

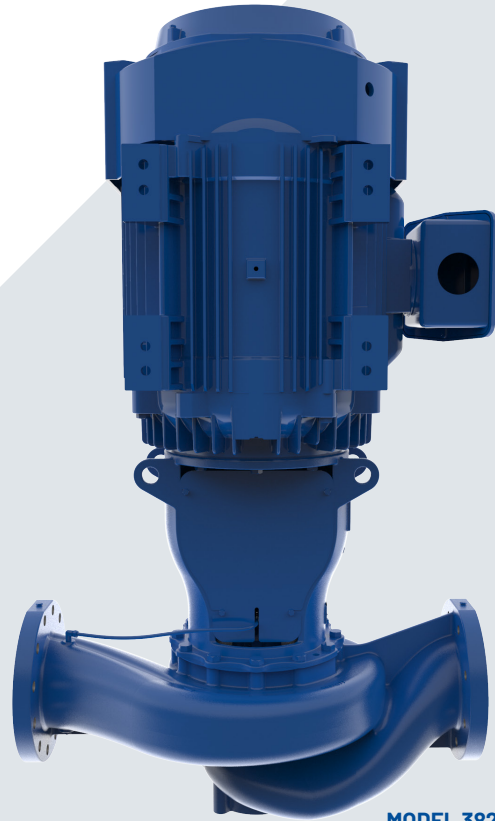


382B SERIES

# SINGLE STAGE VERTICAL IN-LINE PUMPS



MODEL 382B  
CLOSE COUPLED



MODEL 382B  
SPLIT COUPLED

# 382B SERIES SINGLE STAGE VERTICAL IN-LINE PUMPS

Capacities to 12,000 gpm (2,725 m<sup>3</sup>/hr)  
Heads to 370 feet (112 m)  
Temperatures to 275° F (135° C)

## Setting New Standards of Efficiency

Pentair Aurora is delivering over a century of innovation for constant peace of mind. The years of experience with design, sales and manufacturing of centrifugal pumps has led to the new generation of the Pentair Aurora® 382B Series. Today's room space constraints are more challenging than years ago. Pentair Aurora Vertical In-line Pumps are specifically designed for mounting directly in a pipeline and to reduce the space required in a pump room; two pumps fit in the space of one. These modern pumps with a clean, straightforward and updated design were developed with upgraded materials of construction and a simplified offering without limiting ranges of head and capacity requirements. These pumps not only exceed U.S. Department of Energy (U.S. DOE) pump efficiency standards, but also feature shared hydraulics and premium materials as standard offering. The new Pentair Aurora 382B Series offer industry-leading durability and are an easy to maintain solution for your liquid handling needs.



### STANDARD FEATURES

- ◆ Offered in two configurations
  - 382B Close Coupled
  - 382B Split Coupled
- ◆ New Ductile Iron ASTM A536 Casings provide higher strength and durability
- ◆ New 316 Stainless Steel impellers provide less corrosion, additional chemical resistance and durability
- ◆ New shared hydraulics with Pentair Aurora 3800 End Suction Pumps to streamline inventories
- ◆ Working pressures up to 175 psi
- ◆ New standard bracket design to accommodate common C-Face NEMA rated motors. (Pentair Aurora 382B Split coupled only)
- ◆ Patented Seal Replacement mechanism allows servicing without removing motor and casing, one man operation. (Pentair Aurora 382B Split coupled only)
- ◆ Mounting directly in a pipeline, no pipe support and flexible connectors needed
- ◆ Factory hydro test
- ◆ Casing wear rings
- ◆ Stainless steel ASTM A582 Type 416 shaft
- ◆ 303 Stainless Steel mechanical seal with Buna-N, ceramic and carbon parts

### OPTIONAL FEATURES

- ◆ Working pressures up to 290 psi
- ◆ Pump base
- ◆ Impeller wearing rings
- ◆ Outside balanced seal (Pentair Aurora 382B Split coupled only)
- ◆ Several mechanical seal options for maximum temperatures up to 275°F
- ◆ Certified performance testing over the full operating range of the pump

