

# GHTA19 Series

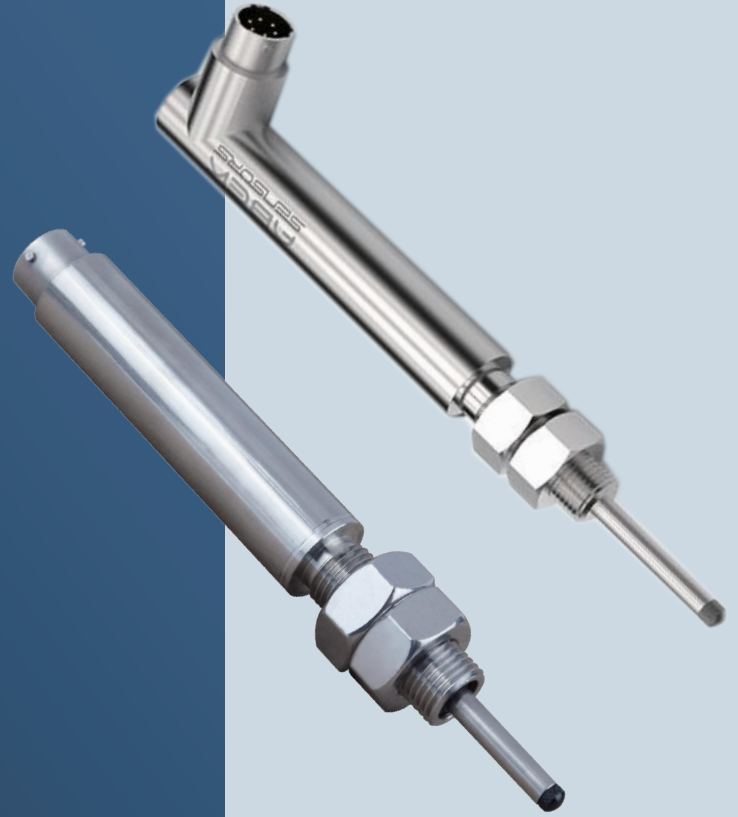
## High Temperature spring-loaded LVDT

### Applications :

- Machine&tool positioning
- Hydraulic axis positioning
- Valve position measurement
- Material tensiometer
- Automatic production line
- Other applications for harsh environments

### Features :

- Range:  $\pm 3 \sim \pm 50 \text{mm}$
- Max. temperature:  $200^{\circ}\text{C}$
- Linearity:  $\leq \pm 0.25\%$  (FS)
- Aviation connector
- Sealing class: IEC IP-68
- AC excitation: 400Hz-5kHz



ABEK GHTA19 series high temperature spring-loaded AC LVDT position sensors are widely used in a variety of displacement measurement applications. This series of sensors are laser-welded in a stainless steel housing, the coil is hermetically sealed, and the entire body can reach IP-68 protection level. This series is produced with special materials and processes, and can work stably at high temperatures up to  $200^{\circ}\text{C}$ , which are resistant to harsh environments and are suitable for a wide range of industrial applications.

The GHTA19 series LVDT sensors consist of a spring-loaded shaft running in a precision sleeve bearing connected to the LVDT core. Due to the precision sleeve bearing, repeatability up to 0.6 microns or even higher.

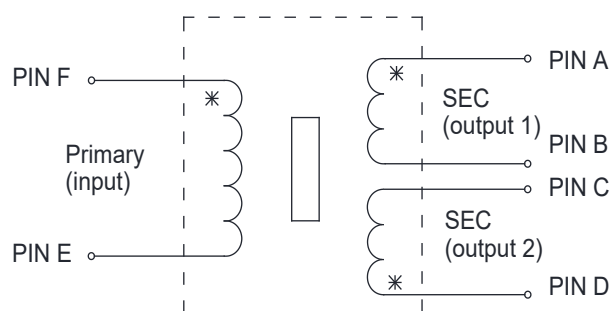
Radial connector type GHTA19R has two major advantages. First, the overbore design allows access to either or both ends of the core, making it easy to provide mechanical support, core guidance, and easy to clean the inside of the sensor. The second is the shorter body size compared to axial connector products of the same range.

