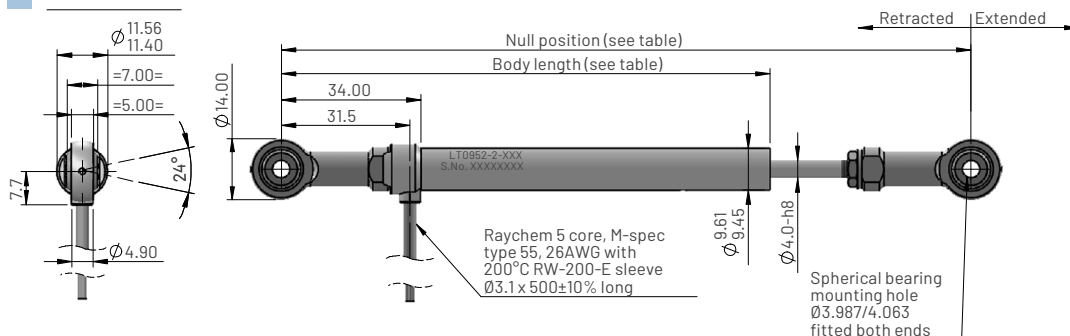


LT0952 Series - LVDT Position Sensor (75mm to 200mm stroke)

Ø9.5mm Slim-bodied, ultra compact. 4mm Rod-End mounting

Dimensions



Ordering code

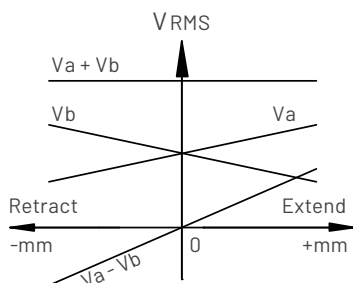
LT0952-3-XXX

Measurement range in mm

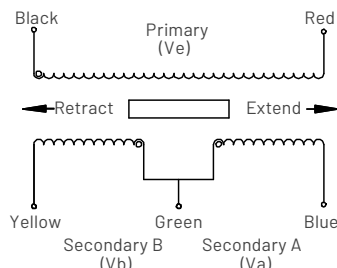
Electrical and mechanical specification

Parameters	Values						Units	Tol	Notes
Measurement range (MR)	025	050	075	100	150	200	mm		
Electrical stroke	±12.5	±25.0	±37.5	±50.0	±75.0	±100.0	mm		
Mechanical stroke	±13.5	±26.0	±38.5	±51.0	±76.0	±101.0	mm	Max	
Body length	114	139	164	205	257	306	mm	±0.5	
Null position	160	198	235	288	367	440	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	0.0264	0.0155	0.0094	0.0089	0.0072	0.0065	R/mm	±5%	2, 3
Va and Vb voltage range	0.520 - 1.031	0.671 - 1.519	1.012 - 2.114	0.608 - 1.582	0.600 - 2.010	0.431 - 2.030	Vrms	Nom	4, 5
(Va + Vb)/Ve Summation ratio	0.52	0.73	1.042	0.73	0.87	0.82	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)	39	52	63	79	101	121	grams	Nom	
Materials	Housing - Stainless steel 410, 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.

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