

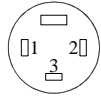
# Installation Information

## LIPS<sup>®</sup> P100 CYLINDER – 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	$R_L = V_s - 18/20mA$ 300Ω @ 24V	In supply lead
F	3 wire Current Loop - Sink	13 to 28V	4 to 20mA	$R_L = V_s - 5/20mA$ 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

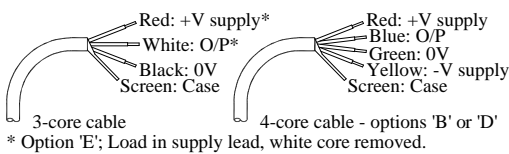
### Connector pin layout:

Wide pin '4'

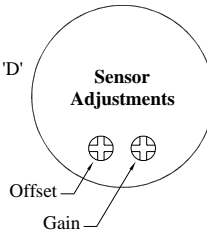


- 1: +Vsupply\*
- 2: O/P\*
- 3: 0V
- 4: Sensor body 'A','C','E','H', -V supply option 'B' or 'D'
- \* Option 'E'; Load in supply, no connection Pin 2.

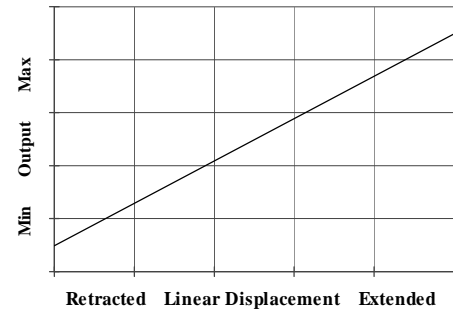
### Conductor Identification:



\* Option 'E'; Load in supply lead, white core removed.



### 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:

Via mounting thread, maximum tightening torque: 100Nm. For fluid ingress protection an O ring seal is provided, size BS908 for M20 & 3/4 UNF thread or 14.3 x 2.4 for M18 thread.

Install the target tube using the flange provided or fix directly into the piston rod using adhesive for instance, the end of the target tube can be proud or flush with the piston end face as required.

### Output Characteristic:

Target position at start of normal travel is 36.0 mm from seal face.

The output increases as the target is moved away from the sensor body, the calibrated stroke is between 20 and 600 mm.

### 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.