

# VeriFast LVDT Integrator Guide for Mechanical Design

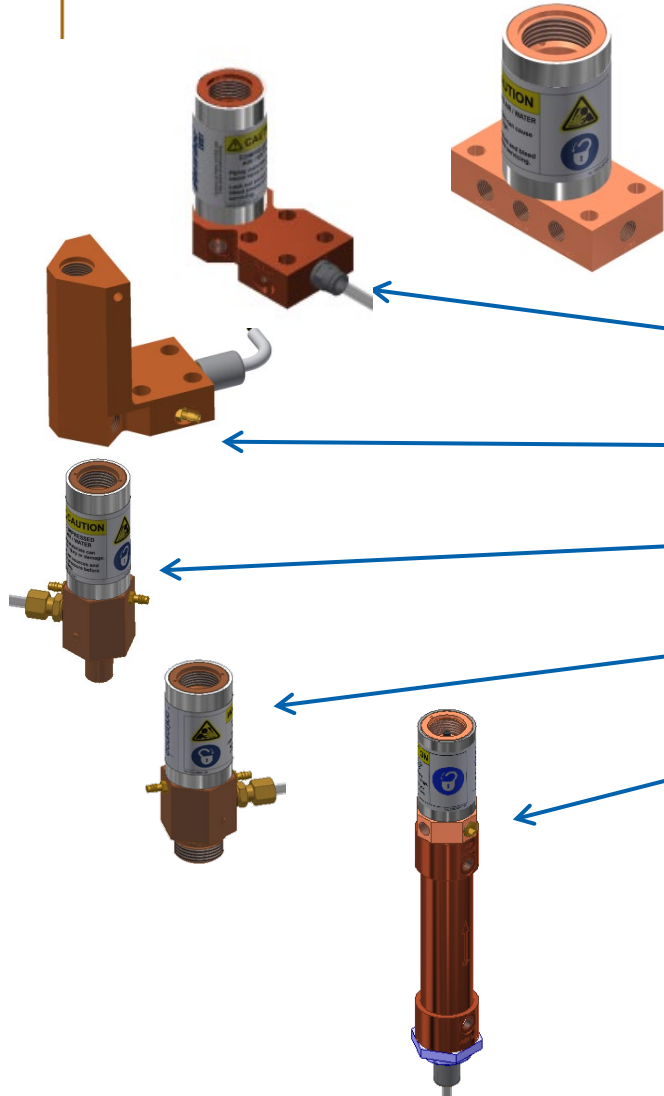
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- Use Series 3 or 4 bodies when possible. The larger sizes allow for more water flow (better cooling) and more pin retract force than Series 2 bodies. Use Series 2 only if design constraints require them. (e.g., center to center distance is small or distance between a fastener and flange requires the smaller size.)
- Use 50 mm stroke bodies only if the additional stroke, or design constraints require them. (e.g., Auto loaded studs longer than 20mm or a deep flange on the stamping)
- If there are similar nuts or studs in the area, extra attention must be required when ordering weld pins. (e.g., 7/16" and M12, or threaded and unthreaded nuts.)
- Use common components, especially consumables, when possible. This reduces stock and makes it less likely that parts are mistakenly interchanged.
- Order appropriate supply of spare components, especially consumables. These include: weld pins, weld heads, upper electrodes, complete weld bodies. The actual number of spares required can vary greatly and depends on the equipment duty cycle.
- Consider the 'big picture'. If there are multiple machines, or a large line, components should be as common as possible, across all operations. CenterLine can help if we are aware of the entire process. This may involve multiple integrators.

- Custom LVDT Weld Bodies can be made. Contact CenterLine through your Account Manager or [customerservice@cntrline.com](mailto:customerservice@cntrline.com)
- The LVDT coil is not user serviceable. In the unlikely event that it fails, the weld body must be replaced. We offer a rebuild service. Contact CenterLine's service department: 519-734-0080 or 800-268-8184 or [service@cntrline.com](mailto:service@cntrline.com).
- Minimum of 1 GPM water flow per body is required.
- 50 PSI air pressure are required.
- Remember all valves: Each retractable pin typically uses a double solenoid valve. A single solenoid valve is sufficient for blow off for each body.
- Separate regulator for blow off is required. This provides only enough pressure to prevent weld spatter from accumulating between the weld head and pin, as well as from getting inside the weld body.
- Weld head and pin must always be in good working condition. Replace when worn.

