

ENGINEERING
TOMORROW



Marine, Oil and Gas

The **toughest** operating conditions demand **reliability** and **performance**

4

distinct certification categories of product approvals to demonstrate reliability & quality



Marine applications face the toughest operating environment imaginable. Subject to harsh weather conditions, extreme temperatures, and constant salt water immersion, your customers demand an extremely high level of reliability and exceptional performance.

Danfoss has the high-quality products and systems expertise to match your customers' demands. Our broad portfolio includes hydraulic pumps and motors for improved reliability and efficiency, easy system integration and control with PLUS+1® microcontrollers and software.

With Danfoss marine solutions, you can rule the waves.

PRODUCT LINE



H1 PUMP



S90 PUMP



S90 MOTOR

DISPLACEMENT

69 - 78cc
89 - 100cc
115 - 130cc
147 - 165cc
210 - 250cc

42cc
55cc
75cc
100cc
130cc
180cc
250cc

55cc
75cc
100cc
130cc

CERTIFICATIONS

Marine Approval



3.1

2.2

2.1

Listed logos under marine approval are registered properties of American Bureau of Shipping, Bureau Veritas, China Classification Society, Nippon Kaiji Kyokai, DNV-GL and Lloyd's Register of Shipping respectively.



H1B MOTOR



D1 PUMP



S45 PUMP

H1B MOTOR						D1 PUMP				S45 PUMP			
60cc	80cc	110cc	160cc	210cc	250cc	130cc	145cc	193cc	260cc	K2 Frame	45 - 75cc	74 - 90cc	100 - 147cc
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A product has no value unless its origins, mechanical and material properties are known. With complex supply chain and manufacturing process, customers want to be certain about the quality of the product they are purchasing.

For assurance the industry offers standards such as EN 10204:2004 as well as certification services that customers can choose from depending on their needs like 2.1, 2.2 and 3.1.

Marine Approval

Marine approvals or marine product certifications are required for hydraulic products destined for marine vessels. These products have specific testing requirements for pressure and capacity.

Danfoss offers its hydraulic products with desired customer approvals from all major classification societies around the world.

3.1

A 3.1 inspection document issued by the manufacturer confirms that the product supplied meets the purchasing specification, internal production standards and is accompanied by test results from the inspection program highlighted by the product specification and/ or purchaser.

This document is further validated by the manufacturer's inspection representative, independent of the manufacturing department.

2.2

A 2.2 inspection document is a manufacturer's declaration that the product supplied meets the purchasing specification, internal production standards and further includes test results from the manufacturer's quality/testing program.

2.1

A 2.1 inspection document is a manufacturer's declaration that the product supplied meets the firm's production standards, purchasing specifications and testing requirements.

Please reach out to your sales advisor for more information.

About Danfoss Power Solutions

Danfoss Power Solutions is a global manufacturer and supplier of high-quality hydraulic and electric 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 as well as the marine sector. Building on our extensive applications expertise, we work closely with you to ensure exceptional performance for a broad range of applications. We help you and other customers around the world speed up system development, reduce costs and bring vehicles and vessels to market faster.

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.

Danfoss Power Solutions – your strongest partner in mobile hydraulics and mobile electrification.

Products we offer:

- Cartridge valves and HIC's
- DCV directional control valves
- Electric converters
- Electric machines
- Electric motors
- Hydrostatic pumps and motors
- Orbital motors
- PLUS+1® controllers
- PLUS+1® displays
- PLUS+1® joysticks and pedals
- PLUS+1® operator interfaces
- PLUS+1® sensors
- PLUS+1® software services, support and training
- PLUS+1® software
- Position controls and sensors
- PVG proportional valves
- Steering components and systems
- Telematics

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

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