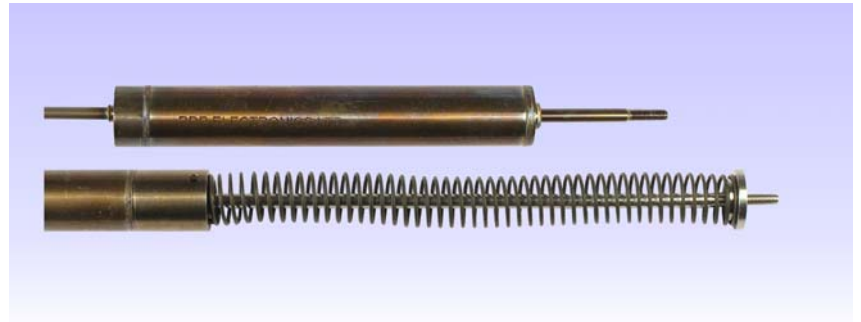


## LIN Extreme Environment Displacement Transducer

- 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.

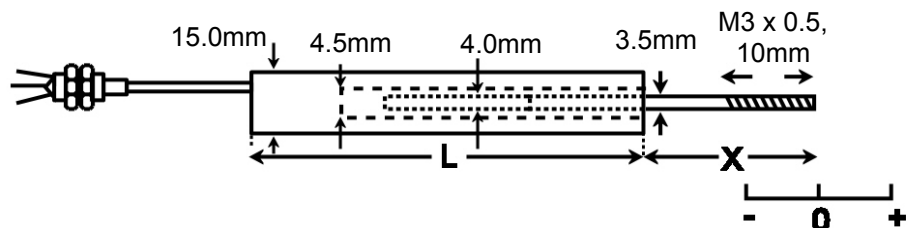
The LIN differential-inductance LVDTs are inductive (similar to an LVDT sensor) and because there is no contact across the sensor element it is very robust.

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	105mm	20mm
LIN56	105mm	20mm
LIN152	182mm	40mm
LIN156	182mm	40mm
LIN252	284mm	60mm
LIN256	284mm	60mm

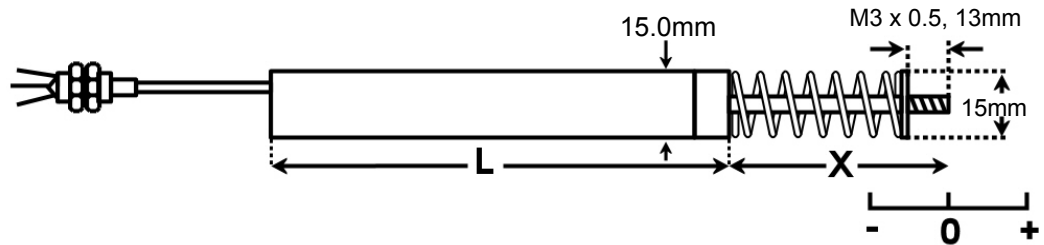


Type	Range	Operating temperature range	Maximum radiation dose	Total weight	Armature weight	Inward over-travel	Linearity error (% F.S.)
LIN52	±5mm	-220°C to 220°C	1M Gy	150g	7g	5mm	<±0.5% F.S.
LIN56	±5mm	-220°C to 600°C	1G Gy	150g	7g	5mm	<±1% F.S.
LIN152	±15mm	-220°C to 220°C	1M Gy	200g	13g	15mm	<±0.5% F.S.
LIN156	±15mm	-220°C to 600°C	1G Gy	200g	13g	15mm	<±1% F.S.
LIN252	±25mm	-220°C to 220°C	1M Gy	250g	21g	25mm	<±0.5% F.S.
LIN256	±25mm	-220°C to 600°C	1G Gy	250g	21g	25mm	<±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	119mm	57mm
LIN56A	119mm	57mm
LIN152A	197mm	99mm
LIN156A	197mm	99mm
LIN252A	299mm	94mm
LIN256A	299mm	94mm



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	-220°C to 220°C	1M Gy	170g	5.2N	1.3N/cm	7mm	23mm	<±0.5% F.S.
LIN56A	±5mm	-220°C to 350°C	1G Gy	170g	5.2N	1.3N/cm	7mm	23mm	<±1% F.S.
LIN152A	±15mm	-220°C to 220°C	1M Gy	220g	6.9N	1.0N/cm	25mm	20mm	<±0.5% F.S.
LIN156A	±15mm	-220°C to 350°C	1G Gy	220g	6.9N	1.0N/cm	25mm	20mm	<±1% F.S.
LIN252A	±25mm	-220°C to 220°C	1M Gy	270g	7.4N	1.0N/cm	11mm	20mm	<±0.5% F.S.
LIN256A	±25mm	-220°C to 350°C	1G Gy	270g	7.4N	1.0N/cm	11mm	20mm	<±1% F.S.

Specification	
Excitation/supply (acceptable)	0.5V to 5V rms, 2.4kHz to 9.6kHz (sinusoidal)
Temperature coefficient (combined zero and span)	±0.02% F.S. /°C (typical)
Electrical termination	2m (integral cable) Longer available to order.
Maximum static pressure	20MPa (250°C 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.

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