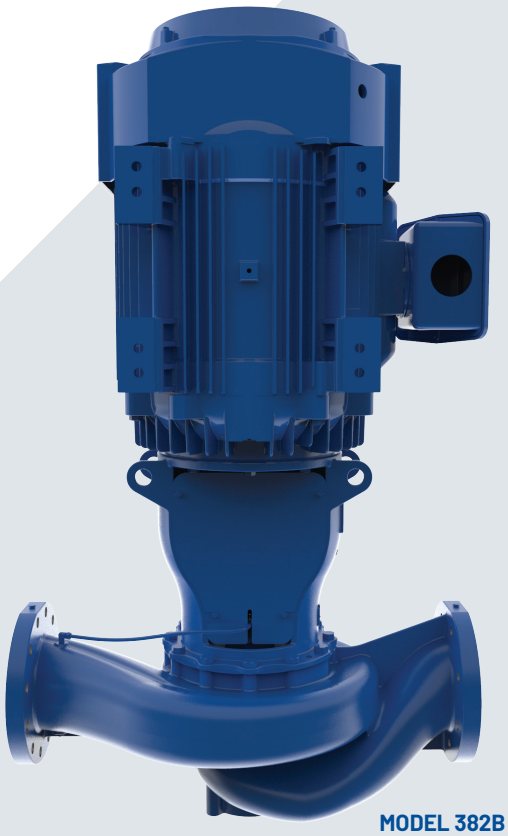
PENTAIR
AURORA

382B SERIES

SINGLE STAGE VERTICAL IN-LINE PUMPS

MODEL 382B
CLOSE COUPLED



MODEL 382B
SPLIT COUPLED

NSF®

NSF372 LISTED

pentair.com/aurora

PENTAIR
AURORA

382B SERIES SINGLE STAGE VERTICAL IN-LINE PUMPS

Capacities to 12,000 gpm (2,725 m3/hr)
Heads to 370 feet (112 m)
Temperatures to 275° F (135° C)

Setting New Standards of Efficiency

The Pentair Aurora brand 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 and no special tools required.
  (Pentair Aurora 382B Split coupled only)
- Mounting directly in a pipeline, no pipe support and flexible connectors needed
- Factory hydro test
- 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 [2]
- Pump base
- Casing wear ring
- Wear ring (Bracket/ Seal plate)
- Impeller wearing rings [1]
- 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
- NSF372 listing low lead content

APPLICATIONS

- Industrial Uses
- HVAC Systems
- Boosting
- Clean Water Pumping
- Municipal

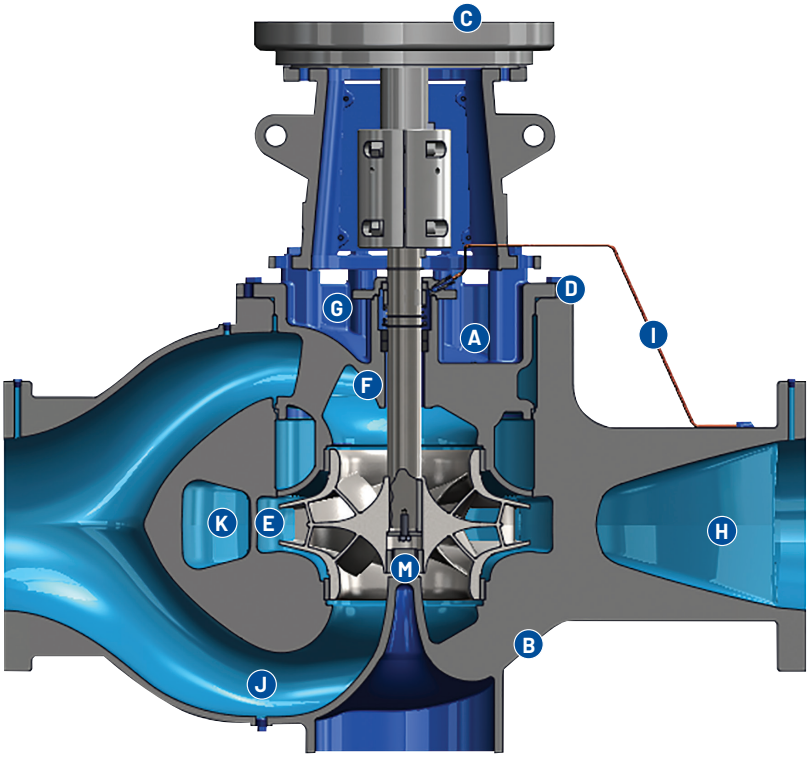
[1] With 14 inch and larger impeller size only
[2] Refer to factory for this option

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.
** Double volute

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



Double Suction Pump

A. Patented Jacking Mechanism[1]
simplifies seal replacement – one person operation.

B. Ductile Iron Casing
long life with higher working pressures.

C. Standard C-Face Motor[2]
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[1]
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.

