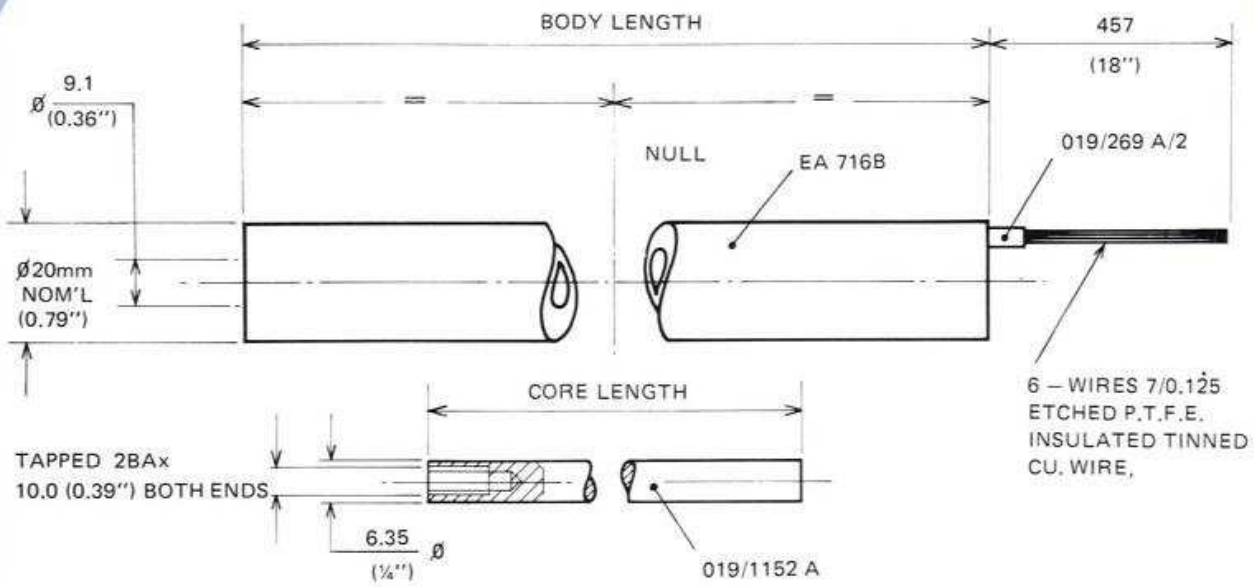
E SERIES AC LVDT DISPLACEMENT TRANSDUCER

- LOW COST
- ACCURATE
- IDEAL FOR OEM
- RELIABLE
- LARGE LINEAR RANGES

The economy E Series LVDT displacement transducers are basic Linear Variable Differential Transformers intended for O E M applications or similar low cost requirements. The straight cylindrical body, flying lead out wires, large bore and free unguided/unrestrained core facilitate the incorporation of the device into other assemblies which may be unique to the user, e.g. force or pressure transducers, mechanical, hydraulic or pneumatic actuators, tensile testers etc.

Similarly, because of these versatile characteristics, these LVDTs form the heart of many of the specialised displacement transducers in our range, the outer bodies of which may be provided with electrical connectors, mounting flanges or end fittings to suit a variety of environments and applications.

These transducers are designed for operation on low voltage AC supplies at frequencies within the range 50Hz to 5KHz. The 20mm nominal diameter body is manufactured from stainless steel. A bore tube of nominal internal diameter 9.1mm extends through the length of the cylindrical body. A free, unguided core of 6.35mm nominal diameter is internally threaded 2BA at each end for mechanical connection by the user to the source of motion. Alternatively, the LVDT may be supplied with a fitted extension rod threaded at the free end. Flying leads of 450mm length emerge through the outer edge of one body end disc.



SPECIFICATION

Input Voltage	From less than 1 volt to 10v RMS, 50 Hz to 5KHz												
Maximum recommended input current	20 mA												
Temperature range	From 0° to 150°C Standard												
Linearity	± 0.5												
Type Numbers	E.01	E.02	E.05	E.075	E.1	E.2	E.3	E.4	E.5	E.6	E.8	E.10	E.12
IS Numbers	IS320	IS321	IS322	IS323	IS324	IS325	IS326	IS327	IS328	IS329	IS330	IS331	IS332
Displacement ranges inches	±0.1"	±0.2"	±0.5"	±0.75	±1.0"	±2.0"	±3.0"	±4.0"	±5.0"	±6.0"	±8.0"	±10.0	±12.0
Displacement ranges mm	±2.5	±5.0	±12.5	± 20	± 25	± 50	± 75	±100	±125	±150	±200	±250	±300
Output at full range (mV/v@3KHz)	35	42	200	200	230	350	380	400	500	350	250	200	200
Primary Inductance (mH) approx	80	80	70	55	70	80	100	130	140	100	285	400	400
Primary impedance at 3KHz (ohms)	460	700	1.3K	280	1.4K	1.5K	2 K	2.4K	2.6K	2 K	5.4K	7.8K	8 K
Primary resistance (ohms)	150	200	110	100	130	190	250	330	300	180	500	600	250
Secondary resistance (total) ohms	100	180	150	125	240	330	440	570	640	390	800	660	400
Zero phase frequency (KHz) approx	4	4		3.5							5		
Body length (inches)	1.25	1.8	3.6	4.7	6.4	9.8	12.6	14.9	17.1	20.2	24.7	29.3	33.7
Core size 0.25" dia. x length inches	0.6	1.0	1.8	2.5	3.0	4.5	5.6	5.6	6.0	6.5	7.2	7.75	9.0
Body diameter	20mm (0.79")												
Mounting arrangement	By clamp around the body (not supplied)												

ORDERING INFORMATION/OPTIONS

OPTIONS

Additional displacement ranges: including up to ± 20 inches

Different lengths of integral lead out wires

Fitted extension rod and core guides

± 0.3 linearity by selection.

Ordering Information

When ordering request unit by type No. and IS No. or state requirements by specifying options.

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