

TEMPERATURE CATALOG



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REOTEMP is a globally recognized ISO 9001-2008 manufacturer of temperature and pressure instrumentation. REOTEMP sells through a mature distribution network that reaches all 50 states and 30 countries worldwide. We provide bimetal thermometers, pressure gauges, diaphragm seals, RTDs, thermocouples, pressure transmitters, compost thermometers, and related accessories to a variety of process markets worldwide.

Our reputation is built on high quality products, quick standard lead times, and exceptional customer support. We're dedicated to providing our customers with complete satisfaction, from the first phone call to the design and quality of the instrument they receive. REO*TEMP* provides both standard and application specific products and is ready and willing to find a solution to all of your temperature and pressure needs.

Sample Client List

Oil, Gas, and Refining

Guarantee & Warranty









Pages

Back Cover



Pharma/Biotech





Utility/Municipality

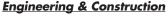




Guarantee & Warranty Information













Online Product Configurators



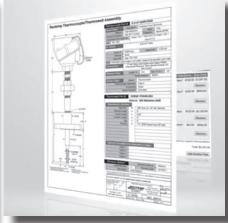
A Powerful Online Tool, that makes specification quick & easy!



Specifying temperature and pressure instrumentation should only require a few clicks of the mouse and a couple moments of your time. Now it does!

With Reotemp's Product Configurators, product specification really is simple and we've provided you with everything you'll need. At the end of the configuration process, you'll have a custom drawing, list pricing, and our standard lead time! Visit www.reotemp.com.



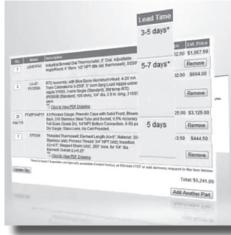




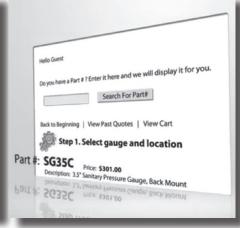
Point and Click Layout:

Drawings Instantly Created:

Roll Over Photos:







Lead Times:

List Pricing:

Part #'s:

www.reotemp.com

Back Connect Bimetal Thermometer



REOTEMP's Bimetal Thermometers are reliable and accurate temperature sensors requiring no electricity or wiring. Back Connect Thermometers are ideal for local, eye-level temperature readings in most process applications. They can be recalibrated with a turn of the calibration screw on the back of the dial. A variety of options are available for your specific process needs.



Standard Delivery 3-5 Days

Thermowell Recommended (available through Reotemp)











FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy ± 1% Full Scale (ASME B40.3 Grade A)
- All Stainless Steel Construction
- Hermetically Sealed (ASME B40.3)
- o Silicone Fillable for Vibration
- Standard and Custom Stem Lengths
- Standard External Reset for Calibration
- OEM Logo Dials/Custom Dials
- Five Year Warranty
- Hi√vis[™] Dials Available

SPECIFICATIONS

ACCURACY: ± 1% Full Scale (ASME B40.3)

DIAL SIZE: 3", 4" or 5"

DIAL MATERIAL: Anodized aluminum with black marks on satin matte finish background; White & HiVis background available.

STEM LENGTH: 2" to 80"

STEM DIAMETER: 1/4" (std); 3/8" & 5/16" available

HEAD, BEZEL, MOUNTING BUSHING, STEMS: 300 Series

SS, 316SS (optional)

OPERATING CONDITIONS: Head temperature should not exceed 200°F (150°F if silicone filled). Stem should not be exposed to continuous temperatures exceeding 50% over-range or 800°F.

TEMPERATURE RANGES: See inside back cover for complete list of ranges.

CASE RATING: IP67, NEMA 6 Rated (Hermetically sealed per ASME B40.3)

LENS: Glass (std), Acrylic, Polycarbonate, Tempered Glass IMMERSION: Minimum 2" in liquid, and 4" in gas for most ranges. Certain ranges require up to 4" in liquids & 5" in gas.

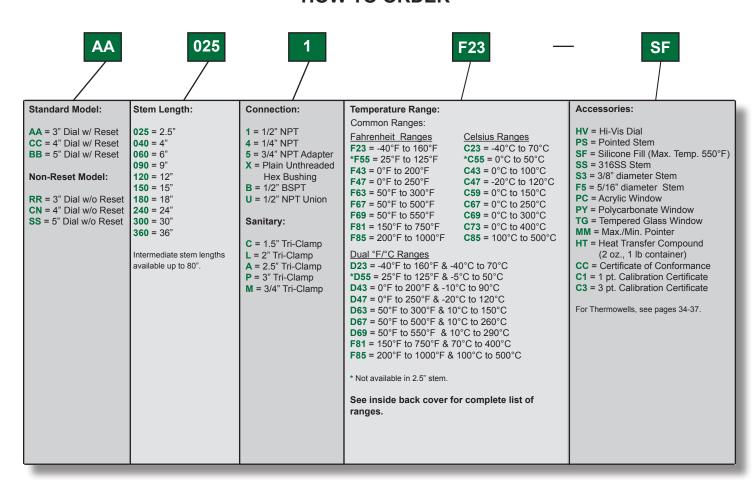
MOUNTING CONNECTION: 1/2" NPT (std), 1/4" NPT, 3/4" NPT, Plain Hex Bushing, 1/2" BSPT, Sanitary Tri-Clamp TEMPERATURE SENSING AREA: Last 2" to 4" of the stem

Back Connect Bimetal Thermometer

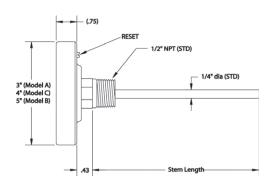




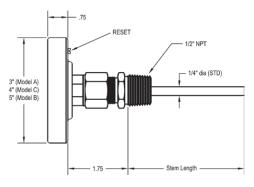
HOW TO ORDER



Standard Dimensions



Fixed Union



*dimensions in inches

Adjustable Angle Bimetal Thermometer



Measuring your world since 1965

REOTEMP's Bimetal Thermometers are reliable and accurate temperature sensors requiring no electricity or wiring. Adjustable Angle Thermometers allow for easy temperature monitoring from any position and they are ideal for local indication. They can be recalibrated with a turn of the calibration screw on the back of the dial. A variety of options are available for your specific process needs.



Standard Delivery 3-5 Days

Thermowell Recommended (available through Reotemp)











FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy ± 1% Full Scale. (ASME B40.3)
- All Stainless Steel Construction
- Hermetically Sealed (ASME B40.3)
- o Silicone Fillable for Vibration
- Standard External Reset for Easy Calibration
- OEM Logo Dials/Custom Dials
- Five Year Warranty
- Hi₁√is Dials Available
- o Dial can be adjusted to any position for easy viewing.

SPECIFICATIONS

ACCURACY: ± 1% Full Scale (ASME B40.3)

DIAL SIZE: 3", 4" or 5"

DIAL MATERIAL: Anodized aluminum with black marks on satin matte finish background; White & HiVis background available.

STEM LENGTH: 2" to 80" STEM DIAMETER: 1/4" (std)

HEAD, BEZEL, MOUNTING BUSHING, STEMS: 300 Series

SS, 316SS. (optional)

OPERATING CONDITIONS: Head temperature should not exceed 200°F (150°F if silicone filled). Stem should not be exposed to continuous temperatures exceeding 50% over-range or 800°F.

CASE RATING: IP67, NEMA 6 Rated (Hermetically sealed per ASME B40.3)

LENS: Glass (std), Acrylic, Polycarbonate, Tempered Glass IMMERSION: Minimum 2" in liquid, and 4" in gas for most ranges. Certain ranges require up to 4" in liquids & 5" in gas.

MOUNTING CONNECTION: 1/2" NPT (std), 3/4" NPT, Plain Hex Bushing, 1/2" BSPT, 1/2" NPT Union, Sanitary Tri-clamp

TEMPERATURE SENSING AREA: Last 2" to 4" of the stem

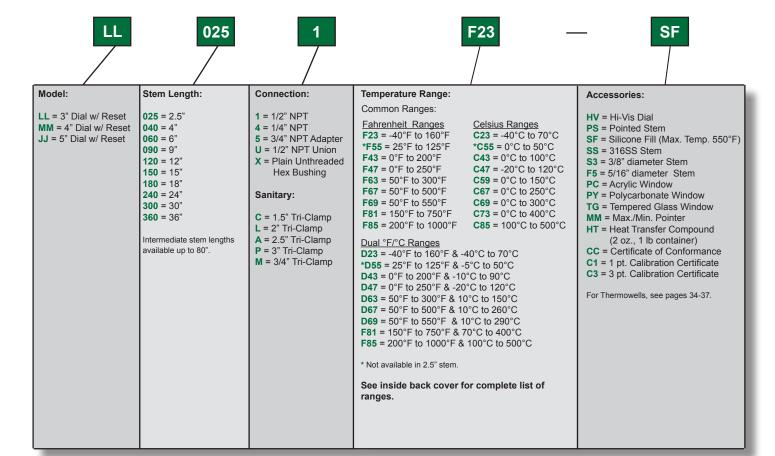
Adjustable Angle Bimetal Thermometer

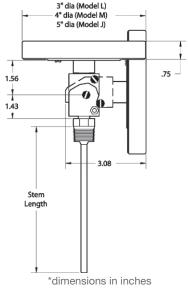


Measuring your world since 1965



HOW TO ORDER





Bottom Connect Bimetal Thermometer



REOTEMP's Bimetal Thermometers are reliable and accurate temperature sensors requiring no electricity or wiring. The Bottom Connect Thermometers are ideal for side and elevated installations on tops or sides of tanks or pipes and are ideal for local indication. They can be recalibrated with a turn of the calibration screw on the back of the dial. A variety of options are available for your specific process needs.



Standard Delivery 3-5 Days

Thermowell Recommended (available through Reotemp)











FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy ± 1% Full Scale. (ASME B40.3)
- All-Stainless Construction
- Hermetically Sealed (ASME B40.3)
- Silicone Fillable for Vibration
- Standard and Custom Stem Lengths
- Standard External Reset for Easy Calibration
- OEM Logo Dials/Custom Dials
- Five Year Warranty
- ∘ Hi vis Dials Available

SPECIFICATIONS

ACCURACY: ± 1% Full Scale (ASME B40.3)

DIAL SIZE: 3", 4", or 5"

DIAL MATERIAL: Anodized aluminum with black marks on satin matte finish background; White & HiVis background available.

