

STA-RITE® J/JB Series

General purpose centrifugal pumps



The J/JB Series Pumps have a heavy-duty cast iron construction and are offered in high and medium head models, with Noryl® or silicon bronze impeller.

APPLICATIONS

Water systems and sprinkling...
for homes, farms and industry.

SPECIFICATIONS

Body and Seal Plate: Close-grained cast iron

Base: Steel 12 gauge

Impeller: J Series – Noryl

Impeller: JB Series – Silicon bronze

Shaft: 416 stainless steel

Mechanical Seal: Carbon/ceramic, Buna-N

FEATURES

1/3 through 2-1/2 HP: High head and medium head models, with heavy-duty motors, easy service design and four-position discharge.

Drain Port: Provided for easy winterizing.

Medium Head Models: Deliver up to 110' of head with capacities to 140 GPM.

High Head Models: Deliver up to 140' of head with capacities to 90 GPM.

Easy Serviceability: All models include replaceable wear ring and feature back pull-out design.

J Series with Noryl Impellers:

Abrasion-resistant for normal applications with working temperatures to 140°F.

JB Series with Silicon Bronze:

JB pumps equipped with shaft seals rated for temperatures to 225°F.

ORDERING INFORMATION

HIGH HEAD

| Catalog Number | | HP | Pipe Tapping Sizes | | Motor Voltage | Phase | Approx. Wt. Lbs. |
|-----------------|-------------------------|-------|--------------------|--------|---------------|-------|------------------|
| Noryl® Impeller | Silicon Bronze Impeller | | Suct. | Disch. | | | |
| JHB | JBHB | 1/3 | 1-1/4" | 1" | 115/230 | 1 | 38 |
| JHC | JBHC | 1/2 | 1-1/4" | 1" | 115/230 | 1 | 39 |
| JHC3 | JBHC3 | | 1-1/4" | 1" | 208-230/460 | 3 | 39 |
| JHD | JBHD | 3/4 | 1-1/4" | 1" | 115/230 | 1 | 42 |
| JHD3 | JBHD3 | | 1-1/4" | 1" | 208-230/460 | 3 | 42 |
| JHE | JBHE | 1 | 1-1/4" | 1" | 115/230 | 1 | 45 |
| JHE3 | JBHE3 | | 1-1/4" | 1" | 208-230/460 | 3 | 45 |
| JHF | JBHF | 1-1/2 | 1-1/4" | 1" | 115/230 | 1 | 49 |
| JHF3 | JBHF3 | | 1-1/4" | 1" | 208-230/460 | 3 | 49 |
| JHG | JBHG | 2 | 1-1/2" | 1-1/4" | 115/230 | 1 | 69 |
| JHG3 | JBHG3 | | 1-1/2" | 1-1/4" | 208-230/460 | 3 | 69 |
| JHHG | JBHHG | 2-1/2 | 2" | 1-1/2" | 115/230 | 1 | 74 |
| JHHG3 | JBHHG3 | | 2" | 1-1/2" | 208-230/460 | 3 | 74 |

ORDERING INFORMATION

MEDIUM HEAD

| Catalog Number | | HP | Pipe Tapping Sizes | | Motor Voltage | Phase | Approx. Wt. Lbs. |
|-----------------|-------------------------|-------|--------------------|--------|---------------|-------|------------------|
| Noryl® Impeller | Silicon Bronze Impeller | | Suct. | Disch. | | | |
| JMB | JBMB | 1/3 | 1-1/4" | 1" | 115/230 | 1 | 38 |
| JMC | JBMC | 1/2 | 1-1/4" | 1" | 115/230 | 1 | 39 |
| JMC3 | JBMC3 | | 1-1/4" | 1" | 208-230/460 | 3 | 39 |
| JMD | JBMD | 3/4 | 1-1/4" | 1" | 115/230 | 1 | 42 |
| JMD3 | JBMD3 | | 1-1/4" | 1" | 208-230/460 | 3 | 42 |
| JME | JBME | 1 | 1-1/2" | 1-1/4" | 115/230 | 1 | 43 |
| JME3 | JBME3 | | 1-1/2" | 1-1/4" | 208-230/460 | 3 | 43 |
| JMF | JBMF | 1-1/2 | 1-1/2" | 1-1/4" | 115/230 | 1 | 54 |
| JMF3 | JBMF3 | | 1-1/2" | 1-1/4" | 208-230/460 | 3 | 54 |
| JMG | JBMG | 2 | 1-1/2" | 1-1/4" | 115/230 | 1 | 66 |
| JMG3 | JBMG3 | | 1-1/2" | 1-1/4" | 208-230/460 | 3 | 66 |
| - | JBMMG | 2-1/2 | 2" | 1-1/2" | 115/230 | 1 | 74 |
| - | JBMMG3 | | 2" | 1-1/2" | 208-230/460 | 3 | 74 |

