

# AURORA* 326A SERIES COMMERCIAL IN-LINE MOUNTED CENTRIFUGAL PUMP 

## AURORA ${ }^{\circ}$ 326A SERIES <br> Commercial In-line Mounted Centrifugal Pump

- Capacities to 140 G.P.M. (8.8 lps)
- Heads to 55 Feet (16.8 m)
- Temperatures to $225^{\circ} \mathrm{F}\left(107^{\circ} \mathrm{C}\right)$
- Space-saving design
- Maintenance-free
- Universal Flange-to-Flange Dimensions


## Introduction.

A superior commercial in-line pump based on the established Aurora Pump 320 Series has successfully met the severest demands of high temperature condensate service and boiler feed applications. The 326A in-line's rugged design is engineered specifically for commercial applications, giving it the advantage over competitive models.

## Commercial Pump Upgraded Design Features

- Quieter operation with pump inlet straightening vane and Aurora Pump's unique low vibration and low noise engineered motor.
- Direct flange-to-flange compatibility allows installer to replace competitor's pumps without time consuming piping and companion flange modifications.
- Hydrostatic tested pump casing to 1.5 times the maximum operating pressure.
- This compact pump is supported by the in-line piping, thus allowing quick installation.
- Vacuum cast bronze impeller, (rather than plastic or stamped brass) for maximum efficiency and durability.
- Reduced spare parts - one seal and one motor design (GA) fits all pump models.
- Tapped suction and discharge gauge ports to verify pump performance as well as three casing drain port locations.
- Available in standard or build-to-order versions for optimum pump selection flexibility.
- Cast iron bronze fitted (standard), or optional all bronze/all iron constructions available.

Maintenance-Free, Long Lasting, Reliable. Features That Make the 326A Pump Superior to the Competition:

- Enlarged motor bearings with high temperature lubrication require no maintenance.
- Standard seal flush line assures proper mechanical seal Lubrication and automatically vents air from the seal chamber for troublefree operation.
- Stainless steel . 75 " ( 22 mm ) diameter oversized pump shaft for minimal shaft deflection, increasing mechanical seal life.
- Cast companion flange set packed with the pump (rather than stamped steel flanges).
- Integral pump/motor shaft eliminates premature nuisance failures due to spring type couplings or shaft extensions.


# Pump Features and Performance Data 

Range Charts 326A In-Line

Standard Models
1750 (60 Hz) /1440 (50 Hz) RPM


Built-to-Order
1750 ( 60 Hz) / 1440 ( 50 Hz ) RPM

A. Industry Standard Universal Flange-toFlange Dimensions direct replacement to competitor's models
B. Seal Flush Line automatic seal venting
c. Inlet Straightening Vane reduced noise
D. Standard GA Motor,

Maintenance-Free
high temperature bearing lubrication
E. Back Pull-Out Design quick disassembly
F. Stainless Steel Shaft lagge. 75 s diameter ( 22 mm )
G. Vacuum Cast Impeller higher pump efficiencies
H. Oversized .75" (22 mm) High Temperature Mechanical Seal reliable hot water service
I. Tapped Suction and Discharge Gauge Ports pump performance test port
J. Three Tapped Casing Vent Plugs easily accessible
K. Key Driven Impeller securely locked to shaft
L. 0 -Ring Sealed Casing superior sealing


# Engineering Specifications and Dimension Details 



| Material of Construction |  |  |  |
| :---: | :---: | :---: | :---: |
| Pump Part | Bronze Fitted | All Iron | All Bronze |
| Casing | Cast Iron ASTM A48 | Cast Iron ASTM A48 | Bronze ASTM B62 |
| Impeller | Bronze ASTM B584 | Cast Iron ASTM A48 | Bronze ASTM B584 |
| Motor Bracket | Cast Iron ASTM A48 | Cast Iron ASTM A48 | Bronze ASTM B62 |
| Shaft | Stainless Steel AISI 416 | Stainless Steel AISI 416 | Stainless Steel AISI 416 |
| Mechanical Seal | Ceramic w/ Buna-N | Ceramic w/ Buna-N | Ceramic w/ Viton |

Maximum operating pressure 175 psi.