### APPLICATIONS

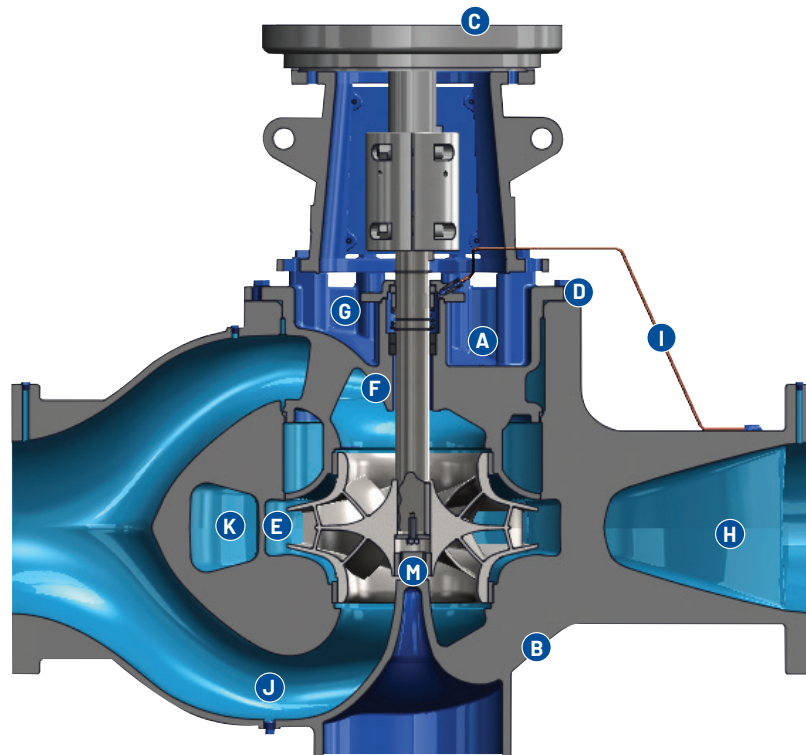
- ◆ HVAC Systems
- ◆ Boosting
- ◆ Chilled and Hot Water
- ◆ Commercial Pools
- ◆ Industrial Uses
- ◆ Municipal

# PUMP SIZE OFFERING

Pump Sizes
1.5x1.5x7
1.5x1.5x9.5
2x2x7A
2x2x11
2.5x2.5x7A
2.5x2.5x9.5
3x3x7
3x3x9.5
3x3x11A
3x3x13.5
4x4x7A
4x4x9.5
4x4x11
4x4x13.5
5x5x7A
5x5x9.5
5x5x11A
5x5x13.5
6x6x7A
6x6x9.5A
6x6x11
6x6x13.5
8x8x9.5*
8x8x11A
8x8x13.5A
10x10x13.5A
10x10x14
10x10x19
12x12x14
12x12x18
14x14x15

\*Temporarily unavailable until further notice.

