

Data Sheet

H1P 045/053**Axial Piston Single Pumps**

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

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)
- Hydraulic Displacement Control (HDC)
- Common control across entire family

Greater total efficiency

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

Installation and packaging benefits

- Length optimized pump
- Minimum one clean side
- Higher corner HP / package size ratio
- Standardized connector interface

Expanded functionality

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

For more information see the H1P 045/053 Axial Piston Single Pumps Technical Information, **BC00000059**.

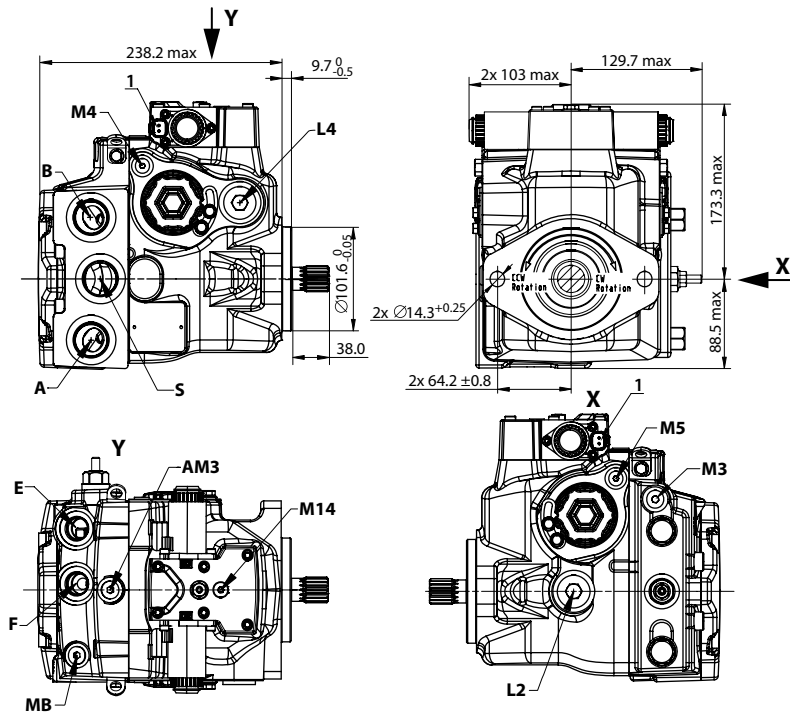
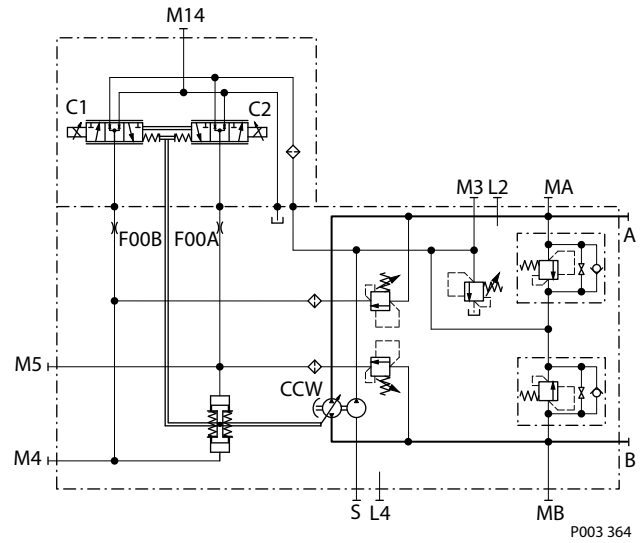
Comprehensive technical literature is online at www.danfoss.com

Technical Specifications

Parameters		Size 045	Size 053
Displacement cm ³ [in ³]		45.0 [2.75]	53.8 [3.28]
Input speed min ⁻¹ (rpm)	Minimum	500	
	Rated	3400	
	Maximum	3500	
System pressure bar [psi]	Max. working*	420 [6092]	380 [5511]
	Maximum	450 [6527]	400 [5802]
	Min. low loop	10 [145]	
Case pressure bar [psi]	Rated	3.0 [44.0]	
	Maximum	5.0 [73.0]	
Weight (without PTO and filter), kg [lb]		41 [90]	

* Pressures above max. working pressure requires Danfoss approval.

Schematic



A/B system ports: 1⁵/₁₆-12

MA/MB (system), **AM3, M3** (charge) gauge ports per ISO 11926-1: 9¹⁶/₁₆-18

M4, M5 (servo), **M14** (case) gauge ports per ISO 11926-1: 7¹⁶/₁₆-20

L2, L4 – Case drain ports per ISO 11926-1: 1¹/₁₆-12

E/F – Charge filtration ports per ISO 11926-1: 7⁸/₈-14

S – Charge inlet port per ISO 11926-1: 1⁵/₁₆-12

1 – Connector DEUTSCH DT04-2P, to be paint free