

Data Sheet

# H1 Axial Piston Tandem Pumps

## Size 045/053 cm<sup>3</sup>

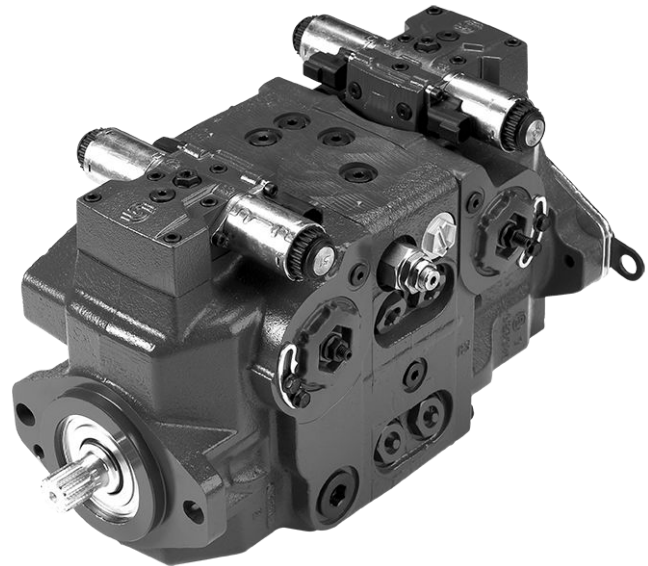


For more than 40 years, Danfoss has been developing state-of-the-art components and systems for mobile machinery used in off-highway operations around the world.

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<sup>®</sup> Compliant. PLUS+1<sup>®</sup> 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
- Integrated auxiliary pad

#### Installation and packaging benefits

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

#### Wide range of controls

- Electro-hydraulic controls:

- Electrical Displacement Control (EDC)
- Forward-Neutral-Reverse (FNR)
- Non-Feedback Proportional Electric (NFPE)
- Manual Displacement Control (MDC)
- Common control across entire family

#### Expanded functionality

- Full compliment of diagnostic ports including case pressure
- PLUS+1<sup>®</sup> Compliant control and sensor options
- Control Cut Off (CCO) valve with integral logic (brake) port

#### Greater total efficiency

- Minimized control losses
- Reduced charge pressure rise rate between idle and high idle
- Lower control pressure for less power consumption

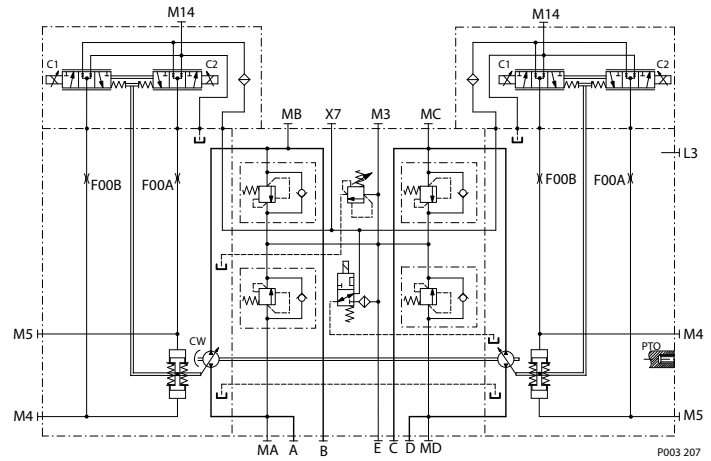
Comprehensive technical literature online at [powersolutions.danfoss.com](http://powersolutions.danfoss.com)

**Technical Specifications**

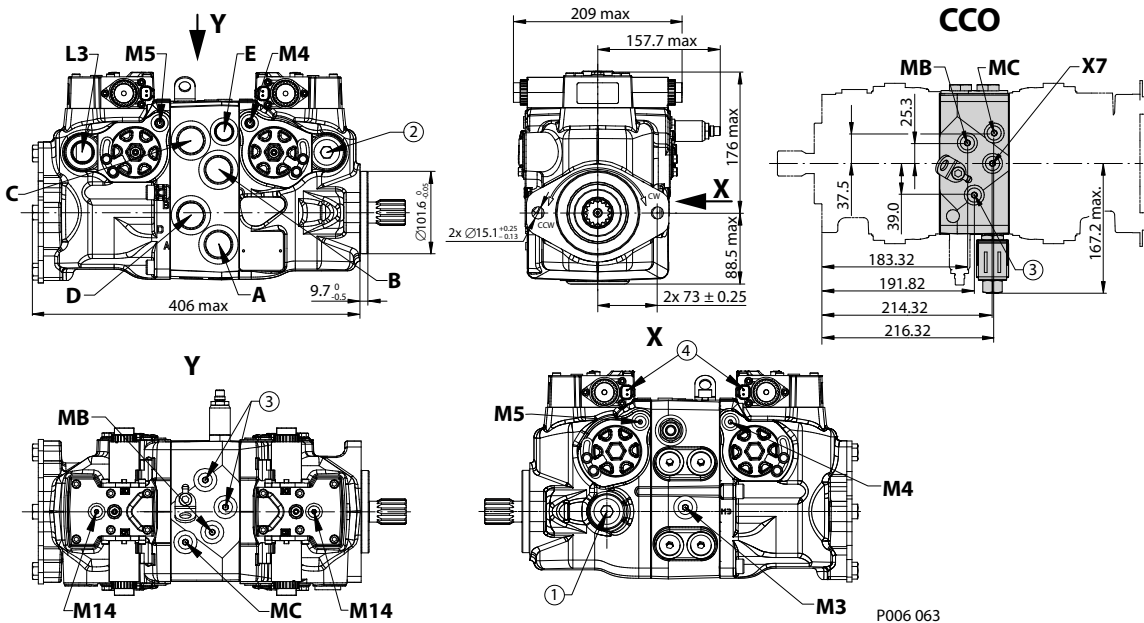
Frame size		Size 045	Size 053
Displacement cm <sup>3</sup> [in <sup>3</sup> ]		45.0 [2.75]	53.8 [3.28]
Input speed min <sup>-1</sup> (rpm)	Minimum	500	
	Rated	3400	
	Maximum	3500	
System pressure bar [psi]	Max. working*	420 [6090]	380 [5510]
	Maximum	450 [6525]	400 [5800]
	Min. low loop	10 [150]	
Case pressure bar [psi]	Rated	3.0 [40]	
	Maximum	5.0 [75]	
Weight (without PTO and filter), kg [lb]		65.0 [143.0]	

\* Applied pressures above maximum working pressure requires Danfoss application approval.

**Schematic**



**Dimensions**



**Legend:**

- A/B/C/D** – System ports, 1 5/16-12; Ø48.5
- MA/MB/MC/MD** – System gauge ports, 9/16-18; Ø28
- M3** – Charge gauge port, 9/16-18; Ø28
- M4, M5** – Servo gauge ports, 7/16-20; Ø24.5
- M14** – Case gauge port, 5/16 -24; Ø21.0
- E** – Charge inlet port, 7/16-20; Ø36
- L3** – Case drain port, 1 1/16-12 Ø48.5

- CCO** – Control Cut Off valve option
- X7** – Brake gauge port 9/16 -18 Ø28.0
- 1** – Case pressure port, 1 1/16-12 Ø41.0
- 2** – Case pressure port, 1 1/16-12 Ø48.5
- 3** – Charge constr. port, 9/16-18; Ø28
- 4** – Connector DEUTSCH DT04-2P

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

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