

The **LT0600 Series** is a micro-slim sensor with an Ø6.0mm stainless steel case suitable for applications, where temperature, severe vibration, high cycling and fluid contamination are important considerations.

Manufactured to quality standards required for high performance measurement systems, the LVDT sensor is designed to convert linear movement from the separate non-contacting shaft into a proportional voltage output.

Extensively used for motorsport throttle and clutch actuation, where size, performance and reliability are part of the design criteria, they are also specified in automotive control and measurement systems.

For total system integrity, they are fitted with Raychem fire and chemical resistant, high temperature RW-200-E sleeved type 55 26AWG signal cabling.

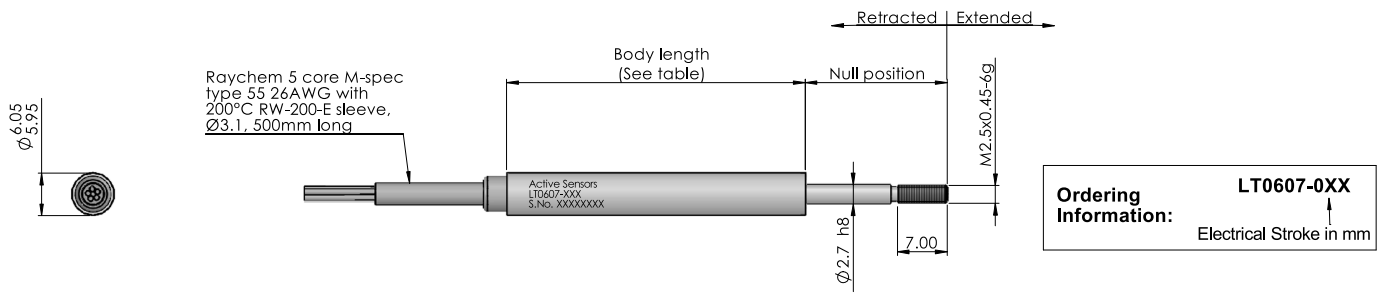
They are designed to be environmentally protected against the ingress of dust and water to IP67.

### Key features and benefits

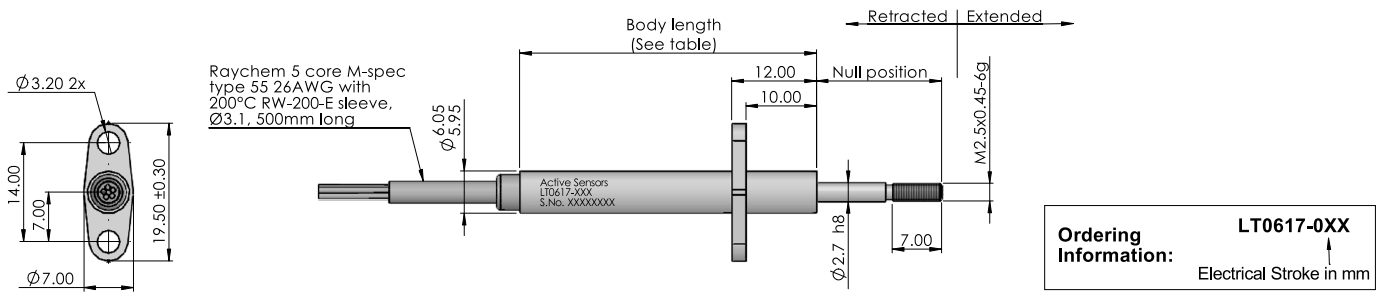
- Measurement ranges 15mm and 20mm.
- Micro-slim Ø6.0mm stainless steel case
- Maximum operating temperature 200°C (400°F)
- Sealed to IP67
- Raychem RW-200-E sleeved type 55 26AWG cabling
- Contactless technology
- Custom designs available on request.
- [Electronic signal conditioning available](#)



## LT0607- Body clamp mounting with rear cable exit



## LT0617 – Flange mounting with rear cable exit



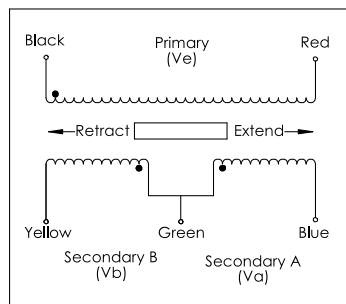
## Electrical and Mechanical Specification for LT0607 and LT0617

Specification			
Input conditions	(Ve)	3.0V $\pm 5\%$ RMS @ 5.0KHz $\pm 5\%$	
Electrical stroke		15 ( $\pm 7.50$ )	20 ( $\pm 10.0$ )
Retracted mechanical stroke	(max)	8.50	11.00
Ratiometric sensitivity ( $\pm 5\%$ )	$\frac{V_a - V_b}{V_a + V_b}$ (note 1)	0.0553	0.0440
Summed O/P voltage	( $\pm 10\%$ )	0.465	0.541
Output voltage range	(nominal)	0.408 - 0.987	0.454 - 1.169
Non-linearity	(note 1,3)	$< \pm 0.5$	
Thermal drift	(note 2,3)	$< \pm 0.01$	
Input impedance		$> 150$	
Null position	( $\pm 0.5$ mm)	20.0	
Body length		36.0	42.0
Insulation resistance (prim-sec, coils-case)		$> 100$ Mohms	
Operating temperature		$-55 - +200$	
Weight (approx)		14	16.5
Environmental		IP67	
Materials		Case - Stainless steel 400 series Shaft - Stainless steel 316 Armature - Nickel iron alloy	

Notes:

1. Non-linearity error and sensitivity is calculated from least squares best fit method.
2. Thermal drift is defined as:- Maximum ratiometric change from reading at ambient ( $+20^\circ\text{C}$ ) to ratiometric reading over operating temperature range.
3. Full scale (FS) is calculated by (Ratiometric sensitivity per mm x total electrical stroke)
4. General dimension tolerance is  $\pm 0.25$ mm

### Electrical Connections



### LVDT AC Output Schematic

