

# INDUSTRIAL GLASS THERMOMETERS



The Weiss 7" and 9" Vari-angle® is molded of GE Valox® polyester, 40% glass/mineral reinforced. This particular material has excellent strength, impact and stiffness properties which makes it perfect for the toughest applications. Some of the uses are process piping, tanks, pipelines in building construction, boilers and air ducts. The Vari-angle is a versatile thermometer that can be adjusted easily for optimum readability. Furnished in ranges up to and including 300°F.

© Vari-angle is a registered trademark of Weiss Instruments, Inc.

## SPECIFICATIONS

**CASE:** Modern V-shape design with parts molded of GE Valox® polyester, in black textured finish. Heavy glass protected front firmly secured against rattles by spring action.

**STEM:** For 3 1/2" stems only and ranges up to and including 300°F, the stem material is a precision die cast Zamac alloy. For ranges above 300°F, bulb chamber is a precision machined aluminum alloy with copper plated steel stem extension. *For Separable Socket connections only.*

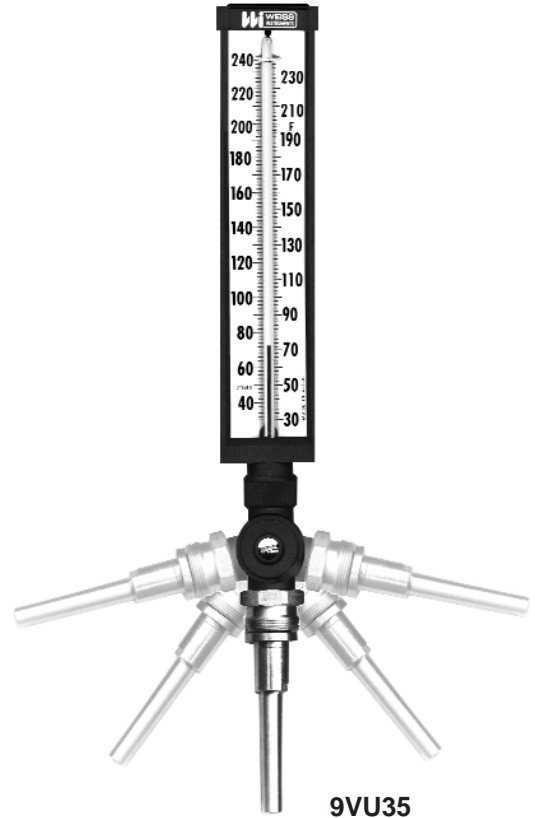
**LOCKING DEVICE:** Adjustable case locknut and angle adjusting screw work independently to provide a full 360° positioning of thermometer case and stem.

**ADJUSTABLE JOINT:** GE Valox finished to match case. Completely encloses capillary to prevent tampering and foreign matter from entering instrument.

**TUBE & CAPILLARY:** Blue liquid filled-magnifying lens "Blue Reading" tube. Precision made to guarantee accuracy within 1% of scale range. Silicone shock mounted for lasting durability.

**SCALE:** White coated aluminum with permanently baked bold black markings. Locked in place and adjusted through device at top of scale. There are no mounting screws to cover up scale markings.

© Valox is a registered trademark of the General Electric Co.



## VARI-ANGLE INDUSTRIAL THERMOMETERS

7" SCALE	CAT NO.
3 1/2" STEM	7VU35
6" STEM	7VU6
9" STEM	7VU9
12" STEM	7VU12

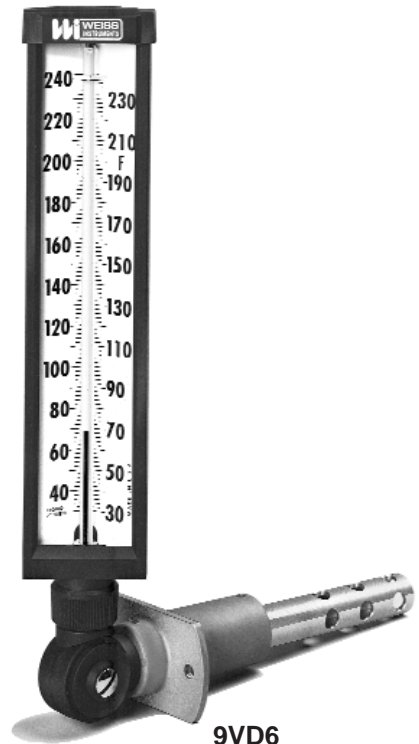
9" SCALE	CAT NO.
3 1/2" STEM	9VU35
6" STEM	9VU6
9" STEM	9VU9
12" STEM	9VU12

ADD RANGE CODE FROM RANGE TABLE LISTING. EX: 9VU35-240 (RANGE 30-240F)  
ABOVE CATALOG NUMBERS **DO NOT INCLUDE SOCKETS** - ORDER SEPARATELY  
FROM THERMOWELL TABLE LISTING.

