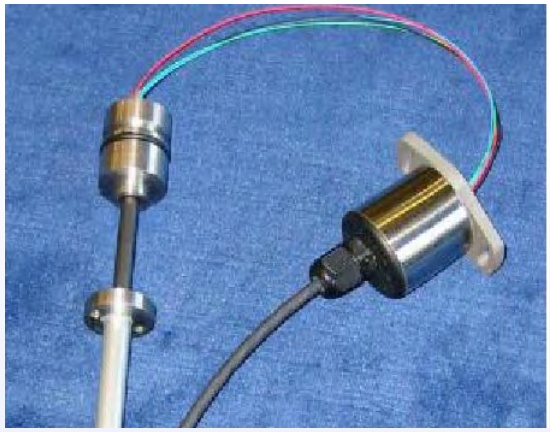
LIPS SERIES P106 LINEAR INDUCTIVE POSITION SENSOR

Issue May 2003

For Hydraulic Cylinders

- **Non-Wearing Inductive Technology**
- **Robust Durable and Reliable**
- **Up to 600mm Stroke**
- **High Stroke to Length Ratio**
- **DC Supply - DC Analogue Output**
- **For Hydraulic and Pneumatic Cylinders**



SPECIFICATION

Travel

Range	10 to 600 mm

Factory set range with adjustable zero and span option

Independent Linearity

Standard @ 20°C	< +/- 0.25%
Temperature Coefficient	<+/-0.01%/°C
Frequency Response	>500 Hz (-3dB)
Resolution	Infinite
Noise	<0.1% FSO

Power Supply and Output Options

Input	*Output*
+ 5 V dc +/- 1 V	0.5 – 4.5 V dc ratiometric
+/- 15 V dc	+/- 5 V dc or +/- 10V dc
+16 to 28 V dc	0.5 – 9.5 V dc
18 to 28 V dc	4 to 20mA (2 wire)
10 to 28 V dc	4 to 20mA (3 wire sink)
16 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	-50 to +150°C
Sealing	IP65/IP67 depending on Connector / cable

EMC Performance

	IEC 801 EN50082-2
	IEC 801 EN50081-1
Vibration	IEC 68-2-6:1982 10g
Shock	IEC 68-2-29:1968 40 g
MTBF	450,000 hrs 40°C Gf

LLOYD'S REGISTER QUALITY ASSURANCE ISO9001

UKAS QUALITY MANAGEMENT 001

The **LIPS P106** is a durable, accurate Linear Inductive Position Sensor specifically for hydraulic and pneumatic cylinder feedback applications.

It is suitable for arduous applications where life, environmental resistance and durability are important.

The sensor is particularly suitable for OEM applications where good performance durability and cost are important. The sensor has a small probe assembly and a remote electronic interface.

The sensor has been designed for installation in cylinders where internal length or diameter is limited or where clevis mountings are needed.

The electronic interface is mounted externally either in a housing or supplied as a small surface mount circuit board

The sensor provides a linear output characteristic with displacement. The DC analogue output signal represents absolute position.

A range of output versions are available including 4-20mA.

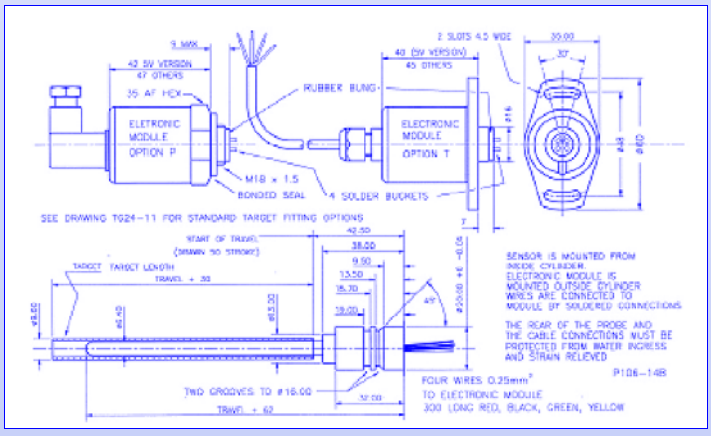
The sensor is very rugged with a stainless steel body and an inert fluropolymer probe sheath.

It is suitable for hydraulic pressure up to 350 bar and is fully rated over the temperature range -20°C to 85°C with sealing to IP66.

Installation in cylinders is simple and in some cases it can be installed directly into the piston bore without a special target.

Overall performance, repeatability and stability are outstanding.

Special sensor designs can be produced



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