# PENTAIR AURORA® 382B SPLIT COUPLED AND CLOSE COUPLED IN-LINE PUMP FEATURES



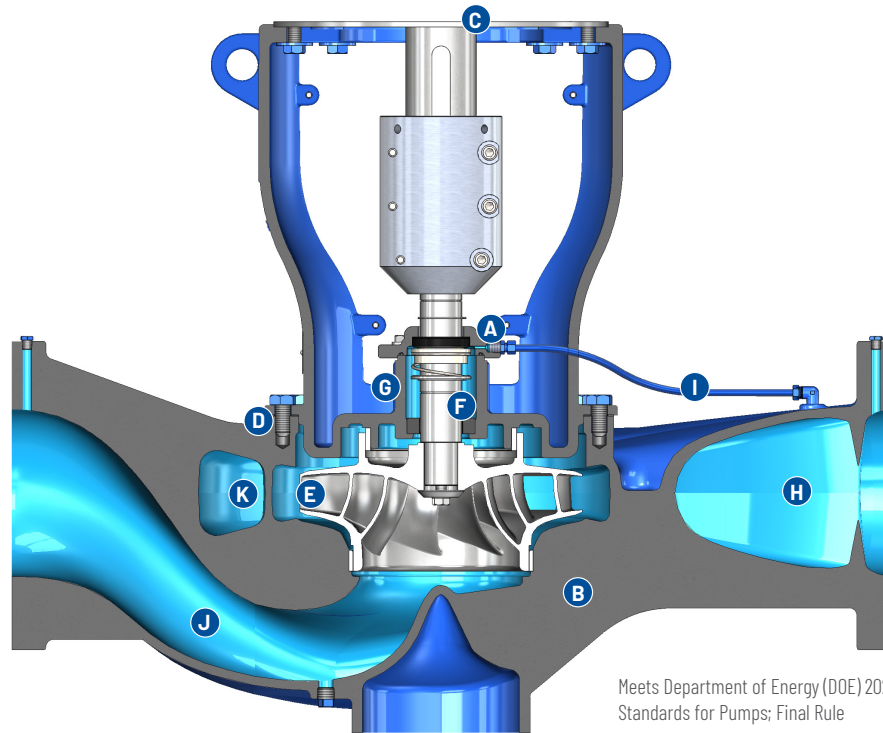
Double Suction Pump

- A. Patented Jacking Mechanism<sup>1</sup>**  
simplifies seal replacement – one person operation.
- B. Ductile Iron Casing**  
long life with higher working pressures.
- C. Standard C-Face Motor<sup>2</sup>**  
provides low noise level pump operation.
- D. Back Pull-Out Casing**  
includes in-line suction and discharge.
- E. Investment Stainless Steel, Dynamically Balanced, Enclosed Impeller**  
keyed to the shaft extension and secured by a capscrew and washer. Gaskets are used to prevent leakage to shaft end.
- F. Stainless Steel Shaft<sup>1</sup>**  
designed for minimum deflection.
- G. Mechanical Seal**  
has carbon against ceramic face for optimum hot water performance. Long life is assured with 303 SST metal parts and Buna-N flexible elastomers (outside balanced seal optional).
- H. Factory Hydro Test**  
guarantees casting and seal integrity.
- I. Relief Line**  
assures adequate venting of the seal chamber and lubrication of seal faces.
- J. Smooth Suction Passage**  
vortex breaker helps to minimize pre-rotation
- K. Double Volute**  
minimizes side load on shaft extending mechanical seal life.  
Note: Single Volute also available
- L. Spire<sup>1</sup>**  
supports rotating element from the bottom for stability and balance during operation.

