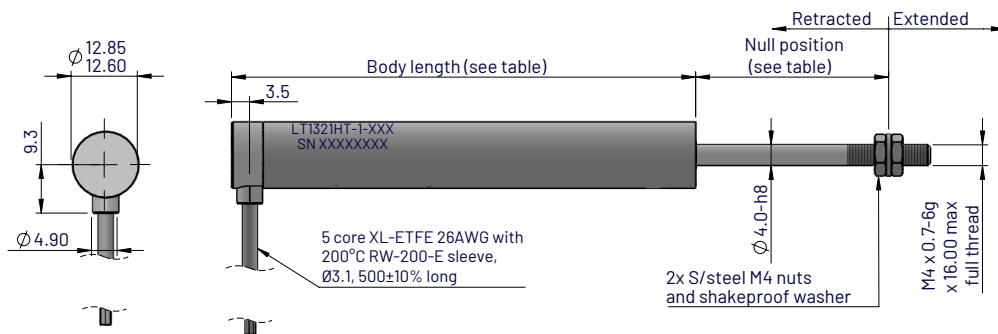


LT1321HT-1 (High Temperature) AC LVDT Contactless Linear Position Sensors

Clamp mounting, Robust 13mm body diameter, 25mm to 200mm measurement range

Active
sensors



Ordering information

LT1321HT-1-XXX

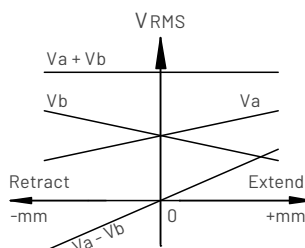
Measurement range in mm

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	64.0	89.0	129.0	162.0	214.0	263.0	mm	±0.5	
Null position	25.5	37.0	49.5	62.5	87.5	112.0	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	0.0247	0.0130	0.0101	0.0077	0.0056	0.0046	R/mm	±5%	2, 3
Va and Vb voltage range	0.880 - 1.667	0.925 - 1.817	0.763 - 1.694	0.759 - 1.710	0.592 - 1.451	0.701 - 1.894	Vrms	Nom	4, 5
(Va + Vb)/Ve Summation ratio	0.849	0.914	0.819	0.823	0.681	0.865	Vrms/Ve	±20%	
Thermal drift	<±0.015						%FS/°C		6, 7
Input impedance	>200	>300	>400	>500	>600	>700	Ohms		
Insulation resistance	>100						Mohms		8
Operating temperature range	-55 to +200						°C		
IP rating	IP67								
Weight (excluding cable)	42	53	75	92	118	140	grams	Nom	
Materials	Housing - Stainless steel 316, Shaft - Stainless steel 316, Rear cap - Peek 450G, Armature - Nickel Iron Alloy								

Notes

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

LVDT AC Output schematic



Electrical connections

