

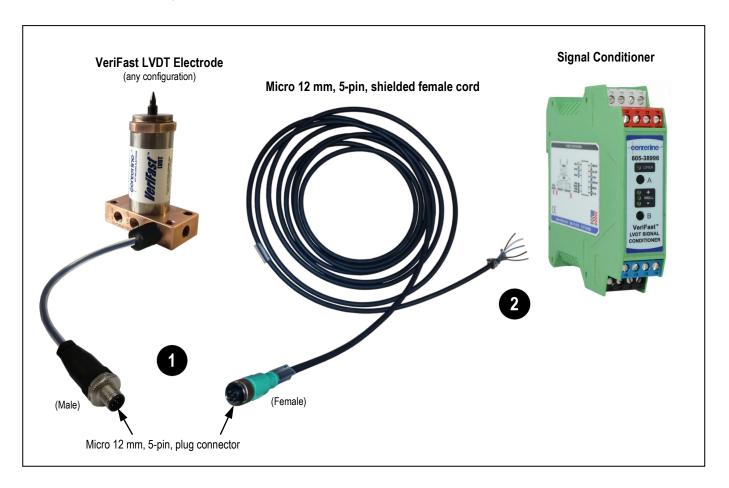
VeriFast[™] LVDT Signal Conditioner Data Sheet

www.cntrline.com

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A. Signal Conditioner to VeriFast LVDT Electrode Connection

Connect the connector of the Micro 12 mm, 5-pin, shielded female cord to the male plug connector of the VeriFast LVDT Electrode Assembly.



Connect the other end of the Micro 12 mm, 5-pin, shielded female cord to the white and red terminals of the Signal Conditioner, as indicated in the table below:

Wiring between 5-pin Shielded Cable and Signal Conditioner					
Pin	Wire Color	Terminal	Description		
1	Brown	3 (White)	Primary coil 1		
2	White	4 (White)	Primary coil 2		
3	Blue	7 (Red)	Secondary coil 1		
4	Black	8 (Red)	Secondary coil 2		
5	Grey + Shield	5 (Red)	Shield		

B. Complete Signal Conditioner Electrical Connections

Color	Terminal	Name	Function
White	1	SYNC I/O	Synchronization (Daisy chain for multiple units)
	2	ERROR DOUT*	Error Flag Output
	3	Primary Coil 1	Primary Excitation to LVDT
	4	Primary Coil 2	Primary Excitation to LVDT
Red	5	SHIELD**	Optional cable Shield connection
	6	NULL DOUT*	Remote Calibration Null Output
	7	Secondary Coil 1	Secondary signal from LVDT
	8	Secondary Coil 2	Secondary signal from LVDT
Blue	9	UP DOUT*	Remote Calibration UP Output
	10	DOWN DOUT*	Remote Calibration DOWN Output
	11	GND*, **	VOUT Return
	12	VDC OUT	Output Voltage
Black	13	ZERO DIN*	Remote Calibration ZERO Input
	14	FULL DIN*	Remote Calibration FULL Input
	15	-VIN (GND)**	Supply Voltage Return (0 V DC)
	16	+VIN	Supply Voltage In (+24 V DC)

* Used for remote calibration only.

** Terminals 5, 11 and 15 are internally connected.

C. Signal Conditioner Specifications

Parameter	Value			
Power:				
Input Voltage / Current	9 – 30 VDC, 90 mA max @ 24 VDC			
Signal Output:				
Voltage Output	0-10 VDC			
Frequency Response	100 Hz Max			
Output Voltage Ripple	1 mV _{RMS} max			
Output Non-Linearity	< ± 0.05% of FSO			
Digital I/O:				
Input	Current Sink, High True (I = 3.0 mA Max., V = 30 VDC Max.)			
Output	Open Collector, Low True (I = 50 mA Max., V = 30 VDC Max.)			
Environmental:				
Temperature Coefficient	< 0.02% FRO/°C			
Operating Temperature Range	-20°C to 75°C			
Enclosure	4.5 x 3.9 x 0.9 in.			
Features:				
Calibration	Via Front Panel Push Button or discrete digital I/O. Calibrated for use with 22 mm weld pin stroke. If 50 mm weld pin stroke is being used, please see the VeriFast LVDT User Manual, section "Re-Calibrating the Signal Conditioner".			
Synchronization Capability	Master/Slave Synchronization via single wire bus			
Null Position Detection	Via Front Panel LEDs or discrete digital I/O			
Error Detection	Primary or Secondary Wire Break Detect, indicated by blinking LEDs and Digital I/O			

For more information about the Signal Conditioner and the VeriFast™ LVDT, please refer to the VeriFast™ LVDT User Manual and other supplementary documentation available at the link below: <u>https://www.cntrline.com/products/verifasttm-lvdt</u>

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