VIKING® HEAVY DUTY PUMPS
SERIES 125 AND 4125
STANDARD CONSTRUCTION

FEATURES

SERIES 125 Pumps
Cutaway View — (Packed Type)
8-15-30 GPM Sizes
(2-3-7 m³/hr)

SERIES 4125
Cutaway View— (Mechanical Seal Type)
50-75-100-135 GPM Sizes
(11-17-23-31 m³/hr)

Note: 50 and 75 GPM sizes have seal located in stuffing box area.

SERIES 125 Pumps
Cutaway View— (Packed Type)
140-200-300-420-500 GPM Sizes
(32-45-68-95-114 m³/hr)

Note: 500 GPM ("QS" size) has opposite ports as standard.

MECHANICAL SEAL (SERIES 4125)

"G"-"HL", "K"-"LL" SIZES

"AK", "AL", "LS"-"M" SIZES

① Bellows
② O-Ring
③ Rotating Face
④ Stationary Seat
⑤ Metal Retainer
⑥ Spring

① Bellows
② O-Ring
③ Rotating Face
④ Stationary Seat
⑤ Metal Retainer
⑥ Spring

⑦ Set Collar
⑧ Seal Holder
⑨ Seal Plate

REVOLVABLE PUMP CASING
(Standard Equipment)
All Series 125 and 4125 pumps are equipped with pump casings that can be turned to eight positions except the "LO", "LL", and "QS" sizes. These can be turned in all positions except for a port in the 6 o'clock position. Relief valve must point to suction port in all cases.

OVERPRESSURE RELIEF VALVE
(Standard Equipment)
Valve permits bypassing of liquids and prevents excessive pressures in the discharge line. If reversing pump, remove valve and turn end for end. Relief valve must point to suction port in all cases. All valves set at 50 lbs. unless otherwise requested. If overpressure relief valve is not used, pumping system should include some form of overpressure protection, e.g., relief valve in discharge line, torque limiting devices, rupture discs, etc.

SERIES 4125

GPM 8-15-30-50-75-100-135-140-200-300-420-500
(② Nominal Rating)

(① Pressure Range
200 PSI (14 BAR) for 100 SSU (21 cSt) and above
100 PSI (7 BAR) for below 100 SSU (21 cSt)

② Temperature Range
-60°F. to +650°F. (-51°C. to +343°C.)

③ Viscosity Range
28 SSU to 2,000,000 SSU
(0.1 cP to 440,000 cSt)

It is the unique and unusually simple construction that has made our rotary pumps so adaptable to so many diversified installations. They possess excellent vacuum developing characteristics and operate equally well in either direction. Because of the cushioned action in providing a continuous and steady stream of liquid without foaming or churning, it is adaptable to an unlimited number of industrial applications.

The rugged construction of these heavy-duty pumps assures long life and peak, trouble-free operation on normal-duty installation and outstanding performance when handling liquids at greater pressures.

These heavy-duty pumps are furnished as standard with packed-type or mechanical seal construction for shaft protection and prevention of leakage. Packed pumps provide extra-deep stuffing box. The rotary-type mechanical seal works with, rather than against, pressure. It is self-adjusting and seals without leakage. Because of its method of sealing it prevents scoring of the pump drive shaft.

The Series 4125 mechanical seal pumps can handle liquids with viscosities up to 15,000 SSU. Special seals for higher viscosities are available; consult factory.

① Values shown represent minimums or maximums. Some special construction or consideration may be required before a cataloged pump can be applied to an application involving maximum pressure or minimum or maximum temperature and/or viscosity. Certain models have restrictions in pressure and/or viscosities. See specifications, page 141.2, and performance curves.

② Nominal capacities based on handling thin liquids at low pressures.

Metric conversions are based on US measurements and rounded to the nearest whole number.
### Unmounted Pumps

This series of heavy-duty pumps is available either unmounted or mounted as shown on following pages. Available with packed stuffing box or Buna-N mechanical seal with carbon rotating and Ni-Resist stationary faces. The integral thrust bearing is designed to handle heavy-duty pumping jobs without problems of end play and distortion. For increased versatility of installation and complete selection of ports, many of the pump casings are designed so they can be rotated on the bracket to any 45° or 90° angle from that shown in the illustrations. See revolvable casing feature on Page 141.1. Overpressure relief valve on head is standard for this series. To permit use of this type pump in a greater range of applications, some sizes are available with jacketed head plate. For heavy-duty pumps with jacketed bracket and head, see Catalog Section 142.

