

Wichita Clutch

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Power Transmission Solutions for Marine Propulsion



REGAL REXNORD PROVIDES HIGHLY RELIABLE POWER TRANSMISSION SOLUTIONS FOR MARINE PROPULSION APPLICATIONS

As a leading multinational designer and producer of a wide range of mechanical power transmission equipment, Regal Rexnord offers a full complement of innovative products for the marine market, including clutches, brakes, couplings, locking devices, shafts and complementary controls through well respected brands including Wichita Clutch, Stromag, Ameridrives, Svendborg Brakes, Twiflex and Bibby Turboflex.



Extensive Marine Market Expertise, Exceptional Product Performance

Our customers have come to rely on our extensive marine market experience, solution-based engineering, quality manufacturing and exceptionally reliable product performance. Regal Rexnord products are utilized on all types of marine vessels, including wind turbine installation vessels (WTIVs), tugs and other workboats, as well as dredgers, ferries, cruise ships, yachts, icebreakers, cargo ships, drilling platforms and naval vessels.

Propulsion Solutions

For decades, Regal Rexnord brands have supplied many marine propulsion customers with innovative high-quality components utilized on all types of propulsion and auxiliary (PTO) drive systems, including diesel, nuclear, gas turbine, hybrid drives, pods/thrusters, and waterjets.

Regal Rexnord brands supply products that meet the requirements of many marine societies including Lloyds Register of Shipping (LRS), Germanischer Lloyd (GL), Chinese Classification Society (CCS), American Bureau of Shipping (ABS), Det Norske Veritas (DNV), Bureau Veritas (BV), RINA (Italian), and Nippon Kaiji Kentei Kyoukai (NK).

www.RegalRexnord.com www.MarineMarketSolutions.com



Global Footprint

Brakes, clutches, and couplings from well-recognized Regal Rexnord brands are hard at work on marine vessels around the world. With sales, engineering and manufacturing capabilities strategically located globally, these brands provide comprehensive and timely support to many prominent marine businesses in Europe, North America, South America and Asia Pacific.



SOLUTIONS FOR ALL TYPES OF PROPULSION SYSTEMS

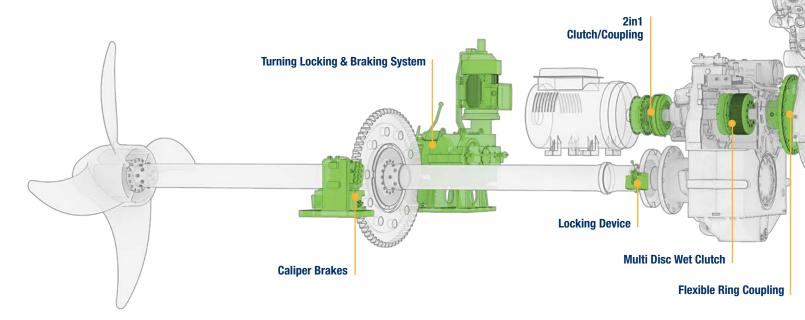
Regal Rexnord brands offer a wide array of clutches, brakes, couplings and shaft locking devices to meet the requirements of all types of propulsion configurations, including traditional diesel, nuclear, gas turbine, and hybrid drives as well as pods, thrusters, and waterjets.

Regal Rexnord solutions are also incorporated in auxiliary drives, such as PTO drive systems, dredge pumps, jet pumps, cutter heads and generator drives.