STEM LENGTH: 2" to 80"

STEM DIAMETER: 1/4" (std); 3/8" and 5/16" available HEAD, BEZEL, MOUNTING BUSHING, STEMS: 300 Series SS, 316SS (optional)

OPERATING CONDITIONS: Head temperature should not exceed 200°F (150°F if silicone filled). Stem should not be exposed to continuous temperatures exceeding 50% over-range or 800°F.

CASE RATING: IP67, NEMA 6 Rated (Hermetically sealed per ASME B40.3)

LENS: Glass (std), Acrylic, Polycarbonate, Tempered Glass IMMERSION: Minimum 2" in liquid, and 4" in gas for most ranges. Certain ranges require up to 4" in liquids & 5" in gas.

MOUNTING CONNECTION: 1/2" NPT (std), 1/4" NPT, 3/4" NPT, Plain Hex Bushing, 1/2" BSPT, 1/2" NPT Union, Sanitary Tri-Clamp

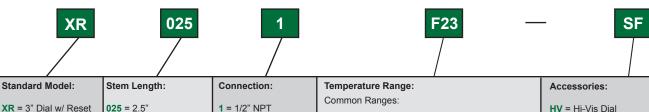
TEMPERATURE SENSING AREA: Last 2" to 4" of the stem

Bottom Connect Bimetal Thermometer





HOW TO ORDER



VR = 5" Dial w/ Reset Non-Reset Model:

YY = 4" Dial w/ Reset

XX = 3" Dial w/o Reset YN = 4" Dial w/o Reset VN = 5" Dial w/o Reset

> Intermediate stem lengths available up to 80".

040 = 4"

060 = 6"

090 = 9"

120 = 12"

150 = 15"

180 = 18°

240 = 24

300 = 30"

360 = 36"

1 = 1/2" NPT 4 = 1/4" NPT

5 = 3/4" NPT Adapter **U** = 1/2" NPT Union X = Plain Unthreaded

Hex Bushing Sanitary:

C = 1.5" Tri-Clamp L = 2" Tri-Clamp **A** = 2.5" Tri-Clamp P = 3" Tri-Clamp M = 3/4" Tri-Clamp Fahrenheit Ranges F23 = -40°F to 160°F ***F55** = 25°F to 125°F **F43** = 0°F to 200°F **F47** = 0°F to 250°F **F63** = 50°F to 300°F

Celsius Ranges

C23 = -40°C to 70°C

*C55 = 0°C to 50°C

C43 = 0°C to 100°C

C47 = -20°C to 120°C

 $C59 = 0^{\circ}C \text{ to } 150^{\circ}C$ **F67** = 50°F to 500°F **C67** = 0°C to 250°C $F69 = 50^{\circ}F \text{ to } 550^{\circ}F$ F81 = 150°F to 750°F

C69 = 0°C to 300°C **C73** = 0°C to 400°C **F85** = 200°F to 1000°F C85 = 100°C to 500°C Dual °F/°C Ranges

D23 = -40° F to 160° F & -40° C to 70° C *D55 = 25°F to 125°F & -5°C to 50°C **D43** = 0°F to 200°F & -10°C to 90°C **D47** = 0°F to 250°F & -20°C to 120°C

D63 = 50°F to 300°F & 10°C to 150°C **D67** = 50°F to 500°F & 10°C to 260°C **D69** = 50°F to 550°F & 10°C to 290°C F81 = 150°F to 750°F & 70°C to 400°C F85 = 200°F to 1000°F & 100°C to 500°C

* Not available in 2.5" stem.

See inside back cover for complete list of ranges.

HV = Hi-Vis Dial PS = Pointed Stem

SF = Silicone Fill (Max. Temp. 550°F)

SS = 316SS Stem

S3 = 3/8" diameter Stem F5 = 5/16" diameter Stem

PC = Acrylic Window

PY = Polycarbonate Window

TG = Tempered Glass Window

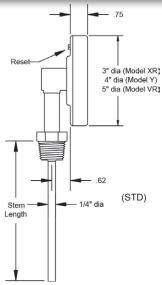
MM = Max./Min. Pointer

HT = Heat Transfer Compound (2 oz., 1 lb container)

CC = Certificate of Conformance

C1 = 1 pt. Calibration Certificate C3 = 3 pt. Calibration Certificate

For Thermowells, see pages 34-37.



*dimensions in inches

Sanitary Bimetal Thermometer



REOTEMP's Sanitary Bimetal Thermometers are specially designed for direct insertion into sanitary process applications when a standard thermowell is not specified or the process environment is not exposed to pressure. Sanitary Thermometers are ideal for the food, beverage and pharmaceutical industries.



Standard Delivery 3-5 Days Thermowell Recommended











FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy ± 1% Full Scale. (ASME B40.3)
- All-Stainless Construction
- Hermetically Sealed (ASME B40.3)
- Silicone Fillable for Vibration
- Standard and Custom Stem Lengths
- Standard External Reset
- Tri-Clamp Design for Fast Installation and Removal
- 3A Sanitary Standards
- 3A Conformance Certificate Included
- o OEM Logo Dials/Custom Dials
- Five Year Warranty

SPECIFICATIONS

ACCURACY: ± 1% Full Scale DIAL SIZE: 3", 4", or 5"

DIAL MATERIAL: Anodized aluminum with black marks on satin matte finish background; White & HiVis background available.

STEM LENGTH: 2" to 80"

STEM DIAMETER: 1/4" (std); 3/8" (optional) MATERIALS: Head and Bezel- 304SS (std);

Wetted Parts- 316/316L Polished Stainless Steel WETTED FINISH: Ra 20, Ra 32 max., Ra 20 max. (optional) LENS: Glass (std), Acrylic, Polycarbonate, Tempered Glass

(available

OPERATING CONDITIONS: Head temperature should not exceed 200°F (150°F if silicone filled). Stem should not be exposed to continuous temperatures exceeding 50% over-range or 800°F.

CASE RATING: IP67, NEMA 6 (Hermetically sealed per ASME B40.3)

IMMERSION: Minimum 2" in liquid, and 4" in gas for most ranges. Certain ranges require up to 4" in liquid & 5" in gas.

PROCESS CONNECTION: Tri-Clamp (std), various sizes

CASE FILL: Silicone (optional)

TEMPERATURE SENSING AREA: Last 2" to 4" of the stem

Sanitary Bimetal Thermometer





HOW TO ORDER



025



F23



Standard Model:

with External Reset					
Dial Size	3"	4"	5"		
Back Connect	AA	СС	ВВ		
Adjustable Angle	LL	ММ	JJ		
Bottom Connect	XR	YY	VR		

Non-Reset Model:

without External Reset				
Dial Size	3"	4"	5"	
Back Connect	RR	CN	SS	
Bottom Connect	XX	YN	VV	

Stem Length:

025 = 2.5"
040 = 4"
060 = 6"
090 = 9"
120 = 12"
150 = 15"
180 = 18"
240 = 24"

300 = 30"

360 = 36"

Intermediate stem lengths available up to 80".

Sanitary Tri-Clamp:

C = 1.5" Tri-Clamp
 L = 2" Tri-Clamp
 A = 2.5" Tri-Clamp
 P = 3" Tri-Clamp
 M = 3/4" Tri-Clamp

Other sanitary flanges available.

Temperature Range:

Common Ranges: Fahrenheit Ranges

Celsius Ranges $F23 = -40^{\circ}F$ to $160^{\circ}F$ $C23 = -40^{\circ}C \text{ to } 70^{\circ}C$ ***F55** = 25°F to 125°F *C55 = 0°C to 50°C **F43** = 0°F to 200°F C43 = 0°C to 100°C **F47** = 0°F to 250°F **C47** = -20°C to 120°C **F63** = 50°F to 300°F $C59 = 0^{\circ}C \text{ to } 150^{\circ}C$ **F67** = 50°F to 500°F **C67** = 0°C to 250°C **F69** = 50°F to 550°F **C69** = 0°C to 300°C **F81** = 150°F to 750°F $C81 = 50^{\circ}C \text{ to } 400^{\circ}C$ **F85** = 200°F to 1000°F C85 = 100°C to 500°C

Dual °F/°C Ranges

D23 = -40°F to 160°F & -40°C to 70°C
*D55 = 25°F to 125°F & -5°C to 50°C
D43 = 0°F to 200°F & -10°C to 90°C
D47 = 0°F to 250°F & -20°C to 120°C
D63 = 50°F to 300°F & 10°C to 250°C
D67 = 50°F to 550°F & 10°C to 260°C
D69 = 50°F to 550°F & 10°C to 290°C
D81 = 150°F to 750°F & 70°C to 400°C
D85 = 200°F to 1000°F & 100°C to 500°C

* Not available in 2.5" stem.

See inside back cover for complete list of ranges.

Accessories:

HV = Hi-Vis Dials **SF** = Silicone Fill **S3** = 3/8" Diameter Stem

PC = Acrylic Window

PY = Polycarbonate
Window
TC = Tompored Classe

TG = Tempered Glass Window

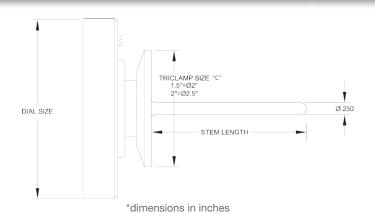
MM = Max./Min. Pointer R2 = Ra 20 Max. Wetted

Finish

C1 = 1 pt. Calibration Cert.

C3 = 3 pt. Calibration Cert.

Sanitary	"C" Diameter
Flange Size	(inches)
3/4"	.98"
1"	2.0"
1 1/2"	2.0"
2"	2.5"
2 1/2"	3.0"
3"	3.6"



Dual Mode Thermometer



REOTEMP's Dual Mode Thermometer (DMT) is a convenient, multi-purpose indicator for local and remote temperature monitoring. This rugged dual-sensor system puts TWO independent sensors in ONE THERMOWELL, and allows easy tie-in to process controls. Both sensors are NIST traceable. Special sensor encapsulation and optional liquid filling make the DMT the most rugged, durable instrument of its kind.

