - All models 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).

