



Rotron / Airscrew



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# Rotron SPARTAN<sup>®</sup> 2 Tubeaxial Fans

## General Spartan 2 Tubeaxial Information

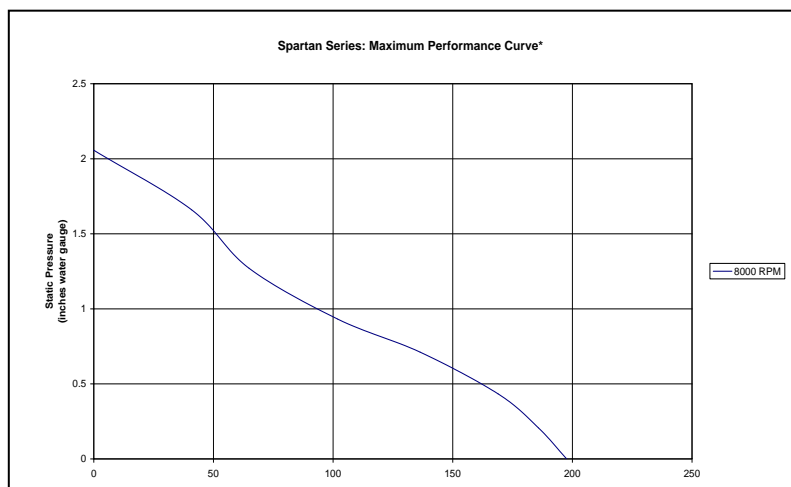
The Spartan 2 is aerodynamically optimized for higher pressure enabling operating points in the range of 0 to 190 CFM at pressures of 0.7" to 2" H<sub>2</sub>O.

In this operating range, the Spartan 2 exhibits a reduction in tonal noise (up to 5 dBA) and an overall acoustic reduction of 3 dBA compared to the standard Spartan fan. Additionally, the fan is 25% more efficient than the standard Spartan fan (in the specified operating range), resulting in significant power savings.

The motor rotor is integral to the true airfoil blade impeller to achieve the smallest possible axial dimension while achieving higher aerodynamic performance and efficiencies.

The Tubeaxial Fan is suitable for operation in severe environmental conditions in air, ground, and shipboard applications. Hook up options include: lead wires, terminal blocks, or MS connectors. All Tubeaxial Fans are finely balanced for long life and designed to meet the requirements of MIL-B-23071.

## Rotron SPARTAN<sup>®</sup> 2



\*Individual Performance Curve Characteristics Available Upon Request



### General

- Physical envelope: 4.69" x 4.69" x 1.53"<sup>1</sup>
- Weight: Approximately 1.0 lb.
- Die cast aluminum Venturi and Rotor
- Specially designed for cooling electronics in land, sea and airborne applications<sup>2</sup>
- Designed to meet the high shock requirements of MIL-S-901 (DC with optional high-shock housing)
- 11 bladed high-temp, high-strength glass-filled polymer propeller configuration

<sup>1</sup> See specific part-number drawing for complete product dimensions

<sup>2</sup> Please Contact the Application Engineering Department for further information

### Standard Materials and Finishes

- All aluminum components finished with a chemical conversion coating per MIL-C-5541, top coat of lusterless black enamel, color #37038, per Federal Standard 595 conforming to TT-E-489 Type B
- Corrosion-resistant stainless steel shaft and hardware
- Impeller runs on two high-precision, double-shielded, stainless steel ball bearings (ABEC Class 5) with an integral lubricant reservoir for a long, maintenance-free life
- Motor stator winding insulation is rated for continuous duty for Class H insulation
- Glass-filled composite propeller



### Options/Accessories

- Helicoil Inserts
- Finger Guards
- Custom Paint Options Available
- Locked Rotor Protection / Auto Restart
- LSWD (Low Speed Warning Device)
- Integral FPS (Fan Performance Sensor)
- Locked Rotor Shutdown
- Speed Control

