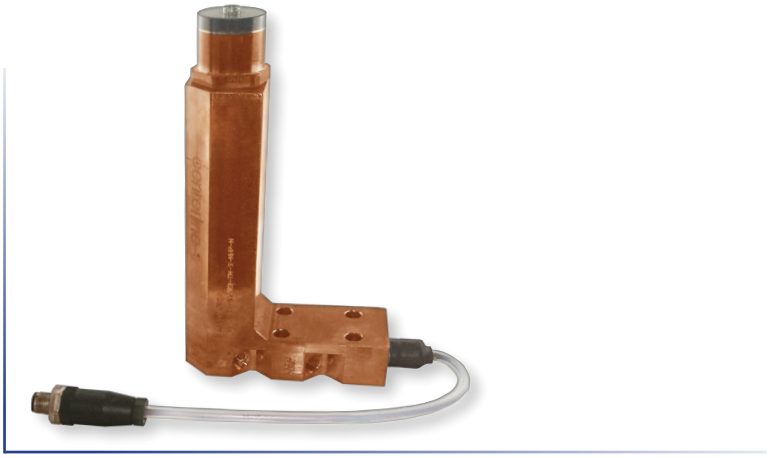
VeriFast LVDT System Configuration

SYVR Base Mount Style



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

3

Weld Head
(page 4)

2

VeriFast LVDT Weld Pin (HG Style)
(page 3)

Includes *HG Connecting Rod Assembly* and *Pin Lock*, which can be reused multiple times with new LVDT Weld Pins (only).

OR

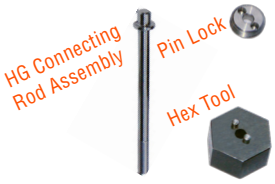
VeriFast LVDT Weld Pin (Only)
(page 3)

Does not include the *HG Connecting Rod Assembly* and *Pin Lock*. Must be assembled with an existing *HG Connecting Rod Assembly* and *Pin Lock* in order to form an *LVDT Weld Pin (HG Style)*. See kit below.

1

VeriFast LVDT SYVR Base Mount Weld Body
(page 2)

+



Kit supplied with all base mount bodies. As long as the *HG Connecting Rod Assembly* and *Pin Lock* are in good shape, they can be reused multiple times with new **VeriFast LVDT Weld Pins** (see above).

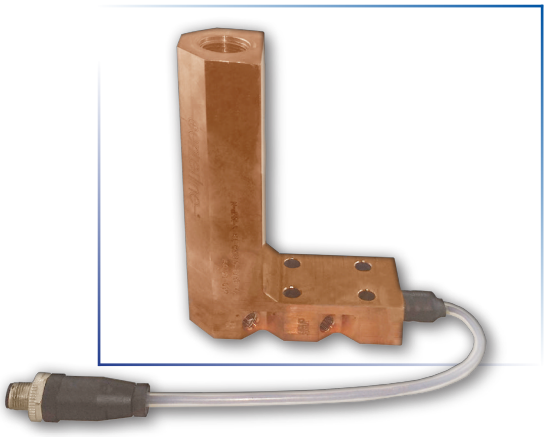
4

LVDT Signal Conditioner
(page 5)

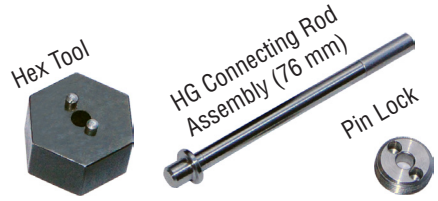
IMPORTANT: The Signal Conditioner must be calibrated once the system is installed in place.

