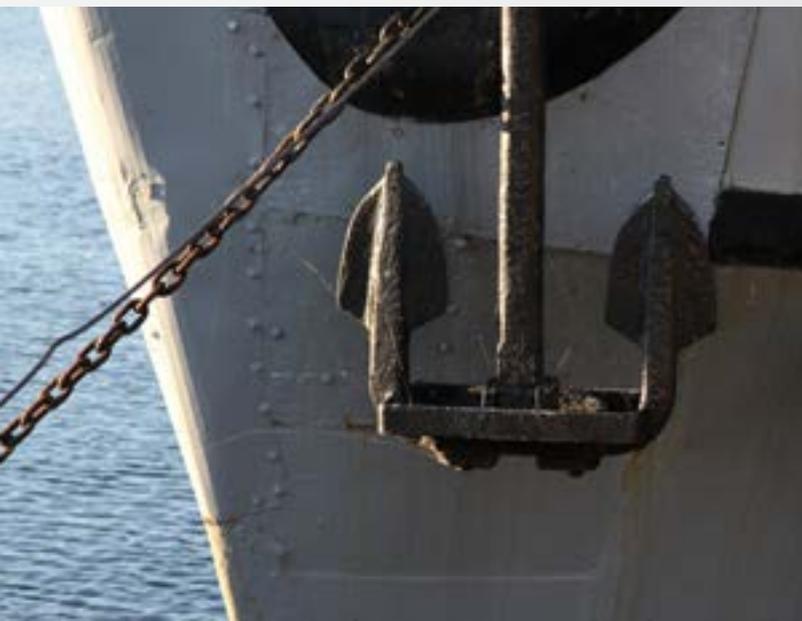


Rexnord Products & Solutions for Marine Applications



Marine Applications

- Main and auxiliary drives
- Thruster Drives
- PTO / PTI
- Fire Fighting Pumps
- Pumps and Compressors
- Winches and Cranes
- Lifting and Towing Equipment
- Slewing Drives
- Conveyors and Unloaders
- Dredgers and Drillers
- Shredders and Crushers

We are with you.
Every step of the way.



Marine Expertise.

Nowhere is equipment durability more crucial to a company's survival than on the world's waterways where crews and schedules depend on reliable power. From couplings and clutches to backstops and torque limiters for drives and on-deck machinery, Rexnord has the most reliable solution for you.

