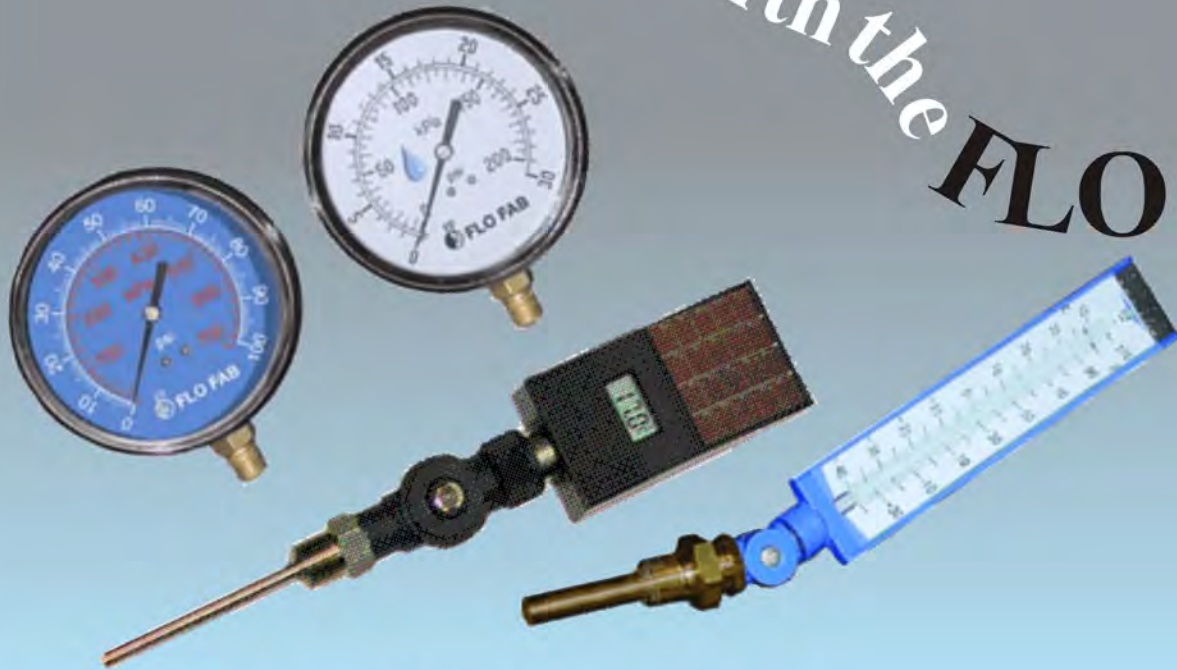


FLO FAB

FF

Go

With the **FLO**



Thermometers Series "TL5-L9VU-DVU"

Manufacturer of Pumps, Tanks, Heat Exchangers & Accessories
for HVAC Market After-Sales Parts and Services

Thermometers
Series "TL5-L9VU-DVU"

www.flofab.com

FLO-FAB INC
LAKE WORTH,
FLORIDA, USA

**Thermometers
Series "TL5-L9VU-DVU"**

Thermometers Series TL5	2
9" Vari-angle Series L9VU	3
Industrial Digital Vari-angle Series DVU	4
Dimensions & Separable Sockets	5
Typical Specifications for Thermometers	6

Thermometers Series TL5

SUBMITTAL DATA SHEET
 ISSUE DATE: MAY 2008
 REVISION DATE: SEP 2009

An economical socket connected thermometer for use in small pipelines, tanks and other pressurized system. The fixed stems are manufactured with a straight (TL5S2) or angle (TL5A2) form suitable for limited space requirements on chilled or hot water installations.

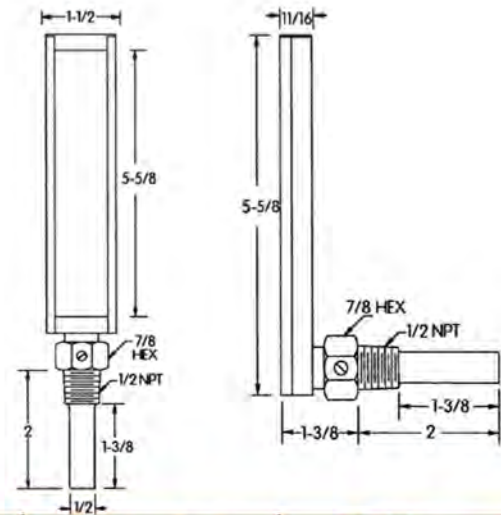
FEATURES

Case: Attractive modern design, "V" shaped gray valox case. Wide angle construction allows full scale width for easy reading.

