Flygt A-C Series Large Split-Case Pumps

THE MOST ENERGY-EFFICIENT PUMPS ON THE MARKET

FLYGT

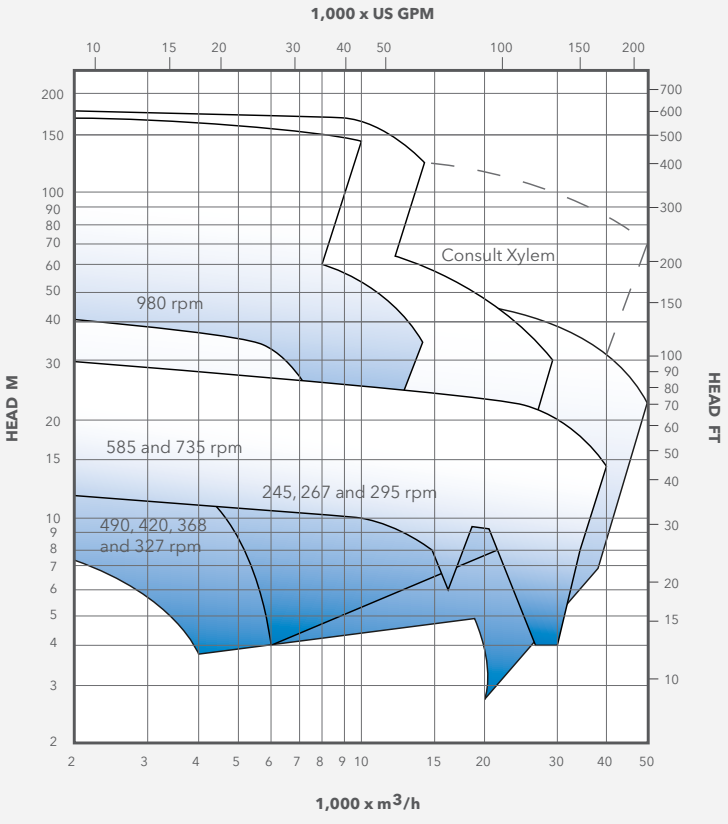
a xylem brand

Performance You Can Rely On

Backed by more than 130 years of experience, Flygt (formerly Allis Chalmers Pump, Inc.) has a reputation as one of the most reliable pump manufacturers in the world. The A-C Series Large Split-Case Pump lives up to that reputation with a double suction design, heavy duty construction and cast components that minimize vibration and provide for long term, trouble-free operation. With a long, low maintenance pump life and industry leading efficiencies of up to 91%, Flygt A-C Series Large Split-Case Pumps are as reliable as the company that makes them.

Flygt A-C Series Large Split-Case Pumps for a Wide Range of Applications

- Water Supply
- Cooling Water
- Process Water
- River and Sea Water
- Irrigation
- Dewatering
- General Petrochemical Applications
- Shipbuilding



