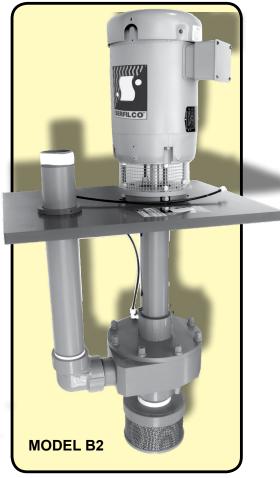
SERIES 'B' | VERTICAL PUMPS

Chemical resistant pumps & filters engineered for industry



HIGH EFFICIENCY AND LOW ENERGY USAGE FOR:

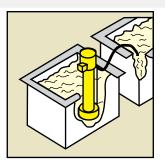
R

WASTES / ACIDS / PLATING / CHEMCIALS

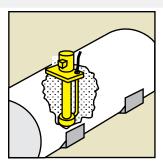
- Flows to 370 U.S. GPM or 84 Ft. TDH @ 60 Hz (1150 LPM or 18.5M @ 50 Hz)
- Pump lengths: 2 ft. to 10 ft. (.6M to 3.0M)
- Corrosion resistant, CPVC construction (See a chemical resistance chart)
- Water or product lubricated bearings
- Chemical duty, 1725 RPM motor (1.0 10.0 HP) Sealed oversized bearings; cast iron end bells; liquid/vapor seal and slinger; corrosion resistant two-part epoxy finish; 1.15 service factor.
- Centrifugal quiet, vibration-free
- Shaft vapor seal protects motor bearings and atmosphere

The Series 'B' Pump features corrosion resistant construction for deep sumps and demanding conditions. An oversized machined pump housing is utilized allowing for high flow rates using low RPM motors, thus extending pump life. A stainless steel shaft sleeved in CPVC offers unmatched strength and chemical resistance. A vapor seal between the rotating shaft and the pump column protects the motor and motor bearings. The shaft bearing and liner are positively lubricated with the product being pumped or clean water from a separate source by means of the bleed line. A spiral flush groove in the rotating bearing ensures a uniform flow of liquid across the bearing surface. The bearing liner is made of a special fluoride-resistant ceramic.

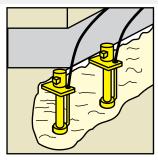
A suction extension can be utilized to pump to depths below impeller level. Thus, a shorter pump can be used, reducing shaft length and number of bearings required.



