

*Weksler<sup>®</sup> Temperature Instruments Full Line Catalog* 





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### BIMETAL THERMOMETERS

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#### RANGE

Standard Farenheit and Celsius ranges have been estblished to encompass all normal temperature measurement requirements. A thermometer can be used at an operating temperature anywhere throughout its range. Although no bimetal thermometer should be exposed continuously to a process temperature over 800 °F.

#### **DIAL SIZE**

Select a dial size that allows you to comfortably read the dial from the normal distance when installed.

#### ACCURACY

All Weksler BiMetal Thermometers have an accuracy of  $\pm 1\%$  of span. For accurate readings stem must be immersed at least 2 inches in liquids and 4 inches in gases.

#### **UNDER/OVER RANGE PROTECTION**

Temporary exposure to temperatures under or over 50% of the full-scale range will not impair accuracy (up to 500°F or 260°C maximum).

#### **CASE ASSEMBLY**

The case, bezel, stem and fittings are stainless steel (300 series). The head assembly is sealed to exclude dirt, dust and moisture on  $3^{"}$  and  $5^{"}$  dial sizes, all joints are welded.

#### DIALS

Dials are white with clear black graduations and numerals and are easy to read.

#### FACE

A gasketed glass window is standard on 3" and 5" dial sizes. Where breakage is a concern, a plastic or shatterproof glass window is optional at extra cost. On 1" and 2" dial sizes a plastic window is standard (no options available). Plastic windows are not suitable where head temperature exceeds 150°F (65°C).

#### **EXTERNAL ADJUSTMENT**

An external adjustment at the rear of the 3" and 5" case permits adjustment at a specific point or pointer repositioning during calibration check.

#### **VIBRATION AND SHOCK**

If present, use of either a heavy duty bimetal or a remote mounted gas actuated thermometer is recommended.

#### HIGH PRESSURE OR CORROSIVE APPLICATIONS

In these applications, use of a separable thermowell is recommended. In addition to protecting the thermometer, thermowells facilitate removal of the thermometer without having to shut down the system.

# Adjustable Angle Type 3" and 5" Dial Slze

#### STANDARD FEATURES

- All Stainless Steel Construction
- External Recalibration Adjustment
- · White dial with black markings
- Accuracy ±1% of Span
- Gasketed Glass Face

- Case is sealed to exclude dirt, dust and moisture
- 3" and 5" dial sizes
- Angularly adjustable frame permits positioning of dial to accommodate viewing requirements

3" AND 5" DIAL SIZE CATALOG NUMBERS					
STEM	FIXED	FIXED THREAD		NNECTED	
LENGTH	3″	5″	3″	5″	
2½″	CF02	AF02	CU02	AU02	
4″	CF04	AF04	CU04	AU04	
6″	CF06	AF06	CU06	AU06	
9″	CF09	AF09	CU09	AU09	
12″	CF12	AF12	CU12	AU12	
15″	CF15	AF15	CU15	AU15	
18″	CF18	AF18	CU18	AU18	
24″	CF24	AF24	CU24	AU24	

NOTE: Union connected types must be used with thermowells, longer length available on special order.

#### STANDARD RANGES

CODE	Fahrenheit			
FC	-80 to 120°F			
FE	-40 to 120°F			
FG	0 to 150°F			
FJ	0 to 200°F			
FL	0 to 250°F			
FM	30 to 240°F			
FN	30 to 130°F †			
FR	50 to 300°F			
FS	50 to 400°F			
FT	50 to 550°F			
FX	150 to 750°F†			
FY	200 to 1000°F*†			
	Celsius			
CD	–50 to 50°C			
CJ	0 to 100°C			
CM	-10 to 110°C			
CN	0 to 50°C †			
CR	0 to 150°C			
CS	0 to 200°C			
CU	0 to 300°C			
CX	50 to 450°C†			
CY	100 to 550°C*†			
SEDARAR	I E THERMOWELLS AVAILABLE			

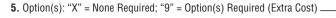
SEPARABLE THERMOWELLS AVAILABLE SEE PAGE 51

	DUAL SCALE			
CODE	Fahrenheit (on outside	and	Celsius (on inside)	
DE	-40/120°F	and	-40/50°C	
DF	40/160°F	and	-40/70°C	
DN	30/130°F	and	0/55°C †	
DJ	0/200°F	and	-20/94°C	
DL	0/250°F	and	-20/120°C	
DR	50/300°F	and	10/150°C	
DS	50/400°F	and	10/200°C	
DT	50/550°F	and	10/290°C	
DX	100/800°F*	and	40/430°C†	
DY	200/1,000°F	and	100/550C*†	

