

# Miniature Gage Head GH-SM Series



This micro-miniature spring-loaded LVDT is designed for high resolution position measurement in tight places. Its 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 and USB-10 or USB-10-4 digital controllers, manufactured by Singer Instruments & Control.



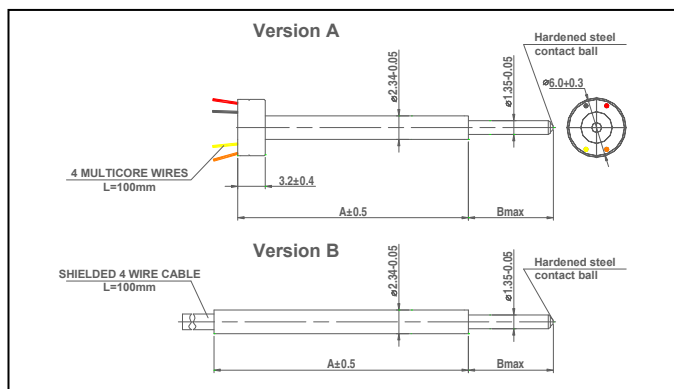
## Specifications

<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.

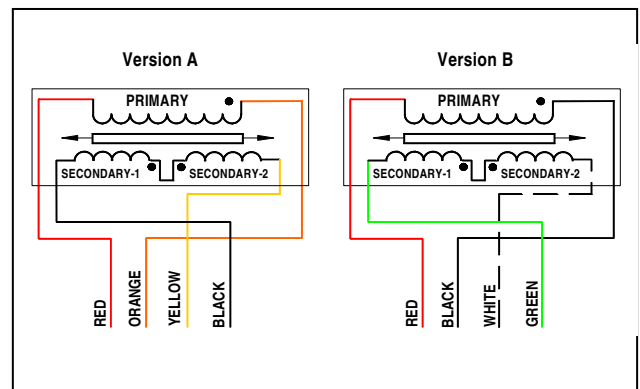
## Applications:

- ✓ robotic systems – micro motion measurement;
- ✓ civil engineering – movements and deflections;
- ✓ optical components - linear/angular positioning;
- ✓ medical use – micro motion, deformation.

## Dimensions (mm)



## Wiring



## How to order

Ordering example: Model number – GHSM– 2.5A

MODEL	Linear Measuring Range	Total mechanical stroke, Bmax	Spring Force *	Sensitivity (tested at 5kHz)	Impedance (tested at 5kHz)		Resistance		Length
					Ω	Ω	Ω	Ω	
	mm	mm	gr.	V/mm/Vex	Prim.	Sec.	Prim.	Sec.	mm
GHSM-1.0A	±1.0	2.7	30-70	0.07	190	50	115	45	20.4
GHSM-1.0B									28.4
GHSM-2.5A	±2.5	5.7	30-95	0.044	310	70	170	65	30.0
GHSM-2.5B									38.0
GHSM-5.0A	±5.0	10.7	25-90	0.044	170	70	90	60	51.6
GHSM-5.0B									59.6

\*Max. deviation ±20%