Bimetal Thermometer

- Local Easy-to-Read Temperature Indication
- Self-Actuating, Dampened Bimetal Helix Sensor
- o Choice of 3", 4", or 5" Sizes, with Back or Adjustable Angles Connection
- Hermetically sealed per ASME B40.3 (3/8"
- NIST Traceable Calibration



Thermocouple or RTD

- Remote and Local Indication
- Data Acquisition for Process Control
- o Choice of Connection Styles (see drawings on following page)
- 4-20mA Transmitter Output Available

Standard Delivery 5-7 Days

Intended for use with Thermowell (available through Reotemp)









FEATURES / BENEFITS

- o Allows independent local and remote reading (Up to 1000°F) from one thermowell.
- o Redundant sensors for simple, effective calibration or spot checking without removing instrument from thermowell.
- Easily installed in any standard thermowell.
- o Interchangeable with existing thermometer, RTD, or Thermocouple.

SPECIFICATIONS

CASE & BEZEL: 304SS (std), 316SS (optional)

CASE STYLE: Back or Adjustable Angle Connection

DIAL SIZE: 3", 4", or 5"

PROCESS CONNECTION: 1/2" NPT (std), 1/2" NPT Union

EXTERNAL RESET: Slotted Hex Screw

CRYSTAL: Glass (std), Plastic or Tempered Glass (optional) HERMETIC SEAL: Bimetal Thermometer per ASME B40.3 (3/8"

stem only)

STEM MATERIAL: 304SS

STEM DIAMETER: 0.375" O.D. or 1/4" O.D.

STEM LENGTH: 2 1/2" to 36'

TC/RTD TEMPERATURE LIMITS:

-100°F to 1000°F (Thermocouple);

-100°F to 600°F (RTD - DM4 Model)

-100°F to 900°F (RTD - DMT Model)

RTD: 100 Ω Platinum; 0.00385 Ω /0/°C, 3-wire (std.), others available - contact factory

RTD ACCURACY: 0.12%°C (std). Others available upon request. THERMOCOUPLE: Type K Gounded Junction (std), Types T, E, J,

and Ungrounded (optional) THERMOCOUPLE ACCURACY: Type K ± 2.2°C or 0.75% (-200°C to 1260°C), whichever is greater. Others available upon request.

BIMETAL RANGES: Standard Ranges and Divisions up to 800°F (538°C). See inside of back page.

BIMETAL OVER RANGES: 50% over range to 550°F, 1000°F max. BIMETAL ACCURACY: ± 1% of Full Scale

THERMOWELL: Model DMT fits any standard 0.385" bore thermowell or Model DM4 fits 0.260" bore.

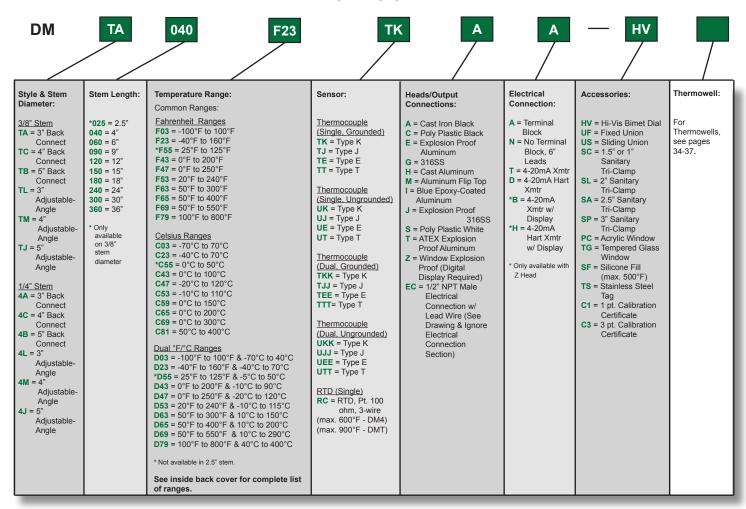
OPTIONS: Silicone case fill for vibration (3/8" stem only); 1 pt. or 3 pt. calibration, Hi-Vis Dial for bimet, sanitary tri-clamp fittings, SS tag

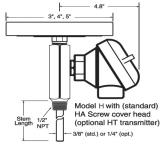
Dual Mode Thermometer



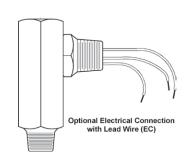


HOW TO ORDER









Heavy-Duty "Navy" Type Bimetal Thermometer



REOTEMP's Bimetal Thermometers are reliable and durable temperature sensors. Navy Type Thermometers are specifically designed to resist vibration and shock. They are ideal for local indication, requiring no electricity or wiring. They can be recalibrated with a turn of the calibration screw on the back of the dial.



Back Angle Form

Straight Form

Standard Delivery 3-5 Days

Thermowell Recommended











FEATURES / BENEFITS

- Accuracy ± 1% Full Scale. (ASME B40.3)
- o 3" Dial- Bimetal Actuation
- Heavy-Duty Vibration and Shock Resistant
- Hermetically Sealed (ASME B40.3)
- Stainless Steel Sealed Construction
- o Plastic Crystal
- Standard External Reset
- Fits in 5" Scale "Submarine" Thermowell
- o The standard 3/4" 28 UN2A Union Connection is designed for Navy thermowells.
- ∘ Hi₄Vis Dials Available

SPECIFICATIONS

ACCURACY: ± 1% Full Scale (ASME B40.3)

DIAL SIZE: 3"

DIAL MATERIAL: Anodized aluminum with black marks on

satin matte finish background.

STEM LENGTH: 2", 4", and 6" (std); custom lengths available.

STEM DIAMETER: .375" (std); 1/4" available

HEAD, BEZEL, MOUNTING BUSHING, STEMS: 300 Series SS OPERATING CONDITIONS: Head temperature should not exceed 200°F (150°F if silicone filled). Stem should not be exposed to continuous temperatures exceeding 50% over-range or 800°F.

CASE RATING: IP67, NEMA 6 Rated (Hermetically sealed per **ASME B40.3)**

LENS: Plastic

IMMERSION: Minimum 2" in liquid, and 4" in gas.

MOUNTING CONNECTION: 3/4" - 28 UN2A Union Connection

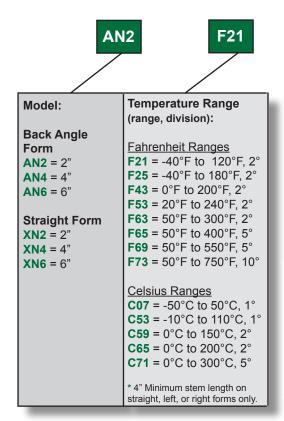
(to be used in thermowell)

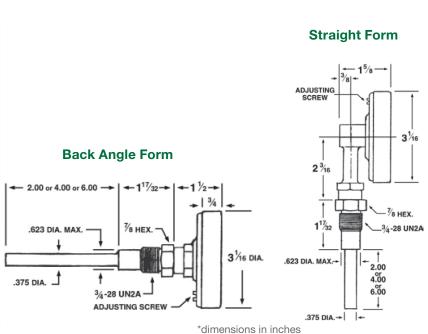
TEMPERATURE SENSING AREA: Last 2" to 4" of the stem

Heavy-Duty "Navy" Type Bimetal Thermometer



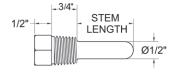
HOW TO ORDER

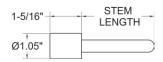




Thermometer Wells

Well Class:	Thermometer Stem Length:	Well (Overall):	Model (Brass):	Model (304SS):	Model (316SS):
Class A = 3/4" NPT	2" 4" 6"	3 1/4" 5 1/4" 7 1/4"	STN2B STN4B STN6B	STN2S STN4S STN6S	STN2SS STN4SS STN6SS
Class W = Socket Weld	2" 4" 6"	3 5/16" 5 5/16" 7 5/16"			SWN2SS SWN4SS SWN6SS





OEM Dial Bimetal Thermometer



REOTEMP's OEM Thermometers are the perfect choice for equipment with limited space that requires a rugged, dependable, and economical temperature sensor. These thermometers are also available with a wide variety of mounting threads.

Model H - 2 3/8"



Model G - 1 11/16"



Model Q - 1 5/32"



Standard Delivery 3-5 Days Thermowell Recommended







FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy ± 1% Full Scale. (ASME B40.3)
- o All-Stainless Steel Construction
- Standard and Custom Stem Lengths
- Standard External Reset
- o OEM Logo Dials/Custom Dial
- One Year Warranty

SPECIFICATIONS

ACCURACY: ± 1% Full Scale (ASME B40.3)

DIAL SIZE: 1 5/32", 1 11/16", 2 3/8"

DIAL MATERIAL: Anodized aluminum with black marks on

satin matte finish background.

STEM LENGTH: 2" to 80" STEM DIAMETER: 1/4"

HEAD, BEZEL, MOUNTING BUSHING, STEMS: 300 Series

SS, 316SS (optional)

OPERATING CONDITIONS: Head temperature should not exceed 200°F (150°F if silicone filled). Stem should not be exposed to continuous temperatures exceeding 50% over-range or 800°F.

HERMETIC SEAL: Hermetically sealed per ASME B40.3.

CASE RATING: IP67, NEMA 6 Rated LENS: Glass; Plastic available.

IMMERSION: Minimum 2 inches in liquid, and 4 inches in gas for most ranges. Certain ranges require up to 4" in liquid and 5" in gas,

MOUNTING CONNECTION: Plain Bushing (std), 1/2" NPT, 3/8"-24 NF (straight threaded), 1/4" NPT, 1/8" NPT, 3/8" NPT, Hex Reset Bushing

TEMPERATURE SENSING AREA: Last 2" to 4" of the stem

OEM Dial Bimetal Thermometer





HOW TO ORDER



025

F23

Celsius Ranges

 $C23 = -40^{\circ}C \text{ to } 70^{\circ}C$

*C55 = 0°C to 50°C

C43 = 0°C to 100°C

 $C59 = 0^{\circ}C \text{ to } 150^{\circ}C$

C67 = 0°C to 250°C

 $C47 = -20^{\circ}C$ to $120^{\circ}C$

PS

OEM Models:

QQ = Model Q (1 5/32" Dial) GG = Model G (1 11/16" Dial) HH = Model H (2 3/8" Dial)

Lab & Test Model:

QP = Model QP (1 5/32" Dial) with 5" Stem GL = Model GL (1 11/16" Dial)

with 8" Stem HL = Model HL (2 3/8" Dial) with 8" Stem

Stem Length:

025 = 2.5" 040 = 4"

060 = 6" 090 = 9" **120** = 12"

150 = 15" **180** = 18" **240** = 24"

300 = 30" **360** = 36"

Intermediate stem lengths available up to 80".

