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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. REOTEMP 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



Industrial



Pharma/Biotech



Utility/Municipality



Government/Military



Engineering & Construction



Food & Beverage



Online Product Configurators



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

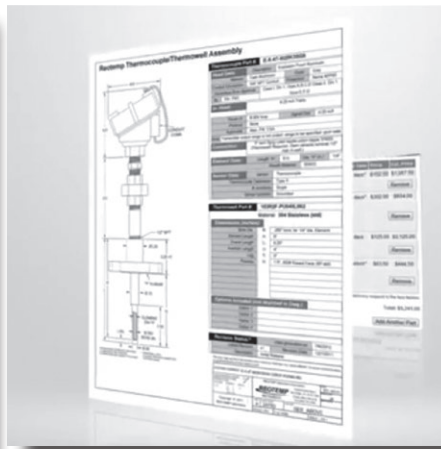


Specifying temperature and pressure instrumentation should only require a few clicks of the mouse and a couple moments of your time. Now it does!

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:

Back Connect Bimetal Thermometer

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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.



Fillable



Dials



Accuracy



Custom Logos



Standard Delivery 3-5 Days

Thermowell Recommended
(available through Reotemp)



Made in the USA

FEATURES / BENEFITS

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

SPECIFICATIONS

ACCURACY: $\pm 1\%$ 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

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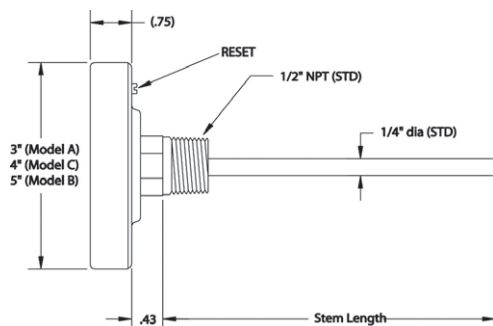
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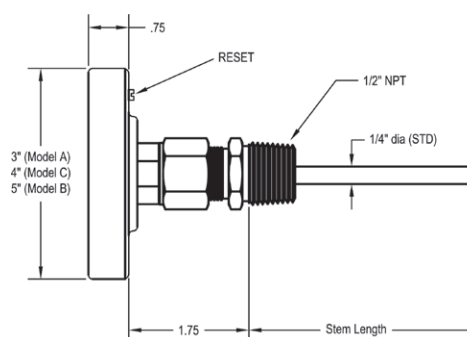
HOW TO ORDER

AA	025	1	F23	SF
Standard Model: AA = 3" Dial w/ Reset CC = 4" Dial w/ Reset BB = 5" Dial w/ Reset Non-Reset Model: RR = 3" Dial w/o Reset CN = 4" Dial w/o Reset SS = 5" Dial w/o Reset	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: 1 = 1/2" NPT 4 = 1/4" NPT 5 = 3/4" NPT Adapter X = Plain Unthreaded Hex Bushing B = 1/2" BSPT U = 1/2" NPT Union Sanitary: C = 1.5" Tri-Clamp L = 2" Tri-Clamp A = 2.5" Tri-Clamp P = 3" Tri-Clamp M = 3/4" Tri-Clamp	Temperature Range: Common Ranges: <u>Fahrenheit Ranges</u> 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°F to 500°F F69 = 50°F to 550°F F81 = 150°F to 750°F F85 = 200°F to 1000°F <u>Celsius Ranges</u> 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°C to 150°C C67 = 0°C to 250°C C69 = 0°C to 300°C C73 = 0°C to 400°C C85 = 100°C to 500°C <u>Dual °F/°C Ranges</u> 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.	Accessories: 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.

Standard Dimensions



Fixed Union



*dimensions in inches

Adjustable Angle Bimetal Thermometer

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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)



Made in the USA



Fillable



Dials



Accuracy



Custom Logos

FEATURES / BENEFITS

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

SPECIFICATIONS

ACCURACY: $\pm 1\%$ 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

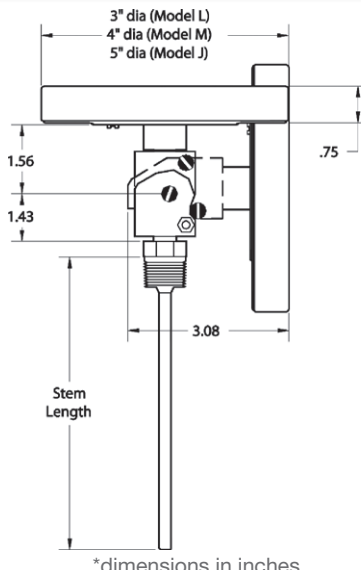
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HOW TO ORDER

LL	025	1	F23	SF
Model: LL = 3" Dial w/ Reset MM = 4" Dial w/ Reset JJ = 5" Dial w/ Reset	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: 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	Temperature Range: Common Ranges: <u>Fahrenheit Ranges</u> 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°F to 500°F F69 = 50°F to 550°F F81 = 150°F to 750°F F85 = 200°F to 1000°F <u>Celsius Ranges</u> 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°C to 150°C C67 = 0°C to 250°C C69 = 0°C to 300°C C73 = 0°C to 400°C C85 = 100°C to 500°C <u>Dual °F/°C Ranges</u> 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.	Accessories: 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.



Bottom Connect Bimetal Thermometer

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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)



Made in the USA



Fillable



Dials



Accuracy



Custom Logos

FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy $\pm 1\%$ 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
- **HiVis™** Dials Available

SPECIFICATIONS

ACCURACY: $\pm 1\%$ 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

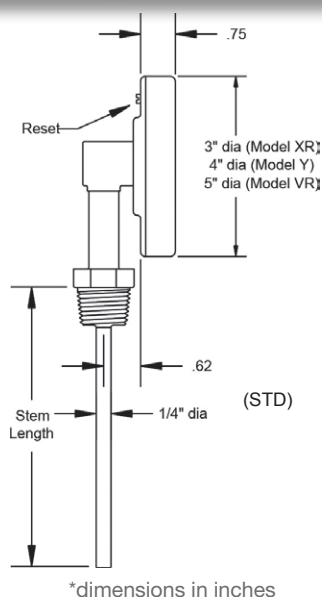
REOTEMP
INSTRUMENTS

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HOW TO ORDER

XR	025	1	F23	SF
Standard Model: XR = 3" Dial w/ Reset YY = 4" Dial w/ Reset VR = 5" Dial w/ Reset Non-Reset Model: XX = 3" Dial w/o Reset YN = 4" Dial w/o Reset VN = 5" Dial w/o Reset	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: 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	Temperature Range: Common Ranges: <u>Fahrenheit Ranges</u> 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°F to 500°F F69 = 50°F to 550°F F81 = 150°F to 750°F F85 = 200°F to 1000°F <u>Celsius Ranges</u> 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°C to 150°C C67 = 0°C to 250°C C69 = 0°C to 300°C C73 = 0°C to 400°C C85 = 100°C to 500°C <u>Dual °F/°C Ranges</u> 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.	Accessories: 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.



Sanitary Bimetal Thermometer

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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.



Fillable



Dials



Accuracy



Custom Logos

FEATURES / BENEFITS

- Made to ASME B40.3 Specifications
- Accuracy $\pm 1\%$ 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
- OEM Logo Dials/Custom Dials
- Five Year Warranty

SPECIFICATIONS

ACCURACY: $\pm 1\%$ 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



Standard Delivery 3-5 Days
Thermowell Recommended



Made in the USA

Sanitary Bimetal Thermometer

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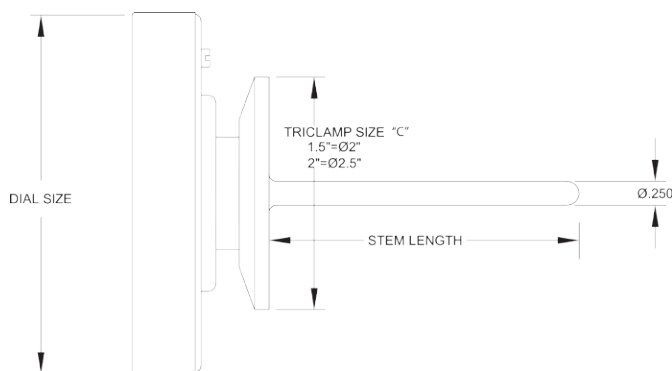
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HOW TO ORDER

