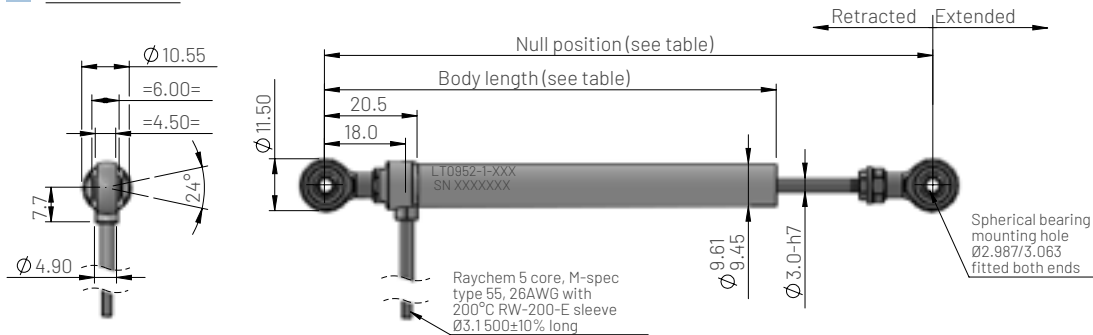


LT0952 Series - LVDT Position Sensor (10mm to 75mm stroke)

Ø9.5mm Slim-bodied, ultra compact. 3mm Rod-End mounting

Dimensions



Ordering code

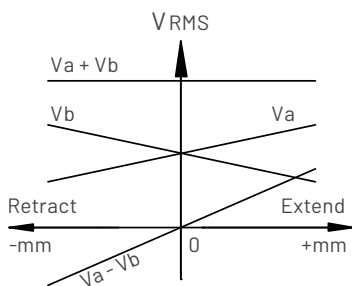
LT0952-1-XX

Measurement range in mm

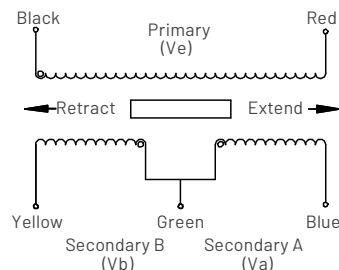
Electrical and mechanical specification

Parameters	Values				Units	Tol	Notes
Measurement range (MR)	10	25	50	75	mm		
Electrical stroke	±5.0	±12.5	±25.0	±37.5	mm		
Mechanical stroke	±5.5	±13.0	±25.5	±38.0	mm	Max	
Body length	75	100	125	150	mm	±0.5	
Null position	103.0	135.0	173.0	210.0	mm	±1.0	
Input voltage (Ve)	3.0				Vrms	±5%	1
Input frequency	2500				Hz	±5%	
Non-linearity	<±0.5				% FS		3, 6
Ratiometric sensitivity	0.0800	0.0422	0.0152	0.0094	R/mm	±5%	2, 3
Va and Vb voltage range	0.540-1.260	0.404-1.306	0.623-1.387	0.895-1.868	Vrms	Nom	4, 5
(Va + Vb)/Ve Summation ratio	0.60	0.57	0.67	0.92	Vrms/Ve	±20%	
Thermal drift	<±0.010				%FS/°C		6, 7
Input impedance	>150				Ohms		
Insulation resistance	>100				Mohms		8
Operating temperature range	-55 to +135				°C		
IP rating	IP67						
Weight (excluding cable)	34	40	50	60	grams	Nom	
Materials	Housing - Stainless steel 400, Shaft - Stainless steel 316						

LVDT AC Output schematic



Electrical connections



Notes

1. Sine waveform. THD <3%.
2. Ratiometric measurement mode (R) is defined as (Va-Vb)/(Va+Vb).
3. Non-linearity error and ratiometric sensitivity is calculated by least squares best fit method.
4. Va and Vb are ratiometric with Ve.
5. Blue (Va) increases and Yellow (Vb) 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.

Europe
Active Sensors Ltd,
Unit 12, Wilverley Road,
Christchurch, Dorset,
BH23 3RU, UK

North America
Active Sensors Inc,
8520 Allison Pointe Blvd, Suite 220,
Indianapolis,
IN 46250, USA