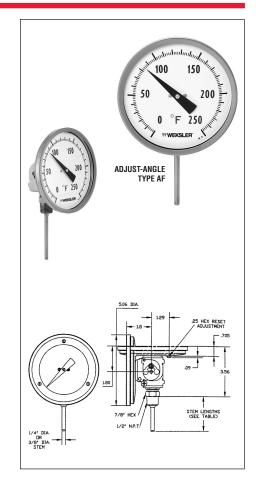
\*Not recommended for continuous service above 800°F (425°C). For such temperatures see pg. 63. †Minimum stem length for these ranges 4".

	OPTIONAL FEATURES			
CODE	Description			
EL	Liquid Filling for Catalog No's AF, 3A, 5A only			
PD	Plastic Window			
SG	Shatter Proof Glass			
NN	Paper Tag			
NH	Stainless Steel Tag			
DM	Dial Markings			
C4	Calibration Čertificate			

HOW TO ORDER							
	Α	F 0 6	4	4	F	М	Х
1. Basic 4-digit Catalog No. From Table Above							
2. Stem Diameter: "4" = .250"O.D. (Standard); "5" = .375"O.D. (Extra	a Cost)						
3. Thread Size: "4" = 1/2 NPT Male (AF Series); "U" = 1/2 NPT Male Sv	wivel Nut (Al	U Series) 🗕					
4. 2 Digit Range Code from Range Tables Above							
6 Ontion(c): "Y" – None Dequired: "0" – Ontion(c) Dequired (Extra (	Coot)						



If option(s) are required specify: Plastic Face, Shatterproof Glass Face, Paper Tag, Stainless Steel Tag



### Rigid Forms – 3" Dial Size

### STANDARD FEATURES

- All Stainless Steel Construction
- External Recalibration Adjustment
- White dial with black markings
- Accuracy ±1% of Span

CATALOG NUMBERS*				
STEM LENGTH	90° BACK Angle Form	STRAIGHT Form		
<b>2</b> ½″	3A02	3S02		
4‴	3A04	3S04		
6″	3A06	3S06		
9″	3A09	3S09		
12″	3A12	3S12		
15″	3A15	3S15		
18″	3A18	3S18		
24″	3A24	3S24		

Longer stem lengths available on special order.

#### **STANDARD RANGES**

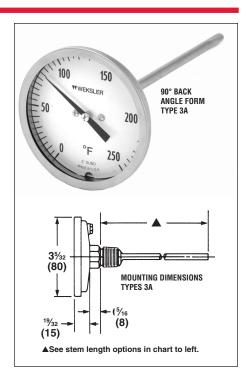
CODE	Fahrenheit
FC	-80 to 120°F
FE	-40 to 120°F
FG	0 to 150°F
FJ	0 to 200°F
FL	0 to 250°F
FM	30 to 240°F
FN	30 to 130°F †
FR	50 to 300°F
FS	50 to 400°F
FT	50 to 550°F
FX	150 to 750°F†
FY	200 to 1000°F*†
	Celsius
CD	–50 to 50°C
CJ	0 to 100°C
CM	-10 to 110°C
CN	0 to 50°C †
CR	0 to 150°C
CS	0 to 200°C
CU	0 to 300°C
CX	50 to 450°C†
CY	100 to 550°C*†

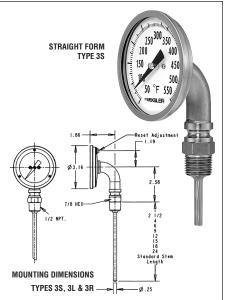
SEPARABLE THERMOWELLS AVAILABLE SEE PAGE 51

#### DUAL SCALE Fahrenheit Celsius CODE (on outside and (on inside) DE -40/120°F -40/50°C and DF 40/160°F and -40/70°C DN 30/130°F 0/55°C † and DJ 0/200°F and -20/94°C DL 0/250°F and -20/120°C DR 50/300°F 10/150°C and DS 50/400°F and 10/200°C 50/550°F 10/290°C DT and DX 100/800°F\* and 40/430°C† DY 200/1,000°F 100/550C\*+ and

\*Not recommended for continuous service above 800°F (425°C). For such temperatures see pg. 63. †Minimum stem length for these ranges 4".