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<div><div>Standard Model:</div><div><div>with External Reset</div><table><tr><td>Dial Size</td><td>3"</td><td>4"</td><td>5"</td></tr><tr><td>Back Connect</td><td>AA</td><td>CC</td><td>BB</td></tr><tr><td>Adjustable Angle</td><td>LL</td><td>MM</td><td>JJ</td></tr><tr><td>Bottom Connect</td><td>XR</td><td>YY</td><td>VR</td></tr></table></div><div><div>Non-Reset Model:</div><div><div>without External Reset</div><table><tr><td>Dial Size</td><td>3"</td><td>4"</td><td>5"</td></tr><tr><td>Back Connect</td><td>RR</td><td>CN</td><td>SS</td></tr><tr><td>Bottom Connect</td><td>XX</td><td>YN</td><td>VV</td></tr></table></div></div></div>	Dial Size	3"	4"	5"	Back Connect	AA	CC	BB	Adjustable Angle	LL	MM	JJ	Bottom Connect	XR	YY	VR	Dial Size	3"	4"	5"	Back Connect	RR	CN	SS	Bottom Connect	XX	YN	VV	<div><div>Stem Length:</div><div><div>025 = 2.5"</div><div>040 = 4"</div><div>060 = 6"</div><div>090 = 9"</div><div>120 = 12"</div><div>150 = 15"</div><div>180 = 18"</div><div>240 = 24"</div><div>300 = 30"</div><div>360 = 36"</div></div><div><div>Intermediate stem lengths available up to 80".</div></div></div>	<div><div>Sanitary Tri-Clamp:</div><div><div>C = 1.5" Tri-Clamp</div><div>L = 2" Tri-Clamp</div><div>A = 2.5" Tri-Clamp</div><div>P = 3" Tri-Clamp</div><div>M = 3/4" Tri-Clamp</div></div><div><div>Other sanitary flanges available.</div></div></div>	<div><div>Temperature Range:</div><div><div>Common Ranges:</div><div><div><div>Fahrenheit Ranges</div><div><div>F23 = -40°F to 160°F</div><div>*F55 = 25°F to 125°F</div><div>F43 = 0°F to 200°F</div><div>F47 = 0°F to 250°F</div><div>F63 = 50°F to 300°F</div><div>F67 = 50°F to 500°F</div><div>F69 = 50°F to 550°F</div><div>F81 = 150°F to 750°F</div><div>F85 = 200°F to 1000°F</div></div><div><div>Celsius Ranges</div><div><div>C23 = -40°C to 70°C</div><div>*C55 = 0°C to 50°C</div><div>C43 = 0°C to 100°C</div><div>C47 = -20°C to 120°C</div><div>C59 = 0°C to 150°C</div><div>C67 = 0°C to 250°C</div><div>C69 = 0°C to 300°C</div><div>C81 = 50°C to 400°C</div><div>C85 = 100°C to 500°C</div></div></div><div><div>Dual °F/°C Ranges</div><div><div>D23 = -40°F to 160°F & -40°C to 70°C</div><div>*D55 = 25°F to 125°F & -5°C to 50°C</div><div>D43 = 0°F to 200°F & -10°C to 90°C</div><div>D47 = 0°F to 250°F & -20°C to 120°C</div><div>D63 = 50°F to 300°F & 10°C to 150°C</div><div>D67 = 50°F to 500°F & 10°C to 260°C</div><div>D69 = 50°F to 550°F & 10°C to 290°C</div><div>D81 = 150°F to 750°F & 70°C to 400°C</div><div>D85 = 200°F to 1000°F & 100°C to 500°C</div></div></div><div><div>* Not available in 2.5" stem.</div></div><div><div>See inside back cover for complete list of ranges.</div></div></div></div></div></div>	<div><div>Accessories:</div><div><div>HV = Hi-Vis Dials</div><div>SF = Silicone Fill</div><div>S3 = 3/8" Diameter Stem</div><div>PC = Acrylic Window</div><div>PY = Polycarbonate Window</div><div>TG = Tempered Glass Window</div><div>MM = Max./Min. Pointer</div><div>R2 = Ra 20 Max. Wetted Finish</div><div>C1 = 1 pt. Calibration Cert.</div><div>C3 = 3 pt. Calibration Cert.</div></div></div>
Dial Size	3"	4"	5"																													
Back Connect	AA	CC	BB																													
Adjustable Angle	LL	MM	JJ																													
Bottom Connect	XR	YY	VR																													
Dial Size	3"	4"	5"																													
Back Connect	RR	CN	SS																													
Bottom Connect	XX	YN	VV																													

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



*dimensions in inches

Dual Mode Thermometer

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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
- Choice of 3", 4", or 5" Sizes, with Back or Adjustable Angles Connection
- Hermetically sealed per ASME B40.3 (3/8" stem only)
- NIST Traceable Calibration



Fillable



Dials



Accuracy

FEATURES / BENEFITS

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

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 $\Omega/0^\circ\text{C}$, 3-wire (std.), others available - contact factory

RTD ACCURACY: 0.12% $^\circ\text{C}$ (std). Others available upon request.

THERMOCOUPLE: Type K Gounded Junction (std), Types T, E, J, and Ungrounded (optional)

THERMOCOUPLE ACCURACY: Type K $\pm 2.2^\circ\text{C}$ 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: $\pm 1\%$ 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 bimetal, sanitary tri-clamp fittings, SS tag



Thermocouple or RTD

- Remote and Local Indication
- Data Acquisition for Process Control
- 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)



Made in the USA

Dual Mode Thermometer

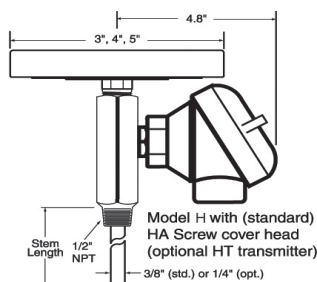
REOTEMP
INSTRUMENTS

Measuring your world since 1965

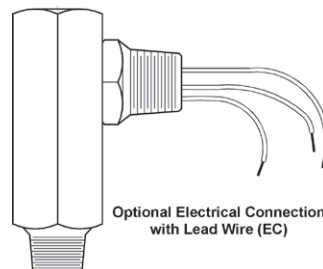


HOW TO ORDER

DM	TA	040	F23	TK	A	A	—	HV	
Style & Stem Diameter:	Stem Length:	Temperature Range:	Sensor:	Heads/Output Connections:	Electrical Connections:	Accessories:	Thermowell:		
3/8" Stem TA = 3" Back Connect TC = 4" Back Connect TB = 5" Back Connect TL = 3" Adjustable-Angle TM = 4" Adjustable-Angle TJ = 5" Adjustable-Angle 1/4" Stem 4A = 3" Back Connect 4C = 4" Back Connect 4B = 5" Back Connect 4L = 3" Adjustable-Angle 4M = 4" Adjustable-Angle 4J = 5" Adjustable-Angle	*025 = 2.5" 040 = 4" 060 = 6" 090 = 9" 120 = 12" 150 = 15" 180 = 18" 240 = 24" 300 = 30" 360 = 36" * Only available on 3/8" stem diameter	Common Ranges: <u>Fahrenheit Ranges</u> F03 = -100°F to 100°F F23 = -40°F to 160°F *F55 = 25°F to 125°F F43 = 0°F to 200°F F47 = 0°F to 250°F F53 = 20°F to 240°F F63 = 50°F to 300°F F65 = 50°F to 400°F F69 = 50°F to 550°F F79 = 100°F to 800°F <u>Celsius Ranges</u> C03 = -70°C to 70°C C23 = -40°C to 70°C *C55 = 0°C to 50°C C43 = 0°C to 100°C C47 = -20°C to 120°C C53 = -10°C to 110°C C59 = 0°C to 150°C C65 = 0°C to 200°C C69 = 0°C to 300°C C81 = 50°C to 400°C <u>Dual °F/°C Ranges</u> D03 = -100°F to 100°F & -70°C to 40°C 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 D53 = 20°F to 240°F & -10°C to 115°C D63 = 50°F to 300°F & 10°C to 150°C D65 = 50°F to 400°F & 10°C to 200°C D69 = 50°F to 550°F & 10°C to 290°C D79 = 100°F to 800°F & 40°C to 400°C * Not available in 2.5" stem. See inside back cover for complete list of ranges.	Sensor: <u>Thermocouple (Single, Grounded)</u> TK = Type K TJ = Type J TE = Type E TT = Type T <u>Thermocouple (Single, Ungrounded)</u> UK = Type K UJ = Type J UE = Type E UT = Type T <u>Thermocouple (Dual, Grounded)</u> TKK = Type K TJJ = Type J TEE = Type E TTT = Type T <u>Thermocouple (Dual, Ungrounded)</u> UKK = Type K UJJ = Type J UEE = Type E UTT = Type T <u>RTD (Single)</u> RC = RTD, Pt. 100 ohm, 3-wire (max. 600°F - DM4) (max. 900°F - DMT)	A = Cast Iron Black C = Poly Plastic Black E = Explosion Proof Aluminum G = 316SS H = Cast Aluminum M = Aluminum Flip Top I = Blue Epoxy-Coated Aluminum J = Explosion Proof 316SS S = Poly Plastic White T = ATEX Explosion Proof Aluminum Z = Window Explosion Proof (Digital Display Required) EC = 1/2" NPT Male Electrical Connection w/ Lead Wire (See Drawing & Ignore Electrical Connection Section)	A = Terminal Block N = No Terminal Block, 6" Leads T = 4-20mA Xmtr D = 4-20mA Hart Xmtr *B = 4-20mA Xmtr w/ Display *H = 4-20mA Hart Xmtr w/ Display * Only available with Z Head	HV = Hi-Vis Bimet Dial UF = Fixed Union US = Sliding Union SC = 1.5" or 1" Sanitary Tri-Clamp SL = 2" Sanitary Tri-Clamp SA = 2.5" Sanitary Tri-Clamp SP = 3" Sanitary Tri-Clamp PC = Acrylic Window TG = Tempered Glass Window SF = Silicone Fill (max. 500°F) TS = Stainless Steel Tag C1 = 1 pt. Calibration Certificate C3 = 3 pt. Calibration Certificate	For Thermowells, see pages 34-37.		