Connection:

2 = Plain Bushing (std)

1 = 1/2" NPT 3 = 3/8" - 24 NF (straight threaded)

4 = 1/4" NPT 6 = 1/8" NPT 7 = 3/8" NPT

8 = Hex Reset Bushing

Temperature Range:

Common Ranges:

Fahrenheit Ranges F23 = -40°F to 160°F

*F55 = 25°F to 125°F F43 = 0°F to 200°F**F47** = 0°F to 250°F

F63 = 50°F to 300°F

 $F67 = 50^{\circ}F \text{ to } 500^{\circ}F$

 $F69 = 50^{\circ}F \text{ to } 550^{\circ}F$ **F81** = 150°F to 750°F

C69 = 0°C to 300°C $C73 = 0^{\circ}C \text{ to } 400^{\circ}C$

F85 = 200°F to 1000°F **C85** = 100°C to 500°C

Dual °F/°C Ranges

D23 = -40°F to 160°F & -40°C to 70°C *D55 = 25°F to 125°F & -5°C to 50°C

D43 = 0°F to 200°F & -10°C to 90°C **D47** = 0°F to 250°F & -20°C to 120°C

D63 = 50°F to 300°F & 10°C to 150°C **D67** = 50°F to 500°F & 10°C to 260°C

D69 = 50°F to 550°F & 10°C to 290°C **D81** = 150°F to 750°F & 70°C to 400°C D85 = 200°F to 1000°F & 100°C to 500°C

* Not availbale in 2.5" stem.

See inside back cover for complete list of ranges.

Accessories:

PS = Pointed Stem

SS = 316SS Stem

PC = Acrylic Window

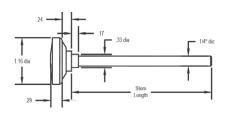
CC = Certificate of Conformance

C1 = 1 pt. Calibration Certificate C3 = 3 pt. Calibration Certificate

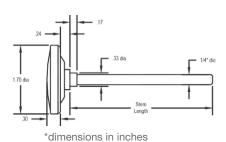
For Thermowells, see pages 34-37.

Standard Plain Bushing

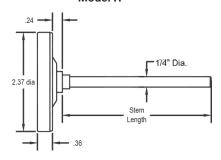
Model Q



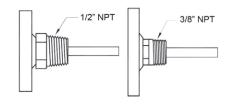
Model G

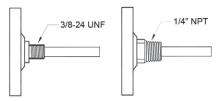


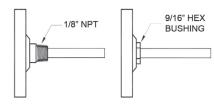
Model H



Mounting Thread Options



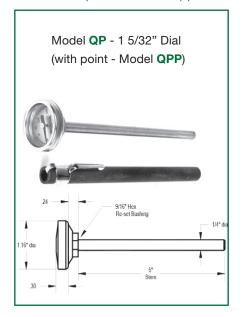


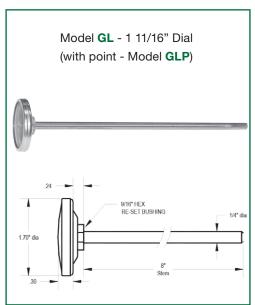


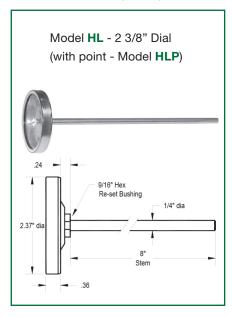
Hand-Held Laboratory Thermometer



REOTEMP's Laboratory Thermometers (QP, GL & HL) are ideal for testing and spot checking local temperatures in a variety of critical process or lab applications. Pointed stems are available for insertion in semi-solids such as soil, meat, etc.







HOW TO ORDER: Specify Model and Range (See inside back page for Ranges) - Example QP - F43

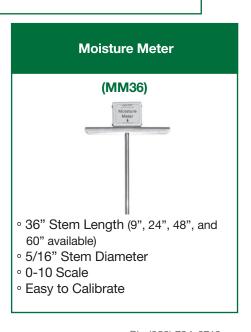
Compost Thermometer



Used By: Waste Treatment Plants; City, State, and Federal Recycling Programs; Farms and University Compost Programs; Composting Farm and Foods Wastes; Mushroom Farms.

Heavy-Duty Compost Thermometer (A36PF) 5/16" Stem 36" Stem Length (24", 48", 60", and 70" available) 5/16" Stem Diameter Hermetically Sealed Rugged, All Stainless Steel Construction

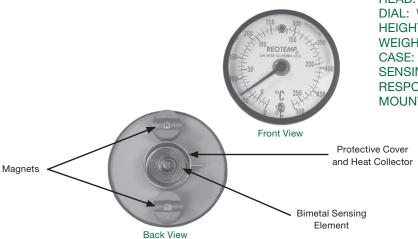




Surface Bimetal Thermometer



- Measures Temperature of Any Horizonal Surface
- Magnetic Feet Hold to Any Ferrous Surface
- o Used on Griddles, Ovens, Motors, Piping, Tanks, etc.



SPECIFICATIONS

ACCURACY: ± 2% Full Scale (ASME B40.3)

HEAD: 2" (5.08cm)

DIAL: White background with blue marks and numbers.

HEIGHT: 1/2" (1.27cm)

WEIGHT: Approximately 2 ounces (56.7g)
CASE: Aluminum with Optically Clear Crystal

SENSING ELEMENT: Precision Calibrated Bimetal Coil

RESPONSE TIME: Appoximately 1 minute MOUNTING: Two Magnets on Back

HOW TO ORDER

Model:	Temperature Range:
SUR-15	0 to 150°F & -20 to 65°C
SUR-25	0 to 250°F & -20 to 120°C
SUR-50	0 to 500°F & -20 to 260°C
SUR-75	50 to 750°F & 10 to 400°C

Pocket Bimetal Thermometer



Analog (Dial) Models

Model K-79

- Accurate and Rugged
- Quick Response
- Shock Resistant
- Sensitive Bimetal Element
- External Reset Adjustment
- Waterproof and Dustproof
- Stainless Steel or Plastic Pocket Case

SPECIFICATIONS

ACCURACY: ± 2% Full Scale (ASME B40.3)

HEAD: 1" Diameter (25mm)

DIAL MATERIAL: White background with crisp letters, marks, and

numbers

STEM LENGTH: 142 O.D., 5" long, pointed (36mm x 127mm)

RESET NUT: 7/16 Hex (11mm)

POCKET CASE: Plastic with Clip and Holder Loop

WEIGHT: 0.65 OUNCES (18.5g) PACKED: 1 per box, 12 per carton

HOW TO ORDER

Analog:	Temperature Range:
K-79-2	-40°F to 160°F
K-79-3	0°F to 220°F
K-79-4	25°F to 125°F
K-79-5	50°F to 550°F
K-79-7	-10°C to 110°C
K-79-8	0°C to 150°C
K-79-9	0°C to 250°C



Measuring your world since 1965

REOTEMP's Remote Vapor Actuated Thermometers are manufactured to the highest standards for a wide range of uses and may be fitted into almost any temperature indicating application. These instruments are ideal for remote reading, such as panel installations, with capillary lengths of 1 to 100 feet.

Being vapor actuated, they are not subject to indicator error due to ambient temperature variations along the capillary tube system, and will give excellent readings provided the temperature being measured is above or below ambient temperature.

Vapor instruments have progressive non-linear graduations, and are best read in the upper 2/3 of the dial range. Many ranges are available between -40°F and +450°F, and care should be exercised to select a range that will locate the operating temperatures within the upper 2/3 of the dial range.





Standard Delivery 3-4 Weeks Thermowell Recommended



FEATURES / BENEFITS

- o Accuracy ± 1 Scale Division (Upper 2/3 Scale)
- o Ideal for Remote Reading, such as Panel Installation
- o Capillary Lengths of 1 to 100 Feet
- Stainless Steel Sealed Construction
- Variety of Flanged or U-Clamp Mounting Options
- Brass and 316SS Thermowells for Vapor-Actuated Bulbs Available.

SPECIFICATIONS

ACCURACY: ± 1 Scale Division (Upper 2/3 Scale)

DIAL SIZE: 2", 2 1/2", 3 1/2", 4 1/2"

DIAL MATERIAL: Aluminum with white finish and black markings. Other colors available upon request.

POINTER: Standard Adjustable

MOVEMENT: Brass with Precision Gearing BOURDON TUBE: Phosphor Bronze

CASE: All-Stainless Steel, except: VA45FL (Aluminum) and

VA45TB (Phenolic)

PROCESS CONNECTION: Plain Bulb, 1/2" NPT Union, 1/2" NPT sliding union on 12" bendable extension, or thermowell. Note: Thermowells must be used whenever the bulb would be exposed to pressure, fluid velocity, or corrosive media.

WINDOW: Polycarbonate or Glass

BULB: Stainless Steel or Copper. Bulb O.D. 7/16" (threaded), 3/8" (plain). Bulb lengths vary from 2 1/2" to 9 1/4" depending on capillary length.

CAPILLARY: Copper, copper with bronze braid armor, stainless steel, stainless steel with stainless steel armor. Capillary lengths 5 feet (standard); 1 to 100 feet available.

RANGES: Over twenty °F and °F/°C ranges available, from -40°F to 450°F. For higher temperature ranges, please call REOTEMP to inquire about gas-actuated vapor thermometers.

APPLICATIONS: Control panels, chemical processing, pipelines, food processing, OEM applications, ovens, solar heating, refrigeration, etc.



