



AURORA[®]

COMPLETE PUMP SOLUTIONS
FOR FIRE PROTECTION

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AURORA®

Aurora Pump provides fire protection pumping for a variety of solutions throughout the world.

With over ninety years of experience, Aurora's commitment to excellence goes beyond the product line by being dedicated to keeping our customers, distributors and employees constantly educated and updated on the leading developments in fire protection. Our computer software programs assist with selecting the best pumps and systems along with providing pump drawings and specifications. These programs save valuable time in the selection and evaluation of pumps and systems.

As an ISO 9001 registered company, Aurora Pump is committed to quality. In addition, to meet your time-critical requirements, Aurora offers the Red Hot quick ship program for total fire pump packages. Along with our outstanding customer service, Aurora will keep your fire pump system at peak performance for years to come. You can rely on Aurora Pump and our qualified distribution network to provide total pump solutions for fire protection.



Pictured at top: Packaged Fire Pump System.

Pictured at bottom: Typical housed diesel driven fire pump with test meter.

Vertical Inline



Model 383

Single Stage Inline Fire Pump

Flows: 50 to 1,500 GPM (11.3 to 340 m³/hr)
Pressures: 40 to 159 PSI (2.7 to 11 bar)

- UL Listed/FM Approved/NFPA-20 Design
- Space Saving Vertical Design
- Easy Maintenance without Disturbing Surrounding Piping
- Bronze-Fitted Pump Construction

End Suction



Model 384

End Suction Fire Pump

Flows: 50 to 1500 GPM (11.3 to 340 m³/hr)
Pressures: 40 to 225 PSI (2.7 to 15.5 bar)

- UL Listed, FM Approved Performance
- Electric and Diesel Speeds
- Back Pullout Design for Easy Pump Service without Disconnecting Pipe
- Frame-Mounted Design
- Small Footprint Ideal for Retrofit
- Designed for Installations such as Schools, Office Buildings and Hospitals

Horizontal Split Case



Models 481, 485, 491, 492, 495

Horizontal Split Case Electric Drive Fire Pumps

Flows: 250 to 5,000 GPM (56.8 to 1135 m³/hr)
Pressures: 40 to 435 PSI (2.7 to 30 bar)

- UL Listed/FM Approved/NFPA-20 Design
- For Commercial, Industrial and Marine Use
- Diesel and Electric Driven Available
- Lower Initial Cost
- Quicker Delivery with Red Hot Quick Ship Program
- Ease of Maintenance

Fire Pumps and Systems

Vertical Split Case



Model 483

Vertical Split Case Electric Drive Fire Pump

Flows: 250 to 2,500 GPM (56.8 to 568 m³/hr)
Pressures: 40 to 200 PSI (2.7 to 13.8 bar)

- UL Listed/FM Approved/NFPA-20 Design
- For Commercial, Industrial and Marine Use
- Electric Driven Available
- Lower Initial Cost
- Ease of Maintenance

Diesel-Driven Split Case



Models 481, 485, 491, 492, 495

Horizontal Split Case Diesel Drive Fire Pumps

Flows: 250 to 5,000 GPM (56.8 to 1,135 m³/hr)
Pressures: 40 to 435 PSI (2.8 to 30 bar)

- UL Listed/FM Approved/NFPA-20 Design
- For Commercial, Industrial and Marine Use
- Diesel and Electric Driven Available
- Lower Initial Cost
- Quicker Delivery with Red Hot Quick Ship Program
- Ease of Maintenance

Vertical Turbine



Fire Pump Vertical Turbine

Flows: 250 to 4,500 GPM (56.8 to 1,022 m³/hr)
Pressures: 50 to 370 PSI (3.4 to 25.5 bar)

- UL Listed/FM Approved/NFPA-20 Design
- For Commercial, Industrial and Marine Use
- Special Materials for Seawater Applications
- Diesel and Electric Driven

Jockey Pump



Models PVM & PVMX

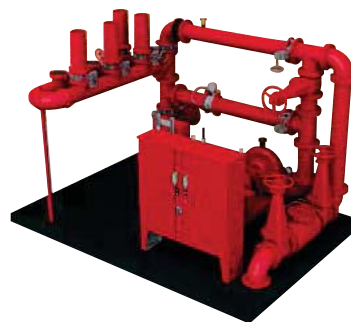
Jockey Pumps

Horsepower: 1/2 to 40
Flow Series: 1, 3, 5, 10, 15, 20, 33
Capacities: Up to 210 GPM (47.6 m³/hr)
Pressures: 330 PSI (22.7 bar)
Heads: 800 Feet (244 m)
Temperatures: 250°F (121°C)

- Cartridge Mechanical Seal – can be replaced easily without dismantling the pump
- Available in Cast Iron or 316 Stainless Steel Materials
- Standard TEFC Motor
- Retrofits easily in existing and new installations

