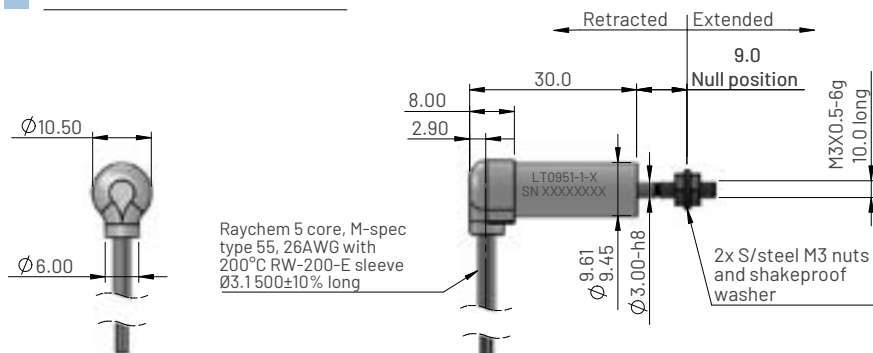


LT0951 Series - LVDT position sensor (1mm to 4mm measurement range)

Ø8mm Ultra-slim, ultra-compact. Clamp mounting.

Active
sensors

Dimensions for LT0951-1-X



Ordering code

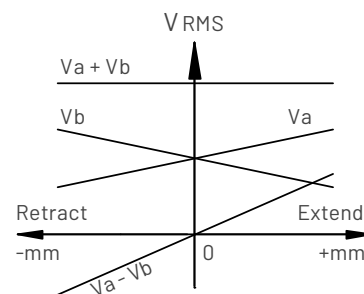
LT0951-1-X

Measurement range in mm

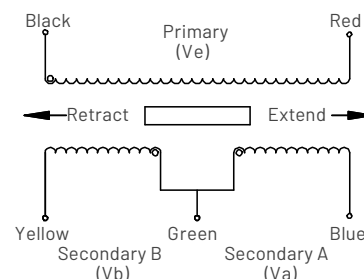
Electrical and mechanical specification

Parameters	Values			Units	Tol	Notes
Measurement range (MR)	1	2	4	mm		
Electrical stroke	±0.5	±1.0	±2.0	mm		
Mechanical stroke	±3.0			mm	Max	
Body length	30.0			mm	±0.5	
Null position	9.0			mm	±1.0	
Input voltage (Ve)	3.0			Vrms	±5%	1
Input frequency	10000			Hz	±5%	
Non-linearity	<±0.5			% FS		3, 6
Ratiometric sensitivity	0.102			R/mm	±5%	2, 3
Va and Vb voltage range	TBD	TBD	1.31 - 1.99	Vrms	Nom	4, 5
(Va + Vb)/Ve Summation ratio	1.10			Vrms/Ve	±20%	
Thermal drift	<±0.010 TBD			%FS/°C		6, 7
Input impedance	>120			Ohms		
Insulation resistance	>100			Mohms		8
Operating temperature range	-55 to +150			°C		
IP rating	IP67					
Weight (excluding cable)	22			grams	Nom	
Materials	Housing - Stainless steel 400 series, Shaft - Stainless steel 316					

LVDT AC Output schematic



Electrical connections



Notes

1. Sine waveform. THD <3%.
2. Ratiometric measurement mode (R) is defined as $(V_a - V_b)/(V_a + V_b)$.
3. Non-linearity error and ratiometric sensitivity is calculated by least squares best fit method.
4. V_a and V_b are ratiometric with V_e .
5. Blue (V_a) increases and Yellow (V_b) decreases as shaft extends (as shown in Output schematic).
6. FS is defined as ratiometric sensitivity x measurement range (MR).
7. Average thermal drift over operating temperature range.
8. Between prim and sec coils and all coils to case at 500Vdc.