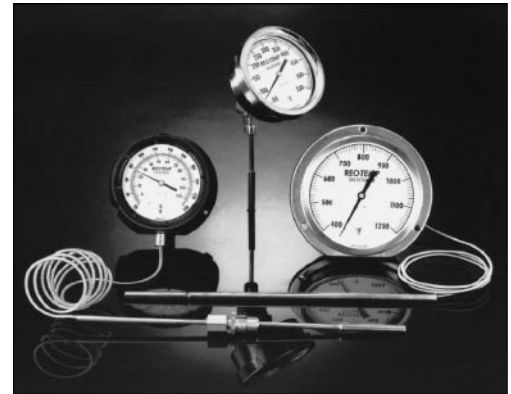


REOTEMP Gas Actuated Thermometers combine advanced gas coil technology with a state-of-the-art adsorbent (Class IV) thermal system, producing a superior temperature measurement instrument that can be fitted to a wide variety of applications.

Features include high accuracy, low ambient error, no head error, and a high degree of over-range protection. The compact (3/8" dia. 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.



## Specifications

**Accuracy:** +/- 1 % of 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.

**Case Materials:** Stainless steel, Phenolic, or Aluminum.

**Case Styles:** Panel Mount, Surface Mount, or Direct (stem) Mount.

**Windows:** Glass is standard. Shatterproof glass and acrylic are optional.

**Pointers:** Slotted adjustable type to permit zero-set adjustments.

**Bulbs:** 316 Stainless Steel, 3/8" dia. x 3" active length. Other diameters and lengths are available.

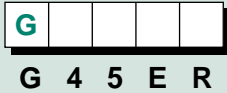
**Process Connections:** Plain bulb; 1/2" NPT sliding union; 1/2" NPT fixed (on All-Angle); or thermowell. *Note: Thermowells should be used whenever the bulb would be exposed to pressure, fluid velocity, or corrosive or abrasive media.*

**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".

# Filled System Thermometers

## Gas Actuated - How to Order

**Table 1**  
Case Size & Style



**Table 2**  
Thermal System & Bulb



**Table 3**  
Capillary Length (feet)



**Table 4**  
Temperature



**Table 5**  
Options



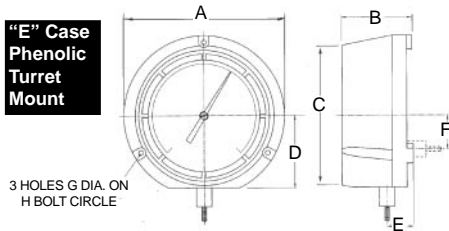
**Table 1-Case Style**

Wall Mount ("E" or "K" case)

CASE CODE    CASE DIAMETER    CONNECTION

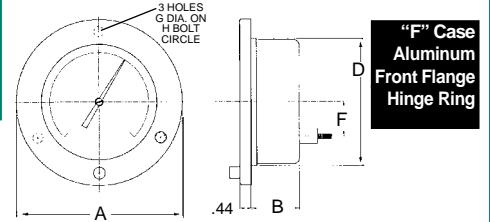
Panel Mount ("F", "S" or "U" case)

**"E" Case**  
Phenolic  
Turret  
Mount



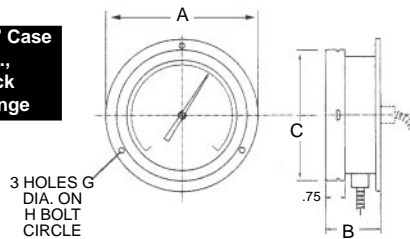
**G45ER**    4 1/2"    REAR  
**G45EL**    4 1/2"    LOWER

**G45FR**    4 1/2"    REAR  
**G60FR**    6"    REAR



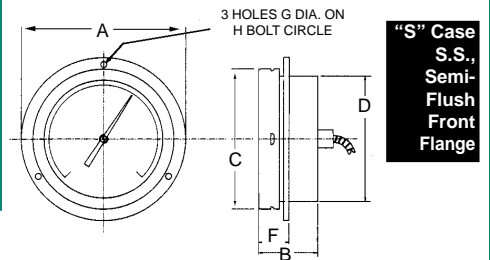
**"F" Case**  
Aluminum  
Front Flange  
Hinge Ring

**"K" Case**  
S.S.,  
Back  
Flange



**G45KR**    4 1/2"    REAR  
**G45KL**    4 1/2"    LOWER  
**G60KR**    6"    REAR  
**G60KL**    6"    LOWER

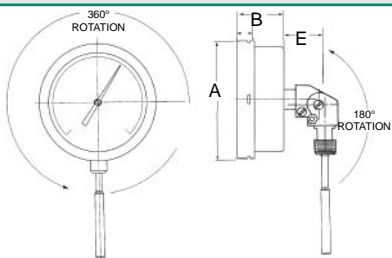
**G45SR**    4 1/2"    REAR  
**G60SR**    6"    REAR