Glass Front: Protective glass cover is retained within the outer edges of the case. Spring pressure created by the "V" scale secures the glass against the case and prevents it from rattling. A formed cover plate, easily removable, completes the assembly.

Tube & Scale: "Red Reading" mercury tube is standard. "V" shaped scale is designed for maximum readability with extra large black numbers. Our crosslocked, scale holding device positively prevents loosening or shifting of scale and does away with holes and screws that interfere with scale markings or numerals.

Stem & Socket Assembly: All brass stem. Removable socket secured to stem by set screw. Socket standard in brass with 1/2" NPT and in other materials at extra cost. Standard insertion length 2" including thread.



SERIES TL5

Models	Stem
TL5A2	2" 50.8 mm
TL5S2	2" 50.8 mm

Dimensions are subject to change without prior notice



SOCKETS FOR SERIES TL5A & TL5S

Model	Stem	Thread	Insert
SF12	2" 50.8 mm	1/2" 12.7 mm	1 3/8" 35.56 mm

AVAILABLE SCALES

Code	Fahrenheit Scales °F	Celsius Scales °C	Divisions (°F/°C)
115	40 - 0 - 110	40 - 0 - 43	2/1
125	0 - 120	5 - 0 - 50	1/1
185	20 - 180	5 - 0 - 80	2/1
245	30 - 240	0 - 115	2/1
305	30 - 300	0 - 150	2/2
405	50 - 400	10 - 200	5/2

Dimensions are subject to change without prior notice.

Dimensions not to be used for construction unless prints certified by factory.

9" Vari-angle Series L9VU

SUBMITTAL DATA SHEET
 ISSUE DATE: MAY 2008
 REVISION DATE: SEP 2009

FEATURES

- Case:** Modern "V" shape design, high pressure die cast aluminum, Baked blue epoxy enamel finish. Heavy glass protected front firmly secured against rattles by spring action.
- Stem:** Tapered bulb chambers are made of steel, precision ground and uniformly copper plated. The tapered chamber forms a metal to metal contact with matching taper in separate sockets assuring maximum speed of response to temperature changes. Graphite is used as a conducting media between bulb chamber and glass tube for range -40°F to 550°F (-40°C to 290°C).
- Locking Device:** Two adjusting screws provide full 360° adjustment of thermometer case and stem.
- Adjustable Joint:** Die cast aluminum finished to match case. Completely encloses capillary to prevent tempering and foreign particles from entering instruments.
- Tube & Capillary:** Alcohol filled magnifying lens "Green Reading" tube. Precision made to guarantee accuracy within 1% of full scale range. Silicone shock mounted for lasting durability. From -40°F to 550°F (-50°C to 290°C).
- Scale:** Satin faced non-reflective aluminum with bold jet black markings permanently etched. Locked in place and adjustable through device at top scale. No mounting screws to obliterate scale markings.
- Federal Spec:** Units are in full conformance with Federal Specification GG-T-321D.
- Socket:** Supplied separately.



SERIES L9VU

Model	Stem
L9VU35	3 1/2" 88.9 mm

Dimensions are subject to change without prior notice

SCALE RANGE AVAILABLE

Code	Fahrenheit Scale °F	Celsius Scale °C	Divisions (°F/°C)
115	40 - 0 - 110	40 - 0 - 43	2/1
125	0 - 120	17 - 0 - 49	1/1
185	30 - 180	0 - 80	2/1
245	30 - 240	0 - 115	2/1
305	30 - 300	0 - 150	2/2
405	50 - 400	10 - 200	5/2
555	50 - 550	10 - 290	5/5

Dimensions are subject to change without prior notice

Dimensions not to be used for construction
 unless prints certified by factory.



SUBMITTAL DATA SHEET
ISSUE DATE: MAY 2008
REVISION DATE: SEP 2009

FLO FAB is proud to introduce its leading edge technology to the HVACR market. These light powered instruments maintain the strict requirements for thermometers in hydronic applications in that they're self-powered and within 1% accuracy. This reliable series of digital thermometers offers the added feature of stem assemblies for direct replacement of mercury in glass type where environmental concerns exist.

Whether on new installations or replacements, our Vari-angle Digital Thermometers include the level of quality that the industry associates with the FLO FAB products.

