DM-8160HS / Engine Dynamometer

DM-8160HS Eddy Current Dynamometer

Specifications

- **Power:** 500 hp (373 kW)
- **Max Torque at Base Speed:** 3,283 lb-ft (4,450 Nm)
- **Base Speed:** 800 rpm
- **Max. Speed:** 6,000 rpm
- **Construction Type:** Dry Gap
- **Rotor Inertia:** 183 lb-ft² (7.71 kg-m²)
- **Coolant Required at Max. Power:** 50 gpm (189.3 lpm)
- **Coolant Inlet (Min-Max):** 55-100 psi (378-689 kPa)
- **Coolant Inlet Temperature Max:** 90°F (32.2°C)
- **Shipping Weight (estimate):** 7,000 lb (3,175 kg)
- **Companion Flange / Hub Pattern:** 1810 - US Customary
- **Coil Voltage / Hot Amperage:** 90V / 9.85 amps
- **Rotation:** bi-directional

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.

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

Everything you need to succeed
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
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.

Note: Shown without companion flange

<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>
<th>K</th>
<th>L</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Customary</td>
<td>59.3</td>
<td>29.66</td>
<td>22.2</td>
<td>48.3</td>
<td>26.25</td>
<td>28</td>
<td>46</td>
<td>24</td>
<td>19.25</td>
<td>7.6</td>
<td>38.5</td>
<td>20.2</td>
</tr>
<tr>
<td>S.I.</td>
<td>1,506</td>
<td>753</td>
<td>564</td>
<td>1,227</td>
<td>667</td>
<td>711</td>
<td>1,168</td>
<td>610</td>
<td>489</td>
<td>193</td>
<td>978</td>
<td>513</td>
</tr>
</tbody>
</table>

| Units          | N    | P    | Q    | R    | S    | T    | U    | V    | W    | Y    | Z    |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| US Customary   | 40.4 | 14.75| 36   | 29.5 | 22.9 | 45.8 | 3.5  | 6    | 12   | 1.44 | 1.12 |
| S.I.           | 1,026| 375  | 914  | 749  | 582  | 1,163| 89   | 152  | 305  | 37   | 28   |

(All dimensions are for new OEM supplied units)