MASCOT®
Radial Piston Hydraulic Motor

- LD Series
- MD Series
- MDS Series
- 820 Series
- HD Series
**MASCOT** HD Series Hydraulic Motors aim to provide high torque for low speed applications. On specific request, the motors can also be custom-made to suit high speed requirements. These motors incorporate the “high-flow” distribution system. The HD Series motors are always torque arm mounted, making them the ideal choice for applications such as Bucket Wheel Drive, Apron Feeder, Kiln Drive etc., to eliminate misalignment.

The motors run with high efficiency and the power output from the motor is as high as 1000 KW. The Mascot HD Series motors ensure trouble free operation even in dusty environmental conditions.

### Options
- Customized shaft
- Integral multi plate disc brake
- High speed versions
- Double shaft
- Super low noise
- Corrosion resistant material
- Through hole shaft of various sizes
- Custom finish
- Deep water submersible
- Non magnetic material
- Dual displacement

### Features
- Long life
- High mechanical efficiency
- Constant torque output
- Smooth low speed performance<1rpm
- Resistance to thermal shock
- Double shaft sealing
- Shrink disc coupling
- Shaft or flange mounting
- Shock resistance
- Low noise

### HD Series

<table>
<thead>
<tr>
<th>MOTOR FRAME SIZE</th>
<th>DISP(*) PER REV</th>
<th>TORQUE (THEORETICAL)</th>
<th>TORQUE MAX</th>
<th>SPEED RATED</th>
<th>SPEED MAX**</th>
<th>PRESSURE RATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>METRIC</td>
<td>CM/REV</td>
<td>NM/BAR</td>
<td>NM</td>
<td>RPM</td>
<td>RPM</td>
<td>BAR</td>
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<td>HM 25</td>
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<td>402</td>
<td>132660</td>
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<td>60</td>
<td>345</td>
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<td>HM 30</td>
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<td>486</td>
<td>160380</td>
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<td>50</td>
<td>345</td>
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<td>563</td>
<td>185790</td>
<td>32</td>
<td>42</td>
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<td>HM 50</td>
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<td>798</td>
<td>279180</td>
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<td>1004</td>
<td>331320</td>
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<td>28</td>
<td>345</td>
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<tr>
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<td>100767</td>
<td>1602</td>
<td>552690</td>
<td>12</td>
<td>20</td>
<td>345</td>
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</table>

**High speed version upon request.

* Any other displacement upon request.
Motor with Shrink disc coupling

<table>
<thead>
<tr>
<th>Type</th>
<th>Main Connection (A1, A2, C1, C2)</th>
<th>Motor Type</th>
<th>Dimensions</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>HM25</td>
<td>1140</td>
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<tr>
<td></td>
<td></td>
<td>HM30</td>
<td>1140</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HM36</td>
<td>1140</td>
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<td>HM50</td>
<td>1280</td>
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</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Drain Connection (D1, D2)</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SAE 2&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SAE 1 1/4&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SAE 1 1/4&quot;</td>
</tr>
</tbody>
</table>

*Technical Dimensions are subject to change without prior notice*
**HD series with brake**

Hollow shaft with female splines

<table>
<thead>
<tr>
<th>Motor Type</th>
<th>A(MM)</th>
<th>B(MM)</th>
<th>DW(MM)</th>
<th>E(MM)</th>
<th>F(MM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMB30</td>
<td>888</td>
<td>755</td>
<td>227</td>
<td>555</td>
<td>1100</td>
</tr>
<tr>
<td>HMB50</td>
<td>900</td>
<td>767</td>
<td>289</td>
<td>555</td>
<td>1250</td>
</tr>
</tbody>
</table>

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**Motor Type**

- HMB30
- HMB50

**SAE**

- **1 ¼"**
- **2"**

**Drain Connection**

- **SAE 2"**
- **SAE 1 ½"**

**Main Compress Head (in HDA)**

- **888**
- **900**
HD series with brake

Brake (static/parking)

<table>
<thead>
<tr>
<th>Motor Type</th>
<th>A (MM)</th>
<th>B (MM)</th>
<th>C (MM)</th>
<th>D (MM)</th>
<th>Brake Release Pressure</th>
<th>Brake Torque NM Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMB30</td>
<td>555</td>
<td>247</td>
<td>84</td>
<td>277.5</td>
<td>50 Bar</td>
<td>80,000 to 1,60,000</td>
</tr>
<tr>
<td>HMB 50</td>
<td>480</td>
<td>211</td>
<td>86</td>
<td>240</td>
<td>50 Bar</td>
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</tr>
</tbody>
</table>

