

The NTC-6000 *Quik-Cal™* LVDT Signal Conditioner from NewTek Sensor Solutions provides an intuitive AC-LVDT setup process. Calibration is accomplished with front panel null indicators and pushbuttons to set Zero and Full Scale output positions. The NTC-6000 offers a choice of excitation frequencies, multiple analog output types, accepts a wide dynamic range of LVDT outputs, indicates LVDT connection failures, and incorporates a 2-wire RS-485 digital communications port. Along with color-coded plug-in screw terminal connectors and a 2 year warranty, these are just a few of the many advanced features that make NewTek Sensor Solutions NTC-6000 module an extremely versatile smart LVDT signal conditioner.

Features

- Quick and easy setup with front panel push buttons and LED indicators
- Selectable excitation frequency, analog outputs and bandwidth
- Automatic excitation synchronization for multiple unit systems
- Self-diagnostics for LVDT failure. disconnect or short circuit
- Digital communications via RS-485 2-wire multi-drop bus
- Hot swapability --- setup can be saved and reloaded via RS-485 port
- Cybersecurity lockout and tamper detect



Applications

- Factory automation
- Steam Valve Position Feedback
- Governor and Throttle Valves
- Materials testing
- Packaging equipment
- Turbine Control Systems
- Dimensional Gaging

Specifications

Power:	Input Voltage	9-30 VDC, 90 mA max @ 24 VDC
Excitation:	Primary Voltage	3 Vrms (nominal)
	Primary Current	30 mA max
	Primary Impedance	90Ω min
	Primary Frequency	3 kHz / 5 kHz / 7.5 KHz / 10 kHz (selectable)

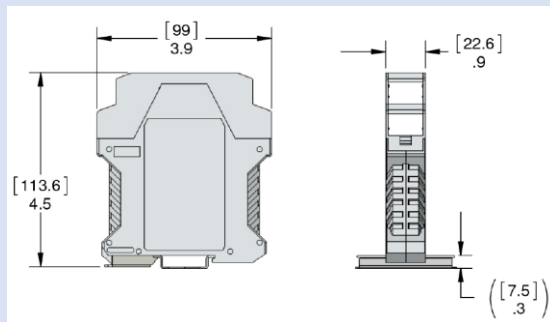
Specifications (continued)

Signal Output:	Voltage Output	0-10 VDC / 0-5 VDC / 0.5-4.5 VDC / ±5 VDC / ±10 VDC (selectable)
	Current Output	4 - 20 mA DC
	Loop resistance	1KΩ Max
	Frequency Response	500Hz Max (10KHz Excitation)
	Low Pass Filter	1Hz / 10Hz / 100Hz / Full (selectable)
	Output Voltage Ripple	1 mV rms Max (no Filter)
	Output Current Ripple	10 μA rms max (no Filter)
	Output Non-Linearity	±0.1% of FSO (typical)
	Error Flag Output	Open collector 50 mA, 30 V DC max.

Environmental:	Coef. Of Thermal Sensitivity	<0.02% FRO/°C
	Operating Temperature Range	-45°C to 85°C
	Enclosure	4.5 x 3.9 x 0.9 in. DIN Rail mountable
	EMC Compliance	EN 61326-1: 2006, CISPR 11-A1: 2003 EN 61000-4-2: 2009, EN 61000-4-3: 2010, EN 61000-4-4: 2004, EN 61000-4-5: 2009, EN 61000-4-6:2009

Terminal Assignments:	1	SYNC I/O	Synchronization Master/Slave Input/Output
	2	ERROR FLAG	Error Flag Output
	3	PRI-1	Primary Excitation to LVDT
	4	PRI-2	Primary Excitation to LVDT
	5	SHIELD	Optional cable Shield connection (GND)
	6	SEC_CT	Optional Secondary CT conn. (n.c.)
	7	SEC-1	Secondary signal from LVDT
	8	SEC-2	Secondary signal from LVDT
	9	VDC OUT	Output Voltage
	10	n.c.	No Connection
	11	OUT RTN	VOUT / IOUT Return (GND)
	12	IDC OUT	Output Current
	13	RS-485 B	RS-485 Data +
	14	RS-485 A	RS-485 Data -
	15	-VIN	Supply Voltage Return (GND)
	16	+VIN	Supply Voltage In

Dimensional Drawing:



Warranty

The NewTek Sensor Solutions NTC-6000 FastCal LVDT Signal Conditioner is warranted against defective materials and workmanship for a period of two years from the date of delivery to the original purchaser. NewTek Sensor Solutions accepts no liability for damages in the misuse of our products.



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