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 powersolutions.danfoss.com
Technical specifications

| Weight                                      | SAE ISO 3019/1 | 29.8 kg (65.8 lb) |
|                                            | DIN ISO 3019/2 | 28.3 kg (62.5 lb) |

Output speed rated

| Max. displacement | 3600 min⁻¹ (rpm) |
| Min. displacement (6°) | 5900 min⁻¹ (rpm) |
| 0° displacement | 6600 min⁻¹ (rpm) |

Max. output speed

| Max. displacement | 4500 min⁻¹ (rpm) |
| Min. displacement (6°) | 7250 min⁻¹ (rpm) |
| 0° displacement | 7950 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] |

Dimensions

SAE ISO 3019/1 with Electric proportional control (de-energized = max. displacement)

- Loop flushing valve
- Gauge port "MA" - "MB" Port ISO 11396-1 – 1/4"-18 [22.2 (0.884) max. clearance dia for fitting]
- Speed sensor connector: Deutsch DT04-2P

SAE ISO 3019/2 with Electric proportional control (de-energized = min. displacement)

- Loop flushing valve
- Gauge port "MA" - "MB" Port ISO 11396-1 – 1/4"-18 [22.2 (0.884) max. clearance dia for fitting]
- Speed sensor connector: Deutsch DT04-2P

Cartridge with Electric two-position control (de-energized = min. displacement)

Pressure compensator override, Brake pressure defeat

Schematic

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