WEISS
INSTRUMENTS

Vari-angle® Digital Thermometers

Featuring the Lastest Technology for HVAC Applications

* **Environmentally Friendly - Mercury Free**
* **Direct Replacement for Industrial Glass and Bimetal Thermometers**
* **Stock One Item for Chilled, Condensor and Hot Water Applications**
* **Light Powered - No Batteries**
* **F/C Switchable**
* **Fast Response**
* **Economical**

72.1°F

-60 to 300°F / -45 to 150°C

WEISS INSTRUMENTS

MADE IN USA

The Weiss patented,* Digital Vari-angle® Thermometer maintains 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 types where environmental concerns exist. Whether on new installations or replacements, our Vari-angle Digital Thermometers include the same level of quality that the industry associates with the Vari-angle trademark and all Weiss Products.

*Patent No. 5,196,781   ®Vari-angle is a registered trademark of Weiss Instruments, Inc.
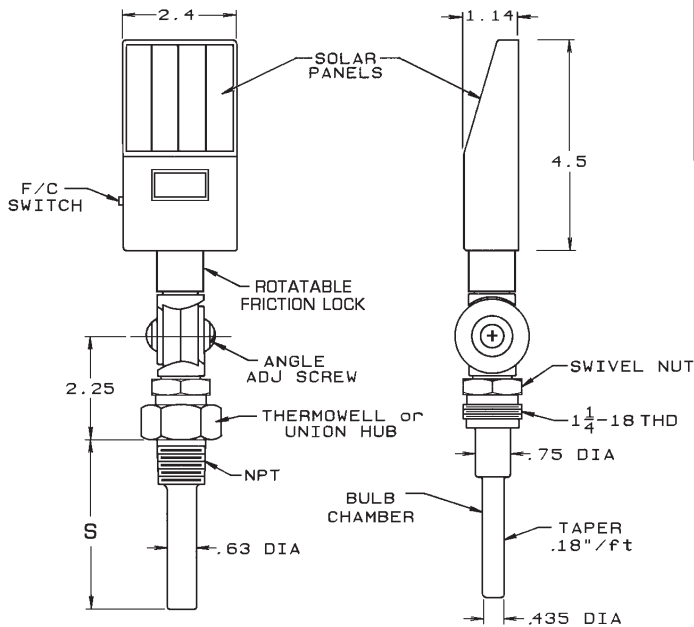
SPECIFICATIONS

CASE	Hi-impact ABS
RANGE with F/C Switch	-50/300°F -45/150°C
DISPLAY	1/2" LCD digits, wide ambient formula
ACCURACY	1% of reading or 1° whichever is greater
RESOLUTION	1/10° between -19.9/199.9°F (-28/93°C)
RECALIBRATION	Through case potentiometer adjustment
LUX RATING	10 Lux (one foot-candle)
UPDATE	10 seconds
AMBIENT OPERATING	-30/140°F (-35/60°C)
AMBIENT TEMP ERROR	Zero
HUMIDITY	100%
SENSOR	Glass passivated thermistor - NTC

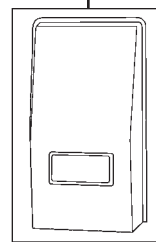| **STEM ASSEMBLIES**	**INDUSTRIAL GLASS**	**BIMETALLIC**
	Full conformance with Fed Spec GG-T-321D. Fully interchangeable with Industrial Glass Thermometers.	Full conformance with ASME B40.3 - 1990. Fully interchangeable with Bimetallic Dial Thermometers.
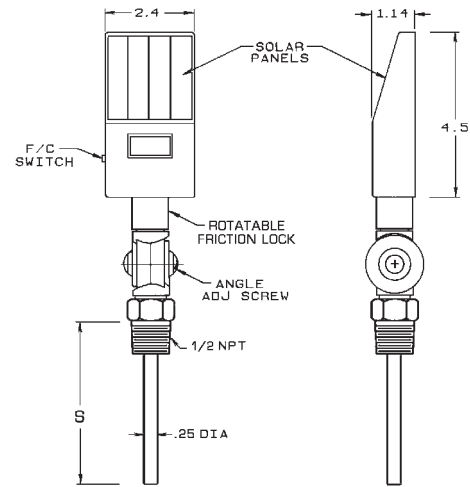
BIMETAL DIAL THERMOMETER STEM ASSEMBLY