	OPTIONAL FEATURES			
CODE	Description			
EL	Liquid Filling for Catalog No's AF, 3A, 5A only			
PD	Plastic Window			
SG	Shatter Proof Glass			
NN	Paper Tag			
NH	Stainless Steel Tag			
DM	Dial Markings			
C4	Calibration Certificate			





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#### **HOW TO ORDER**

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· Case is sealed to exclude dirt, dust and moisture

· Gasketed Glass Face

• 3" dial size

### **STANDARD FEATURES**

- All Stainless Steel Construction
- External Recalibration Adjustment
- White dial with black markings
- Accuracy ±1% of Span

CATALOG NUMBERS*				
STEM LENGTH	90° BACK Angle Form	STRAIGHT Form		
21/2″	5A02	5S02		
4″	5A04	5S04		
6″	5A06	5S06		
9″	5A09	5S09		
12″	5A12	5S12		
15″	5A15	5S15		
18″	5A18	5S18		
24″	5A24	5S24		

Longer stem lengths available on special order

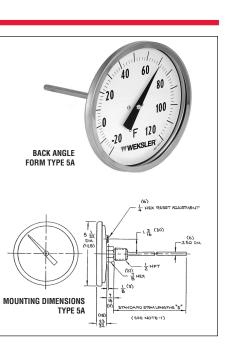
#### **STANDARD RANGES**

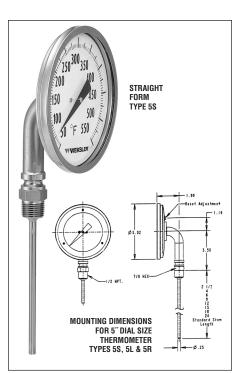
CODE	Fahrenheit
FC	-80 to 120°F
FE	-40 to 120°F
FG	0 to 150°F
FJ	0 to 200°F
FL	0 to 250°F
FM	30 to 240°F
FN	30 to 130°F †
FR	50 to 300°F
FS	50 to 400°F
FT	50 to 550°F
FX	150 to 750°F†
FY	200 to 1000°F*†
	Celsius
CD	–50 to 50°C
00	
CJ	0 to 100°C
ĊJ	0 to 100°C
CJ CM CN CR	0 to 100°C -10 to 110°C
CJ CM CN CR CS	0 to 100°C -10 to 110°C 0 to 50°C
CJ CM CN CR CS CU	0 to 100°C -10 to 110°C 0 to 50°C 0 to 150°C 0 to 200°C 0 to 300°C
CJ CM CN CR CS CU CX	0 to 100°C -10 to 110°C 0 to 50°C 0 to 150°C 0 to 200°C 0 to 300°C 50 to 450°C†
CJ CM CN CR CS CU	0 to 100°C -10 to 110°C 0 to 50°C 0 to 150°C 0 to 200°C 0 to 300°C
CJ CM CN CR CS CU CX CY	0 to 100°C -10 to 110°C 0 to 50°C 0 to 150°C 0 to 200°C 0 to 300°C 50 to 450°C†

	DUAL SCALE			
	Fahrenheit		Celsius	
CODE	(on outside	and	(on inside)	
DE	-40/120°F	and	-40/50°C	
DF	40/160°F	and	-40/70°C	
DN	30/130°F	and	0/55°C †	
DJ	-0/200°F	and	-20/94°C	
DL	0/250°F	and	-20/120°C	
DR	50/300°F	and	10/150°C	
DS	50/400°F	and	10/200°C	
DT	50/550°F	and	10/290°C	
DX	100/800°F*	and	40/430°C†	
DY	200/1.000°F	and	100/550C*+	

\*Not recommended for continuous service above 800°F (425°C). For such temperatures see pg. 63. †Minimum stem length for these ranges 4".

	OPTIONAL FEATURES				
CODE	Description				
EL	Liquid Filling for Catalog No's AF, 3A, 5A only				
PD	Plastic Window				
SG	Shatter Proof Glass				
NN	Paper Tag				
NH	Stainless Steel Tag				
DM	Dial Markings				
C4	Calibration Certificate				





#### **HOW TO ORDER**

<u>5 A O 6</u> 4 4 F J

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- 1. Basic 4-digit Catalog No. From Table Above
- **2.** Stem Diameter: "4" = .250"O.D. (Standard); "5" = .375" O.D. (Extra Cost)
- **3.** Thread Size: "4" = 1/2 NPT Male; 2 = 1/4 NPT Male, Back Angle Rear Only(Extra Cost)
- 4. 2 Digit Range Code from Range Tables Above\_
- 5. Option(s): "X" = Non Required Option(s) Required (Extra Cost) Select code from above table