FEATURES

- Environmentally Friendly (mercury free)
- Light powered (no battery - microlife)
- Stock one item for chilled, condenser and hot water applications
- Range from -40°F to 300°F (-20°C to 145°C) (Code 510)
- °F/°C Switchable Scale
- Fast Response
- Direct replacement for industrial glass thermometer
- Economical

SPECIFICATIONS

- Case:** Hi-impact ABS
- Display:** 3/8" LCD digits, wide ambient formula
- Range:** -40°F to 300°F (-20°C to 145°C) (Code 510)
- Accuracy:** 1% or 1° whichever is greater
- Resolution:** 1/10 degree between -19.9 to 199.9°F (-28 to 93°C)
- Recalibration:** Internal Potentiometer
- Lux Rating:** 10 Lux (one foot candle)
- Update:** 10 seconds
- Ambient operating Temperature:** -30 to 140°F (-35 to 60°C)

Ambient temporary Error: Zero

Humidity: 100%

Sensor: Glass passivated Thermistor

STEM ASSEMBLIES

Industrial Glass:

- Full conformance with Federal spec. GG-T-321D
- Fully interchangeable with industrial glass thermometers

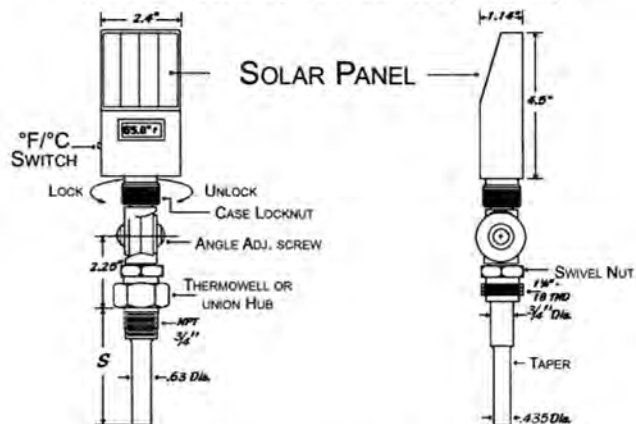


SERIES DVU

Models	S	Stem
DVU35	3/2" 88.9 mm	3/2" 88.9 mm

Dimensions are subject to change without prior notice.

INDUSTRIAL GLASS THERMOMETER



Dimensions not to be used for construction unless prints certified by factory.

Dimensions & Separable Sockets

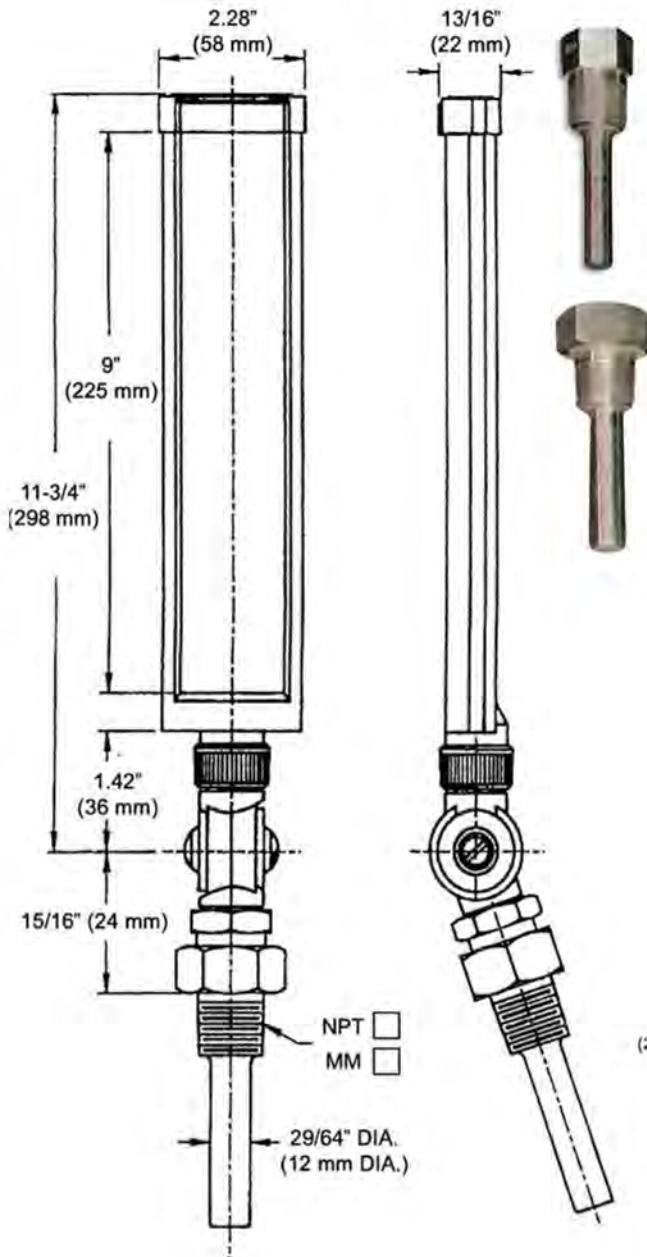
SUBMITTAL DATA SHEET
 ISSUE DATE: MAY 2008
 REVISION DATE: SEP 2009