| Model | GA <br> Motor hp | X | IV | VD | DF | DC | DE | F | Pump Weight | OOP <br> Motor Frame | ODP <br> Motor <br> Weight | TEFC <br> Motor <br> Weight | Dimensions May Vary By Manufacturer |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  | AG | P | AB |
| $1-1 / 4 \times 1-1 / 4 \times 6$. Model "B" | 1/3 | 4-1/2 (115) | 6-1/2 (165) | 3-3/8 (86) | 2-7/8 (73) | 3-1/2 (89) | 3-1/2 (89) | 7/8(22) | 17 (7.7) | 56 cz | 25 (11.3) | Use 1/2 hp | 11 (280) | 6-5/8 (170) | 5 (130) |
| $1-1 / 4 \times 1-1 / 4 \times 6$ | 1/2 | 4-1/2 (115) | 6-1/2 (165) | 3-3/8 (86) | 2-7/8 (73) | 3-1/2 (89) | 3-1/2 (89) | 7/8 (22) | 17 (7.7) | 56 cz | 30 (13.6) | 40 (18.1) | 11 (280) | 6-5/8 (170) | 5 (130) |
| $1-1 / 2 \times 1-1 / 2 \times 6$ | 1/3 | 4-1/2 (115) | 7 (165) | 3-3/4 (95) | 2-7/8(73) | 3-1/2 (89) | 3-3/4 (95) | 7/8 (22) | 23 (10.4) | 56 cz | 25 (11.3) | Use 1/2 hp | 11 (280) | 6-5/8 (170) | $5(130)$ |
| $1-1 / 2 \times 1-1 / 2 \times 6$. Model "C" | 1/2 | 4-1/2 (115) | 7 (178) | 3-3/4 (95) | 2-7/8 (73) | 3-1/2 (89) | 3-3/4 (95) | 7/8 (22) | 23 (10.4) | 56 cz | 30 (13.6) | 40 (18.1) | 11 (280) | 6-5/8 (170) | 5 (130) |
| $1-1 / 2 \times 1-1 / 2 \times 6$ | 3/4 | 4-1/2 (115) | 7 (178) | 3-3/4 (95) | 2-7/8(73) | 3-1/2 (89) | 3-3/4 (95) | $7 / 8$ (22) | 23 (10.4) | 56 cz | 35 (15.9) | Use 1 hp | 11 (280) | 6-5/8 (170) | $5(130)$ |
| $2 \times 2 \times 6$ | 1/2 | 4-3/4 (120) | 6-3/4 (171) | 3-3/4 (95) | 2-7/8(73) | 3-3/4 (95) | 4 (102) | $7 / 8$ (22) | 23 (10.4) | $56 c z$ | 30 (13.6) | 40 (18.1) | 11 (280) | 6-5/8 (170) | $5(130)$ |
| $2 \times 2 \times 6$, Model "0" | 3/4 | 4-3/4 (120) | 6-3/4 (171) | 3-3/4 (95) | 2-7/8(73) | 3-3/4 (95) | 4 (102) | $7 / 8$ (22) | 23 (10.4) | 56 cz | 35 (15.9) | Use 1 hp | 11 (280) | 6-5/8 (170) | $5(130)$ |
| $2 \times 2 \times 6$ | 1 | 4-3/4 (120) | 6-3/4 (171) | 3-3/4 (95) | 2-7/8(73) | 3-3/4 (95) | 4 (102) | $7 / 8$ (22) | 23 (10.4) | 56 cz | 40 (18.1) | 50 (22.7) | 11 (280) | 6-5/8(170) | 5 (130) |
| $1-1 / 2 \times 1-1 / 2 \times 7$. Model "F" | 1/2 | 5-1/2 (140) | 8 (203) | 4 (102) | 2-7/8 (73) | 4 (102) | 4-1/4 (108) | $7 / 8$ (22) | 25 (11.3) | 56 cz | 30 (13.6) | 40 (18.1) | 11 (280) | 6-5/8 (170) | 5 (130) |
| $1-1 / 2 \times 1-1 / 2 \times 7$. Model "G" | 3/4 | 5-1/2 (140) | 8 (203) | 4 (102) | 2-7/78 (73) | 4 (102) | 4-1/4 (108) | 7/8 (22) | 25 (11.3) | $56 c z$ | 35 (15.9) | Use 1 hp | 11 (280) | 6-5/8 (170) | 5 (130) |
| $1-1 / 2 \times 1-1 / 2 \times 7$. Model "H" | 1 | 5-1/2 (140) | 8 (203) | 4 (102) | 2-718 (73) | 4 (102) | 4-1/4 (108) | $7 / 8(22)$ | 25 (11.3) | 56 Cz | 40 (18.1) | 50 (22.7) | 11 (280) | 6-5/8 (170) | 5 (130) |
| $1-1 / 2 \times 1-1 / 2 \times 7$ | 1 | 5-1/2 (140) | 8 (203) | 4 (102) | 2-7/8 (73) | 4 (102) | 4-1/4 (108) | 7/8 (22) | 25 (11.3) | 56 cz | 40 (18.1) | 50 (22.7) | 11 (280) | 6-5/8 (170) | 5 (130) |
| 1-1/2 $\times 1-1 / 2 \times 7$ | 1-1/2 | 5-1/2 (140) | 8 (203) | 4 (102) | 2-718 (73) | 4 (102) | 4-1/4 (108) | $7 / 8(22)$ | 25 (11.3) | $56 c z$ | 40 (18.1) | 50 (22.7) | 11 (280) | 6-5/8 (170) | 5 (130) |
| $2 \times 2 \times 7$,Model "\|" | 3/4 | 6 (152) | 8 (203) | 4 (102) | 2-718 (73) | 4-1/4 (108) | 4-3/4 (121) | 13/16 (21) | 26 (11.8) | $56 c z$ | 35 (15.9) | Use 1 hp | 11 (280) | 6-5/8 (170) | 5 (130) |
| $2 \times 2 \times 7$ | 1 | 6 (152) | 8 (203) | 4 (102) | 2-7/8(73) | 4-1/4 (108) | 4-3/4 (121) | 13/16 (21) | 26 (11.8) | 56 cz | 40 (18.1) | 50 (22.7) | 11 (280) | 6-5/8 (170) | 5 (130) |
| 2 $2 \times 7$.Models "J" and "K" | 1-1/2 | 6 (152) | 8 (203) | 4 (102) | 2-718 (73) | 4-1/4 (108) | 4-3/4 (121) | 13/16 (21) | 26 (11.8) | * | 55 (24.9) | 60 (27.2) | 11 (280) | 6-5/8 (170) | 5 (130) |
| $2 \times 2 \times 7$ | 2 | 6 (152) | 8 (203) | 4 (102) | 2-7/8(73) | 4-1/4 (108) | 4-3/4 (121) | 13/16 (21) | 26 (11.8) | ** | 55 (24.9) | 60 (27.2) | 11 (280) | 6-5/8 (170) | 5 (130) |

