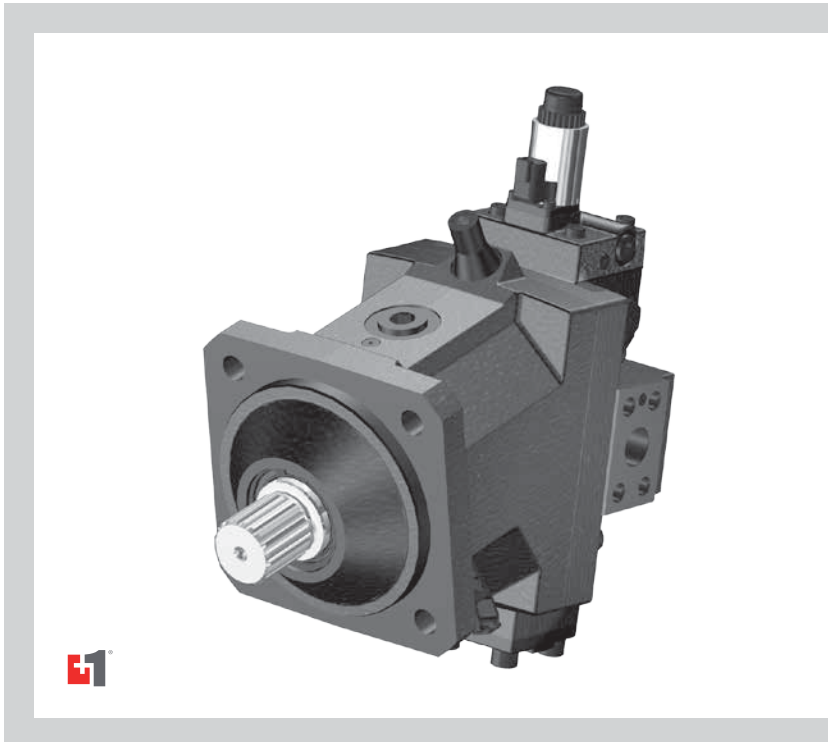


Data Sheet

H1-The new Generation of Hydrostatics 080 cm³ Bent Axis Variable Motor



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 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**
 - 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
- **Optimized for electric control**
 - Electric Two-position Control
 - Pressure Compensator Override
 - Proportional Pressure Compensator Override
 - Brake Pressure Defeat option
 - Electric Proportional Control
 - Pressure Compensator Override
 - Brake Pressure Defeat option
- **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
- **Greater total efficiency**
 - Minimized losses
 - Improved at high flow conditions
- **Common controls across the entire motor family**
- **Plus+1 Compliant control and sensor options**

Technical Specifications

Physical Properties

Features	Units	Frame size
Displacement	cm ³ [in ³]	080 [4.88]
Weight (with Electric Proportional Control)		
SAE ISO 3019/1		34.8 [76.9]
DIN ISO 3019/2	kg [lb]	34.4 [76.0]
Cartridge		33.0 [72.8]

Weight with Electric Proportional Control

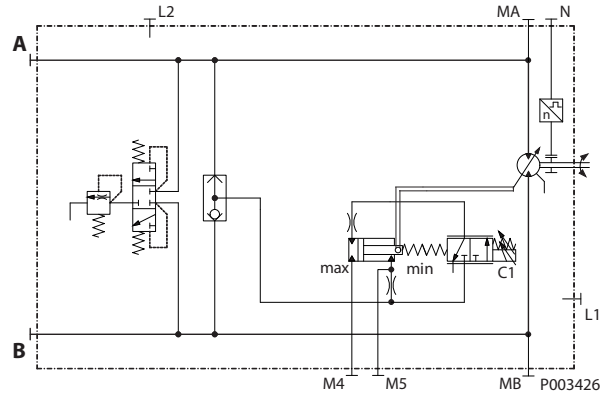
Operating Parameters

Output speed min-1 [rpm]	Rated	at max. displacement	3200
		at min. displacement (6°)	5100
	Maximum	at max. displacement	4100
		at min. displacement (6°)	6350
System pressure bar [psi]	Working	450 [6527]	
	Maximum	480 [6960]	
	Min. low loop	7.5 [109]	
Case pressure bar [psi]	Rated	3 [44]	
	Maximum	5 [73]	
	Minimum	0.3 [4]	