The GHTA19 series sensors are available in ranges from  $\pm 3 \text{mm}$ (0-6mm) to  $\pm 50 \text{mm}$ (0-100mm), although other ranges are available at special request, and it has the characteristics of high resolution, good repeatability, and low latency.

## General Specifications

Parameters	Specifications
Inout voltage:	1-12V AC, 3V rms (rated)
Input frequency:	400 Hz to 10 kHz, 2.5 kHz (rated)
Linearity error:	<±0.25% of FSO
Repeatability error:	<0.01% of FSO
Hysteresis error:	<0.01% of FSO
Operating temperature:	-55°C to +200°C
Thermal coefficient:	-0.02%/°C (rated)
Vibration resistance:	20g, 2 K Hz

## Wiring Connection

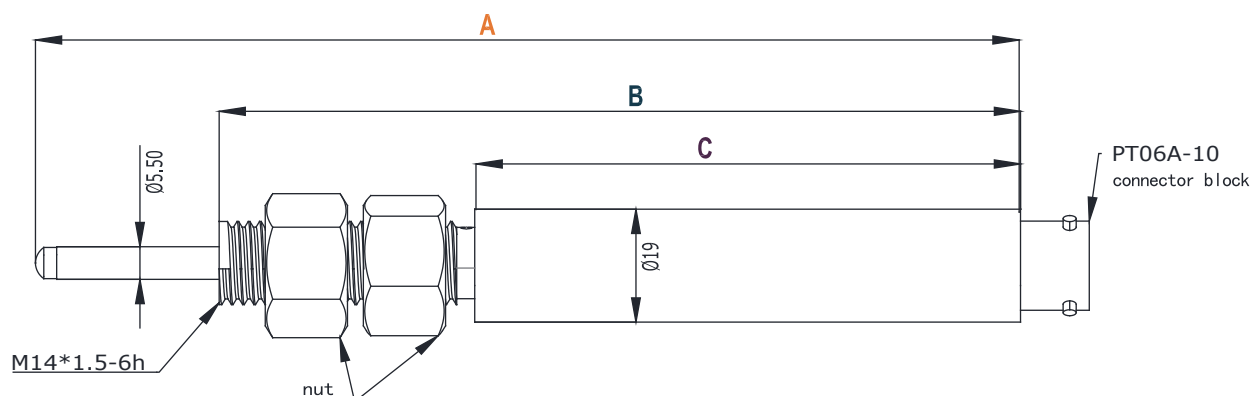


- Pin A **RED**
- Pin B **BLUE**
- Pin C **GREEN**
- Pin D **BLACK**
- Pin E **BROWN**
- Pin F **YELLOW**

Connect PINS (B)and(C) for differential output.

