

ENGINEERING
TOMORROW

Danfoss

Count on availability when you need it most **H1B Bent Axis Motors Rapid Delivery Center**

Faster

time to market

Danfoss RDCs
ensure you have the
product you want,
when you want it



Shorten your design cycle with lead times to bring you what you want when you want it

Danfoss Rapid Delivery Centers (RDCs) enable OEMs to bring machines to market faster.

H1B Bent Axis Hydraulic Motors

Danfoss RDCs featuring the H1B Bent Axis Hydraulic Motor offer up to 130 million combinations of motor configurations, bringing the versatility you need when designing your vehicle on a schedule.

Your RDC is an authorized assembly and warranty center, and is held to very strict quality standards. All H1B motors from your distributor have been hydraulically tested.

H1B – Meeting your needs

Efficiency and performance are optimized using the latest computer aided design tools in conjunction with unrivaled hydrostatic system experience.

- Designed for the rugged environments of mobile machinery
- 7,000 psi pressure capability
- Shortest package length in the market
- 0 degree capability for free wheeling and anti-slip systems
- Robust evolution of our own successful Series 51
- Controls are common across displacement sizes and external replacement of shaft seals results in fewer service parts
- Speed and temperature sensor-ready
- Superior controls – less than 4% hysteresis

Local inventories include:

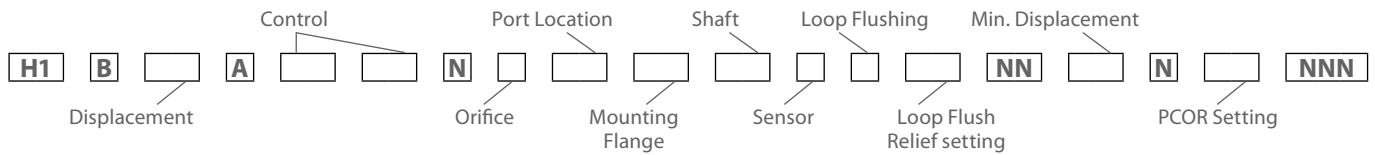
- 60 cm³
- 80 cm³
- 110 cm³
- 160 cm³
- 250 cm³*

*At participating locations only



H1B configurations at your local RDC

Proportional



Control – Electric Proportional

Code	Control Signal	De-energized position	PCOR	BPD
L1-BA	12 VDC	Max	No	No
L2-BA	24 VDC	Max	No	No
M1-CA	12 VDC	Min	No	No
M2-CA	24 VDC	Min	No	No
K1-KA	12 VDC	Min	Yes	No
K2-KA	24 VDC	Min	Yes	No
D1-MA	12 VDC	Max	Yes	No
D2-MA	24 VDC	Max	Yes	No
D1-M1	12 VDC	Max	Yes	Yes
D2-M2	24 VDC	Max	Yes	Yes
K1-K1	12 VDC	Min	Yes	Yes
K2-K2	24 VDC	Min	Yes	Yes

PCOR = Pressure Compensator Override, BDP = Brake Pressure Defeat

Displacement

080-80 cm³/rev (4.9 CIR)
 110-110 cm³/rev (6.7 CIR)
 160-160 cm³/rev (9.8 CIR)
 250-250 cm³/rev (15.3 CIR)

Orifice

A 1.2 mm
 B 0.8 mm
 C 0.6 mm

Port Location

PA Axial Ports
 PB Side Ports

Mounting Flange

CS Cartridge (80 cm³ only)
 VS SAE

Shaft

AS 14T 12/24 (60 & 80 cm³ only)
 HS W35x2x30x16 (80 cm³ only)
 JS W40x2x30x18 (80 & 110 cm³ only)
 ES 13T 8/16 (110 cm³ only)
 FS 15T 8/16 (160 & 250 cm³ only)
 KS W45x2x30x24 (160 cm³ only)
 DS 27T 16/32 (250 cm³ only)

Sensor

S 4.5-8 V speed, temperature, direction
 B 7-32 V speed only
 P Plugged, sensor not included
 N None

Loop Flushing

A 6.5 bar shift
 N No loop flushing

Loop Flushing Relief Valve

5 l/m, 16 bar, fixed (60/80 cm³ only)
 10 l/m, 16 bar, fixed (60/80/110 cm³ only)
 15 l/m, 16 bar, fixed (110 cm³ only)
 20 l/m, 16 bar, fixed (160/250 cm³ only)
 30 l/m, 16 bar, fixed (160/250 cm³ only)
 40 l/m, 16 bar, fixed (160/250 cm³ only)
 50 l/m, 16 bar, fixed (160/250 cm³ only)

Minimum Displacement

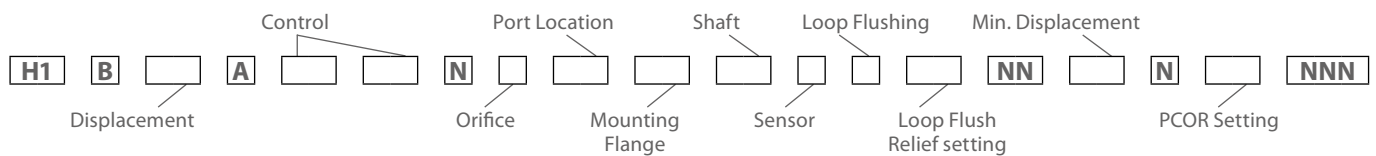
80 cm³: 000 and 016 to 054
 110 cm³: 000 and 022 to 074
 160 cm³: 000 and 032 to 108
 250 cm³: 000 and 050 to 169