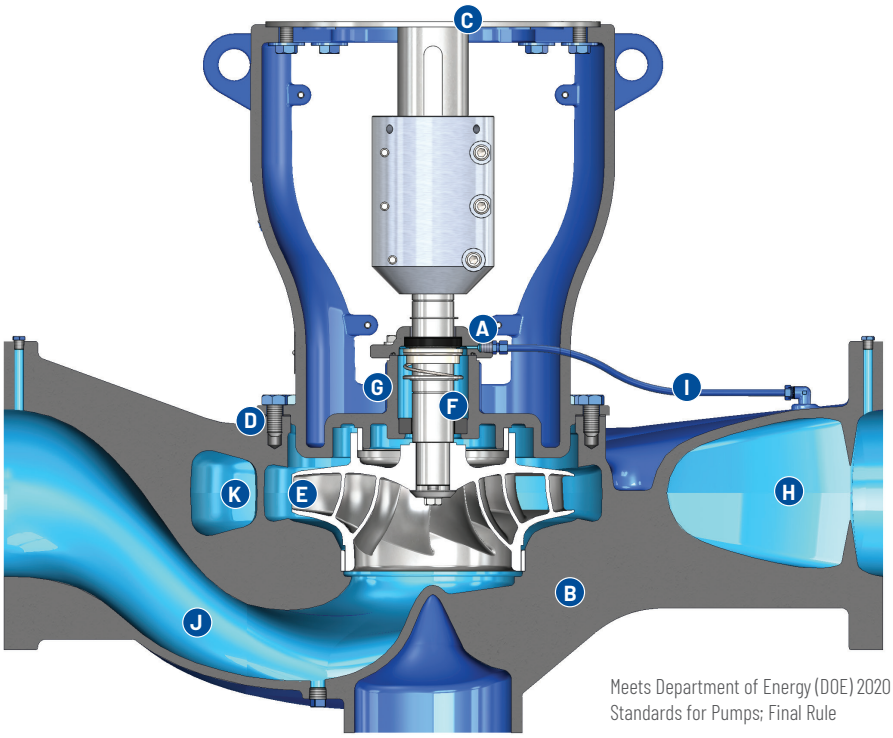
J. Smooth Suction Passage
vortex breaker helps to minimize pre-rotation.

K. Double Volute
minimizes side load on shaft extending mechanical seal life.
Note: Single Volute also available.

L. Spire[1]
supports rotating element from the bottom for stability and balance during operation.

[1] Split Coupled version only
[2] 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

