



Thermocouple Technology, Inc.

Series W

Weld-In Series - Manufacturing Standard

Valid only for Overall Length "L" maximum of 42" and/or one-piece construction barstock stems.

SEC. I Tolerances

DWG

<u>KEY</u>	<u>DESCRIPTION</u>	<u>STANDARD TOLERANCE</u>
A	Bore Depth	+.030"/-.000" Depth; W-Shaped bore bottom
B	Bore Diameter	+/- .005"
C	Chamfer	Nominal
D	Diameter	Standard Machined o.d.: +/- .015" Option: Barstock o.d.: Mill Standard tolerance/- .032"
E	Tip Thickness	+/- .063"
I	Instrument Conn.	ANSI B1.20.1
J	Radius	Nominal
K	Head Length	Nominal – See "A", "E" & "U" for accumulated length tolerances
L	Overall Length	Nominal – See "A", "E" & "U" for accumulated length tolerances
P	Proc. Conn.	See "D" above
Q	Shank Diameter(s)	+/- .010"
T	Lag ext. Length	Nominal – See "A", "E" & "U" for accumulated length tolerances
U	Insertion Length	+/- .063"
V	Tapered Length	+/- .500" when "U" length is longer than 16"

Sec. II – Manufacturer's Standard Specifications

1. Bore Concentricity: .0015" per inch / maximum T.I.R. .035".
2. Instrument connection: 1/2" NPT compliant to ANSI B1.20.1. Standard dimensions: Entrance bevel 60° +/- 2°. I.D. .718" +/- .005" x 1.00" +/- .015" depth with 59° nominal drill bottom. Tap 1/2" NPT threads x .875" nominal depth. Tolerance: ANSI compliant 3 full plug gauge turns minimum x 4.5 turns maximum. *Note: Request thread dimensions for Series with "K" Length constraints.
3. Materials: In compliance with the applicable governing National Standard such as ASTM, ASME, AWS, etc.
4. Stamping: 3/32" minimum height characters indicating material grade & traceability code. TTEC reserves the option to relocate standard stamp locations if there are surface area constraints.
5. Surface Finish: 16-32 RMS over 85% of the "U" length – the remainder of the stem is belt-sanded. Surface finish varies for "high carbon/low alloy" materials due to inherent rusting characteristics.
6. Tapered length "V": Full length taper is provided for U16" or less. Longer lengths are tapered over the last 16" as a standard. A full length taper for all lengths is available for an additional charge.