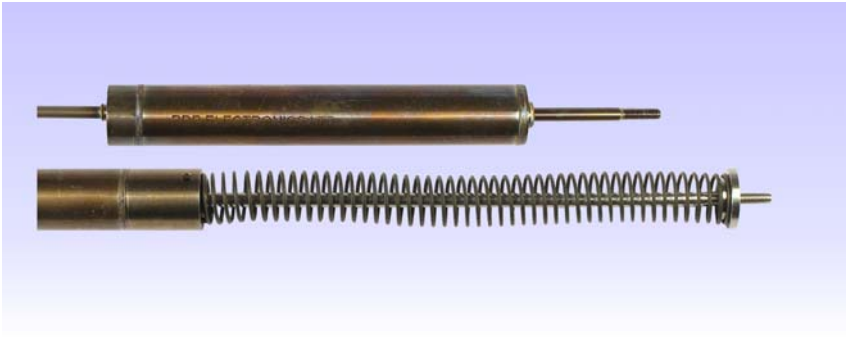
DISPLACEMENT

LIN Extreme Environment Displacement Transducer

- High cycle life
- High radiation resistance
- High temperature survival
- Submersible
- Stainless steel
- Infinite resolution



These transducers are for displacement / position measurement. They make an accurate position measurement of the movement of the armature (the sliding part) relative to the body of the displacement transducer.

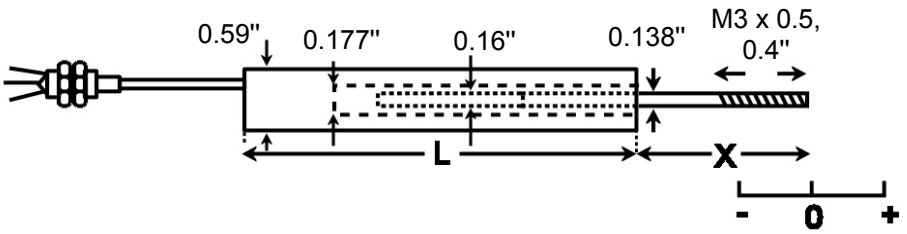
The LIN differential-inductance LVDTs are inductive (similar to an LVDT sensor) and because there is no contact across the sensor element it is very robust.

This sensor is appropriate for high temperature, high pressure and high nuclear radiation position measurement applications. Many applications in turbines, in nuclear power stations and in research labs are appropriate for this sensor.

Unguided version.

On our unguided LVDTs the armature assembly is a separate component, to make a measurement the user must guide the armature inside the body without touching the sides. Unguided position measurement transducers are appropriate where external guidance is available and give truly non-contact operation

Type	L	X
LIN52	4.1"	0.79"
LIN56	4.1"	0.79"
LIN152	7.2"	1.57"
LIN156	7.2"	1.57"
LIN252	11.2"	2.36"
LIN256	11.2"	2.36"

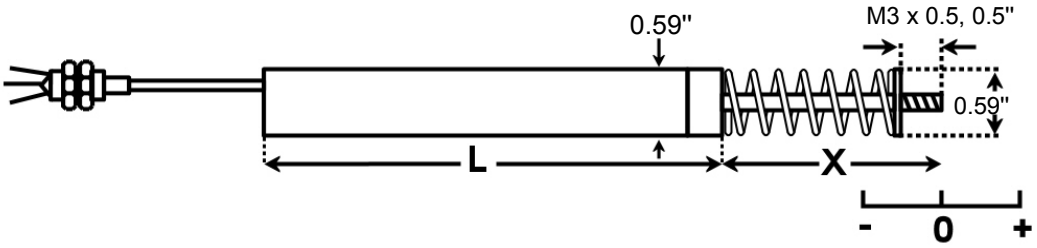


Type	Range	Operating temperature range	Maximum radiation dose	Total weight	Armature weight	Inward over-travel	Linearity error (% F.S.)
LIN52	±5mm (±0.2")	-364°F to 428°F	100M Rad	5.3oz	0.2oz	0.2"	<±0.5% F.S.
LIN56	±5mm (±0.2")	-364°F to 1112°F	100G Rad	5.3oz	0.2oz	0.2"	<±1% F.S.
LIN152	±15mm (±0.6")	-364°F to 428°F	100M Rad	7.1oz	0.5oz	0.6"	<±0.5% F.S.
LIN156	±15mm (±0.6")	-364°F to 1112°F	100G Rad	7.1oz	0.5oz	0.6"	<±1% F.S.
LIN252	±25mm (±1")	-364°F to 428°F	100M Rad	8.8oz	0.7oz	1.0"	<±0.5% F.S.
LIN256	±25mm (±1")	-364°F to 1112°F	100G Rad	8.8oz	0.7oz	1.0"	<±1% F.S.

Spring return version.

Our spring displacement transducer has bearings to guide the armature inside the measurement sensor and a spring which pushes the armature to the fully out position. Spring return LVDTs are appropriate where it is not possible to connect the transducer armature to the moving component being measured.

Type	L	X
LIN52A	4.7"	2.22"
LIN56A	4.7"	2.22"
LIN152A	7.8"	3.90"
LIN156A	7.8"	3.90"
LIN252A	11.8"	3.70"
LIN256A	11.8"	3.70"



Type	Range	Operating temperature range	Maximum radiation dose	Total weight	Spring force at X	Spring rate	Inward over-travel	Outward over-travel	Linearity error (% F.S.)
LIN52A	±5mm (±0.2")	-364°F to 428°F	100M Rad	6.0oz	1.2lbs	11.9oz/inch	0.26"	0.92"	<±0.5% F.S.
LIN56A	±5mm (±0.2")	-364°F to 662°F	100G Rad	6.0oz	1.2lbs	11.9oz/inch	0.26"	0.92"	<±1% F.S.
LIN152A	±15mm (±0.6")	-364°F to 428°F	100M Rad	7.8oz	1.6lbs	9.6oz/inch	1.00"	0.80"	<±0.5% F.S.
LIN156A	±15mm (±0.6")	-364°F to 662°F	100G Rad	7.8oz	1.6lbs	9.6oz/inch	1.00"	0.80"	<±1% F.S.
LIN252A	±25mm (±1")	-364°F to 428°F	100M Rad	9.5oz	1.7lbs	9.6oz/inch	0.41"	0.79"	<±0.5% F.S.
LIN256A	±25mm (±1")	-364°F to 662°F	100G Rad	9.5oz	1.7lbs	9.6oz/inch	0.41"	0.79"	<±1% F.S.

Specification	
Excitation/supply (acceptable)	0.5V to 5V rms, 2.4kHz to 9.6kHz (sinusoidal)
Temperature coefficient (combined zero and span)	±0.01% F.S. /°F (typical)
Electrical termination	6.6ft (integral cable) Longer available to order.
Maximum static pressure	2901psi (482°F maximum)

Due to our policy of on-going development, specifications may change without notice. Any modification may affect some or all of the specifications for our equipment.

All dimensions and specifications are nominal.

RDP Electrosense
2216 Pottstown Pike
Pottstown, PA 19465
USA
Tel: 610-469-0850
Tel: 800-334-5838
Fax: 610-469-0852
Email: info@rdpe.com