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 H1 range is built around an advanced control and available in a wide range of displacements. It is designed for quality and reliability and offers expanded functionality, greater total efficiency, and easy installation.

All H1 control and sensor options are 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 quality and reliability**
- One design concept
- Single piece swash plate
- Integrated auxiliary pad

**Installation and packaging benefits**
- Length optimized pump
- Minimum one clean side
- Higher corner HP/package size ratio
- Standardized connector interface
- High strength mounting flange

**Wide range of controls**
- Electro-hydraulic controls:
  - Electrical Displacement Control (EDC)
  - Forward-Neutral-Reverse (FNR)
  - Non-Feedback Proportional Electric (NFPE)
  - Manual Displacement Control (MDC)
  - Common control across entire family

**Greater total efficiency**
- Minimized control losses
- Reduced charge pressure rise rate between idle and high idle
- Lower control pressure for less power consumption

**Expanded functionality**
- Full compliment of diagnostic ports including case pressure
- PLUS+1® Compliant control and sensor options
- Control Cut Off (CCO) valve with integral logic (brake) port

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

<table>
<thead>
<tr>
<th></th>
<th>Size 045</th>
<th>Size 053</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frame size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Displacement cm³ [in³]</strong></td>
<td>45.0 [2.75]</td>
<td>53.8 [3.28]</td>
</tr>
<tr>
<td><strong>Input speed min⁻¹ (rpm)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Rated</td>
<td>3400</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>3500</td>
<td></td>
</tr>
<tr>
<td><strong>System pressure bar [psi]</strong></td>
<td>Max. working*</td>
<td>420 [6090]</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>450 [6525]</td>
</tr>
<tr>
<td></td>
<td>Min. low loop</td>
<td>10 [150]</td>
</tr>
<tr>
<td><strong>Case pressure bar [psi]</strong></td>
<td>Rated</td>
<td>3.0 [40]</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>5.0 [75]</td>
</tr>
<tr>
<td><strong>Weight (without PTO and filter), kg [lb]</strong></td>
<td>65.0 [143.0]</td>
<td></td>
</tr>
</tbody>
</table>

* Applied pressures above maximum working pressure requires Danfoss application approval.

### Dimensions

Legend:

- **A/B/C/D** – System ports, 1 5/16-12; Ø48.5
- **MA/MB/MC/MD** – System gauge ports, 9/16-18; Ø28
- **M3** – Charge gauge port, 9/16-18; Ø28
- **M4, M5** – Servo gauge ports, 7/16-20; Ø24.5
- **M14** – Case gauge port, 5/16 -24; Ø21.0
- **E** – Charge inlet port, 7/16-20; Ø36
- **L3** – Case drain port, 1 1/16-12 Ø48.5

CCO – Control Cut Off valve option

- **X7** – Brake gauge port 9/16 -18 Ø28.0
- **1** – Case pressure port, 1 1/16-12 Ø41.0
- **2** – Case pressure port, 1 1/16-12 Ø48.5
- **3** – Charge constr. port, 9/16-18; Ø28
- **4** – Connector DEUTSCH DT04-2P

All ports per ISO 11926-1, max. clearance dia for fitting.