· Case is sealed to exclude dirt, dust and moisture

· Gasketed Glass Face

• 5" dial size

### Heavy Duty Types – 3<sup>~~</sup> Dial Size

#### **STANDARD FEATURES**

- · Shock and Vibration Resistant
- Stainless Steel Construction
- · Plastic Crystal
- Dished Anti-Parallax Dial for Easy Reading
  External Recalibration Adjustment at Rear
- of Case

	CATALOG NUMBERS			
STEM Length	90° BACK Angle Form	STRAIGHT Form		
2″	H3A2	H3S2		
4″	H3A4	H3S4		
6″	H3A6	H3S6		

NOTE: A minimum of 2" insertion (immersion) is required for accurate readings and proper response.

- Accuracy 1% of Span(when tested without well)
- Interchangeable with 5" Scale Size "Submarine" Thermometers Having Same Stem Length
- ¾ ~-28 UN2A Union Connection Assembly Must be used with Well (or Bushing)

CODE	Fahrenheit
D	-40 to 120°F in 2° divs.*
Н	0 to 200°F in 2° divs.
L	20 to 240°F in 2° divs.
Р	50 to 300°F in 2° divs.
Q	50 to 400°F in 5° divs.
R	50 to 500°F in 5° divs.
S	50 to 750°F in 10° divs.
CODE	Celsius
1	-50 to 50°C in 1° divs.*
2	-10 to 110°C in 1° divs.
5	0 to 150°C in 2° divs.
6	0 to 200°C in 2° divs.
8	0 to 300°C in 5° divs.

mulul 300 350 250 400 200 450 50 500 100 550 50 TYPE H3A 90° BACK ANGLLE ← 2.00 or 4.00 or 6.00 →+< 1<sup>1</sup>/<sub>32</sub> +<1<sup>1</sup>/<sub>32</sub>> External Adjustment .623 Dia. Max.-31/16 Dia. .375 Dia.-3/4-28 UN2A 7/8 Hex \*4" MINIMUM STEM LENGTH (ON STRAIGHT FORM ONLY)

#### **HOW TO ORDER**

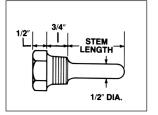
<u>H 3 S 4</u> H

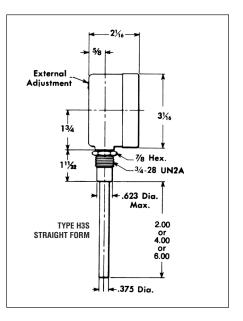
1. Basic 4-digit Catalog No.

2. Range Code\_

### THERMOWELLS FOR HEAVY DUTY BIMETAL THERMOMETERS .385<sup>°</sup> BORE – 3/4-28<sup>°</sup> FEMALE THREAD (INTERNAL)

THREADED TYPE – <sup>3</sup> /4-14 NPT MALE				
	CATALOG NO.			
THERMOMETER STEM LENGTH	WELL LENGTH (OVERALL)	304 SS		
2″ 4″	3¼″ 5¼″	W3G1 W5G1		
6″	71⁄4″	W7G1		





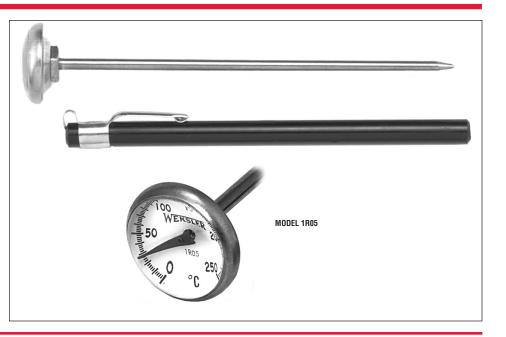
To Order: Specify 4 digit catalog no. from above tables

11

### STANDARD FEATURES

- 1″ dial
- 5" stem length
- .142" stem diameter
- Complete with pocket case and clip
- Standard with plastic crystal and recalibration feature

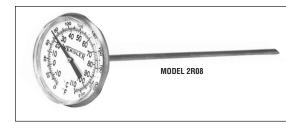
CATALOG	STANDARD
NUMBER	Ranges
1R05A	-40 to 160°F in 2° divs.
1R05B	25 to 125°F in 1° divs.
1R05C	0 to 220°F in 2° divs.
1R05D	50 to 550°F in 5° divs.
1R05E	-50 to 100°C in 2° divs.
1R05F	-10 to 110°C in 2° divs.
1R05G	0 to 150°C in 2° divs.
1R05H	0 to 250°C in 5° divs.



