

SM Series LVDT

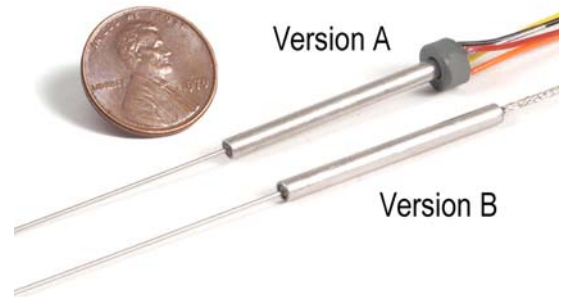
2.3 mm diameter



This micro-miniature LVDT is designed for high resolution position measurement in tight places. It is layer wound on metal coil-form provides excellent stability, while ferromagnetic housing takes care of the electromagnetic and electrostatic shielding

Several options are available for signal conditioning: digital or analog EL-35 signal conditioners, CB-100 line powered control box, and USB-10 digital controller.

Different versions of this LVDT can be manufactured by request.



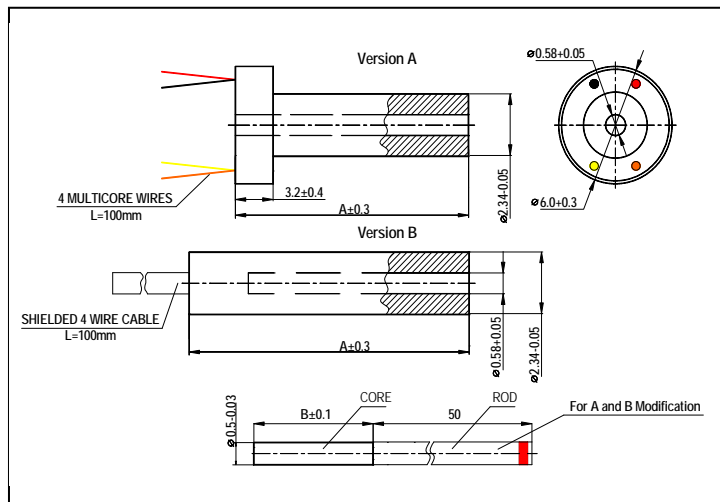
Specification

Input voltage	2.3Vrms max
Input Frequency	5kHz (nominal)
Linearity deviation error	2.0% F. R. max
Operating temperature range	-20°C to +70°C
Housing material	Nickel-Iron Alloy.

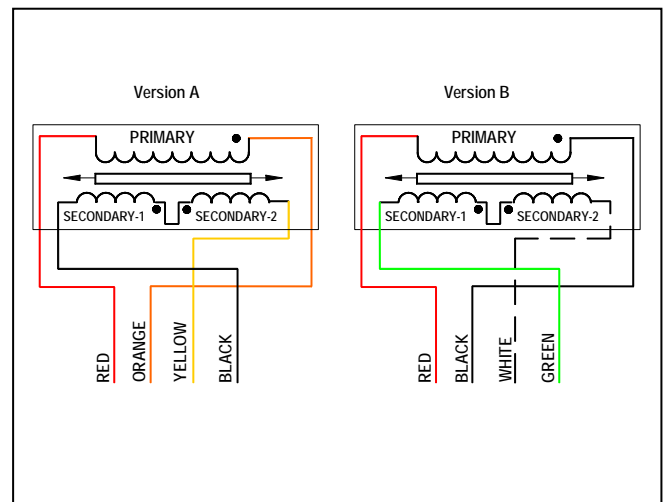
Applications:

- ✓ robotic systems - miniature control elements;
- ✓ miniature sensors - force, torque, joint movements;
- ✓ optical components - linear/angular position;
- ✓ medical use - micro motion, deformation.

Dimensions (mm):



Wiring



Notes

LVDT core is supplied together with welded connecting rod.
Non magnetic side is labelled with red mark

How to order

Ordering example:
Model number: LVDT SM – 7.0A-3m (supplied with 3 meter long connecting wires.).

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
SM-1.0A	±1.0	0.07	190	50	115	45	10.0	6.5
SM-1.0B							18.0	
SM-2.5A	±2.5	0.044	310	70	170	65	17.5	11.0
SM-2.5B							25.5	
SM-5.0A	±5.0	0.044	170	70	90	60	27.5	17.0
SM-5.0B							35.5	
SM-7.0A							35.0	
SM-7.0B	±7.0	0.029	205	90	130	80	43.0	19.5
SM-8.5A							43.0	
SM-8.5B	±8.5	0.02	240	110	165	100	51.0	26.2

Rev. L

© Singer Instruments & Control Ltd., 2012

WWW.SINGER-INSTRUMENTS.COM

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