



## **Data Sheet**

# H1P 210/250/280 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<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

## 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)

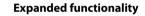
- Manual Displacement Control (MDC)
- Hydraulic Displacement Control (HDC)
- Common control across entire family

## **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



 PLUS+1<sup>®</sup> Compliant control and sensor options

For more information see the H1P 210/250/280 Axial Piston Single Pumps Technical Information, **BC152986484463**.

Comprehensive technical literature is online at www.danfoss.com



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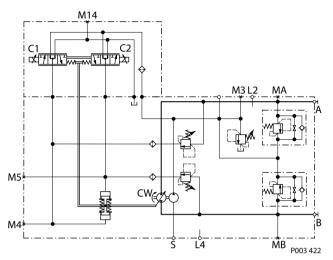




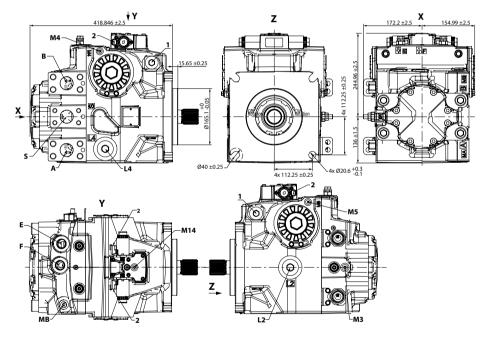
# **Technical Specifications**

Parameters		Size 210	Size 250	Size 280
Displacement cm <sup>3</sup> [in <sup>3</sup> ]		211.5	251.7	280.2
		[12.91]	[15.36]	[17.10]
Input speed min <sup>-1</sup> (rpm)	Minimum	500		
	Rated	2600		
	Maximum	2800		
System pressure bar [psi]	Max. working*	450 [6527]		420 [6091]
	Maximum	480 [6962]		450 [6527]
	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]		163 [359.4]		

## Schematic



\* Pressures above max. working pressure requires Danfoss approval.



**A/B** system ports: Ø38 mm, 450 bar split flange boss per ISO 6162, M16 x 2; 27 min. full thread depth

**MA/MB** (system), **M3** (charge) gauge ports per ISO 11926-1: $\frac{9}{16}$ -18 **M4, M5** (servo), **M14** (case) gauge ports per ISO 11926-1: $\frac{7}{16}$ -20

**L2, L4** – Case drain ports per ISO 11926-1:  $1\frac{5}{8}$ –12

**E/F** – Charge filtration ports per ISO 11926-1: 1<sup>1</sup>/<sub>16</sub>-12

**S** – Charge inlet port per ISO 11926-1: Ø38 mm, 350 bar split flange boss per ISO 6162, M12 x 1.75; 21 min. full thread depth

- 1 Case pressure port per ISO 11926-1: 1  $\frac{5}{16}$  12
- 2 Connector DEUTSCH DT04-2P, to be paint free

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