

XLT0956

XLT (LVIT) linear sensor

(Linear Variable Inductive Transducer)

The XLT0956 is a compact, body clamp mounted long life, high temperature linear position sensor with integral electronics. It is housed in a slim 9.54mm \varnothing stainless steel body and has fully encapsulated, sealed internal electronics and electrical connections. The sensor is manufactured to quality standards required for high performance, high cyclic control and measurement systems.

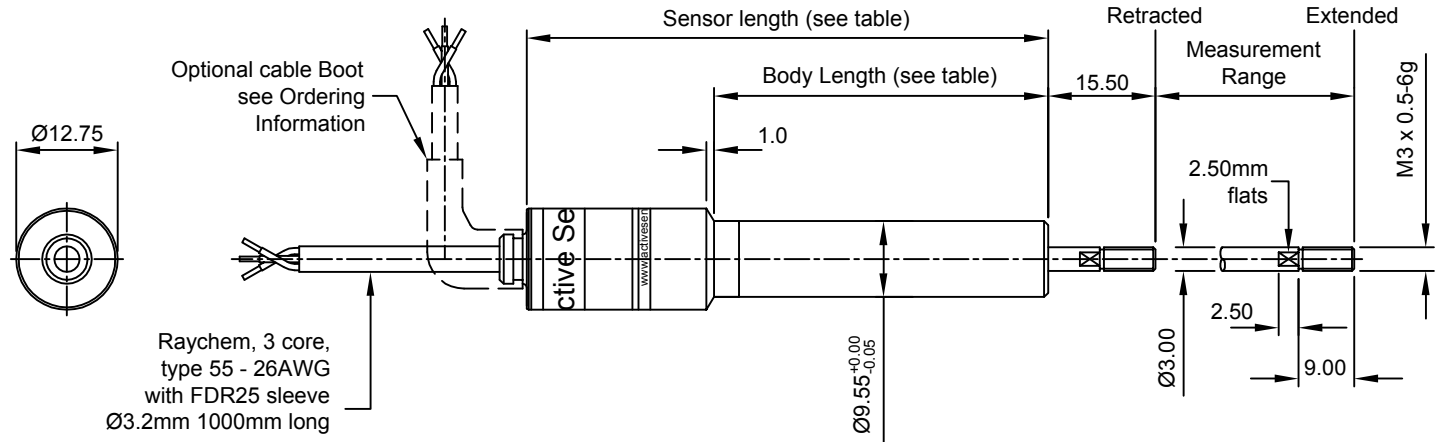
With a measurement range from 10mm to 60mm, the sensor operates from a 5Vdc regulated supply with a low noise analogue output of 0.5V to 4.5Vdc. The XLT's precision wound inductive coils enable an improved temperature performance (low thermal drift, typically $\pm 0.01\%$ FS/ $^{\circ}$ C), compared to other similar inductive products.

Other models in this range

XLT095X Higher temperature model with separate signal conditioning

XLT1320 - Choice of mounting (12.70mm body \varnothing)

XLT132X - Higher temperature model with separate signal conditioning



Electrical & Mechanical Information

Measurement range	10	15	20	25	30	40	50	60	mm
Sensor length	68	68	78	78	88	98	103	113	mm
Body length	42	42	52	52	62	72	77	87	mm
Input voltage (+Vs)	5 \pm 5%								Volts DC
Supply current	<10								mA dc
Output voltage (Vo)	0.5 to 4.5								Volts DC
Non-Linearity	< \pm 0.5								%
Thermal drift	< \pm 0.01%								FS/ $^{\circ}$ C
Output load	>150								ohms
Output noise and ripple	0.1%								FS (pk-pk)
Frequency response (-3dB)	500 (Nom)								Hz
Operating temp. range	-40 $^{\circ}$ to +125 $^{\circ}$								$^{\circ}$ C
Environmental	Sealed								
Case material	Stainless Steel 416								

Note 1: Incorrect wiring may cause internal damage to the sensor.

