

1. What is the VeriFast LVDT used for?

The VeriFast LVDT is a weld pin position detection system. It can detect the position of the weld pin:

- a) before feeding a fastener to ensure that it is fully raised
- b) before welding to ensure that all parts are properly loaded and orientated
- c) after welding to ensure that the correct setdown of the fasteners' projections has been achieved
- d) before part ejection to ensure that the weld pin is in its fully retracted position.

2. What type of equipment can the VeriFast LVDT be used on?

Any projection welding machine that has analog input capability. This includes manually and automatically fed welders, robotic applications, pedestal type welders and transguns.

3. How do I know what style of weld body to use?

You can refer to the VeriFast LVDT application sheet. There are a large variety of base mount, threaded, tapered and clamp mount weld bodies to suit almost any application.

4. What is the maximum measurable pin stroke for VeriFast LVDT bodies?

22mm, except for clamp mounts where it is 50mm.

5. How many VeriFast LVDT bodies can be connected to a single VeriFast LVDT-SC1 signal conditioner at one time?

One. However, one VeriFast LVDT-SC1 signal conditioner can be used for more than one VeriFast LVDT body on an interchangeable basis.

6. Can any pin be used in the standard VeriFast LVDT bodies?

No, only pins designed for the VeriFast LVDT family with the appropriate connecting rod and core.

7. What voltage does the VeriFast SC1 signal conditioner require?

24v DC, 90mA.

8. What is the output signal from the VeriFast LVDT SC1 signal conditioner?

0-10v DC analog.



9. What is the recommended analog input resolution requirement to achieve the best performance from the VeriFast LVDT application?

16 bit.

10. Are there any wiring or controls concerns with multiple signal conditioners in one location?

Yes, there needs to be a jumper wire installed from pin 1 to pin 1 of each VeriFast LVDT-SC1 to allow for synchronization.

11. How do I connect the VeriFast LVDT to the VeriFast SC1 Signal Conditioner?

A standard 5 pin shielded cable must be used.

12. Do I have to purchase the required cables from CenterLine?

No. The cable (pigtail) connected to the LVDT body is included with the body, all others follow the M12 Micro standard.

13. What is the maximum cable distance from the VeriFast LVDT to the VeriFast LVDT-SC1 signal conditioner?

500 feet.

14. What is the maximum cable distance from the VeriFast LVDT to a VeriFast Microview interface?

500 feet.



15. What is the maximum cable distance for a 0-10v analog signal?

50 feet.

16. What is required to integrate the VeriFast LVDT to an existing machine?

The VeriFast SC1 Signal Conditioner is DIN rail mountable and should be mounted in the control panel or another suitable enclosure. It is recommended that the machine have a programmable HMI for setting positions and tolerances of the VeriFast LVDT. Suitable PLC code will also be needed. CenterLine can provide sample logic upon request.

17. Why is a tolerance window needed?

A tolerance window allows the process to operate within the fastener and material tolerance stacking.

18. What if the intended machine does not have a PLC?

Some modern weld controls have analog inputs that can be monitored in the weld schedule logic. If the weld control does not have the required 15 or 16 bit analog input, but does have available 24v DC inputs, then you may be able to use **VeriFast™ Microview** for the VeriFast LVDT signal processing. If either of these features are not available, then you will need to add a PLC and HMI to the machine.

19. Can I get additional product information on the VeriFast LVDT?

For additional information, visit the VeriFast LVDT product information page on our website: www.cntrline.com.



Head Office:

CenterLine Ltd.
415 Morton Drive, Windsor ON N9J 3T8 Canada
Tel: 519-734-8464, Toll Free: 800-820-6977
Fax: 519-734-2004
Email: info@cntrline.com

Sales & Technical Inquiries

Inside Sales

Website: www.cntrline.com

Toll Free Tel:

800-268-8330

Tel:

519-734-8330