

Installation Information

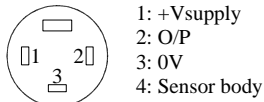
LIPS[®] X103 SHORT STROKE LINEAR POSITION SENSOR

INTRINSICALLY SAFE FOR HAZARDOUS GAS/VAPOUR ATMOSPHERES

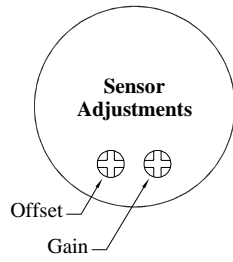
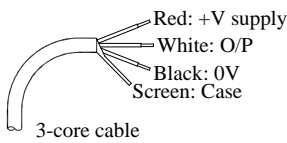
ATEX Qualified to Intrinsic Safety Standard Certificate number Sira 00ATEX2076X			Ex II 1G EEx ia IIC T4 (Ta = -40°C to +80°C)		
Electronics Option	Output Description:	Supply Voltage: (Vs)	Output:	Load resistance:	Load connected to:
A	Voltage (ratiometric with supply)	5±0.5V	0.5 to 4.5V	2kΩ min	0V

Connector pin layout:

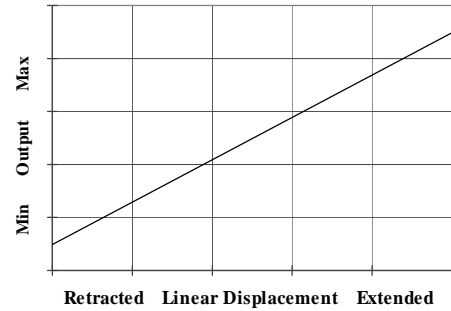
Wide pin '4'



Conductor Identification:



Output Characteristic - Standard



Putting Into Service: The sensor must be used with a galvanic isolation barrier designed to supply the sensor with a nominal 5V and to transmit the sensor output to a safe area. The barrier parameters must not exceed:-

- Ui = 11.4V Ii = 0.20A Pi = 0.51W
- Ci = 1.36µF* Li = 710µH* (Lxx option)
- Ci = 1.16µF Li = 50µH (J option)

*Figures for 1km cable where: Ci = 200pF/m & Li = 660nH/m

The sensor is certified to be used with up to 1000m of cable, cable characteristics must not exceed:-

- Capacitance: ≤ 200 pF/m for max. total of: 200 nF
- Inductance: ≤ 660 nH/m for max. total of: 660 µH

The performance of the sensor may be affected by voltage drops associated with long cable lengths; For cable lengths exceeding 10 metres a five wire connection is recommended to eliminate errors introduced by cable resistance and associated temperature coefficients.

Use: The sensor is designed to measure Linear displacement and provide an analogue output signal.

Assembly and Dismantling: The unit is not to be serviced or dismantled and re-assembled by the user.

Maintenance: No maintenance is required.

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: Flange mounted or by clamping the sensor body - body clamps are available, if not already ordered. The flange slots are 4.5mm by 30 degrees wide on a 48mm pitch.

Output Characteristic: Plunger extended, at start of normal travel, from mounting face by:

- Standard body : 25 mm
- Flanged body : 10 mm

Note: where ball end option is fitted add 5 mm.

The output increases as the plunger extends from the sensor body, the calibrated stroke is between 10 and 50 mm.

Incorrect Connection Protection levels: **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.