

# 400 SERIES

Split Case Pumps

410 Series

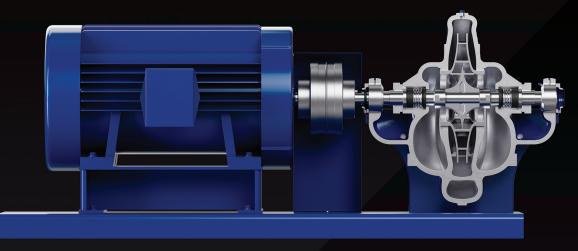
420 Series



Contact us to learn more about our NSF certified products.

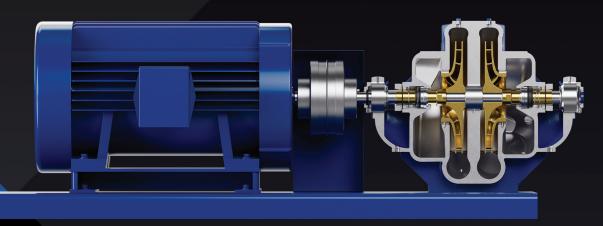
pentair.com/aurora

### **UNYIELDING PERFORMANCE** FROM TRUSTED TECHNOLOGY



### 410 SERIES

These single-stage pumps combine modern performance with a trusted, reliable design. They are best for installations with small- to medium-scale pumping needs.



### 420 SERIES

420 Series pumps are designed to maximize the life of bearings, pumps, and other key pump components. These models offer increased flow rates and pressure ranges for demanding municipal, industrial, and commercial water systems.

Backed by over a century of innovation, the Pentair Aurora® 400 Series delivers reliable commercial pumping performance in the toughest applications. Our full line of single and multistage models is built to last using high-quality materials and protective design elements that help keep pumps operational.

# 400 SERIES

### Split Case Pumps



Max Flow 15,000 GPM (4,307 M<sup>3</sup>/HR)

663 FT (202 M)

<sub>Мах Тетр</sub> 275°F (135°C)

#### DURABILITY

- Bronze fitted pump construction + shaft sleeves
- Bronze case wearing rings
- Stainless steel impeller key
- Graphite and TFE lubricated acrylic packing<sup>1</sup>
- Interwoven graphite + Teflon<sup>™</sup> lubricated acrylic yarn packing rings<sup>2</sup>
- Carbon steel shaft
- Water slingers and grease seals
- All-iron or alloy pump construction<sup>3</sup>
- Hardened 440C stainless steel shaft sleeves (packing only)<sup>3</sup>
- 316 stainless steel shaft sleeves<sup>3</sup>
- Impeller wear rings<sup>3</sup>
- Stainless steel shaft<sup>3</sup>
- Steel drip pan or drip rim base<sup>3</sup>
- Formed or fabricated steel base<sup>3</sup>

#### **APPLICATIONS**

- Heating + cooling
- Boiler feed service
- Condensate service
- High-pressure water service
- Water transport + boosting

<sup>2</sup> Select models

<sup>3</sup> Optional features

#### PERFORMANCE

- Dynamically balanced impellers
- Twin volute on 10" and larger pumps<sup>1</sup>
- Re-greaseable ball bearings
- Inboard single-row ball bearings
- Outboard double-row ball bearings
- Single balanced mechanical seal<sup>1,3</sup>
- Single unbalanced mechanical seal<sup>2,3</sup>
- 125#/250# ANSI suction and discharge flanges available<sup>1</sup>
- 250 psi case working pressure
- Stuffing box bushings
- Lifting lugs
- Hydrostatic testing
- Cast integral bearing arms
- Coupling guard<sup>2</sup>
- Oil lubricated ball bearings<sup>2</sup>
- Double extended shaft model<sup>2,3</sup>
- Right- or left-handed rotation<sup>3</sup>
- Certified performance testing<sup>3</sup>
- Water-cooled cartridge caps<sup>1,3</sup>
- Water-cooled bearings<sup>3,4</sup>

