

## SERIES 5030 SC(2) TWO-STAGE SPLIT CASE



The AMERIFLO two-stage split case product line was designed for the most aggressive, high pressure fire protection markets found throughout the world today. With third party certified flows from 500 GPM through 1,500 GPM, you will not find a more complete, high pressure offering anywhere in the world. Pressures up through 610 PSI are available with one of the most hydraulically efficient, double volute two-stage split case models available from any manufacturer. A unique Aegis buffer system minimizes pressures on the second stage stuffing box.

With state of the art global design and manufacturing facilities, AMERIFLO uses computational fluid dynamics and solid works software to design the most efficient product available today with the lowest documented horsepower.



### TYPICAL INSTALLATIONS:

- Residential buildings
- Commercial
- Hospitals
- Hotels
- Oil & gas
- Airports
- Power stations
- Sea water

### TYPICAL APPLICATIONS:

- Water curtains
- Sprinkler
- Monitor systems
- Water curtains



# SERIES 5030 MODEL SC(2)

TWO-STAGE  
FLEX-COUPLED SPLIT CASE

Sizes: 4" to 6" Discharge  
Flows: 500 GPM to 1,500 GPM  
Heads: 262 PSI to 610 PSI  
Temp: To 250°F

Services:  
Fire Protection



## SHAFT ASSEMBLY

- 420 stainless 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

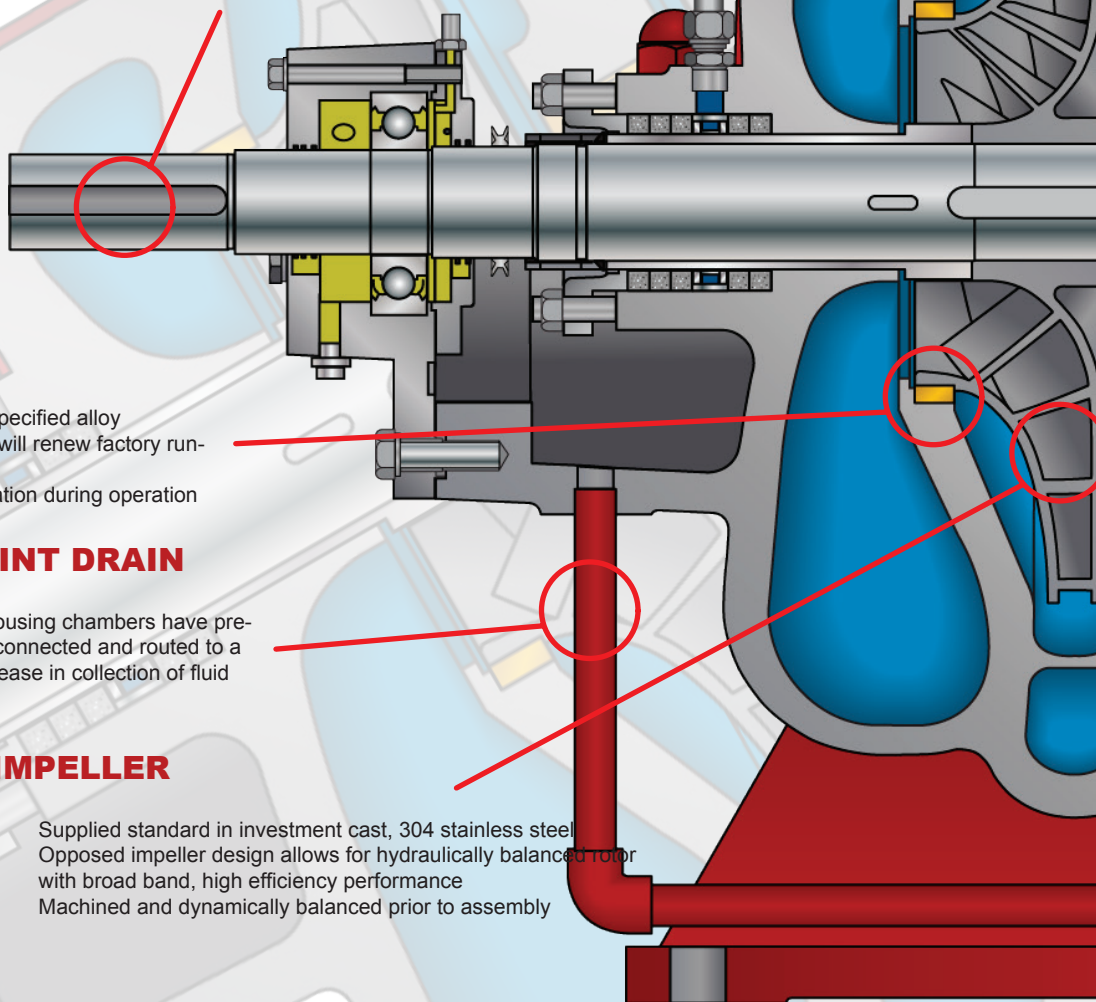
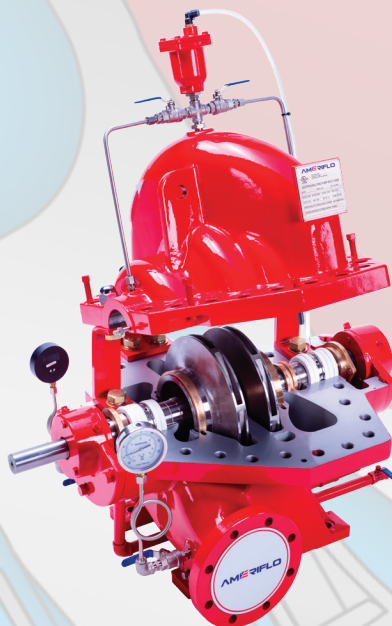
- Supplied in standard bronze or other specified alloy
- Case wear rings are renewable which will renew factory running clearances and performance
- Pinned at the centerline to prevent rotation during operation

## 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



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## 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
- 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

## 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

## 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

Flush plan features all 304 stainless steel tubing and valves to control packing leakage

Impellers are opposed creating a hydraulically balanced rotating assembly keeping bearing sizes smaller

Shaft assemblies are constructed out of 420 stainless steel

All pump models have 304 stainless steel buffer tube and valves for mounting of glycerin filled suction and discharge gauges

Heavy duty ribbed, ductile iron casing with double volute on both stages for high efficiency operation

Every casing assembly features pry-bar locations and jackscrews to aid in pump disassembly

Investment cast, 304 stainless steel impellers with heavy duty bronze case wear ring allows for renewable factory running clearances

Single point drain connection simplifies the collection of packing leakage

Heavy duty ductile iron casing with 250# raised face flanges with drilled and tapped gauge connections at suction and discharge location