**"S" Case**  
S.S.,  
Semi-Flush  
Front Flange

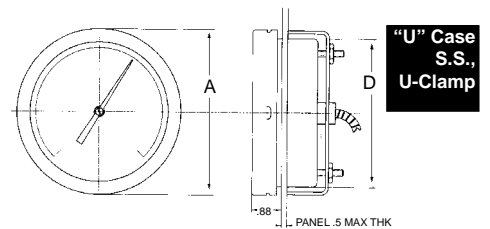
Direct Mount ("D" case)

**"D" Case**  
S.S.,  
All-Angle  
Direct  
Mount



**G45DA**    4 1/2"    ADJUST  
**G60DA**    6"    ADJUST

**G45UR**    4 1/2"    REAR  
**G60UR**    6"    REAR



**"U" Case**  
S.S.,  
U-Clamp

**Case Dimensions**

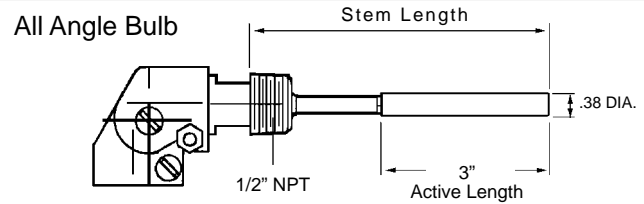
Case Size	Case	Type	A	B	C	D	E	F	G	H
4 1/2"	"E"	Turret Phenolic	5.83	2.56	5.08	2.62	1.0	.20	.24	5.39
4 1/2"	"F"	Front Flange	6.31	1.63	-	4.88	-	1.35	.19	5.38
4 1/2"	"K"	Back Flange	5.88	2.15	5.04	-	-	-	0.22	5.38
4 1/2"	"S"	Semi-Flush	5.88	2.15	5.04	4.51	-	1.00	0.22	5.38
4 1/2"	"D"	All Angle	5.04	2.00	-	-	1.70	-	-	-
4 1/2"	"U"	U-Clamp	5.04	-	-	4.51	-	-	-	-
6"	"F"	Front Flange	7.87	1.59	-	6.34	-	1.75	0.19	6.69
6"	"K"	Back Flange	7.50	2.15	6.38	-	-	-	0.25	6.84
6"	"S"	Semi-Flush	7.50	2.15	6.38	5.88	-	1.00	0.25	6.84
6"	"D"	All Angle	6.38	2.15	-	-	1.70	-	-	-
6"	"U"	U-Clamp	6.38	-	-	5.88	-	-	-	-

**REOTEMP INSTRUMENT CORPORATION**

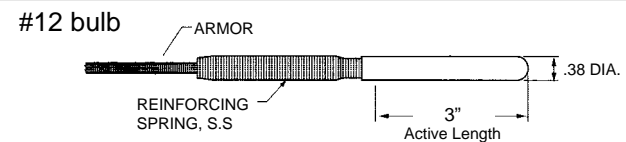
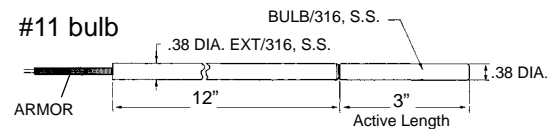
Telephone: (800) 648-7737 FAX (858) 784-0720 • [sales@reotemp.com](mailto:sales@reotemp.com) • [www.reotemp.com](http://www.reotemp.com)

**Table 2-Thermal Systems** (all bulbs & capillaries are 316 SS)

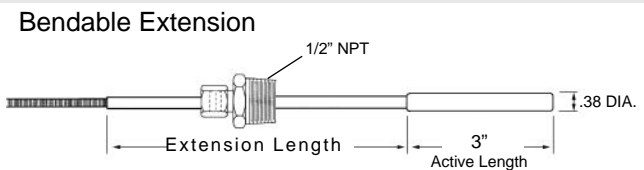
CODE	DESCRIPTION
<b>All Angle Direct Mount with 1/2" NPT (with "D" case only)</b>	
<b>04</b>	4" stem x 3/8" diameter
<b>06</b>	6" stem x 3/8" diameter
<b>09</b>	9" stem x 3/8" diameter
<b>0X</b>	12" or longer stem x 3/8" dia. - specify stem length <b>EXAMPLE: G45DA - 0X - 12" FB</b>



<b>Plain Bulbs</b>	
<b>11</b>	Plain bulb, 3/8" x 3" active, + 12" rigid extension
<b>12</b>	Plain bulb, 3/8" x 3" active



<b>Sliding 1/2" NPT on Bendable Extension</b>	
<b>87</b>	3/8" x 3" active, 12" bendable extension
<b>88</b>	3/8" x 3" active, 18" bendable extension
<b>8X</b>	3/8" x 3" active, over 18" bendable (Specify)



**Table 3-Capillary Length**

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

**L05** = 5 feet      **L10** = 10 feet      **L15** = 15 feet...etc.

Note: Stainless steel spring armor is standard protection on all capillary. Capillary over 40 feet requires XSI Spiral Interlock Armor option.

