DM-8163HS / Engine Dynamometer

DM-8163HS Eddy Current Dynamometer

Specifications

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>1,500 hp (1,119 kW)</td>
</tr>
<tr>
<td>Max Torque at Base Speed</td>
<td>3,751 lb-ft (5,086 Nm)</td>
</tr>
<tr>
<td>Base Speed</td>
<td>2,100 rpm</td>
</tr>
<tr>
<td>Max. Speed</td>
<td>6,000 rpm</td>
</tr>
<tr>
<td>Construction Type</td>
<td>Wet Gap</td>
</tr>
<tr>
<td>Rotor Inertia</td>
<td>183 lb-ft² (7.71 kg-m²)</td>
</tr>
<tr>
<td>Coolant Required at Max. Power</td>
<td>150 gpm (567.8 lpm)</td>
</tr>
<tr>
<td>Coolant Inlet (Min-Max)</td>
<td>55-100 psi (379-689 kPa)</td>
</tr>
<tr>
<td>Coolant Inlet Temperature Max</td>
<td>90°F (32.2°C)</td>
</tr>
<tr>
<td>Shipping Weight (estimate):</td>
<td>7,000 lb (3,175 kg)</td>
</tr>
<tr>
<td>Companion Flange / Hub Pattern:</td>
<td>1810 - US Customary</td>
</tr>
<tr>
<td>Coil Voltage / Hot Amperage:</td>
<td>90V / 11.81 amps</td>
</tr>
<tr>
<td>Rotation</td>
<td>bi-directional</td>
</tr>
</tbody>
</table>

Recommended Accessories

- Driveshaft - 1810
- Torsional Coupling - 1810
- 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
DM-8163HS (US Customary)

Torque (lb-ft)

Power (Hp)

Speed (rpm)

DM-8163HS (S.I.)

Torque (Nm)

Power (kW)

Speed (rpm)
Standard Included Components

Load Cell and Linkage
Cooling Safety Package
Calibration Arm
Calibration Weight Hanger
Companion Flange / Hub Pattern 1810 - 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.