CATALOG NO.	S Dim.	IDN
DVBM25	2 1/2"	62120
DVBM4	4"	62130
DVBM6	6"	62140
DVBM9	9"	62150

CATALOG NO.	DESCRIPTION	IDN
DVC-4	Outdoor Waterproof Cover (4 pcs per pack)	62410

INDUSTRIAL GLASS THERMOMETER STEM ASSEMBLY

CATALOG NO. Without Socket	STEM	S Dim.	IDN
DVU35	3 1/2"	3 1/2"	62100
DVU6	6"	5"	62110
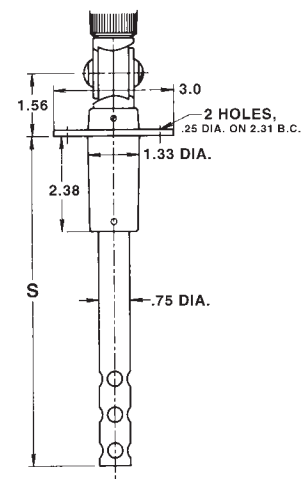
AIR DUCT STEM ASSEMBLY

CATALOG NO.	S Dim.	IDN
DVD35	3 1/2"	62300
DVD6	6"	62310
DVD9	9"	62320
DVD12	12"	62330

Vari-angle® Self-indicating Temperature Transmitter

Introducing the first "self-indicating" temperature transmitter that is light powered. Combining Weiss's patented mercury-free Solar Industrial Thermometer with a loop-powered 4 to 20mA transmitter results in a single unit that allows local reading and remote transmitting for HVAC systems, building automation or anywhere local and remote readings are required. Dual sensors offer independent operation for reliability and convenience. The DVUT requires one thermowell which saves time and money without sacrificing performance.

CASE	Hi-impact ABS
RANGE with F/C Switch	-50/300°F (-45/150°C)
DISPLAY	1/2" LCD digits, wide ambient formula
ACCURACY	1% of reading or 1° whichever is greater
RESOLUTION	1/10° between -19.9/199.9°F
RECALIBRATION	Through case potentiometer adjustment
LUX RATING	1 Lux (1 foot-candle)
UPDATE	10 seconds
AMBIENT OPERATING	-30/140°F (-35/60°C) & 100% HR
AMBIENT TEMP ERROR	Zero
HUMIDITY	100%
SENSOR	Thermistor based - NTC

STEM ASSEMBLIES

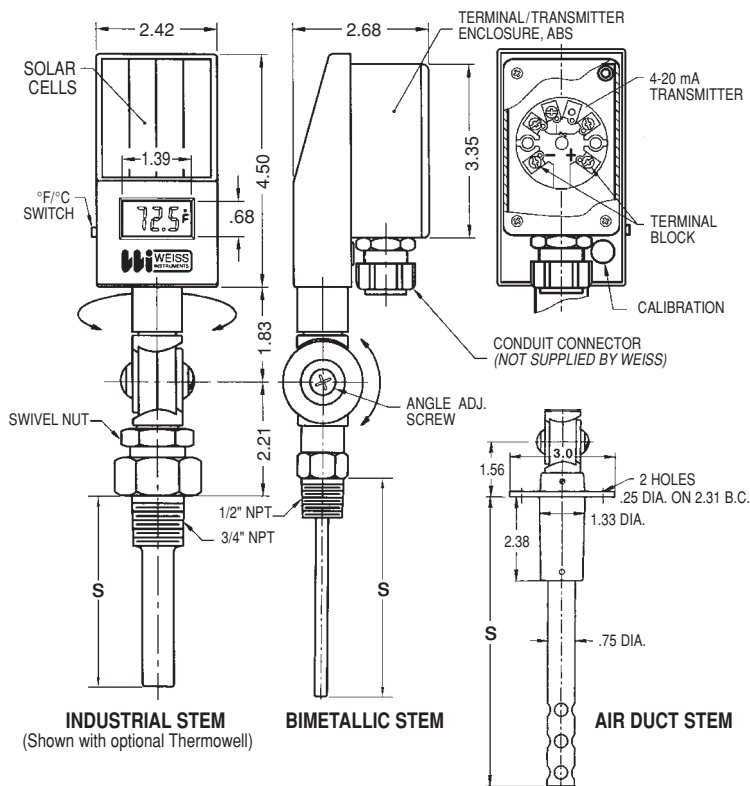| **INDUSTRIAL GLASS**	**BIMETALLIC**
Full conformance with Fed Spec GG-T-321D. Fully interchangeable with Industrial Glass Thermometers	Full conformance with ASME B40.3-1990. Fully interchangeable with Bimetallic Dial Thermometers