**Dimensions for Unmounted Pumps**—See Page 141.8. **Performance Data for Unmounted Pumps**—See Pages 141.15 through 141.42.

### CONSTRUCTION — SERIES 125 AND ® 4125 (“G” THROUGH “M” SIZES)

<table>
<thead>
<tr>
<th>Pump Construction</th>
<th>Casing</th>
<th>Head</th>
<th>Bracket</th>
<th>Rotor</th>
<th>Idler</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Construction</td>
<td>Iron</td>
<td>Iron</td>
<td>Iron</td>
<td>Iron</td>
<td>Steel</td>
</tr>
<tr>
<td>® Steel Fitted</td>
<td>Iron</td>
<td>Iron</td>
<td>Iron</td>
<td>Steel</td>
<td>Bronze</td>
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<tr>
<td>® Bronze Fitted</td>
<td>Iron</td>
<td>Iron</td>
<td>Iron</td>
<td>Bronze</td>
<td>Bronze</td>
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<table>
<thead>
<tr>
<th>Rotor Shaft And Idler Pin</th>
<th>Bushings</th>
<th>Mechanical Seal</th>
<th>Internal Pressure Relief Valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idler</td>
<td>Bracket</td>
<td>Idler</td>
<td>Bracket</td>
</tr>
<tr>
<td>Packed</td>
<td>Mechanical Seal</td>
<td></td>
<td></td>
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</tbody>
</table>

### Specifications — Series 125 and ® 4125 Unmounted Pumps

<table>
<thead>
<tr>
<th>Model Numbers</th>
<th>Port Size</th>
<th>Nominal Pump Rating</th>
<th>Maximum Hydrotatic Pressure</th>
<th>Steel Fitted Construction Recommended Above This Viscosity</th>
<th>Maximum Recommended Discharge Pressure When Handling 100 SSU Liquid At Nominal Rated Speeds</th>
<th>Maximum Recommended Temperature for Catalyzed Pump °F, °C</th>
<th>Approximate Shipping Weight With Valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125</td>
<td>1</td>
<td>8 (2)</td>
<td>1800</td>
<td>400 (28)</td>
<td>@ 7,500 (1,650)</td>
<td>200</td>
<td>300 (149) 225 (107) 22 (10)</td>
</tr>
<tr>
<td>H125</td>
<td>1 1/2</td>
<td>15 (3)</td>
<td>1800</td>
<td>400 (28)</td>
<td>25,000 (5,500)</td>
<td>200</td>
<td>300 (149) 225 (107) 38 (17)</td>
</tr>
<tr>
<td>HL125</td>
<td>1 1/2</td>
<td>30 (7)</td>
<td>1800</td>
<td>400 (28)</td>
<td>7,500 (1,650)</td>
<td>200</td>
<td>300 (149) 225 (107) 40 (18)</td>
</tr>
<tr>
<td>AK125</td>
<td>2</td>
<td>50 (11)</td>
<td>1200</td>
<td>400 (28)</td>
<td>@ 25,000 (5,500)</td>
<td>150</td>
<td>300 (149) 225 (107) 78 (35)</td>
</tr>
<tr>
<td>AL125</td>
<td>2</td>
<td>75 (17)</td>
<td>1200</td>
<td>400 (28)</td>
<td>@ 25,000 (5,500)</td>
<td>150</td>
<td>300 (149) 225 (107) 81 (37)</td>
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<tr>
<td>K125</td>
<td>2</td>
<td>75 (17)</td>
<td>760</td>
<td>400 (28)</td>
<td>25,000 (5,500)</td>
<td>200</td>
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<td>760</td>
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<td>L125</td>
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<td>200</td>
<td>300 (149) 225 (107) 155 (70)</td>
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<tr>
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<td>3</td>
<td>150 (32)</td>
<td>640</td>
<td>400 (28)</td>
<td>25,000 (5,500)</td>
<td>200</td>
<td>300 (149) 225 (107) 175 (79)</td>
</tr>
<tr>
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<td>3</td>
<td>200 (45)</td>
<td>640</td>
<td>400 (28)</td>
<td>25,000 (5,500)</td>
<td>200</td>
<td>300 (149) 225 (107) 190 (86)</td>
</tr>
<tr>
<td>Q125</td>
<td>4</td>
<td>300 (68)</td>
<td>520</td>
<td>400 (28)</td>
<td>7,500 (1,650)</td>
<td>150</td>
<td>300 (149) 225 (107) 440 (200)</td>
</tr>
<tr>
<td>QS125</td>
<td>6</td>
<td>500 (114)</td>
<td>520</td>
<td>400 (28)</td>
<td>75,000 (16,500)</td>
<td>150</td>
<td>300 (149) 225 (107) 540 (245)</td>
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<tr>
<td>M125</td>
<td>6</td>
<td>420 (95)</td>
<td>420</td>
<td>400 (28)</td>
<td>25,000 (5,500)</td>
<td>150</td>
<td>300 (149) 225 (107) 600 (272)</td>
</tr>
</tbody>
</table>