*dimensions in inches



Heavy-Duty “Navy” Type Bimetal Thermometer

REOTEMP
INSTRUMENTS

Measuring your world since 1965

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.



Fillable



Dials



Accuracy



Custom Logos



Back Angle Form

Straight Form

Standard Delivery 3-5 Days

Thermowell Recommended



Made in the USA

FEATURES / BENEFITS

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

SPECIFICATIONS

ACCURACY: $\pm 1\%$ 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

REOTEMP
INSTRUMENTS

Measuring your world since 1965

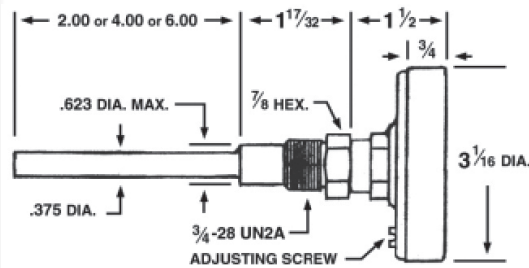
HOW TO ORDER

AN2

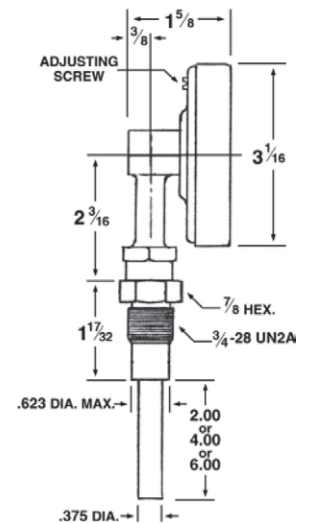
F21

Model:	Temperature Range (range, division):
Back Angle Form	Fahrenheit Ranges
AN2 = 2"	F21 = -40°F to 120°F, 2°
AN4 = 4"	F25 = -40°F to 180°F, 2°
AN6 = 6"	F43 = 0°F to 200°F, 2°
	F53 = 20°F to 240°F, 2°
Straight Form	F63 = 50°F to 300°F, 2°
XN2 = 2"	F65 = 50°F to 400°F, 5°
XN4 = 4"	F69 = 50°F to 550°F, 5°
XN6 = 6"	F73 = 50°F to 750°F, 10°
	Celsius Ranges
	C07 = -50°C to 50°C, 1°
	C53 = -10°C to 110°C, 1°
	C59 = 0°C to 150°C, 2°
	C65 = 0°C to 200°C, 2°
	C71 = 0°C to 300°C, 5°
* 4" Minimum stem length on straight, left, or right forms only.	

Back Angle Form



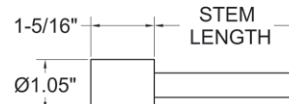
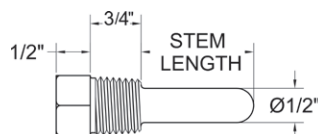
Straight Form



*dimensions in inches

Thermometer Wells

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



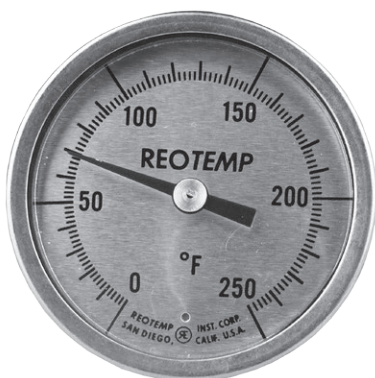
OEM Dial Bimetal Thermometer

REOTEMP
INSTRUMENTS

Measuring your world since 1965

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"



Accuracy



Custom Logos

FEATURES / BENEFITS

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

Model G - 1 11/16"



Model Q - 1 5/32"



Standard Delivery 3-5 Days
Thermowell Recommended



Made in the USA

SPECIFICATIONS

ACCURACY: $\pm 1\%$ 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

REOTEMP
INSTRUMENTS

Measuring your world since 1965

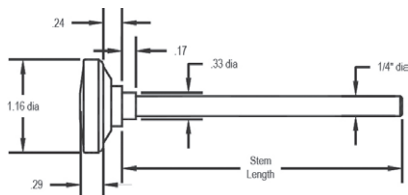


HOW TO ORDER

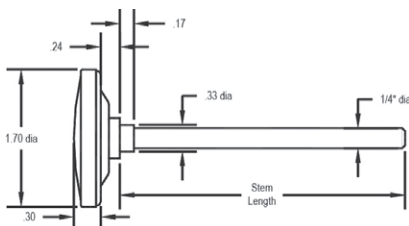
QQ	025	2	F23	PS
OEM Models: QQ = Model Q (1 5/32" Dial) GG = Model G (1 11/16" Dial) HH = Model H (2 3/8" Dial) Lab & Test Model: QP = Model QP (1 5/32" Dial) with 5" Stem GL = Model GL (1 11/16" Dial) with 8" Stem HL = Model HL (2 3/8" Dial) with 8" Stem	Stem Length: 025 = 2.5" 040 = 4" 060 = 6" 090 = 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: <u>Fahrenheit Ranges</u> 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°F to 500°F F69 = 50°F to 550°F F81 = 150°F to 750°F F85 = 200°F to 1000°F <u>Celsius Ranges</u> 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°C to 150°C C67 = 0°C to 250°C C69 = 0°C to 300°C C73 = 0°C to 400°C C85 = 100°C to 500°C <u>Dual °F/°C Ranges</u> 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 available 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

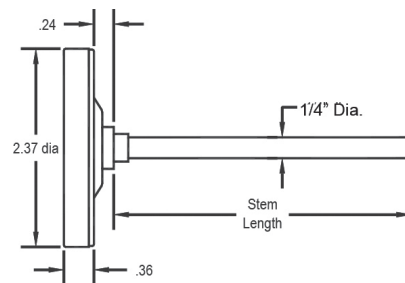


Model G

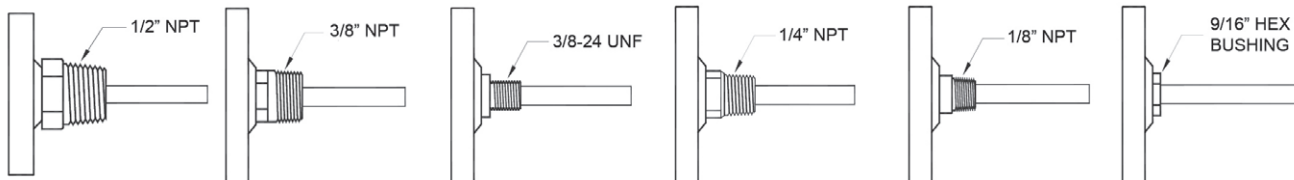


*dimensions in inches

Model H



Mounting Thread Options



*dimensions in inches

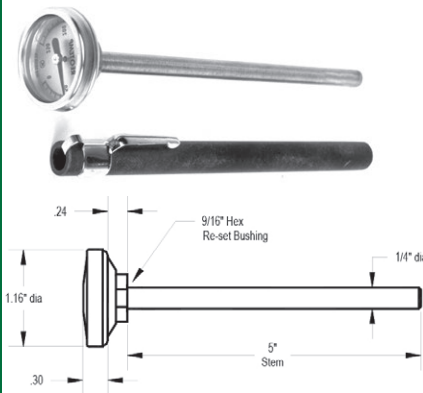
Hand-Held Laboratory Thermometer

REOTEMP
INSTRUMENTS

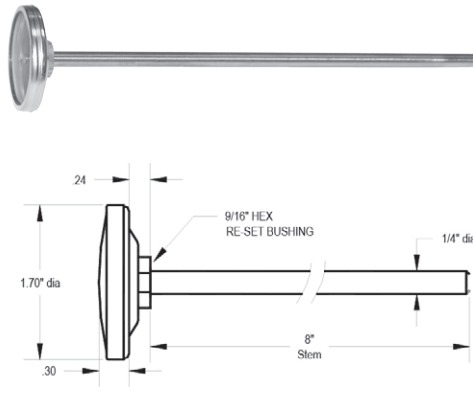
Measuring your world since 1965

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.

