



LT0600 micro-slim range

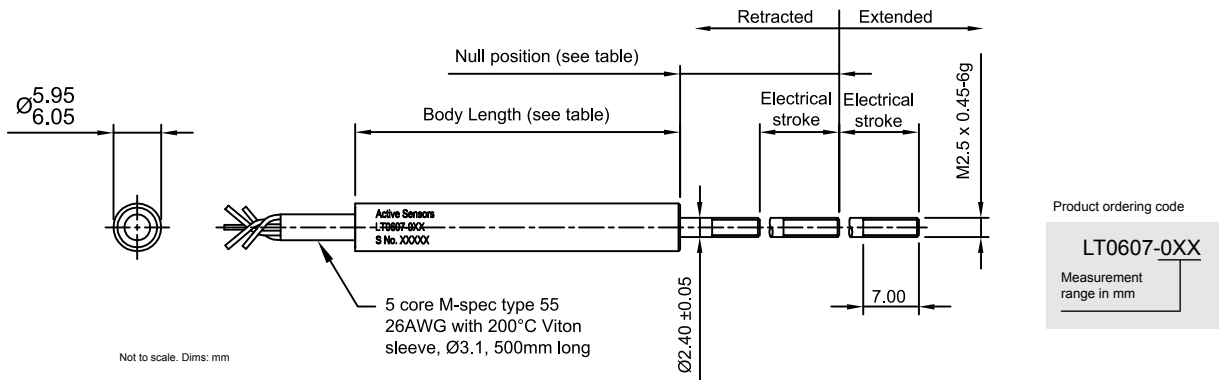


- Measurement range: up to 20mm
- Mirco-slim 6.0mm body Ø
- 180°C (360°F) operating temperature
- Ultra compact
- Sealed as standard
- Raychem cabling

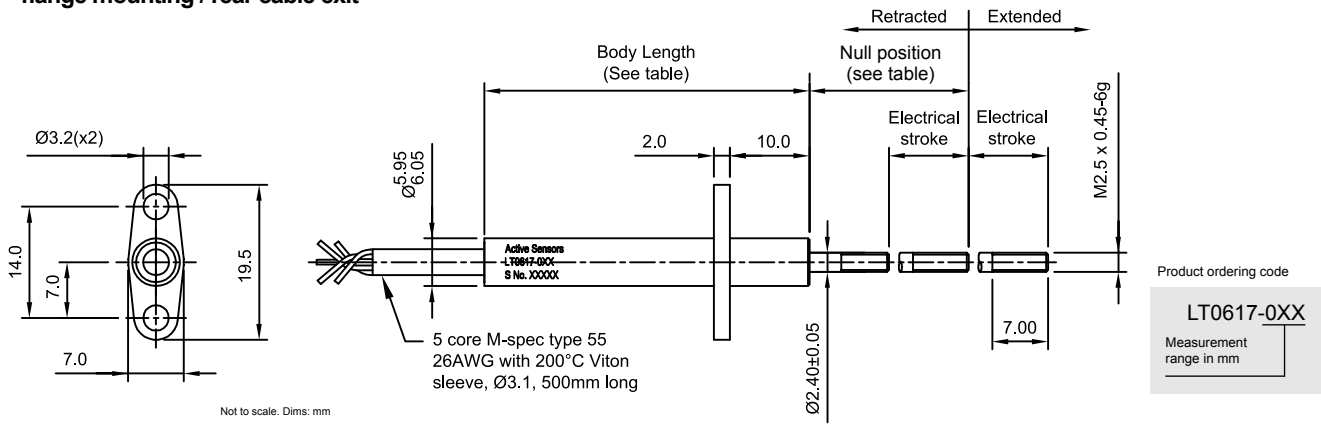
The LT0600 sensors contains design features which make it suitable for applications where high temperature, severe vibration, high cycling and fluid contamination are important considerations. The sensor is used in installations when size, performance and reliability are part of the design criteria and are used extensively in motorsport control systems for throttle and clutch actuation. Other applications include flight control and measurement systems. The sensor housing is manufactured from stainless steel and is environmentally sealed and fitted with Raychem fire & chemical resistant, high temperature Viton-type 55-26 signal cabling for total system reliability. The LVDT sensor is designed to convert the linear movement of a separate non-contacting core or shaft into a proportional voltage output.

Model dimensions and mounting

LT0607 - body clamp mounting / rear cable exit



LT0617 - flange mounting / rear cable exit



Electrical & mechanical information for LT0600 range

Input conditions (V_{in})	3.0V RMS $\pm 5\%$ @ 5.0 KHz $\pm 5\%$		
Electrical stroke	15 (± 7.50)	20 (± 10.00)	mm
Mechanical stroke (min.)	± 8.50	± 11.00	mm
Body length	36.0	42.0	mm
Null position	20.0		mm
Summed output voltage ($\pm 5\%$)	0.465	0.541	V/V _{in}
Ratiometric sensitivity $\frac{V_a - V_b}{V_a + V_b}$	0.053	0.0440	/mm
Output voltage range (nominal)	0.420 - 0.975	0.440 - 1.170	V rms
Non-linearity (note 1, 3)	$< \pm 0.5$		% FS
Thermal drift (note 2)	$< \pm 0.01$		%FS/°C
Input impedance	> 150		Ohms
Operating temperature	-55° to $+180^\circ$		°C
Environmental conditions	IP66		
Weight	15 (approx.)		grams
Materials	Housing - 400 Series stainless steel Armature - nickel iron alloy		

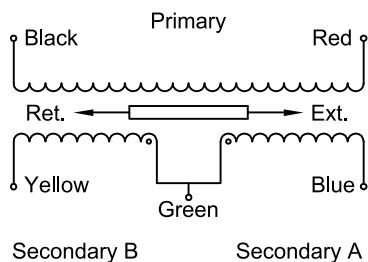
Note 1: Non-linearity error and sensitivity is calculated from least squares best fit method.

Note 2: Maximum error from reading at ambient ($+20^\circ\text{C}$) to reading at $+180^\circ\text{C}$.

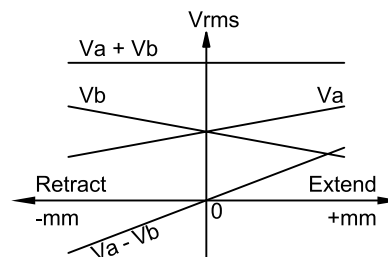
Note 3: FS is total ratiometric output range.

Note 4: The shaft on this sensor is non-captive.

Electrical Connections



LVDT AC Output Schematic



Other LVDT position sensor models available

LT0800

- Range up to 40mm
- Ultra-slim 8.0mm body Ø
- 200°C operating temperature
- Ultra-compact design



LT0950

- Range up to 50mm (2")
- Slim 9.54mm body Ø
- 200°C operating temperature
- Sealed as standard



LT1300

- Range: 25mm (1") to 200mm (8")
- Robust and slim 12.7mm body Ø
- 200°C operating temperature
- Sealed as standard



Please see separate datasheet for electronic signal conditioning for LVDT sensors.

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Additional product information

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