

## DYNAMOMETERS / DC - Tachogenerators

### Standard Features :

- Compact and Light Weight and can substitute a range of imported / indigenous tachos
- High Linearity
- Low Ripple
- High Stability and Extreme Reliability in Hostile Industrial Environments

### Specifications :

- Current: Up to 200 mA
- Speeds: Up to 1500 rpm
- Voltages: 12V to 240 V / 1500 rpm

### Standard Options (EXTRA) :

- Temperature Compensation
- Terminal Box / Connector
- Foot Mounting
- Extended Shaft

<b>DESIGN</b>	Our Designs, parts & Dimensions are as per I.S.I Standards. Latest Innovations are incorporated. Changes are made with times and also as per Customer demands.
<b>FRAME &amp; ENCLOSURE</b>	<p>Our Steel made Frames ensure greater strength &amp; standard type production. Ventilation is provided by strong fan. In case of excess heat due to low speeds, Blower Mounting arrangement are provided for necessary Cooling.</p> <p>In the standard version, all motors have separate excitation, the field going shunt wound. Compound or series winding can be supplied on request.</p>
<b>WINDINGS</b>	The Shunt Coils are wound in such a way with Main Pole that, solid inter-pole & main-pole base would withstand any type of vibration. Coils made of copper conductors are insulated & then vaccum impregnated with high grade varnish ensuring resistance against acids, oil & moisture. In higher versions Thermostatic receivers are placed between the coils to protect the windings against over heating (130 degrees of celsius). These receivers have to be connected serially to the DC driver's stop circuit in order to resist 3A. 250V.

<b>BEARINGS</b>	All bearings and their internal clearances have been especially selected based on load carrying ability, thermal stresses and speed range consistent with ample bearing life.
<b>COMMUTATORS &amp; COMMUTATION</b>	<p>Manufactured Cylindrically, with hard-drawn copper and V-Groove segments of high conductivity, insulated by a mica sheet in between. Complete commutator is baked for high temperature testing.</p> <p>Almost sparkless commutation with converter connection even in the overloaded range due to optimized compole field, magnetic decoupling of the main and compole field circuit and rotor windings with very good commutation characteristics.</p>
<b>BRUSH BOX &amp; BRUSHES</b>	<p>All motors utilize top-cushioned brushes for low-vibration operation. Brush holders are extruded metal. The constant pressured springs do not need adjustment.</p> <p>Brush Gear is made of strong, special design- but with simple construction- making it possible for shafts to rotate easily at low speeds with noise-free service. Provision for easy access to replace and adjust the brushes is provided. Brushes are of standard grades, ensuring sparkless commutation.</p>
<b>ARMATURE</b>	Armatures are built of high quality Standard Steel Laminations, Securely insulated from each other and clamped together under high pressure ensuring low heating losses. Coils and wire-winding is strictly as per insulation class 'B'. Armature are Dynamically Balanced to precise grade using computerised balancing machine to ensure low vibration operations. Resin Binding means full protection of Armature in all respects.
<b>TESTS &amp; TESTING</b>	<p>Each motor is given routine tests to determine that it is free from electrical or mechanical defects and to provide assurance that it meets design specifications.</p> <p>All products are thoroughly &amp; vigorously tested on special Heavy Duty Test Bench and Dynamometer. Special rated Motors &amp; Generators are tested on Full Load for more than Five Hours (HEAT RUN TEST) for temperature rises and the same are not permitted to exceed values prescribed as per I.S. 4722. All windings are put to insulation test with lowest rate of 1.5 to 2 KV.</p>