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Packaged System



Packaged Fire Pump Systems

- UL Listed/FM Approved Aurora® Fire Pump
- UL Listed/FM Approved Fire Pump Controller
- ETL Listed
- Aurora Jockey Pump
- UL Listed Jockey Pump Controller
- Pressure Sensing Lines Complete per NFPA 20
- Listed OS & Y Gate & Butterfly Valves with Tamper Switches
- Suction and Discharge Pressure Gauges
- Automatic Casing Air Release Valve
- Casing Pressure Relief Valve (Electric Packages)
- Hose Header with Valves, Caps & Chains
- Suction and Discharge Piping per NFPA 20
- Removable Lifting Lugs

Compact System



Compact Fire Pump Systems

Flows to 750 GPM (170.3 m³/hr)
Pressures to 160 PSI (11.0 bar)

- Ideal for Smaller Areas – Fits through a 36" Doorway
- Multiple Starting Methods Available for the Fire Pump with Optional Automatic Transfer Switch
- Optional City Bypass

Fire Pump Houses



- Designed to Meet Specific Environmental Requirements
- All-Steel Building with Seismic Certification
- Easy Access Entries
- Electric Heaters with Built-In Thermostat
- Continuous Duty Exhaust Fan
- AC Motor/Solenoid Operated Louver
- Interior Fluorescent and Flood Light, Exterior 70 W HPS Light
- Sprinkler System per NFPA 13
- Finished through Wall or Floor Penetration
- Single Point Electrical Connection
- State Certification Label

Accessories

- Casing Relief Valve/Air Relief Valve
- Eccentric Suction Reducers, Concentric Discharge Increases
- Test Manifold, Hose Valves, Ball Drip Valve
- Main Relief Valve, Waste Cone
- Flow Metering Systems
- Diesel Batteries, Racks and Cables
- Double Wall Fuel Tanks and Fittings
- Diesel Engine Mufflers
- Exhaust Flex Connectors
- City Bypass
- Backflow Preventer
- Insulated Exhaust Piping
- Roof Curb for Vertical Turbine Installation and Removal
- Alarms and Tamper Switches Prewired to a Common Junction Box



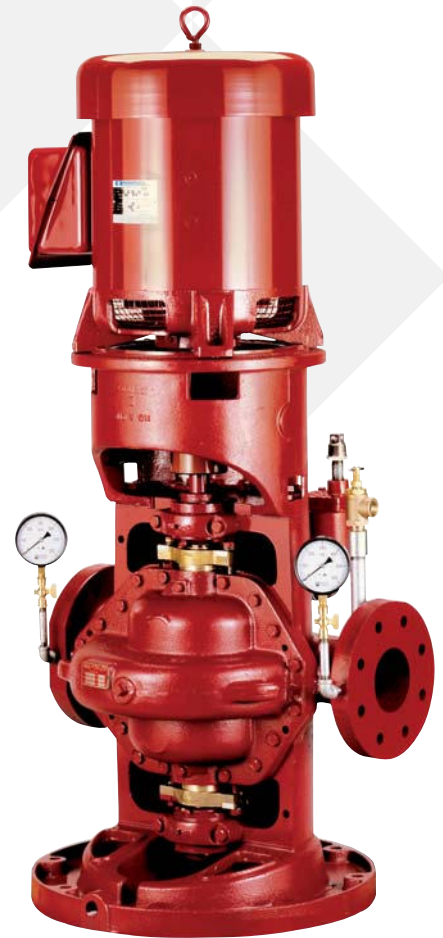
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HORIZONTAL SPLIT CASE PUMP