VeriFast LVDT
SYVR Base Mount Weld Body

Part Numbering System



Kit for LVDT Weld Pin
(Supplied with all weld bodies)



VeriFast	Pin Sensing System	Body Style	Series*	Cable Exit Position**	Port Thread	No Head or Pin	Attachment Screws
VF	LVDT	SYVR	3	TM	S	NHP	N

VeriFast

LVDT

Base Mount
SYVR

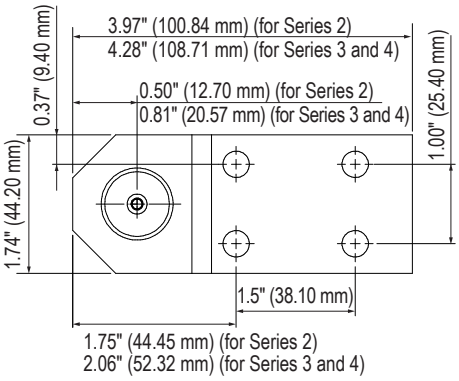
***Series**
Series 2 = 2
(Preferred) Series 3* = 3
Series 4 = 4

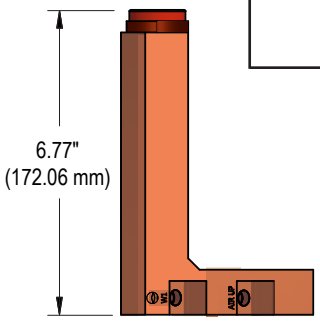
Attachment Screws
M = Metric (M6 x 1 x 35)
S = Standard (1/4"-20 x 1 1/2")
N = Not provided

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

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

Cable Exit Position**
TM = Top Middle





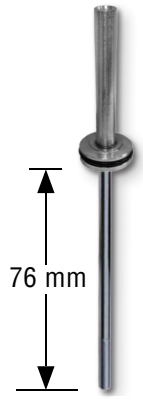
* Series 3 is preferred for all applications, unless clearance or welding issues exist. The Series number must be consistent between all components (Body, Pin, and Head).

** 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. The Signal Conditioner must be calibrated once the system is installed in place.

VeriFast LVDT
Stud Weld Pin

For use with **SYVR** Weld Bodies (see page 2)

Part Numbering System

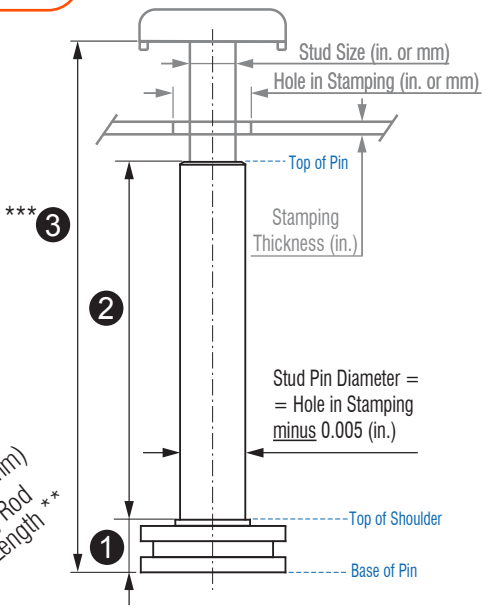


HG Style

Besides the *LVDT Stud Weld Pin*, includes *HG Connecting Rod Assembly (76 mm)* and *Pin Lock* that can be reused when ordering *LVDT Stud Weld Pin* only.

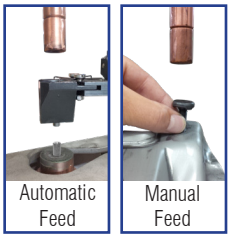
LVDT Stud Weld Pin (Only)

Does not include Connecting Rod Assembly and Pin Lock. Must be assembled with an existing *HG Connecting Rod Assembly (76 mm)* and *Pin Lock* (shown faded underneath).



LVDT Stud Weld Pin Material	Stud Feeding Mode	Series*	Stud Size (in. or mm)	Length from Top of Shoulder to Top of Pin (in. or mm)	Length from Base of Pin to Top of Shoulder (in. or mm)	LVDT Connecting Rod Assembly Length**
SV	P	3	M08	047	07	HG

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 diameter of 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

Length from Base of Pin to Top of Shoulder
(See ❶ 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 ❷ 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 2 digits.
Example: If length is 47 mm, the number in this field will be 047

LVDT Connecting Rod Assembly Length**
HG = Includes an *LVDT Stud Weld Pin*, *HG Connecting Rod Assembly*, and *Pin Lock*.