### DC Line Powered Units – E.C.D.C.®

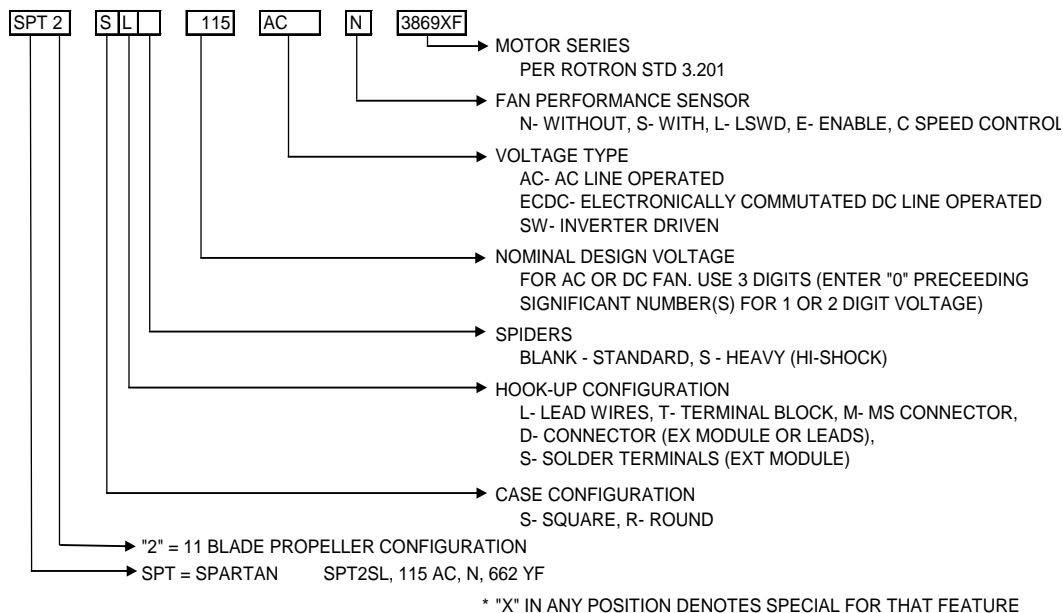
- Brushless permanent magnet design (Electronically Commutated DC)
- Speed (performance) fixed by input voltage
- Meets or exceeds the requirements of MIL-B-28873 and other applicable U.S. military and commercial aerospace specifications<sup>2</sup>
- Max free delivery airflow of 190 CFM<sup>1</sup>
- Ambient temperature range -40°C to 80°C
- Acoustic levels as low as 81 dBA<sup>1</sup>

<sup>1</sup> Airflow, maximum ambient and acoustic levels will vary depending on design parameters

<sup>2</sup> Please call for further information concerning applicable U.S. military and commercial aerospace specifications

### Unit Description Key

The unit description key is for reference only and should not be confused with a part number. While most units are custom configurations, not all variations of the key shown below are possible. Please contact the Application Engineering department for more information regarding possible custom configurations.



### Ordering Information

When ordering, please specify the specific Rotron part number listed on the following model table. Further ordering information, based on the configuration and motor series, may be obtained by contacting customer service. Please refer to the Unit Description Key explanation above.



North America  
T: +1 845-679-1361  
F: +1 845-679-1870

United Kingdom  
T: +44 (0) 1932 765822  
F: +44 (0) 1932 761098

Specifications subject to change without notice

Europe  
T: +49 8145 951767  
F: +49 8145 951768

Asia Pacific  
T: +65 6484 2388  
F: +65 6481 6588

<http://www.rotron.com>

Contact E-mail: [mlinquiry@ametek.com](mailto:mlinquiry@ametek.com)



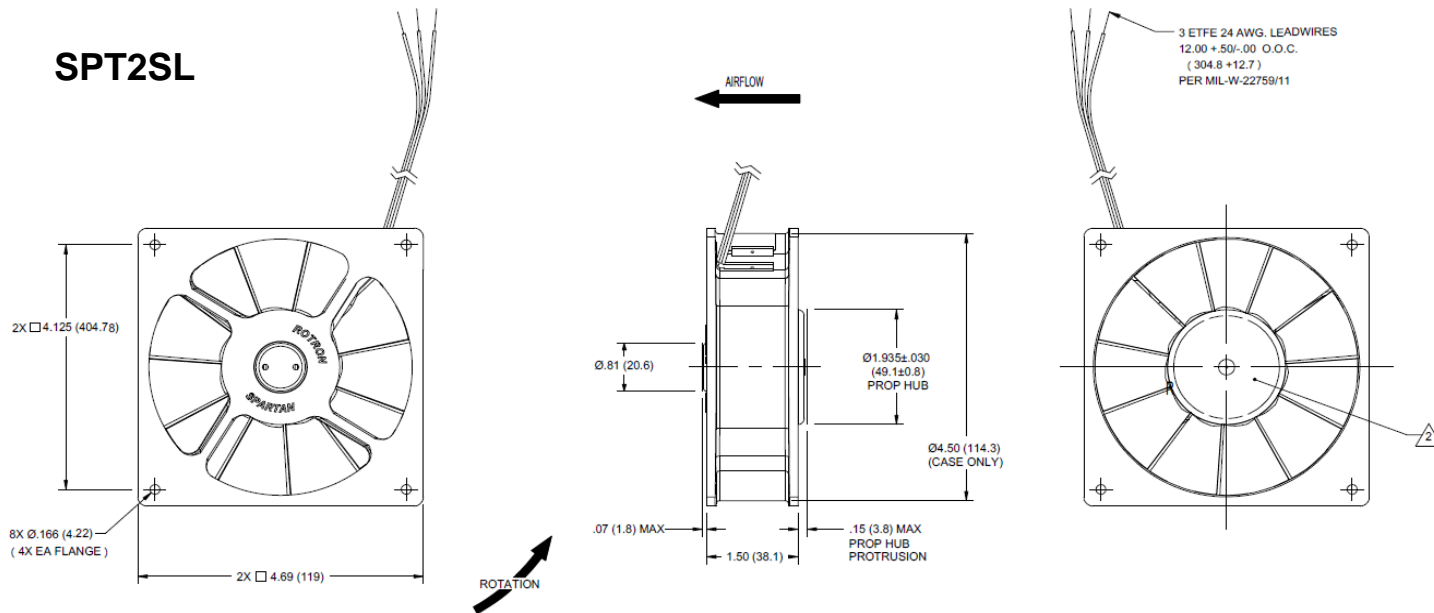
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## Standard Product Offering of DC Line Powered Models