Measuring your world since 1965

HOW TO ORDER

Model V Vapor Actuated Table 1
Case Style
& Size

Table 2 Temperature Range Table 3 Capillary & Bulb

Table 4
Capillary Length
in Feet

Table 5
Process
Connection

V

20FR

21

D

05

L2

Table 1: Case Styles

	Front Flanged (Panel Mount): 20FR 25FR 35FR 45FR 45FL	Dial: 2" 2 1/2" 3 1/2" 4 1/2" 4 1/2"	Case: Stainless Steel Stainless Steel Stainless Steel Stainless Steel Black Aluminum (Hinge Ring Type)	Lens: **Polycarbonate **Polycarbonate **Polycarbonate **Polycarbonate *Glass	Rear Rear Rear Rear Rear Rear
	U-Clamp (Panel Mount): 20UR 25UR 35UR	2" 2 1/2" 3 1/2"	Stainless Steel Stainless Steel Stainless Steel	**Polycarbonate **Polycarbonate **Polycarbonate	
	Rear Flanged (Surface Mount): 20RR 35RR 35RB 45RR 45RB 45RB 45TB	2" 3 1/2" 3 1/2" 4 1/2" 4 1/2" 4 1/2"	Stainless Steel Stainless Steel Stainless Steel Stainless Steel Stainless Steel Phenolic	**Polycarbonate **Polycarbonate **Polycarbonate **Polycarbonate **Polycarbonate *Glass	Bottom
	Other Case Styles: 35SB 45SB	3 1/2" 4 1/2"	Stainless Steel Stainless Steel	**Polycarbonate **Polycarbonate	Adjustable Bracket Mount Adjustable Bracket Mount
200	35DA 45DA	3 1/2" 4 1/2"	Stainless Steel Stainless Steel	**Polycarbonate **Polycarbonate	"Direct" Adjustable Mount w/ 3.4" Bulb, 1/2" NPT "Direct" Adjustable Mount w/ 3.4" Bulb, 1/2" NPT

Notes:

*Glass Lens available, specify "Glass Lens"

**Polycarbonate Lens available, specify "Polycarbonate Lens"

For the Other Case Styles Connection Location, specify Model and Range Only. Example: V45DA-80



Table 2: Temperature Ranges

Code (°F Ranges):	Code (°F & °C Ranges):
20 = -40°F to 60°F 30 = -40°F to 100°F 32 = -20°F to 120°F 72 = 0°F to 180°F 49 = 0°F to 150°F 80 = 20°F to 220°F 50 = 40°F to 240°F 56 = 0°F to 250°F 60 = 30°F to 300°F *68 = 100°F to 350°F *70 = 200°F to 450°F *F0 = 150°F to 450°F	21 = -40°F to 60°F & -40°C to 15°C 31 = -40°F to 100°F & -40°C to 40°C 33 = -20°F to 120°F & -30°C to 50°C 73 = 0°F to 180°F & -20°C to 80°C 79 = 0°F to 150°F & -15°C to 65°C 81 = 20°F to 220°F & 0°C to 105°C 51 = 40°F to 240°F & 0°C to 115°C 57 = 0°F to 250°F & -20°C to 120°C 61 = 30°F to 300°F & 0°C to 150°C 66 = 100°F to 350°F & 40°C to 175°C *71 = 200°F to 450°F & 100°C to 230°C *D1 = 150°F to 450°F & 70°C to 230°C

^{*} Ranges 350°F & over come with a 316SS Capillary Only. Note: For higher temperature ranges, please call REOTEMP to inquire about gasactuated vapor thermometers.

Table 3: Capillary & Bulbs

Code:	Capillary & Bulb Material:	Capillary Protection:
Α	Tin Plated Copper	None
С	Tin Plated Copper	302SS
D	316SS	None
E	316SS	SS Armor

Table 4: Capillary Length

Specify Length in Feet Standard Length = 5 Feet Available Capillary Length = 1-100 Feet Note: Capillary lengths over 5 feet affect bulb length.

See table at the bottom of the page.

Table 5: Process Connection

Code:	Connection Type:		Material:			
J1	None (Plain Bulb)					
J2	Jam Nut Only		Brass (For Ex	Brass (For Existing Brass Well)		
J3	Jam Nut Only		316SS (For S	S Well)		
K2	1/2" NPT Union		Nickel Plated	Brass		
L2	1/2" NPT Union		316SS	316SS		
M2	1/2" NPT Sliding Union on I	Bendable Extension	n 316SS (Only A	Available with 316SS	Capillary)	
	Vapor Actuated Bulbs				SSS:	
(⊨	xcept M2):	1/2" NPT	3/4" NPT	1/2" NPT	3/4" NPT	
For 1-10 ft. Capilla	ry (Bulb #1)	12B	13B	12S	13S	
For 11-25 ft. Capillary (Bulb #2) 22B		23B	22S	23S		
For 26-50 ft. Capillary (Bulb #3) 32B		33B	32S	33S		
For 51-75 ft. Capillary (Bulb #4) 42B		43B	42S	43S		
For 76-100 ft. Cap	illary (Bulb #5)	52B	53B	52S	53S	

Bulb Configurations



Standard Bulb Dimesions

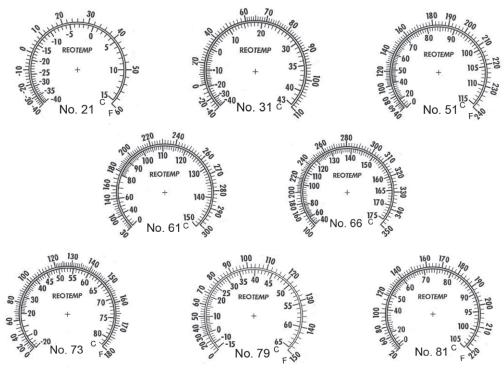
Capillary Length:	Plain Bulb:		Union Connection:		n:	Bendable Extension:			Thermowell:		
	L	D	U	S	D	L	S	D	U	S	D
1-10 ft. (Bulb #1)	2 1/2" (1-5 ft.); 3 7/16" (6-10 ft.)	3/8"	1 13/16"	2 3/8"	7/16"	2 1/2" (1-5 ft.); 3 7/16" (6-10 ft.)	3-13; 4-14	3/8"	1 15/16"	2 1/2"	9/16"
11/25 ft. (Bulb #2)	3 7/16"	3/8"	1 1/2"	3 1/4"	7/16"	3 7/16"	4-14	3/8"	2 5/8"	3 3/8"	9/16"
26-50 ft. (Bulb #3)	4 7/8"	3/8"	4 1/2"	5 1/4"	7/16"	4 7/8"	5-15	3/8"	4 5/8"	5 3/8"	9/16"
51-75 ft. (Bulb #4)	7 7/8"	3/8"	6 1/2"	7 1/4"	7/16"	7 7/8"	8-18	3/8"	6 5/8"	7 3/8"	9/16"
76-100 ft. (Bulb #5)	10 7/8"	3/8"	8 1/2"	9 1/4"	7/16"	10 7/8"	11-21	3/8"	8 5/8"	9 3/8"	9/16"



Measuring your world since 1965

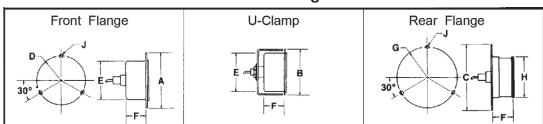
Dial Faces

Typical dial faces shown below. Complete list shown on page 21. Operating temperatures should be in upper 2/3 of selected range.



For temperatures above or below those shown, ask for information on REOTEMP Gas Actuated Thermometers.

Case and Mounting Dimensions



Dial:	Α	В	С	D	E	F	G	Н	J
2"	2.94"	2.25	2.94	1.25 R	2.05	0.98	1.28 R	2.3	0.14
2 1/2"	3.69"	2.81		1.66 R	2.56	1		-	0.17
3 1/2"	4.75"	3.97	4.75	2.16 R	3.59	1.41 RF 0.75 UC, FF	2.16 R	3.69	0.16
4 1/2"	5.88" FR 6.31" FL	-1-	5.88 RR, RB 5.83 TB	2.69 R 	4.59 FR 47 RR, RB, FL	1.41 RF 0.75 UC, FF 2.56TB 1.63 FL	2.69 R	4.69	0.22



Measuring your world since 1965

REOTEMP's Gas Actuated Thermometers combine advanced gas coil technology with a state-of-the-art adsorbent- (Class IV) thermal system, producing a superior temperature measurement instrument that can be fitted to a wide variety of applications.

Features include high accuracy, low ambient error, no head error, and a high degree of over-range protection. The compact (3/8" diameter x 3" active length) bulb, and a wide range of case styles and thermal systems, allow great flexibility in installation.

The linear dial on all REOTEMP gas thermometers provides a consistent 1% accuracy across the full span of each range. This, combined with over twenty Fahrenheit and dual ranges, from -320°F to +1200°F, provides complete coverage of all normal temperature requirements.





Standard Delivery 4-5 Weeks



FEATURES / BENEFITS

- o Accuracy ± 1% Full Scale
- Can Handle a Wide Temperature Range Up to 1200°F
- Wide Variety of Wall, Panel and Direct Mounting Options
- Capillary Lengths Up to 99 Feet
- OEM Logo Dials/Custom Dials
- One Year Warranty

SPECIFICATIONS

ACCURACY: ± 1% Full Scale. Calibration to NIST traceable standards.

RANGES: Twenty °F and °F & °C ranges available from -320°F to 1200°F.

OVERRANGE: Minimum 50% of span above top of range, or 1300°F. whichever is less.

AMBIENT ERROR: 1/4% of span per 25°F change in ambient temperature at midscale.

DIAL SIZES: 4 1/2" & 6". Dials are white with black markings. For smaller sized dials, please call REOTEMP to inquire about gasactuated vapor thermometers.

CASE MATERIALS: Stainless steel, Polypropylene, or Aluminum CASE STYLES: Panel Mount, Surface Mount, or Direct (stem)

Mount

WINDOWS: Glass (standard). Shatterproof glass and acrylic (optional). Gas with aluminum ring (4 1/2" and 6") are glass only.

POINTERS: Aluminum, slotted adjustable type to permit zero-set adjustments.

BULBS: 316SS, 3/8" diameter x 3" active length. Other diameters and lengths are available.

PROCESS CONNECTIONS: Plain bulb; 1/2" NPT sliding union; 1/2" NPT fixed (on All-Angle); or thermowell. Note: Thermowells should be used whenever the bulb would be exposed to pressure, fluid velocity, or corrosive or abrasive media.

THERMAL SYSTEMS: Stainless steel capillary with stainless steel spring armor (up to 40ft). Over 40 feet, stainless steel interlock armor is standard. Direct mount stems, 316 SS, 4" to 48".