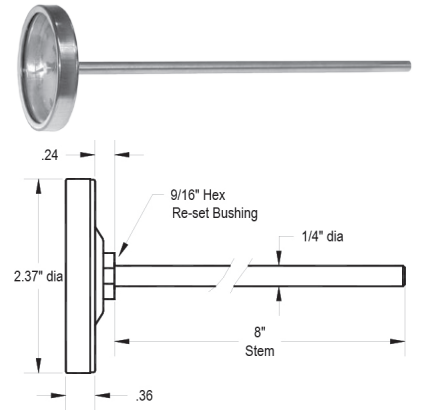
Model **QP** - 1 5/32" Dial
(with point - Model **QPP**)



Model **GL** - 1 11/16" Dial
(with point - Model **GLP**)



Model **HL** - 2 3/8" Dial
(with point - Model **HLP**)



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

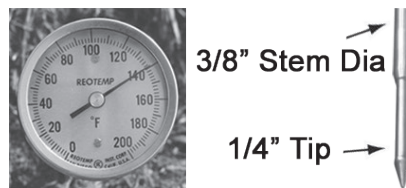
(A36PF)



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

Super Duty/Fast Response Compost Thermometer

(A36FR)



- 36" Stem Length (24", 48", 60", and 72" available)
- 3/8" Stem Diameter x 1/4" Tip
- Hermetically Sealed
- Rugged, All Stainless Steel Construction

Moisture Meter

(MM36)



- 36" Stem Length (9", 24", 48", and 60" available)
- 5/16" Stem Diameter
- 0-10 Scale
- Easy to Calibrate

Surface Bimetal Thermometer

REOTEMP
INSTRUMENTS

Measuring your world since 1965

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

SPECIFICATIONS

ACCURACY: $\pm 2\%$ Full Scale (ASME B40.3)

HEAD: 2" (5.08cm)

DIAL: White background with blue marks and numbers.

HEIGHT: 1/2" (1.27cm)

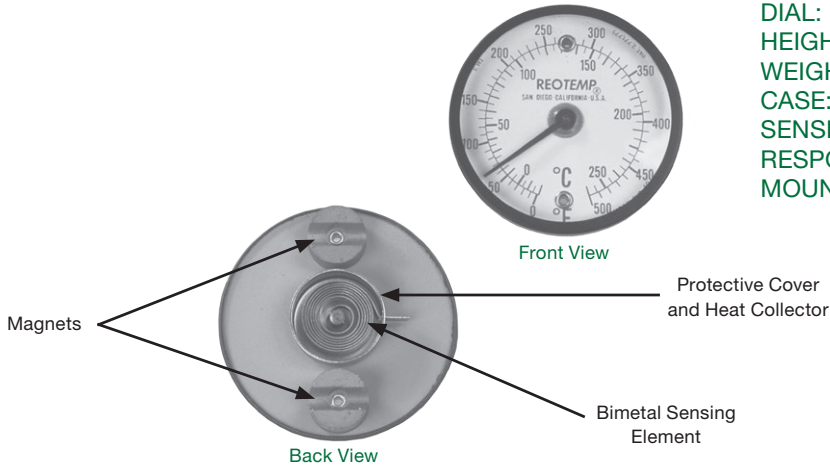
WEIGHT: Approximately 2 ounces (56.7g)

CASE: Aluminum with Optically Clear Crystal

SENSING ELEMENT: Precision Calibrated Bimetal Coil

RESPONSE TIME: Approximately 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

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

SPECIFICATIONS

ACCURACY: $\pm 2\%$ 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

Vapor Actuated Filled System Thermometer

REOTEMP
INSTRUMENTS

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



Made in the USA

FEATURES / BENEFITS

- Accuracy ± 1 Scale Division (Upper 2/3 Scale)
- Ideal for Remote Reading, such as Panel Installation
- 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.

Vapor Actuated Filled System Thermometer

REOTEMP
INSTRUMENTS

Measuring your world since 1965

HOW TO ORDER

Model V
Vapor
Actuated

V

Table 1
Case Style
& Size

20FR

Table 2
Temperature
Range

21

Table 3
Capillary
& Bulb

D

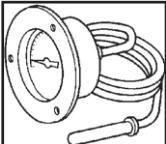
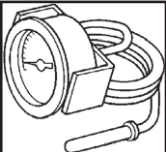
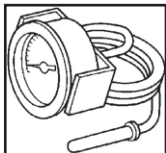

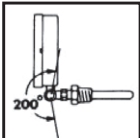
Table 4
Capillary Length
in Feet

05

Table 5
Process
Connection

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	Connection Location: Rear Rear Rear Rear Rear
	U-Clamp (Panel Mount): 20UR 25UR 35UR	Dial: 2" 2 1/2" 3 1/2"	Case: Stainless Steel Stainless Steel Stainless Steel	Lens: **Polycarbonate **Polycarbonate **Polycarbonate	Connection Location: Rear Rear Rear
	Rear Flanged (Surface Mount): 20RR 35RR 35RB 45RR 45RB 45TB	Dial: 2" 3 1/2" 3 1/2" 3 1/2" 4 1/2" 4 1/2" 4 1/2"	Case: Stainless Steel Stainless Steel Stainless Steel Stainless Steel Stainless Steel Stainless Steel Phenolic	Lens: **Polycarbonate **Polycarbonate **Polycarbonate **Polycarbonate **Polycarbonate **Polycarbonate *Glass	Connection Location: Rear Rear Bottom Rear Bottom Bottom (Turret Mount)
	Other Case Styles: 35SB 45SB	Dial: 3 1/2" 4 1/2"	Case: Stainless Steel Stainless Steel	Lens: **Polycarbonate **Polycarbonate	Connection Location: Adjustable Bracket Mount Adjustable Bracket Mount
	35DA 45DA	Dial: 3 1/2" 4 1/2"	Case: Stainless Steel Stainless Steel	Lens: **Polycarbonate **Polycarbonate	Connection Location: "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**

Vapor Actuated Filled System Thermometer

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Table 2: Temperature Ranges

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

Table 3: Capillary & Bulbs

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

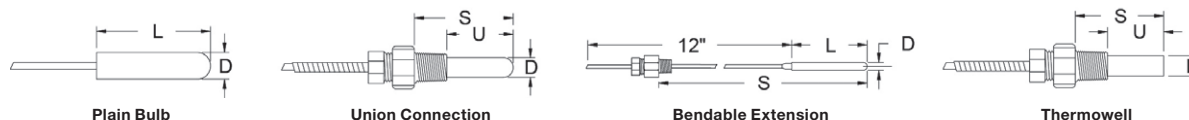
Table 4: Capillary Length

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 Existing Brass Well)			
J3	Jam Nut Only	316SS (For SS Well)			
K2	1/2" NPT Union	Nickel Plated Brass			
L2	1/2" NPT Union	316SS			
M2	1/2" NPT Sliding Union on Bendable Extension	316SS (Only Available with 316SS Capillary)			
Thermowells for Vapor Actuated Bulbs (Except M2):		Brass:		316SS:	
	1/2" NPT	3/4" NPT		1/2" NPT	3/4" NPT
For 1-10 ft. Capillary (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. Capillary (Bulb #5)	52B	53B		52S	53S

Bulb Configurations



Standard Bulb Dimensions

Capillary Length:	Plain Bulb:			Union Connection:			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"