## VARI-ANGLE AIR DUCT THERMOMETERS

9" SCALE	CAT NO.
3 1/2" STEM	9VD35
6" STEM	9VD6
9" STEM	9VD9
12" STEM	9VD12

ADD RANGE CODE FROM RANGE TABLE LISTING. EX: 9VD6-180 (RANGE 30-180F)  
ABOVE CAT. NUMBERS INCLUDE A REVERSIBLE DUCT MOUNTING FLANGE.



# CONSTRUCTION FEATURES



**CASE:** Modern V-shape design, high pressure die cast aluminum, finished in black textured enamel. Heavy glass protected front firmly secured against rattles by spring action.

**STEM:** For 3 1/2" stems only and ranges up to and including 300°F, the stem material is a precision die cast Zamac alloy. For ranges above 300°F, bulb chamber is a precision machined aluminum alloy with copper plated steel stem extension. *For Separable Socket connections only.*

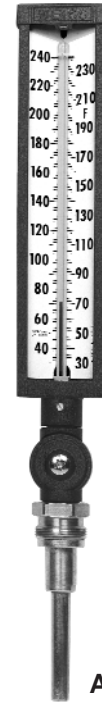
**LOCKING DEVICE:** Two adjusting screws provide a full 360° positioning of thermometer case and stem.

**ADJUSTABLE JOINT:** Die cast aluminum finished to match case. Completely encloses capillary to prevent tampering and foreign matter from entering instrument.

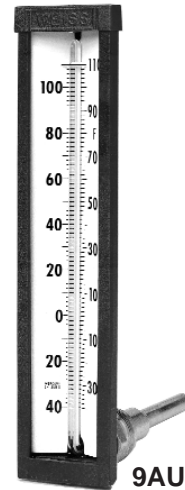
**TUBE & CAPILLARY:** Blue liquid filled-magnifying lens "Blue Reading" tube. Precision made to guarantee accuracy within 1% of scale range. Silicone shock mounted for lasting durability.

**SCALE:** White coated aluminum with permanently baked bold black markings. Locked in place and adjusted through device at top of scale. There are no mounting screws to cover up scale markings.

**FEDERAL SPEC.** Units are in full conformance with Federal Specification GG-T-321D.



A9VU35



9AU35



9SU35

## ALUMINUM CASE VARI-ANGLE INDUSTRIAL THERMOMETERS

7" SCALE	CAT NO.
3 1/2" STEM	A7VU35
6" STEM	A7VU6
9" STEM	A7VU9
12" STEM	A7VU12

9" SCALE	CAT NO.
3 1/2" STEM	A9VU35
6" STEM	A9VU6
9" STEM	A9VU9
12" STEM	A9VU12

ADD RANGE CODE FROM RANGE TABLE LISTING. **EX: A9VU35-120 (RANGE 0-120F)**  
 ABOVE CATALOG NUMBERS **DO NOT INCLUDE SOCKETS** - ORDER SEPARATELY  
 FROM THERMOWELL TABLE LISTING.

## ANGLE FORM INDUSTRIAL THERMOMETERS

7" SCALE	CAT NO.
3 1/2" STEM	7AU35
6" STEM	7AU6
9" STEM	7AU9
12" STEM	7AU12

9" SCALE	CAT NO.
3 1/2" STEM	9AU35
6" STEM	9AU6
9" STEM	9AU9
12" STEM	9AU12

ADD RANGE CODE FROM RANGE TABLE LISTING. **EX: 9AU35-120 (RANGE 0-120F)**  
 ABOVE CATALOG NUMBERS **DO NOT INCLUDE SOCKETS** - ORDER SEPARATELY  
 FROM THERMOWELL TABLE LISTING.