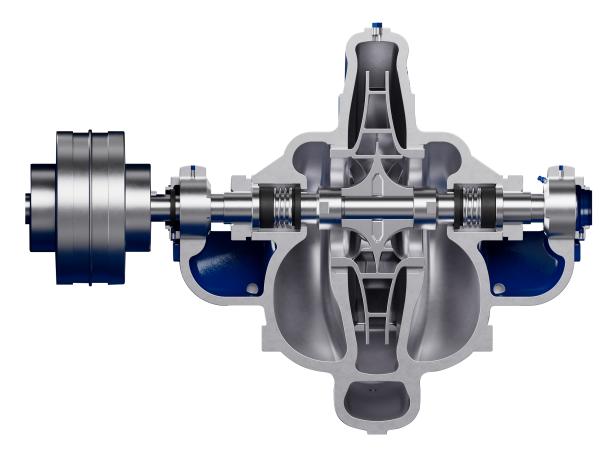


<sup>4</sup> Multistage models

<sup>1</sup> Single stage models

### **PUMP FEATURES**

AURORA 410 SERIES SPLIT CASE PUMPS



**Split case design** makes it easy to remove upper casing without disturbing suction and discharge for simpler servicing and inspection.

**Dynamically balanced impeller** is keyed to the shaft and secured by adjustable shaft sleeve.

**Bronze shaft sleeve** extends the entire length of each stuffing box to prevent shaft wear.

**Interchangeable stuffing boxes** come equipped with 303 stainless steel parts and Buna-N<sup>®</sup> elastomers for a longer pump life.

**Mechanical seals** are included in standard constructions and include carbon against ceramic face for optimal hot water performance.

#### LIFECYCLE SUPPORT FOR YOUR PUMP

When it's time to service your pump equipment with replacement parts, there's no room to gamble on unknown suppliers. We carry thousands of genuine OEM parts tailored to Pentair pumps and ready to ship quickly.

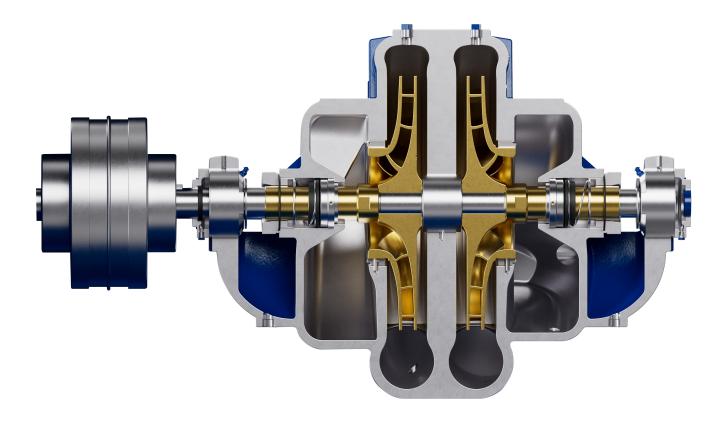
#### **HYDRONIC ACCESSORIES**

Get the most out of your system with a wide range of hydronic accessories that can help boost performance and reliability.

Learn more at **pentair.com/pumpcare** 

### **PUMP FEATURES**

AURORA 420 SERIES SPLIT CASE PUMPS



**Grease lubrication bearings** are conveniently located for quick access and outfitted with oil seals and non-sparking neoprene rotating slingers to protect bearings during operation and washdowns.

**High-load bearings** provide a minimum of 50,000 hours of performance at maximum load thanks to double-row thrust ball bearings and arms that help eliminate misalignment.

**Performance certification** with positive suction pressure or suction lift is available on each pump for customer approval. All pumps are hydrostatically tested for optimal performance.

**Case wearing rings** prevent wear on pump casing and are easy and cost-effective to replace.

Left-hand rotation is available with standard parts.

#### 400 SERIES OPTIONAL ADDS

**O-Ring seals** on the impeller and shaft sleeves help prevent shaft corrosion, reducing the need for high-cost specialty materials.

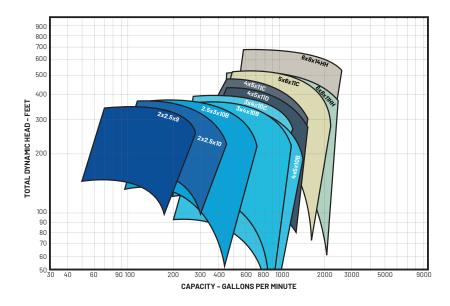
Teflon™ coating on multistage model shaft sleeves and impellers help reduce corrosion in high head applications. **Computer-machined components** with 360° registered fits assure part concentricity.

