



INTRINSICALLY SAFE

LIPS® SERIES X104

STAND ALONE LINEAR POSITION SENSOR



- Intrinsicly Safe to EEX ia IIC T4 (Ta=-40 to 80°C)
- Non-Contacting Inductive Technology
- Light weight & Durable
- Up to 250mm Travel
- Compact Overall Length
- IP67 Sealing Available

SPECIFICATION

Travel	
Travel- Electrical	50mm to 250mm
Factory set range	
Independent Linearity	< ± 0.5%
Temperature Coefficients	< ± 0.01%/°C Gain & < ± 0.01%FSI/°C Offset
Typical Overall Accuracy	< ± 0.75% FSO
Frequency Response	> 10 KHz (-3dB)
Resolution	Infinite
Noise	< 0.02% FSO
Power Supply and Output Options	
<i>Input</i>	<i>Output</i>
+ 5 V dc ± 0.5 V	0.5 – 4.5 V dc ratiometric
To be used with a galvanically isolated barrier.	
Refer to factory for advice on suppliers..	
Sensor Supply Current	10 mA Typical 20 mA max.
Intrinsic Safety	II 1G EEX ia IIC T4 (Ta = -40°C to +80°C)
	Ui 11.4V Ii 0.46A Pi 0.51W
Cable length	150m, 550 nanoF & 99 microH maximum
	Environmental
Temperature Limits	
Operating	-40°C to +80°C
Storage	-40°C to +125°C
Sealing	IP67
EMC Performance	EN 61000-6-2 EN 61000-6-3
Vibration	IEC 68-2-6: 10g
Shock	IEC 68-2-29: 40 g
MTBF	450,000 hrs 40°C Gf



The X104 LIPS® is an Intrinsically Safe Linear Inductive Position Sensor for hazardous area feedback applications. The X104 is ATEX

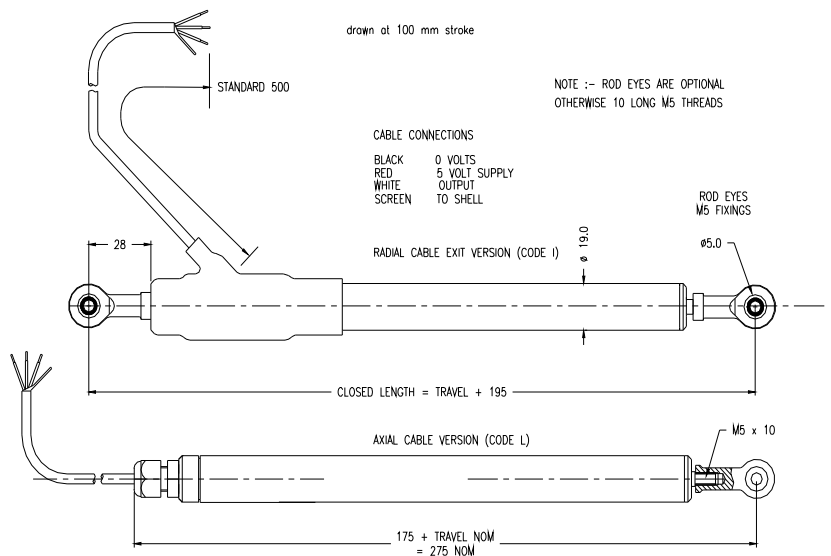
approved to II 1G EEX ia IIC T4 (Ta=-40°C to +80°C) and provides accurate position information for displacements from 50mm to 250mm.

The sensor uses Positek's novel inductive technology, PIPS®, with simple inductive coils and advanced ASIC electronic technology. It should be used with a galvanically isolated barrier and from the barrier a range of transmission options are available.

The sensor provides a linear output

characteristic with displacement and is very compact with a built-in electronic interface. Overall performance is outstanding over a wide temperature range and the output has good frequency response. Full EMC protection is built in.

The sensors are very rugged and are suitable for the most demanding applications. They are sealed to IP67 and have a slim 19 mm body and 6 mm stainless steel push rod. The body may be supported by a rod end or by a clamp. Special sensor designs can be produced to suit customer specifications.



For Further information please contact:

Everight Precision Technologies Corporation
Merion, PA USA

Phone: 610.453.3075

FAX: 610-672-9663

eMail: info@everightsensors.com