## STRAIGHT FORM INDUSTRIAL THERMOMETERS

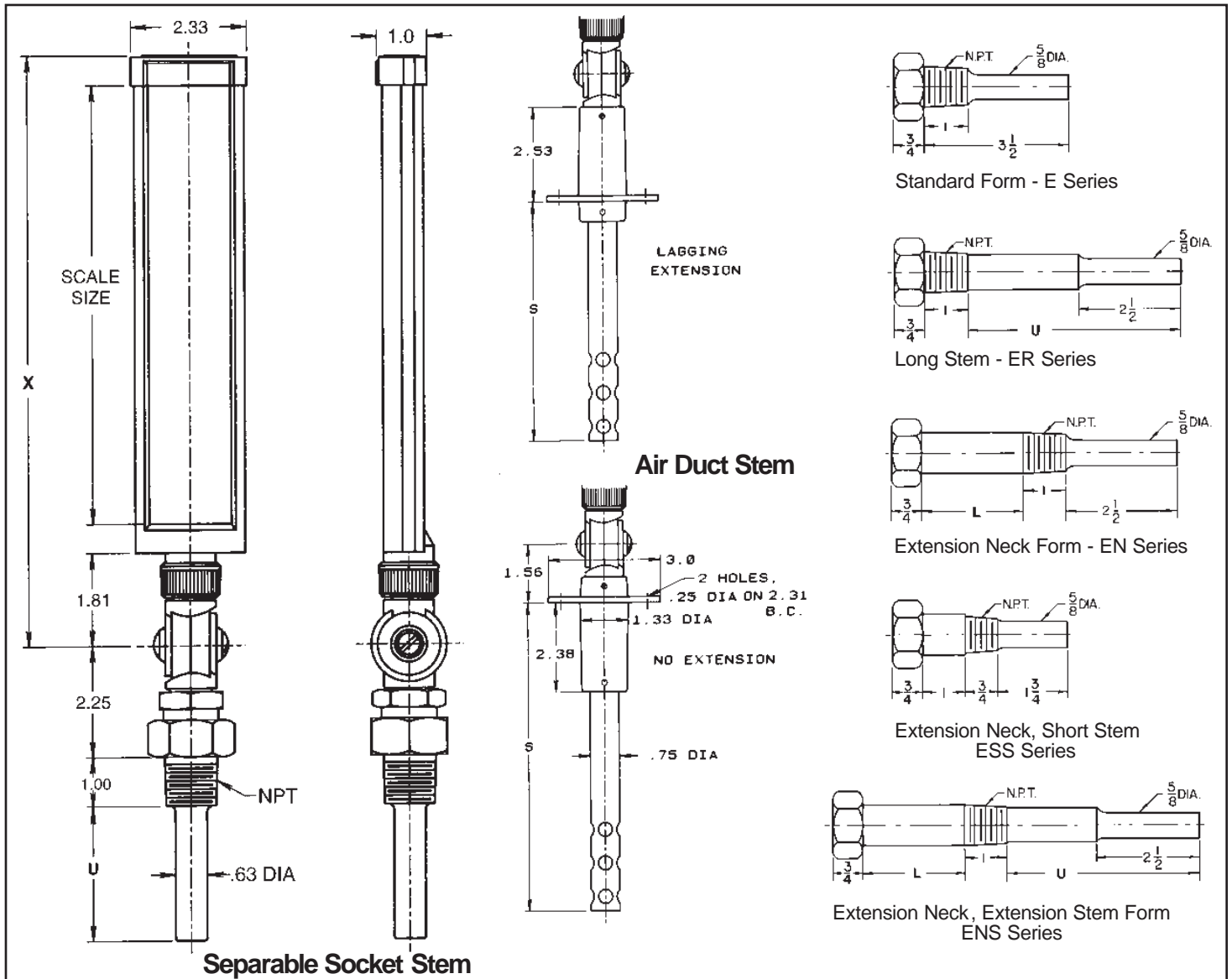
7" SCALE	CAT NO.
3 1/2" STEM	7SU35
6" STEM	7SU6
9" STEM	7SU9
12" STEM	7SU12

9" SCALE	CAT NO.
3 1/2" STEM	9SU35
6" STEM	9SU6
9" STEM	9SU9
12" STEM	9SU12

ADD RANGE CODE FROM RANGE TABLE LISTING. **EX: 9SU35-120 (RANGE 0-120F)**  
 ABOVE CATALOG NUMBERS **DO NOT INCLUDE SOCKETS** - ORDER SEPARATELY  
 FROM THERMOWELL TABLE LISTING.