## 22 mm Stroke Weld Through Bodies



|                 | Series 2 | Series 3 | Series 4 |
|-----------------|----------|----------|----------|
| SXAR            | ANR      | ✓        | ✓        |
| SXTR            | ANR      | ✓        | ✓        |
| SXVR            | ✓        | X        | X        |
| SXCR (tapered)  | X        | ✓        | X        |
| SXGR (threaded) | X        | ✓        | X        |
| Clamp Mount     | ANR      | ✓        | ✓        |

✓ - Available

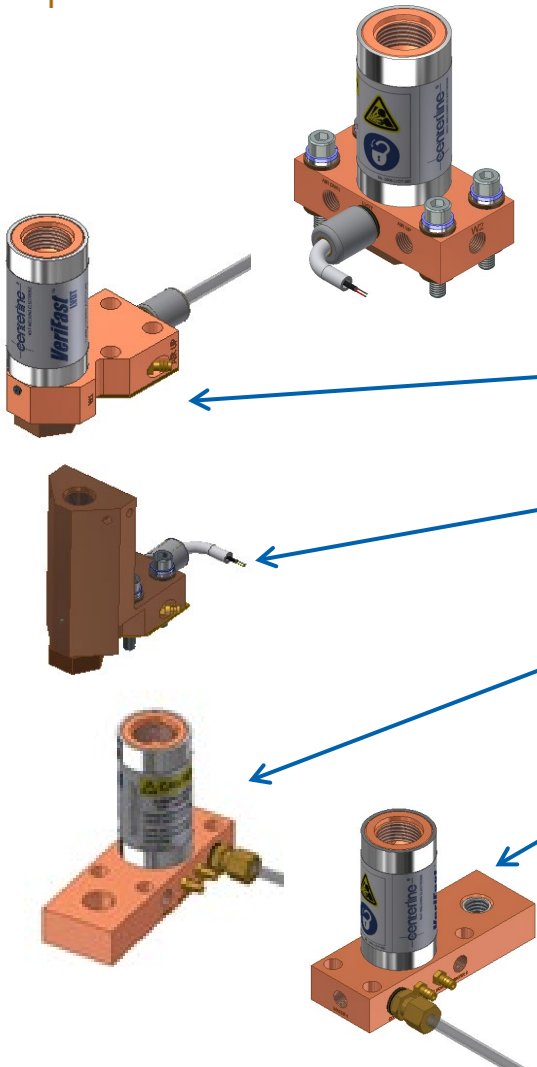
X - Not Available

ANR - Available, but Not Recommended

For more information:

<https://www.cntrline.com/products/verifast-lvdt>

## 22 mm Stroke Insulated Bodies



|                     | Series 2 | Series 3 | Series 4 |
|---------------------|----------|----------|----------|
| SXKR                | ANR      | ✓        | ✓        |
| SXQR                | ANR      | ✓        | ✓        |
| SXWR                | ✓        | X        | X        |
| SXHR (through lug)  | ANR      | ✓        | ✓        |
| SXJR (threaded lug) | ANR      | ✓        | ✓        |

✓ - Available

X - Not Available

ANR - Available, but Not Recommended

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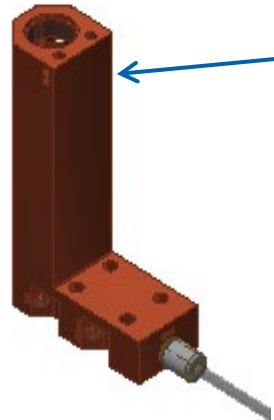
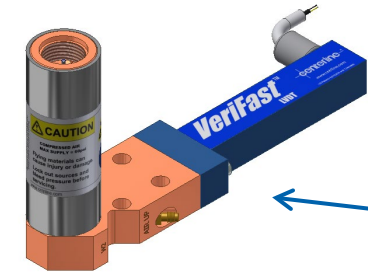
## 50 mm Stroke Weld Through Bodies

|             | Series 2 | Series 3 | Series 4 |
|-------------|----------|----------|----------|
| SXZR*       | ANR      | ✓        | ✓        |
| SYVR        | ✓        | ✓        | ✓        |
| Clamp Mount | ANR      | ✓        | ✓        |

✓ - Available

✓ ANR - Available, but Not Recommended

\* Use SYVR instead of SXZR unless there is a height restriction



For more information:

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Weld bodies **must** be mounted properly:

- a) Polish bottom of weld body and mounting surface with 3M Scotch-Brite pad
- b) Apply Kopr-Shield compound between weld body and mounting surface
- c) Use 'Nord-Lock' washers
- d) Torque M6 or 1/4" fasteners to 8 Nm (6 ft-lb or 72 in-lb)

Weld bodies **must** be connected properly:

- a) Use di-electric grease in electrical connectors
- b) Ensure all electrical connections are properly tightened