## Notes

1. Dimensions and weights are approximate.
2. All weights are in pounds or kilograms (kg)
3. All dimensions are in inches or metric (mm) and may vary $\pm .25$ " $(.6 \mathrm{~mm})$.
4. Conduit box is shown in approximate position.

Dimensions are not specified (as they vary with each motor manufacturer.)
5. Add pump and motor weight for unit weight.
6. Not for construction purposes unless certified.

* 1 phase (145tcz). 3 phase (56cz)
** 1 phase (182tcz), 3 phase (145tcz)


## How To Specify In-Line Mounted Centrifugal Pump (326A)

The contractor shall furnish and install in location as shown on the plan an Aurora Pump Type 326A In-Line Centrifugal Pump, single stage design size $\qquad$ (bronze fitted) (all iron) (all bronze) construction. The pump shall have a capacity of $\qquad$ G.P.M. at $\qquad$ ft. total head and $\qquad$ specific gravity. The pump mechanical seal is to be a Buna-N bellows, Ceramic seat, and hot water carbon washer. The pump shall be capable of mounting horizontally or vertically. The pump is to be close-coupled to a NEMA motor of $\qquad$ hp, $\qquad$ phase, $\qquad$ R.P.M..(drip proof) (totally enclosed) enclosure, with stainless steel motor shaft. The motor shall be designed to Aurora Pump's specifications as to vibration limits.

## PENTAIR



