

## ABOUT LVDT'S

Linear Variable Differential Transformers are non-contact, absolute position sensors. They include a transformer housed into a metal case and a ferromagnetic core which can be attached to an extension rod. The core slides inside the spool tube (also called boreliner) of the transformer. The transformer contains the coil assembly with primary and secondary windings and, in the case of DC LVDTs, the signal conditioning electronics as well.



TE Connectivity offers a full range of LVDTs as well as other position sensors, signal conditioners, and many other types of sensors. Data sheets, application notes and manuals can be downloaded from our web site at:

<http://www.te.com/usa-en/products/sensors.html>

## MATING CONNECTOR AND EXTENSION CABLES

There is only one connector mating plug for our LVDTs equipped with integral connector (HCA, HCA-RA, HCI, HCD, HCT, and HC485): Description: **Bendix-type PT06A-10-6S (SR); Part Number: 62101011-000**

Please contact us for mating plugs installed on cables of your desired lengths. We can also provide cables with custom lengths for interfacing all our AC LVDTs with our signal conditioners. Our cables are shielded and designed for optimum performance of our sensors and signal conditioners under industrial environments.

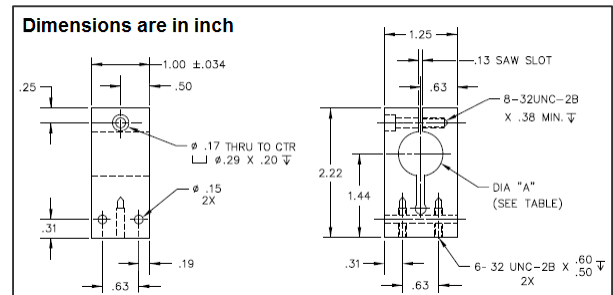
## MOUNTING BLOCKS

Frequently, LVDT installations require a convenient method to mount them. Ready-made mounting blocks are available for most of our LVDT Series. Constructed of reinforced phenolic and other nonconductive materials with a low-temperature coefficient of expansion, our mounting blocks are a convenient, inexpensive and fast solution for LVDT installation.



To order, use the chart below to specify the part number for the appropriate LVDT diameter:

"A" Diameter	LVDT Diameter inch	LVDT Diameter mm	Use with LVDT Series	Part Number
0.83	0.812	20.62	HR	04560952-000
0.77	0.750	19.05	Various	04560950-000
0.49	0.472	12.00	M-12	04560956-000
0.39	0.375	9.53	MHR	04560954-000



*Note: As the dimensions in the above drawing may change without notice, please contact the factory for a copy of the current drawing if needed.*

## CORE CONNECTING RODS AND CORES

LVDT installation requires a connecting rod between the LVDT core and the moving object being measured. Connecting rods made of magnetized, ferromagnetic, or high conductivity metals (Aluminum, Brass, Copper, etc.) **must not be used** as they interfere with the LVDT operation. Connecting rods made of plastic or other non-conductive materials are acceptable.

One must be extremely careful when attaching a core to a rod, as the core is a very sensitive part. It is annealed for the highest permeability, making this Nickel alloy part "soft". Any excessive stresses, high heat, or physical damage would significantly affect the LVDT performance. Cores must be installed only hand-tight and caution must be applied to avoid bending them. Thread-locker adhesive can be applied. For additional information, please refer to our applications note "LVDT selection, handling & installation guidelines" at:

<http://www.te.com/usa-en/products/sensors/position-sensors/linear-position-sensors-lvdt-lvit.html?tab=pgp-related>

TE Connectivity has a large selection of high-quality connecting rods. Our connecting rods are fabricated from AISI 300 Series austenitic (non-ferromagnetic) stainless steel to prevent distortion of the LVDT magnetic field. They are threaded end to end. To order, check the thread size of the core for the LVDT you are using and select the part number in the following table function of the length (L) that you need.



Length		Thread size					
inch	mm	1-72 UNF-2B	40 UNC-2B	6-40 UNF-2B	M2x0.4-6H	M3x0.5-6H	M4x0.7-6H
6	152.4	05282945-006	05282946-006	05282947-006	05282976-006	05282977-006	05282978-006
12	304.8	05282945-012	05282946-012	05282947-012	05282976-012	05282977-012	05282978-012
24	609.6	05282945-024	05282946-024	05282947-024			
36	914.4	05282945-036	05282946-036	05282947-036			

We also sell replacement cores (please contact us).

### PSD 40-15 DUAL RAIL POWER SUPPLY FOR DC LVDT'S

The PSD 40-15 power supply is designed for optimum operation of our DC LVDTs with voltage, current or digital outputs. The supply voltage is  $\pm 15VDC$  with 85 to 264 Volts AC, 45 to 65 Hertz line input. The current capability is 1A continuous and it can therefore operate multiple sensors. This DIN standard rail mount power supply is CE certified and UL listed.



Part Number: 02291339-000

Refer to the data sheet for detailed information on this product at:

<http://www.te.com/usa-en/product-CAT-PSI0009.html>

### INSTRUMENTATION FOR AC LVDT'S

TE Connectivity offers a comprehensive selection signal conditioners, panel displays and mini-controllers with voltage, current loop and digital outputs. These products are suitable for the most rigorous OEM, factory automation, process controls, materials testing, metrology and many other applications.

Data sheets and manuals can be downloaded from our web site at:

<http://www.te.com/usa-en/products/sensors/position-sensors/signal-conditioning-lvdt-rvdt.html?tab=pgp-story>



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