A. Patented Jacking Mechanism[1]
simplifies seal replacement – one person operation.

B. Ductile Iron Casing
long life with higher working pressures.

C. Standard C-Face Motor[2]
provides low noise level pump operation.

D. Back Pull-Out Casing
includes in-line suction and discharge.

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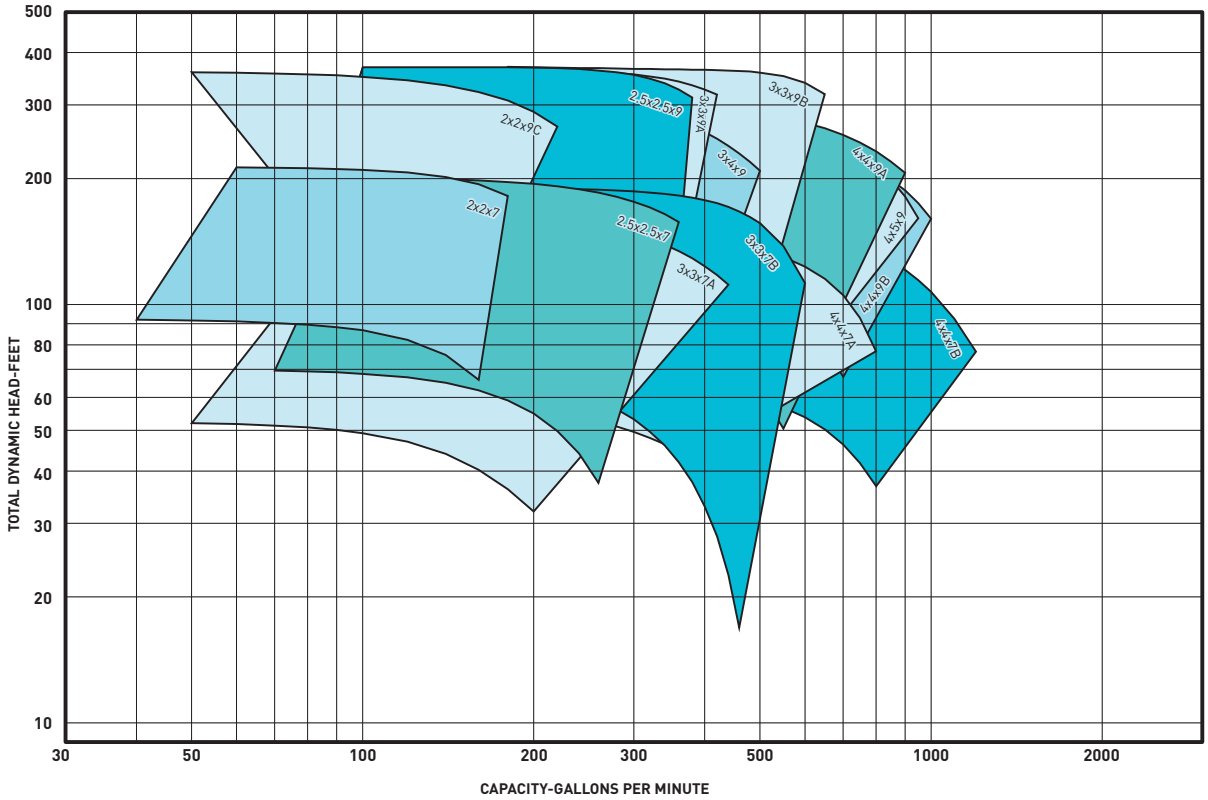
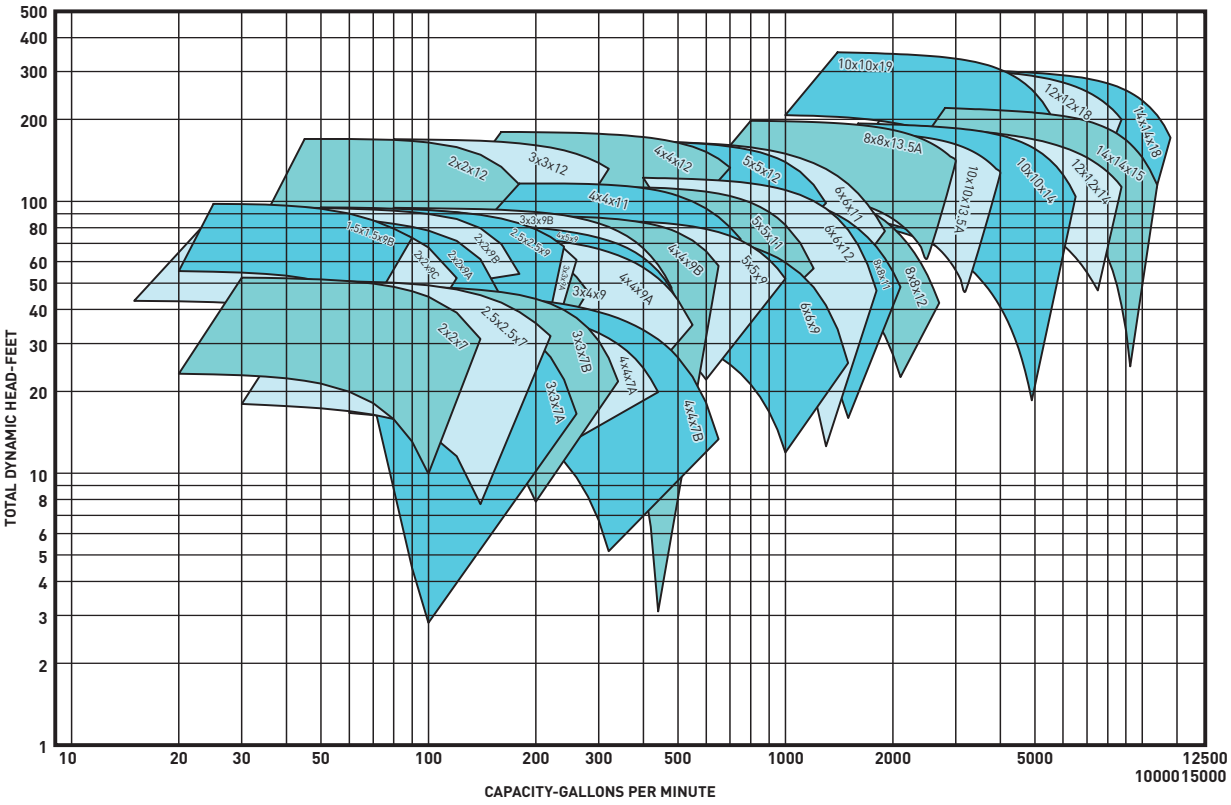
PUMP PERFORMANCE