Vapor Actuated Filled System Thermometer

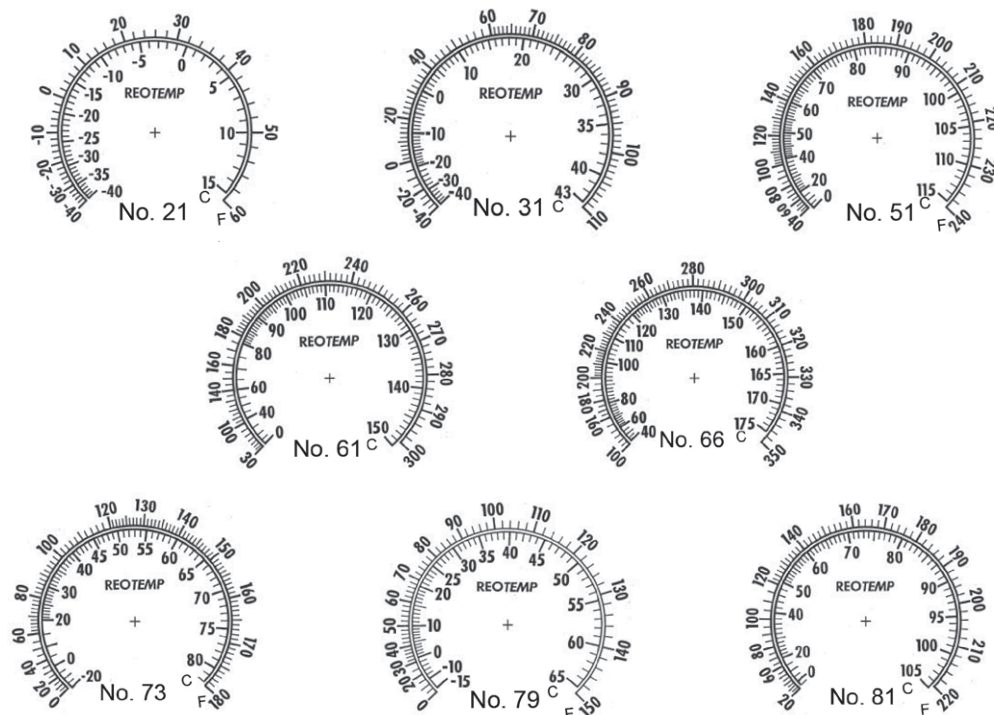
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Dial Faces

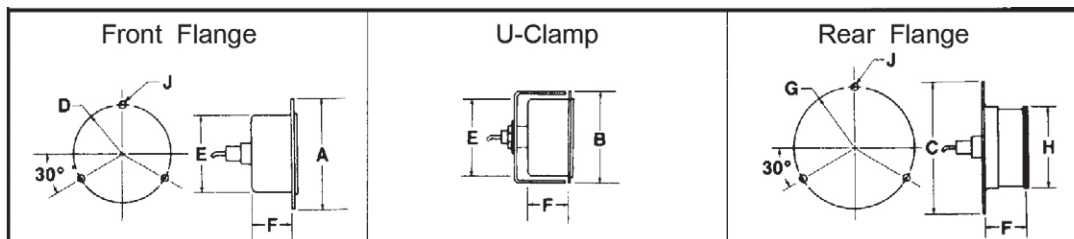
Typical dial faces shown below. Complete list shown on page 21.

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:	A	B	C	D	E	F	G	H	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	-- --	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

Gas Actuated Filled System Thermometer

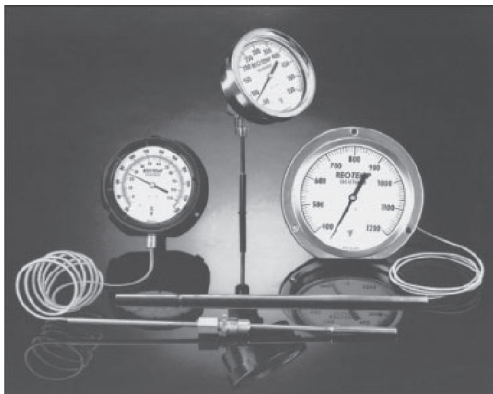
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REOTEMP's Gas Actuated Thermometers combine advanced gas coil technology with a state-of-the-art adsorbent- (Class IV) thermal system, producing a superior temperature measurement instrument that can be fitted to a wide variety of applications.

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



Made in the USA

FEATURES / BENEFITS

- Accuracy $\pm 1\%$ 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: $\pm 1\%$ 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 gas-actuated 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".

Gas Actuated Filled System Thermometer

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HOW TO ORDER

Table 1
Case Style
& Size

G45ER

Table 2
Thermal System
& Bulb

87

Table 3
Capillary Length
in Feet

L15

Table 4
Temperature

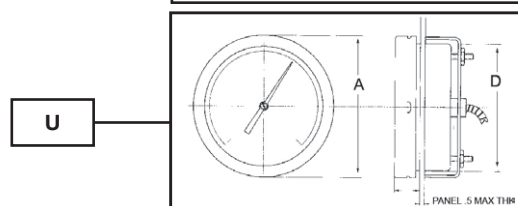
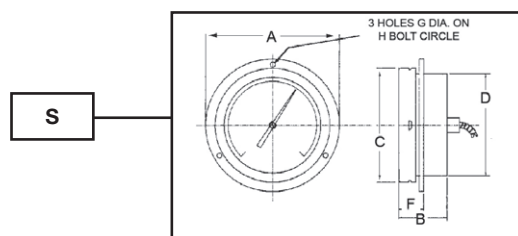
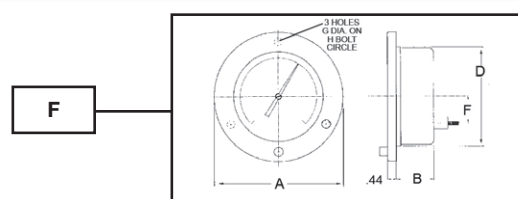
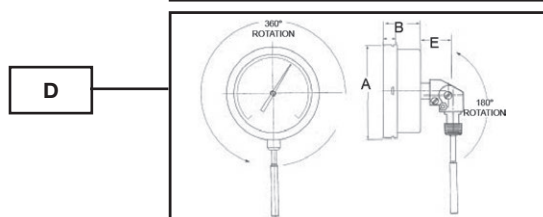
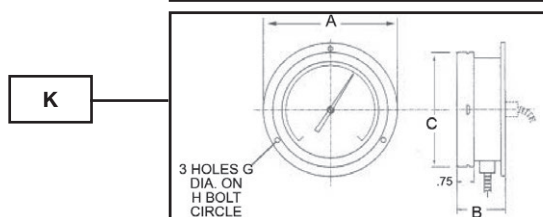
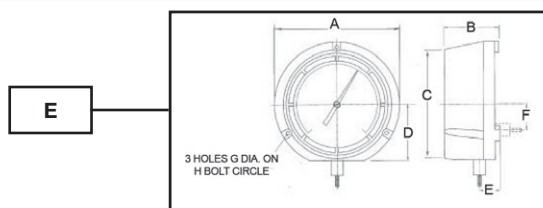
FB

Table 5
Options

XAW

Table 1: Case Styles

Wall Mount:	Case Code:	Connection:	Case Diameter:	Case Dimensions:							
				A	B	C	D	E	F	G	H
E = Polypropylene Turret Mount	G45ER G45EL	Rear Lower	4 1/2"	5.83	2.41	5.08	2.62	1.00	0.20	0.24	5.39
			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	4 1/2"	5.88	2.15	5.04	--	--	--	0.22	5.38
		Lower	4 1/2"	5.88	2.15	5.04	--	--	--	0.22	5.38
		Rear	6"	7.50	2.15	6.38	--	--	--	0.25	6.84
		Lower	6"	7.50	2.15	6.38	--	--	--	0.25	6.84
Direct Mount:	G45DA G60DA	Adjustable	4 1/2"	5.04	2.00	--	--	1.70	--	--	--
		Adjustable	6"	6.38	2.15	--	--	1.70	--	--	--
Panel Mount:	G45FR G60FR	Rear	4 1/2"	6.31	1.63	--	4.88	--	1.35	0.19	5.38
		Rear	6"	7.87	1.59	--	6.34	--	1.75	0.19	6.69
S = Stainless Steel Semi-Flush Front Flange	G45SR G60SR	Rear	4 1/2"	5.88	2.15	5.04	4.51	--	1.00	0.22	5.38
		Rear	6"	7.50	2.15	6.38	5.88	--	1.00	0.25	6.84
U = Stainless Steel "U" Clamp	G45UR G60UR	Rear	4 1/2"	5.04	--	--	4.51	--	--	--	--
		Rear	6"	6.38	--	--	5.88	--	--	--	--



Gas Actuated Filled System Thermometer

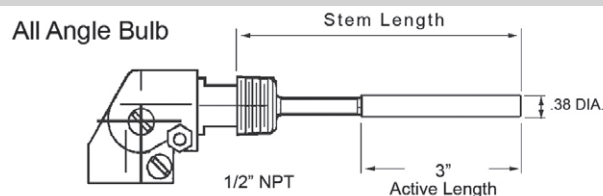
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Table 2: Thermal Systems (All Bulbs & Capillaries Are 316SS)

All-Angle Direct Mount with 1/2" NPT (with "D" Case Only):

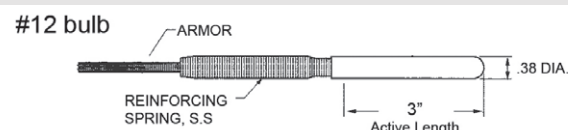
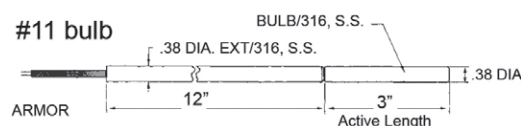
- 04** = 4" Stem x 3/8" Diameter
- 06** = 6" Stem x 3/8" Diameter
- 09** = 9" Stem x 3/8" Diameter
- *0X** = 12" or Longer Stem x 3/8" Diameter
(specify stem length)



