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.

H1 - our new generation of servo-controlled hydrostatic pumps and bent axis variable motors is no exception.

The H1 product 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**
- Proven and optimized 9 piston rotating group
- Single piece housing
- Electric components with IP67 & IP69K rating

**Installation and packaging benefits**
- Optimized for shortest length
- Standardized connector interface
- Integrated loop flushing device
- Radial or axial high pressure ports

**Greater total efficiency**
- Minimized losses
- Improved at high flow conditions

**Wide range of controls**
- Electric Two-position Control
- Electric Proportional Control
- Hydraulic Two-position Control
- Hydraulic Proportional Control
- Pressure Compensator Override
- Proportional Pressure Compensator Override
- Brake Pressure Defeat option
- Common controls across the entire motor family
- PLUS+1® Compliant control and sensor options

**Expanded functionality**
- Zero degree capability together with a high performance 32 degree maximum angle
- Enhanced control functions with proportional controls de-energized at minimum or maximum displacement
- Optional integrated speed sensor with
  - Dual redundant speed sensing
  - Direction indication
  - Temperature sensing
  - Wire fault detection

Comprehensive technical literature online at powersonsolutions.danfoss.com
Technical specifications

| Weight (with EDC) | SAE ISO 3019/1 | 81.0 kg [179 lb] |
|                  | DIN ISO 3019/2 | 75.0 kg [165 lb] |

| Output speed rated | Max. displacement | 2350 min⁻¹ (rpm) |
|                   | Min. displacement (6°) | 3850 min⁻¹ (rpm) |
|                   | 0° displacement | 4300 min⁻¹ (rpm) |

| Max. output speed | Max. displacement | 3000 min⁻¹ (rpm) |
|                  | Min. displacement (6°) | 4800 min⁻¹ (rpm) |
|                  | 0° displacement | 5250 min⁻¹ (rpm) |

| System pressure | Working | 450 bar [6527 psi] |
|                | Maximum | 480 bar [6960 psi] |
|                | Min. low loop | 7.5 bar [109 psi] |

| Case pressure | Rated | 3 bar [44 psi] |
|              | Max. | 5 bar [73 psi] |
|              | Min. | 0.3 bar [4 psi] |

Schematic example

H1B with Electric Proportional Control (De-energized = max. displacement)

H1B 210 dimensions for SAE ISO 3019/1 with Electric Proportional Control (De-energized = max. displacement)

H1B 210 dimensions for DIN ISO 3019/2 with Electric Proportional Control (De-energized = min. displacement)

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