3600 RPM, 60 HZ RANGE CHART



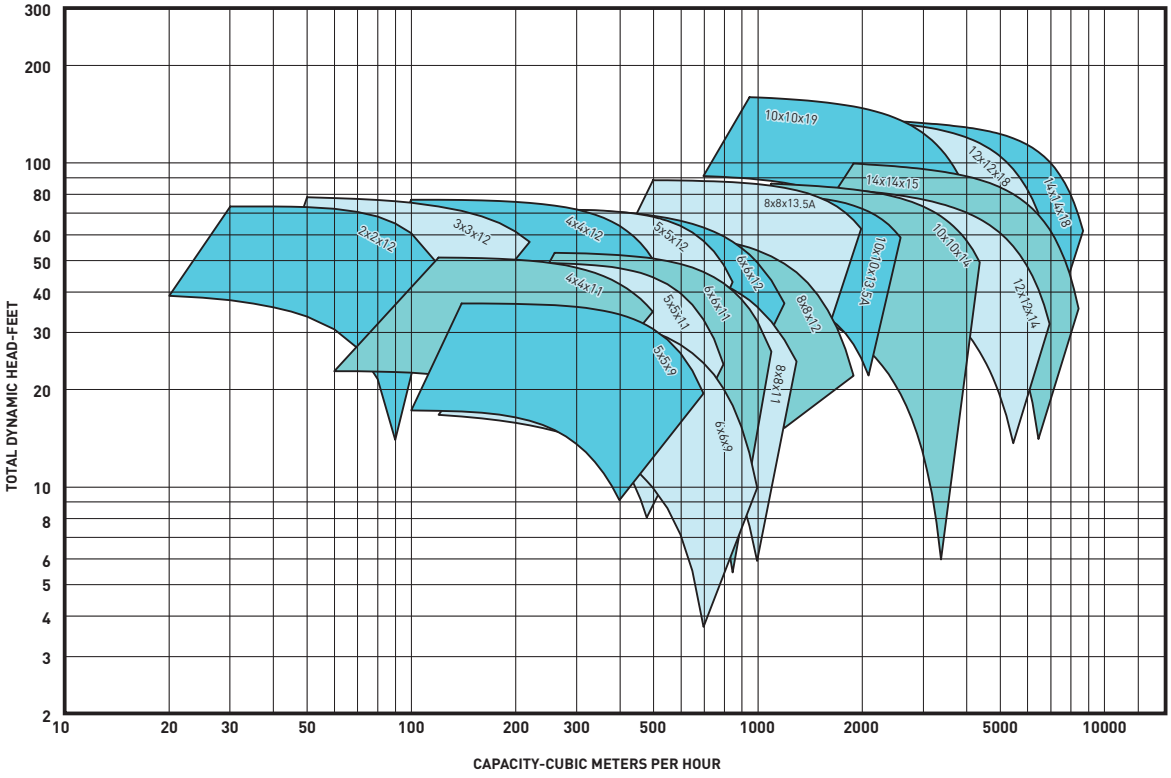
1800 RPM. 60 HZ RANGE CHART



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[1]

[1] 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

PENTAIR

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