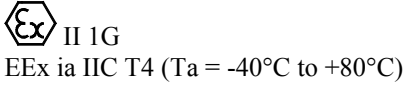


# Installation Information

## LIPS<sup>®</sup> X103 SHORT STROKE LINEAR POSITION SENSOR

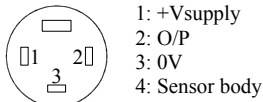
### INTRINSICALLY SAFE FOR HAZARDOUS GAS/VAPOUR ATMOSPHERES

ATEX Qualified to Intrinsic Safety Standard Certificate number Sira 00ATEX2076X

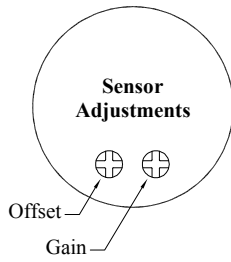
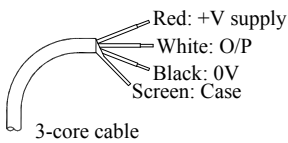
Output Description:	Barrier Supply Voltage:	Barrier Output:	
Voltage (BX002)	20-35V dc	0.5 to 9.5V	
Current Loop (BX003)	20-35V dc	4-20mA	

**Connector pin layout:**

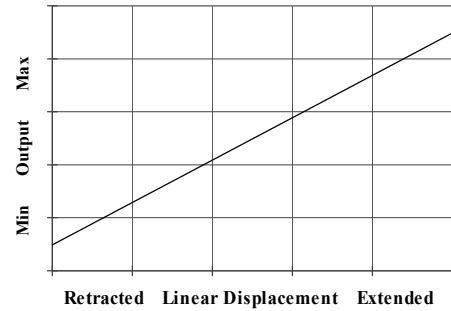
Wide pin '4'



**Conductor Identification:**



Output Characteristic - Standard



**Putting Into Service:**

The sensor must be used with a galvanically isolated three port barrier designed to supply the sensor with a nominal 5V and to transmit the buffered output to a safe area. Various Barrier output versions are available. The barrier parameters must not exceed:- **Ui = 11.4V Ii = 0.46A Pi = 0.51W**

The sensor is certified to be used with up to **150m** of cable with parameters not exceeding:-  
 Capacitance = **550 nF** total, Inductance = **0.66uH/m**

The performance of the sensor may be affected by voltage drops in long cables; these can be eliminated by using a 5 wire connection. The typical supply current is 10mA and the sensor output is ratiometric to the supply voltage at the sensor.

**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.