LIPS S114
Submersible stand-alone inductive linear position sensor

- Non-contacting inductive technology to eliminate wear
- Travel set to customer’s requirement
- Compact and self-contained
- High durability and reliability
- High accuracy and stability
- Sealing to IP68 10Bar

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 S114 LIPS® (Linear Inductive Position Sensor) is an affordable, durable, high-accuracy position sensor. The S114 is an affordable, durable, high-accuracy position sensor. Derived from the P101, it is designed for applications where the sensor would be completely submerged during normal operation, it retains desirable features such as compact size, good sensor performance yet capable of working at pressure. The S114, 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, any stroke from 0-5mm to 0-800mm and with full EMC protection built in. The sensor is very robust, the body and push rod being made of stainless steel for long service life and environmental resistance. Overall performance, repeatability and stability are outstanding over a wide temperature range. The sensor is easy to install with mounting options including M5 stainless steel rod eye bearings and body clamps. The push rod can be supplied free or captive, with female M5 thread, an M5 rod eye, or dome end. Captive push rods can be sprung loaded, in either direction, on sensors up to 300mm of travel. The S114 also offers a selection of mechanical and electrical options, environmental sealing is to IP68 10Bar.

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.
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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 0-5mm to 0-800mm (e.g. 254mm)

### ELECTRICAL INTERFACE OPTIONS

#### OUTPUT SIGNAL

- Standard:
  - 0.5-4.5V dc
  - 0.5-4.5V dc reameteric

- Buffered:
  - 0.5-4.5V dc
  - ±5V dc
  - ±5V dc nom. ± 0.5V.

#### SUPPLY INPUT

- Standard: +5V dc nom. ± 0.5V.
- Buffered: +24V dc nom. ± 9-28V.

#### OUTPUT LOAD

- 5kΩ min.
- 5kΩ min.

#### Supply Current

- 10mA typical, 20mA maximum.

#### CONNECTOR/CABLE OPTIONS

- Cable with Pg 7 gland
  - Axial or Radial, IP68 10 Bar
- Supply current 10mA typical, 20mA maximum.

#### MOUNTING OPTIONS

- M5 rod eye bearing (radial versions), Body Tube Clamp/s (axial or radial versions).

#### PUSH ROD OPTIONS

- Standard retained with M5x0.8 female thread, M5 rod eye bearing, Dome end, Sprung loaded (retraction or extension) or Free.