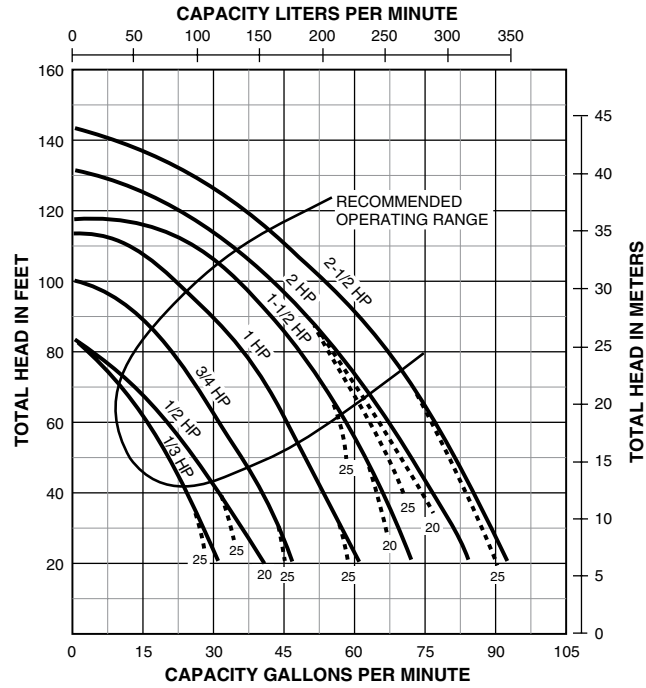
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STA-RITE® J/JB Series

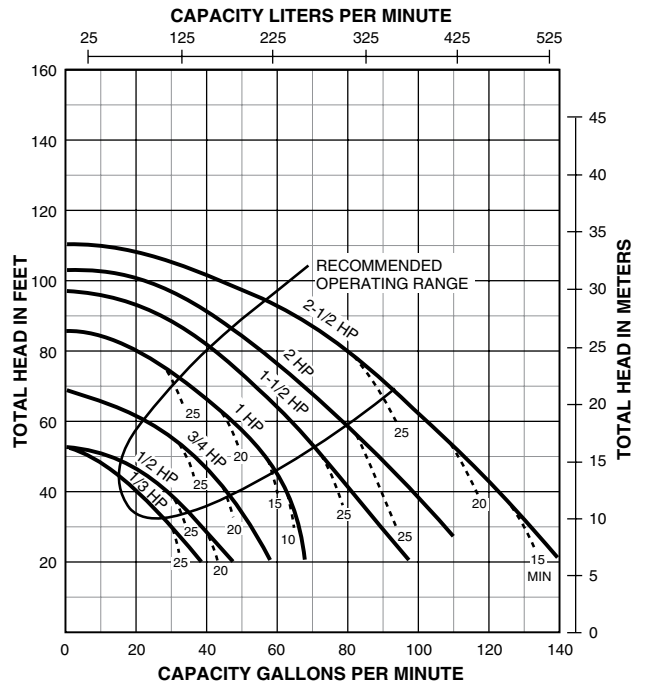
General purpose centrifugal pumps

PUMP PERFORMANCE

HIGH HEAD



MEDIUM HEAD



NOTE: Dotted lines indicate performance reduction at high suction lift.

