H1F Bent Axis Fixed Displacement Motor
Size 060 cm³

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
- Electric components with IP67 & IP69K rating
- Open or closed circuit operation

Installation and packaging benefits

- Optimized for shortest length
- Standardized connector interface
- Optional integrated loop flushing device
- All metric motor
- Radial, twin or axial (coming soon) high pressure ports

Greater total efficiency

- Minimized losses
- Improved at high flow conditions

Optimized for OC valves

- Pressure ports interface for optimal connection to valves
- Optional bolt-on blocks may be supplied with H1F:
  - CBV (coming soon)
  - LVH (coming soon)
  - BPV (coming soon)

Expanded functionality

- High performance at 32 degree maximum angle
- Optional integrated speed sensor with
  - Dual redundant speed sensing
  - Direction indication
  - Temperature sensing
  - Wire fault detection

Comprehensive technical literature is online at *powersource.danfoss.com*.

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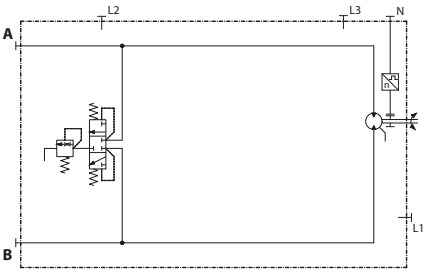
Technical specifications

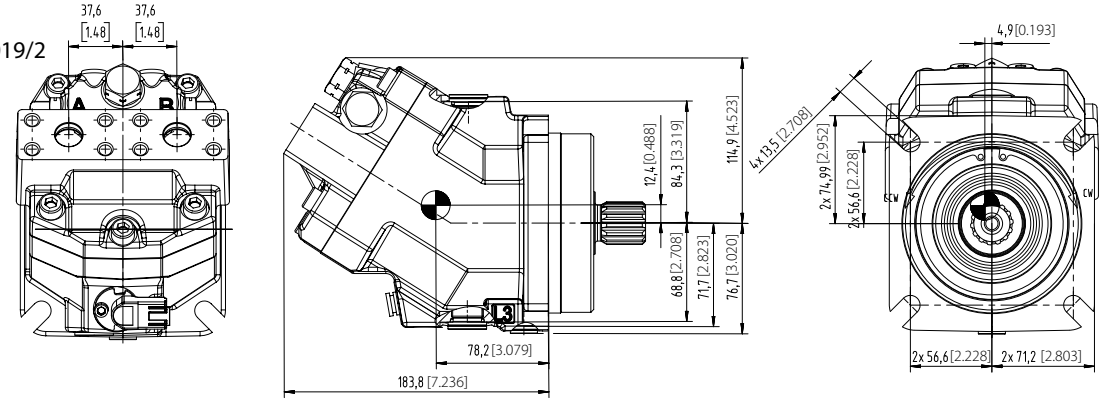
Weight	SAE ISO 3019/1	17.5 - 18.5 kg [38.6 - 40.8]
	DIN ISO 3019/2	16.2 - 17.0 kg [35.7 - 37.5 lb]
	Cartridge	16.6 - 17.5 kg [36.6 - 38.6 lb]
Speed	Rated	5000 min^{-1} (rpm)
	Max	5500 min^{-1} (rpm)
System pressure	Working (delta)	450 bar [6527 psi]
	Working (gauge)	480 bar [6962 psi]
	Maximum (delta)	480 bar [6962 psi]
	Maximum (gauge)	510 bar [7397 psi]
	Min. low loop (gauge)	7.5 bar [109 psi]
Case pressure	Rated	3 bar [44 psi]
	Max.	5 bar [73 psi]
	Min.	0.3 bar [4 psi]

Schematic

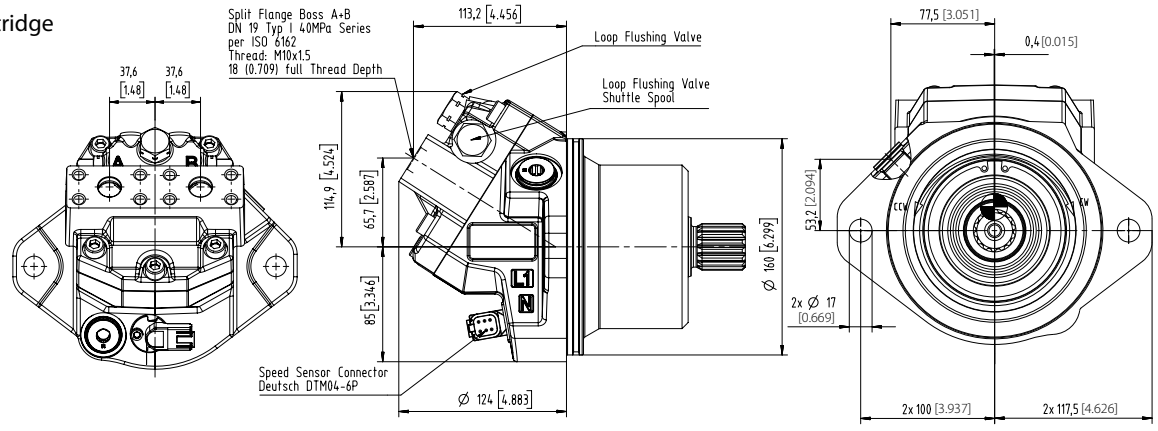
H1F with loop flushing device



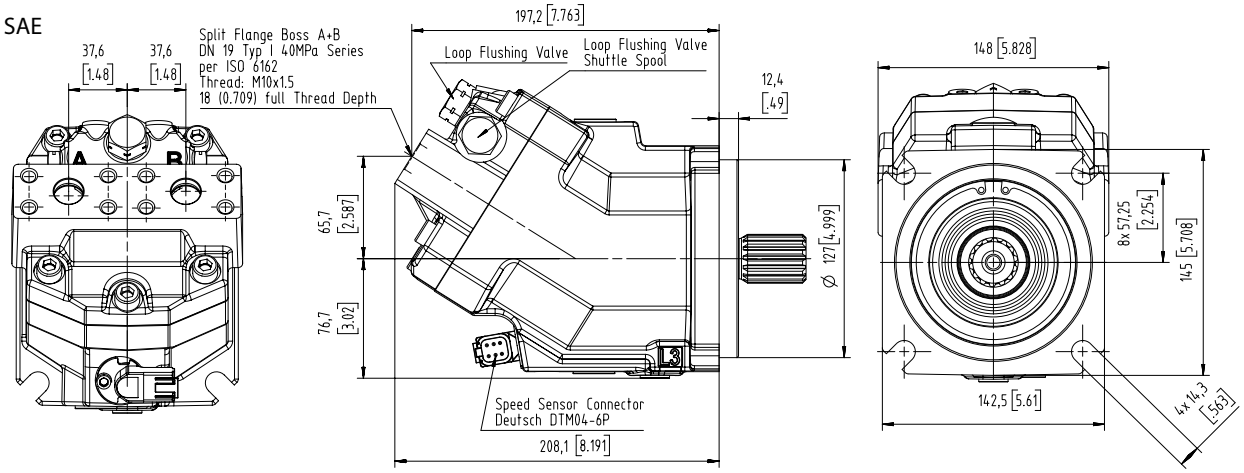
DIN ISO 3019/2



Cartridge



SAE



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