Twin volute design on single stage models balances radial hydraulic thrust loads on large split case pumps (see range charts). **Optional lantern rings** use internal water seal passages between casing and stuffing boxes to help prevent damage.

**Short bearing span** holds shaft deflection to .002" at the face of the stuffing box at maximum load.

Mechanical seals are included in standard constructions and include carbon against ceramic face for optimal hot water performance.

AURORA 410 SERIES SINGLE STAGE SPLIT CASE PUMPS

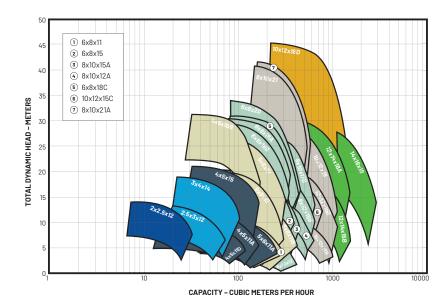


#### SINGLE VOLUTE 3500 RPM

Individual performance curves should be checked for final selection.

For selections not shown on this chart, please refer to the factory.





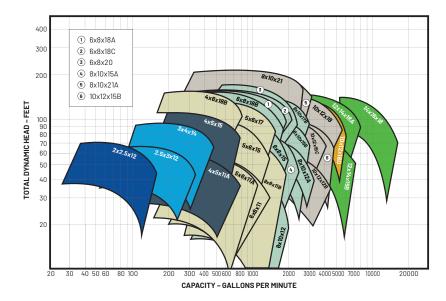
#### 1000 RPM

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AURORA 410 SERIES SINGLE STAGE SPLIT CASE PUMPS

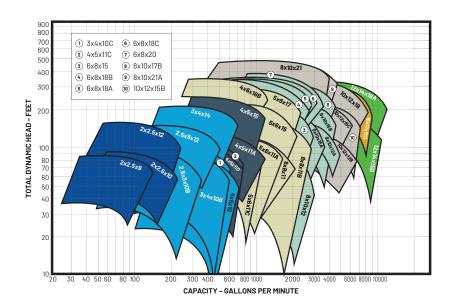


#### 1150 RPM

Individual performance curves should be checked for final selection.

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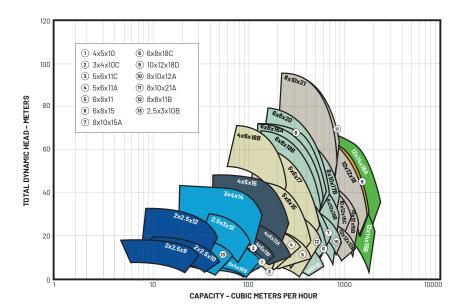
#### 1750 RPM

Individual performance curves should be checked for final selection.

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AURORA 410 SERIES SINGLE STAGE SPLIT CASE PUMPS

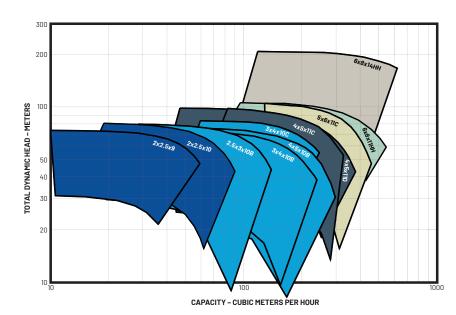


#### 1500 RPM

Individual performance curves should be checked for final selection.

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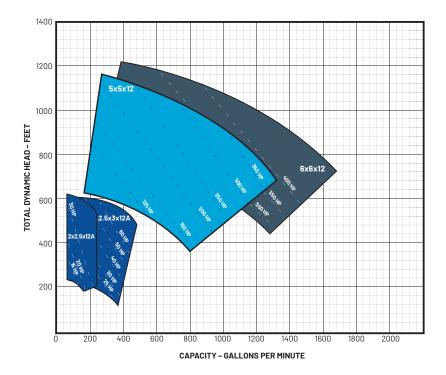
#### 3000 RPM

Individual performance curves should be checked for final selection.