PUMP PERFORMANCE (CAPACITY IN GALLONS PER MINUTE)

HIGH HEAD

| HP | Discharge Pressure | | Dynamic Suction Lift | | | | |
|-------|--------------------|-----------|----------------------|-----|-----|-----|-----|
| | PSI | Feet Head | 5' | 10' | 15' | 20' | 25' |
| 1/3 | 10 | 23.1 | — | 26 | 24 | 22 | 20 |
| | 20 | 46.2 | 20 | 18 | 15 | 11 | 10 |
| | 30 | 69.3 | 6 | — | — | — | — |
| 1/2 | 10 | 23.1 | — | 34 | 32 | 29 | 26 |
| | 20 | 46.2 | 25 | 21 | 18 | 15 | 11 |
| 3/4 | 10 | 23.1 | — | — | 42 | 39 | 37 |
| | 20 | 46.2 | 35 | 32 | 30 | 28 | 26 |
| 1 | 20 | 46.2 | 48 | 46 | 45 | 43 | 40 |
| | 30 | 69.3 | 38 | 35 | 31 | 28 | 25 |
| 1-1/2 | 40 | 92.4 | 23 | 20 | 15 | — | — |
| | 20 | 46.2 | 62 | 60 | 58 | 55 | 52 |
| 2 | 30 | 69.3 | 50 | 48 | 44 | 40 | 37 |
| | 40 | 92.4 | 37 | 32 | 29 | 22 | — |
| 2-1/2 | 20 | 46.2 | 71 | 68 | 66 | 62 | 60 |
| | 30 | 69.3 | 60 | 57 | 52 | 59 | 45 |
| | 40 | 92.4 | 45 | 40 | 36 | 31 | 24 |
| 2 | 50 | 115.5 | 22 | 15 | — | — | — |
| | 20 | 46.2 | 81 | 79 | 76 | 74 | 71 |
| | 30 | 69.3 | 69 | 67 | 63 | 60 | 56 |
| 2-1/2 | 40 | 92.4 | 56 | 51 | 47 | 44 | 38 |
| | 50 | 115.5 | 33 | 30 | 22 | 15 | — |

Tested and rated in accordance with Water Systems Council Standards.

NOTE: Pumps installed with a Pro-Source® tank require a 100 PSI relief valve. Pumps with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

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General purpose centrifugal pumps

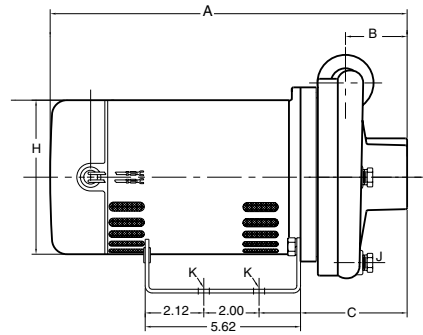
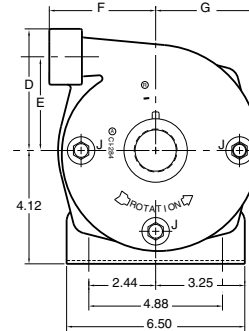
PUMP PERFORMANCE (CAPACITY IN GALLONS PER MINUTE)

MEDIUM HEAD

| HP | Discharge Pressure | | Dynamic Suction Lift | | | | |
|-------|--------------------|-----------|----------------------|-----|-----|-----|-----|
| | PSI | Feet Head | 5' | 10' | 15' | 20' | 25' |
| 1/3 | 10 | 23.1 | 32 | 27 | 18 | — | — |
| | 20 | 46.2 | — | — | — | — | — |
| 1/2 | 10 | 23.1 | 40 | 37 | 32 | 27 | 17 |
| | 20 | 46.2 | — | — | — | — | — |
| 3/4 | 10 | 23.1 | — | 50 | 46 | 42 | 32 |
| | 20 | 46.2 | 37 | 29 | 21 | — | — |
| 1 | 20 | 46.2 | 54 | 51 | 44 | 40 | 33 |
| | 30 | 69.3 | 33 | 28 | 18 | — | — |
| 1-1/2 | 20 | 46.2 | 71 | 69 | 62 | 57 | 51 |
| | 30 | 69.3 | 52 | 47 | 34 | 30 | 20 |
| 2 | 20 | 46.2 | 88 | 84 | 78 | 70 | 66 |
| | 30 | 69.3 | 67 | 60 | 50 | 45 | 40 |
| | 40 | 92.4 | 25 | 13 | — | — | — |
| 2-1/2 | 20 | 46.2 | 111 | 106 | 101 | 95 | 90 |
| | 30 | 69.3 | 90 | 83 | 77 | 70 | 60 |
| | 40 | 92.4 | 46 | 38 | 20 | — | — |

Tested and rated in accordance with Water Systems Council Standards.
 NOTE: Pumps installed with a Pro-Source® tank require a 100 PSI relief valve. Pumps with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

