

**Data Sheet** 

# H1-The new Generation of Hydrostatics 045/053 cm<sup>3</sup> Tandem 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.

H1 - our new generation of servo-controlled hydrostatic pumps - is no exception.

The H1 range is built around an advanced electrical 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
- Integrated auxiliary pad

# · 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®
- High strength mounting flange

#### · Optimized for electrical control

- Electro-hydraulic control options include Electrical Displacement Control (EDC) and Forward-Neutral-Reverse (FNR) Non-Feedback Proportional Electric (NFPE)
- Common control across entire family

# · Expanded functionality

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

# · Greater total efficiency

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



# **Technical Specifications**

#### Physical properties

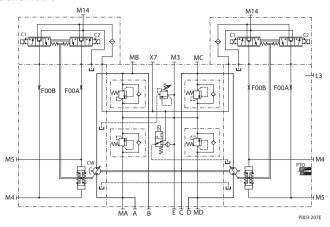
Features	Unit	Sizes	
		045	053
Displacement	cm³ [in³]	45 [2.75]	53.8 [3.28]
Weight (without PTO and filter)	kg [lb]	65.0 [143.0]	

#### Operating parameters

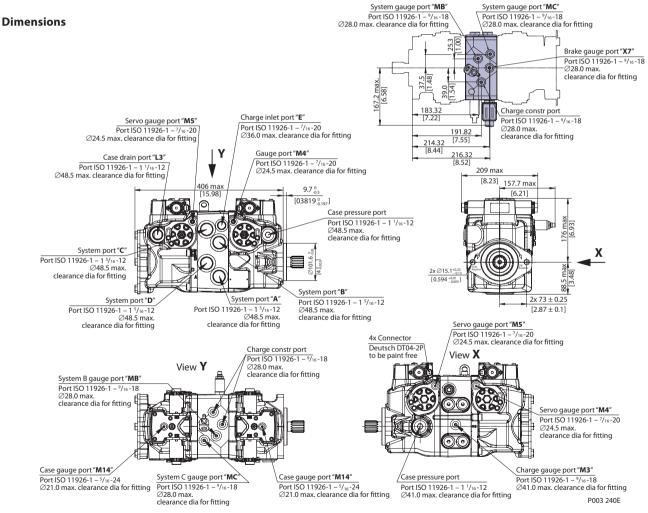
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Input speed	Minimum	min-1 (rpm)	500				
	Rated		3400				
	Maximum		3500				
System pressure	Maximum working pressure*	bar [psi]	420 [6090]	380 [5510]			
	Maximum pressure		450 [6525]	400 [5800]			
	Minimum low loop		10 [150]				
Case pressure	Rated	bar [psi]	2.0 [29]				
	Maximum		5.0 [75]				

<sup>\*</sup> Applied pressures above maximum working pressure requires Danfoss application approval.

#### Schematic



# Option: Control Cut Off valve (CCO)



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