

# GH Series Gage Head LVDT

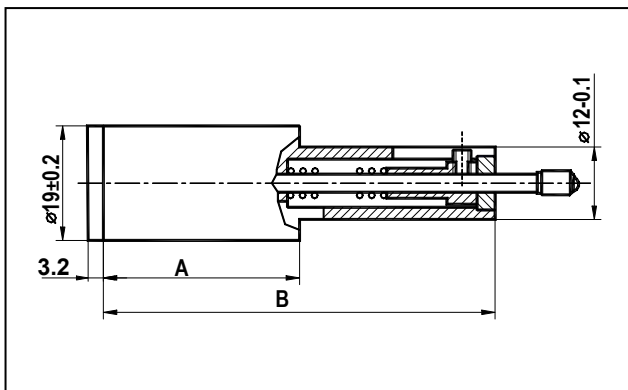
This linear bearing spring loaded Gage Head is specially designed for heavy duty high resolution position measurements. Hardened Steel contact tip can be removed and replaced if damaged. Steel casing serves for electromagnetic and electrostatic shielding. The Gage Head contains an AC LVDT and it needs a signal conditioner electronics to operate, such as Digital or analog EL-35 Signal Conditioners, USB-10 or USB-10-4 digital controllers. All are manufactured by Singer Instruments & Control.

## Specifications

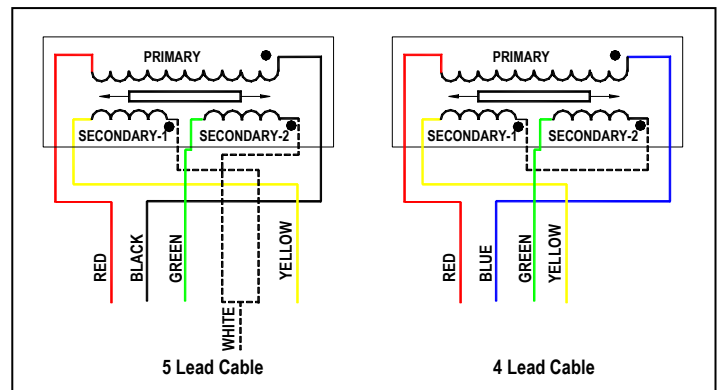
|  |   |
|--|---|
| <b>Input voltage</b> . . . . .               | 3V rms (nominal)                          |
| <b>Input Frequency</b> . . . . .             | 50 to 10000 Hz range, 5kHz nominal        |
| <b>Linearity deviation error</b>             | 0.25% of full range output                |
| <b>Operating temperature range</b> . . . . . | -20°C to 70°C                             |
| <b>Housing material</b> . . . . .            | Chrome plated High carbon steel           |
| <b>Lead wires</b> . . . . .                  | Shielded 4 or 5 Lead Cable<br>500 mm long |
| <b>Contact tip</b> . . . . .                 | Hardened steel ball, 3 mm diameter        |



## Dimensions (mm)



## Wiring



## How to order

Ordering example: Model number – GH- 1.5 4 leads.

| TYPE   | Linear Measuring Range<br>mm | Moving Range, min<br>mm | Measuring Force *<br>gr | Sensitivity (tested at 5kHz)<br>V/mm/Vex | Repeatability<br>µm | Impedance (tested at 5kHz) |      | Resistance |      | Length   |          |
|--------|------------------------------|-------------------------|-------------------------|--|---------------------|----------------------------|------|------------|------|----------|----------|
|        |                              |                         |                         |  |                     | Ω                          |      | Ω          |      | mm       |          |
|        |                              |                         |                         |  |                     | Prim.                      | Sec. | Prim.      | Sec. | A        | B        |
| GH-1.5 | ±1.5                         | 3.5                     | 40-60                   | 0.13                                     | ±0.1                | 220                        | 720  | 60         | 170  | 34.5±0.3 | 69.5±0.5 |
| GH-3   | ±3                           | 6.5                     | 40-70                   | 0.11                                     | ±0.1                | 310                        | 1200 | 95         | 270  | 49.5±0.3 | 83.5±0.5 |
| GH-5   | ±5                           | 10.5                    | 40-105                  | 0.06                                     | ±0.15               | 420                        | 1300 | 110        | 260  | 78±0.3   | 113±0.7  |
| GH-10  | ±10                          | 21                      | 55-115                  | 0.04                                     | ±0.15               | 440                        | 1500 | 90         | 210  | 104±0.3  | 149±0.7  |

\* Max. deviation ±20%

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