

Study of LVDT Scientech 2303



Scientech LVDT 2303 is designed to teach LVDT Characteristics. LVDT (Linear Variable Differential Transformer) is the most widely used inductive transducer for displacement measurement. LVDT is a secondary transducer which converts the displacement directly into an electrical output proportional to the displacement. Scientech 2303 has seven-segment LED display showing displacement in mm with a sensitivity of 10mV/mm in the range of 10mm. Scientech 2303 is self contained single box design and easy to use.

Features

- Self-contained and easy to operate
- Sensitive, Linear, Stable & Accurate
- Functional blocks indicated on board mimic
- 3¹/₂ digit LED display with polarity indicator
- Onboard LVDT displacement measurement jig with micrometer
- Onboard Excitation Generator
- Amplitude adjustment for Excitation Generator
- High repeatability and reliability

Scope of Learning

- Study of Input Output characteristics of LVDT
- Determination of linear range of operation of LVDT
- Determination of sensitivity of LVDT
- Measurement of phase difference between LVDT secondaries



Technical Specifications

Measurement Range	:	20 mm (±10 mm)
Excitation Frequency	:	4 KHz (approximately)
Excitation Voltage	:	$4 V_{PP}$ (approximately)
Sensitivity	:	10 mV DC/ mm
Linear Range	:	Full Scale
Signal conditioner output	:	0.1 V DC or Maximum Displacement
Display	:	3½ Digit LED with Polarity Indicator
Micrometer Scale	:	25 mm
Micrometer Least count	:	0.01 mm
Test points	:	8 nos.
Power Consumption	:	2 VA (approximately)
Dimensions (mm)	:	W 326 x D 252 x H 52
Power Supply	:	110V - 260V AC, 50/60Hz
Weight	:	1.5Kg (approximately)
Operating Conditions	:	0-40°C, 85% RH
Product Tutorial	:	Online on www.ScientechLearning.com
Included Accessories	:	Mains cord-1no.
		Patch cord 16" (2mm) -2nos.