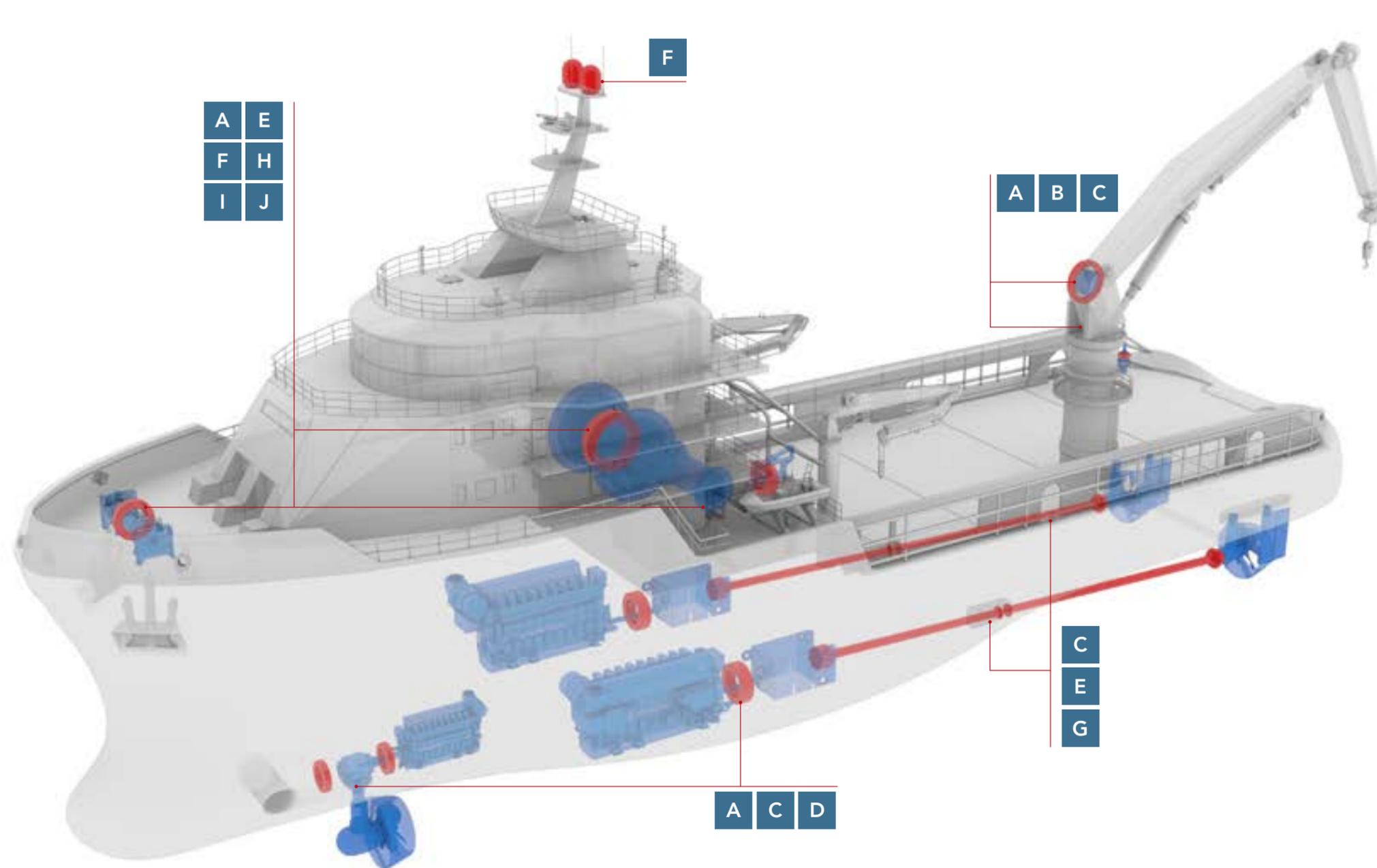
Rexnord is with you every step of the way.

From selection to purchase, installation and testing, monitoring, repair and overhauls, Rexnord provides outstanding lead times and customer service. Count on our superior product quality and technical support to prevent costly maintenance, repairs and standstills, maximising your return over the product's total lifecycle. With worldwide sales and service operations, and a vast network of distributor relationships, we deliver exactly what you need, when you need it.

Rexnord products, Rexnord reliability.

Rexnord is a leading manufacturer of critical system components that perform under the most rigorous demands. With safety in mind, our products are engineered to meet cost and performance criteria to ensure the most efficient solution for your specific applications.





- E G**
Main and Auxiliary Drives
- A D**
Thruster Drives
- C**
PTO / PTI
- F H**
Fire Fighting Pumps
- A E F I J**
Pumps and Compressors
- A B C**
Winches and Cranes
- A B C**
Lifting and Towing
- A F**
Slewing Drives
- A**
Conveyors and Unloaders
- A C**
Dredgers and Drillers
- A F**
Shredders and Crushers

Torque Limiters and Backstops

Overload protection devices for on-deck machinery, reliably safeguarding the equipment.

- A** Autogard® Torque Limiters 
- B** BSD® Backstops 

Clutches

Dry and wet clutches increase manoeuvrability and safety on board. Also available as wet clutches integrated in the gear.

- C** BSD® Hydraulic and Pneumatic Clutches 
- D** BSD® Clutch-Coupling Combination 

Couplings and Clamping Hubs

A variety of long-lasting and maintenance-free couplings in modular designs as standard and customized solutions.

