

# Single channel | E75.LVDT-H

## Inductive LVDT Micrometer



### Introduction

E75 LVDT inductance micrometer is a contact micrometer, through the inductive probe to detect the external displacement deformation, the measurement range of 0~1mm, accuracy is better than 100nm.

#### Characteristics >>

- Measuring range 0~1mm
- Touch screen display
- Resolution of 0.05microns
- Contact measurement
- Touch screen control or PC software control

#### Applications >>

- Vibration measurement
- Precision positioning system
- Micro-displacement detection
- Position detection
- Optical fiber alignment and etc that require micro-displacement detection
- Length(depth, height, thickness, diameter, taper, etc.) measurement



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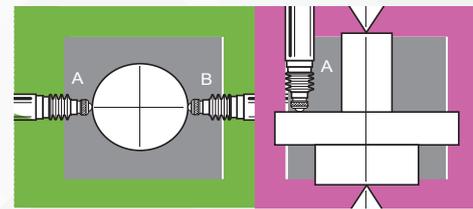
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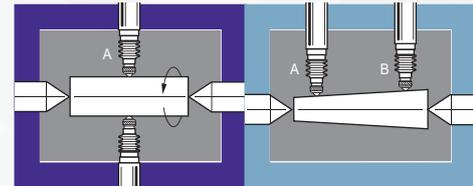
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**Technical Data >>**

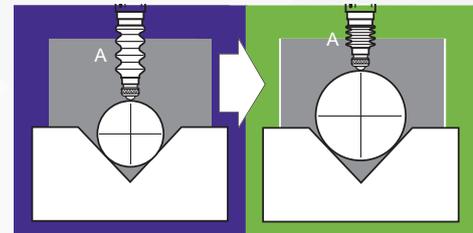
Type	E75.LVDT-H
Measuring range(mm)	0~1
Channels	Single Channel
Resolution( $\mu\text{m}$ )	0.05
Display update frequency	10/s
Screen type	Touch
Display range	Digital rebound
Sensor reading rate	200 readings per second
Analog output(mA)	Voltage or 4~20 optional
Operating temperature( $^{\circ}\text{C}$ )	5~50
Storage temperature( $^{\circ}\text{C}$ )	-20~50
Accuracy (percentage of readings)	0.05% or 0.1 $\mu\text{m}$ , whichever is larger
Repeatability (worst case)	0.15 $\mu\text{m}$ , the difference between the maximum and minimum values of the carbide surface was measured several times when the lateral force was used for the bearing
Repeatability (typical)	0.05 $\mu\text{m}$ , one standard deviation of multiple measurements of cemented carbide surface results (68%)
pretravel(mm)	0.15
After the trip(mm)	0.35
Spring driven (force measurement in middle position)	0.70N $\pm$ 20%
Temperature drift coefficient of	0.01%FS/ $^{\circ}\text{C}$
Probe life (number of runs)	100 million (without side load), more than 10 million in most applications
Dimensions(mm)	260.6 $\times$ 247.6 $\times$ 164
Probe shell material	Steel
Probe material	Tungsten carbide
Computer interface mode	RS-232, RS-485
Function	Data acquisition, storage, triggering, etc
Mass (g)	1285

**Typical Application >>**


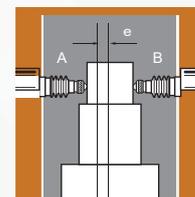
Diameter and flatness measure



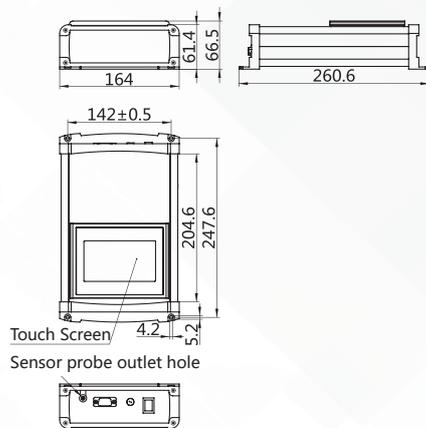
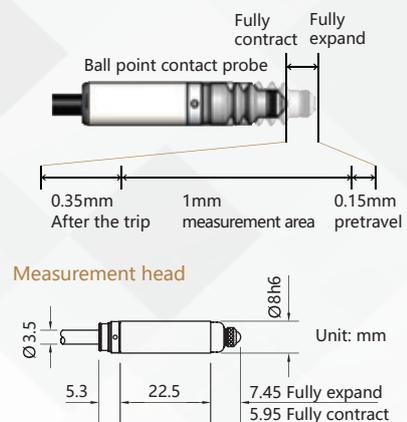
Coaxiality and dimensionality measure



Scale factor



Eccentricity measure

**Control Panel >>**

**Contact Digital Probe >>**

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