TRANSMITTER

RANGE	-58/302°F (-50/150°C)
OUTPUT	4 to 20mA
OPERATING AMBIENT	-15/185°F (-25/85°C)
AMBIENT ERROR	.01% Span (°C)
SUPPLY	8 to 35VDC
MAX.LOAD RESISTANCE	775Ω with 24VDC Supply
ACCURACY	0.1% of Span
SENSOR	Platinum 100ΩRTD

SOLAR CELLS	2.42
—	—
°F/°C SWITCH	4.50 / .68 / 1.39

72.5 F

WEISS INSTRUMENTS

SWIVEL NUT

1/2" NPT
3/4" NPT

S

INDUSTRIAL STEM
(Shown with optional Thermowell)

2.68

TERMINAL/TRANSMITTER ENCLOSURE, ABS

4-20 mA TRANSMITTER

TERMINAL BLOCK

CALIBRATION

CONDUIT CONNECTOR
(NOT SUPPLIED BY WEISS)

3.35

ANGLE ADJ. SCREW

S

BIMETALLIC STEM

1.56
2.38

3.0

2 HOLES
.25 DIA. ON 2.31 B.C.
1.33 DIA.

S

.75 DIA.

AIR DUCT STEM

Compatible with most
Building Automation Systems
with 4-20mA input.

INPUT VOLTAGE TO COMPUTER

R$_L$

CONNECT TO TERMINALS ON DVUT TRANSMITTER

8.5 TO 35 VDC POWER SUPPLY

NEGATIVE — POSITIVE
TRANSMITTER
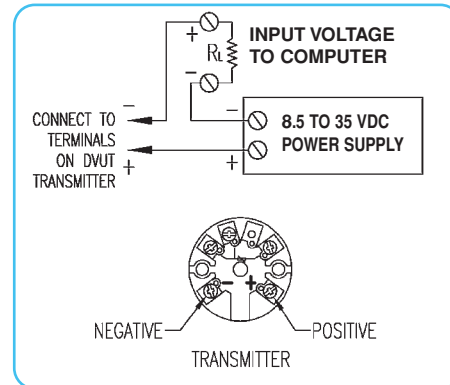
For R$_L$ = 250Ω

V (VOLT)	I (mA)	°F	°C
1	4	-58	-50
5	20	+302	+150

INDUSTRIAL GLASS THERMOMETER STEM ASSEMBLY			
CATALOG NO.	STEM	S Dim.	IDN
DVUT35	31/2"	31/2"	62400
DVUT6	6"	5"	62401
BIMETAL DIAL THERMOMETER STEM ASSEMBLY			
CATALOG NO.		S Dim.	IDN
DVBMT25		21/2"	62402
DVBMT4		4"	62403
DVBMT6		6"	62404
AIR DUCT STEM ASSEMBLY			
CATALOG NO.		S Dim.	IDN
DVDT6		6"	62405
DVDT9		9"	62406
DVDT12		12"	62407

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