NOMINAL DIMENSIONS

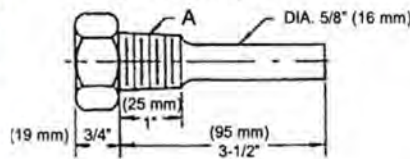
Models	Thread	Stem Length	Insert Length	Shank Length
LE35-75BS	$\frac{3}{4}$ " 19.05 mm	$3\frac{1}{2}$ " 88.9 mm	$2\frac{1}{2}$ " 63.5 mm	1" 63.5 mm
LESS35-75BS	$\frac{3}{4}$ " 19.05 mm	$3\frac{1}{2}$ " 88.9 mm	$1\frac{3}{4}$ " 44.45 mm	N/A

Dimensions are subject to change without prior notice

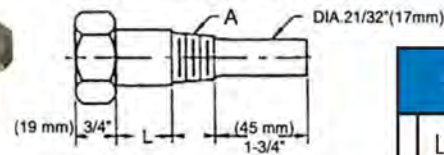
SERIES L9VU



SERIES DVU Standard form



Extension neck, Short stem



Models	A
LE35-75BS	$\frac{3}{4}$ " 19.05 mm

Models	L	A
LESS35-75BS	1" 25.4 mm	$\frac{3}{4}$ " 19.05 mm

Note: Wells should be used on all pressurized applications, to protect the stem of the thermometer from corrosion and physical damage, and to facilitate removal of the thermometer without disturbing the process.

Dimensions not to be used for construction unless prints certified by factory.

Typical Specifications for Thermometers

Supply and install thermometers as shown on the drawings as manufactured by FLO FAB.
All thermometers supplied shall be from the same manufacturer.

SERIES TL5

Economic liquid dilatation thermometers, with 6" (150mm) graduation. All thermometers shall be rectangular rigid type with a Valox (PVC) body unbreakable plexiglass with red mercury filled tube to read temperature with a bronze socket. Model TL5S2 straight form and model TL5A2 90° degree angle form.

Thermometers will have a combined scale of °F & °C.

Range will be as follow:

Chilled water (-40 to 110°F/-20 to 54°C)

Domestic water (20 to 180 °F/10 to 88°C)

Heating at low or norm temperature (30 to 240 °F/15 to 117°C)

Acceptable products FLO FAB series TL5.

SERIES L9VU

Industrial liquid dilatation thermometers, with 9" (225 mm) graduation. Meet the requirement of ONGC 14-GP-2A. All aluminum thermometers shall be rectangular rigid type with L9VU unbreakable plexiglass with a green alcohol filled tube to read temperature. All thermometers shall be adjustable vari-angle allowing reading temperature at a distance.

Thermometers will have a combined scale of °F and °C.

Range will be as follow:

Chilled water (0 to 120°F/0 to 59°C)

Domestic water, heating at low temperature, (30 to 180 °F/15 to 88°C)

Heating at normal temperature (30 to 240 °F/15 to 117°C)

Acceptable products FLO FAB series L9VU.

SERIES DVU

Digital industrial glass thermometer, adjustable angle, self-powered (no battery) $\frac{3}{8}$ "

LCD digits display, $4\frac{1}{2}$ " x $2\frac{3}{8}$ " Hi-impact ABS case, dual °F & °C switchable.

Temperature range -40 to 300°F (-50 to 150°C), accuracy +/- 1% of reading or 1° whichever is greater.

Stem assembly to be fully interchangeable with industry standards for industrial thermometers.

Complete with brass separable socket (extension necks for insulated pipes) where required.

Stainless steel also available for DVU models.

Acceptable products FLO FAB series DVU.

FF

FLO FAB



www.flofab.com

**Manufacturer of Pumps, Tanks, Heat Exchangers & Accessories
for HVAC Market After-Sales Parts and Services**

FLO-FAB INC
LAKE WORTH,
FLORIDA, USA

SEPTEMBER 2009