



LIPS[®] 103 SHORT STROKE LINEAR POSITION SENSOR



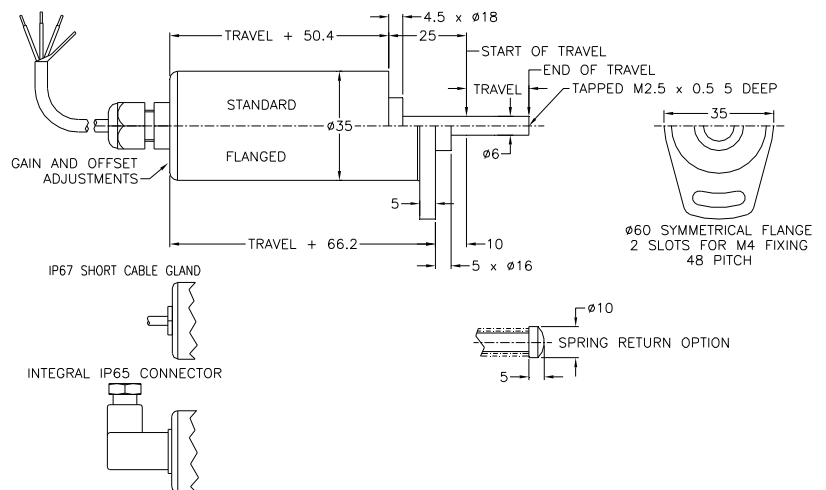
- Position Feedback for Industrial & Scientific Applications
- Non-Contacting Inductive Technology
- Robust, Durable & Reliable
- Short Body Length
- Easy Mounting
- DC Supply - DC Analogue Output - Voltage or Current Options Available
- Excellent Accuracy and Stability
- IP65/IP67 Sealing Available

SPECIFICATION

Travel	10mm to 50mm
Electrical	Factory set range with adjustable zero and span.
Independent Linearity	< ± 0.5% @ 20°C
Temperature Coefficients	< ± 0.01%/°C Gain & < ± 0.01%FS/°C Offset
Typical Overall Accuracy	< ± 0.75% / FSO
Frequency Response	> 10 KHz (-3dB) > 300 Hz (2 wire 4 to 20 mA)
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
± 15 ± 2V dc	± 5 V dc or ± 10V dc
+13 to 28 V dc	0.5 – 9.5 V dc
+18 to 28 V dc	4 to 20mA (2 wire)
+13 to 28 V dc	4 to 20mA (3 wire sink)
+13 to 28 V dc	4 to 20mA (3 wire source)
Supply Current	10 mA Typical, 20 mA max. (Voltage versions)
Environmental	
Temperature Limits	
Operating	-40 to +125°C (5V only) -20 to +85°C
Storage	-40 to +125°C
Sealing	IP65/IP67 depending on connector / cable
EMC Performance	EN 61000-6-2 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 P103 LIPS[®] is an affordable, durable, high accuracy Linear Inductive Position Sensor for general industrial position feedback applications. P103 sensors are; available with 10, 20, 30 and 50mm travel, 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. A range of factory set electrical output options are available, including 4-20mA current loop, without the need for a separate interface card. 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 sensors have a rugged stainless steel body and plunger. Mounting options include servo or face flange and body clamps. The plunger can be supplied free or captive, with female M2.5 thread, or sprung loaded with a ball end. 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.



NOTE: SENSORS ARE AVAILABLE WITH STANDARD MECHANICAL TRAVEL OF 10, 20, 30 & 50 ELECTRICAL O/P'S ARE CALIBRATED AS REQUIRED TO THE NEAREST (LARGER) PREFERRED MECHANICAL TRAVEL BODY CLAMP OPTION AVAILABLE WITH STANDARD VERSION.

