

# SERIES 3620

## MODEL HS(2)

TWO-STAGE STAGE  
FLEX-COUPLED SPLIT CASE

Sizes: 4" to 6" Discharge  
Flows: To 2,500 GPM  
Heads: To 1,455 Feet  
Temp: To 250°F

### Services:

Cooling Water  
Raw Water Intake  
Municipal Water Supply  
Condenser Circulating  
Sea Water  
Industrial Process

### ROTATING ASSEMBLY

- Includes investment cast, 304 stainless steel, single 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
- Labyrinth style design for stage piece and Aegis throat bushing keep pressure losses at a minimum
- 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

### 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

### SINGLE POINT DRAIN

- Both packing housing chambers have pre-plumbed drain connected and routed to a single point for ease in collection of fluid

### IMPELLER

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

### 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 as well as jackscrews to aid in the casing top removal
- Double volute design on both stages 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
- 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

### SHAFT SEALING

- Wide variety of packing available and supplied standard
- Component, single cartridge and/or double cartridge mechanical seals can be supplied upon request

### BEARING HOUSINGS

- Cartridge style bearings are completely removable and replaceable without the need for casing top removal
- Both inboard & outboard bearings 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 inboard and outboard bearings provide superior axial and radial support
- Specifiable purge grease lubrication design allows new grease to be installed while purging old grease through purge port
- Each bearing housing is protected from containments by using lip seals at every location where the shaft enters the housings

### AEGIS BUFFER CHAMBER

- Proprietary buffer chamber under first stage pressure that significantly reduces pressures on second stage stuffing box
- Allows for the use of standard packing and packing gland assembly
- This chamber is connected to the suction chamber on the first stage balancing pressures and eliminating uncontrollable packing housing leakage