© Buna-N elastomer used in mechanical seal of Series 4125 pumps. Viton®, Neoprene, and PTFE mechanical seals also available.

© “G,” “Q,” and “QS” sizes have steel idler.

© For mechanical seal pumps on applications with viscosities above 15,000 SSU (3,300 cSt), provide details for recommendation.

© Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.

© Standard seal can be used from -20°F to +225°F. With special construction, temperatures from -60°F to +650°F can be handled with this series pumps.

© Nominal rating based on handling thin liquids.

© “AK,” “AL,” “KK,” “LS,” and “QS” sizes have ductile iron rotor. For maximum recommended discharge pressures when handling other viscosities and/or other speeds, see performance curves. Performance curves also show preferred constructions. If suction pressure exceeds 50 PSIG (3 BAR), consult factory.

© Check factory before using bronze rotors at viscosities normally requiring steel-fitted construction. “G,” “AK,” “AL,” “LS,” and “QS” sizes not available in bronze-fitted construction.

© “AK,” “AL,” “LS,” “Q,” “QS,” and “M” 4125 models furnished with carbon graphite bracket bushings and mechanical seal is mounted in stuffing box. Mechanical seal is mounted behind rotor in “G,” “H,” “HL,” “K,” “KK,” “L,” “LQ,” and “LL” pumps.

© “AK” and “AL” sizes not available in steel-fitted construction.

Viton® — Registered trademark of DuPont Performance Elastomers.
Heavy-duty pump Series 125 and 4125 are available with helical gear reducers that have been specifically developed for efficient operation with heavy-duty pumps. These rugged, compact, exceptionally quiet gear reducers come in three sizes: the “small” A size, “medium” B size, and “large” C size and are all bracket mounted requiring flexible couplings for both input and output shafts.

The “A” size reducer, available with four gear ratios (2.24, 2.76, 3.43, and 4.17 to 1), is ideally suited for use with the “G”, “H”, “HL”, “AK” and “AL” size pumps. With the “A” size reducer and 1200 or 1800 RPM motors, the “G”, “H”, “HL”, “AK”, and “AL” size pumps can be used to cover a capacity range to 51 GPM.

The medium size “B” helical gear reducer is available with eight gear ratios from 1.87 to 1 to 7.65 to 1. This size normally is used with pump sizes “AK” through “LS”. With the “B” reducer, “AK” through “LS” pumps driven by 1200 or 1800 RPM motors can be used to cover a capacity range to 213 GPM.

The large “C” size reducer also is available with seven gear ratios from 2.21 to 1 to 7.65 to 1. It is normally used with the “KK” through “M” size pumps. With the “C” reducer, “KK” through “M” size pumps driven by 1200 or 1800 RPM motors can cover a capacity range to 500 GPM.

Dimensions for “R” Drive Units— See Pages 141.9 and 141.10. Performance Data for “R” Drive Units—See Pages 141.15 through 141.42.
### VIKING HELICAL GEAR REDUCER UNITS ("R" DRIVE)