## CASE & SOCKET DIMENSIONS FOR VARI-ANGLE THERMOMETERS

Separable sockets are used to provide pressure tight connections where required. They also offer the advantage of allowing a thermometer to be removed from a system without disturbance. The thermometer is inserted and tightened to the separable socket by means of a threaded swivel nut coupling. Quick response to temperature change is assured since the stem and socket are precision tapered, providing a metal to metal contact at the sensitive bulb section. To withstand severe corrosive conditions, sockets machined of special materials are available. Pipe threads on separable sockets can be located at different points on the stem. Thread location determines the insertion length and the length available for insulation.



### THERMOWELLS AND ACCESSORIES

STEM LENGTH	BRASS CAT NO.	304SS CAT NO.	316SS CAT NO.	NPT	INSERTION (U)	LAG EXTENSION (L)
3 1/2	E35-75BS	E35-75SS	E35-75316SS	3/4	2 1/2	—
6	ER6-75BS	ER6-75SS	ER6-75316SS	3/4	5	—
9	ER9-75BS	ER9-75SS	ER9-75316SS	3/4	8	—
12	ER12-75BS	ER12-75SS	ER12-75316SS	3/4	11	—
3 1/2	ESS35-50BS	ESS35-50SS	ESS35-50316SS	1/2	2	1
3 1/2	ESS35-75BS	ESS35-75SS	ESS35-75316SS	3/4	2	1
6	EN6-75BS	EN6-75SS	EN6-75316SS	3/4	2 1/2	2 1/2
9	ENS9-75SS	ENS9-75SS	ENS9-75316SS	3/4	5 1/2	2 1/2
12	ENS12-75BS	ENS12-75SS	ENS12-75316SS	3/4	8 1/2	2 1/2

**Catalog No. ECC** - Brass Cap and Chain Assembly for Test Well

# SIX INCH INDUSTRIAL THERMOMETERS

## Navy Class Thermometers

The Weiss 6" Navy Class Thermometer is compactly designed, ruggedly constructed and has excellent readability. The blue-reading liquid-in-glass tube maintains accuracy despite vibrations and shock.

This economical thermometer is built for diesel engines, compressors, brine lines and all small piping networks. It is especially adaptable to equipment operating under continuous vibrating conditions.

**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.

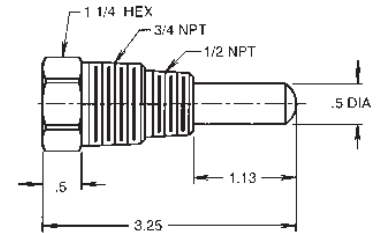
**TUBE & SCALE:** "Blue-Reading" liquid tube is standard. V-shaped scale is designed for maximum readability with extra large black numbers. Our cross-locked, scale holding device positively prevents loosening or shifting of scale and does away with holes and screws that interfere with scale markings.

**STEM ASSEMBLY:** Standard fittings of all brass construction which insures proper response to temperature changes. Standard dual threaded socket for 1/2" and 3/4" NPT. Meets all current military specifications (Army, Navy, Air Force).



5AS2

E13S-BS Thermowell



NAVY CLASS THERMOWELLS

STRAIGHT FORM	CAT NO.	ANGLE FORM	CAT NO.	BRASS	304SS	316SS	STEM	INSERTION U
2" STEM	5SS2	2" STEM	5AS2	E13S-BS	E13S-SS	E13S-316SS	2"	1 5/16"
4" STEM	5SS4	4" STEM	5AS4	E13L-BS	E13L-SS	E13L-316SS	4"	3 5/16"

ADD RANGE CODE FROM RANGE TABLE LISTING EX: 5AS2-240 (RANGE 30-240F) ABOVE CATALOG NUMBERS **DO NOT INCLUDE SOCKETS** - ORDER SEPARATELY FROM THERMOWELL TABLE LISTING.

# THRIFT LINE THERMOMETERS

Same Features as Navy Class Thermometer except:

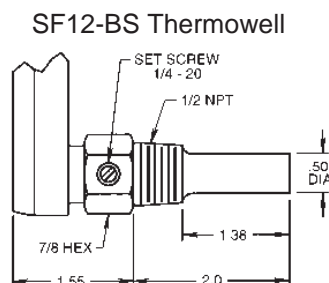
**STEM & SOCKET ASSEMBLY:** All brass stem. Removable socket secured to stem by set-screw. Socket standard in brass with 1/2" NPT. Sockets also available with 3/4" NPT.