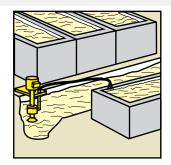
CHEMICAL TRANSFERRING



STORAGE TANK



DEEP STANDBY PUMPING when priming not possible

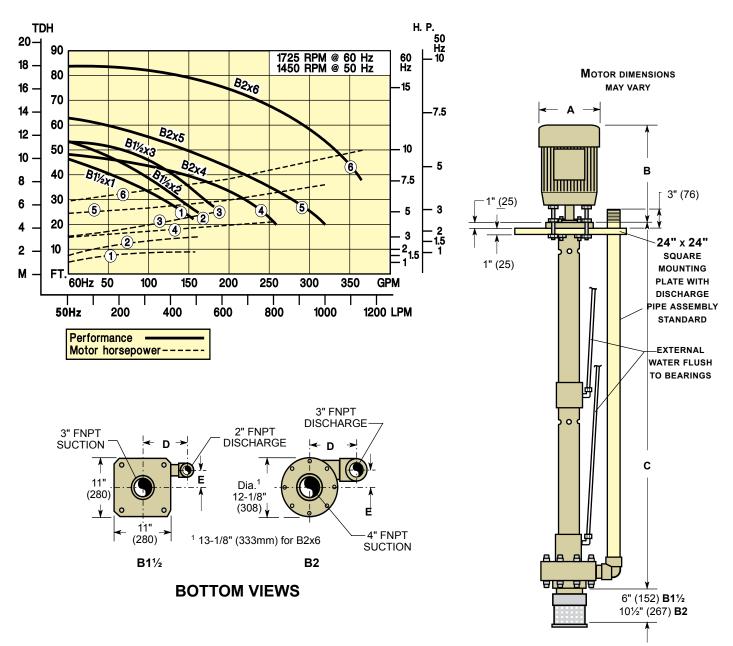


SUMP DRAINING and WASTE TREATMENT

SERIES 'B' | VERTICAL PUMPS

P-303_X Page 2

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| PUMP | | DIMENSIONS Inches (mm) | | | | | | MOTOR | APPROX. SHIPPING | |
|----------|---------|------------------------|-----------|--------|--------------|------------|-----|-------|------------------|------------------|
| MODEL | NPT | А | В | С | D | Е | HP | FRAME | WEIG | SHT ² |
| WODEL | CONNS. | 4 | В | U U | U | E | | | Lbs. | (Kg.) |
| D11/ y 1 | 0" 2 0" | 71/ (104) | 13¼ (236) | | | 2-3/4 | 1.5 | 143TC | 130 | 59 |
| B1½ x 1 | 3" x 2" | 7¼ (184) | 14¼ (362) | | 9 | (70) | 2.0 | 145TC | 135 | 61 |
| D41/ x 2 | 0 | 7¼ (184) | 14¼ (362) | | (229) | 2-7/8 | 2.0 | 145TC | 140 | 64 |
| B1½ x 2 | 3" x 2" | 8½ (216) | 15½ (394) | SELECT | | (73) | 3.0 | 182TC | 145 | 66 |
| D41/ 0 | 0" 0" | 01((040) | 15½ (394) | LENGTH | 8-1/2 | 2-5/8 | 3.0 | 182TC | 150 | 68 |
| B1½ x 3 | 3" x 2" | 8½ (216) | 17¼ (438) | | (216) | (67) | 5.0 | 184TC | 170 | 77 |
| B2 x 4 | 4" x 3" | 8½ (216) | 17¼ (438) | | 11-1/8 | 3-3/16 | 5.0 | 184TC | 170 | 77 |
| B2 x 5 | 4" x 3" | 10¼(260) | 18 (457) | | (283) | (81) | 7.5 | 213TC | 190 | 86 |
| B2 x 6 | 4" x 3" | 10¼(260) | 19 (483) | | 11-5/8 (295) | 3-3/4 (95) | 10 | 213TC | 200 | 91 |

² Add 4½ lb. (2.0 kg.) per foot (.3M) of additional pump length above 2 feet (.6M).





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Standard models are constructed of CPVC with high purity chemical resistant graphite or Rulon® (glass filled PTFE) bearing and silica-free ceramic liner for fluoride resistance. Includes threaded suction and discharge. Models B1½ have polyethylene suction strainer, Models B2 have CPVC suction strainer. The "O"-rings are EPDM (Viton optional). Models B1½ have semi-enclosed impellers, Models B2 fully-enclosed impellers. Motors are "C" face, 1725 RPM, 230-460V/3/50-60, TEFC, chemical duty, painted with two-part epoxy enamel. Pump shaft is 303 stainless steel sleeved in CPVC. Complete pump assembly offers non-metallic solution contact except titanium fasteners at each bearing (Hastelloy[®] C 257 optional). Pump lengths are available in one foot (.3M) increments. Bleed line provides water or pumped solution to bearings. (Each bearing requires 10 PSI.) All models wet-tested before shipment. Standard is external water flush. Product flush may be specified, or field converted. All models include 24" x 24" square mounting plate and discharge pipe assembly.

TO ORDER, use Price Code Number

For standard 24" - 60" pump-motor combinations, select model from TABLE I. For custom pump-motor combination, select components from TABLE II on page 4.