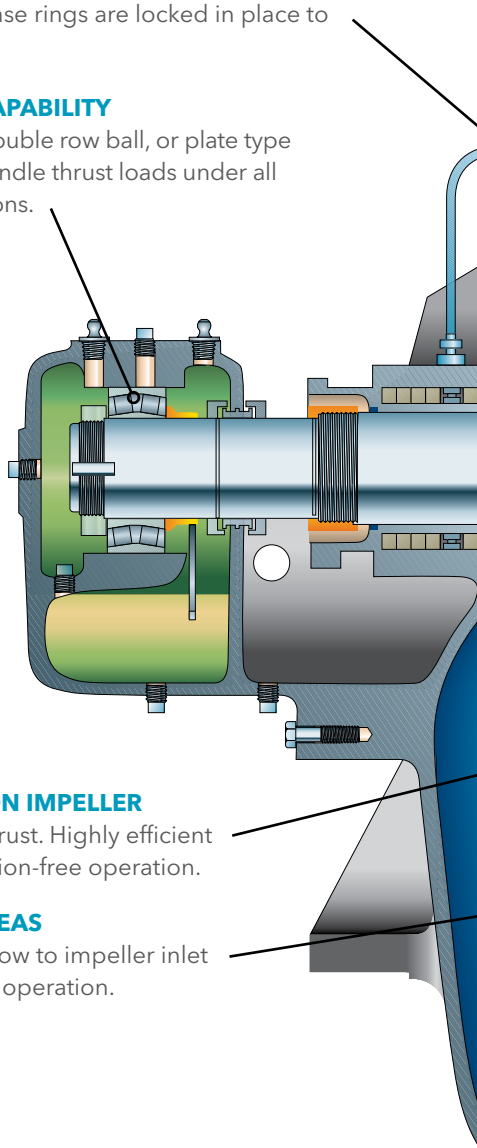
QUALITY IN EVERY DETAIL

RENEWABLE CASE WEAR RINGS

Permits easy maintenance of proper running clearances. The case rings are locked in place to prevent rotation.

HIGH THRUST CAPABILITY

Spherical roller, double row ball, or plate type thrust bearings handle thrust loads under all operating conditions.



DOUBLE SUCTION IMPELLER

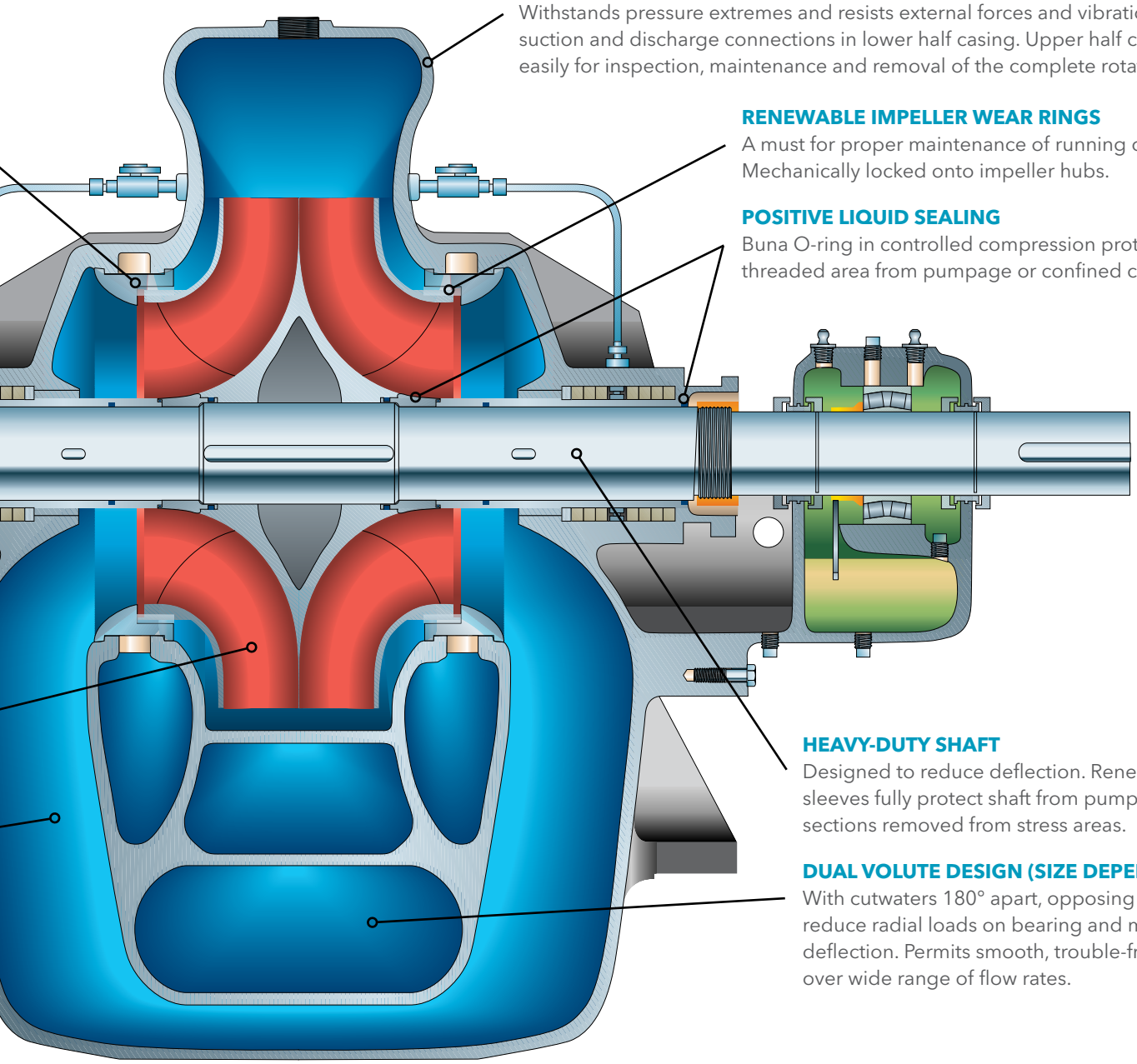
Minimizes axial thrust. Highly efficient for smooth, vibration-free operation.