#### SPECIFICATIONS — "R" DRIVE UNITS

<table>
<thead>
<tr>
<th>Model Numbers</th>
<th>Nominal Pump Rating</th>
<th>Maximum Hydro-Static Pressure</th>
<th>Steel-Fitted Construction Recommended Above This Viscosity</th>
<th>Maximum Recommended Discharge Pressure When Handling 100 SSU Liquid at Nominal Rated Speeds</th>
<th>Maximum Recommended Temperature For Cataloged Pump °F (°C)</th>
<th>Approximate Shipping Weight with Valve (Less Power) Pounds (KG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G125R</td>
<td>8 (2) 1800</td>
<td>7,500 (1,650)</td>
<td>200</td>
<td>300 (149) 225 (107)</td>
<td>109 (49)</td>
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<tr>
<td>H125R</td>
<td>15 (3) 1800</td>
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<td>200</td>
<td>300 (149) 225 (107)</td>
<td>125 (57)</td>
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<tr>
<td>HL125R</td>
<td>30 (7) 1800</td>
<td>7,500 (1,650)</td>
<td>200</td>
<td>300 (149) 225 (107)</td>
<td>130 (59)</td>
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<td>AK125R</td>
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<td>150</td>
<td>300 (149) 225 (107)</td>
<td>170 (77)</td>
<td>300 (136)</td>
</tr>
<tr>
<td>AL125R</td>
<td>75 (17) 1200</td>
<td>25,000 (5,500)</td>
<td>150</td>
<td>300 (149) 225 (107)</td>
<td>173 (79)</td>
<td>303 (138)</td>
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<td>K125R</td>
<td>75 (17) 780</td>
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<td>200</td>
<td>300 (149) 225 (107)</td>
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<td>327 (146)</td>
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<tr>
<td>KK125R</td>
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<td>200</td>
<td>300 (149) 225 (107)</td>
<td>...</td>
<td>334 (152)</td>
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<tr>
<td>L125R</td>
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<td>200</td>
<td>300 (149) 225 (107)</td>
<td>...</td>
<td>380 (173)</td>
</tr>
<tr>
<td>LQ125R</td>
<td>135 (31) 640</td>
<td>25,000 (5,500)</td>
<td>200</td>
<td>300 (149) 225 (107)</td>
<td>...</td>
<td>415 (188)</td>
</tr>
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<td>LL125R</td>
<td>140 (32) 520</td>
<td>25,000 (5,500)</td>
<td>200</td>
<td>300 (149) 225 (107)</td>
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<tr>
<td>LS125R</td>
<td>200 (45) 640</td>
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<td>150</td>
<td>300 (149) 225 (107)</td>
<td>...</td>
<td>490 (222)</td>
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<tr>
<td>Q125R</td>
<td>300 (68) 520</td>
<td>7,500 (1,650)</td>
<td>150</td>
<td>300 (149) 225 (107)</td>
<td>...</td>
<td>1000 (499)</td>
</tr>
<tr>
<td>QS125R</td>
<td>500 (114) 520</td>
<td>75,000 (16,500)</td>
<td>150</td>
<td>300 (149) 225 (107)</td>
<td>...</td>
<td>1100 (499)</td>
</tr>
<tr>
<td>M125R</td>
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<td>25,000 (5,500)</td>
<td>150</td>
<td>300 (149) 225 (107)</td>
<td>...</td>
<td>1140 (518)</td>
</tr>
</tbody>
</table>

1. Buna-N elastomer used in mechanical seal of Series 4125 pumps. Viton® Neoprene, and PTFE mechanical seals also available.
2. For mechanical seal pumps on applications with viscosities above 15,000 SSU (3,300 cSt), provide details for recommendation.
3. Standard seal can be used form -20°F. to +225°F. With special construction, temperatures from -60°F. to +650°F. can be handled with this series pumps.
4. Ports suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.
5. Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.
6. Nominal rating based on handling thin liquids.
7. Standard seal can be used form -20°F. to +225°F. With special construction.
8. No radial load on pump or motor shafts.
9. Self-supported. Not hung on pump or motor shafts.
10. Reducers easily adjustable to different motor center heights.
11. "A" reducers have ¾” dia., ¾” key input and output shafts; "B" reducers have 1” dia., ¾” key input shaft and 1½” dia., ¾” key output shaft; "C" reducers have 1¾” dia., ¾” key input and output shafts.

