ROTRON / AMETEK®
AEROSPACE & DEFENSE

Rotron MIL-901T
Tubeaxial Fans



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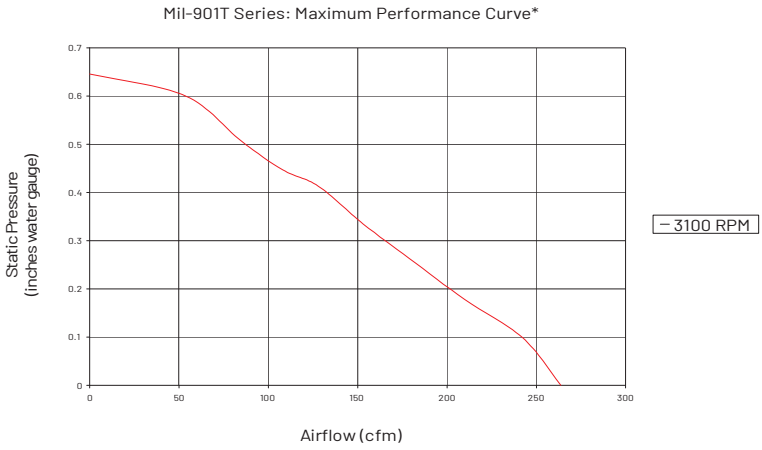
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General Tubeaxial Information

Tubeaxial Fans are integrated axial flow air moving devices in which the motor rotor is cast inside the impeller to achieve the smallest possible axial dimension. Higher aerodynamic performance and efficiencies can be achieved with these true airfoil blade designs. These fans typically operate near free delivery, but can achieve static pressures above those of Propeller Fans due to high speed operations.

The Tubeaxial Fan is suitable for operation in severeenvironmental conditions in air, ground, and shipboard applications. They come in a variety of AC voltages and frequencies, as well as DC voltages. Hook up options include: lead wires, terminal blocks, or MS connectors. All Tubeaxial Fans are finely balanced to meet the requirements of MIL-B-23071. All units are available with an optional internal Fan Performance Sensor (FPS) and an external Low Speed Warning Device (LSWD). Some units are available with an internal Low Speed Warning Device (LSWD).

Rotron MIL901T



*Individual Performance Curve Characteristics Available Upon Request



General

- Physical envelope: 5.92" x 6.75" x 1.50" [1].
- Weight: approximately 1.75 lbs.
- Cast aluminum Venturi in flatted only.
- Glass-filled composite Impeller.
- Specially designed for cooling electronics in shipboard and submarine rack applications, and Telecom and Datacom racks.
- Designed to meet the high shock requirements of MIL-S-901.
- Custom mounting configurations available [2].

[1] Note: See specific part-number drawing for complete product dimensions
[2] Please contact the Application Engineering Department for further information

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, maintenancefree life.
- Motors have stator winding insulation which is rated for continuous duty for Class F.

Options/Accessories

- Helicoil Inserts
- Finger Guards
- In-line EMI Filters
- Custom Paints Available
- LSWD (Low Speed Warning Device)
- FPS (Fan Performance Sensor)

AC Line Powered Units [1]

- 3-phase and 1-phase permanent-split capacitor motor designs.
- Fixed speeds (performance) based on input frequency
- Meets or exceeds the requirements of MIL-B-23071 and other applicable U.S. military and commercial aerospace specifications 2.
- Max free delivery airflow of 190 CFM at 50 Hz, 228 CFM at 60 Hz, 265 CFM at 400 Hz.
- Ambient temperature range: -54 °C to 100 °C.
- Acoustic levels as low as 69 dBA.

[1] Airflow, maximum ambient and acoustic levels will vary depending on design parameters
[2] Please call for further information concerning applicable U.S. military and commercial aerospace specifications

DC Line Powered Units – E.C.D.C®

- Not available with this model fan.

Optional DC-AC Inverters and AC-AC Converters for AC Powered Models [1]

BATAC® Inverter Driven Units

- AC square wave fans driven from a DC power source through a BATAC® Inverter.
- Low cost alternative when multiple fans are used in a single application or area.
- Allows for greater than 100 VDC input voltage.