<sup>1</sup>Split Coupled version only

<sup>2</sup>Split Coupled version only, Close Coupled use JM/JP motors

# PENTAIR AURORA® 382B SPLIT COUPLED AND CLOSE COUPLED IN-LINE PUMP FEATURES



Meets Department of Energy (DOE) 2020 Standards for Pumps; Final Rule

Single Suction Pump

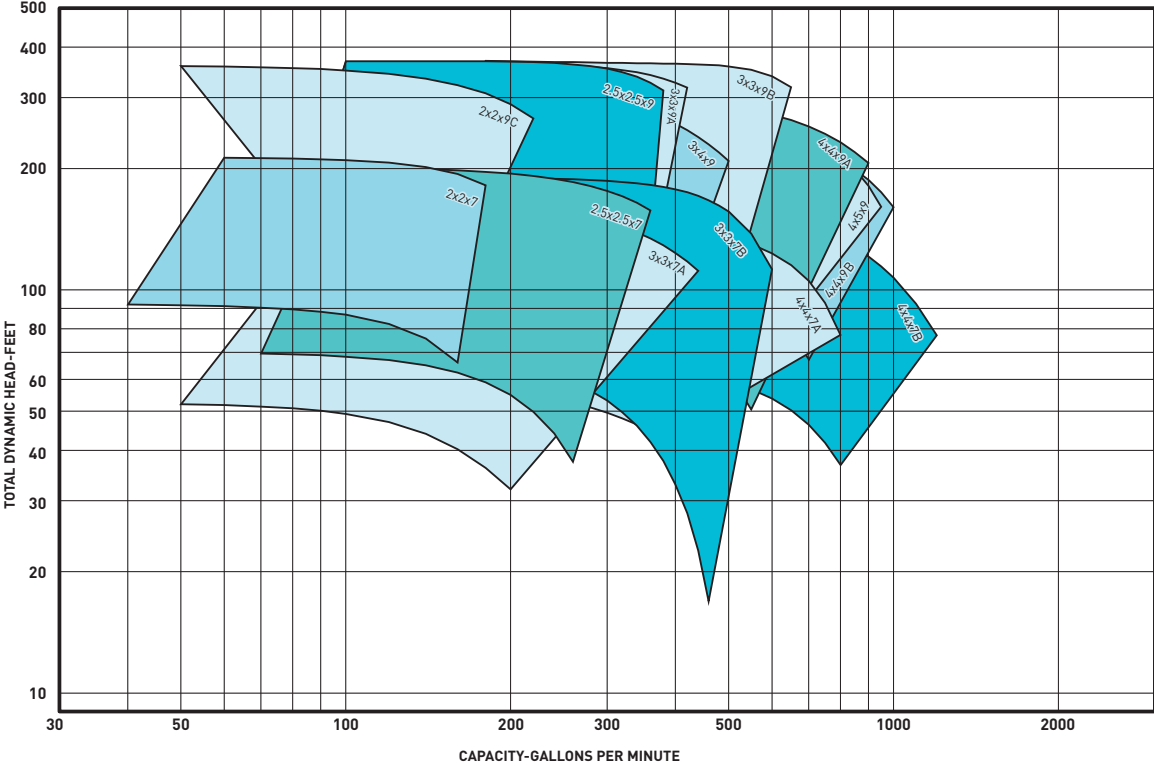
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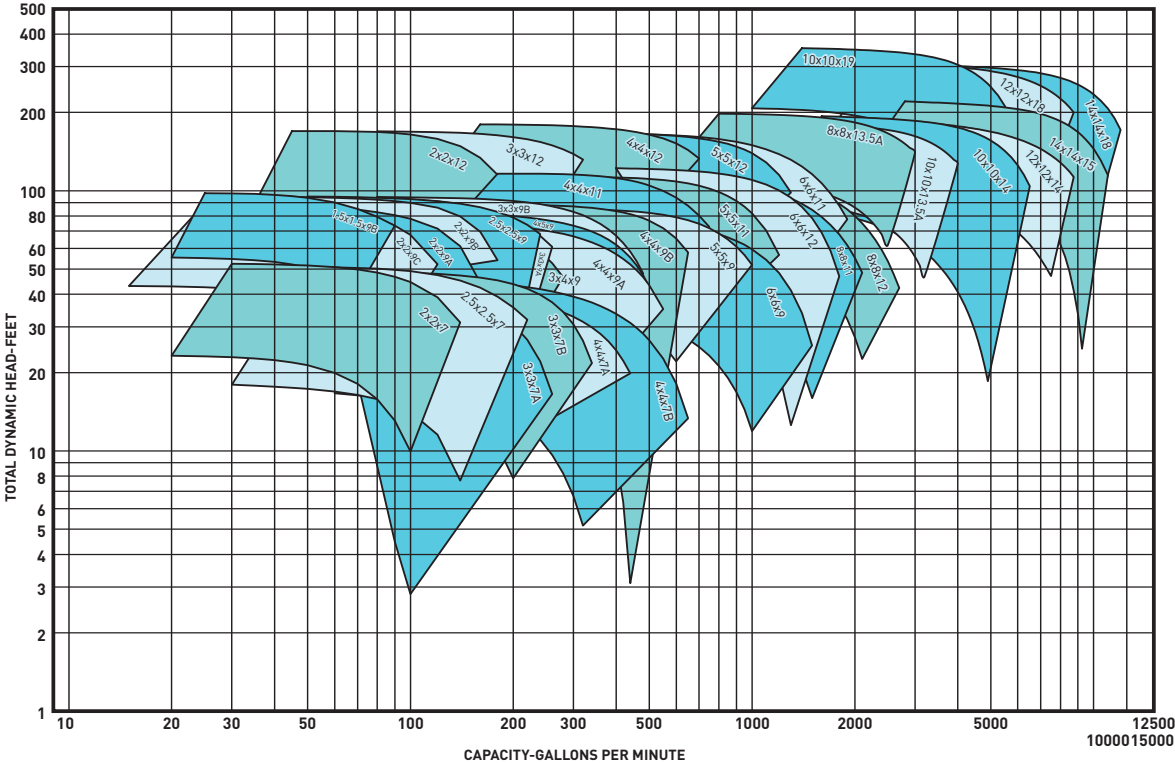
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# PUMP PERFORMANCE