**OUTSTANDING FEATURES**

1. Mounts NEMA standard motors, 1200 or 1800 RPM. (5 HP, 1800 RPM maximum with “A” reducer; 15 HP, 1800 RPM maximum with “B” reducer; and 50 HP, 1800 RPM maximum with “C” reducer.)
2. Complete reducers within a size may be interchanged on a pump unit to obtain desired pump speeds and capacities. Thus the four gear ratios within the “A” size reducer may be interchanged within the size by selecting the proper pinion and gear of a common ratio. Similarly, all eight “B” reducers are interchangeable on each respective series of “B” reducer units. All seven “C” reducers are interchangeable on each respective series of “C” reducer units.
3. Quiet operation. High hardness helical gears run in a bath of oil.
4. Compact, narrow and low to fit in small space and low overhead.
5. Pump, motor, or reducer can be removed without disturbing the other two components.
6. Units with “A”, “B” and “C” reducers have standard flexible coupling with guard between power and reducer as well as between reducer and pump.
7. Oil and weatherproof for outdoor service.
8. Ball bearings throughout.
9. Reducers easily adjustable to different motor center heights.
10. Self-supported. Not hung on pump or motor shafts. No radial load on pump or motor shafts.
11. “A” reducers have ¾” dia., ¾” key input and output shafts; “B” reducers have 1” dia., ¾” key input shaft and 1½” dia., ¾” key output shaft; “C” reducers have 1¾” dia., ¾” key input and output shafts.

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VIKING HELICAL GEAR REDUCTION UNITS ("R" DRIVE)

HELICAL REDUCER HORSEPOWER TABLE — "A" SIZE

<table>
<thead>
<tr>
<th>HIGH SPEED SHAFT INPUT RPM</th>
<th>GEAR REDUCER RATIOS &quot;A&quot; SIZE</th>
<th>2.24:1</th>
<th>2.76:1</th>
<th>3.43:1</th>
<th>4.17:1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1750</td>
<td></td>
<td>780</td>
<td>640</td>
<td>520</td>
<td>420</td>
</tr>
</tbody>
</table>
|                           |                             | 6.1    | 4.9    | 3.8    | 3.1    | LOW SPEED SHAFT RPM
| 1450                      |                             | 640    | 520    | 420    | 350    | MAXIMUM REDUCER HP
|                           |                             | 5.2    | 4.2    | 3.2    | 2.7    |
| 1150                      |                             | 520    | 420    | 350    | 280    | LOW SPEED SHAFT RPM
|                           |                             | 4.3    | 3.4    | 2.6    | 2.2    |
| 950                       |                             | 420    | 350    | 280    | 230    | LOW SPEED SHAFT RPM
|                           |                             | 3.6    | 2.9    | 2.2    | 1.8    | MAXIMUM REDUCER HP

① For input speeds higher than 1750 RPM, consult the factory.
② Horsepower ratings based on 8-10 hours operation per day, electric motor drive. See Catalog Section 610 for specific reducer sizing information.

HELICAL REDUCER HORSEPOWER TABLE — "B" SIZE

<table>
<thead>
<tr>
<th>HIGH SPEED SHAFT INPUT RPM</th>
<th>GEAR REDUCER RATIOS &quot;B&quot; SIZE</th>
<th>1.87:1</th>
<th>2.24:1</th>
<th>2.76:1</th>
<th>3.40:1</th>
<th>4.19:1</th>
<th>5.06:1</th>
<th>6.27:1</th>
<th>7.65:1</th>
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<tbody>
<tr>
<td>1750</td>
<td></td>
<td>950</td>
<td>780</td>
<td>640</td>
<td>520</td>
<td>420</td>
<td>350</td>
<td>280</td>
<td>230</td>
</tr>
</tbody>
</table>
|                           |                             | 19.0   | 17.0   | 15.0   | 13.0   | 11.0   | 9.5    | 7.6    | 6.4    | LOW SPEED SHAFT RPM
| 1450                      |                             | 780    | 640    | 520    | 420    | 350    | 280    | 230    | 190    | MAXIMUM REDUCER HP
|                           |                             | 17.3   | 15.5   | 13.4   | 11.6   | 9.9    | 8.5    | 6.4    | 5.4    |
| 1150                      |                             | 640    | 520    | 420    | 350    | 280    | 230    | 190    | 155    | LOW SPEED SHAFT RPM
|                           |                             | 16.5   | 14.0   | 11.6   | 10.1   | 8.5    | 7.3    | 5.3    | 4.4    |
| 950                       |                             | 520    | 420    | 350    | 280    | 230    | 190    | 155    | 125    | LOW SPEED SHAFT RPM
|                           |                             | 15.5   | 12.8   | 10.1   | 9.0    | 7.6    | 6.0    | 4.3    | 3.7    | MAXIMUM REDUCER HP

① For input speeds higher than 1750 RPM, consult the factory.
② Horsepower ratings based on 8-10 hours operation per day, electric motor drive. See Catalog Section 610 for specific reducer sizing information.

