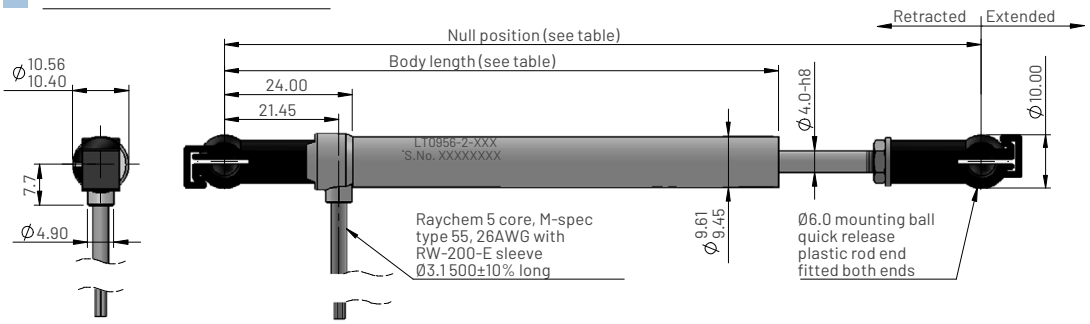
LT0956 Series - LVDT position sensor (25mm to 200mm measurement range)

Ø9.5mm Ultra-compact. Quick-Release ball joint mounting.

Dimensions for LT0957-2



Ordering code

LT0956-2-XXX

Measurement range in mm

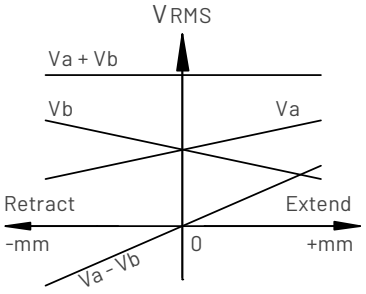
Electrical and mechanical specification

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	±13.0	±25.5	±38.0	±50.5	±75.5	±100.5	mm	Max	
Body length	104	129	154	195	247	296	mm	±0.5	
Null position	142	180	217	270	349	422	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 impedence	>150						Ohms		
Insulation resistance	>100						Mohms		8
Operating temperature range	-55 to +135						°C		
IP rating	IP67								
Weight (excluding cable)	36	49	60	76	98	118	grams	Nom	
Materials	Housing - Stainless steel 410, Shaft - Stainless steel 316								

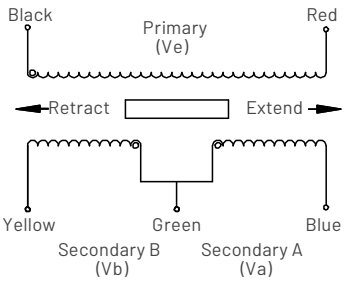
Notes

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.

LVDT AC Output schematic



Electrical connections



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