As a leading designer and manufacturer of linear, rotary, tilt and intrinsically safe position sensors, Positek® has the expertise to supply a sensor to suit a wide variety of applications. Our P138 LIPS® (Linear Inductive Position Sensor) is an affordable, durable, accurate position sensor designed for a wide range of industrial applications. It is particularly suitable for OEMs seeking good sensor performance in situations where a small diameter, short-bodied sensor is needed and cost is important. The unit is compact and space-efficient, being responsive along almost its entire length, and like all Positek® sensors provides a linear output proportional to travel. Each unit is supplied with the output calibrated to the travel required by the customer, from 51 to 100mm and with full EMC protection built in.

Overall performance, repeatability and stability are outstanding over a wide temperature range. The sensor has a compact 19 mm diameter stainless steel body, is easy to install and set up. Mounting options include body clamps or a stainless steel mounting flange with two 3.2 mm by 30 degree wide slots on a 25 mm pitch. The stainless steel plunger can be supplied free or captive, with female M4 thread, or spring-loaded with a ball end. The P138 also offers a range of mechanical options, environmental sealing is to IP67.

Do you need a position sensor made to order to suit a particular installation requirement or specification? We’ll be happy to modify any of our designs to suit your needs - please contact us with your requirements.
How Positek’s PIPS® technology eliminates wear for longer life

Positek’s PIPS® technology (Positek Inductive Position Sensor) is a major advance in displacement sensor design. PIPS®-based displacement transducers have the simplicity of a potentiometer with the life of an LVDT/RVDT.

PIPS® technology combines the best in fundamental inductive principles with advanced micro-electronic integrated circuit technology. A PIPS® sensor, based on simple inductive coils using Positek’s ASIC control technology, directly measures absolute position giving a DC analogue output signal. Because there is no contact between moving electrical components, reliability is high and wear is eliminated for an exceptionally long life.

PIPS® overcomes the drawbacks of LVDT technology – bulky coils, poor length-to-stroke ratio and the need for special magnetic materials. It requires no separate signal conditioning.

Our LIPS® range are linear sensors, while RIPS® are rotary units and TIPS® are for detecting tilt position. Ask us for a full technical explanation of PIPS® technology.

We also offer a range of ATEX-qualified intrinsically-safe sensors.

### TABLE OF OPTIONS

#### CALIBRATED TRAVEL:
Factory set to any length from 0-51mm to 0-100mm (e.g. 76mm).

#### ELECTRICAL INTERFACE OPTIONS

<table>
<thead>
<tr>
<th>OUTPUT SIGNAL</th>
<th>SUPPLY INPUT</th>
<th>OUTPUT LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard:</td>
<td>+5V dc nom. ± 0.5V</td>
<td>5kΩ min.</td>
</tr>
<tr>
<td>Buffered:</td>
<td>+24V dc nom. + 9-28V</td>
<td>5kΩ min.</td>
</tr>
<tr>
<td>0.5-9.5V dc</td>
<td>+24V dc nom. + 13-28V</td>
<td>5kΩ min.</td>
</tr>
</tbody>
</table>

Supply Current: 10mA typical, 20mA maximum.

#### CONNECTOR/CABLE OPTIONS

- Connector - M8 IEC 60947-5-2 IP67
- Cable with M8 gland IP67
- Cable length > 50 cm – please specify length in cm

#### MOUNTING OPTIONS

- Flange, Body Tube Clamp
- Push Rod Options – standard retained with M4x0.7 female thread
- Sprung loaded (spring supplied loose), Dome end (sprung loaded) or Free