

Data Sheet

# Variable Displacement Pump

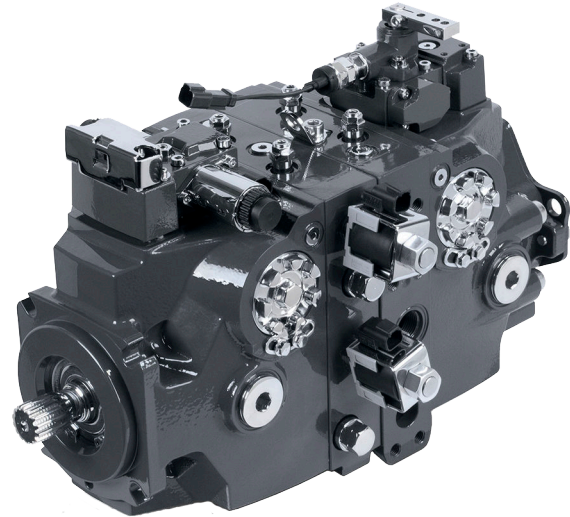
## H1 60/68 Tandem



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 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 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<sup>®</sup>
- High strength mounting flange

#### Control options

- Electro-hydraulic control options include:
  - 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 complement of diagnostic ports including case pressure
- PLUS+1 Compliant control and sensor options
- Control Cut Off (CCO) valve
- Integral brake control valve

#### Greater total efficiency

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

# H1 60-68 Tandem Pumps

## Specifications

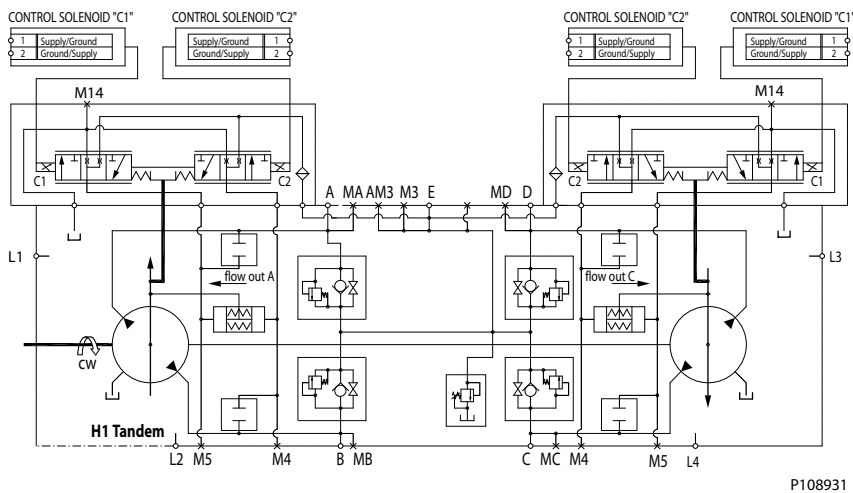
### Physical Properties

Features	Unit	060	068
Displacement (maximum)	cm <sup>3</sup> [in <sup>3</sup> ]	60.4 [3.69]	68 [4.15]
Weight	kg [lb]	96.2 [212]	

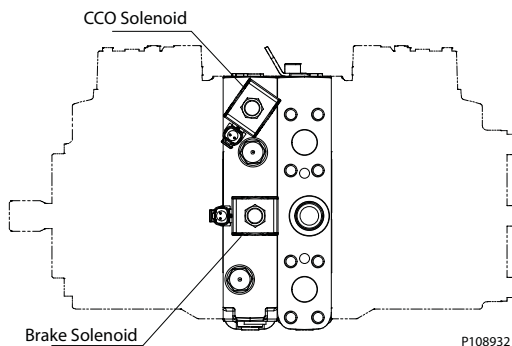
### Operating Parameters

Parameter	Measure	Unit	060	068
Input Speed	Minimum	Min <sup>-1</sup> [rpm]	500	
	Rated		3500	
	Maximum		4000	
System pressure	Maximum working pressure	bar [psi]	420 [6090]	380 [5510]
	Maximum pressure		450 [6525]	400 [5800]
	Maximum low loop		10 [150]	
Case pressure	Rated	bar [psi]	2.0 [29]	
	Maximum		5.0 [87]	