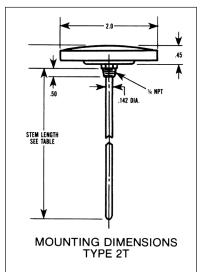
### **STANDARD FEATURES**

### • 2″ dial

- All Stainless Steel Construction
- Accuracy ±1% of Span
  Dual Scale (Both °F and °C) Ranges







MOUNTING CLIP FOR 1" and 2" PN TPC

CATALOG NUMBER	DUAL SCAL Fahrenheit on Oute	ТҮРЕ		
2R08A 2R08B 2R08J 2R08C 2R08K 2R08D	-40 to 160°F in 2° divs. 25 to 125°F in 1° divs. 0 to 180°F in 2° divs. 0 to 220°F in 1° divs. 50 to 400°F in 5° divs. 50 to 550°F in 5° divs.	and and and and and and	-40 to 70°C in 2° divs. -5 to 50°C in 1° divs. -18 to 83°C in 1° divs. -10 to 110°C in 2° divs. 10 to 106°C in 2° divs. 10 to 290°C in 5° divs.	8″ Plain Stem With Recalibration Feature
2T02A 2T02C	-40 to 160°F in 2° divs. 0 to 220°F in 2° divs.	and and	–40 to 70°C in 2° divs. –10 to 110°C in 2° divs.	2½″ Stem ¼ NPT Fixed Thread
2T04A 2T04B 2T04C	–40 to 160°F in 2° divs. 25 to 125°F in 1° divs. 0 to 220°F in 2° divs.	and and and	-40 to 70°C in 2° divs. -5 to 50°C in 1° divs. -10 to 110°C in 2° divs.	4″ Stem ¼ NPT Fixed Thread

### HOW TO ORDER

Specify 5 digit catalog number from above tables

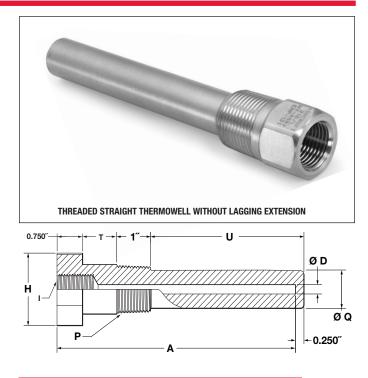
12

### **Standard Threaded Thermowells**

#### FOR INDUSTRIAL BIMETAL THERMOMETERS WITH .250" DIAMETER ELEMENTS

- .385" bore available for use with instruments • with .375" diameter elements
- · All Weksler standard thermowells are bored from solid bar stock

<sup>3</sup> /4 NPT – CATALOG NUMBERS					
A	U	Q	BRASS	304 SS	316 SS
4	<b>2</b> <sup>1</sup> / <sub>2</sub>		S3B4	S3G4	S3J4
6	41⁄2	3⁄4	S3B6	S3G6	S3J6
9	71⁄2	3⁄4	S3B9	S3G9	S3J9
12	10½	3⁄4	S3B2	S3G2	S3J2



THREADED STRAIGHT - 0.260 & 0.385 BORE						
Р	н	Q 0.260 Bore	Q 0.385 Bore			
1/2″	1.125″	0.50″	0.625″			
3⁄4″	1.125″	0.50″	0.625″			
1″	1.375″	0.50″	0.625″			

THERMOWELL LEGEND
Instrument connection
Process connection

T - Lag dimension when required

B - Root OD

1-Ρ-

E - Tip OD

D - Bore diameter

U - Insertion depth

S - Instrument stem length or bore depth

Brass wells are not recommended for installations involving high pressures and/or temperatures over 400°F. Brass cap and chain available to keep bore clean when not in use. .260° bore standard. If .385° bore is required: (1) Add the letter K at the end of the catalog no.; (2) "Q" diameter is changed to 49/64° along entire length of insertion ("U" dimension). For pressure – temperature rating use Table 1 on page 89.

NOTE: 21/2" STEM THERMOMETERS USE SPECIAL LIMITED SPACE WELLS.

