

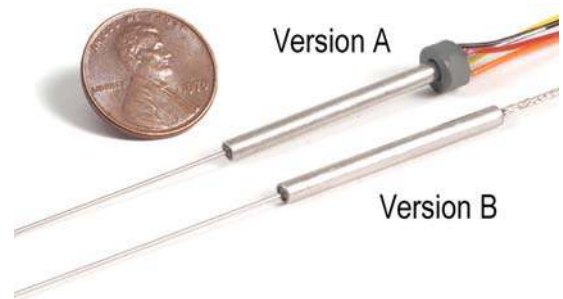
# SM Series LVDT

## 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.



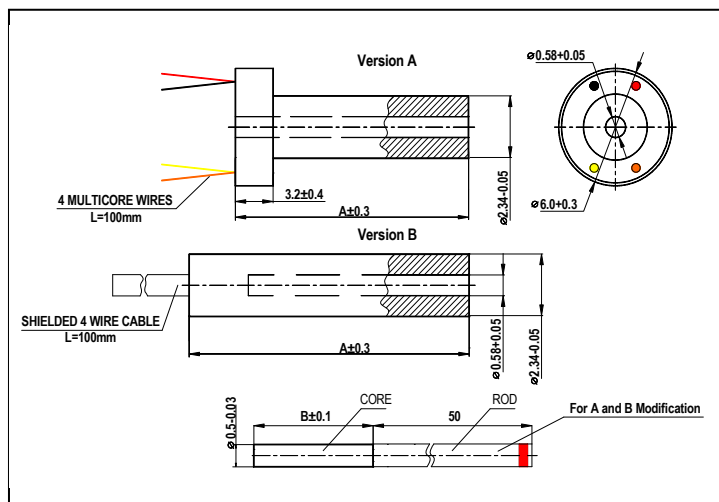
### Specification

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

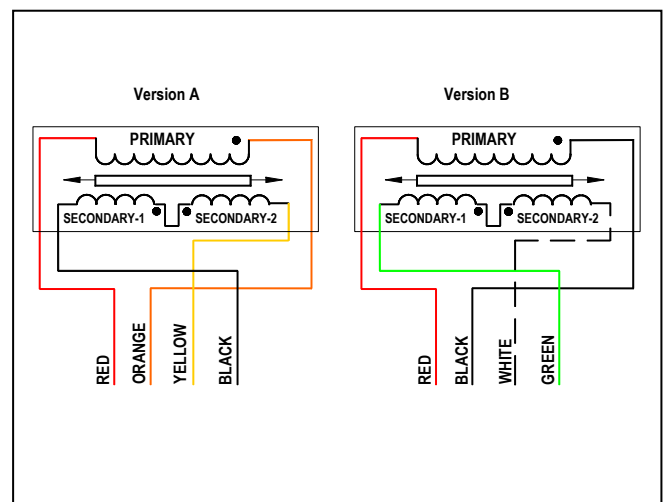
### Applications:

- ✓ 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

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