

Data Sheet

H1 Bent Axis Variable Displacement Motor Size 210 cm³

ind it at



PRECISION FLUID POWER, INC. Hydraulic Sales & Repair

800-728-5168 PrecisionFluidPower.com

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 and bent axis variable motors is no exception.

The H1 product 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

- Proven and optimized 9 piston rotating group
- Single piece housing
- Electric components with IP67 & IP69K rating

Installation and packaging benefits

- · Optimized for shortest length
- Standardized connector interface
- Integrated loop flushing device
- · Radial or axial high pressure ports

Wide range of controls

- Electric Two-position Control
- Electric Proportional Control
- Hydraulic Two-position Control
- Hydraulic Proportional Control
- Pressure Compensator Override
- Proportional Pressure Compensator Override
- Brake Pressure Defeat option
- Common controls across the entire motor family
- PLUS+1[®] Compliant control and sensor options

Expanded functionality

- Zero degree capability together with a high performance 32 degree maximum angle
- Enhanced control functions with proportional controls de-energized at minimum or maximum displacement
- Optional integrated speed sensor with
 - Dual redundant speed sensing
 - Direction indication
 - Temperature sensing
 - Wire fault detection

Comprehensive technical literature online at *powersolutions.danfoss.com*

Greater total efficiency

- · Minimized losses
- · Improved at high flow conditions

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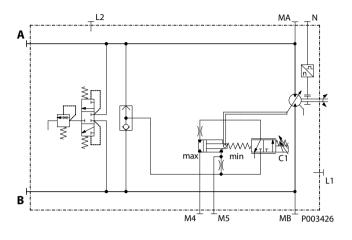


Technical specifications

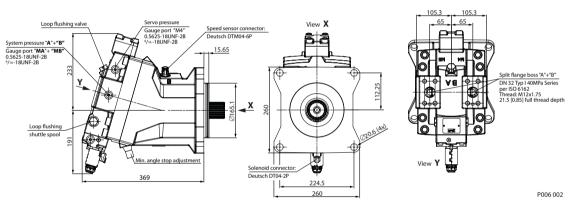
Weight (with EDC) SAE ISO 3019/1 81.0 kg [179 lb] DIN ISO 3019/2 75.0 kg [165 lb] Output speed rated Max. displacement 2350 min ⁻¹ (rpm) Min. displacement (6°) 3850 min ⁻¹ (rpm) 0° displacement 4300 min ⁻¹ (rpm) Max. output speed Max. displacement 3000 min ⁻¹ (rpm) Min. displacement (6°) 4800 min ⁻¹ (rpm) 0° displacement 5250 min ⁻¹ (rpm) Maximum 480 bar [6527 psi] Maximum 480 bar [6960 psi] Min. low loop 7.5 bar [109 psi] Case pressure Rated 3 bar [44 psi] Max. 5 bar [73 psi] Min. 0.3 bar [4 psi]			
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System pressure Working 450 bar [6527 psi] Maximum 480 bar [6960 psi] Min. low loop 7.5 bar [109 psi] Case pressure Rated 3 bar [44 psi] Max. 5 bar [73 psi]		Min. displacement (6°)	4800 min ⁻¹ (rpm)
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Min. low loop 7.5 bar [109 psi] Case pressure Rated 3 bar [44 psi] Max. 5 bar [73 psi]	System pressure	Working	450 bar [6527 psi]
Case pressure Rated 3 bar [44 psi] Max. 5 bar [73 psi]		Maximum	480 bar [6960 psi]
Max. 5 bar [73 psi]		Min. low loop	7.5 bar [109 psi]
	Case pressure	Rated	3 bar [44 psi]
Min. 0.3 bar [4 psi]		Max.	5 bar [73 psi]
		Min.	0.3 bar [4 psi]

Schematic example

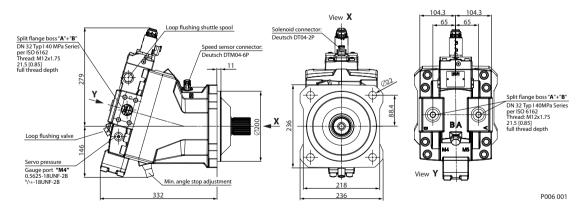
H1B with Electric Proportional Control (De-energized = max. displacement)



H1B 210 dimensions for SAE ISO 3019/1 with Electric Proportional Control (De-energized = max, displacement)



H1B 210 dimensions for DIN ISO 3019/2 with Electric Proportional Control (De-energized = min. displacement)



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