ENGINEERING



**Data Sheet** 

# **H1 Axial Piston Single Pump** Size 147/165 cm<sup>3</sup>

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.



# 4

#### **Features**

#### Designed for quality and reliability

- One design concept
- Single piece swash plate

### Installation and packaging benefits

- Length optimized pump
- Minimum one clean side
- Higher corner HP / package size ratio
- Standardized connector interface
- Expanded functionality through PLUS+1<sup>®</sup>

#### Wide range of controls

- Electro-hydraulic controls:
  - Electrical Displacement Control (EDC)
  - Forward-Neutral-Reverse (FNR)
  - Non-Feedback Proportional Electric (NFPE)
- Automotive Control (AC)
- Fan Drive Control (FDC)
- Manual Displacement Control (MDC)
- Common control across entire family

#### **Expanded functionality**

- PLUS+1<sup>®</sup> Compliant control and sensor options
- Integral filtration available with integrated filter bypass sensors and switch

#### **Greater total efficiency**

- Minimized control losses
- · Improved charge circuit
- Lower control pressure for less power consumption

Comprehensive technical literature online at powersolutions.danfoss.com

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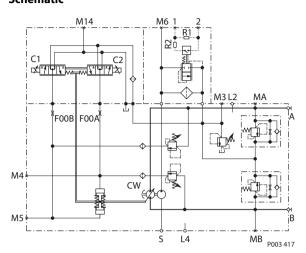


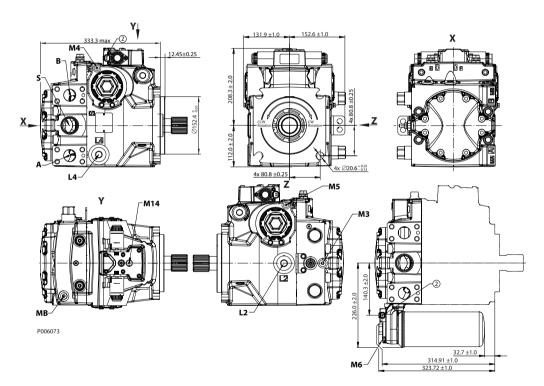
## **Technical Specifications**

Parameters		Size 147	Size 165
Displacement cm <sup>3</sup> [in <sup>3</sup> ]		147.2 [8.98]	165.1 [10.08]
Input speed min <sup>-1</sup> (rpm)	Minimum	500	
	Rated	3000	
	Maximum	3100	
System pressure bar [psi]	Max. working*	450 [6525]	
	Maximum	480 [6962]	
	Min. low loop	10 [150]	
Case pressure bar [psi]	Rated	3.0 [40]	
	Maximum	5.0 [75]	
Weight (without PTO and filter), kg [lb]		96 [211]	

<sup>\*</sup> Pressures above max. working pressure requires Danfoss approval.

#### Schematic





**A, B** – System ports, Ø31.5 – 450 bar, split flange boss per ISO 6162

MA, MB – System gauge ports, 9/16-18

**M3, M6** – Charge gauge port, 9/16-18

**M4, M5** – Servo gauge ports, 7/16-20

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

**M14** – Case gauge port, 7/16-20

**L2, L4** – Case drain ports, 1 5/16-12

S - Charge inlet port, 1 5/8-12

2 – Connector DEUTSCH

**Optional:** Integrated charge pressure filtration

Detailed technical information are available in the Technical Information H1 Axial Piston Single Pumps, Size 147/165, BC00000061.

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