DM-8122 / Engine Dynamometer

DM-8122 Eddy Current Dynamometer

Specifications

- Power: 650 hp (485 kW)
- Max Torque at Base Speed: 1,552 lb-ft (2,104 Nm)
- Base Speed: 2,200 rpm
- Max. Speed: 6,000 rpm
- Construction Type: Wet Gap
- Rotor Inertia: 37 lb-ft² (1.56 kg-m²)
- Coolant Required at Max. Power: 65 gpm (246 lpm)
- Coolant Inlet (Min-Max): 55-100 psi (378-689 kPa)
- Coolant Inlet Temperature Max: 90°F (32.2°C)
- Shipping Weight (estimate): 3,000 lb (1,361 kg)
- Companion Flange / Hub Pattern: 1610 - US Customary
- Coil Voltage / Hot Amperage: 90V / 10.14 amps
- Rotation: bi-directional

Recommended Accessories

- Driveshaft - 1610
- Torsional Coupling - 1610
- Flywheel Adapter Plate Kit
- Driveshaft Guard
- Sub-Base Kit
- Engine Cart
- Air or Electric Starter
- Engine Cooling Column
- Charge Air Cooler
- Water Recirculating System

For overhung loads, such as a belt or gear drive, please contact Dyne Systems to ensure that the system will meet the required performance needs.
Optional Accessories

Optional Manual Shaft Lock
Optional Closed Loop Cooling Center
Optional Charge Air Cooler

Optional Driveshaft Guard
Optional Engine Cart

Various Facility Support Systems and Services Available

Bulk Fuel Storage and Distribution
Coolant Storage and Distribution
Water Recirculation
Design, Project & Construction Management Services
Commissioning, Start-up & Training

(414) 755-0040 www.dynesystems.com
Standard Included Components

Load Cell and Linkage
Cooling Safety Package
Calibration Arm
Calibration Weight Hanger
Companion Flange / Hub Pattern 1610 - US Customary
Shaft End Guard
Magnetic Pickup and 60-tooth Gear

As a safety precaution, Dyne Systems recommends a torsional analysis to uncover any potential torsional problems that exist for each application. This analysis will identify any torsional issues (frequencies) that should be fixed prior to operation. Excessive linear vibration may also create problems that must be mitigated for continued operation. It is the customer's responsibility to ensure that these vibration issues are addressed upon application of the dynamometer. Equipment failures attributed to linear or torsional vibration are not warrantable.

<table>
<thead>
<tr>
<th>Units</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Customary</td>
<td>45</td>
<td>22.5</td>
<td>15.88</td>
<td>31.75</td>
<td>20.88</td>
<td>22</td>
<td>35.12</td>
<td>18</td>
<td>13.12</td>
</tr>
<tr>
<td>S.I.</td>
<td>1,143</td>
<td>572</td>
<td>403</td>
<td>806</td>
<td>530</td>
<td>559</td>
<td>892</td>
<td>457</td>
<td>333</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Units</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>P</th>
<th>Q</th>
<th>R</th>
<th>U</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Customary</td>
<td>8.25</td>
<td>26.24</td>
<td>14.88</td>
<td>29.75</td>
<td>11.62</td>
<td>36</td>
<td>23.24</td>
<td>2.63</td>
<td>0.88</td>
</tr>
<tr>
<td>S.I.</td>
<td>210</td>
<td>666</td>
<td>378</td>
<td>756</td>
<td>295</td>
<td>914</td>
<td>590</td>
<td>67</td>
<td>22</td>
</tr>
</tbody>
</table>

(All dimensions are for new OEM supplied units)