Measuring your world since 1965

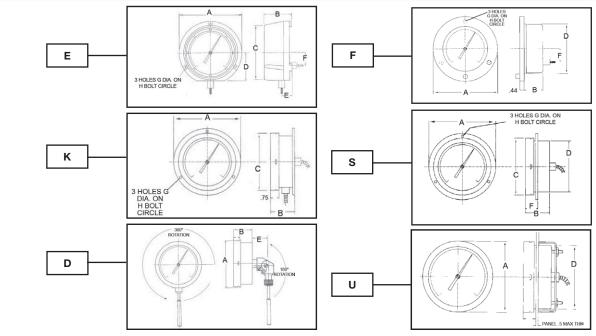
HOW TO ORDER

Table 1 Table 2 Table 3 Table 4 Table 5
Case Style Thermal System Capillary Length Temperature Options
& Size & Bulb in Feet

 G45ER
 87
 L15
 FB
 XAW

Table 1: Case Styles

Wall Mount:	Case Code:	Connection:	Case Diameter:	Case D	imensions):					
				Α	В	С	D	Е	F	G	Н
E = Polypropylene Turret	G45ER	Rear	4 1/2"	5.83	2.41	5.08	2.62	1.00	0.20	0.24	5.39
Mount	G45EL	Lower	4 1/2"	5.83	2.41	5.08	2.62	1.00	0.20	0.24	5.39
K = Stainless Steel Back Flange	G45KR G45KL G60KR G60KL	Rear Lower Rear Lower	4 1/2" 4 1/2" 6" 6"	5.88 5.88 7.50 7.50	2.15 2.15 2.15 2.15 2.15	5.04 5.04 6.38 6.38	 	 	 	0.22 0.22 0.25 0.25	5.38 5.38 6.84 6.84
Direct Mount: D = Stainless Steel All- Angle Direct Mount	G45DA	Adjustable	4 1/2"	5.04	2.00			1.70			
	G60DA	Adjustable	6"	6.38	2.15			1.70			
Panel Mount: F = Aluminum Front Flange Hinge Ring	G45FR	Rear	4 1/2"	6.31	1.63		4.88		1.35	0.19	5.38
	G60FR	Rear	6"	7.87	1.59		6.34		1.75	0.19	6.69
S = Stainless Steel Semi-	G45SR	Rear	4 1/2"	5.88	2.15	5.04	4.51		1.00	0.22	5.38
Flush Front Flange	G60SR	Rear	6"	7.50	2.15	6.38	5.88		1.00	0.25	6.84
U = Stainless Steel "U" Clamp	G45UR G60UR	Rear Rear	4 1/2" 6"	5.04 6.38	 	 	4.51 5.88	 	 		





Measuring your world since 1965

Table 2: Thermal Systems (All Bulbs & Capillaries Are 316SS)

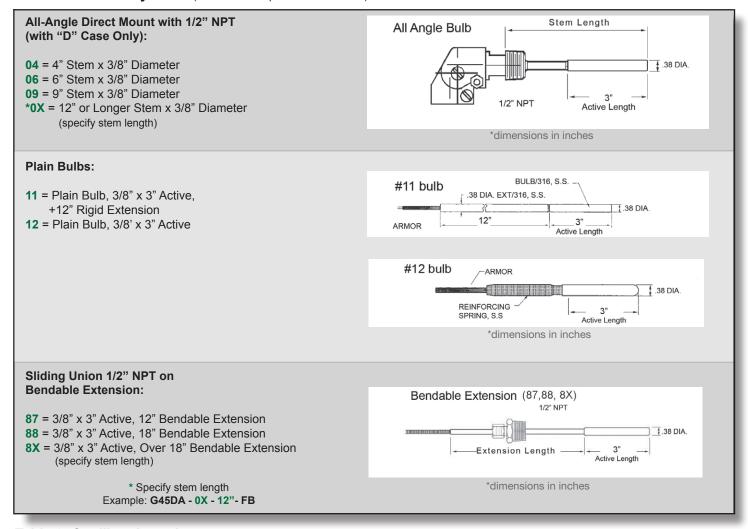
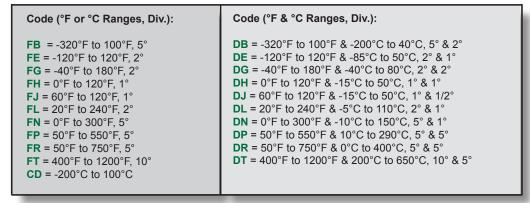


Table 3: Capillary Length

Specify Armored Capillary Length in Feet, up to 99 Feet (omit for "D" case).

L05 = 5 Feet
L10 = 10 Feet
L15 = 15 Feet
Note: Stainless steel spring armor is standard protection on all capillary.
Capillary over 40 ft. requires XSI Spiral Interlock Armor option.

Table 4: Temperature Ranges





Measuring your world since 1965

Table 5: Accessories & Options

Code:

*XAW = Acrylic Window

*XSG = Safety Glass Window

XFR = Flush Mounting Ring for "E" Case

XBF = 1/2" NPT Fitting for #11 Bulb (Fits on Bulb or Extension)

XCF = 1/2" NPT Fitting (Fastens on Spiral Interlock Armor - Requires XSI Option

XSI = Spiral Interlock Armor (Required over 40 Feet)

XVD = Vibration Dampening Feature (Dampens Vibration - Available in all Rear Connected Models)

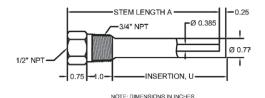
XTW = Thermowell (See Thermowell Table Below for Order Codes)

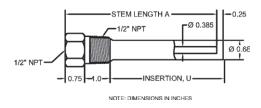
* = 4 1/2" Cases Only; Not Available in "F" Case

Thermowells for 3/8" Diameter Elements

Standard Wells

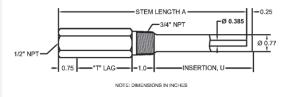
"P" External Length:	"A" Stem Length:	"U" Insert Length:	Order Code: 304SS 316SS	
	4"	2 1/2"	ST4304-SB3	ST4316-SB3
	6"	4 1/2"	ST6304-SB3	ST6316-SB3
	9"	7 1/2"	ST9304-SB3	ST9316-SB3
3/4" NPT	12"	10 1/2"	ST12304-SB3	ST12316-SB3
	15"	13 1/2"	ST15304-SB3	ST15316-SB3
	18"	16 1/2"	ST18304-SB3	ST18316-SB3
	24"	22 1/2"	ST24304-SB3	ST24316-SB3
	4"	2 1/2"	ST4304-HSB3	ST4316-HSB3
	6"	4 1/2"	ST6304-HSB3	ST6316-HSB3
	9"	7 1/2"	ST9304-HSB3	ST9316-HSB3
1/2" NPT	12"	10 1/2"	ST12304-HSB3	ST12316-HSB3
	15"	13 1/2"	ST15304-HSB3	ST15316-HSB3
	18"	16 1/2"	ST18304-HSB3	ST18316-HSB3
	24"	22 1/2"	ST24304-HSB3	ST24316-HSB3





Lagging Wells

"P" External Length:	"A" Stem Length:	"U" Insert Length:	"T" Lag Extension:	Order 304SS	Code: 316SS
	6"	2 1/2"	2"	LG6304-SB3	LG6316-SB3
	9"	4 1/2"	3"	LG9304-SB3	LG9316-SB3
3/4" NPT	12"	7 1/2"	3"	LG12304-SB3	LG12316-SB3
0,4 141 1	15"	10 1/2"	3"	LG15304-SB3	LG15316-SB3
	18"	13 1/2"	3"	LG18304-SB3	LG18316-SB3
	24"	19 1/2"	3"	LG24304-SB3	LG24316-SB3



Direct Drive Gas Actuated Thermometer



Measuring your world since 1965

REOTEMP's Rugged Direct Drive System makes our series 45G the right choice for temperature indication in heavy-duty or high vibration applications. The all-stainless steel case and internals, along with the direct drive system, result in superior instrument life in severe environments.

Available in Four Styles

45GW WALL MOUNTED
 45GF FLUSH MOUNTED
 45GFF FRONT FLANGE
 45GAW ADJUSTABLE WALL



Standard Delivery 4-5 Weeks

Thermowell Recommended





FEATURES / BENEFITS

- Accuracy ± 1% of Range Span
- ° Can handle a wide temperature range up to 1200°F.
- Heavy-Duty Vibration and Shock Resistant
- Stainless Steel Sealed Construction
- o Various mounting options available.

SPECIFICATIONS

CASE: Stainless Steel

ACCURACY: ± 1% of Range Span

DIAL FACE: 4 1/2" Satin finish aluminum with black lines and

numbers

LENS: Gasket Sealed Glass (standard); Plexi Glass

(optional)

POINTER: Micrometer Adjustment Type

CAPILLARY: Stainless steel protected by 1/4" diameter, Flexible Stainless Steel Armor or 3/16" diameter Plain Armor

BULB: Stainless Steel Welded Construction

ACTUATION: Nitrogen thru Stainless Steel Direct Drive

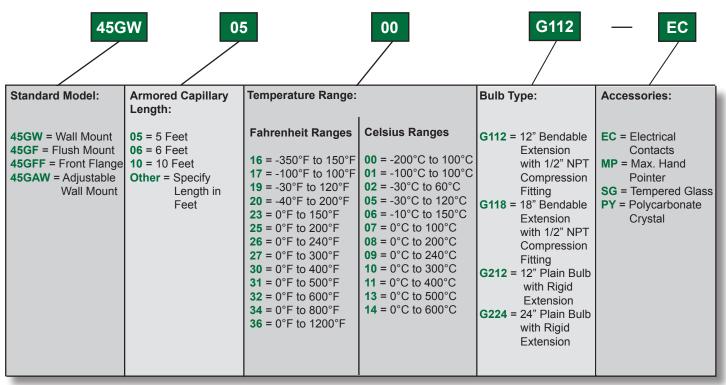
Bourdon Coil

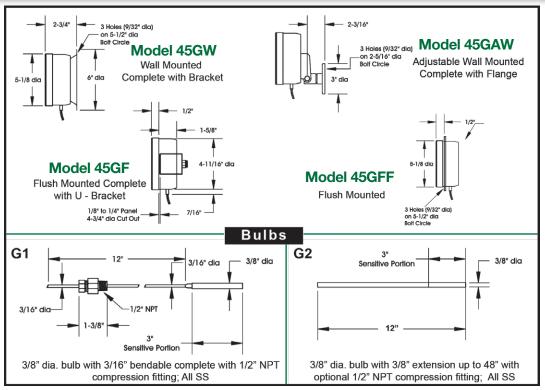
Direct Drive Gas Actuated Thermometer



Measuring your world since 1965

HOW TO ORDER





Direct Drive Gas and Liquid Filled Thermometer



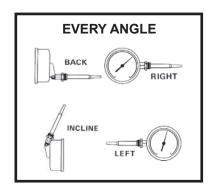
REOTEMP's Rugged Direct Drive System makes our 45GR and 45LR the right choice for temperature indication in heavy-duty or high vibration applications. The all-stainless steel case and internals, along with the direct drive system, result in superior instrument life in severe environments.