### GLASS THERMOMETERS

Adjustable Glass Thermometers	
A735, A935	17
Dimensions, Thermowells	18

### Adjustable Angle Thermometer, Mercury Free, Standard Model A935AF5

### STANDARD FEATURES

#### • Mercury Free.

- Molded Valox  $^{\ensuremath{\mathbb{B}}}$  V-shaped black case for ranges up to and including 300  $^{\ensuremath{\mathbb{C}}}$  F
- Die cast black aluminum V-shaped case for ranges above 300°F.
- Glass front excludes dust and dirt.
- White aluminum scale with bold black graduations and figures.
- Mercury Free blue liquid in glass with magnifying lens for easy readability.
- Accuracy is ±1% of span.
- Easy adjustment permits case and stem to be rotated 360°.
- 31/2", 6", 9" & 12" stems available.
- 11/4"-18" NEF swivel nut.

#### **OPTIONS**

- Plastic window available for both 7" and 9" scale.
- Aluminum case available for low ranges (300°F and below).

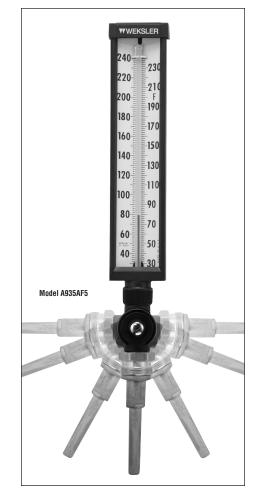
#### ACCESSORIES

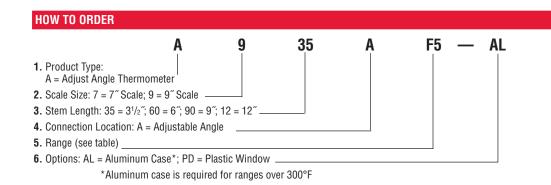
Thermowells For Adjustable Angle Thermometers: See page 20

FAHRENHEIT -40/110F 0/120F 0/160F 30/180F 30/240F 30/300F 50/400F <sup>(1)</sup> 50/550F <sup>(1)</sup>	MINOR GRADS 2° 2° 2° 2° 5° 5° 5°	<b>RANGE</b> <b>CODE</b> F1 F2 F3 F4 F5 F6 F7 F8
CELSIUS -20/45C 0/50C 0/100C 0/160C <sup>(1)</sup> 0/200C <sup>(1)</sup> 0/300C <sup>(1)</sup>	1° 1° 2° 2° 5°	C1 C2 C3 C4 C5 C6
DUAL SCALE -40/110F & -40/43C 0/120F & -15/48C 0/160F & -15/70C 30/180F & 0/82C 30/240F & 0/115C 30/300F & 0/150C 50/400F & 10/200C <sup>(1)</sup> 50/550F & 10/290C <sup>(1)</sup>	2° 1° 2° 2° 5° 5° 5°	D1 D2 D3 D4 D5 D6 D7 D8

(1) Must be supplied with optional aluminum case.

STOCK THERMOMETERS				
A735AF2	A935AF4	A935AF2-AL		
A735AF5	A935AF5	A935AF3-AL		
A935AD2	A935AF6	A935AF4-AL		
A935AF2	A960AF2	A935AF5-AL		
A935AF3	A960AF5	A935AF6-AL		
-	-	A960AF2-AL		

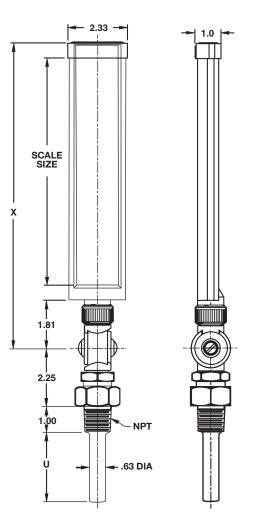




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RANGES

Adjustable Angle and Air Duct Thermometer General Dimensions



### THERMOWELLS FOR ADJUSTABLE ANGLE THERMOMETERS



THERMOMETER STEM LENGTH	"U" DIM.	3/4 NPT BRASS
3½″	21/2″	G1E3D2
6″	5″	G1M3D2
9″	8″	G1S3D2
12″	11″	G1T3D2



THERMOMETER STEM LENGTH	"T" DIM.	"U" DIM.	<sup>3</sup> ⁄4 NPT BRASS
3½″	1	1½″	G1E3D2B
6″	<b>2</b> ½″	<b>2</b> ½″	G1M3D2E
9″	<b>2</b> ½″	5½″	G1S3D2E
12″	2½″	8½″	G1T3D2E

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Weksler Instruments 250 E. Main Street, Stratford, CT 06614 Tel: 203-378-8281 • Fax: 203-385-0408 www.weksler.com

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