**Table 4-Temperature Ranges**

CODE	°F RANGES	DIV.
<b>FB</b>	-320/100°F	5°
<b>FE</b>	-120/120° F	2°
<b>FG</b>	-40/180°F	2°
<b>FH</b>	0/120°F	1°
<b>FJ</b>	60/120°F	1°
<b>FL</b>	20/240°F	2°
<b>FN</b>	0/300°F	5°
<b>FP</b>	50/550°F	5°
<b>FR</b>	50/750°F	5°
<b>FS</b>	200/1000°F	10°
<b>FT</b>	400/1200°F	10°

CODE	°F & °C RANGES	DIV.
<b>DB</b>	-320/100°F / -200/40°C	5°/2°
<b>DE</b>	-120/120°F / -85/50°C	2°/1°
<b>DG</b>	-40/180°F / -40/80°C	2°/2°
<b>DH</b>	0/120°F / -15/50°C	1°/1°
<b>DJ</b>	60/120°F / 15/5°0C	1°/1/2°
<b>DL</b>	20/240°F / -5/110°C	2°/1°
<b>DN</b>	0/300°F / -10/150°C	5°/1°
<b>DP</b>	50/550°F / 10/290°C	5°/5°
<b>DR</b>	50/750°F / 0/400°C	5°/5°
<b>DT</b>	400/1200°F / 200/650°C	10°/5°

Note: °C Ranges available on request

# Filled System Thermometers

## Gas Actuated

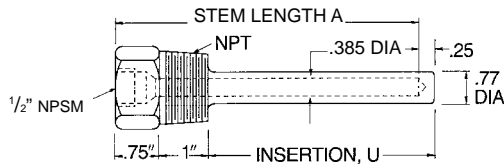
**Table 5 - Accessories & Options**

Code	Description
<b>XAW</b>	Acrylic Window (4 1/2" Cases only; not available in "F" Case).
<b>XSG</b>	Safety Glass Window (4 1/2" Cases only; not available in "F" Case).
<b>XFR</b>	Flush Mounting Ring for "E" Case.
<b>XBF</b>	1/2" NPT Fitting for #11 Bulb - Fits on Bulb or extension.
<b>XCF</b>	1/2" NPT Fitting - Fastens on spiral interlock armor (requires XSI option).
<b>XSI</b>	Spiral Interlock Armor (required over 40 feet).
<b>XVD</b>	Vibration Dampening feature (dampens vibration - available in all rear connected models).
<b>XTW</b>	Thermowell (see thermowell table below for order codes).

### Thermowells for 3/8" dia. Elements

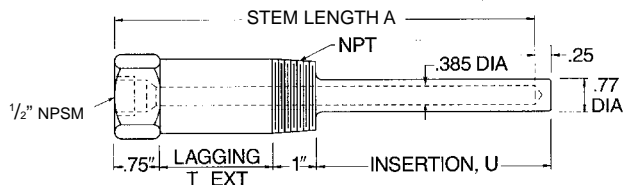
#### Standard Wells

External Thread P	Stem length A"	Insert Length U"	Order Code	
			304 s.s.	316 s.s.
3/4" NPT	4	2 1/2	<b>046</b>	<b>146</b>
	6	4 1/2	<b>047</b>	<b>147</b>
	9	7 1/2	<b>048</b>	<b>148</b>
	12	10 1/2	<b>049</b>	<b>149</b>
	15	13 1/2	<b>050</b>	<b>150</b>
	18	16 1/2	<b>051</b>	<b>151</b>
1" NPT	24	22 1/2	<b>052</b>	<b>152</b>
	4	2 1/2	<b>053</b>	<b>153</b>
	6	4 1/2	<b>054</b>	<b>154</b>
	9	7 1/2	<b>055</b>	<b>155</b>
	12	10 1/2	<b>056</b>	<b>156</b>
	15	13 1/2	<b>057</b>	<b>157</b>
18	16 1/2	<b>058</b>	<b>158</b>	
24	22 1/2	<b>059</b>	<b>159</b>	



#### Lagging Wells

External Thread P	Stem length A"	Insert Length U"	Lag Ext. T"	Order Code	
				304 s.s.	316 s.s.
3/4" NPT	6	2 1/2	2	<b>247</b>	<b>347</b>
	9	4 1/2	3	<b>248</b>	<b>348</b>
	12	7 1/2	3	<b>249</b>	<b>349</b>
	15	10 1/2	3	<b>250</b>	<b>350</b>
	18	13 1/2	3	<b>251</b>	<b>351</b>
	24	16 1/2	3	<b>252</b>	<b>352</b>



**How to Order**

Specify "TW" Plus Order Code

Example: **TW-146**