Model 45GR Model 45LR



Standard Delivery 4-5 Weeks

Thermowell Recommended





FEATURES / BENEFITS

- Accuracy ± 1% of Range Span
- ° Can handle a wide temperature range up to 1200°F.
- Heavy-Duty Vibration and Shock Resistant
- Stainless Steel Sealed Construction
- o Adjustable to any angle.

SPECIFICATIONS

CASE: Stainless Steel (SS)

ACCURACY: ± 1% of Range Span

DIAL FACE: 4 1/2" Satin finish aluminum with black lines and

numbers.

LENS: Gasket Sealed Glass (std); Polycarbonate (optional)

POINTER: Micrometer Adjustment Type BULB: Stainless Steel Welded Construction

ACTUATION: 45LR - Inert Liquid thru Stainless Steel Direct

Drive Bourdon Coil.

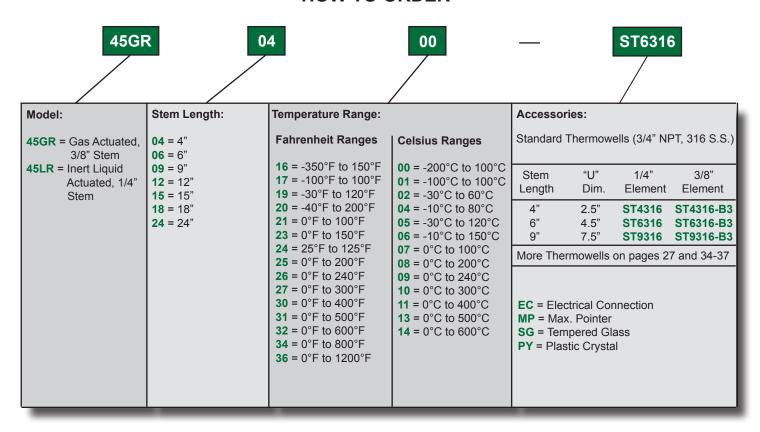
45GR - Nitrogen thru Stainless Steel Direct Drive

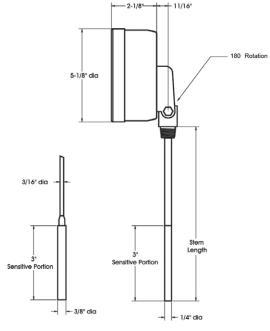
Bourdon Coil.

Direct Drive Gas and Liquid Filled Thermometer



HOW TO ORDER





*dimensions in inches

Liquid-In-Glass Industrial Thermometer



Measuring your world since 1965

REOTEMP's Liquid-In-Glass Industrial Thermometers are used in pipelines of all types, commercial building application (heating & cooling), process piping, tanks, boilers, etc.





FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy ± 1% Full Scale. (ASME B40.3)
- One Year Warranty

SPECIFICATIONS

ACCURACY: ± 1% Full Scale. (ASME B40.3)

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

STEM: Tapered bulb chambers are made of precision ground aluminum. The tapered chamber forms a metal contact with matching taper in the sockets assuring maximum speed of response to temperature changes. Graphite is used as a conducting media between bulb chamber and glass tube.

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

TUBE & CAPILLARY: Blue Spirit filled magnifying lens tube. Precision made to guarantee accuracy within 1% of scale range. Silicone shock mounting for lasting durability.

SCALE: 9" scale with white coated aluminum and permanently baked bold black markings.

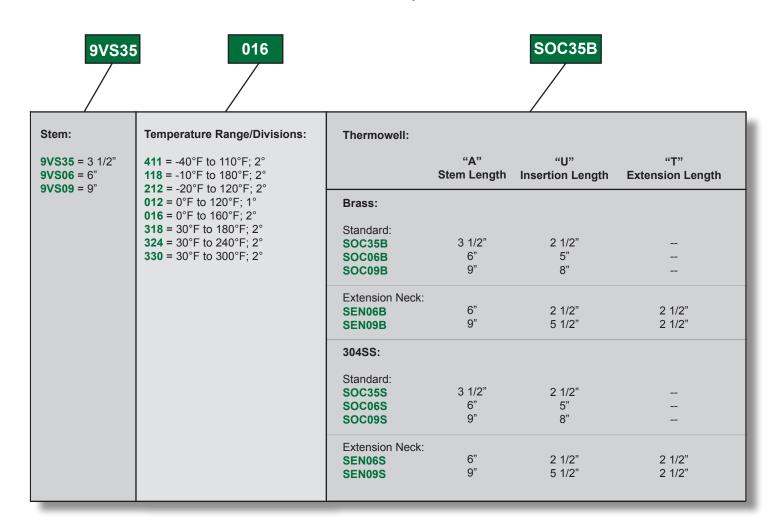
Liquid-In-Glass Industrial Thermometer



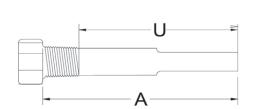
Measuring your world since 1965

HOW TO ORDER

- 1. Part #
- 2. Range Code
- 3. Accessories
- *Items normally in stock

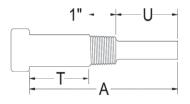


Separable Sockets (Thermowells)



Standard

w/ Extension Neck (Lag)



*dimensions in inches

Threaded Thermowell



Thermowells make it possible to remove an instrument without dropping pressure or losing contents of the process. Thermowells also protect the instrument from getting bent by the process media. Each stainless steel thermowell is die stamped with the type of material from which it is made.

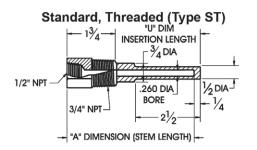


FEATURES / BENEFITS

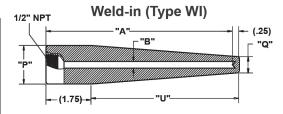
- One stop for your instrument and thermowell needs
- REOTEMP's Online Configurator Provides:
 - Engineering drawings for instrument and thermowell
 - Matched thermowell with instrument

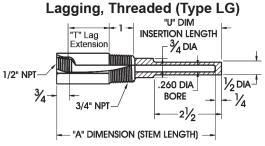
OPTIONS

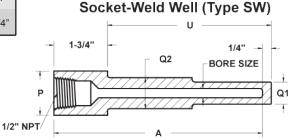
- Wake Frequency
- Hydrostatic Test
- Full Penetration Welding
- NACE Certified

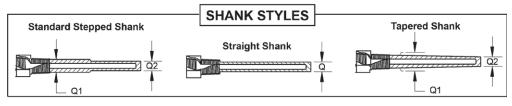


Standard Dimensions:					
"A"	Standard	Lagging	Overall		
Stem	"U"	"U"	Length		
2 1/2"	1 5/8"		2 7/8"		
4"	2 1/2"		4 1/4"		
6"	4 1/2"	2 1/2"	6 1/4"		
9"	7 1/2"	4 1/2"	9 1/4"		
12"	10 1/2"	7 1/2"	12 1/4"		









Threaded Thermowell



HOW TO ORDER



\$	2	30	4 — 1	T	B3	
Туре:	"A" Stem Length:	Material:	Process Connection:	Shank:	Bore Diameter:	Options:
ST = Threaded LG = Threaded	2.5 = 2.5" 4 = 4"	304 = 304SS 316 = 316SS	For Threaded Wells " " = 3/4" NPT (std.)	" " = Stepped (std.)	" " = .260 (std.)	DP = Dye Penetration Testing

ST = Threaded	2.5 = 2.5
LG = Threaded	4 = 4"
Lagging	6 = 6"
SW = Socket Weld	9 = 9"
SWL = Socket Weld	12 = 12"
w/ Lagging	2.0 = 2"
WI = Weld-In	
WIL = Weld-In w/	
Lagging	

1:	wateri
	304 = 3
	316 = 3
	316L =
	B = Bra
	C = Ca
	(10
	G = Ha
	H = Ha
	M = Mo
	T = Tita
	Y = Inc
	A = Alle
	Sta
	D = All
	5 = F5

316L SS ass rbon Steel 018) astalloy B stalloy C onel/A400 anium onel 600 oy 105 Carbon inless Steel oy 20 5 Alloy P = PTFE Coated 316SS N = F22 Alloy Other materials

available. Please check with office.

