For more than 40 years, Danfoss has been developing state-of-the-art components and systems for mobile machinery used in off-highway operations around the world. We have become a preferred supplier by offering the best of what really matters: The hardware inside your vehicle application.

The M46, along with the high-current control is designed for quality and reliability and offers expanded functionality, greater total efficiency, and easy installation.

The M46 high-current control option is PLUS+1® compliant.

PLUS+1® allows you to rapidly develop and customize electronic machine control. It opens up the future by combining machine controls and diagnostics in an integrated operating network.

**Features**

**Designed for Durability and Flexibility**
- Optimized for medium duty applications
- Single piece housing/end cap
- Efficient axial piston design

**Installation and Packaging benefits**
- Worldwide Support
- Standard connector interfaces
- Compact, optimized packaging
- Low noise
- Single, bolt together tandem configurations

**Wide Range of Options**
- Optional integrated charge pump
- High pressure and charge relief valve
- Displacement limiters
- Variety of input shafts
- Variety of auxiliary mounting pads

**Wide Range of Options**
- PLUS+1® Compliant control
- Consistent, flat and repeatable deadband
- Easier system compatibility
- Improved controllability

Comprehensive technical literature online at powersolutions.danfoss.com
### Technical Specifications

<table>
<thead>
<tr>
<th>Features</th>
<th>Unit</th>
<th>M46 Single Pump</th>
</tr>
</thead>
<tbody>
<tr>
<td>Displacement</td>
<td>cm³/rev [in³/rev]</td>
<td>45.9 [2.80]</td>
</tr>
<tr>
<td>Weight</td>
<td>kg [lb]</td>
<td>33 [73]</td>
</tr>
<tr>
<td>Input Speed</td>
<td>Minimum</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>Rated</td>
<td>4000</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>4100</td>
</tr>
<tr>
<td>System Pressure</td>
<td>Max. Working</td>
<td>345 [5000]</td>
</tr>
<tr>
<td></td>
<td>Pressure</td>
<td>385 [5585]</td>
</tr>
<tr>
<td></td>
<td>Min. Low Loop</td>
<td>10 [145]</td>
</tr>
<tr>
<td>Control Pressure</td>
<td>Minimum @ corner power</td>
<td>21.5 [312]</td>
</tr>
<tr>
<td>Case Pressure</td>
<td>Continuous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum (cold start)</td>
<td>5.2 [75]</td>
</tr>
</tbody>
</table>

### Dimensions

Bypass Valve (full open at two revolutions)

- Ø21 ± 1.5
- 8.1 ± 1
- 64.2 ± 1.5
- 0.89 ± 0.5
- 171.4 ± 2.5
- 185.4 ± 2.5
- 210 ± 2.5
- 193.5 ± 2.5

Control manual override C1

Depressing the plunger mechanically moves the control spool. Actuation allows full stroke pump response as per coil and rotation dependent control logic.

Case gauge port

ISO 11926-1 9/16-18

System port (alternate)

Case outlet

ISO 11926-1 9/16-18

- Ø 14.27 ± 0.25
- Ø 28.0 ± 0.25
- 0.89 ± 0.5

Control Solenoid Connector C1

Deutsch DT04-2P

System Port A

ISO 11926-1 9/16-18

Servo Gauge Port M5

ISO 11926-1 9/16-18

- Case outlet (alternate)

System Port B

ISO 11926-1 5/16-12

Servo Gauge Port M4

ISO 11926-1 9/16-18

- Spline Data
  - Number of teeth: 15
  - Pitch fraction: 16/32
  - Pressure angle: 30°
  - Type of fit: ANSI B92.101970 Class 5
  - Fillt root side: Ø 23.813
  - Ø 23.813

System Port B

ISO 11926-1 5/16-12

Case outlet

ISO 11926-1 5/16-12

- Ø 26.9 ± 2.5
- Ø 28.0 ± 0.25
- 0.89 ± 0.5

### Schematic

- C2
- C1
- M1
- M2
- M4
- M5
- Cuts

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