



# **3610 Series VHS Vertical Double Suction Split Case**



**Flows to: 90,000 GPM**  
**Heads to: 700 Feet**  
**Temperatures to: 250°F**

# SERIES 3610

## MODEL VHS

### SINGLE STAGE

### FLEX-COUPLED

### VERTICAL SPLIT CASE

Sizes: 3" to 32" Discharge  
Flows: To 90,000 GPM  
Heads: To 700 Feet  
Temp: To 250°F

- Services:**
- Cooling Water
  - Raw Water Intake
  - Sea Water
  - Industrial Process
  - Condenser Circulating
  - Irrigation & Drainage
  - Municipal Water Supply

#### SHAFT ASSEMBLY

- 4340 quenched and tempered high chrome steel shaft is stronger than standard carbon steel and has superior corrosion resistance
- Designed and sized specifically for the aggressive fire protection markets

#### CASE WEAR RINGS

- Supplied in standard bronze or other specified alloy
- Case wear rings are renewable which will renew factory running clearances and performance
- Pinned at the centerline to prevent rotation during operation

#### IMPELLER

- Supplied standard in investment cast, 304 stainless steel
- Double suction design allows for hydraulically balanced design with broad band, high efficiency performance
- Machined and dynamically balanced prior to assembly

#### BEARING HOUSINGS

- Cartridge style bearing is completely removable and replaceable without the need for casing top removal
- Inboard bearing can be inspected and replaced without the need for complete pump disassembly
- Designed for a minimum 50,000 hour bearing life using 6300 series, deep groove bearing provides superior support
- Specifiable purge grease lubrication design allows new grease to be installed while purging old grease through bottom purge port
- Bearing housing is protected from contaminants by using a lip seal at every location where the shaft enters the housings

#### ROTATING ASSEMBLY

- Includes investment cast, 304 stainless steel, double suction impeller
- Modular design maximizes the sharing of common components
- 304 stainless steel shaft sleeves completely protect the shaft from wear and corrosion
- 304 stainless steel gland assemblies ensure that packing can be adjusted without the worry of corrosion
- Component, single cartridge and/or double cartridge mechanical seal can be supplied upon request
- 304 stainless steel shaft sleeve nuts are located outside of the fluid chamber minimizing corrosion and allowing for an easier disassembly when the need for service arises

#### CASING

- Supplied standard in ASTM A536 ductile iron
- Heavy wall thickness for corrosion allowance and high pressure applications
- Horizontally split to permit complete access to the rotating assembly
- Casing assembly design features pry bar locations at each quadrant as well as jackscrews to aid in the casing top removal
- Single & double volute design significantly reduces radial loads on shafting and allows for a more compact & efficient design
- Cast integral, vortex suppressor in casing top at each impeller eye designed to reduce vortexing of fluid prior to it entering the impeller eye
- Threaded taps for gauges and pressure relief valve
- Dedicated cast support for the nameplate allows for a high visibility design
- Flush plan features 304 stainless steel tubing and valves to control packing lubrication
- Suction & discharge gauge package with 304 stainless steel buffer tube, fittings and ball valves
- Suction and discharge flanges supplied in 250 PSI rating with raised face for high pressure applications
- Alternate metallurgy options available upon request

#### OUTBOARD BEARING HOUSING

- Bronze bushing provides radial support
- No outboard roller bearing minimizing contamination
- External flush line ensures adequate lubrication fluid and proper flushing of contaminants

#### VERTICAL BASE

- Supplied standard in carbon steel or other specified material
- Machined register for C-Face motor installation
- Heavy duty, I-beam base for structural rigidity





## How It All Began EFFICIENCY BY DESIGN

With years of manufacturing experience, Ameriflo has spent considerable time developing what the customer has asked for. The most diverse hydraulic offering in the split case markets with an emphasis on pump efficiency and systems integration. Ameriflo manufactures all product type in a wide variety of standard and optional materials offering you the solution you need.

Ameriflo is a global manufacturer of integrated systems with facilities located in several countries and has clients in over 80 countries. The corporate manufacturing headquarters is located in Tennessee, along with a very large testing and training facility for distributor and representative training.

Ameriflo uses computational fluid dynamics (CFD) and 3D Solids Works for designing all pumps and systems with detail for all valves, suction & discharge piping and any installed optional accessories specified by the end user. Electric and Diesel engine driven systems are available and can be ordered in a variety of flows and pressures with full optional metallurgy support.

### Product Line

The benefit to the Ameriflo offering is that you only need to go to one place for your product line needs. Whether your need is an end suction pump, a large split case or even a vertical turbine Ameriflo has a model for you. Each product line has a very diverse offering from the very small to the very large and everything in between. Do not rely on other manufacturers who have broken product lines with missing models.

Ameriflo also has state-of-the-art engineered customer service. The applications engineering



part of Ameriflo have decades of engineering and specification work. This background and experience is critical when the design engineer is looking for answers to questions.

Ameriflo has one of the largest test facilities in North America with nearly 300,000 gallons of water utilizing 8 different test loops from 2 inch through 36 inch. The horizontal and vertical test labs have ratings up through 1,000 HP and include string test stands allowing testing with the job motor or Diesel engine.

### Communication Is The Key To Our Success

Ameriflo has systems in place making communication with our clients of the utmost priority. Each client has their own customer portal that will allow them to check on all quotations, sales orders and any client case that is generated. These tools put the power in the hands of the client and allow them access to the most current information. This access empowers our clients to respond to their customers in a more timely fashion and secure that next opportunity!

Ameriflo also has a dedicated theater used for sales and service

training. This theater can house approximately 35 students and is used to cover the Ameriflo pump and Diesel engine product lines. Schools are available to sales people and dedicated service schools are also offered. Service schools feature a hands on portion allowing students to disassemble and re-assemble pumps and/or Diesel engines to allow for certified repairs in the field. Contact Ameriflo to inquire about the next school and how you can join in these events.

Ameriflo also has a state-of-the-art software selection package with full configuration, **Ameriflo IQ**, that can be used by simply signing up. E-mail us for additional information.

If you would like more information about what Ameriflo is all about, please contact us.

What separates Ameriflo from the competition, **WE DELIVER.....**

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