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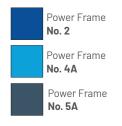
#### AURORA 420 SERIES MULTISTAGE SPLIT CASE PUMPS

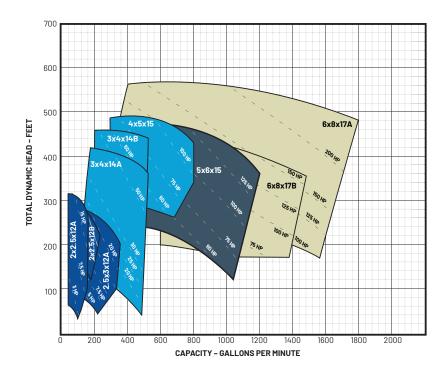


#### 3600 RPM

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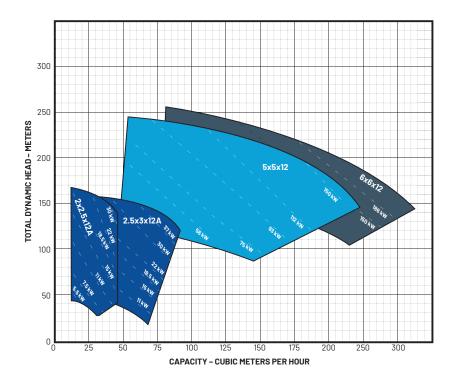
#### 1800 RPM

Individual performance curves should be checked for final selection.

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AURORA 420 SERIES MULTISTAGE SPLIT CASE PUMPS

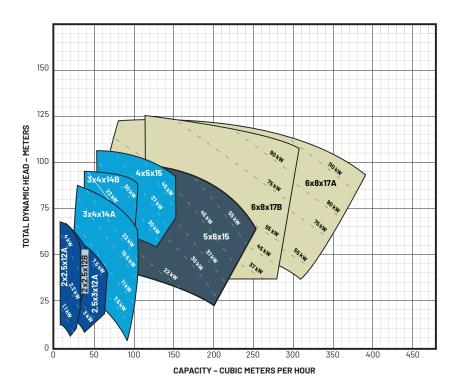


#### 3000 RPM

Individual performance curves should be checked for final selection.

For selections not shown on this chart, please refer to the factory.





#### 1500 RPM

Individual performance curves should be checked for final selection.

For selections not shown on this chart, please refer to the factory.



# AURORA OEM SPLIT CASE REPAIR KITS

TO HELP GET YOUR PUMP BACK TO FACTORY CONDITIONS

Our three most popular kits have the parts your pump needs to get back to full strength. Shipping from our factory in North Aurora, Illinois, these OEM kits are made to fit your specific Aurora pump.

|                 | Repair Kit includes<br>mechanical seal<br>and gasket | Overhaul Kit includes<br>mechanical seal, gasket<br>and sleeves | Rotating Assembly<br>includes all the internal<br>parts you need to easily<br>rebuild your pump |
|-----------------|--|---|---|
| Parts Included  | Repair Kit   | Overhaul Kit  | Rotating Assembly   |
| Gasket          | •  | ٠   | ٠   |
| Mechanical Seal | •  | •   | •   |
| Sleeves         |  | •   | •   |
| Shaft           |  |   | •   |
| Impeller        |  |   | •   |

# YOUR PUMP PARTNER FOR THE WHOLE BUILDING

### PROTECTING LEGACIES LIKE YOURS FOR MORE THAN A CENTURY

Our extensive pump portfolio, crafted with a tradition of quality and excellence, has countless applications in commercial buildings.

Whether it's fire suppression for safety or HVAC and boosting applications for comfort, your building is covered with dynamic water movement solutions that fit your needs.

No matter where it's used, you can trust that your pump is backed by a dedicated team providing unwavering support throughout its lifetime. Because every decision counts when selecting pump equipment that protects your building and the people inside.

Scan the QR code or visit pentair.com/aurora to learn more.



EXPLORE OUR PUMP PORTFOLIO

FIRE SUPPRESSION + HVAC + PRESSURE BOOSTING

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