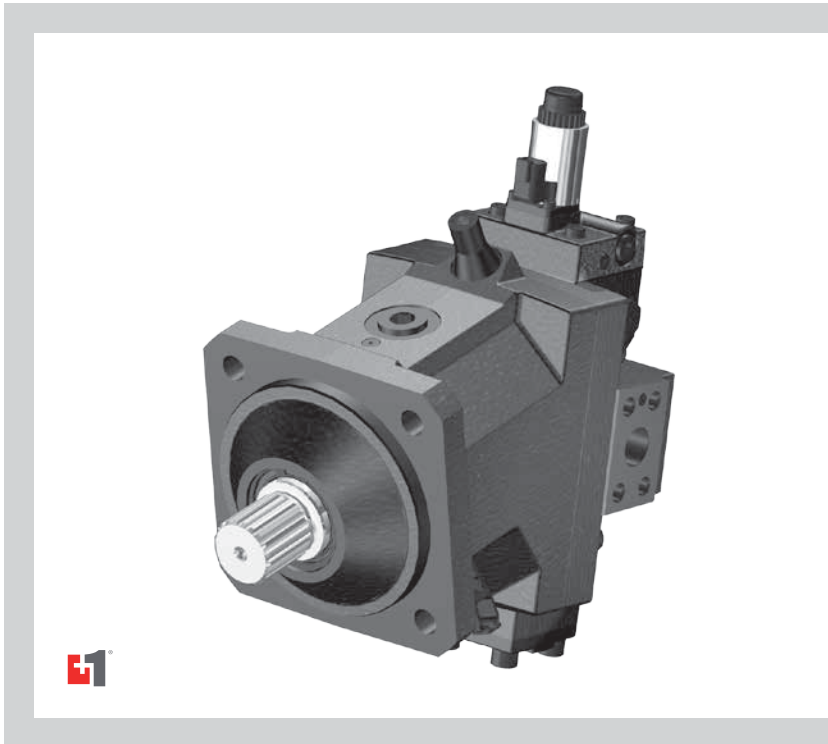


Data Sheet

H1-The new Generation of Hydrostatics 160 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
- **Common controls across the entire motor family**
 - Plus+1 Compliant control and sensor options
- **Expanded functionality**
 - Zero degree capability in conjunction with unchanged 32 degree feature
 - 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

Technical Specifications

Physical Properties

| Features | Units | Size 160 |
|--|------------------------------------|------------|
| Displacement | cm ³ [in ³] | 160 [9.76] |
| Weight (with Electric Proportional Control) | | |
| SAE ISO 3019/1 | kg [lb] | 61.9 [136] |
| DIN ISO 3019/2 | | 59.3 [131] |
| Cartridge | | 54.7 [121] |

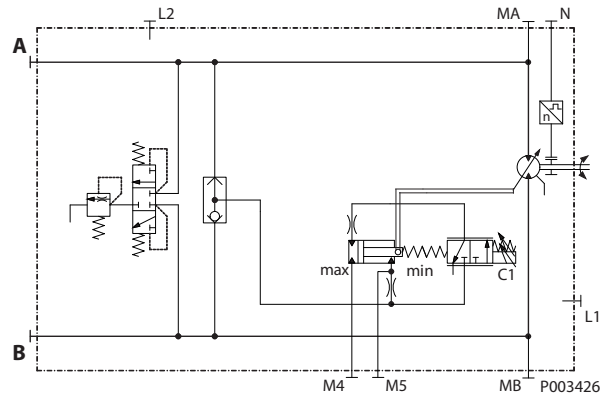
Operating Parameters

| | | | |
|--------------------------------|---------------|---------------------------|------|
| Output Speed min-1 [rpm] | Rated | at max. displacement | 2600 |
| | | at min. displacement (6°) | 4250 |
| | | at 0° displacement | 4750 |
| | Maximum | at max. displacement | 3300 |
| | | at min. displacement (6°) | 5250 |
| 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)

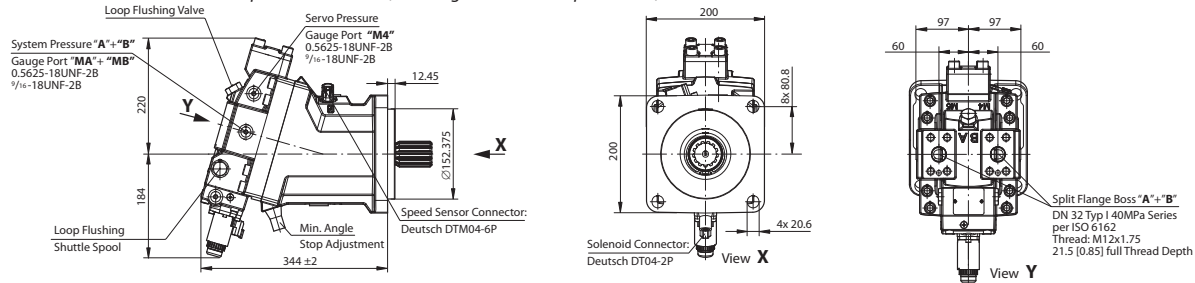
Electric Proportional Control

(de-energized = max. displacement)

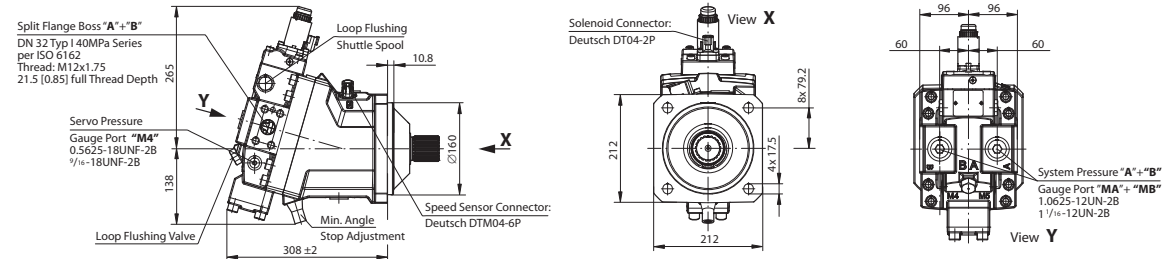


Installation Drawings

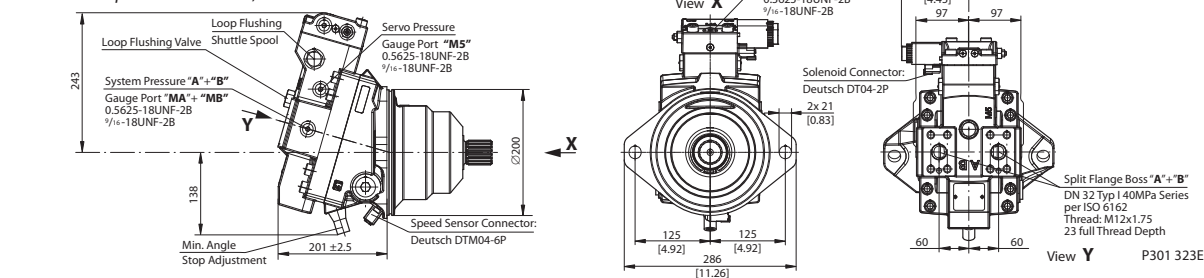
SAE ISO 3019/1 with Electric Proportional Control (de-energized = max. displacement)



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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