

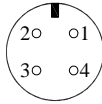
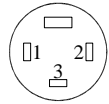
# Installation Information

## LIPS<sup>®</sup> P101 STAND-ALONE LINEAR POSITION SENSOR

Electronics Option	Output Description:	Supply Voltage: (Vs)	Output:	Load resistance: (include leads for 4 to 20mA O/Ps)	Load connected to:
A	Voltage (ratiometric with supply)	5±0.5V	0.5 to 4.5V	2kΩ min	0V
B	Voltage	±9 to 28V	±5V	2kΩ min	0V
C	Voltage	13 to 28V	0.5 to 9.5V	5kΩ min	0V
D	Voltage	±13.5 to 28V	±10V	5kΩ min	0V
E	2 wire Current Loop	18 to 28V	4 to 20mA	$R_L = V_s - 18/20\text{mA}$ 300Ω @ 24V	In supply lead
F	3 wire Current Loop - Sink	13 to 28V	4 to 20mA	$R_L = V_s - 5/20\text{mA}$ 950Ω @ 24V	Vs
G	Voltage	9 to 28V	0.5 to 4.5V	2kΩ min	0V
H	3 wire Current Loop - Source	13 to 28V	4 to 20mA	300Ω max	0V

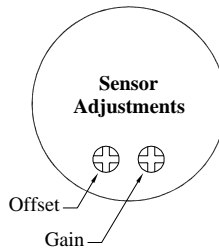
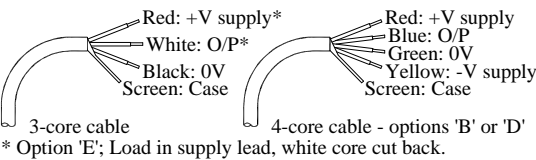
**Connector pin layout:**

Wide pin '4'

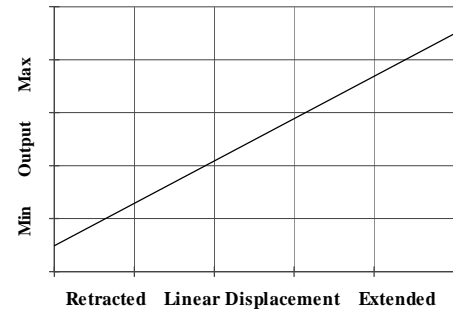


- 1: +Vsupply\*
- 2: O/P\*
- 3: 0V
- 4: Sensor body 'A','C','E'-H',  
-V supply options 'B' or 'D'
- \* Option 'E'; Load in supply,  
no connection Pin 2.

**Conductor Identification:**



**Output Characteristic - Standard**



**Gain and Offset Adjustment:** (Where accessible - Typically ± 10% Min available)

To adjust the gain or offset use a small potentiometer adjuster or screwdriver 2mm across. Do not apply too much force on the potentiometers.

**Mechanical Mounting:**

Depending on options; Body can be mounted by M5x0.8 male thread, M5 rod eye or by clamping the sensor body - body clamps are available, if not already ordered. Target by M5x0.8 female thread or M5 rod eye.

**Output Characteristic:**

Target is extended 9 mm from end of body at start of normal travel.

The output increases as the target extends from the sensor body, the calibrated stroke is between 50 and 600 mm.

**Warning - the connector on 'K' coded sensors can be rotated for purposes of convenient orientation of the connector and cable, however rotating the connector more than one complete revolution is not recommended. Repeated rotation of the connector will lead to damage to the internal wiring.**

**Incorrect Connection Protection levels:-**

- A **Not protected** – the sensor is **not** protected against either reverse polarity or over-voltage. The risk of damage should be minimal where the supply current is limited to less than 50mA.
- B & D Supply leads diode protected. Output must not be taken outside ± 12V.
- C & G Supply leads diode protected. Output must not be taken outside 0 to 12V.
- E, F & H Protected against any misconnection within the rated voltage.