LVDT position sensors

Active sensors
Proud to be part of *the* team

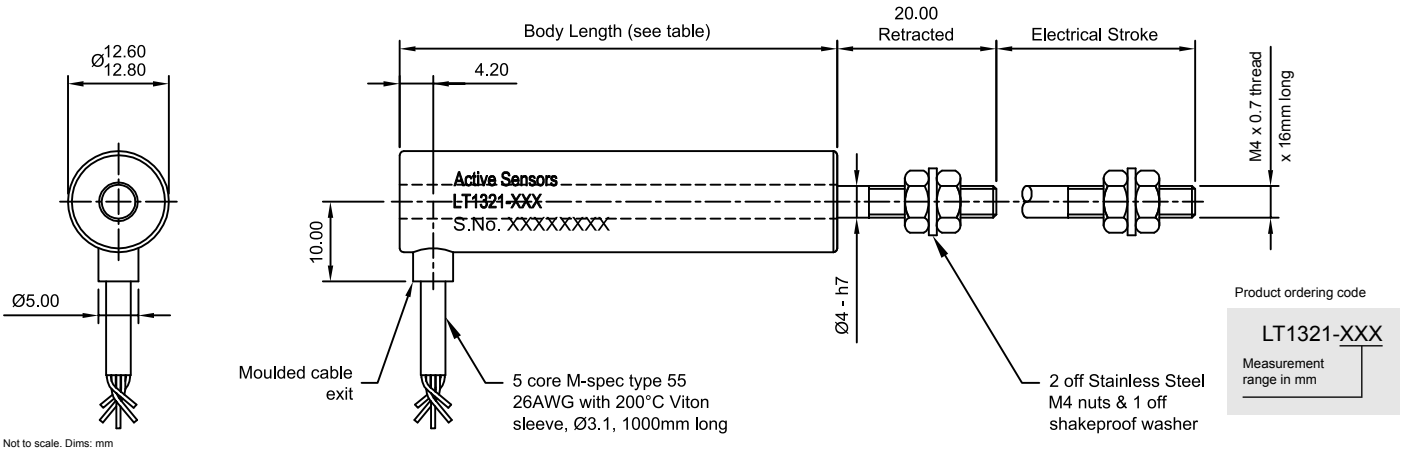
LT1300 range

- Measurement range: 25mm to 200mm
- Robust and slim 12.7mm body Ø
- 200°C (400°F) operating temperature
- Sealed as standard
- Long operational life
- Raychem cabling

The LT1300 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

LT1321 - body clamp / side cable exit



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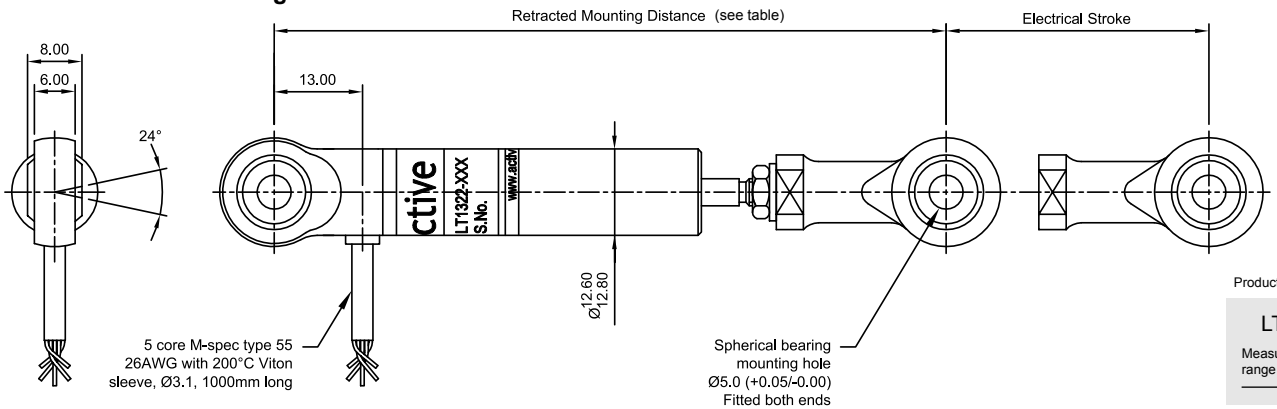
LT1322 - rod end mounting



