Two-phase stepper motors

**Features**
- Step angle 1.8°, higher resolution through microstep mode
- Very high torque through rare earth magnets
- Optimised for use with position controllers
- Optimum torque/size ratio
- Smaller step angle errors, non-cumulative
- IP43 protection class
- Optional: MD 24 drive module
- Brake (MS 200 HT)
- Second shaft end (MS 200 HT)

**General**

Two-phase stepper motors behave similarly to synchronous motors. They are easy to control and are characterised by very long working life and reliability, at a favourable price. This results in a wide range of applications. Two-phase stepper motors in the MS range are of the high torque type. A particularly high torque is achieved by the use of rare earth magnets.

**Technical specification**

<table>
<thead>
<tr>
<th>Description</th>
<th>Holding moment bipolar Nm</th>
<th>Winding current per phase A</th>
<th>Winding voltage per phase V</th>
<th>Winding inductance per phase mH</th>
<th>Weight kg</th>
<th>Length (without shaft) mm</th>
<th>Part no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 135 HT-2</td>
<td>1.1</td>
<td>3.0</td>
<td>2.4</td>
<td>2.4</td>
<td>0.7</td>
<td>56</td>
<td>470551</td>
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<tr>
<td>MS 200 HT-2</td>
<td>1.8</td>
<td>3.0</td>
<td>3.0</td>
<td>3.5</td>
<td>1.0</td>
<td>76</td>
<td>470581</td>
</tr>
<tr>
<td>MS 200 HT-2 (2nd shaft end)</td>
<td>1.8</td>
<td>3.0</td>
<td>3.0</td>
<td>3.5</td>
<td>1.1</td>
<td>76</td>
<td>470581 0100</td>
</tr>
<tr>
<td>MS 200 HT-2 (brake)</td>
<td>1.8</td>
<td>3.0</td>
<td>3.0</td>
<td>3.5</td>
<td>1.8</td>
<td>76</td>
<td>470581 0200</td>
</tr>
</tbody>
</table>

**Wiring diagram**

**Dimensioned drawing**

**Torque curves**

Technical specifications subject to change.