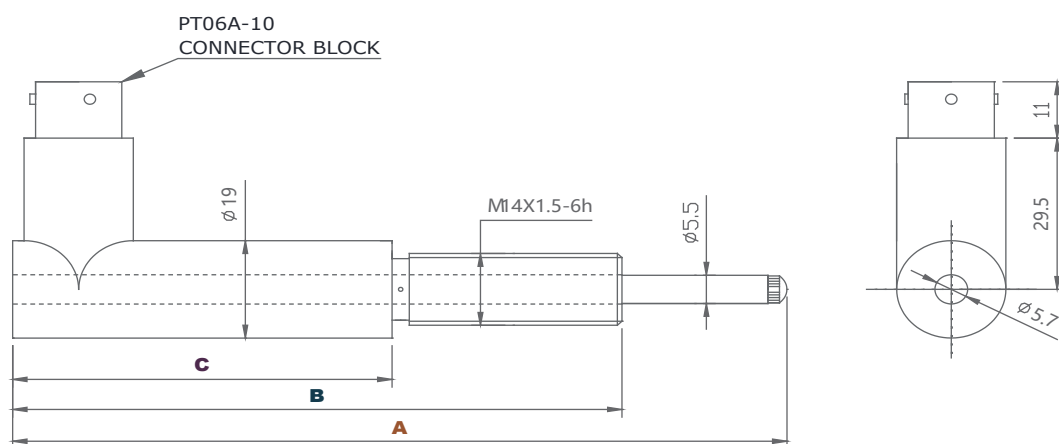
## Dimensions

### Axial Connector



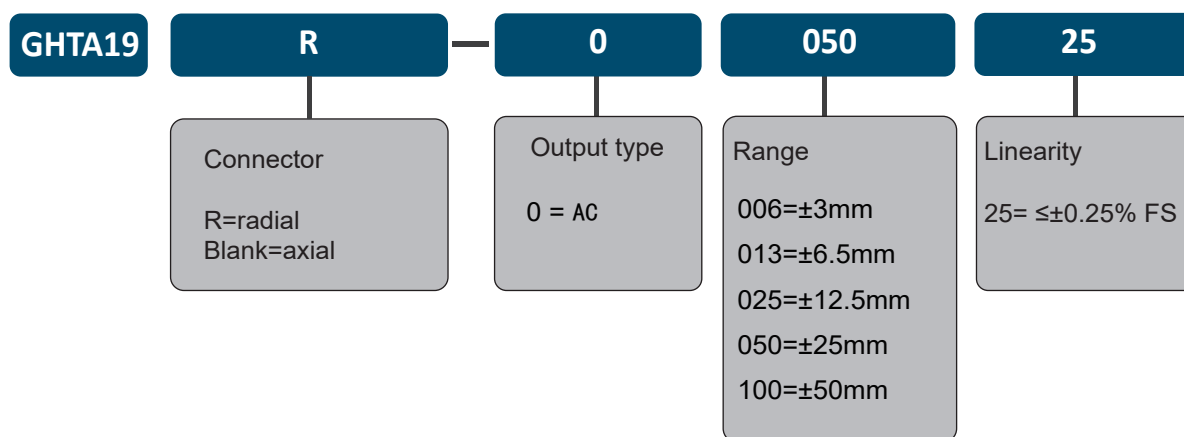
Parameter	Range Code	006	013	025	050	100
Range	mm	$\pm 3$	$\pm 6.5$	$\pm 12.5$	$\pm 25$	$\pm 50$
Body length "A"	mm	136.7	154.7	280.7	344.4	534.3
Core length "B"	mm	108	126	242.7	280.7	413.6
Core position "C"	mm	68	86	155	193	279

### Radial Connector



Parameter	Range Code	006	013	025	050	100
Range	mm	$\pm 3$	$\pm 6.5$	$\pm 12.5$	$\pm 25$	$\pm 50$
Body length "A"	mm	136.7	154.7	273	336.7	538.7
Core length "B"	mm	108	126	235	273	418
Core position "C"	mm	68	86	155	193	279

## Ordering Guide



### Axial Connector

Range	Model	P/N
±3mm LVDT	GHTA19-000625	0356-0059
±6.5mm LVDT	GHTA19-001325	0356-0060
±12.5mm LVDT	GHTA19-002525	0356-0061
±25mm LVDT	GHTA19-005025	0356-0062
±50mm LVDT	GHTA19-010025	0356-0063

### Radial Connector

Range	Model	P/N
±3mm LVDT	GHTA19R-000625	0356-0487
±6.5mm LVDT	GHTA19R-001325	0356-0480
±12.5mm LVDT	GHTA19R-002525	0356-0479
±25mm LVDT	GHTA19R-005025	0356-0577
±50mm LVDT	GHTA19R-010025	0356-0578

## Accessories

P/N	Part Name	Model	Description	Remark
0356-TC6-0001	HT connector&cable	TC-6-2M	PT06A+HT 6 core cable, orange cable, length 2m	Standard
0356-TC6-0002	HT connector&cable	TC-6-5M	PT06A+HT 6 core cable, orange cable, length 5m	Optional
0356-TC6-0003	HT connector&cable	TC-6-10M	PT06A+HT 6 core cable, orange cable, length 10m	Optional
20069388-4	connector	PT06A-10-6S(SR)	Connector excl. cable	Optional
0355-001	mounting block	MTD-19	Mounting block for 19mm LVDT	Optional

*HT refers to high temperature.*

## Contact us

Contact us for technical consultation or customization requests.

Tel: 400-013-6886

Tel: 010-51660768

Fax: 010-80766992

Email: [info@abeksensors.com](mailto:info@abeksensors.com)

Web: [www.bjabek.com](http://www.bjabek.com)

ABEK SENSORS is a registered trademark.  
All specifications subject to change without notice.  
Copyright ©2017 -ABEK SENSORS