VERTICAL SPLIT CASE PUMP

AURORA[®] 900 SERIES SPLIT CASE FIRE PUMPS

Built Per NFPA 20



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AURORA® 900 SERIES

Split Case Fire Pumps

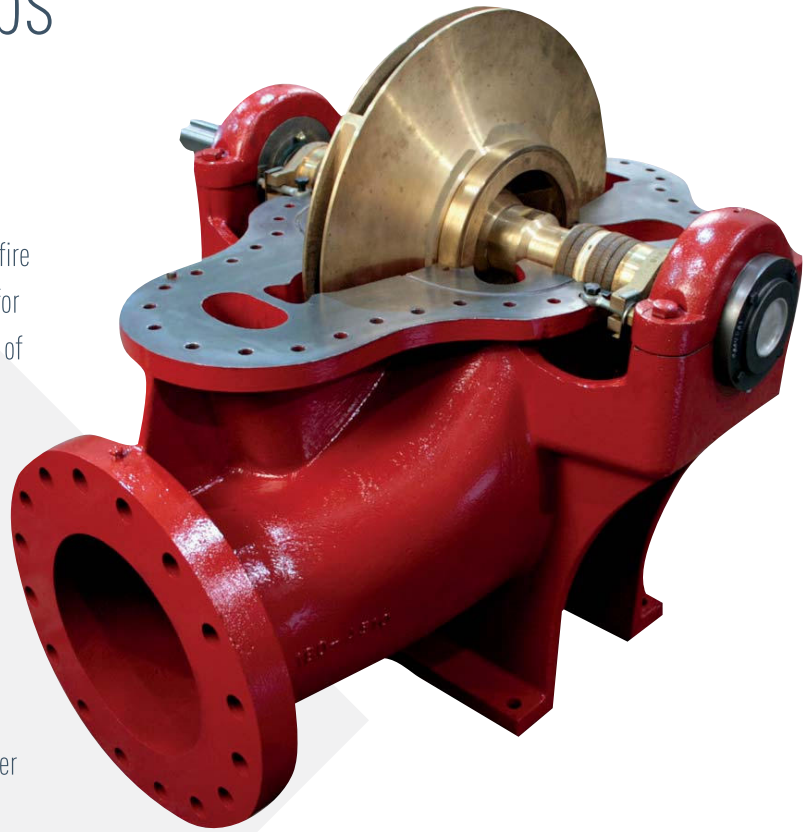
Horizontal split case pumps are the most common type of fire pump. These pumps are specifically designed and tested for fire service applications where reliability of performance is of vital importance. Split case pumps are characterized by:

- Easy access to all working parts;
- Rugged construction;
- Liberal water passages; and
- Efficient operation.

Split case fire pumps are specified when the source of water is located above the surface of the ground and provides a positive suction pressure to the pump at any performance point. Single-stage or multistage pumps are available dependent upon discharge pressure requirements.

Aurora split case fire pumps are built per the rigid standards of NFPA 20 and are listed by Underwriters Laboratories (UL) and approved by Factory Mutual (FM).

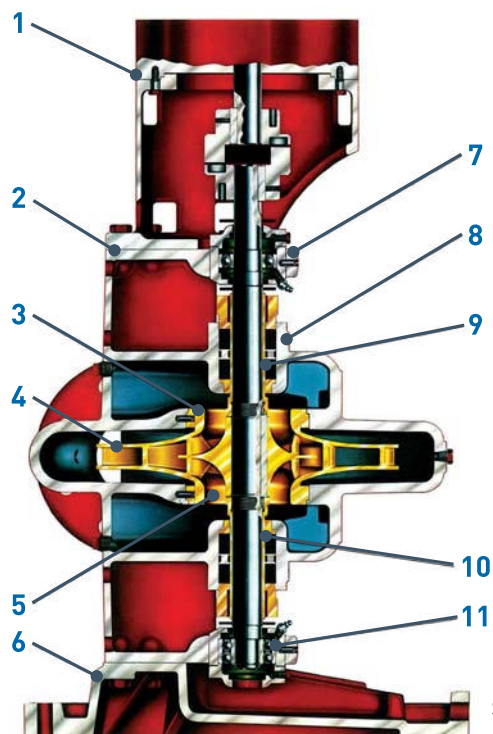
Available in a broad range of operating pressures and flows from a minimum of 250 GPM, Aurora split case pumps can be driven by either an electric motor or diesel engine. Aurora's UL-Listed, FM-Approved fire pump packages also include the system controller, with a full range of options and accessories available to complete the NFPA-compliant fire pump package.



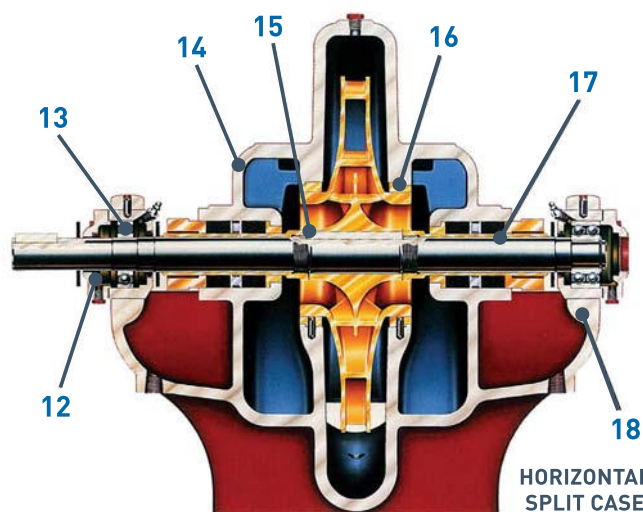
In addition to horizontal split case pumps, Aurora also offers split case performance in a vertical format. Vertical fire pumps provide distinct advantages over horizontal pump constructions.