STRAIGHT FORM	CAT NO. TL5S2
ANGLE FORM	CAT NO. TL5A2

THRIFT LINE THERMOWELLS

CAT NO.	NPT	INSERTION U
SF12-BS	1/2"	1 3/8"
SF34-BS	3/4"	1 3/8"

ADD RANGE CODE FROM RANGE TABLE LISTING. EX: TL5S2-240 (RANGE 30-240F). ABOVE CATALOG NUMBERS **DO NOT INCLUDE SOCKETS**-ORDER SEPARATELY FROM THERMOWELL TABLE LISTING.



TL5S2

# SIX INCH HOT & CHILLED WATER THERMOMETERS

The Weiss 6" Hot & Chilled Water Thermometer is our most economical offering in industrial glass thermometers. The unit features components of non-corrosive materials and its compact design and excellent readability makes the HW Series ideal for a variety of general purpose applications. Typical applications include small pipe lines, residential and commercial boilers, solar heating systems.

**SCALE LENGTH:** 5 1/2"

**SCALE:** White coated aluminum with permanently baked black markings.

**FILL:** Weiss "Blue Ribbon Liquid" is non-toxic and environmentally safe.

**CASE:** Molded V-shaped GE Valox® in gray textured finish.

**CONNECTION:** Brass 1/2" NPT.



HW5S2



HW5A2

## HOT WATER THERMOMETERS

40-260°F (2° div.) and 5-125°C (1° div.)

STRAIGHT FORM	CAT NO. HW5S2
ANGLE FORM	CAT NO. HW5A2

FURNISHED IN RANGE 40-260 F&C ONLY

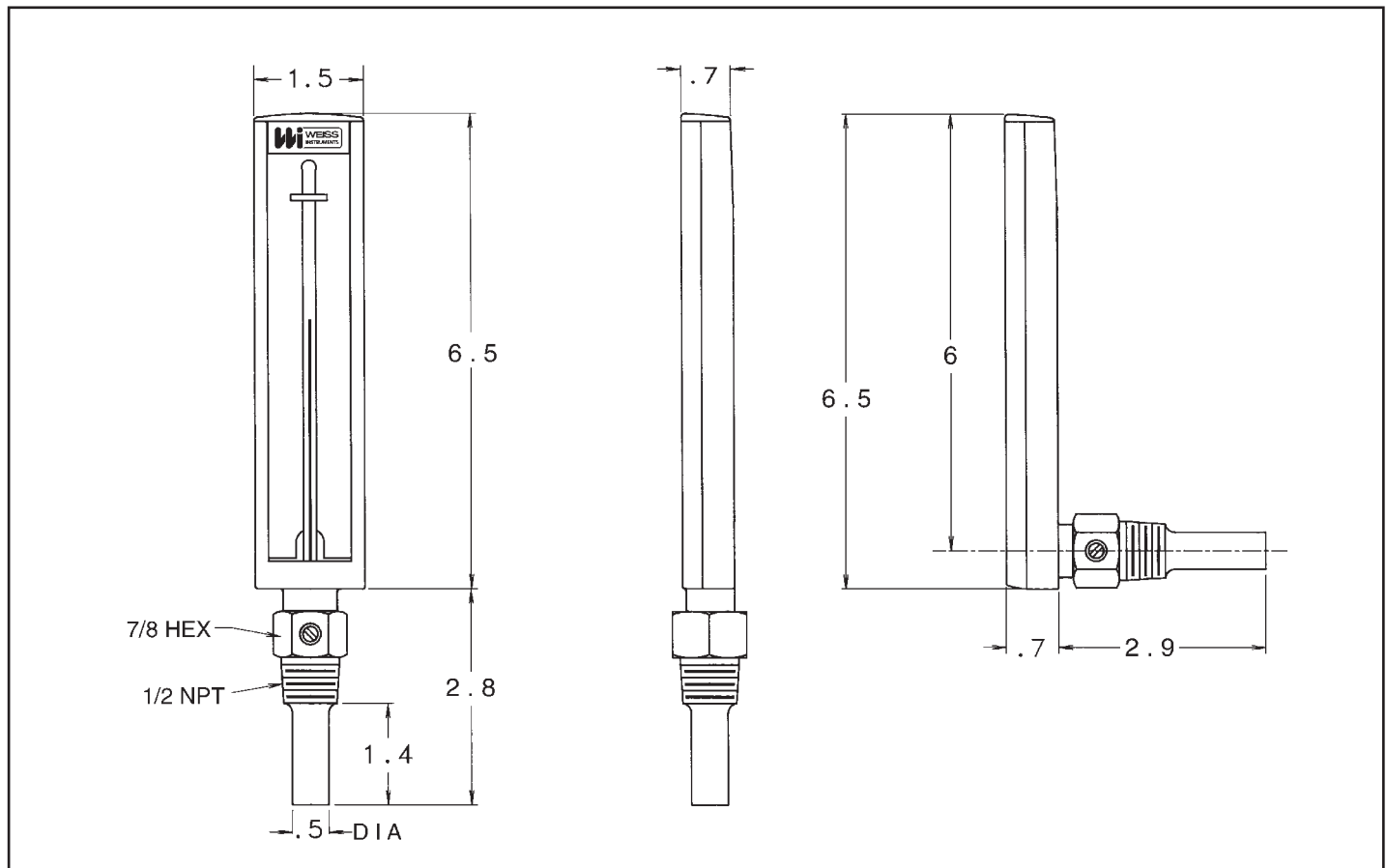
COMPLETE WITH 1/2" NPT BRASS CONNECTION WITH 1 3/8" INSERTION.