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# HD series

## Motor with Shrink disc coupling

![Diagram of Motor with Shrink disc coupling](image1.png)

### Dimensions

<table>
<thead>
<tr>
<th>Motor Type</th>
<th>A (MM)</th>
<th>B (MM)</th>
<th>C (MM)</th>
<th>D (MM)</th>
<th>E (MM)</th>
<th>F (MM)</th>
<th>G (MM)</th>
<th>Weight (Kg)</th>
<th>Main Connect (A1, A2, C1, C2)</th>
<th>Drain Connect (D1, D2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMA 70</td>
<td>1460</td>
<td>1250</td>
<td>1295</td>
<td>1007</td>
<td>660</td>
<td>291</td>
<td>675</td>
<td>4450</td>
<td>SAE 2”</td>
<td>SAE 1 1/4”</td>
</tr>
<tr>
<td>HMA 100</td>
<td>1460</td>
<td>1250</td>
<td>1295</td>
<td>1007</td>
<td>660</td>
<td>291</td>
<td>675</td>
<td>4650</td>
<td>SAE 2”</td>
<td>SAE 1 1/4”</td>
</tr>
</tbody>
</table>

*Technical Dimensions are subject to change without prior notice*

## Hollow shaft with female splines

![Diagram of Hollow shaft with female splines](image2.png)

### Dimensions

<table>
<thead>
<tr>
<th>Motor Type</th>
<th>A (MM)</th>
<th>B (MM)</th>
<th>C (MM)</th>
<th>D (MM)</th>
<th>E (MM)</th>
<th>F (MM)</th>
<th>G (MM)</th>
<th>Weight (Kg)</th>
<th>Main Connect (A1, A2, C1, C2)</th>
<th>Drain Connect (D1, D2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMA 70</td>
<td>1460</td>
<td>1250</td>
<td>1107</td>
<td>850</td>
<td>471</td>
<td>675</td>
<td>4100</td>
<td>SAE 2”</td>
<td>SAE 1 1/4”</td>
<td></td>
</tr>
<tr>
<td>HMA 100</td>
<td>1460</td>
<td>1250</td>
<td>1107</td>
<td>850</td>
<td>471</td>
<td>675</td>
<td>4400</td>
<td>SAE 2”</td>
<td>SAE 1 1/4”</td>
<td></td>
</tr>
</tbody>
</table>

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Application for High Torque Gearless Hydraulic System

- Pulp & Paper industry
  - waste paper handling
  - cooking process
  - washing and bleaching

- Rubber & Plastics
  - winch drives
  - steering
  - dredgers
  - crawlers
  - drive barges

- Mining
  - kiln drivers
  - driers
  - chemical
  - evaporators
  - mixers
  - reactors
  - dryers

- Power
  - conveyor
  - reclaimer
  - stacker
  - bogie drives
  - unloaders

- Cement
  - mill drives
  - pressure feeders
  - cane carriers
  - cane unloaders

- Marine
  - moulding machines
  - process machines
  - belt process
  - screw drives

- Sugar
  - ball mills
  - bowl mills
  - feeder conveyors
  - ash handling
  - feeding gates
  - conveyors

- Material Handling
  - conveyors
  - wagon tipplers
  - side arm charges
  - paddle feeders
  - apron feeders
  - stacker reclaimers
  - crushers
HM-Series Motor
LD
MD
MD-S Series Motor
820
HD
A-No Brake
B-Wrh Brake
Motor size / displacement (Reference)
A-SAE Ports with Metric
B-Other
A-Standard Seals
B-Vitron Seals
C-Other/Custom
1-Female Splined Front Shaft
2-Shaft with Shrink Disc
3-Male Splined Front Shaft
A-Single Displacement
B-Dual Displacement
0-Standard
1-Rear Shaft Extension
Speed Encoder
0-No Encoder
1-Speed Encoder 0-20- rpm
2-Speed Encoder 0-100- rpm
3-Speed Encoder 0-150- rpm
Torque Arm
0-No Torque Arm
1-Standard Arm
2-Torque Arm Special
Code for other custom features.
Consult MASCOT for assignment of code.