- E** BSD® Modulflex® Disc Couplings 
- F** Rexnord Thomas® Disc Couplings 
- G** BSD® Koniclamp® Clamping Hubs 
- H** Rexnord Omega® and Viva® Elastomeric Couplings 
- I** Falk Lifelign® Gear Couplings 
- J** Falk Steelflex® Grid Couplings 

Customer-focused solutions. Reliable performance. Trusted brands.

Shaft line packages for main thruster drives.

Modulflex features and benefits

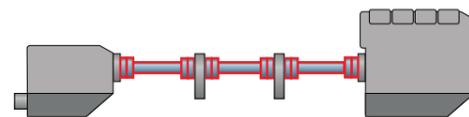
- Reliable and maintenance-free connection
- Easy installation
- Suitable for long shaft applications
- High misalignment capacity
- EN 10204-3.2 compliant

This application often requires a drive train coupling and clutch package that can connect a Diesel engine and engage / disengage the thruster.

The torsionally stiff disc coupling compensates for angular and axial misalignment in the drive train. Additional radial offset is compensated by combining two disc modules within the same coupling.

Compared to conventional shaft connections, the maintenance-free disc coupling uses an intermediate tube providing less weight thus requiring fewer bearings. A clamping hub system is available to provide reliable performance and ease of assembly.

The clutch provides an axial air inlet incorporated in the central driveshaft. A unique feature is the power take off (PTO) interface for providing power to auxiliary drives through a belt drive. Power can thus be used for other purposes even when the thruster is disconnected. Clutches are available in both pneumatic and hydraulically operated versions.



Application example Torsionally Stiff Coupling

Modulflex



Coupling-Clutch Combination

Hydraulic and pneumatic clutches for thruster drives, PTO/PTI.

Clutch features and benefits

- Easy to assemble / disassemble and maintain
- Pneumatically or hydraulically operated
- Axial or radial oil inlet available
- External or integrated solutions available
- EN 10204-3.2 compliant

Tug-boats and push-boats use tunnel or bow thrusters to increase their manoeuvrability and safety at sea. Clutches are used to connect and disconnect the thruster from the propulsion drive.

For this application, Rexnord BSD offers two options, depending on the type of thruster:

- A hydraulic clutch integrated with the gear providing a maintenance-free and reliable solution allowing for high actuation frequencies
- A dry clutch solution ensuring smooth running while dampening when engaging.



BSD Wet Clutch integrated in the gear



BSD Dry Clutch



Integrated clutch within a gearbox for thruster drive

Electromagnetic clutches for Fire-Fighting Pumps.

Electromagnetic clutch features and benefits

- Robust and reliable
- Easy to install
- No wear when in disengaged position
- High actuation frequencies

On board supply vessels or on oil platforms, electromagnetic clutches with flexible couplings are attached to the engine to engage and disengage e.g. fire fighting equipment.

Rexnord BSD® Electromagnetic Clutches for torque ratings of up to 22 000Nm and high speeds provide high actuation frequencies and robust design thus increasing the safety of your equipment. Electromagnetic single surface clutches are easy to install and free of wear in the disengaged condition.

Also available in hydraulically or pneumatically operated versions. EN 10204-3.2 compliant.



BSD Electromagnetic Clutch

Autogard torque limiters for capstan winch drive.

Autogard torque limiter features and benefits

- High speed, instantaneous disengagement
- Auto-reset upon reverse of drive
- Easy to adjust release torque
- Bi-directional protection

When raising an anchor on a ship there is a risk of torque overload should the anchor become stuck. Preventing a torque overload is imperative as it could potentially damage the gearbox or other vital components of the drive train.

Usually positioned between the electric motor and gearbox, the torque limiter functions as a coupling until the preset maximum torque setting is reached at which point the torque limiter instantly disconnects the drive.

Upon disconnection, a signal can be sent to the motor to ensure full shut down. Once the cause of the overload is overcome the torque limiter is simply re-engaged and normal use can resume.