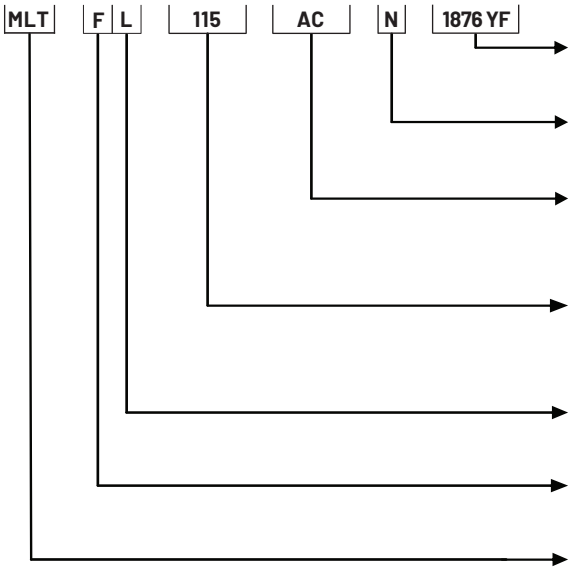
[1] See Accessories: Power Conversion

DELTAC® Converter Driven Units

- DELTAC® converters allow high frequency (typically 400 Hz) fans to be driven by variable frequency (typically 360-800 Hz) power or low frequency 50/60 Hz power to obtain the higher frequency performance.

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.



MOTOR SERIES
PER ROTRON STD 3 201

FAN PERFORMANCE SENSOR
N- WITHOUT, S- WITH

VOLTAGE TYPE
AC- AC LINE OPERATED
ECDC- ELECTRONICALLY COMMUTATED DC LINE OPERATED

NOMINAL DESIGN VOLTAGE
FOR AC OR DC FAN. USE 3 DIGITS (ENTER "0" PRECEEDING SIGNIFICANT NUMBER(S) FOR 1 OR 2 DIGIT VOLTAGE)

HOOK-UP CONFIGURATION
L- LEADWIRES, M- MS CONNECTOR, T- TERMINAL

VENTURI CONFIGURATION
F- FLATTED

MIL-901 EXAMPLE: ML93FL, 200 AC, S, 1972 JF

* "X" IN ANY POSITION DENOTES SPECIAL FOR THAT FEATURE

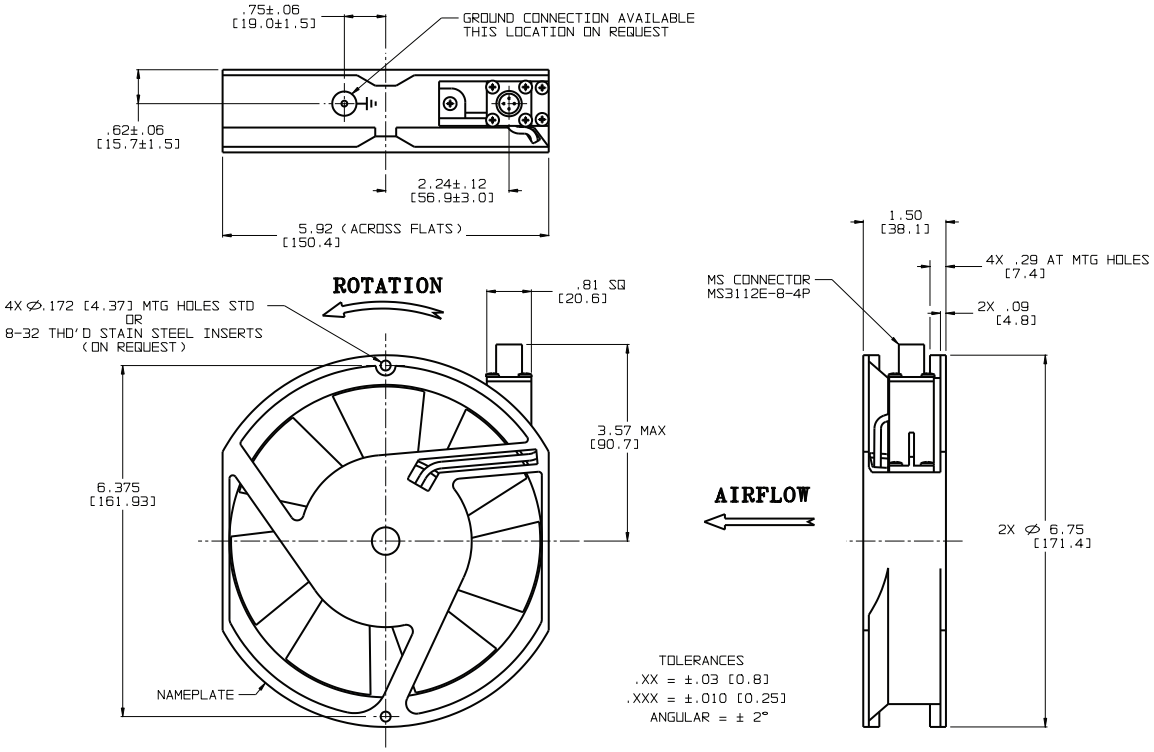
Ordering Information

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.

