

Low Cost Bearingless DC Tachometer Generators



Part Number: ST-7565A-2

Output Voltage: 7 VDC ± 5%, no load, per 1000 RPM at 25°C

Internal Resistance: 270 Ohms typical at 25°C

Ripple: 5% RMS of DC output voltage at speeds over 40 RPM

Linearity: 0.1% max, 0 to 4000 RPM

Bidirectional Output: 0.5% of nominal output in both CW and CCW directions

Polarity: Red wire positive with CCW rotation viewing shaft end
Breakdown Voltage: 500 VAC at 60Hz between terminals & housing for 1 sec
Temp. Coefficient: 0.05% per °C of nominal output at 25°C from -20°C to 50°C

Low Cost Bearingless DC Tachometer Generators (1-24 volts/1000 RPM)

The new ST-7565 series DC tachometer generators use a #10-32 threaded shaft that quickly attaches to a tapped #10-32 motor shaft. No shaft coupling or tachometer mounting kit is required. Two mounting holes, on 1.5" mounting centers, are used to mount the tachometer body. Other mounting configurations are available, including a **PY** type adapter that can be mounted to tachometer ready TENV motors.

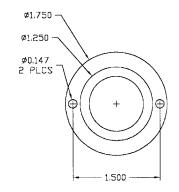
Like all of Servo-Tek's DC tachometer generators, the ST-7565 is self-generating and requires only two wires to sense the analog voltage output. Using an overhung design with no bearings, the driving torque is low.

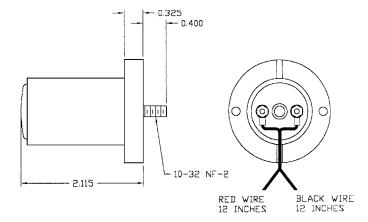
When this DC tachometer generator is used in reversing applications, the bi-directional output is a maximum of 0.5% of the nominal voltage in both CW and CCW directions. Linearity is 0.1% maximum up to 4000 RPM and ripple is a maximum of 5% RMS of the DC output voltage.

While the ST-7565A-2 offers a standard voltage output of 7 volts/1000 RPM, other voltage outputs up to 24 volts/1000 RPM are available. Even though the innovative design of the ST-7565 series tachometer is cost effective, it still offers the same high quality silver commutator used on all of Servo-Tek's DC tachometer generators.

The ST-7565 series DC tachometer Generator offers a simple low cost solution for measuring and controlling speed. For more information on Servo-Tek's DC tachometer generators, request catalog RC700 in print or CD.

Outline Dimensions



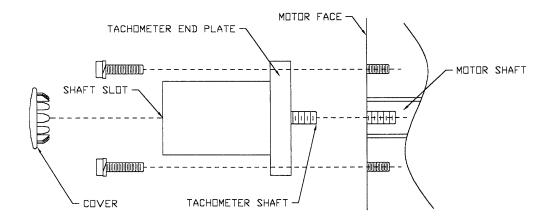






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Installation Instructions



1. Apply one drop of thread lock (Loctite 609) to tachometer shaft threads. Screw the tachometer shaft into the motor shaft using the screw slot in the rear of the shaft and torque to 20 - 25 inch-pounds.

CAUTION: The tachometer end plate should mate within 0.050 of the motor face. The tachometer wires should remain in the clearance slots in the end plate.

- 2. Align the tachometer bolt holes with the 6-32 tapped holes in the motor face. Install but do not fully tighten the two 6-32 x 5/8 screws and #6 lockwashers.
- 3. Slowly rotate the motor shaft to assure the armature does not touch the housing. Adjust the position of the housing as necessary to maintain a clearance with the armature during full rotation. Tighten both screws to 8 inch-pounds.
- 4. Install the supplied snap-in cover at the open end of the tachometer.

Tachometer to Motor Mounting Specifications

