KEFS ELECTRIC FLOAT SWITCH

OVERVIEW

The Model KEFS uses a float to determine the presence or absence of liquid in a vessel at the process connection. The float arm assembly consists of a float at one end and a magnet at the other. As the liquid level in the vessel rises, the float rises, and the magnet falls. The magnet actuates a second magnet on the other side of the pressure boundary. This second magnet causes the switch to change state.

The pressure boundary contains no seals; it is a solid stainless steel barrier that passes a magnetic field, but no liquids. It is impossible for the process liquid to enter the switch enclosure through this barrier.

The electrical contacts consist of a microswitch that can be either a Single-pole, Double-throw (SPDT) or Double-pole, Double-throw (DPDT) Configuration. The SPDT Switch is available with either a 5 Amp or 8 Amp current load. The DPDT switch option is only available with a 4 Amp Vac or 5 Amp Vdc current load.

SPECIFICATIONS

- Maximum operating pressure of 2000 psig.
- Minimum operating specific gravity of 0.53.
- Operating temperature range of -67° F to 257° F; High temperature option -15°F to 400°F
- Available with 5A SPDT, 8A SPDT and 4A DPDT (*See switch specifications for full switch ratings).
- Printed circuit board mounted switches and terminal block means wiring electrical connections is easy. No wire splicing is required.
- All wetted parts including switch body are manufactured from 303 Stainless Steel. 316 Stainless Steel wetted parts option available.
- Magnetic Switch actuator operates through a solid steel barrier. There are no seals between the process and the switch compartment that could potentially cause a switch failure.

FEATURES

- **Terminal Block**
  Terminal block simplifies wiring installation. No butt connectors or wire splicing required.

- **Stainless Steel Body**
  All wetted parts including the switch body are machined from stainless steel.

- **Debris Guard**
  Factory installed debris guard supplied at no additional charge on all units.
### MODEL KEFS

![Diagram of Model KEFS](image)

**NOMINAL**
- 2.77
- 23.7°
- 6-13/32
- 3-3/4
- 9-13/16

**TERMINAL BLOCK**
- COMMON
- GROUND SCREW
- NORMALLY OPEN
- NORMALLY CLOSED

**TERMINAL BLOCK**
- TOP

**SPDT Shown**

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>≥ 0.53</td>
</tr>
<tr>
<td>Wetted Parts</td>
<td>Standard 303/304 Stainless Steel</td>
</tr>
<tr>
<td></td>
<td>Optional 316 Stainless Steel</td>
</tr>
<tr>
<td>Process Connection Size</td>
<td>Standard 2” NPT</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>Standard -67°F to 257°F (-55°C to 125°C)</td>
</tr>
<tr>
<td></td>
<td>Optional *High Temperature -15°F - 400°F (-26°C - 204°C)</td>
</tr>
<tr>
<td>Process Pressure Range</td>
<td>Vacuum to 2000 psig</td>
</tr>
<tr>
<td>Switch Types &amp; Ratings</td>
<td>Standard SPDT; 5A @ 250Vac; 5A @ 30Vdc resistive</td>
</tr>
<tr>
<td></td>
<td>Optional SPDT; 8A @ 250Vac; 12A @ 125Vac resistive</td>
</tr>
<tr>
<td></td>
<td>Optional DPDT; 4A @ 250Vac; 5A @ 30Vdc resistive</td>
</tr>
<tr>
<td>Housing Rating (CSA Certified)</td>
<td>Division 1: Class I; Groups C &amp; D</td>
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<tr>
<td></td>
<td>Class II; Groups E, G</td>
</tr>
<tr>
<td></td>
<td>Class III; Type 4X/7/9;</td>
</tr>
<tr>
<td>Conduit Connection</td>
<td>1/2” NPT</td>
</tr>
</tbody>
</table>

* Note: High Temperature option not CSA Certified

**ORDERING SYSTEM**

**Kenco Electric Float Switch**

- **KEFS**
- **2**
- **Switch Rating**
  - Spdt5=5A Spdt
  - Dpdt4=4A Dpdt
  - Spdt8=8A Spdt
- **Temperature Rating**
  - Standard (Leave Blank)
  - *High Temp = 400
- **Wetted Parts**
  - 303 Stainless Steel (Leave Blank)
  - S6=316 Stainless Steel

*High Temperature option only available with 5A SPDT Switch Rating
• Example Order Number: KEFS-2-SPDT5

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**Kenco Electric Float Switch**

- Model
  - KEFS Kenco Electric Float Switch
- Process Connection
  - 2=2” NPT
- Switch Rating
  - Spdt5=5A Spdt
  - Dpdt4=4A Dpdt
  - Spdt8=8A Spdt
- Temperature Rating
  - Standard (Leave Blank)
  - *High Temp = 400
- Wetted Parts
  - 303 Stainless Steel (Leave Blank)
  - S6=316 Stainless Steel