DIMENSIONS (IN INCHES)

HIGH HEAD

| HP | NPT Suct. | NPT Disch. | A (1 Phase) | A (3 Phase) | B | C | D | E | F | G | H | NPT J | K |
|-------|-----------|------------|-------------|-------------|---------|--------|---------|---------|-------|---------|--------|-------|----------|
| 1/3 | 1-1/4 | 1 | 13 | 13-3/8 | 2-1/16 | 5-9/16 | 4-1/2 | 3-7/16 | 3-7/8 | 3-15/16 | 5-5/8 | 1/4 | 3/8 Dia. |
| 1/2 | 1-1/4 | 1 | 11-21/32 | 13-3/8 | 2-1/16 | 5-9/16 | 4-1/2 | 3-7/16 | 3-7/8 | 3-15/16 | 5-5/8 | 1/4 | 3/8 Dia. |
| 3/4 | 1-1/4 | 1 | 11-25/32 | 13-3/8 | 2-1/16 | 5-9/16 | 4-1/2 | 3-7/16 | 3-7/8 | 3-15/16 | 5-5/8 | 1/4 | 3/8 Dia. |
| 1 | 1-1/4 | 1 | 12-25/32 | 13-7/8 | 2-1/16 | 5-9/16 | 4-1/2 | 3-7/16 | 3-7/8 | 3-15/16 | 5-5/8 | 1/4 | 3/8 Dia. |
| 1-1/2 | 1-1/4 | 1 | 13-39/64 | 14-3/8 | 2-1/16 | 5-9/16 | 4-1/2 | 3-7/16 | 3-7/8 | 3-15/16 | 5-5/8 | 1/4 | 3/8 Dia. |
| 2 | 1-1/2 | 1-1/4 | 16-3/4 | 16-15/16 | 2-13/16 | 6-5/16 | 4-27/32 | 3-13/32 | 4-5/8 | 4 | 6-7/16 | 1/4 | 3/8 Dia. |
| 2-1/2 | 2 | 1-1/2 | 17-3/4 | 17-1/4 | 2-13/16 | 6-5/16 | 4-27/32 | 3-13/32 | 4-5/8 | 4 | 6-7/16 | 1/4 | 3/8 Dia. |

MEDIUM HEAD

| | | | | | | | | | | | | | |
|-------|-------|-------|----------|----------|--------|-------|---------|-------|-------|---------|--------|-----|----------|
| 1/3 | 1-1/4 | 1 | 12-9/16 | 12-15/16 | 1-7/16 | 5-1/8 | 4-7/16 | 3-1/4 | 2-1/4 | 3-1/4 | 5-5/8 | 1/4 | 3/8 Dia. |
| 1/2 | 1-1/4 | 1 | 11-7/32 | 12-15/16 | 1-7/16 | 5-1/8 | 4-7/16 | 3-1/4 | 2-1/4 | 3-1/4 | 5-5/8 | 1/4 | 3/8 Dia. |
| 3/4 | 1-1/4 | 1 | 11-31/32 | 12-15/16 | 1-7/16 | 5-1/8 | 4-7/16 | 3-1/4 | 2-1/4 | 3-1/4 | 5-5/8 | 1/4 | 3/8 Dia. |
| 1 | 1-1/2 | 1-1/4 | 12-11/32 | 13-7/16 | 1-7/16 | 5-1/8 | 4-7/16 | 3-1/4 | 2-1/4 | 3-1/4 | 5-5/8 | 1/4 | 3/8 Dia. |
| 1-1/2 | 1-1/2 | 1-1/4 | 13-25/32 | 14-9/16 | 2 | 5-3/4 | 4-13/16 | 3-1/2 | 4-1/4 | 3-15/16 | 5-5/8 | 1/4 | 3/8 Dia. |
| 2 | 1-1/2 | 1-1/4 | 16-3/16 | 16-3/8 | 2 | 5-3/4 | 4-13/16 | 3-1/2 | 4-1/4 | 3-15/16 | 6-7/16 | 1/4 | 3/8 Dia. |
| 2-1/2 | 2 | 1-1/2 | 17-3/16 | 16-11/16 | 2 | 5-3/4 | 4-13/16 | 3-1/2 | 4-1/4 | 3-15/16 | 6-7/16 | 1/4 | 3/8 Dia. |



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