TABLE I

Select flow curve number providing the desired performance. Then match to Model Numbers listed below. Motor HP is non-overloading at full capacity.

| | 24" PUMP | | 36" PUMP | | |
|--------------|--|-------------------|---|-------------------|--|
| CURVE NO. | MODEL | PRICE CODE NO. | MODEL | PRICE CODE NO. | |
| 1 | B1½x1SCEY-24"C-CGL- <u>*</u> °F-H2.0-SD | 46-1024 BS | B1½ x 1SCEY-36"C-CGL- <u>*</u> °F-H2.0-SD | 46-1034 BS | |
| 2 | B1½x2SCEY-24"C-CGL- <u>*</u> °F-H3.0-SD | 46-2024 CS | B1½ x 2SCEY-36"C-CGL- <u>*</u> ºF-H3.0-SD | 46-2034 CS | |
| 3 | B1 ¹ ⁄ ₂ x 3SCEY-24"C-CGL- <u>*</u> °F-H5.0-SD | 46-3024 DS | B1½ x 3SCEY-36"C-CGL- <u>*</u> ºF-H5.0-SD | 46-3034 DS | |
| 4 | B2 x 4SCEY-24"C-CGL- <u>*</u> °F-H5.0-SD | 46-4024 DS | B2 x 4SCEY-36"C-CGL- <u>*</u> °F-H5.0-SD | 46-4034 DS | |
| 5 | B2 x 5SCEY-24"C-CGL- <u>*</u> °F-H7.5-SD | 46-5024 ES | B2 x 5SCEY-36"C-CGL- <u>*</u> ºF-H7.5-SD | 46-5034 ES | |
| 6 | B2x6SCEY-24"C-CGL- <u>*</u> °F-H10.0-SD | 46-6024 FS | B2 x 6SCEY-36"C-CGL- <u>*</u> ºF-H10.0-SD | 46-6034 FS | |

| | 48" PUMP | | 60" PUMP | | |
|--------------|---|-------------------|---|-------------------|--|
| CURVE NO. | MODEL | PRICE CODE NO. | MODEL | PRICE CODE NO. | |
| 1 | B1½x1SCEY-48"C-CGL- <u>*</u> °F-H2.0-SD | 46-1044 BS | B11/2x1SCEY-60"C-CGLX2- * °F-H2.0-SD | 46-1055 BS | |
| 2 | B1½x2SCEY-48"C-CGL- <u>*</u> °F-H3.0-SD | 46-2044 CS | B1½x2SCEY-60"C-CGLX2- <u>*</u> °F-H3.0-SD | 46-2055 CS | |
| 3 | B1½x3SCEY-48"C-CGL- <u>*</u> °F-H5.0-SD | 46-3044 DS | B1 ¹ ⁄ ₂ x3SCEY-60"C-CGLX2- <u>*</u> °F-H5.0-SD | 46-3055 DS | |
| 4 | B2x4SCEY-48"C-CGLx2- <u>*</u> °F-H5.0-SD | 46-4045 DS | B2 x 4SCEY-60"C-CGLX2- <u>*</u> °F-H5.0-SD | 46-4055 DS | |
| 5 | B2x5SCEY-48"C-CGLx2- <u>*</u> °F-H7.5-SD | 46-5045 ES | B2 x 5SCEY-60"C-CGLX2- <u>*</u> °F-H7.5-SD | 46-5055 ES | |
| 6 | B2x6SCEY-48"C-CGLx2- <u>*</u> °F-H10.0-SD | 46-6045 FS | B2x6SCEY-60"C-CGLX2- <u>*</u> °F-H10.0-SD | 46-6055 FS | |

* Include operating temperature in Model Number.



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 TABLE II
 Determine pump model for a specifie GPM, TDH, pump length and bearing.

 Select performance point on curve and size horsepower from corresponding number dotted line vertically above

or below performance point. Read required HP at right ordinate and multiply by specific gravity. Select pump model components and Price Code Number from Table II.

| PUMP | | | | | |
|---------------|-----------------|-------------------|--|--|--|
| PUMP CURVE | MODEL NUMBER | PRICE CODE NO. | | | |
| 1 | B1½ x 1SCEY | 46-1 | | | |
| 2 | B1½ x 2SCEY | 46-2 | | | |
| 3 | B11/2 x 3SCEY | 46-3 | | | |
| 4 | B2 x 4SCEY | 46-4 | | | |
| 5 | B2 x 5SCEY | 46-5 | | | |
| 6 | B2 x 6SCEY | 46-6 | | | |

