

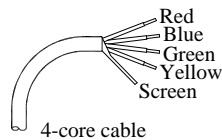
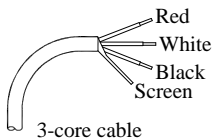
# Installation Information

## LIPS<sup>®</sup> P115 RUGGED SUBMERSIBLE STAND-ALONE LINEAR POSITION SENSOR

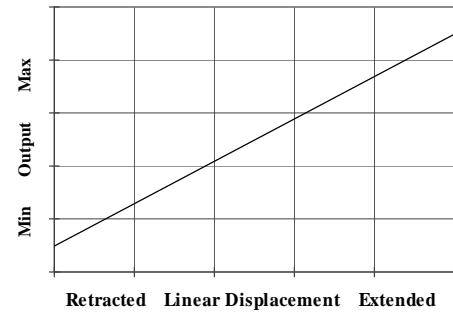
Electronics Option	Output Description:	Supply Voltage: (Vs)	Output:	Load resistance: (include leads for 4 to 20mA O/Ps)	Load connected to:
A	Voltage (ratiometric with supply)	5±0.5V	0.5 to 4.5V	2kΩ min	0V
B	Voltage	±9 to 28V	±5V	2kΩ min	0V
C	Voltage	13 to 28V	0.5 to 9.5V	5kΩ min	0V
D	Voltage	±13.5 to 28V	±10V	5kΩ min	0V
E	2 wire Current Loop	18 to 28V	4 to 20mA	$R_L = V_s - 18/20mA$ 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

### Cable conductor colours:

Red: +V supply  
 White/Blue: O/P  
 Black/Green: 0V  
 Yellow: -V supply options 'B' or 'D'  
 Screen: Sensor body



Output Characteristic - Standard



### Mechanical Mounting:

Depending on options; Body can be mounted by M8 rod eye or by clamping the sensor body - body clamps are available, if not already ordered. Target by M8x1.25 female thread or M8 rod eye.

Where the free end of the cable is to be terminated in a submerged position, adequate sealing must be provided to ensure water cannot track inside the cable jacket.

### Output Characteristic:

Target is extended 7 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.

### 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.

Issue	Change	Author	Date	RAN
A First Issue		PDM	03/09/07	-