Part #	Product Description	Flow (CFM)	Max Pressure (IWG)	Nom. RPM	Nom. Watts	Line Amps (A)	Max Amb. (°C)	Weight (lbs)	Volts	Airflow Source Data	Features
012373000	SPT2SL 3869XF	190	2	7800	40	1.4	80	1.0	28	A815-14	12" Leads, Square case, Locked rotor protection
012418000	SPT2SLX 3869XF	190	2	7800	40	1.4	80	1.0	28	A815-14	20" Shielded leads, Square case, Masked ground

## SPARTAN 2\*



\*Part Number Specific Drawings Available Upon Request

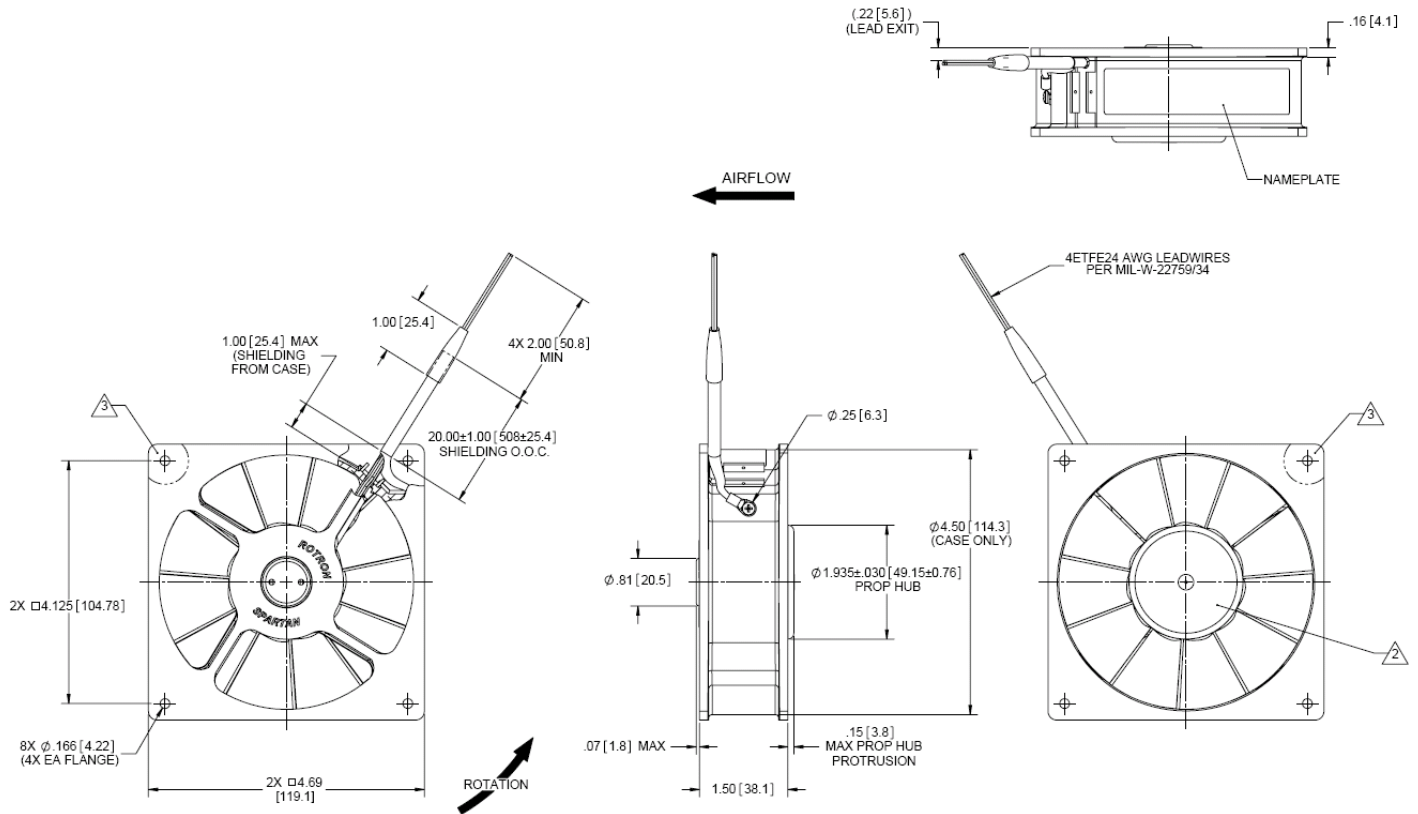


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# SPARTAN 2\*

## SPT2SLX



\*Part Number Specific Drawings Available Upon Request



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P/N 012373000 SPT2SL 3869XF A815-14

P/N 012418000 SPT2SLX 3869XF A815-14