*dimensions in inches

Plain Bulbs:

- 11** = Plain Bulb, 3/8" x 3" Active, +12" Rigid Extension
- 12** = Plain Bulb, 3/8" x 3" Active

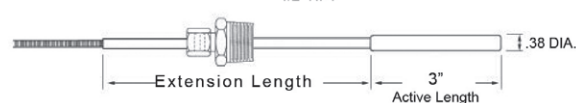


*dimensions in inches

Sliding Union 1/2" NPT on Bendable Extension:

- 87** = 3/8" x 3" Active, 12" Bendable Extension
- 88** = 3/8" x 3" Active, 18" Bendable Extension
- 8X** = 3/8" x 3" Active, Over 18" Bendable Extension
(specify stem length)

Bendable Extension (87,88, 8X)



*dimensions in inches

* Specify stem length
Example: **G45DA - 0X - 12" - FB**

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

Code (°F or °C Ranges, Div.):

- FB** = -320°F to 100°F, 5°
- FE** = -120°F to 120°F, 2°
- FG** = -40°F to 180°F, 2°
- FH** = 0°F to 120°F, 1°
- FJ** = 60°F to 120°F, 1°
- FL** = 20°F to 240°F, 2°
- FN** = 0°F to 300°F, 5°
- FP** = 50°F to 550°F, 5°
- FR** = 50°F to 750°F, 5°
- FT** = 400°F to 1200°F, 10°
- CD** = -200°C to 100°C

Code (°F & °C Ranges, Div.):

- DB** = -320°F to 100°F & -200°C to 40°C, 5° & 2°
- DE** = -120°F to 120°F & -85°C to 50°C, 2° & 1°
- DG** = -40°F to 180°F & -40°C to 80°C, 2° & 2°
- DH** = 0°F to 120°F & -15°C to 50°C, 1° & 1°
- DJ** = 60°F to 120°F & -15°C to 50°C, 1° & 1/2°
- DL** = 20°F to 240°F & -5°C to 110°C, 2° & 1°
- DN** = 0°F to 300°F & -10°C to 150°C, 5° & 1°
- DP** = 50°F to 550°F & 10°C to 290°C, 5° & 5°
- DR** = 50°F to 750°F & 0°C to 400°C, 5° & 5°
- DT** = 400°F to 1200°F & 200°C to 650°C, 10° & 5°

Gas Actuated Filled System Thermometer

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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)

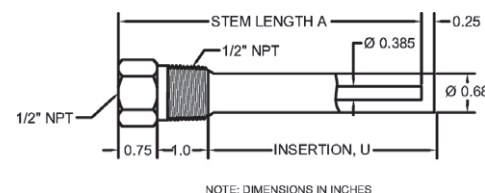
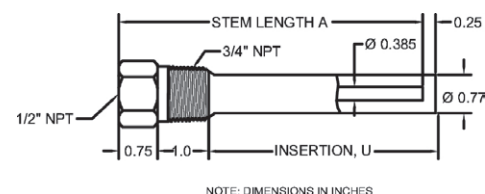
XTW = Thermowell (See Thermowell Table Below for Order Codes)

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

Thermowells for 3/8" Diameter Elements

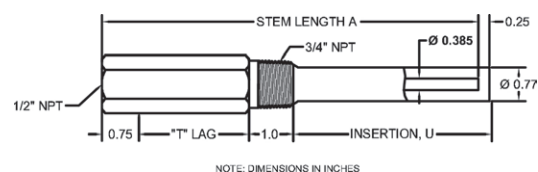
Standard Wells

"P" External Length:	"A" Stem Length:	"U" Insert Length:	Order Code:	
			304SS	316SS
3/4" NPT	4"	2 1/2"	ST4304-SB3	ST4316-SB3
	6"	4 1/2"	ST6304-SB3	ST6316-SB3
	9"	7 1/2"	ST9304-SB3	ST9316-SB3
	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
1/2" NPT	4"	2 1/2"	ST4304-HSB3	ST4316-HSB3
	6"	4 1/2"	ST6304-HSB3	ST6316-HSB3
	9"	7 1/2"	ST9304-HSB3	ST9316-HSB3
	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 Code:	
				304SS	316SS
3/4" NPT	6"	2 1/2"	2"	LG6304-SB3	LG6316-SB3
	9"	4 1/2"	3"	LG9304-SB3	LG9316-SB3
	12"	7 1/2"	3"	LG12304-SB3	LG12316-SB3
	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

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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

FEATURES / BENEFITS

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

SPECIFICATIONS

CASE: Stainless Steel

ACCURACY: $\pm 1\%$ of Range Span

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

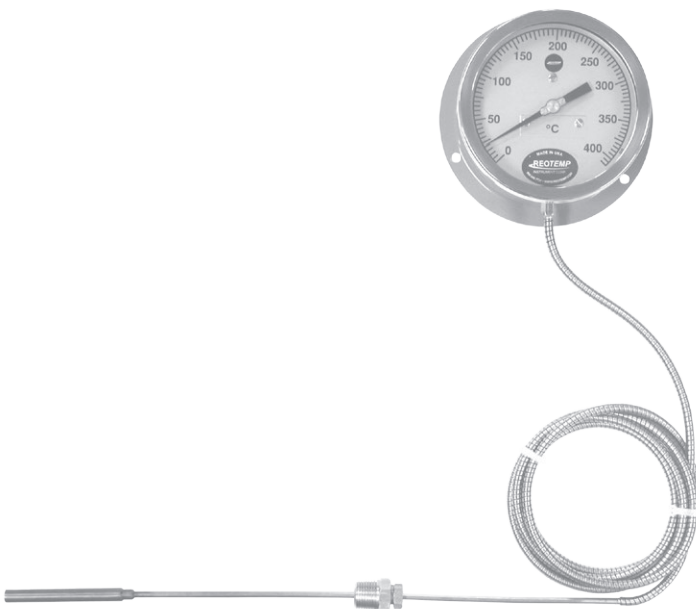
LENS: Gasket Sealed Glass (standard) ; Plexi Glass (optional)