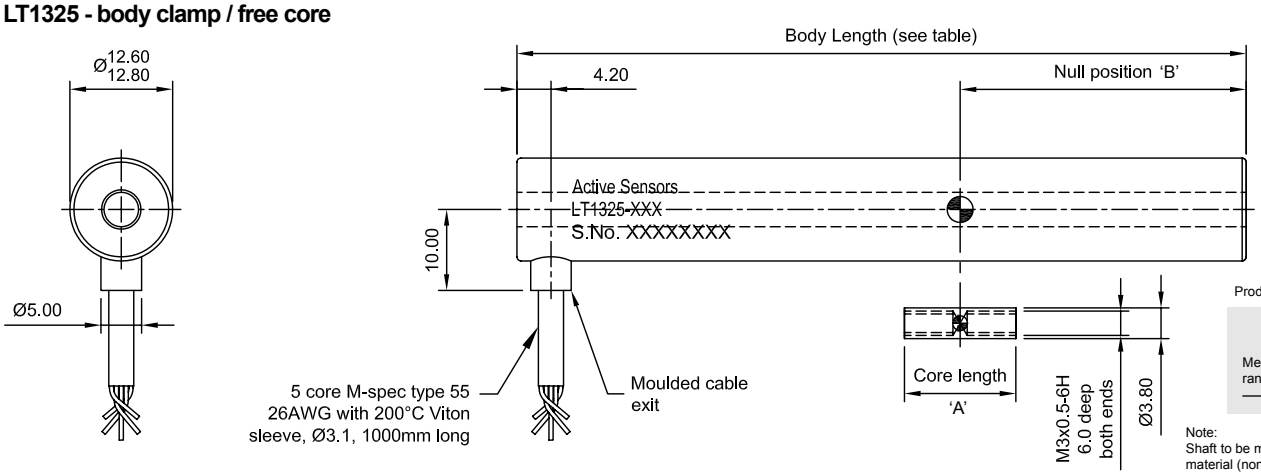
Product ordering code

LT1322-XXX

Measurement range in mm

Not to scale. Dims: mm

LT1325 - body clamp / free core



Product ordering code

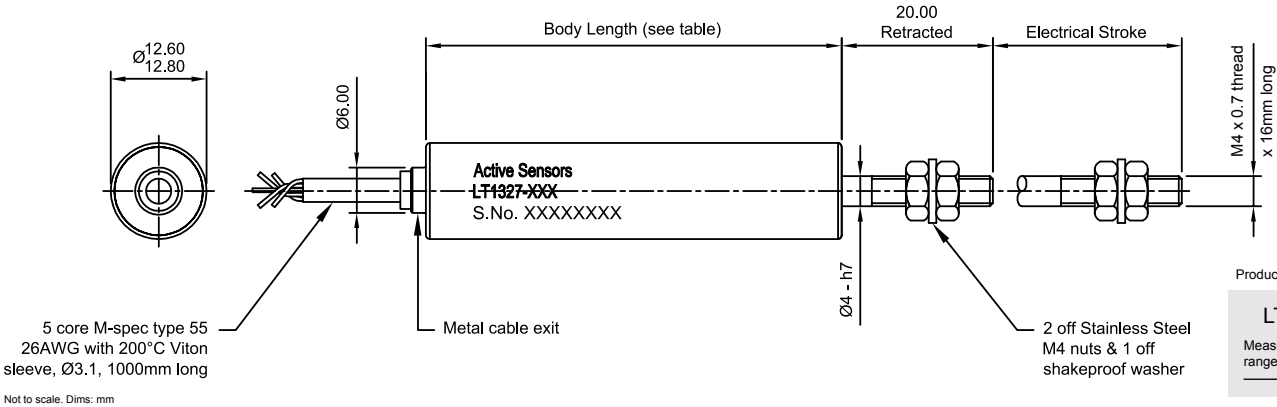
LT1325-XXX

Measurement range in mm

Note:
Shaft to be made from non-ferrous material (non-magnetic)

