

# BIMETAL THERMOMETER

## SSKE50-1

### APPLICATIONS

- Liquid & gaseous mediums
- Corrosive environments
- Oil & Gas applications
- Chemical & Petrochemical
- Food & Beverages
- Nuclear power plants

### FEATURES

- All stainless steel welded construction
- Follows EN 13190 / ASME B40.200
- Accuracy as per Class 1
- Dry / Fillable / Liquid filled



BIMETAL THERMOMETER, SSKE50-1

## DESCRIPTION

### General

**Design :** EN 13190  
**Accuracy :**  $\pm 1.0\%$  of full scale  
**Ambient temperature :**  $-20\dots+60^{\circ}\text{C}$   
**Over range limits :** 110% full scale  
**Stem pressure rating :** 25 bar (Without thermowell)  
**Weld joints :** TIG argon arc welding

### Material of construction

**Sensing element :** Coiled bimetal strip  
**Case & Ring material :** AISI 304 SS  
**Stem material :** AISI 316 SS  
**Process connection material :** AISI 316 SS  
**Dial :** Aluminum, black graduation on white background  
**Pointer :** Zero adjustable, aluminum, black powder coated  
[Fix pointer for 50 mm]  
**Gaskets :** Neoprene / NBR  
**Window :** Sheet glass

### Temperature effect

When temperature of the measuring system deviates from reference temperature ( $+20^{\circ}\text{C}$ ):  
max  $\pm 0.4\%$  / 10K of full scale value.

### Standard version

**Dial size :** 50 mm / 63 mm / 80 mm / 100 mm / 150 mm  
**Range :**  $-50$  up to  $600^{\circ}\text{C}$   
**Mounting pattern :** Direct Bottom connection  
**Stem size :** 6.0 mm / 8.0 mm / 9.5 mm / 12 mm  
**Ingress protection :** IP 65  
**Stem length :** 150 mm standard up to 1000 mm  
**Process connection type :** Adjustable connection  
**Process connection :**  $\frac{1}{2}$ " NPT (M) /  $\frac{1}{2}$ " BSP (M)

### Filled versions

#### Glycerin

**Window :** Shatterproof safety glass  
**Dampening liquid :** Glycerin 99.7% / 80% / 60%  
[Max temperature range limit  $100^{\circ}\text{C}$ ]

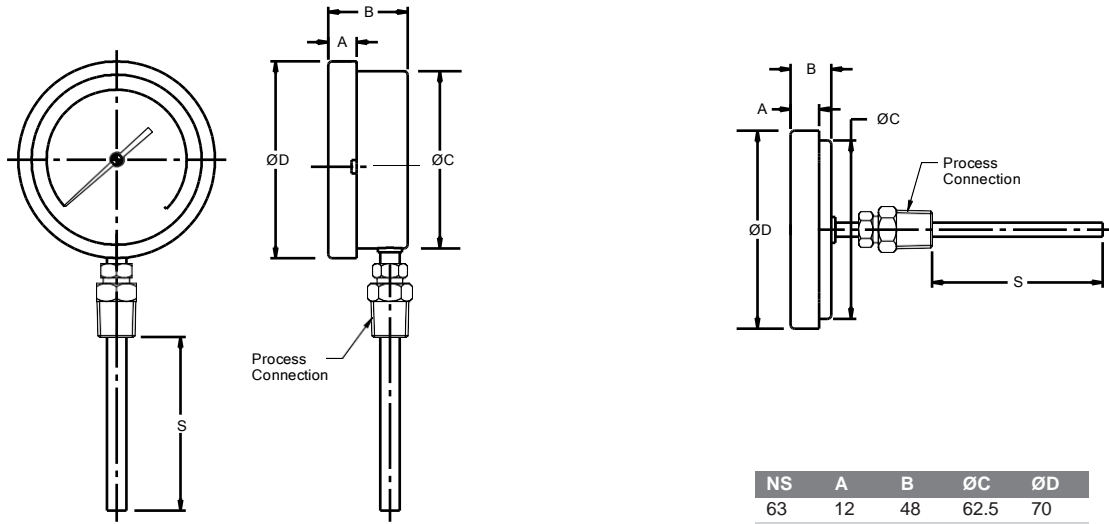
#### Silicon Oil

**Window :** Shatterproof safety glass  
**Gasket, Blow off disc & filling plug :** NBR / Viton  
**Dampening liquid :** Silicon oil DC 200  
[Max temperature range limit  $200^{\circ}\text{C}$ ]

# BIMETAL TEMPERATURE GAUGE

## SSKE50-1

### DIMENSIONAL DRAWING



NS	A	B	ØC	ØD
63	12	48	62.5	70
80	9.5	48	80	89.5
100	12	48	100	111
125	15	48	118.5	129
150	15	48	149	161

#### NOTES

1. Drawing not to scale. All dimensions are in mm.
2. For other mounting details, Panel cut-out dimensions, kindly contact factory.

### ORDERING CODES

#### MODEL

**SSKE50-1** Bimetal thermometer

**SSKE50-1**

#### DIAL SIZE

**D1** 2" / 50 mm      **D2** 2.5" / 63 mm      **D3** 3" / 80 mm  
**D4** 4" / 100 mm      **D6** 6" / 150 mm

**D4**

#### MOUNTING

**M1** Direct bottom      **M5** Direct center back

**M1**

#### CONNECTION

**P4** ¼" NPT (M)      **P20** 3/8" NPT (M)      **P8** ½" NPT (M)  
**P3** ¼" BSP (M)      **P5** 3/8" BSP (M)      **P7** ½" BSP (M)

**P8**

#### CASE FILLING

**F1** Dry      **F2** Dry but fillable      **F3** Glycerin filled  
**F4** Silicon oil filled

**F1**

#### INGRESS PROTECTION

**I1** IP 65      **I6** IP 68

**I1**

#### STEM SIZE

**B6** 6 mm      **B8** 8 mm      **B10** 10 mm  
**B12** 12 mm      **B9** 9.5 mm      **B7** 6.35 mm (¼")

**B6**

#### STEM LENGTH

**XXXX** Please mention stem length in 'mm'

**100**

#### RANGE

**0-100°C** Please mention range required with the measurement unit  
 [SSKE offer in all types of National & International measurement units, e.g. °C, °F, etc. with single or dual scales]

**0-100°C**

#### OPTIONAL EXTRAS

**E33** AISI 316 SS case & ring      **E01** Shatterproof safety glass      **E46** External zero adjustment (> 63 mm)  
**E27** AISI 304 SS tag plate      **E28** AISI 316 SS tag plate      **E31** Custom designed dial  
**E32** Dial tag marking      **E16** 5 - point calibration certificate

**E16/E27**

**Ordering Example : SSKE50-1-D4.M1.P8.F1.I1.B6/100/0-100°C/E16/E27**

**SHREE SAMARTH KRUPA ENGINEERS**

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