- Less floor space is required.
- In-line piping arrangement allows piping in any direction in most cases.
- Elevated motor protects against potential flooding if the pump station is in a low area.
- Components are register-fitted to prevent misalignment.

Pump Features



VERTICAL
SPLIT CASE



HORIZONTAL
SPLIT CASE

- 1. Computer Machined**
major components with 360 degree registered fits to assure concentricity of parts.
- 2. Integral Bearing Arms**
eliminate bearing misalignment and simplify maintenance.
- 3. Enclosed Impeller Design**
provides high efficiency and performance.
- 4. Dynamically Balanced Impeller**
is keyed to the shaft and secured by adjustable shaft sleeves.
- 5. Double Suction Impeller**
balances hydraulic thrust loads.
- 6. Cast Iron Drip Rim Base**
directs condensation and any stuffing box leakage to drain.
- 7. Short Bearing Span**
holds shaft deflection to .002" at face of stuffing box at maximum load.
- 8. Internal Water Seal Passages**
between volute and stuffing box cannot be damaged.
- 9. Interwoven, Graphite Impregnated T.F.E.**
diagonally cut packing rings seal the pump shaft.
- 10. Stuffing Boxes**
are extra deep for proper sealing. Split packing glands simplify packing maintenance.
- 11. Double Row Thrust**
ball bearing.
- 12. Grease Seals**
and nonsparking neoprene rotating slingers protect both bearings during pump operation and washdown.
- 13. Bearings**
selected for 50,000 hour minimum life at maximum load. Average bearing life 5 x minimum.
- 14. Split Case Design**
simplifies disassembly. The suction and discharge piping and shaft alignment are not disturbed.
- 15. O-Ring Sealed Shaft Sleeves**
prevent corrosion of the shaft. This eliminates the need for stainless steel shafts.
- 16. Case Wearing Rings**
and throttle bushings protect the casing from wear and are easily and inexpensively replaced.
- 17. Bronze Shaft Sleeve**
prevents shaft wear, is slip fit over the shaft, keylocked, and extends the entire length of the seal box.
- 18. Certified Performance Test with Positive Suction Pressure**
is provided for each fire pump for customer approval. Pumps are also hydrostatically tested per NFPA 20 at no less than 250 psi.

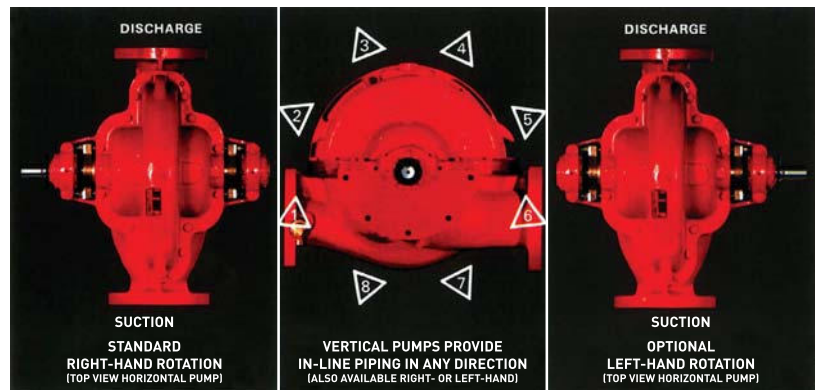
Fire Pump Feature Selector

Standard

- Bronze fitted pump construction
- Bronze shaft sleeves
- Bronze case wearing rings
- Dynamically balanced impellers
- Stainless steel impeller key
- Carbon steel shaft
- Corrosion-resistant lantern rings*
- Bronze stuffing box bushings
- Bronze or stainless steel glands
- Interwoven graphite-impregnated T.F.E. packing rings
- Cast integral bearing arms (most models)
- Regreaseable ball bearings
- Double row thrust bearing (outboard side)
- Upper casing lifting lugs
- Water slingers and grease seals
- Hydrostatic and Certified Performance test**
- Coupling guard
- Suction and discharge gauges with shutoff cocks
- Automatic air release valve
- Casing relief valve (electric driven units only)

Optional

- Ductile iron casings (available in selected 481 and 485 models)
- Some models available in 316 SST, duplex and super duplex
- Right- or left-hand rotation
- Impeller wearing rings
- Stainless steel shafts
- Double row ball bearings on inboard side
- External bypass line from casing to stuffing boxes (optional on Model 480s, standard on Model 490s)
- Formed steel drip-rim base (horizontal electric driven units only)
- 15' Suction lift test to verify performance at 150% of rated flow
- Available accessories include valves, headers, main relief valves, increasers and reducers, waste cones, and more.



* Standard on Model 490s; furnished when suction pressure is below 40 psi on Model 480s.

** Test is performed with positive suction pressure.



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