

Data Sheet

# H1 Bent Axis Fixed Displacement Motor

## Size 080 cm<sup>3</sup>

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.

Our portfolio has been expanded to a new product line: Fixed bent axis motors.

Using the proven rotating groups from H1B products, the H1F fixed bent axis motor delivers a compact unit design with high starting torque, high reliability, and best-in-class rotating efficiency.

H1F fixed bent axis motors have been developed specifically to be used in open and closed circuit applications. They are also compatible with Danfoss Open Circuit (OC) valves.



### Features

#### Designed for quality and reliability

- Proven and optimized 9 piston rotating group
- Single piece housing
- Optional speed sensor with IP67 & IP69K rating and standardized connector interface
- Open or closed circuit operation

#### Installation and packaging benefits

- Optimized for shortest length
- Radial, axial, or twin high pressure ports
- Optional integrated loop flushing device

#### Greater total efficiency

- Fuel savings
- Improved productivity
- Reduced heat generation

#### Optimized for OC valves

- Pressure ports interface for optimal connection to valves
- Optional bolt-on blocks may be supplied with H1F
  - Counterbalance Valve
  - Load Holding Valve (coming soon)

#### Expanded functionality

- High performance at 32 degree angle
- Optional integrated speed sensor with
  - Dual speed signal outputs
  - Direction sensing
  - Temperature output
  - Wire fault detection

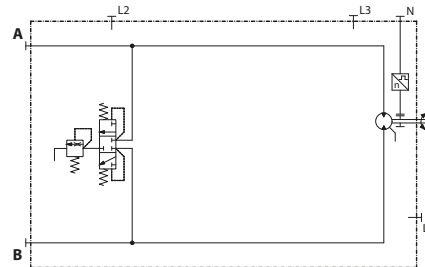
Comprehensive technical literature is online at [www.danfoss.com](http://www.danfoss.com)

**Technical specifications**

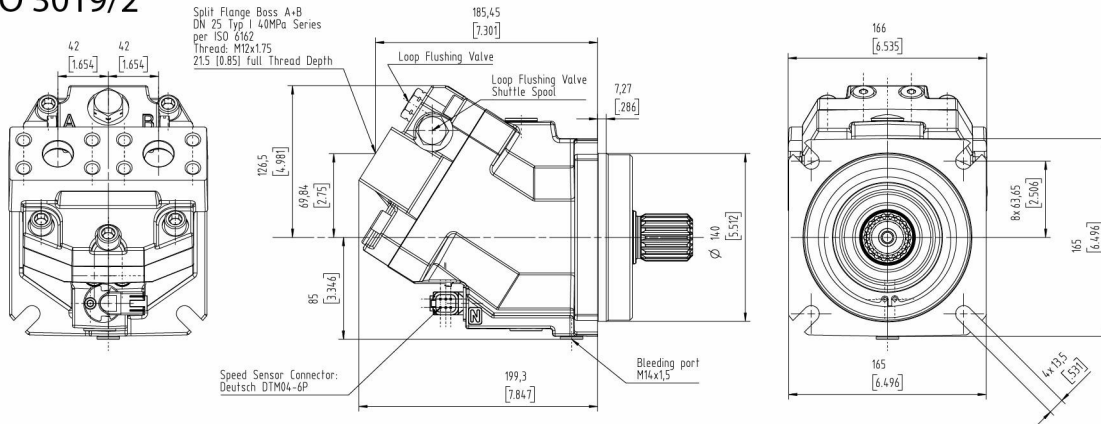
<b>Weight</b>	SAE ISO 3019/1	21.0 - 22.1 kg [46.3 - 48.7 lb]
	DIN ISO 3019/2	21.8 - 22.9kg [48.0 - 50.5 lb]
	Cartridge	22.1 - 23.3 kg [48.7 - 51.4 lb]
<b>Speed</b>	Rated	4500 min <sup>-1</sup> (rpm)
	Max	5000 min <sup>-1</sup> (rpm)
<b>System pressure</b>	Working (delta)	450 bar [6527 psi]
	Working (abs.)	480 bar [6962 psi]
	Maximum (delta)	480 bar [6962 psi]
	Maximum (abs.)	510 bar [7397 psi]
	Min. low loop (abs.)	7.5 bar [109 psi]
<b>Case pressure</b>	Rated	3 bar [44 psi]
	Max.	5 bar [73 psi]
	Min.	0.3 bar [4 psi]

**Schematic**

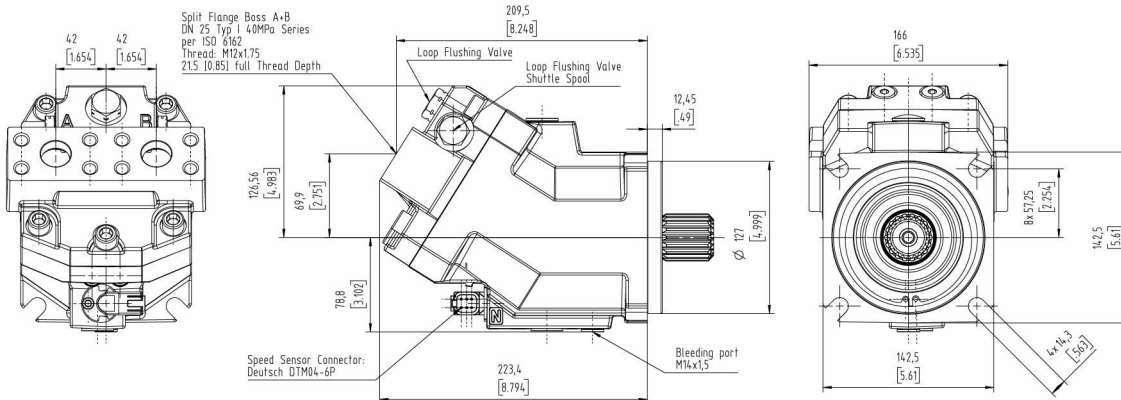
H1F with loop flushing device



**DIN ISO 3019/2**



**SAE ISO 3019/1**



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