PCOR Setting

00 Without
 16 160 bar
 17 170 bar
 18 180 bar
 19 190 bar
 20 200 bar
 21 210 bar
 22 220 bar
 23 230 bar
 24 240 bar
 25 250 bar
 26 260 bar
 27 270 bar
 28 280 bar
 29 290 bar
 30 300 bar

H1B configurations at your local RDC

Two position



Control – Two position

Code	Control Signal	De-energized position	PCOR	BPD
E1-AA	12 VDC	Max	No	No
E2-AA	24 VDC	Max	No	No
F1-EA	12 VDC	Min	No	No
F2-EA	24 VDC	Min	No	No
T1-DA	12 VDC	Min	Yes	No
T2-DA	24 VDC	Min	Yes	No
P1-DA	12 VDC	Min	Yes	No
P2-DA	24 VDC	Min	Yes	No
T1-D1	12 VDC	Min	Yes	Yes
P1-D1	12 VDC	Min	Yes	Yes
T2-D2	24 VDC	Min	Yes	Yes
P2-D2	24 VDC	Min	Yes	Yes
HE-HE	Hyd	Max	No	No
HF-HF	Hyd	Min	No	No
TA-DA	Pressure compensated, no shift	Min	Yes	No
TA-D1	Pressure compensated, no shift – BPD 12 VDC	Min	Yes	Yes
TA-D2	Pressure compensated, no shift – BPD 24 VDC	Min	Yes	Yes

PCOR = Pressure Compensator Override, BDP = Brake Pressure Defeat

Displacement

060 - 60 cm³/rev (3.7 CIR)
 080 - 80 cm³/rev (4.9 CIR)
 110 - 110 cm³/rev (6.7 CIR)

Orifice

A 1.2 mm
 B 0.8 mm
 C 0.6 mm

Port Location

TA Axial Ports
 TB Side Ports

Mounting Flange

CS Cartridge (60 & 80 cm³ only)
 VS SAE

Shaft

GS W30×2×30×14 (60 cm³ only)
 AS 14T 12/24 (60 & 80 cm³ only)
 HS W35×2×30×16 (80 cm³ only)
 JS W40×2×30×18 (80 & 110 cm³ only)
 ES 13T 8/16 (110 cm³ only)

Sensor

S 4.5-8 V speed, temperature, direction
 B 7-32 V speed only
 P Plugged, sensor not included
 N None

Loop Flushing

A 6.5 Bar shift
 N No loop flushing

Loop Flushing Relief Valve

5 l/m, 16 bar, fixed (60/80 cm³ only)
 10 l/m, 16 bar, fixed (60/80/110 cm³ only)
 15 l/m, 16 bar, fixed (110 cm³ only)
 20 l/m, 16 bar, fixed (160/250 cm³ only)
 30 l/m, 16 bar, fixed (160/250 cm³ only)
 40 l/m, 16 bar, fixed (160/250 cm³ only)
 50 l/m, 16 bar, fixed (160/250 cm³ only)

Minimum Displacement

60 cm³: 000 and 012 to 040
 80 cm³: 000 and 016 to 054
 110 cm³: 000 and 022 to 074

PCOR Setting

00 Without
 16 160 bar
 17 170 bar
 18 180 bar
 19 190 bar
 20 200 bar
 21 210 bar
 22 220 bar
 23 230 bar
 24 240 bar
 25 250 bar
 26 260 bar
 27 270 bar
 28 280 bar
 29 290 bar
 30 300 bar



Contact your local RDC center
today for more information on
getting the products you need
when you need them



Availability is subject to prior sale and is limited to quantities suitable for prototype and unplanned production orders for new customers. Normal production quantities can be accommodated by your RDC distributor by establishing an inventory program specifically for your production needs. While many combinations of products will be available within a few days, some combinations and quantities will be subject to standard lead-time. Please inquire with your RDC for current availability.

Your Danfoss technical distributor will help with your selection. Please see Danfoss publication 11037153 for details and definitions of the included nomenclature options.

Danfoss Power Solutions reserves the right to make program changes at anytime without notice. Quantities in excess of those available from the RDC will be acknowledged at standard lead-time.



About Danfoss Power Solutions

Danfoss Power Solutions is a global manufacturer and supplier of high-quality hydraulic and electronic components. We specialize in providing state-of-the-art technology and solutions that excel in the harsh operating conditions of the mobile off-highway market. Building on our extensive applications expertise, we work closely with you to ensure exceptional performance for a broad range of off-highway vehicles. We help OEMs around the world speed up system development, reduce costs and bring vehicles to market faster.

Danfoss Power Solutions – your strongest partner in mobile hydraulics.

Products we offer:

- Bent Axis Motors
- Closed Circuit Axial Piston Pumps and Motors
- Displays
- Electrohydraulic Power Steering
- Electrohydraulics
- Hydraulic Power Steering
- Integrated Systems
- Joysticks and Control Handles
- Microcontrollers and Software
- Open Circuit Axial Piston Pumps
- Orbital Motors
- PLUS+1® GUIDE
- Proportional Valves
- Sensors
- Steering
- Transit Mixer Drives

Wherever off-highway vehicles are at work, so is Danfoss Power Solutions. We offer you expert worldwide support for ensuring the best possible solutions for outstanding performance. And with an extensive network of Global Service Partners, we also provide you with comprehensive global service for all of our components.

Go to www.powersolutions.danfoss.com for further product information.

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