Note: A worn Pin (only) can be replaced with an *LVDT Stud Weld Pin* (see option below).

If ordering an **LVDT Stud Weld Pin (Only)**, this field remains empty.

Note: The LVDT Stud Weld Pin (only) must be assembled with an existing HG Connecting Rod Assembly and Pin Lock.

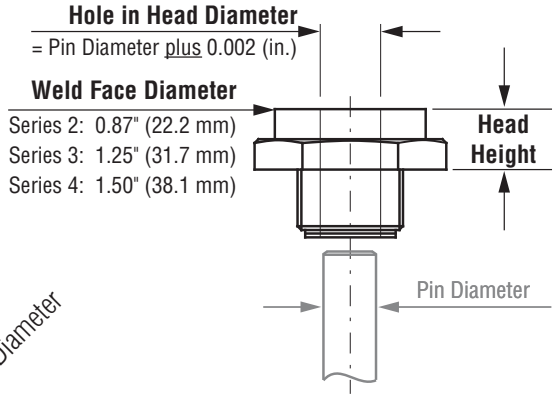
* Series 3 is preferred for all applications, unless clearance or welding issues exist. The Series number must be consistent between all components (Body, Pin, and Head).

** The SYVR Weld Body uses the *LVDT Stud Weld Pin* assembled with the *HG Connecting Rod Assembly* and *Pin Lock*.

*** Dimension ❸ cannot be longer than 48 mm (1.89 in.).

Weld Head

Part Numbering System



Weld Head Prefix	Series*	Head Height**	Material	Weld Face Diameter**	Hole in Head Diameter
GH	3	050	T	125	350

Weld Head Prefix

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

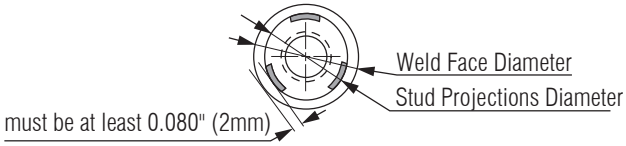
Hole in Head Diameter
Max. 0.427" (10.85 mm) - for Series 2
Max. 0.642" (16.31 mm) - for Series 3* (preferred)
Max. 0.852" (21.64 mm) - for Series 4

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.

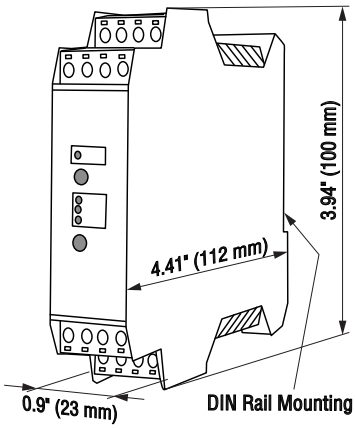


* Series 3 is prefered for all applications, unless clearance or welding issues exist. The Series number must be consistent between all components (Body, Pin, and Head).

** Special sizes are available for larger dimension requirements or areas with clearance restrictions. Contact CenterLine for information.

LVDT Signal Conditioner

Part Numbering System



VeriFast	LVDT	Signal Conditioner	Version
VF	LVDT	SC	1

VeriFast

LVDT

Version

Signal Conditioner

Power Requirement: 24 VDC, 90 mA

Output: Analog, 0-10 VDC,
for best results 16-bit resolution required.

IMPORTANT:
- A Signal Conditioner is required for each weld body, with the exception of interchangeable tooling.
- The Signal Conditioner must be calibrated once the system is installed in place.

If you require more information about the VeriFast LVDT system, please contact CenterLine.

centerline®

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