1 = 1" NPT **H** = 1/2" NPT 2 = 1.5" NPT For Socket Weld & Weld-In Wells " " = 3/4" Pipe Nominal (1.050" OD) (std.) P1 = 1" Pipe Nominal (1.315" OD) P2 = 1.5" Pipe Nominal P3 = 2" Pipe Nominal

T = Tapered **S** = Straight

""=.260
(std.)
B3 = .385
B5 = .515
I3 = 3/4" NPT
Internal
Thread
Other bore and
internal thread

" " = .260 (std.)	DP = Dye Penetration Testing
B3 = .385	EP = External Pressure
B5 = .515	Test
I3 = 3/4" NPT	FP = Full Penetration
Internal	Weld (Flanged Only)
Thread	IT = Internal Pressure
	Testing (5 min. test)
Other bore and	MT = Material Certificate
internal thread	ML = Mill Certificate
sizes available.	MR = NACE MR-01-75
	A I





PR =	Brass Plug & Chair
R2 =	Special Surface
	Finish (Ra 20 max)
T1 =	Tantalum Coating/
	Halar Coating

T2 = Teflon Coating T3 = Tungsten Carbide Coating TM = Special Marking

(Stamping) TS = SS Tag (attached)
WK = Wake Frequency

Calculation

Other Thermowell Options Available:

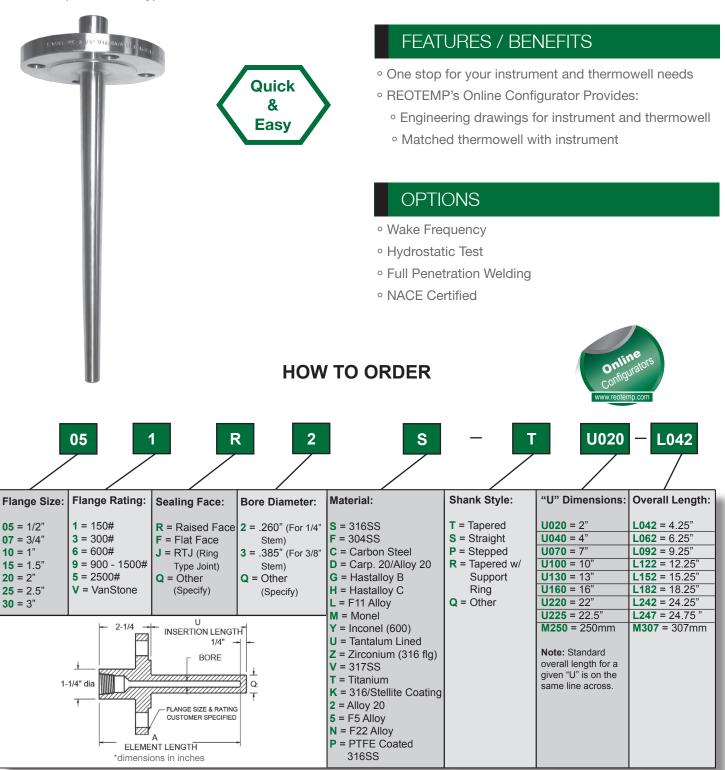
-Cleaning for Oxygen Services -Chrome Plating -Special Surface Finish (Ra 12 max) -Electropolishing -Stellite Overlay -Tantalum Sheath

-Titanium Sheath

Flanged Type Thermowell



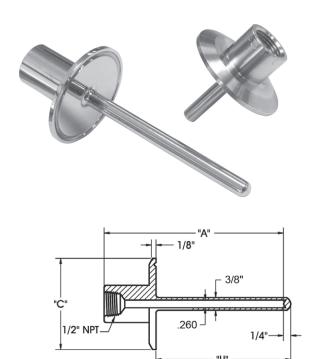
REOTEMP's Thermowells make it possible to remove an instrument without dropping pressure or losing contents of the process. Thermowells also protect the instrument from getting bent by the process media. Each stainless steel thermowell is die stamped with the type of material from which it is made.



Sanitary Thermowell



REOTEMP's Thermowells make it possible to remove instrument without dropping pressure or losing contents. Each stainless steel Thermowell is die stamped with type of material from which it is made.



*dimensions in inches

FEATURES / BENEFITS

- Provides Sanitary Protection for Temperature Probes
- All 316L Stainless Steel Construction
- Fast Installation and Removal
- Ideal for Food, Beverage, Biotech, and Pharmaceutical Applications
- o Finish Exceeds Ra 32 max. (finer finishes available)
- o Exceeds 3A #4 Finish

HOW TO ORDER

Part Number:	Tri-Clamp Size:	"A" Stem Length:	"U" Dimensions:	"C" Dimensions (Flange Diameter):		
STF1.5-2.5		2 1/2"	1 5/8"			
STF1.5-4	1 1/2"	4"	2 1/2"	2.0" (51mm)		
STF1.5-6	12	6"	4 1/2"			
STF1.5-9		9"	7 1/2"			
STF2-2.5		2 1/2"	1 5/8"	2.5" (63mm)		
STF2-4	2"	4"	2 1/2"			
STF2-6	2	6"	4 1/2"			
STF2-9		9"	7 1/2"			
STF2.5-2.5		2 1/2"	1 5/8"			
STF2.5-4	2 1/2"	4"	2 1/2"	3.0" (76mm)		
STF2.5-6	2 1/2	6"	4 1/2"			
STF2.5-9		9"	7 1/2"			
STF3-2.5		2 1/2"	1 5/8"			
STF3-4		4"	2 1/2"	3.6" (91mm)		
STF3-6	3"	6"	4 1/2"			
STF3-9		9"	7 1/2"			



Calibration & Certification



Calibration

REOTEMP uses a combination of fixed point calibration cells and fluid-filled calibration equipment to perform calibrations from -196°C to 1,100°F. We provide calibrations for metrology and industrial customers in most industrial markets. Our friendly and knowledgeable calibration technicians will ensure your sensors have the accuracy required for your application.















Note: See Product Specific Pages for Pricing and Part #.

Certification

Certification of Conformance (General conformance to published specs)

Certification of Calibration (Includes logged points and sticker)

3A Sanitary Certificates

Compliance and material certs for all wetted components

Note: See Product Specific Pages for Pricing and Part #.

Bimetal Temperature Range Master List



Measuring your world since 1965

Fahrenheit Celsius Fahrenheit & Celsius

Code	°F Ranges	Div	QGH	3,4,5	Code	°C Ranges	Div	QGH	3,4,5	Code	°Dual Ranges	QGH	3,4,5
F03	-100/100°F	2	ΥΥ	Υ	C03	-70/70°C			Υ	D03	-100/100°F & -70/40°C	ΥΥ	Υ
F07	-80/120°F	2	Υ	Υ	C07	-50/50°C	1	ΥΥ	Υ	D15	-50/210°F & -50/100°C		Υ
F11	-70/150°F	2		Υ	C15	-50/100°C	2	ΥΥ	Υ	D23	-40/160°F & -40/70°C	ΥΥ	Υ
F19	-50/300°F	2	ΥΥ	Y	C17	-50/200°C	2		Y	+D39	0/150°F & -20/70°C		**Y
+F21	-40/120°F	2		Υ	C19	-40/160°C	2		Y	D43	0/200°F & -10/90°C	YYY	Υ
F23	-40/160°F	2	YYY	Υ	C23	-40/70°C	1	YYY	Υ	D47	0/250°F & -20/120°C	ΥΥ	Υ
+F31	-20/120°F	2	Υ	Υ	*C31	-20/40°C	1		Y	D53	20/240°F & -10/115°C	ΥΥ	Υ
*F35	0/100°F	1		Υ	*C37	0/60°C			Y	D55	25/125°F & -5/50°C	ΥΥ	Υ
+F37	0/140°F	2	Y	Y	C43	0/100°C	1	YYY	Υ	D63	50/300°F & 10/150°C	ΥΥ	Υ
+F39	0/150°F	1	Υ	Υ	C47	-20/120°C	2	ΥΥ	Υ	D65	50/400°F & 10/200°C		**Y
F43	0/200°F	2	YYY	Υ	C53	-10/110°C	1	YYY	Y	D67	50/500°F & 10/260°C	YYY	Υ
F45	0/220°F	2	ΥΥ	Y	*C55	0/50°C	1/2	ΥΥ	Υ	D69	50/550°F & 10/290°C		Υ
F47	0/250°F	2	YYY	Y	C56	0/120°C	1		Y	D79	100/800°F & 40/400°C	ΥΥ	**Y
F49	0/300°F	2		Υ	C59	0/150°C	1	YYY	Y	D81	150/750°F & 70/400°C		
F53	20/240°F	2	ΥΥ	Υ	C65	0/200°C	2	YYY	Y	D85	200/1000°F & 100/500°C	YYY	Υ
*F55	25/125°F	1	YYY	Υ	C67	0/250°C	2		Υ				
F63	50/300°F	2	YYY	Υ	C69	0/300°C	2		Y				
F65	50/400°F	5		Υ	C71	0/300°C	2	YYY	Y				
F67	50/500°F	5	YYY	Υ	C73	0/400°C	5	ΥΥ	Y				
F69	50/550°F	5	Υ	Υ	C75	0/500°C	5		Y				
F73	50/750°F	10		Υ	C81	50/400°C	5	YYY					
F79	100/800°F	10	ΥΥ	Υ	C85	100/500°C	5	Y Y	Υ				
F81	150/750°F	10	YYY	Υ									
F85	200/1000°F	10	YYY	Υ									

Note: Other ranges available on application.

Y = Available

^{* =} Min. 4" stem with these ranges.

^{+ =} Min. 4" stem, Bottom & Adjustable Angle models.

^{** =} Available with 3" & 5" only.

REOTEMP GUARANTEE AND WARRANTY INFORMATION

Our Guarantee

REO*TEMP* guarantees our products will perform within the cataloged performance specifications if used within specified parameters. Determination of defect or failure will be made at REO*TEMP* or at a certified test facility. Warranty is limited to replacement or repair at factory. This warranty is expressly in lieu of any other warranty, expressed or implied, and of all other obligations or liability on our part for damages, including but not limited to, consequential damages arising out of use or misuse of our temperature or pressure instruments, and we neither assume nor authorize anyone to assume for us, any other liability in connection with the sale of our instruments or sensors.

REOTEMP reserves the right to make product improvements and change its specification stated throughout this catalog at anytime without notification. Please contact the factory on all critical dimensions and specifications for verifications.

Five Year Warranty

We warrant 3", 4", and 5" dial bimetal thermometers* against defective materials or workmanship under normal use and service as per ASME B40 standards for five (5) years following date of shipment. This warranty does not cover exposure to corrosive materials, temperatures in excess of those recommended, excessive vibration, or forces or abrasions which cause bending or unsealing of the case or stem. REOTEMP's liability is limited to repair or replacement at the factory, shipping charges prepaid.

* The thermometers covered by this warranty are all 3", 4", and 5" dial bimetal thermometers except those with plastic crystals, silicone filling, stems exceeding 35", and minimum - maximum pointers, which are covered for 1 year from the date of shipment.

One Year Warranty

All other REO*TEMP* temperature instruments, except for hand held digital thermometers and associated probes**, are warranted for one (1) year from date of shipment under normal use and service as per ASME B40 standards to be free of manufacturer's defects in material and workmanship. REO*TEMP*'s liability is limited to repair or replacement at the factory, shipping charges prepaid.

** Digital Thermometers and associated probes are warranted for 90 days from date of shipment.

CONTACT INFORMATION

Address: 10656 Roselle St.

San Diego, CA 92121

sales@reotemp.com

Phone: (U.S.) (800) 648-7737

(Int'l) - (00) 1-858-784-0710

Fax: (858) 784-0720

Email:

(050) 704 0720