Schematic (example)

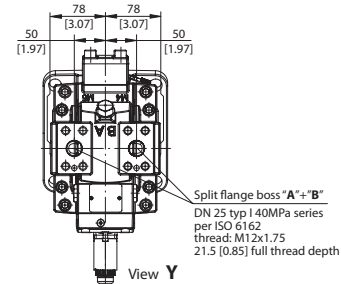
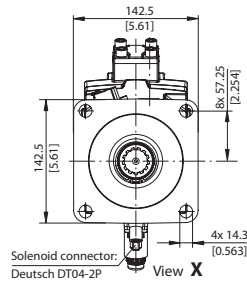
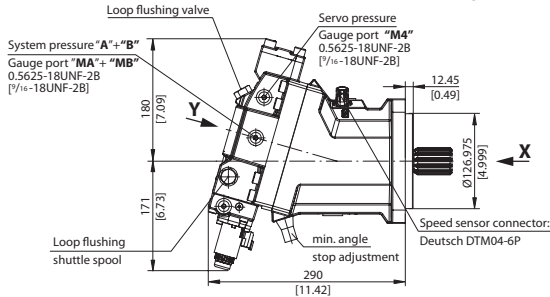
Electric Proportional Control

(de-energized = max. displacement)

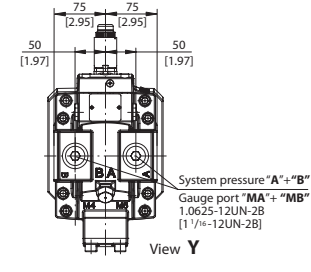
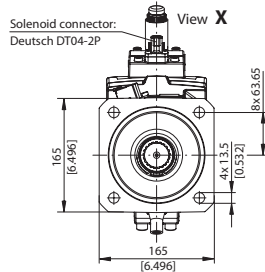
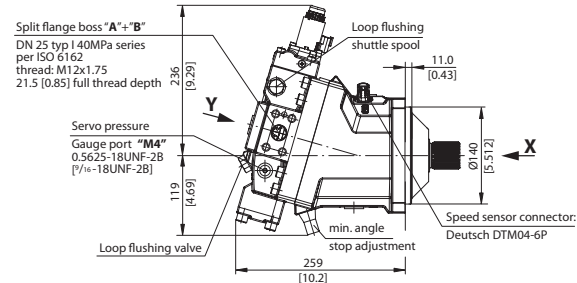


Installation Drawings

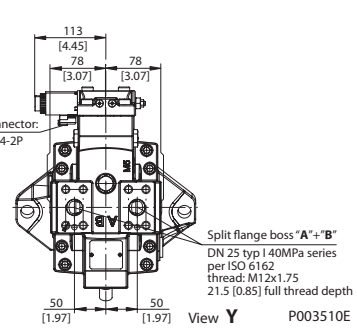
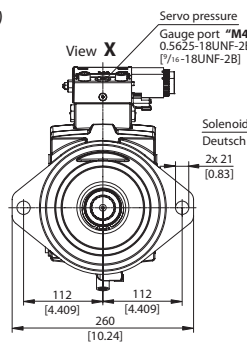
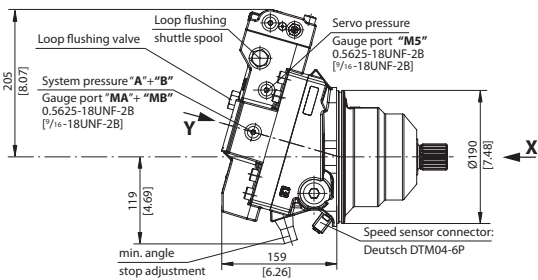
SAE ISO 3019/1 with Electric proportional control (de-energized = max. displacement)



DIN ISO 3019/2 with Electric proportional control (de-energized = min. displacement)



Cartridge with Electric two-position control (de-energized = min. displacement)
Pressure compensator override, Brake pressure defeat



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