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**Various materials and types**

The LK Series offers a variety of sizes to fit a range of small to very large injection flow rates. Several material configurations and flexible motor options combine to satisfy a multitude of applications.

**High performance and versatile design**

The LK series has a discharge accuracy (repeatability) that is within ±2% FS. Reliability has been enhanced with the improvement in the linearity of the stroke and the discharge ratio of each stroke.
The heart of the LK series is the dual-cam gearbox with a highly reliable, built-in worm gear type reduction unit. This compact and rigid drive unit achieves maximum wear resistance during continuous operation. The aluminum bronze worm gear designed with a large module ratio combined with a tapered roller bearing used at the end of the worm gear enables efficient transmission of motor power to the gearbox. A fully enclosed oil bath lubrication system keeps wear to a minimum while permitting outdoor installation. The LK Series was designed for durability during continuous operation providing long life.

Liquid End

A diaphragm is attached to the gear reduction unit being driven by an attached motor. Displacement of volume by the diaphragm in the pump head, in combination with check valves, makes for a reliable positive displacement metering pump. Motor driven mechanical feed pumps are both economical and simple, yet retain a high degree of versatility. The LK Series pumps have flange connections available, improving installation flexibility. Three main pump head materials are PVC, stainless steel, or PVDF*. A wide range of chemicals, such as acid, alkalines, organic solvents, slurry, and high-temperature liquids, can be effectively pumped with the LK series. Six different liquid end materials combinations can be chosen to best fit the application. *Please contact your distributor for PVDF models.

Stoke adjustment

Output of flow is regulated by changing the volume per stroke with a micrometer Stroke Length dial. Accurate and reliable adjustments are made possible with the spring-back mechanism of the LK design ensuring repeatable performance.

Motor

The LK-A, LK-B, and LK-C series pump are designed to be fit with general-purpose, vertically mounted TEFC outdoor-use motors, providing different voltage and enclosure options, including VFD-ready and explosion-proof designs.

Drive component

The heart of the LK series is the dual-cam gearbox with a highly reliable, built-in worm gear type reduction unit. This compact and rigid drive unit achieves maximum wear resistance during continuous operation. The aluminum bronze worm gear designed with a large module ratio combined with a tapered roller bearing used at the end of the worm gear enables efficient transmission of motor power to the gearbox. A fully enclosed oil bath lubrication system keeps wear to a minimum while permitting outdoor installation. The LK Series was designed for durability during continuous operation providing long life.

**Materials**

- **PVC**
- **Stainless steel**
- **PVDF**

**Applicable type**

- **A55 to A65**
- **B65 to C87**

**Material symbol**

- **VC**
- **VH**
- **VS**
- **S**
- **S4**

**Typical chemical**

- **VH**: Hydrochloric acid, Hydrobromic acid, Sulfuric acid
- **VS**: Sulfuric acid

**Application type**

- **V**:
  - Acidic
  - Alkaline

**Applicable VS**

- **A55 to A65**: A57, A57
- **B65 to C87**: B65, B65

**Application**

- **Liquid head**
  - PVC
  - SS316

**Valve ball**

- **VC**
  - SS316

**Diaphragm**

- **PTFE + EPDM**

**Note**: The capacity is the value when maximum discharge pressure is applied (with pure water at room temperature). The value may be higher than shown in the table if the discharge pressure is lower.

**Note 2**: The weight is the estimated value when installed with a totally enclosed fan-cooled outdoor motor. Performance may vary as it is based on installation conditions and liquid characteristics.

**Note 3**: The weight is the estimated value when installed with a totally enclosed fan-cooled outdoor motor. Performance may vary as it is based on installation conditions and liquid characteristics.

**Note 4**: IEC 60 motor mount. Use vertical mount setup, 100 RPM motor.

**Pump identification**

**Series name**

- LK-A, LK-B, LK-C

**Drive section**

- A: V5V Frame
- B: V5V Frame
- C: V5V Frame

**Motor output requirement**

- LK-A/B/C (IEC motor type)
  - 1.0 HP, 1.5 HP, 2.0 HP

**Material symbol**

- **VC**
- **VH**
- **VS**
- **S**
- **S4**

**Special symbol**

- **S**: Special specification other than standard.
**Construction**

A diaphragm is attached to the gear reduction unit being driven by an attached motor. Displacement of volume by the diaphragm in the pump head, in combination with check valves, makes a reliable positive displacement metering pump. Motor driven mechanical metering pumps are both economical and simple, yet retain a high degree of versatility. The LK Series pumps have flange connections available, improving installation flexibility. Three main pump head materials are PVC, stainless steel, or PVDF*. A wide range of chemicals, such as acid, alkalines, organic solvents, slurty, and high-temperature liquids, can be effectively pumped with the LK series. Six different liquid end materials combinations can be chosen to best fit the application. *Please contact your distributor for PVDF models.

**Liquid End**

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**Drive component**

The heart of the LK series is the dual-cam gearbox with a highly reliable, built-in worm gear type reduction unit. This compact and rigid drive unit achieves maximum wear resistance during continuous operation. The aluminum bronze worm gear designed with a large module ratio combined with a tapered roller bearing used at the end of the worm gear enables efficient transmission of motor power to the gearbox. A fully enclosed oil bath lubrication system keeps wear to a minimum while permitting outdoor installation. The LK Series was designed for durability during continuous operation providing long life.

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**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>60 Hz GPM (LPM)</th>
<th>50 Hz GPM (LPM)</th>
<th>PVC PS (SR)</th>
<th>SS PS (MPa)</th>
<th>Max. Stroke Length (mm)</th>
<th>Connection Type</th>
<th>Motor Output HP (kW)</th>
<th>IEC Motor Mount Size</th>
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<tr>
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<td>5.2 (3.5)</td>
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<td>LK-A65</td>
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<td>9.5 (5.9)</td>
<td>43.5 (2.6)</td>
<td>58 (4.8)</td>
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<tr>
<td>LK-A75</td>
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<td>LK-B65</td>
<td>11.4 (7.1)</td>
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<td>LK-B75</td>
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<td>14.0 (8.4)</td>
<td>43.5 (2.6)</td>
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**Materials**

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**Pump identification**

**Motor output requirement**

<table>
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<th>Motor output requirement</th>
<th>LK-A/C/B (IEC motor type)</th>
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<th>1.5</th>
<th>2.0</th>
<th>2.5</th>
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<tbody>
<tr>
<td>Drive section</td>
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<td>B: 0.75 HP Frame</td>
<td>C: 1.0 HP Frame</td>
<td>D: 1.5 HP Frame</td>
<td>E: 2.0 HP Frame</td>
<td>F: 2.5 HP Frame</td>
<td>G: 3.0 HP Frame</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Special symbol**

S: Special specification other than standard.

**Joint**

A: ANSI Flange

**Motor identification**

<table>
<thead>
<tr>
<th>Series name</th>
<th>Drive section</th>
<th>Joint</th>
<th>Motor output requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>LK - A</td>
<td>A: 0.5 HP Frame</td>
<td>A: ANSI Flange</td>
<td>0.4</td>
</tr>
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</table>

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