

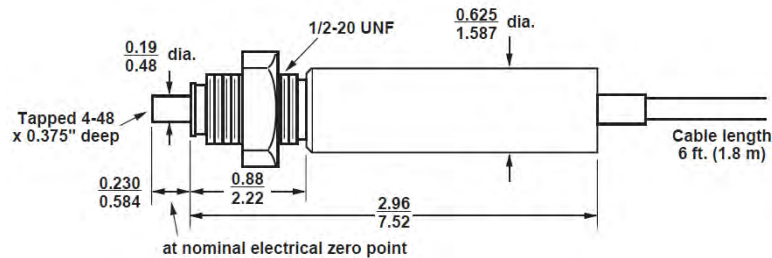


## “LOCKING NUT” LVDT SERIES

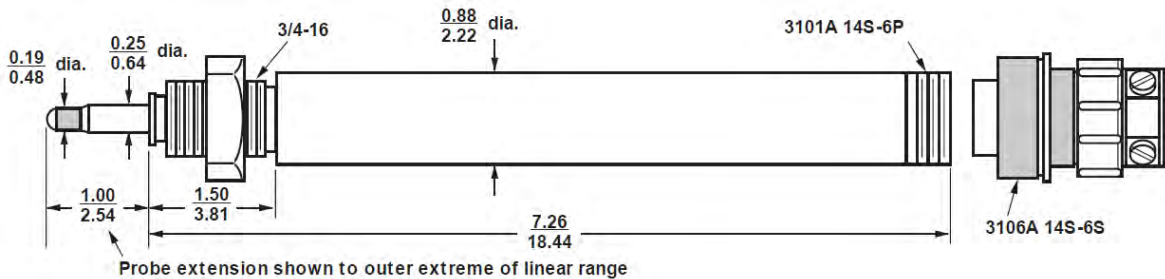
The Models **DS200C** and **DS500** each have a threaded mounting shank and locking nut to allow secure, precise positioning in a simple mounting fixture. The coil is epoxyencapsulated and magnetically shielded, and the springloaded probe terminates in a hardened steel tip, rounded and polished, which is readily replaceable (see the optional Model 106 Contact Tip). An optional rubber boot is also available, for protection of the probe shaft from fluids and abrasive materials.

Combining optimal electrical properties with rugged stainless-steel construction, these instruments can tolerate years of hard industrial use with no appreciable loss of precision. Typical applications include in-process gaging control, creep test recording, structural deflection measurement, actuator and tool position feedback, dilatometry, strip thickness measurement, and much more (see Fig. LT3).

**Fig. LT.9**  
**Model DS200C**  
**Dimensions**  
**(in./cm)**



**Fig. LT.10**  
**Model DS500**  
**Dimensions**  
**(in./cm)**



# LVDT

AC, SHORT-STROKE, SPRING-EXTENDED  
[LOCKING NUT SERIES]

## SPECIFICATIONS

### Linear Range:

**DS200C:** ±0.10 in. (±2.5 mm)

**DS500:** ±0.250 in. (±6.35 mm)

### Excitation:

**DS200C:** 1 to 5 V-AC (RMS) at 2 to 10 kHz

**DS500:** 2 to 10 V-AC (RMS) at 0.06 to 10 kHz\*

### Armature:

**DS200C** - 110g @ ext, 77g @ null and 45g @ compression

### Linearity\*\*:

**DS200C:** ±0.2% of full scale

**DS500:** ±0.25% of full scale

### Sensitivity:

**DS200C:** 1.8 mV/V/0.001", nominal

**DS500:** 5.0 mV/V/0.001", nominal

### Operating Temperature Range:

**DS200C** -20°C to +125°C (-4° F to +257° F)

**DS500:** -40°C to +100°C (-40° F to +212° F)

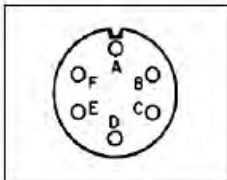
\* With excitation below 0.4 kHz, primary voltage should not exceed 3 V.

\*\* Minimum characteristics at 5 kHz excitation for DS200C; at 3 kHz for DS500.

## DS500

### Connector / Wiring Details

Connector #	Transducer Connection
A	Center Tap (Signal Common)
B	Secondary Output 1 (+ Signal)
C	Center Tap (Signal Common)
D	Secondary Output 2 (- Signal)
E	Primary Input 1 (+ Excitation)
F	Primary Input 2 (- Excitation)

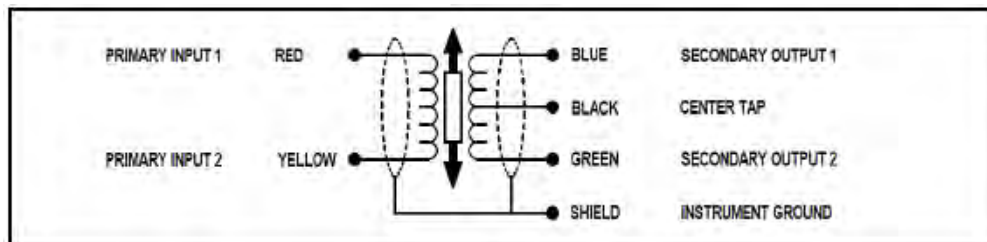


Connector is an Amphenol  
97-3106A-14S-6S, AN3047-6  
  
Rear view

## DS200C

### Wiring Details

Wire Color	Transducer Connection
RED	Primary Input 1 (+ Excitation)
YELLOW	Primary Input 2 (- Excitation)
Shield	Shield
BLUE	Secondary Output 1 (+ Signal)
GREEN	Secondary Output 2 (- Signal)
BLACK	Center Tap



**Note as of June 2018 - DS200C:** Version has been updated to "C" to denote the transducer is supplied without the 14 pin Amphenol connector pair. For recommended in-line connector pair - use Daytronic part number 64090.00. Technical document 92377.00.