Not to scale. Dims: mm

LT1327 - body clamp / rear cable exit



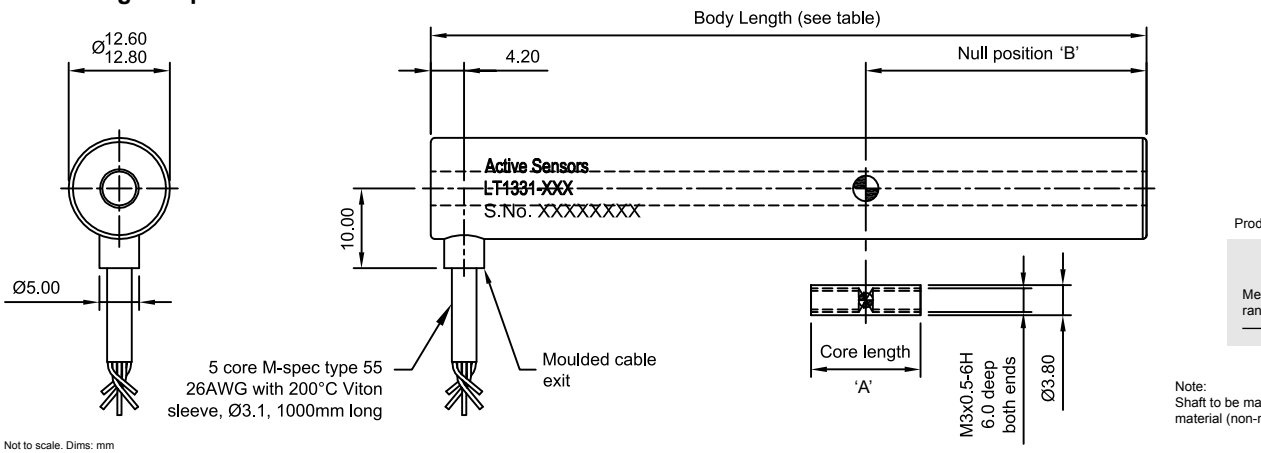
Product ordering code

LT1327-XXX

Measurement range in mm

Not to scale. Dims: mm

LT1331 - high temperature model / free core



Product ordering code

LT1331-XXX

Measurement range in mm

Note:
Shaft to be made from non-ferrous material (non-magnetic)

Not to scale. Dims: mm

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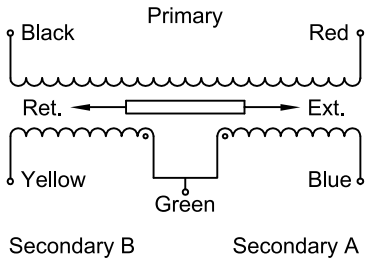
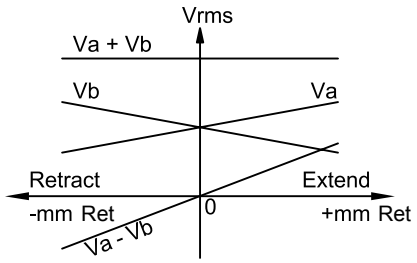
Electrical & mechanical information for LT1300 range

Input conditions	3.0V RMS ±5% @ 2.5 KHz ±5%						
Electrical stroke	25 (±12.50)	50 (±25.00)	75 (±37.50)	100 (±50.00)	150 (±75.00)	200 (±100.00)	mm
Mechanical stroke (min.)	±13.50	±26.00	±38.00	±51.00	±76.00	±101.00	mm
Body length	55.0	90.0	125.0	153.0	205.0	255.0	mm
Retracted mounting distance	125.0	150.0	195.0	223.0	275.0	323.0	mm
Core length 'A'	13.8	13.8	15.0	33.0	33.0	26.0	mm
Null position 'B'	22.8	35.3	55.1	71.8	97.6	122.3	mm
Summed output voltage (nominal)	0.97	0.93	0.84	0.80	0.77	0.91	v/v
Ratiometric sensitivity ±5%	0.025	0.0132	0.010	0.008	0.006	0.004	/mm
Non-linearity	<±0.5						%
Input impedance	>200	>300	>400	>500	>600	>700	Ohms
Operating temperature	LT1321, 22, 25, 26 - -55° to +150° LT1331 - -55° to +200°						°C
Environmental	Sealed						
Materials	Case - stainless steel 416 Shaft- stainless steel 316						

Electrical Connections



LVDT AC Output Schematic



Other LVDT position sensor models available

LT0600
- Range up to 20mm
- Micro-slim 6.0mm body Ø
- 180°C (360°F) operating temperature
- Ultra-compact design

LT0800
- Range up to 40mm
- Ultra-slim 8.0mm body Ø
- 200°C (400°F) operating temperature
- Ultra-compact design

LT0950
- Range up to 50mm (2")
- Slim 9.54mm body Ø
- 200°C (400°F) operating temperature
- Sealed as standard

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

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