| | - LENGTH (Dimension C) | | | | | | |
|--------|------------------------|-------------|-------|---------|----------|--|--|
| | | NO. of | | ADD TO | | | |
| | | | RINGS | MODEL | PRICE | | |
| FT. | (M) | B1 ½ | B2 | NUMBER | CODE NO. | | |
| 23 | .6 | 1 | 1 | - 24"C | 02 | | |
| | .9 | 1 | 1 | - 36"C | 03 | | |
| 4 5 | 1.2 | 1 | 2 | - 48"C | 04 | | |
| | 1.5 | 2 | 2 | - 60"C | 05 | | |
| 6 | 1.8 | 2 | 2 | - 72"C | 06 | | |
| 7 | 2.1 | 2 | 3 | - 84"C | 07 | | |
| 8 | 2.4 | 2 | 3 | - 96"C | 08 | | |
| 9 | 2.7 | 3 3 | 3 | - 108"C | 09 | | |
| 10 | 3.1 | 3 | 3 | - 120"C | 10 | | |

Read:"Tips for the successful operation of sump pumps". See Technical Bulletin TP-113.

| -BEARING & LINER | | | | | | |
|------------------|--------|----------------------|----------|--|--|--|
| MATERIAL | OF | | | | | |
| NO. | BRGS. | MODEL | PRICE | | | |
| | ADD TO | NO. | CODE NO. | | | |
| Ceramic & | 1 | - CGL- <u>*</u> °F | 4 | | | |
| Graphite | 2 | - CGLx2- <u>*</u> °F | 5 | | | |
| Max. 160°F | 3 | - CGLx3- <u>*</u> °F | 6 | | | |
| Ceramic & | 1 | - CRL- <u>*</u> °F | 1 | | | |
| Rulon | 2 | - CRLx2- <u>*</u> °F | 2 | | | |
| Max. 140°F | 3 | - CRLx3- <u>*</u> °F | 3 | | | |

* Include operating temperature in Model Number.

| | - MOTOR & MOUNTING PLATE | | | | | |
|----------|---------------------------------|-----------------|----|--|--|--|
| | TEFC, 230-4 | 460V/3/50-60 ** | | | | |
| | | ADD | ΤΟ | | | |
| RPM | RPM HP (kw) MODEL PF NO. COE | | | | | |
| | 1.0 (.75) | - H1.0-SD | GS | | | |
| 1725@ | 1.5 (1.1) | - H1.5-SD | AS | | | |
| 60 Hz | 2.0 (1.5) | - H2.0-SD | BS | | | |
| | 3.0 (2.2) | - H3.0-SD | CS | | | |
| 1450@ | 5.0 (3.7) | - H5.0-SD | DS | | | |
| 50 Hz ** | 7.5 (5.6) | - H7.5-SD | ES | | | |
| | 10.0 (7.5) | - H10.0-SD | FS | | | |

** B2 Models are 230-460V/3/60 as standard 230-380-415V/3/50 FOR 50 Hz models

OPTIONAL

| DESCRIPTION | ADD SUFFIX to MODEL NO. | ADD TO PRICE CODE NUMBER |
|-----------------------------------|-------------------------------|--------------------------------|
| Viton "O"-rings | -V | V |
| Hastelloy C 257 bearing fasteners | -HC | Х |
| 50 Hz - B2 Models | -5 | 5 |
| Round -24" diameter x 1" thick | change -SD to -CD in model | replace S with C in PCN |

| DESCRIPTION | ADD SUFFIX to | USE SEPERATE PRICE CODE | | |
|--------------------|------------------|----------------------------|---------|--|
| | MODEL NO. | B1 1/2 | B2 | |
| Suction extension, | -K12" | 46-0081 | 46-0089 | |
| CPVC pipe, | -K24" | 46-0082 | 46-0090 | |
| threaded both ends | -K36" | 46-0083 | 46-0091 | |

Consult Sales Dept. for explosion-proof motors, custom pump stations, motor starters, level controls and Dri-Stop flow switch for bearing protection.

F.O.B. Northbrook, Illinois

Specifications subject to change without notice.

Registered trademarks:

Hastelloy - Haynes, International Viton - DuPont Dow Elastomers Rulon - Dixon