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: 48.8 kg [108 lb]
- DIN ISO 3019/2: 45.0 kg [99 lb]

**Output speed rated**
- Max. displacement: 2900 min⁻¹ (rpm)
- Min. displacement (6°): 4800 min⁻¹ (rpm)
- 0° displacement: 5350 min⁻¹ (rpm)

**Max. output speed**
- Max. displacement: 3700 min⁻¹ (rpm)
- Min. displacement (6°): 5950 min⁻¹ (rpm)
- 0° displacement: 6500 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)**

**DIN ISO 3019/2 with Electric Proportional Control (de-energized = min. displacement)**

**Cartridge with Electric Two-Position Control (de-energized = min. displacement)**

### Schematic

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

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