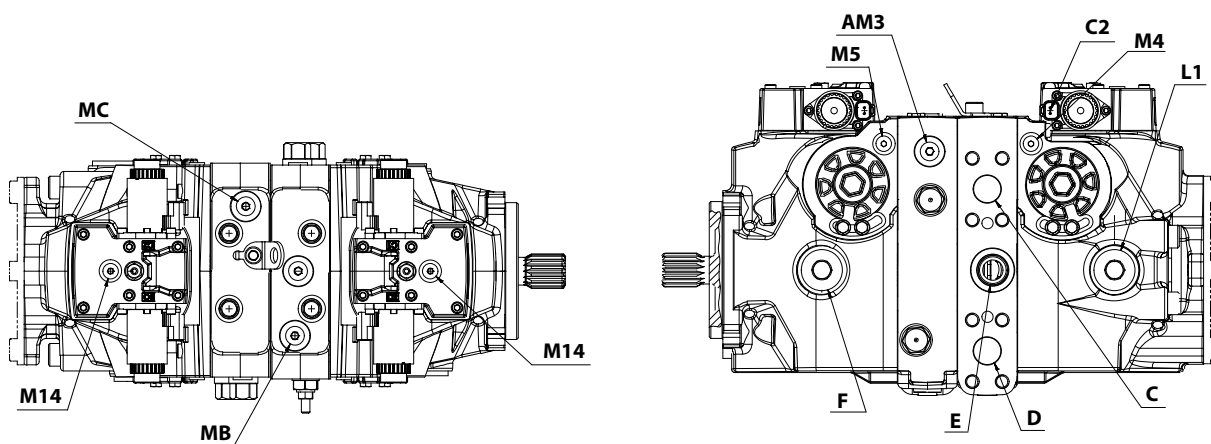
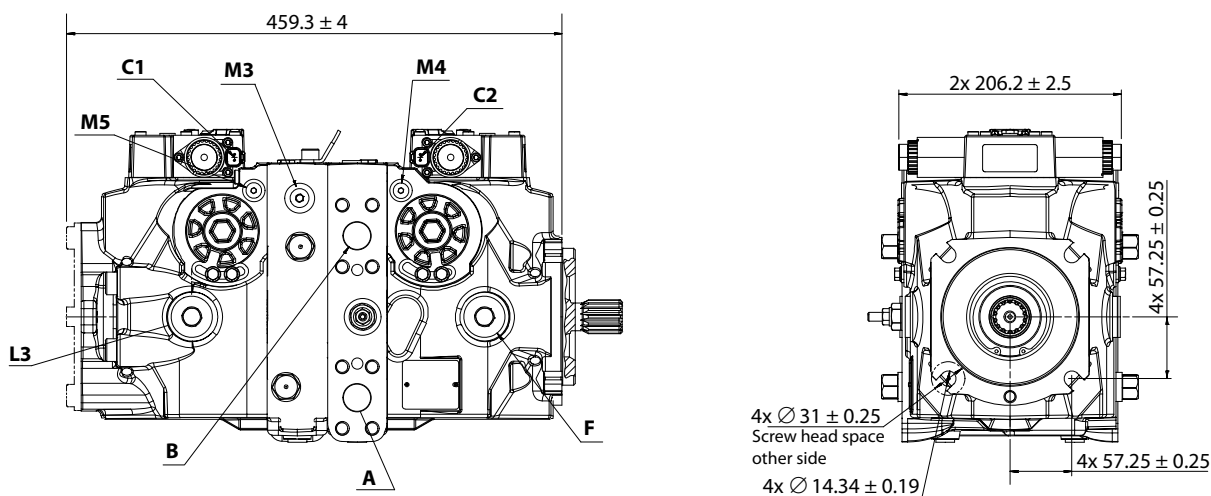
## Schematic



### Options: Control Cut Off Valve (CCO), Brake Valve



Dimensions and Ports



P108933

	Description	Port
<b>A/B/C/D</b>	System port	$\varnothing 25.4$ -450 Bar split flange boss per ISO 6162 M12x1.75-6H Thd. 20 full Thd. depth
<b>E</b>	Charge inlet port	ISO 11926-1 – 1 1/16-12
<b>F</b>	Case pressure port	ISO 11926-1 – 1 5/16-12
<b>MB/MC</b>	System gauge port	ISO 11926-1 – 9/16-18
<b>L1/L3</b>	Case Drain	ISO 11926-1 – 1 5/16-12
<b>M14</b>	Case gauge port	ISO 11926-1 – 1 7/16-20
<b>C1/C2</b>	Solenoid connector	DEUTSCH DT04-2P
<b>M4/M5</b>	Servo gauge port	ISO 11926-1 – 7/16-20
<b>M3/AM3</b>	Charge gauge port	ISO 11926-1 – 9/16-18

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