LARGE INLET AREAS

Assures smooth flow to impeller inlet for efficient, quiet operation.

Customized Pumping Solutions

Flygt A-C Series Large Split-Case Pumps are custom engineered to meet your specific needs. They are available for both horizontal and vertical installations. The motor may be mounted on a cement foundation, common base plate, or on a second floor above the pump. Flygt offers multiple bearing designs, from roller bearing configurations to sleeve-type bearings along with an angular roller or plate-type thrust bearing. In addition, all designs are available in both side and bottom suction and can be built in nearly unlimited material configurations. Every pump includes high-performance double suction impellers that provide balanced axial thrust. Due to the lower impeller inlet velocities, superior performance is achieved under difficult suction conditions. The design also provides balanced hydraulic radial thrust for minimum shaft deflection and prolonged bearing and seal life. Each pump offers easy access to the interior components as well, with an upper casing half that can be quickly removed for inspection or maintenance without the need to disturb the piping, driver, or alignment.



HEAVY-DUTY CASING
Withstands pressure extremes and resists external forces and vibrations. Both suction and discharge connections in lower half casing. Upper half casing removes easily for inspection, maintenance and removal of the complete rotating element.

RENEWABLE IMPELLER WEAR RINGS
A must for proper maintenance of running clearances. Mechanically locked onto impeller hubs.

POSITIVE LIQUID SEALING
Buna O-ring in controlled compression protects shaft and threaded area from pumpage or confined corrosive attack.

HEAVY-DUTY SHAFT
Designed to reduce deflection. Renewable shaft sleeves fully protect shaft from pumpage. Threaded sections removed from stress areas.

DUAL VOLUTE DESIGN (SIZE DEPENDENT)
With cutwaters 180° apart, opposing radial forces reduce radial loads on bearing and minimize shaft deflection. Permits smooth, trouble-free operation over wide range of flow rates.

The Flygt Advantage

PERFORMANCE TESTING - with testing capabilities up to 300,000 GPM (68,000 m3/hr), the performance of your pump can be accurately verified before it leaves the factory.

CRITICAL SPEED ANALYSIS - performed on every rotor to ensure that the first critical speed is well above the pump operating speeds.

MECHANICAL DESIGN ANALYSIS – performed on every pump to determine the proper shaft size, bearing spans, wall thickness, bolting sizes & quantities, and other critical design features.

FEA & CFD ANALYSIS – in-house Finite Element Analysis and Computerized Fluid Dynamics analysis are available to ensure that there are no system resonant frequency or hydraulic concerns.

STARTUP ANALYSIS – determines the optimal starting sequence between the pump, motor and control valve, and confirms the ability of the drive to start the pump under any number of possible circumstances. Available upon request.

EXPERIENCED CUSTOM DESIGNS - every order is custom designed to match the specific pump configuration, mechanical design, hydraulic requirements and materials of construction dictated by the application and the contract documents.

PUMP QUALITY - all pump components and assemblies are inspected and documented in accordance with Flygt ISO 9000 certified quality program. Any special contract requirements are incorporated into the Inspection and Test Plan developed for each contract.

MODEL TEST DATA – the high efficiency hydraulics for each pump design have been extensively model tested over the full range of impeller diameters/tilts. Model testing in a closed loop system provides accurate measurement of all pump performance characteristics along with NPSHr values, hydraulic thrust values and the development of three quadrant curves (Karman-Knapp curves).

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Let's Solve Water

Flygt is a brand of Xylem, whose 12,000 employees are addressing the most complex issues in the global water market.

www.xyleminc.com

Xylem, Inc.
14125 South Bridge Circle
Charlotte, NC 28273
Tel 704.409.9700
Fax 704.295.9080
855-XYL-H2O1 (855-995-4261)

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