

- Very high accuracy
- High cycle life
- Stainless steel
- Infinite resolution
- Precision linear bearings
- Miniature



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.

This transducer uses the Linear Variable Differential Transformer (LVDT) principle which means that it is probably the most robust and reliable position sensor type available. The strength of the LVDT sensor's principle is that there is no electrical contact across the transducer position sensing element which for the user of the sensor means clean data, infinite resolution and a very long life.

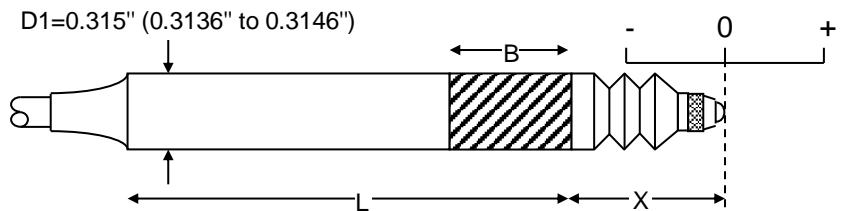
The GT series gauging transducer employs precision linear bearings to optimise the LVDTs measurement precision and repeatability.

Spring return version.

Our GT 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. Our GT spring return LVDTs are appropriate where it is not possible to connect the transducer armature to the moving component being measured.

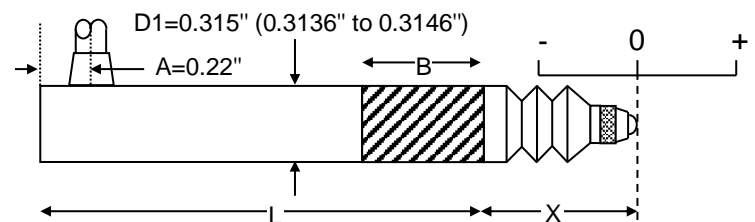
End (axial) exit cable.

Type	L	X (nom)	B- (No clamp zone)	Total weight
GT0500Z	1.02"	0.29"	0.2"	0.2oz
GT1000	2.10"	0.6"	0.55"	0.4oz
GT2500	2.26"	0.8"	0.71"	0.4oz
GT5000	3.41"	0.9"	1.18"	0.5oz



Side (radial) exit cable.

Type	L	X (nom)	B- (No clamp zone)	Total weight
GT0500XRA	1.30"	0.3"	0.2"	0.2oz
GT1000RA	2.25"	0.6"	0.5"	0.4oz
GT2500RA	2.41"	0.8"	0.7"	0.6oz
GT5000RA	3.58"	0.9"	1.2"	0.7oz



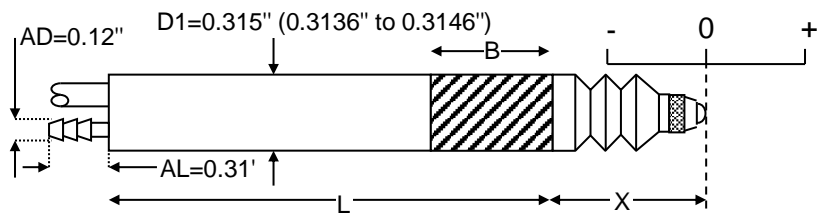
Type	Range	Linearity error (% F.S.)	Total weight	Spring force at X	Spring rate	Inward over-travel	Outward over-travel	Sensitivity (nom)
GT0500Z/GT0500XRA	±0.5mm (±0.02")	±0.25	0.2oz	3oz	16oz/inch	0.01"	0.01"	110mV/V
GT1000/GT1000RA	±1mm (±0.04")	±0.25/±0.1	0.4oz	3oz	24oz/inch	0.06"	0.01"	150mV/V
GT2500/GT2500RA	±2.5mm (±0.1")	±0.25/±0.1	0.4oz	4oz	24oz/inch	0.03"	0.01"	375mV/V
GT5000/GT5000RA	±5mm (±0.2")	±0.25/±0.1	0.5oz	5oz	14oz/inch	0.05"	0.01"	700mV/V

Air push version.

The air-push version of the GT displacement transducer is extended by the application of air to the displacement transducer and is retracted by an internal spring. This is useful where the LVDT's position measurement tip must be retracted to allow components to move on a conveyor for example.

Type	L	X (nom)	B- (No clamp zone)
GT1000P	2.83"	1.0"	0.6"
GT2500P	3.04"	0.8"	0.7"
GT5000P	4.39"	0.9"	1.2"

Air filter = 0.00002"
Relative humidity = 60% (maximum)



Type	Range	Linearity error (% F.S.)	Total weight	Air pressure		Inward over-travel	Outward over-travel	Sensitivity (nom)
				Minimum	Maximum			
GT1000P	±1mm (±0.04")	±0.25/±0.1	0.4oz	6psi	9psi	0.06"	0.01"	150mV/V
GT2500P	±2.5mm (±0.1")	±0.25/±0.1	0.5oz	7psi	9psi	0.03"	0.01"	375mV/V
GT5000P	±5mm (±0.2")	±0.25/±0.1	0.6oz	7psi	8psi	0.05"	0.01"	700mV/V

Specification	
Excitation/supply (acceptable)	0.5V to 7V rms, 2kHz to 10kHz (sinusoidal)
Excitation/supply (calibrated)	5V rms, 5kHz (sinusoidal)
Linearity error (Standard)	±0.25% F.S.
Linearity error (Optional on some models)	±0.1% F.S.
Repeatability	0.000006"
Temperature coefficient (span)	±0.006% F.S. /°F (typical)
Operating temperature range	-40°F to 212°F
Electrical termination	6.6ft (integral cable) Longer available to order.



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

GT - WARNING - PERSONAL INJURY

Do not use our GT as safety, emergency stop or feedback devices in any application where the failure of this product could result in damage to equipment, personal injury or death.

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