Autogard 400 Series Torque Limiter

Omega and Viva general purpose couplings for use above and below deck.

Omega & Viva features and benefits

- Split-in-half flex element design for simplified assembly and disassembly
- Torsionally soft flex element cushions shock loads and vibration, extending equipment life
- Interchangeable hubs allow for reduced inventory
- Polyurethane-to-metal bond eliminates assembly and slippage problems associated with mechanically clamped designs
- Material flexing design allows visual inspection during operation

Couplings used on ships must withstand harsh environments where temperatures may vary greatly. The focus of the ship's crew should always be on their mission rather than machine maintenance and, as contact with sea water is likely to be unavoidable, selecting reliable and resilient couplings is essential.

The Omega and Viva split-in-half design allows quick installation and does not require removal for inspection and maintenance. The polyurethane flex element cushions vibrations and permits quiet and smooth operation. With no wearing parts, these couplings provide long, reliable service.

On-deck rotating machines must resist sea water salt spray. As well as offering resistance to the salt water conditions, the Omega HSU-J design also offers extra corrosion protection and resistance to degradation in conditions of high heat and humidity.



Omega HSU Coupling



Innovation for all your future demands.

With more than 80 years of engineering expertise and experience in a vast range of applications, Rexnord is continually developing and improving the design and functionality of the products following the most challenging market demands.

Whether your business is in power transmission, manoeuvring equipment or machinery protection, we are ready to accompany you in finding the most suitable, reliable and profitable solution for your application.



Rexnord Products for Marine

Nowhere is equipment durability more crucial to a company's survival than on the world's waterways where crews and schedules depend on reliable power. From couplings and clutches to gear drives and torque limiters, Rexnord has the most reliable solution for you.

Autogard 400 Series Torque Limiters

Handles higher speed applications up to 3,600 RPM and offers up to 500,000 (lb-in) torque capacity.



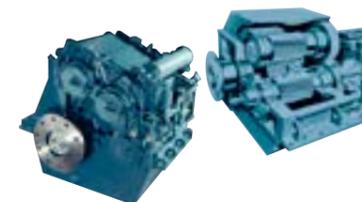
BSD Dry and Wet Clutches

Offer modular design (according to EN 10204 3.2), increasing maneuverability and safety on board; also available as wet clutch integrated in the gear.



Falk Marine Gear Drives

Heavy-duty gear drives provide reliability, long life, smooth engagement and powerful performance.



BSD Modulflex Couplings, BSD Koniclamp Clamping Hubs, Falk Lifelign & Rexnord Omega Couplings

A variety of long-lasting and maintenance-free couplings and hubs for a multitude of on-board applications.



Marine Applications

- Conveyors
- Unloaders
- Forging
- Ship Main Drives
- Thruster Drives
- Winches
- Drilling
- Compression
- Pumps
- PTO/PTI Main Propulsion Drives

Why Choose Rexnord?

When it comes to providing highly engineered products that improve productivity and efficiency for industrial applications worldwide, Rexnord is the most reliable in the industry. Commitment to customer satisfaction and superior value extend across every business function.

Delivering Lowest Total Cost of Ownership

The highest quality products are designed to help prevent equipment downtime and increase productivity and dependable operation.

Valuable Expertise

An extensive product offering is accompanied by global sales specialists, customer service and maintenance support teams, available anytime.

Solutions to Enhance Ease of Doing Business

Commitment to operational excellence ensures the right products at the right place at the right time.

Rexnord Corporation

Rexnord is a growth-oriented, multi-platform industrial company with leading market shares and highly trusted brands that serve a diverse array of global end markets.

Process and Motion Control

The Rexnord Process and Motion Control platform designs, manufactures, markets and services specified, highly engineered mechanical components used within complex systems where our customers' reliability requirements and the cost of failure or downtime are extremely high.

Water Management

The Rexnord Water Management platform designs, procures, manufactures and markets products that provide and enhance water quality, safety, flow control and conservation.