HELICAL REDUCER HORSEPOWER TABLE — "C" SIZE

<table>
<thead>
<tr>
<th>HIGH SPEED SHAFT INPUT RPM</th>
<th>GEAR REDUCER RATIOS &quot;C&quot; SIZE</th>
<th>2.21:1</th>
<th>2.80:1</th>
<th>3.31:1</th>
<th>4.21:1</th>
<th>5.08:1</th>
<th>6.24:1</th>
<th>7.95:1</th>
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</thead>
<tbody>
<tr>
<td>1750</td>
<td></td>
<td>780</td>
<td>640</td>
<td>520</td>
<td>420</td>
<td>350</td>
<td>280</td>
<td>230</td>
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</tbody>
</table>
|                           |                             | 49.8   | 43.5   | 39.0   | 32.4   | 26.6   | 19.7   | 18.0   | 15.2   | LOW SPEED SHAFT RPM
| 1450                      |                             | 640    | 520    | 420    | 350    | 280    | 230    | 180    | 145    | MAXIMUM REDUCER HP
|                           |                             | 45.3   | 36.6   | 32.8   | 27.2   | 22.3   | 16.7   | 12.8   | 145    |
| 1150                      |                             | 520    | 420    | 350    | 280    | 230    | 190    | 145    | 12.6   | LOW SPEED SHAFT RPM
|                           |                             | 40.1   | 30.0   | 26.8   | 22.2   | 18.2   | 13.8   | 10.4   | 12.6   |
| 950                       |                             | 420    | 350    | 280    | 230    | 190    | 155    | 120    | 10.4   | MAXIMUM REDUCER HP
|                           |                             | 29.1   | 24.7   | 22.1   | 18.3   | 15.0   | 11.4   | 10.4   | 10.4   |

① For input speeds higher than 1750 RPM, consult the factory.
② Horsepower ratings based on 8-10 hours operation per day, electric motor drive. See Catalog Section 610 for specific reducer sizing information.
VIKING® HEAVY DUTY PUMPS
SERIES 125 AND 4125

GEAR REDUCER UNITS ("P" DRIVE) AND DIRECT DRIVE UNITS ("D" DRIVE)

Heavy-duty Series 125 and 4125 packed and mechanical seal pumps in sizes from “K” through “M” are available in the “P” drive arrangement. These heavy-duty units are mounted on formed steel bases (“K” through “LS” sizes) and structural or formed steel bases (“Q” through “M” sizes) as illustrated above.

All mount separate heavy-duty reducers with flexible couplings between pump, reducer, and motor. Coupling guards as illustrated are standard construction. Contact factory for specifications and motor horsepower range.

Dimensions for “P” Drive Units — Consult Factory.
Performance Data for “P” Drive Units — See Pages 142.27 through 141.42.

The Direct Drive “D” mounting is specifically designed for compactness and quietness of operation. In this type assembly the pump is mounted on one end of a rectangular formed steel base and connected to a motor by means of a flexible coupling with guard. “G,” “H,” and “HL” sizes can be directly connected to 1800 RPM motors as well as gearhead motors. “AK” and “AL” size pumps are direct connected to 1200 RPM motors or gearhead motors providing high-capacity, compact pumping unit.

Dimensions for “D” Drive Units (“G” through “AL” sizes)— See Page 141.9.
Performance Data for “D” Drive Units—See Pages 141.15 through 141.42.
### V-Belt Drive Units ("V" Drive)

V-belt driven line of heavy-duty Series 125 and 4125 pumps are all mounted on formed welded steel bases. Pumps mount on pads to accept totally enclosed V-belt drive. All units in this series feature standard pump shaft extension with totally guarded V-driven pulley mounted on end of heavy-duty pump shaft.

