



# LIPS® SERIES P112

## GAUGE HEAD POSITION SENSOR



- Gauge Head Positioning for Industrial and Scientific Applications
- Non-Contacting Inductive Technology
- Robust, Durable and Reliable
- Compact Overall Length
- Up to 50mm Travel
- 19mm Diameter Body
- Spring-loaded Plunger
- DC Supply - DC Analogue Output - Voltage
- Excellent Accuracy and Stability
- IP67 Sealing

### SPECIFICATION

|                                 |  |
|---------------------------------|--|
| Travel                          | 10mm to 50mm                                 |
| Electrical                      |  |
| Factory set range.              |  |
| Independent Linearity           | < ± 0.25% @ 20°C                             |
| Temperature Coefficients        | < ± 0.01%/°C Gain &<br>< ± 0.01%FS/°C Offset |
| Typical Overall Accuracy        | < ± 0.5% / FSO                               |
| Frequency Response              | > 10 KHz (-3dB)                              |
| Resolution                      | Infinite                                     |
| Noise                           | < 0.02% FSO                                  |
| Power Supply and Output Options |  |
| Input                           | Output                                       |
| + 5 V dc ± 0.5 V                | 0.5 – 4.5 V dc ratiometric                   |
| Supply Current                  | 10 mA Typical, 20 mA max.                    |
| Environmental                   |  |
| Temperature Limits              |  |
| Operating                       | -40 to +125°C                                |
| Storage                         | -40 to +125°C                                |
| Sealing                         | IP67   |
| Spring Force                    | 1.5 – 4.5N approx.                           |
| EMC Performance                 | EN 61000-6-2<br>EN 61000-6-3                 |
| Vibration                       | IEC 68-2-6: 10g                              |
| Shock                           | IEC 68-2-29: 40 g                            |
| MTBF                            | 450,000 hrs 40°C Gf                          |

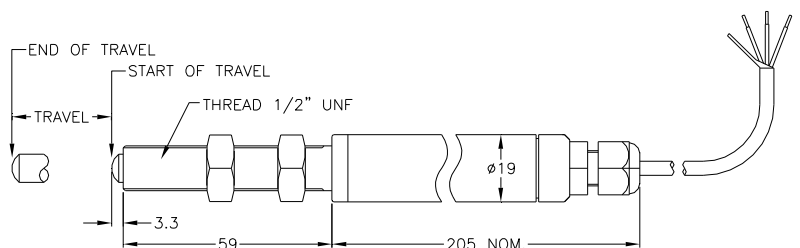


The P112 LIPS® is an affordable, durable, high accuracy Linear Inductive Position Sensor for gauge head positioning for industrial and scientific applications. P112 sensors are; available with calibrated travel from 10mm up to 50mm, easy to install and set up and provide a linear output characteristic with displacement. Using Positek's PIPS® technology, simple inductive coils with advanced ASIC electronic technology, the sensors DC analogue output signal represents absolute position and is available immediately on power up.

Overall performance, repeatability and stability are outstanding over a wide temperature range; it is very compact, responsive over almost its full length. With excellent frequency response and no wearing contacts they have major advantages over LVDT or potentiometer based devices.

The sensor has a robust stainless steel body and plunger, the 1/2" UNF thread gives the end user flexibility positioning the sensor and two locknuts are supplied to fix it in place. The plunger has a domed end and is sprung loaded. Sealing between IP65 and IP67 depending on selected cable or connector options and full EMC protection built in.

Enquires regarding modifications for custom applications are welcome, please contact us with your requirements.



For Further information please contact:

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