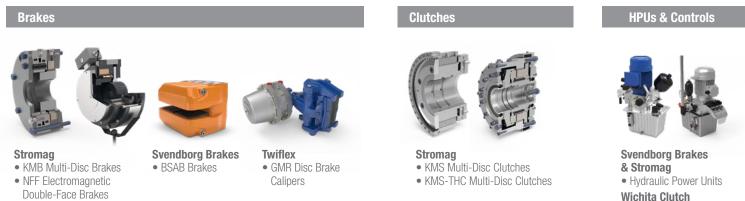
POD/THRUSTERS



HYBRID PROPULSION DRIVETRAINS



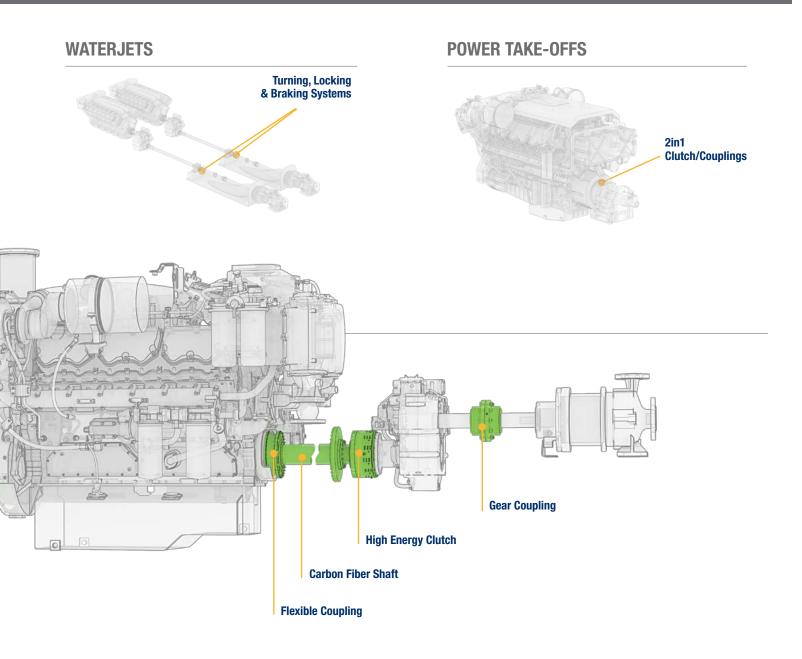
PRODUCTS FOR PROPULSION APPLICATIONS



ple-Face Brakes

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Controls



Couplings & Shafts



- Stromag Periflex[®] VN Disc Couplings • Vector[®] Couplings
- TRI-R Couplings



Stromag Carbon Fiber Shaft **Bibby Turboflex** • Torsiflex Disc Couplings

Ameridrives

Gear Couplings

• Ameriflex Couplings

Systems



Stromag • 2in1 Clutch/ Couplings



Wichita Clutch Combination Clutch/Couplings



Twiflex • Turning, Locking & Braking Locking Devices

Brakes



Stromag KMB Multi-Disc Brakes

Hydraulically released, spring-applied multi-disc brakes. Braking torque range 50 – 500,000 Nm (36 – 368,700 lb-ft). Available for dry and wet running.

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Stromag NFF Double-Face Brakes

Reliable spring-loaded electromagnetic double-face brake. Holding and working brake ideal for marine propulsion applications. Braking torque range 20 – 10,000 Nm (14 – 7375 lb-ft).





Stromag KMS Multi-Disc Clutches

Oil cooled, hydraulically operated clutch with high thermal load capacity and low mass moment of inertia for marine transmissions. Rated torque of over 2,000,000 Nm (1,475,000 lb-ft).



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Stromag
KMS-THC Multi-Disc Clutches
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A hydraulically operated clutch with high power density, a compact design and a stand-alone solution outside of the transmission. KMS...THC Series has been designed for use in thruster-propulsion systems. Torque range 1400 Nm – 22,500 Nm (1,032 – 16595 lb-ft).





Stromag 2in1 Clutch/Couplings

Customized combination Periflex® VN flexible disc coupling / MWU electromagnetic single disc clutch. Ideal for marine hybrid drives. Compact plug and play package. Torque range 20 – 20,000 Nm (14 – 14751 lb-ft)



Wichita Clutch Combination Clutch/Couplings

Customized solutions of Wichita Pneumatic high energy clutches in combination with a wide range of flexible couplings. Ideal for dredge pump, cutter head and propulsion drive applications. Rated torques up to 1,500,000 Nm (1,106,000 lb-ft).



Turning, Locking & Braking

Integrated shaft turning and braking system with locking device. Turning torques in excess of 334,850 lb-ft. (454,000 Nm). Braking and locking torques up to 862,000 Nm (635,780 lb-ft).



Locking Devices

Available as either axial or radial manual locking devices. Designed to stop propeller rotation and securely lock the propulsion shaft for maintenance. Locking forces available up to 500,000 N (112,000 lbf).



Svendborg Brakes BSAB Brakes

Multi-piston, dual-action hydraulically released caliper brakes with integrated and fixed pad holders. Model 90 provides a clamping force up to 200,000 N (44,900 lbf).



Twiflex GMR Disc Brake Calipers

Spring applied, low pressure air release. Brakes can be positioned at any angle around the periphery of the disc. Up to 36,000 N (8,000 lbf) braking force.

Couplings/Shafts



Stromag Periflex[®] VN Disc Couplings

Highly flexible disc coupling, torsionally flexible with a linear chrarcteristic curve. Ideal for diesel engine drives. Blind plug-in assembly; simple flanged connection to flywheels. Various stiffness's available. Torque range 160 – 63,000 Nm (118 – 46,400 lb-ft).



Stromag Vector [®] Couplings

Designed for shaft-to-shaft backlash-free connections. Features a radial arrangement of rubber element segments in a compact design. Highly-flexible with progressive spring characteristic. Torque range 6600 – 22,500 Nm (4,867 – 16,595 lb-ft).



Stromag Carbon Fiber Shaft

Popular for marine propulsion applications. Flexible carbon fiber construction allows for long lengths. Accommodates misalignment while providing high torque perfrmance.

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Bibby Turboflex Torsiflex Disc Couplings

Specifically designed for pump and general marine applications. All-metal disc coupling requires no lubrication. Incorporates a plug-in feature to allow installation and removal without disturbing the pump alignment. Torque range 270 – 455,000 Nm (199 – 335,600 lb-ft).



Stromag TRI-R Couplings

Highly flexible ring couplings, torsionally soft with linear characteristic curve and high displacement properties. Ideal for main and auxiliary marine drives. Torque range 1300 – 63,000 Nm (958 – 46,400 lb-ft).



Ameridrives Gear Couplings

Fully-crowned gear teeth provide maximum load-carrying capacity with minimum size, maximum reliability and long life. Torque capacity of over 1,130,000 Nm (833,000 lb-ft).



Ameridrives Ameriflex Couplings

Multiple convoluted diaphragm coupling designed for infinite life in high performance marine applications. High torque-to-diameter and weight ratio. Low bending moments and axial force result in lower bearing loads. Torque range 3,390 – 677,910 Nm (22 – 500,000 lb-ft).

HPUs & Controls



Svendborg Brakes Hydraulic Power Units

Units are available in two versions; a basic (single dump) and a premium (dual dump) with cabinet / enclosure with various options and accessories.



Wichita Clutch Controls

A wide range of electro-pneumatic controls, specifically designed for Wichita clutchcoupling combinations used on dredging and similar PTO drives are available.

Features include adjustable start profiles, slip detection monitoring and full bridge control interface.



Scan to see all the brands of Regal Rexnord



www.regalrexnord.com