### Specifications — "V" Drive Units

<table>
<thead>
<tr>
<th>Model Numbers</th>
<th>Port Size</th>
<th>Nominal Pump Rating</th>
<th>Maximum Hydrostatic Pressure</th>
<th>Steel-Fitted Construction Recommended Above This Viscosity</th>
<th>Maximum Recommended Discharge Pressure When Handling 100 SSU Liquid at Nominal Rated Speeds</th>
<th>Maximum Recommended Temperature for Cataloged Pump, °F (°C.)</th>
<th>Approximate Shipping Weight With Valve (Less Power)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packed</td>
<td>Mech. Seal</td>
<td>GPM (m³/hr)</td>
<td>RPM</td>
<td>PSIG (BAR)</td>
<td>SSU (cSt)</td>
<td>PSIG</td>
<td>Packed</td>
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<tr>
<td>G125V</td>
<td>G4125V</td>
<td>1</td>
<td>8 (2)</td>
<td>1800</td>
<td>400 (28)</td>
<td>7,500 (1,650)</td>
<td>200</td>
</tr>
<tr>
<td>H125V</td>
<td>H4125V</td>
<td>1½</td>
<td>15 (3)</td>
<td>1800</td>
<td>400 (28)</td>
<td>25,000 (5,500)</td>
<td>200</td>
</tr>
<tr>
<td>HL125V</td>
<td>HL4125V</td>
<td>1½</td>
<td>30 (7)</td>
<td>1800</td>
<td>400 (28)</td>
<td>7,500 (1,650)</td>
<td>200</td>
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<tr>
<td>K125V</td>
<td>K4125V</td>
<td>2</td>
<td>75 (17)</td>
<td>780</td>
<td>400 (28)</td>
<td>25,000 (5,500)</td>
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</tr>
<tr>
<td>KK125V</td>
<td>KK4125V</td>
<td>2</td>
<td>100 (23)</td>
<td>780</td>
<td>400 (28)</td>
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<tr>
<td>L125V</td>
<td>L4125V</td>
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<td>640</td>
<td>400 (28)</td>
<td>25,000 (5,500)</td>
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<td>LL125V</td>
<td>LL4125V</td>
<td>2½</td>
<td>135 (31)</td>
<td>640</td>
<td>400 (28)</td>
<td>25,000 (5,500)</td>
<td>200</td>
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<tr>
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<td>LST4125V</td>
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<td>400 (28)</td>
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<tr>
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<td>M125V</td>
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<td>420</td>
<td>400 (28)</td>
<td>25,000 (5,500)</td>
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</table>

1. Buna-N elastomer used in mechanical seal of Series 4125 pumps. Viton®, Neoprene, and PTFE mechanical seals also available.
2. For mechanical seal pumps on applications with viscosities above 15,000 SSU (3,300 cSt), provide details for recommendation.
3. For maximum recommended discharge pressures when handling other viscosities and/or at other speeds, see performance curves. If suction pressure exceeds 50 PSIG (3 BAR), consult factory.
4. For mechanical seal pumps on applications with viscosities above 15,000 SSU (3,300 cSt), provide details for recommendation.
5. Nominal rating based on thin liquids.
6. Standard seal can be used from -20°F. to +225°F. With special construction, temperatures from -60°F. to +650°F. can be handled with this series pumps.

Viton® — Registered trademark of DuPont Performance Elastomers.
DIMENSIONS

These dimensions are average and not for construction purposes. Certified prints on request.

For specifications, see page 141.2.

DIMENSIONS—
SERIES 125 AND 4125
UNMOUNTED PUMPS

① Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.

NOTE: Dimensions shown in parentheses are millimeters; others are inches.
DIMENSIONS
These dimensions are average and not for construction purposes. Certified prints on request.

For specifications, see pages 141.3 through 141.5.

DIMENSIONS—
SERIES 125 AND 4125
(“R” DRIVE)
“G” THROUGH “AL” SIZE
PUMPS
“A” SIZE REDUCER UNITS

① Base suitable for motor frames 56 through 184-T on Models G, H, and HL through 215-T for Models AK and AL.
② For motor frames 213-T and 215-T, “G” dimension is increased to 34.00”. All other dimensions remain the same. (Base has open ends.) Does not apply to Models AK and AL.
③ Location of pump port centerline on Models G125R and G4125R.
④ With motor frames 182-T and smaller, use the (four) corner base anchor holes. Motor frame 184-T covers up the lower left corner anchor hole, so the hole 9.00” to the right is used. Does not apply to Models AK and AL.
⑤ On Models G125R and G4125R, “E” dimension includes pump block. Base height is 2.94”.