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



Standard Delivery 4-5 Weeks

Thermowell Recommended



Made in the USA

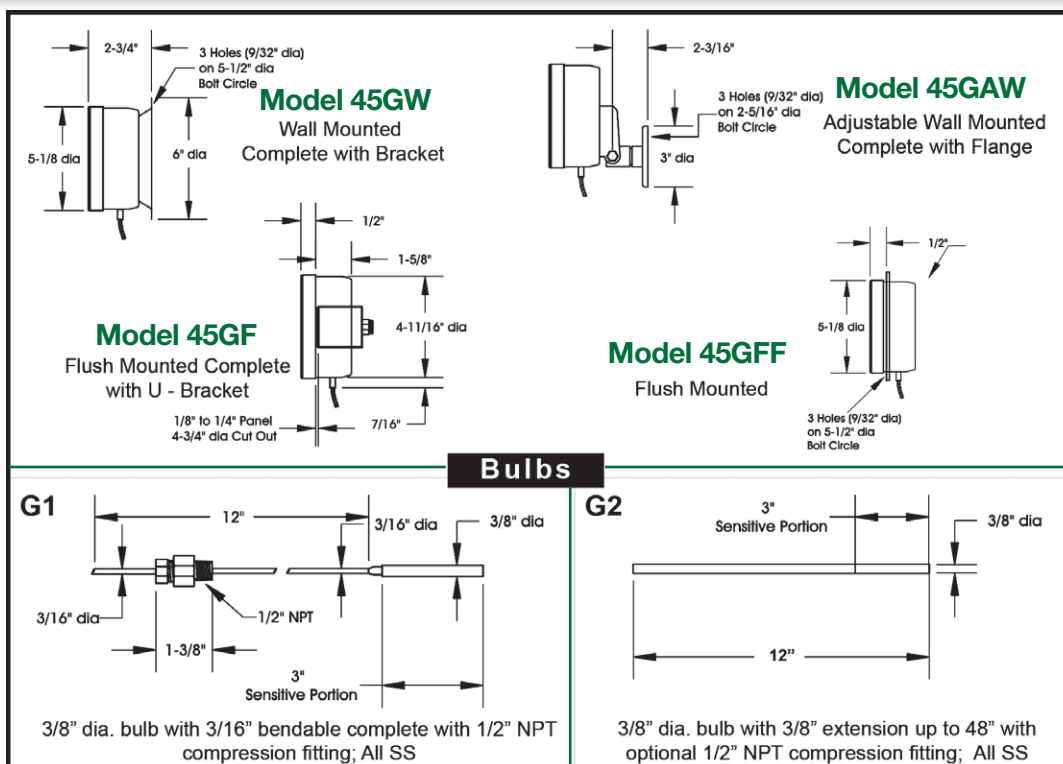
Direct Drive Gas Actuated Thermometer

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HOW TO ORDER

45GW	05	00	G112	—	EC
Standard Model:	Armored Capillary Length:	Temperature Range:	Bulb Type:	Accessories:	
45GW = Wall Mount 45GF = Flush Mount 45GFF = Front Flange 45GAW = Adjustable Wall Mount	05 = 5 Feet 06 = 6 Feet 10 = 10 Feet Other = Specify Length in Feet	Fahrenheit Ranges 16 = -350°F to 150°F 17 = -100°F to 100°F 19 = -30°F to 120°F 20 = -40°F to 200°F 23 = 0°F to 150°F 25 = 0°F to 200°F 26 = 0°F to 240°F 27 = 0°F to 300°F 30 = 0°F to 400°F 31 = 0°F to 500°F 32 = 0°F to 600°F 34 = 0°F to 800°F 36 = 0°F to 1200°F Celsius Ranges 00 = -200°C to 100°C 01 = -100°C to 100°C 02 = -30°C to 60°C 05 = -30°C to 120°C 06 = -10°C to 150°C 07 = 0°C to 100°C 08 = 0°C to 200°C 09 = 0°C to 240°C 10 = 0°C to 300°C 11 = 0°C to 400°C 13 = 0°C to 500°C 14 = 0°C to 600°C	G112 = 12" Bendable Extension with 1/2" NPT Compression Fitting G118 = 18" Bendable Extension with 1/2" NPT Compression Fitting G212 = 12" Plain Bulb with Rigid Extension G224 = 24" Plain Bulb with Rigid Extension	EC = Electrical Contacts MP = Max. Hand Pointer SG = Tempered Glass PY = Polycarbonate Crystal	



*dimensions in inches

Direct Drive Gas and Liquid Filled Thermometer

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INSTRUMENTS

Measuring your world since 1965

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



FEATURES / BENEFITS

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

SPECIFICATIONS

CASE: Stainless Steel (SS)

ACCURACY: $\pm 1\%$ of Range Span

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

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

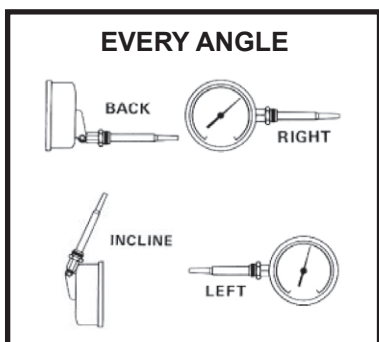
POINTER: Micrometer Adjustment Type

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.

Standard Delivery 4-5 Weeks

Thermowell Recommended



Made in the USA

Direct Drive Gas and Liquid Filled Thermometer

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HOW TO ORDER

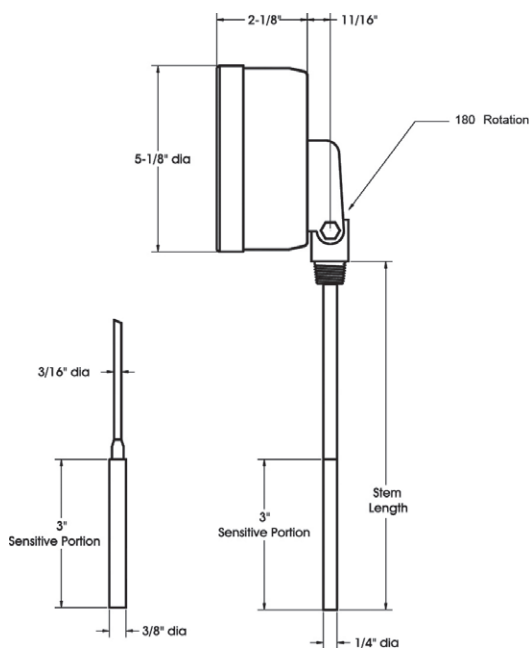
45GR

04

00

ST6316

Model:	Stem Length:	Temperature Range:		Accessories:																
45GR = Gas Actuated, 3/8" Stem 45LR = Inert Liquid Actuated, 1/4" Stem	04 = 4" 06 = 6" 09 = 9" 12 = 12" 15 = 15" 18 = 18" 24 = 24"	Fahrenheit Ranges 16 = -350°F to 150°F 17 = -100°F to 100°F 19 = -30°F to 120°F 20 = -40°F to 200°F 21 = 0°F to 100°F 23 = 0°F to 150°F 24 = 25°F to 125°F 25 = 0°F to 200°F 26 = 0°F to 240°F 27 = 0°F to 300°F 30 = 0°F to 400°F 31 = 0°F to 500°F 32 = 0°F to 600°F 34 = 0°F to 800°F 36 = 0°F to 1200°F	Celsius Ranges 00 = -200°C to 100°C 01 = -100°C to 100°C 02 = -30°C to 60°C 04 = -10°C to 80°C 05 = -30°C to 120°C 06 = -10°C to 150°C 07 = 0°C to 100°C 08 = 0°C to 200°C 09 = 0°C to 240°C 10 = 0°C to 300°C 11 = 0°C to 400°C 13 = 0°C to 500°C 14 = 0°C to 600°C	Standard Thermowells (3/4" NPT, 316 S.S.) <table><tr><th>Stem Length</th><th>"U" Dim.</th><th>1/4" Element</th><th>3/8" Element</th></tr><tr><td>4"</td><td>2.5"</td><td>ST4316</td><td>ST4316-B3</td></tr><tr><td>6"</td><td>4.5"</td><td>ST6316</td><td>ST6316-B3</td></tr><tr><td>9"</td><td>7.5"</td><td>ST9316</td><td>ST9316-B3</td></tr></table> <div>More Thermowells on pages 27 and 34-37</div> <div>EC = Electrical Connection MP = Max. Pointer SG = Tempered Glass PY = Plastic Crystal</div>	Stem Length	"U" Dim.	1/4" Element	3/8" Element	4"	2.5"	ST4316	ST4316-B3	6"	4.5"	ST6316	ST6316-B3	9"	7.5"	ST9316	ST9316-B3
Stem Length	"U" Dim.	1/4" Element	3/8" Element																	
4"	2.5"	ST4316	ST4316-B3																	
6"	4.5"	ST6316	ST6316-B3																	
9"	7.5"	ST9316	ST9316-B3																	



*dimensions in inches

Liquid-In-Glass Industrial Thermometer

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



Made in the USA

FEATURES / BENEFITS

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

SPECIFICATIONS

ACCURACY: $\pm 1\%$ 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

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HOW TO ORDER

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

9VS35

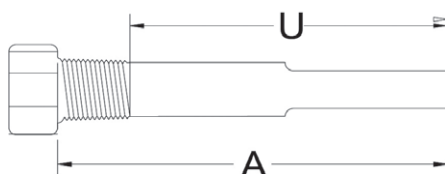
016

SOC35B

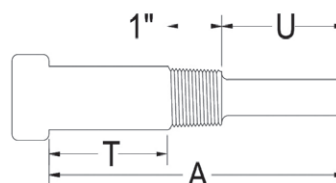
Stem:	Temperature Range/Divisions:	Thermowell:			
9VS35 = 3 1/2" 9VS06 = 6" 9VS09 = 9"	411 = -40°F to 110°F; 2° 118 = -10°F to 180°F; 2° 212 = -20°F to 120°F; 2° 012 = 0°F to 120°F; 1° 016 = 0°F to 160°F; 2° 318 = 30°F to 180°F; 2° 324 = 30°F to 240°F; 2° 330 = 30°F to 300°F; 2°	"A" Stem Length	"U" Insertion Length	"T" Extension Length	
		Brass:			
		Standard:			
		SOC35B	3 1/2"	2 1/2"	--
		SOC06B	6"	5"	--
		SOC09B	9"	8"	--
		Extension Neck:			
		SEN06B	6"	2 1/2"	2 1/2"
		SEN09B	9"	5 1/2"	2 1/2"
		304SS:			
		Standard:			
		SOC35S	3 1/2"	2 1/2"	--
		SOC06S	6"	5"	--
		SOC09S	9"	8"	--
		Extension Neck:			
		SEN06S	6"	2 1/2"	2 1/2"
SEN09S	9"	5 1/2"	2 1/2"		

Separable Sockets (Thermowells)

Standard



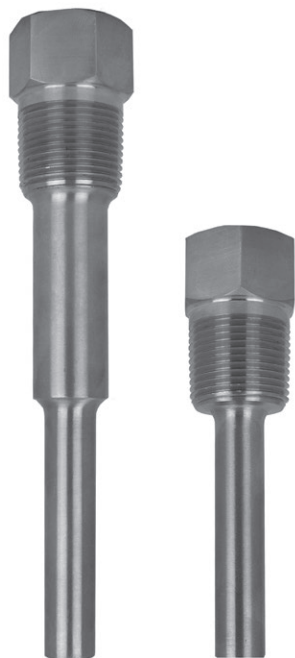
w/ Extension Neck (Lag)



*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.



