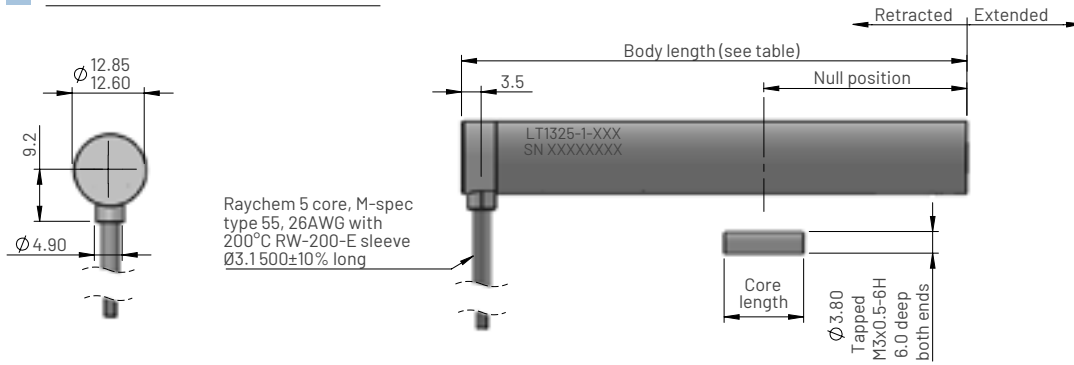


LT1325 Series - LVDT position sensor (25mm to 200mm stroke)

Ø12.7mm body. Robust construction. Free core.

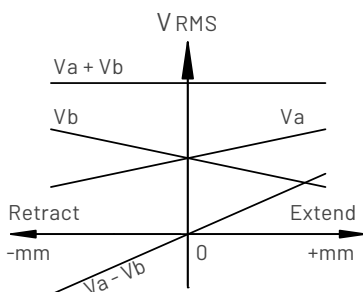
Dimensions for LT1325-1-XXX



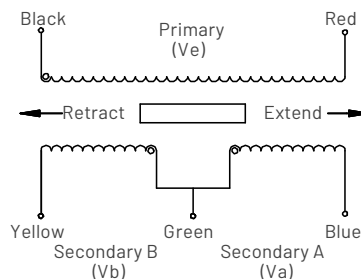
Electrical and mechanical specification

| 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 | 64.0 | 89.0 | 129.0 | 162.0 | 214.0 | 263.0 | | | |
| Core length | 15.0 | 14.0 | 15.0 | 28.5 | 28.0 | 26.0 | | | |
| Null position | 23.3 | 35.8 | 55.6 | 72.3 | 98.3 | 122.8 | 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 | 0.0250 | 0.0132 | 0.0100 | 0.0080 | 0.0060 | 0.0040 | R/mm | ±5% | 2, 3 |
| Va and Vb voltage range | 1.000 - 1.910 | 0.935 - 1.855 | 0.788 - 1.733 | 0.720 - 1.680 | 0.635 - 1.675 | 0.819 - 1.911 | Vrms | Nom. | 4, 5 |
| (Va + Vb)/Ve Summation ratio | 0.97 | 0.93 | 0.84 | 0.80 | 0.77 | 0.91 | Vrms/Ve | ±20% | |
| Thermal drift | <±0.010 TBC | | | | | | %FS/°C | | 6, 7 |
| Input impedance | >200 | >300 | >400 | >500 | >600 | >700 | Ohms | | |
| Insulation resistance | >100 | | | | | | Mohms | | 8 |
| Operating temperature range | -55 to +135 | | | | | | °C | | |
| IP rating | IP67 | | | | | | | | |
| Weight (excluding cable) | 34 | 48 | 69 | 86 | 113 | 139 | grams | Nom. | |
| Materials | Housing - Stainless steel 316, 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.

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