## CHILLED WATER THERMOMETERS

-40-120°F (2° div.) and -40-50°C (1° div.)

STRAIGHT FORM	CAT NO. CW5S2
ANGLE FORM	CAT NO. CW5A2

FURNISHED IN RANGE -40-120 F&C ONLY



# **INDUSTRIAL GLASS TEMPERATURE RANGES**

°F RANGES	SCALE DIV.	RANGE CODE	°F & °C RANGES	RANGE CODE
40-0-110°F	2°	110	40-0-110F&C	115
0-120°F	1°	120	0-120F&C	125
0-160°F	2°	160	0-160F&C	165
30-180°F	2°	180	30-180F&C	185
30-240°F	2°	240	30-240F&C	245
30-300°F	5°	300	30-300F&C	305
50-400°F	5°	400	50-400F&C	405
50-550°F	5°	550	50-550F&C	555

°C RANGES	SCALE DIV.	RANGE CODE	°F & PSI RANGES	RANGE CODE
20-0-45 °C	1°	042	170-270 F&P	270
0-50 °C	1°	050	200-400 F&P	415
0-100°C	1°	100	80-135 C&Kg/CM2	135
0-160°C	2°	162		
0-200°C	2°	200		

All Ranges 400°F (200°C) and higher are furnished in Aluminum Case.      F&PSI Ranges Available in Fixed Form Only.

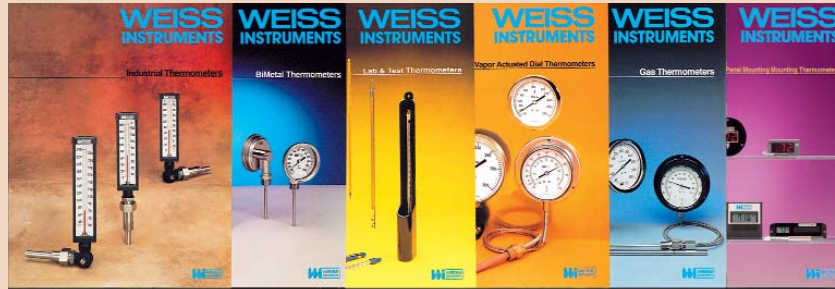
# **SIX INCH INDUSTRIAL THERMOMETER RANGES**

°F RANGES	SCALE DIV.	RANGE CODE	°F & °C RANGES	RANGE CODE
40-0-110°F	2°	110	40-0-110F&C	115
20-120°F	2°	120	20-120F&C	125
20-180°F	2°	180	20-180F&C	185
30-240°F	2°	240	30-240F&C	245
30-300°F	5°	300	30-300F&C	305
50-400°F	5°	400	50-400F&C	405
			40-260F&C	265

°C RANGES	SCALE DIV.	RANGE CODE
5-0-50 °C	1°	050
0-110°C	2°	110
0-150°C	2°	150



Send for Weiss Literature to match your specific application.



IND-4/02

BM-9/01

LT-7/01

V-11/00

GD-8/02

DT-11/02



SG-7/02

SPG-399

CTP-6/03

ARW-11/02

PHC-10/02

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