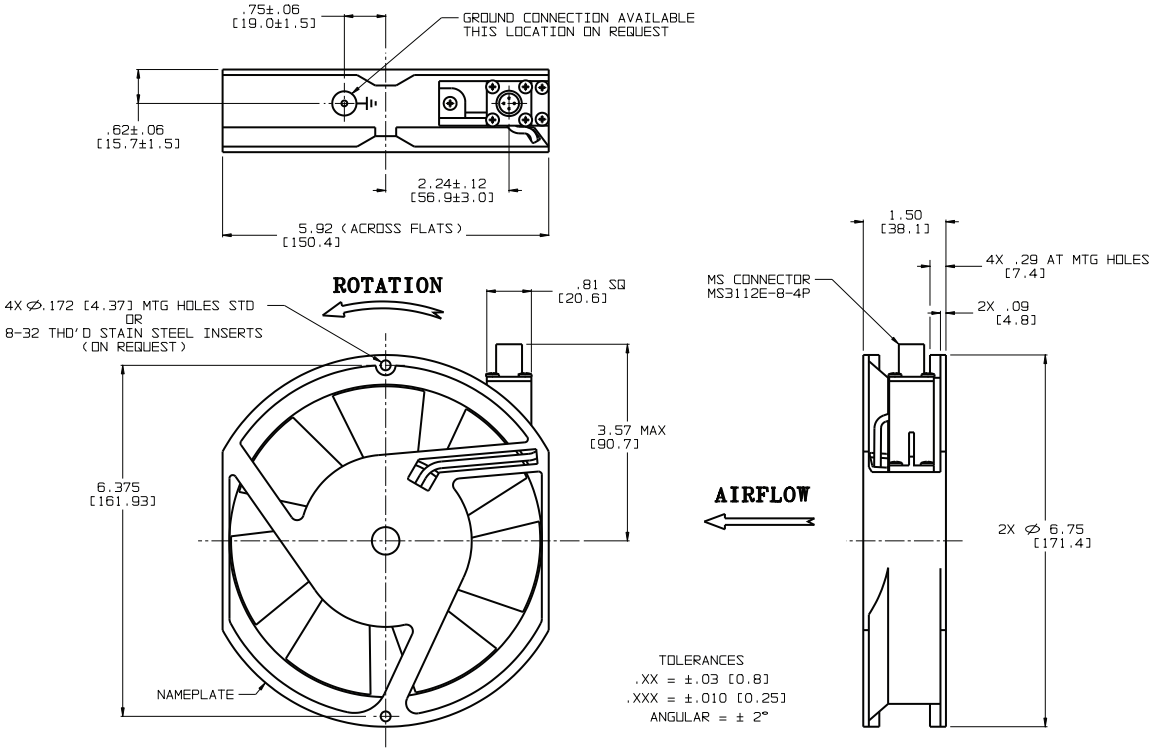
Standard Product Offering of AC Line Powered Models

Part #	Product Description	Flow (CFM)	Max Pressure (IWG)	Nom. RPM	Nom. Watts	Line Amps (A)	Max Amb (C)	Weight	Volts	Phase	Hz	Capaciotr	Airflow Source Data	Features
034695000	MLTFL 1910DF	265	0.7	4,000	38	0.37	100	1.8	115	1	400	1.2/220	A275-16	LEADS
035595000	MLT 2642NF	228	0.7	3,100	32	0.18	100	1.8	220	1	60	3.3/220	A299-24	LEADS, FPS
033691000	MLT 1876YF	225	0.7	3,000	35	0.28	100	1.8	115	1	60	3.0/220	A277-29	LEADS

MLTFM



MLTFM



*Part Number Specific Drawings Available Upon Request

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Specifications subject to change without notice