**Quick
&
Easy**

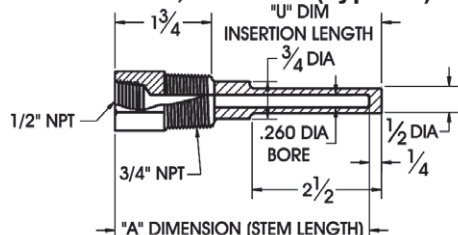
FEATURES / BENEFITS

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

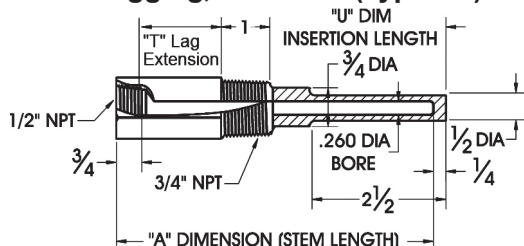
OPTIONS

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

Standard, Threaded (Type ST)



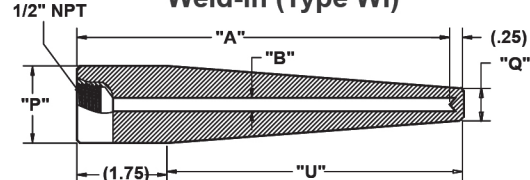
Lagging, Threaded (Type LG)



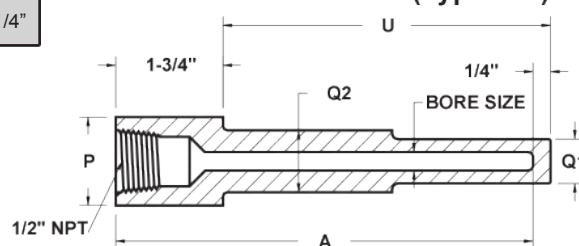
Standard Dimensions:

"A" Stem	Standard "U"	Lagging "U"	Overall 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"

Weld-in (Type WI)

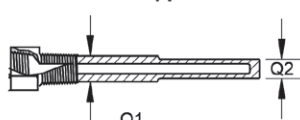


Socket-Weld Well (Type SW)



SHANK STYLES

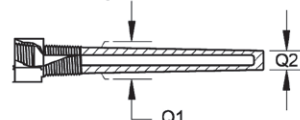
Standard Stepped Shank



Straight Shank



Tapered Shank



*dimensions in inches

Threaded Thermowell

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HOW TO ORDER

Type:	"A" Stem Length:	Material:	Process Connection:	Shank:	Bore Diameter:	Options:
ST = Threaded LG = Threaded Lagging SW = Socket Weld SWL = Socket Weld w/ Lagging WI = Weld-In WIL = Weld-In w/ Lagging	2.5 = 2.5" 4 = 4" 6 = 6" 9 = 9" 12 = 12" 2.0 = 2"	304 = 304SS 316 = 316SS 316L = 316L SS B = Brass C = Carbon Steel (1018) G = Hastalloy B H = Hastalloy C M = Monel/A400 T = Titanium Y = Inconel 600 A = Alloy 105 Carbon Stainless Steel D = Alloy 20 5 = F5 Alloy P = PTFE Coated 316SS N = F22 Alloy Other materials available. Please check with office.	For Threaded Wells " " = 3/4" NPT (std.) 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	" " = Stepped (std.) T = Tapered S = Straight	" " = .260 (std.) B3 = .385 B5 = .515 I3 = 3/4" NPT Internal Thread Other bore and internal thread sizes available.	DP = Dye Penetration Testing EP = External Pressure Test FP = Full Penetration Weld (Flanged Only) IT = Internal Pressure Testing (5 min. test) MT = Material Certificate ML = Mill Certificate MR = NACE MR-01-75 Approval M3 = NACE MR-01-03 Approval HT = Post-Weld Heat Treat PM = Positive Material Identification (PMI) P4 = SS 304 Plug & Chain P6 = SS 316 Plug & Chain PB = Brass Plug & Chain 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.



**Quick
&
Easy**

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

HOW TO ORDER



05

1

R

2

S

-

T

U020

L042

Flange Size:	Flange Rating:	Sealing Face:	Bore Diameter:	Material:	Shank Style:	"U" Dimensions:	Overall Length:
05 = 1/2" 07 = 3/4" 10 = 1" 15 = 1.5" 20 = 2" 25 = 2.5" 30 = 3"	1 = 150# 3 = 300# 6 = 600# 9 = 900 - 1500# 5 = 2500# V = VanStone	R = Raised Face F = Flat Face J = RTJ (Ring Type Joint) Q = Other (Specify)	2 = .260" (For 1/4" Stem) 3 = .385" (For 3/8" Stem) Q = Other (Specify)	S = 316SS F = 304SS C = Carbon Steel D = Carp. 20/Alloy 20 G = Hastalloy B H = Hastalloy C L = F11 Alloy M = Monel Y = Inconel (600) U = Tantalum Lined Z = Zirconium (316 flg) V = 317SS T = Titanium K = 316/Stellite Coating 2 = Alloy 20 5 = F5 Alloy N = F22 Alloy P = PTFE Coated 316SS	T = Tapered S = Straight P = Stepped R = Tapered w/ Support Ring Q = Other	U020 = 2" U040 = 4" U070 = 7" U100 = 10" U130 = 13" U160 = 16" U220 = 22" U225 = 22.5" M250 = 250mm	L042 = 4.25" L062 = 6.25" L092 = 9.25" L122 = 12.25" L152 = 15.25" L182 = 18.25" L242 = 24.25" L247 = 24.75" M307 = 307mm

*dimensions in inches

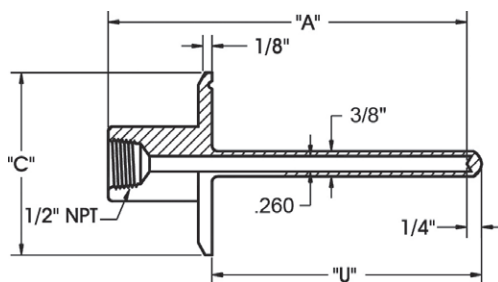
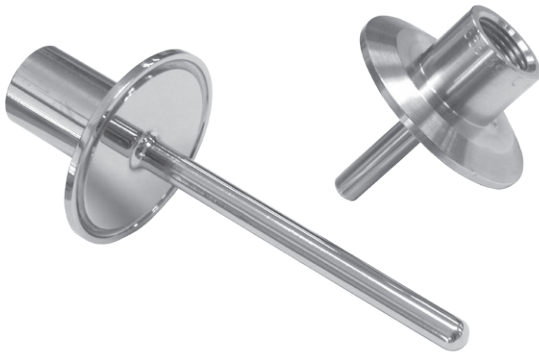
Note: Standard overall length for a given "U" is on the same line across.

Sanitary Thermowell

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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
- Finish Exceeds Ra 32 max. (finer finishes available)
- 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 STF1.5-4 STF1.5-6 STF1.5-9	1 1/2"	2 1/2" 4" 6" 9"	1 5/8" 2 1/2" 4 1/2" 7 1/2"	2.0" (51mm)
STF2-2.5 STF2-4 STF2-6 STF2-9	2"	2 1/2" 4" 6" 9"	1 5/8" 2 1/2" 4 1/2" 7 1/2"	2.5" (63mm)
STF2.5-2.5 STF2.5-4 STF2.5-6 STF2.5-9	2 1/2"	2 1/2" 4" 6" 9"	1 5/8" 2 1/2" 4 1/2" 7 1/2"	3.0" (76mm)
STF3-2.5 STF3-4 STF3-6 STF3-9	3"	2 1/2" 4" 6" 9"	1 5/8" 2 1/2" 4 1/2" 7 1/2"	3.6" (91mm)



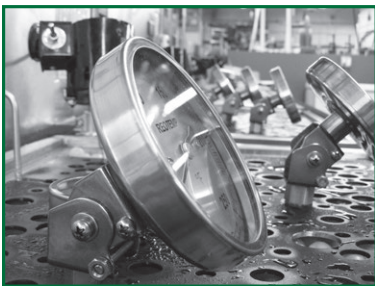
Calibration & Certification

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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



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Fahrenheit

Celsius

Fahrenheit & Celsius

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

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

REOTEMP guarantees our products will perform within the cataloged performance specifications if used within specified parameters. Determination of defect or failure will be made at REOTEMP 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 REOTEMP 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. REOTEMP'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.



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