

# ST Series LVDT



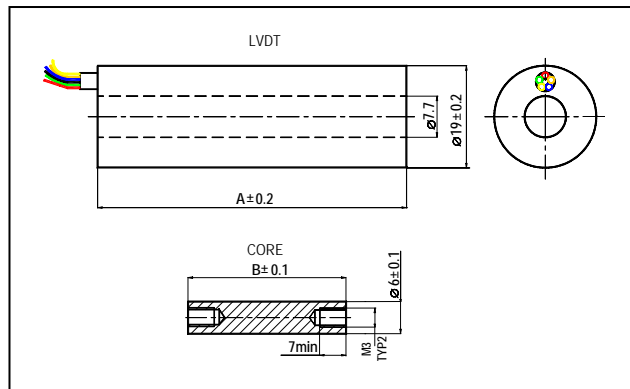
The ST series AC-LVDTs are layer wound on a steel coil form, providing high quality and rugged position sensors. Featuring large radial clearance between case hole and core. Steel casing serves as electromagnetic and electrostatic shielding. Being an AC LVDT it needs a signal conditioner to operate it, such as LVDT Signal Conditioner model EL-10 or LVDT Signal Conditioner model EL-35, or LVDT Control Box CB-100 Series, or USB-10 Unit. All are manufactured by Singer Instruments & Control.



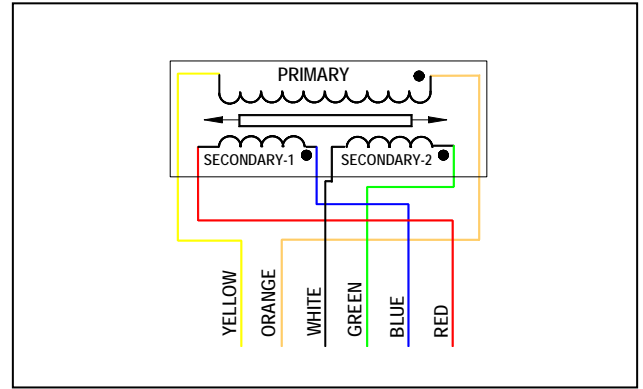
## Specifications

- Input voltage** . . . . . 3Vrms (nominal)
- Input Frequency** . . . . . 50 to 10000 Hz range, 5kHz (nominal)
- Non Linearity error** . . . . . 0.25% F. R. (0.5% for ST-75, ST-100)
- Operating temperature range** . . . . . -20°C to +70°C
- Shock Survival** . . . . . 250g for 11 msec
- Vibration tolerance** . . . . . 20 g up to 500 Hz
- Lead wires** . . . . . 6 wires 400 mm long

## Dimensions (mm)



## Wiring



**Note**  
LVDT installation requires a connecting rod between the LVDT core and the object whose motion is being measured. This connecting rod must be made of non-magnetic stainless steels (for example AISI 304)

**How to order**  
Ordering example:  
Model number – LVDT ST – 1.5 (supplied with core)

TYPE	Linear Range mm	Sensitivity (tested at 5kHz) V/mm/Vex	Impedance (tested at 5kHz)		Resistance		Length	
			Ω		Ω		mm	
			Prim.	Sec.	Prim.	Sec.	A	B
ST-1.5	±1.5	0.18	220	720	60	170	30.5	21.5
ST-3	±3	0.11	310	1200	95	270	45	25
ST-5	±5	0.06	420	1300	110	260	74	45
ST-10	±10	0.04	440	1500	90	210	100	65
ST-25	±25	0.032	420	900	90	160	150	80
ST-32	±32	0.03	450	950	95	170	160	80
ST-50	±50	0.015	180	640	50	110	300	173
ST-75	±75	0.013	220	800	60	135	370	185
ST-100	±100	0.01	280	1000	80	170	470	215

Information furnished by Singer Instruments & Control is believed to be accurate and reliable. However, no responsibility is assumed by Singer Instruments & Control for its use, nor for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Singer Instruments & Control Ltd.

## Singer Instruments & Control Ltd.

2 Yozma St., Tirat Carmel 39032, ISRAEL  
yuval@singer-instruments.com

Tel: 972-4-857-8880  
Fax: 972-4-857-8881