For Stud Applications

VeriFast LVDT System Configuration

**SXZR Mount Style**

Establish the part number of each component in sequence from 1 to 4 as indicated below.

1. **VeriFast LVDT SXZR Weld Body**
   (page 2)

2. **LVDT Stud Weld Pin**
   (page 3)

3. **Weld Head**
   (page 4)

4. **LVDT Signal Conditioner**
   (page 5)

**Spanner Tool (with slot)**
(Supplied with all SXZR weld bodies. Used for replacing the Stud Weld Pin).
### VeriFast LVDT

**SXZR Mount Weld Body**

#### Part Numbering System

**VeriFast LVDT**

**Body Style**
- SXZR

**Series**
- Series 2 = 2
- (Preferred) Series 3* = 3
- Series 4 = 4

**Attachment Screws**
- M = Metric (M6 x 1 x 35)
- S = Standard (1/4"-20 x 1 1/2")
- N = Not provided

**NHP (No Head or Pin)**
Note: Head and Pin must be ordered separately. The pin must be **LVDT Stud Weld Pin** (see page 3).

**Port Thread**
- G = 1/8" BSPP
- S = 1/8" NPT

**Cable Exit Position**
- TM = Top Middle

**Bend Radius**
- 5.5 mm (0.22")

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* Series 3 is preferred for all applications, unless clearance or welding issues exist. The Series number must be consistent between all components (Body, Pin, and Head).

** To connect to the Signal Conditioner, the VeriFast LVDT requires a micro (12 mm), 5-pin, shielded, female tool cord.

** IMPORTANT: A Signal Conditioner is required for each weld body, with the exception of Interchangeable tooling.**
LVDT Stud Weld Pin
(Must be assembled with the existing LVDT Cable / Lock Pin Assembly (shown faded underneath) located inside the SXZR Weld Body)

LVDT Stud Weld Pin Material
- Stainless = RV
- Coated = KV
- DuraPin™ = SV

Stud Feeding Mode
- Manual = P
- Automatic = A

* Series
- Series 2 = 2
  (Preferred) Series 3* = 3
- Series 4 = 4

Stud Size
- Measured in inches, 3 decimals. Becomes 3 digits.
  Example: If Stud is 0.315", the number in this field will be: 315
  or
  Measured in millimeters, 0 decimals. Becomes prefix “M” followed by 2 digits.
  Example: If diameter of stud is 8 mm, the number in this field will be: M08

Connecting Rod Assembly Length**
This field remains empty since no Connecting Rod Assembly is used with Stud Pins in SXZR Weld Bodies.

Length from Base of Pin to Top of Shoulder
(See 1 in drawing above)
- Measured in inches, 2 decimals. Becomes 2 digits.
  Example: If length is 0.27", the number in this field will be: 27
  or
  Measured in millimeters, 0 decimals. Becomes 2 digits.
  Example: If length is 7 mm, the number in this field will be: 07

Length from Top of Shoulder to Top of Pin
(See 2 in drawing above)
- Measured in inches, 2 decimals. Becomes 3 digits.
  Example: If length is 1.85", the number in this field will be: 185
  or
  Measured in millimeters, 0 decimals. Becomes 3 digits.
  Example: If length is 47 mm, the number in this field will be: 047

* Series 3 is preferred for all applications, unless clearance or welding issues exist. The Series number must be consistent between all components (Body, Pin, and Head).

** The SXZR Weld Body uses the LVDT Stud Weld Pin connected to the Cable / Lock Pin Assembly.

*** Dimension 3 cannot be longer than 48 mm (1.89 in.).
## Weld Head

### Weld Head Prefix

<table>
<thead>
<tr>
<th>Series</th>
<th>2</th>
<th>3*</th>
<th>T</th>
<th>125</th>
<th>350</th>
</tr>
</thead>
<tbody>
<tr>
<td>GH</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### Series (must be consistent with Hole in Head Diameter and Weld Face Diameter on the right)
- Series 2 = 2
- (Preferred) Series 3* = 3
- Series 4 = 4

### Head Height**
- Series 2 and 3* = 050
- Series 4 = 062

### Material
- RWMA Class 3 = C
- RWMA Class 11 = T

### Hole in Head Diameter

\[ \text{Hole in Head Diameter} = \text{Pin Diameter} + 0.002 \text{ (in.)} \]

- Series 2: 0.427" (10.85 mm) - for Series 2
- Max. 0.642" (16.31 mm) - for Series 3* (preferred)
- Max. 0.852" (21.64 mm) - for Series 4

**Important:** The Hole in Head Diameter must be 0.002" larger than the Pin Diameter.

**Example:** If Pin Diameter = 0.348", the Hole in Head Diameter will become: 0.348" + 0.002" = 0.350". The value in this field will be 350. (Ensure that preferred Series 3 applies, since 0.350" < 0.642").

### Weld Face Diameter**
- 087 = 0.87" Weld Face (for Series 2)
- 125 = 1.25" Weld Face (for Series 3* (Preferred))
- 150 = 1.50" Weld Face (for Series 4)

**Important:** The Diameter of the Stud Projections must be at least 0.160" (4 mm) smaller than the Weld Face Diameter (or 0.080" (2 mm) radius difference). If it is not, the next larger weld head series should be used for the application.

### Stud Projections Diameter

**Weld Face Diameter**

- Stud Projections Diameter must be at least 0.080" (2mm).
If you require more information about the VeriFast LVDT system, please contact CenterLine.