

# SCIENTIFIC INSTRUMENT

## Oil Filled Dial Thermometer



AK00018

**Model: SO-100S**  
Rigid Stem Type Dial Thermometer  
(Oil Filled for Vibration Proof and Water Proof Type)

**SPECIFICATIONS:**

Case: SUS 304 High Polished  
Window: Glass  
Dial: White background with black markings  
Bulb: SUS 304  
Case diameter: 110mm (100mm)  
Temp. range: + 50 + 650°C/F

Order specifications required:

- A. Temperature range
- B. Stem length & stem diameter
- C. Connections size

\*Special size available upon requests.

## Dial Thermometer Electric Contact



BM-100SE AK00050  
ST-100SE AK00051

**Model: BM-100SE / ST-100SE**  
Dial Thermometer Electric Contact Type  
(High / Low)

**SPECIFICATIONS:**

Case: SUS 304 High Polished  
Window: Acryl resin  
Bulb: SUS 304  
Contact capacity: AC100/200v-0.3A  
Case diameter: 110mm (100mm)  
Temp. range: - 40 + 50°C till 0 + 650°C

Order specifications required:

- A. Temperature range
- B. Stem length & stem diameter
- C. Connections size

\*Special size available upon requests.

## BI-Metal Thermometer



AK00052

**Model: BM-60S, 70S & 90S**

**BI-Metal Thermometer**  
(Bottom Connection)

**SPECIFICATIONS:**

Indoor / Outdoor use  
Case: SUS 304 / Brass Chrome  
Window: Glass  
Bulb: SUS 304 / 304 / Brass Chrome  
Case diameter: 64mm (60mm)  
80mm (70mm)  
101mm (90mm)  
Temp. range: -40 + 60°C/F till 0 + 550°C/F

Order specifications required:

- A. Temperature range
- B. Stem length & stem diameter
- C. Connections size

\*Special size available upon requests.

## BI-Metal Thermometer Adjustable Angle



AK00053

**Model: SA70S & 90S**

**BI-Metal Thermometer Tilting Type**  
(High / Low)

**SPECIFICATIONS:**

Indoor / Outdoor use  
Case: SUS 304  
Window: Glass  
Bulb: SUS 304  
Case diameter: 101mm (90mm)  
80mm (70mm)  
Temp. range: - 40 + 60°C/F till 0 + 550°C/F

Order specifications required:

- A. Temperature range
- B. Stem length & stem diameter
- C. Connections size

\*Special size available upon requests.

## BI-Metal Thermometer



AK00054

**Model: SK-40S, 60S, 70S & 90S**  
**BI-Metal Thermometer (Black Conn.)**

**SPECIFICATIONS:**

Indoor / Outdoor use  
Case: SUS 304  
Window: Glass  
Bulb: SUS 304  
Case diameter: 45mm (42mm)  
64mm (60mm)  
80mm (70mm)  
101mm (90mm)  
Temp. Range: -40 + 60°C/F till 0 + 550°C/F

Order specifications required:

- A. Temperature range
- B. Stem length & stem diameter
- C. Connections size

\*Special size available upon requests.

### Allinton Engineering & Trading Pte Ltd

Head Office: Block 803, King George's Avenue #01-234 Singapore 200803. Tel: 6296 0679 (10 lines) 6292 7728 Fax: 6297 0024

Branch Office: 21 Tuas Basin Link Singapore 638782 Tel: 6265 1888 (10 lines) Fax: 6265 5623

Web-site: <http://www.allinton.com.sg> E-mail: [allinton@singnet.com.sg](mailto:allinton@singnet.com.sg)

# SCIENTIFIC INSTRUMENT

## V-Line Thermometer



TYPE 174 B  
AK00055

TYPE 175 B  
AK00056

TYPE 176 B  
AK00057

### Castings

Aluminium, V-shaped, completely polished, gold-coloured anodized (or silver coloured upon request). Numerals of reading scale printed on the right side. Printing black-coloured for easy readability. Adjustable to any desired viewing position and locked by brass nut, spanner size 22mm. Angle thermometers (90°) have a grooved adapter piece with set screw. Advantage: When mounting the thermometer, it is not necessary to turn the casting.

### Glass Inserts (Capillaries)

Capillary tube of solid glass, bar-shaped, prismatic (optic enlargement of the column), diameter approx. 6mm, oval opening, with yellow background for mercury and white background for blue fluid column. Calibration is deeply burnt, in black, thus being absolutely resistant. The main graduations, which correspond with the printing on the casing, are especially clearly outlined.