## 3600 RPM, 60 Hz RANGE CHART



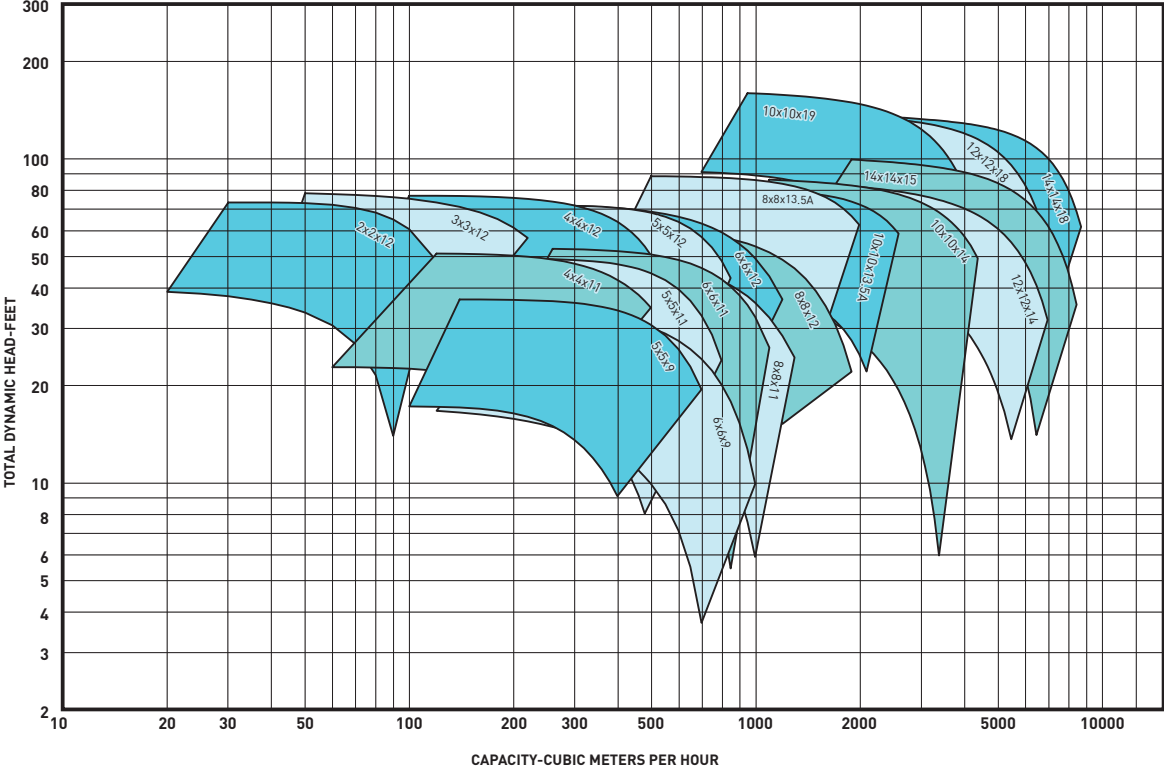
## 1800 RPM, 60 Hz RANGE CHART



Reference only: For the most current information, refer to the Encompass Pump Selection Tool.

# PUMP PERFORMANCE

## 1200 RPM, 60 Hz RANGE CHART



Reference only: For the most current information, refer to the Encompass Pump Selection Tool.

# PUMP FEATURES

## MAXIMUM LIMITATION BASED ON STANDARD MATERIALS AND PUMPING CLEAR WATER

	Speed (RPM)	Up to 3600 RPM
Horsepower (HP)	1200 RPM	250 HP
	1800 RPM	800 HP
	3600 RPM	500 HP
Temperature °F/ °C		Standard 225 °F (107 °C) / Optional 275 °F (135 °C)
Case Working Pressure PSI		290 <sup>1</sup>

<sup>1</sup>With optional 250# flanges and seal rated for 290 psi

## MATERIALS OF CONSTRUCTION

Pump Part	Stainless Steel Impeller Fitted
Casing	Ductile Iron ASTM A536
Impeller	Stainless Steel ASTM A743 Type 316
Shaft	Stainless Steel ASTM A582 Type 416
Bushing	Carbon Graphite Matrix
Case Wearing Rings	Stainless Steel ASTM A582 Type 416
Bracket	Cast Iron ASTM A48
Mechanical Seal (STD)	
Washer	Carbon
Seat	Ceramic
Elastomer	Buna-N
Metal Parts	303 SST
Spring	303 SST



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