

ASME B40.3* STANDARD ACCURACIES:
Example #1: Range 0/250°F Grade A

Span = 250-0 = 250°F

Accuracy at 20% of span (50°F) = ±1% = ±2.5°F

Accuracy at 50% of span (125°F) = ±1% = ±2.5°F

Accuracy at 100% of span (250°F) = ±1% = ±2.5°F

Example #2: -40/160°F Grade E

Span = 160-(-40) = 200°F

Accuracy at 20% of span (0°F) = ±3.4% = ±6.8°F

Accuracy at 50% of span (60°F) = ±1% = ±2.0°F

Accuracy at 100% of span (160°F) = ±5% = ±10.0°F

Example #3: Range 50/300°F Grade AA

Span = 300-(-50) = 250°F

Accuracy at 0% of span (50°F) = ±1% = ±2.5°F

Accuracy at 50% of span (175°F) = ±0.5% = ±1.25°F

Accuracy at 70% of span (225°F) = ±0.7% = ±1.75°F

ACCURACY:

Thermometer accuracy is graded as shown in the table below. Adjustment of the case of a thermometer, with an adjustable angle connection, may affect its accuracy. This effect should not exceed 0.5% of span .

*ASME B40.3 may be ordered from:

American Society of Mechanical Engineers
Three Park Avenue
New York, NY 10016

