Series 280

Economy AC LVDTs

The Series 280 AC LVDTs are designed and manufactured to provide an accurate, yet economical, means of measuring linear displacement. The transducers are available in working ranges of 0.1 to 2.0 inches. Maximum non-linearity is specified as $\pm 0.4\%$ of full scale.



KEY FEATURES

- Ranges from ±0.05" to 2.0"
- Large Core to Bore Clearance
- Non-linearity < 0.4%
- Low Cost

SPECIFICATIONS - ELECTRICAL

MODEL	LINEAR RANGE ±Inches (mm)	REFERENCE FREQUENCY	SENSITIVITY V/in./V	INPUT IMPEDANCE Ohms	OUTPUT IMPEDANCE Ohms	PHASE ANGLE UNCOMPENSATED	FREQUENCY FOR ZERO PHASE SHIFT	MAXIMUM NON-LINEARITY	MAXIMUM EXCITATION
0280-0000	0.050 (1.27)	1.0 KHz	4.5	71	935	3°	1.6 KHz		
0281-0000	0.100 (2.54)	1.0 KHz	3.2	70	372	3°	1.4 KHz	±0.4%	1.0 V.A.
0282-0000	0.250 (6.35)	2.4 KHz	2.9	46	160	25°	17 KHz	Full Scale	
0283-0000	0.500 (12.7)	2.4 KHz	1.8	107	265	15°	10 KHz		
0284-0000	1.00 (25.4)	2.4 KHz	0.95	100	134	9.5°	7.8 KHz		

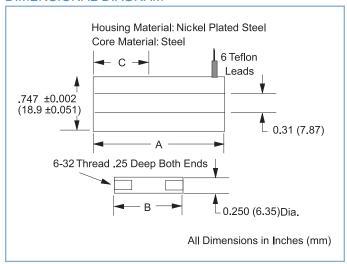
Notes:

- 1. Electrical specifications are based on energizing the primary coil with the specified excitation frequency.
- 2. Nominal values are given for sensitivity.
- 3. Operating Temperature -50°F to +250°F (-46°C to +121°C)

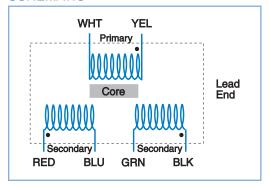
SPECIFICATIONS - MECHANICAL

MODEL	HOUSING LENGTH A Inches (mm)	CORE LENGTH B Inches (mm)	ELECTRICAL CENTER C Inches (mm)	INNER SLEEVE MATERIAL	TOTAL NET WEIGHT W/0 CORE Grams	CORE NET WEIGHT Grams	CORE PART NUMBER	LEAD LENGTH, GAUGE
0280-0000	1.63 (41.4)	1.00 (25.4)	0.63 (16.0)	PHENOLIC	40	5.4	C005-0046	7" AWG #26
0281-0000	1.94 (49.3)	1.19 (30.2)	0.78 (19.8)	PHENOLIC	48	6.4	C005-0045	7" AWG #26
0282-0000	3.31 (84.1)	1.25 (31.8)	1.47 (37.3)	PHENOLIC	67	7.0	C005-0044	7" AWG #26
0283-0000	4.88 (124)	2.00 (50.8)	2.25 (57.2)	PHENOLIC	105	12.1	C005-0037	7" AWG #26
0284-0000	6.88 (175)	3.00 (76.2)	3.25 (82.6)	PHENOLIC	120	18.4	C005-0038	7" AWG #26

DIMENSIONAL DIAGRAM



SCHEMATIC

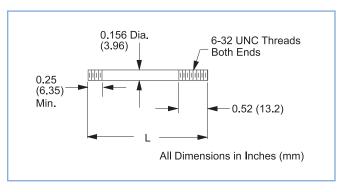


CORE EXTENSION RODS (Sold Separately)

The recommended core extension rods are made of nonmagnetic stainless steel and are sized to allow the transducers to operate over their full range. Extension rods from models with longer strokes may be used to facilitate installation. Using extension rods shorter than recommended may reduce the LVDT's usable measurement range.

MODEL	LENGTH L Inches (mm)	CORE EXTENSION ROD		
0280-0000	2.00 (50.8)	C006-0060		
0281-0000	2.00 (50.8)	C006-0060		
0282-0000	2.50 (63.5)	C006-0061		
0283-0000	3.25 (82.6)	C006-0062		
0284-0000	5.25 (133)	C006-0063		

DIMENSIONAL DIAGRAM



SALES OPTIONS

Option # Description

X0009 Provide longer leads to a specified length

X0012 Replace leads with an integral connector type MS3101A-14S-6P; adaptor

for connector has 1.00" O.D.; mating connector included