

# LIPS<sup>®</sup> P106 INTERNALLY MOUNTED CYLINDER SENSOR WITH EXTERNAL ELECTRONICS

High-resolution position feedback for hydraulic and pneumatic cylinders

## How Positek's PIPS<sup>®</sup> technology eliminates wear for longer life

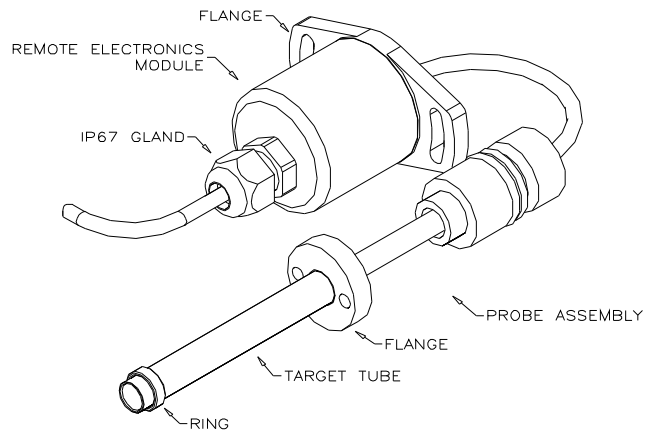
Positek's PIPS<sup>®</sup> technology (Positek Inductive Position Sensor) is a major advance in displacement sensor design. PIPS<sup>®</sup>-based displacement transducers have the simplicity of a potentiometer with the life of an LVDT/RVDT.

PIPS<sup>®</sup> technology combines the best in fundamental inductive principles with advanced micro-electronic integrated circuit technology. A PIPS<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> range are linear sensors, while RIPS<sup>®</sup> are rotary units and TIPS<sup>®</sup> are for detecting tilt position. Ask us for a full technical explanation of PIPS<sup>®</sup> technology.

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



### TABLE OF OPTIONS

**MEASUREMENT RANGE:** Factory-set to any length from 20 to 600 mm in increments of 1mm.

#### ELECTRICAL INTERFACE OPTIONS

OUTPUT SIGNAL	SUPPLY INPUT	OUTPUT LOAD
Standard: 0.5-4.5V dc ratiometric	+5V dc nom. ± 0.5V.	2kΩ min.
Buffered: 0.5-4.5V dc	+24V dc nom. + 9-28V.	2kΩ min.
±5V dc	±15V dc nom. ± 9-28V.	2kΩ min.
0.5-9.5V dc	+24V dc nom. + 13-28V.	5kΩ min.
±10V dc	±15 V dc nom. ± 13.5-28V.	5kΩ min.
Supply Current	10mA typical, 20mA maximum.	
4-20mA (2 wire)	+24 V dc nom. + 18-28V.	300Ω @ 24V.
(3 wire sink)	+24 V dc nom. + 13-28V.	950Ω @ 24V.
(3 wire source)	+24 V dc nom. + 13-28V.	300Ω max.

Option for output 'zero' and 'span' adjustment available.

#### CONNECTOR/CABLE OPTIONS

Connector - Hirschmann GD series IP65  
Cable with M12 gland or short gland IP67  
Cable length >50cm – please specify length in cm

#### ELECTRONICS MODULE MOUNTING OPTIONS

Flange 2 off 4.5 mm x 30 degree wide slots, 48 mm PCD.  
M18 male thread 30mm hex AF, Ø30mm seal face.  
Supplied with O-ring seal.

#### TARGET TUBE OPTIONS

Stainless Steel (316) ID 7.7mm, OD 9.45mm  
Aluminium (6063) ID 7.1mm, OD 9.53mm

#### FLANGE OPTIONS

Penny & Giles HLP100, Temposonics (M4 fixing) and Parker Hannifin cylinders versions available.