For specifications, see pages 141.3 through 141.5.

DIMENSIONS—
SERIES 125 AND 4125
(“R” DRIVE)
“AK” THROUGH “LS” SIZE
PUMPS
“B” SIZE REDUCER UNITS

① Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.
② With motor frames 184-T and smaller, these units are assembled on a shorter base with the following dimension changes: (F = 16”, G = 39”, L = 3”, N = 5½”). Motor rails 1½” high are required with 56, 143-T and 145-T frame motors.
NOTE: Motor frame larger than 256-T requires larger base. Consult factory. Units available to accept 10HP, 1200 RPM maximum motor.
NOTE: Motor rails 2” high are required on “L” through “LS” size units with 184-T or 4½” center height motors.
### DIMENSIONS

These dimensions are average and not for construction purposes. Certified prints on request.

#### DIMENSIONS—

**SERIES 125 AND 4125**

(“R” DRIVE)

“KK” THROUGH “M” SIZE PUMPS

(NOT FOR “QS” SIZE)

“C” SIZE REDUCER UNITS

For specifications, see pages 141.3 through 141.5.

#### Table: Model Numbers

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>PACKED</th>
<th>SEAL</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
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<td>6.00</td>
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<td>349</td>
<td>152</td>
<td>502</td>
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<td>.18</td>
<td>181</td>
<td>146</td>
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<td></td>
<td>in</td>
<td>183</td>
<td>349</td>
<td>152</td>
<td>502</td>
<td>1511</td>
<td>38</td>
<td>.18</td>
<td>181</td>
<td>146</td>
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<td></td>
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<td>183</td>
<td>349</td>
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<td>502</td>
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<td>.18</td>
<td>194</td>
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<td>375</td>
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<td>502</td>
<td>1511</td>
<td>38</td>
<td>.18</td>
<td>284</td>
<td>146</td>
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<td></td>
<td>in</td>
<td>241</td>
<td>406</td>
<td>152</td>
<td>502</td>
<td>1511</td>
<td>38</td>
<td>.18</td>
<td>318</td>
<td>146</td>
<td></td>
</tr>
</tbody>
</table>

① Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.

NOTE: Dimensions shown in parentheses are millimeters; others are inches.
VIKING® HEAVY DUTY PUMPS
SERIES 125 AND 4125

DIMENSIONS
These dimensions are average and not for construction purposes. Certified prints on request.

For description, see page 141.6.

DIMENSIONS —
SERIES 125 AND 4125
("D" DRIVE)
"G" SIZE PUMPS
DIRECT CONNECTED UNITS

DIMENSIONS —
SERIES 125 AND 4125
("D" DRIVE)
"H" THROUGH "AL" SIZE
PUMPS
DIRECT CONNECTED UNITS

For description, see page 141.6.

① For motor frames 56, 143-T, and 145-T. (Base has open ends.)
② For motor frames 182, 182-T, 184, and 184-T. (Base has closed ends.)
③ For motor frames 213 through 215-T. (Base has closed ends.)
④ For motor frames 182 through 184-T. Dimension includes block under motor. (Base has open ends.)
⑤ For motor frames 213 through 215-T. (Base has closed ends.)
⑥ For motor frames 254 through 256-T. (Base has closed ends.)
⑦ For motor frames 284 through 286-T. (Base has closed ends.)
DIMENSIONS

These dimensions are average and not for construction purposes. Certified prints on request.

For specifications, see page 141.7.

DIMENSIONS —
SERIES 125 AND 4125
(“V” DRIVE)
“G” SIZE PUMPS
V-BELT DRIVE UNITS

NOTE: For motor frames 56 and 143-T. Maximum frame size is 143-T. “D” dimension for motor frame 56 is 3.50” (89 mm) less rail; for motor frame 143-T, 5.00” (127 mm) with rail.

NOTE: Dimensions shown in parentheses are millimeters; others are inches.

For specifications, see page 141.7.

DIMENSIONS —
SERIES 125 AND 4125
(“V” DRIVE)
“H” THROUGH “M” SIZE PUMPS
V-BELT DRIVE UNITS

① Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.
② Base dimensions correct for all motors.
③ Base dimensions correct through frame 215-T motors and 19” OD sheaves. Larger motors and/or 25” OD sheaves require larger base.
④ "QS" size pump drawing available on request.