

# H1B-The new Generation of Hydrostatics 160 cm<sup>3</sup> Bent Axis Variable Motor

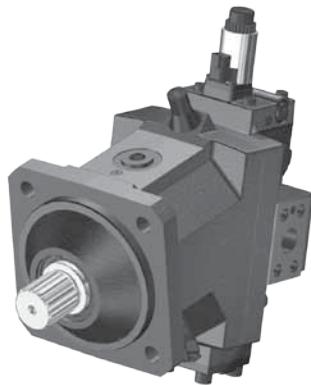
## Introduction

For more than 40 years, Sauer-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.

Local Address:

 **PLUS+1** COMPLIANT

*H1B Bent Axis Variable Motor*  
Frame Size 160

## 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

# H1B-The new Generation of Hydrostatics

## 160 cm<sup>3</sup> Displacement Bent Axis Variable Motor

### Technical Specifications

#### Physical Properties

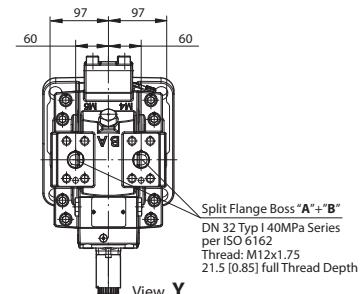
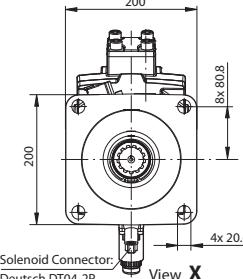
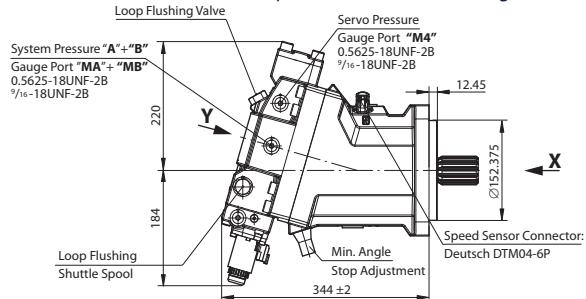
Features	Units	Size 160
Displacement	cm <sup>3</sup> [in <sup>3</sup> ]	160 [9.76]
<b>Weight (with Electric Proportional Control)</b>		
SAE ISO 3019/1	kg [lb]	61.9 [136]
DIN ISO 3019/2		59.3 [131]
Cartridge		54.7 [121]

#### Operating Parameters

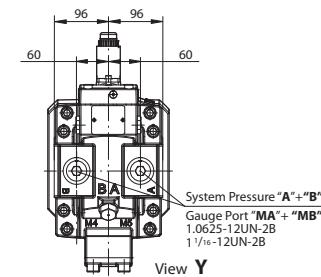
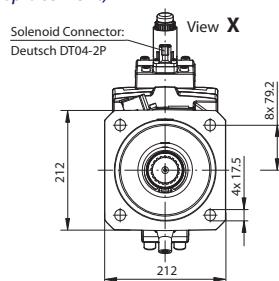
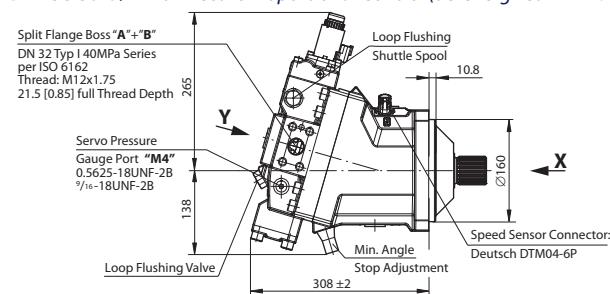
Output Speed min-1 [rpm]	Rated	at max. displacement	2600
		at min. displacement (6°)	4250
		at 0° displacement	4750
Maximum		at max. displacement	3300
		at min. displacement (6°)	5250
		at 0° displacement	5750
System Pressure bar [psi]	Working		450 [6527]
	Maximum		480 [6960]
	Min. low loop		7.5 [109]
Case Pressure bar [psi]	Rated		3 [44]
	Maximum		5 [73]
	Minimum		0.3 [4]

#### 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