### Capillary Fluid

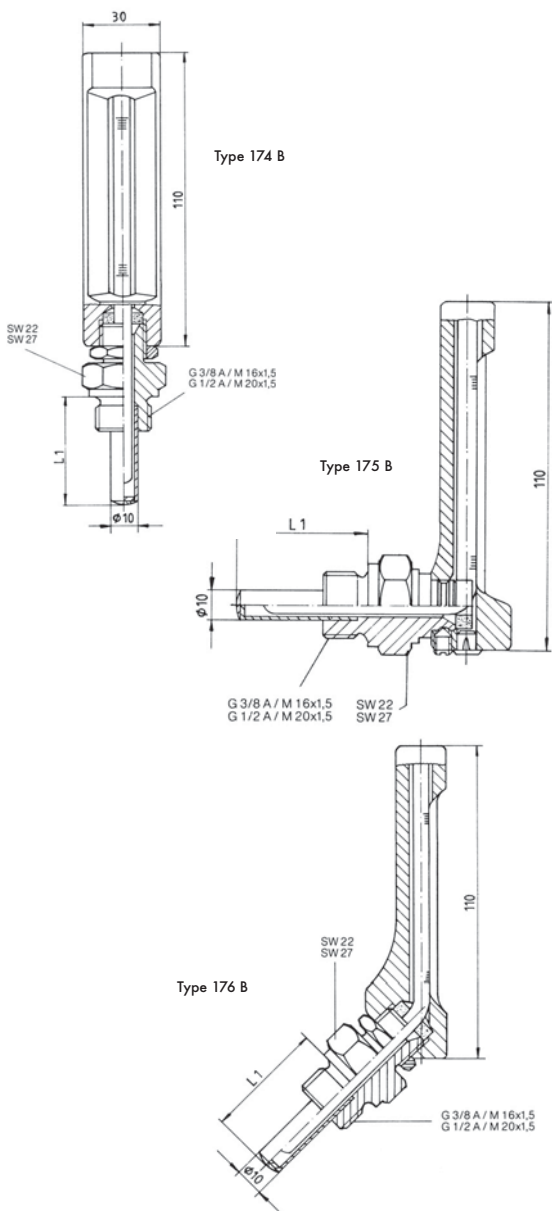
For standard executions from -60° to +200°C, blue fluid and red fluid, respectively, for -60°C (code "F"). For temperatures of more than +200°C, only mercury columns (code "Hg") are possible. Upon request, thermometers can be delivered with mercury filling from -30°C onwards.

### Immersion Tubes (Pockets)

As a standard, manufactured of brass (code "Ms") for temperature up to 300°C, for temperatures of more than 300°C made of steel (code "St"). Seawater resistant alloys are available upon request (special alloy "Ms 76" or CuNi30Fe"). For corrosive alkalis or acids, material 1.4571 (stainless steel) or other resistant kinds of steel are available. With immersion tube type "B", diameter is 10mm, thickness 1mm.

### Accuracy

About 1% of maximum scale value, for thermometers with mercury column. The accuracy of thermometers with an alcoholic fluid meets DIN 16195 requirements and, consequently, corresponds with the requirements for local reading thermometers.



Order Example	174	2	35	1	1	030	2	1	1
Thermometer executive	Type								
Straight	174								
angle 90° C backwards	175								
angle 135° C backwards	176								
Immersion tube type	B	=2							
	Bdr <sup>1</sup>	=6							
Ranges									
	-40 + 60° C =		35						
	0 + 120° C =		12						
	0 + 150° C =		15						
	0 + 200° C =		20						
Division	celsius (°C)				1				
	Celsius + Fahrenheit (°C+F)				2				
Columns (Filling)									
Blue fluid is standard for									
ranges up to +200° C					Fü =	1			
Optional: mercury					Hg +	2			
Immersion Tube length									
l <sub>1</sub> in mm (incl. thread)		30 =	030						
			40 =	040					
			63 =	063					
			75 =	075					
			100 =	100					
			160 =	160					
			250 =	250					
			300 =	300					
Thread connection					G 3/8 A / SW 22 =	1			
					G 1/2 A / SW 27 =	2			
Immersion tube materials									
Brass (hex.nut Ms58/tube special brass Ms76, brazed or MS63									
or up to immersion length l <sub>1</sub> = 63, G1/2 A. available in Ms 58 solid material								1	
Steel (hex.nut) 9SMnPb28K/tube steel St. 35, welded								2	
Stainless steel 1.4571 (hex.nut and tube)								3	
Special brass Ms76 (hex.nut and tube)								4	
CuNi30Fe (hex.nut and tube)								5	
Straight type								1	
Angle type								2	

Immersion tubes of all right-angle thermometers are manufactured with a grooved adapter piece on top, which is installed in the casing and kept in its place by a set screw.

Advantage: Immersion tube can be installed independently of thermometer: After installation, casing can be turned by 360° in any direction

## Allinton Engineering & Trading Pte Ltd

Head Office: Block 803, King George's Avenue #01-234 Singapore 200803. Tel: 6296 0679 (10 lines) 6292 7728 Fax: 6297 0024

Branch Office: 21 Tuas Basin Link Singapore 638782 Tel: 6265 1888 (10 lines) Fax: 6265 5623

Web-site: <http://www.allinton.com.sg> E-mail: [allinton@singnet.com.sg](mailto:allinton@singnet.com.sg)

# SCIENTIFIC INSTRUMENT



AK00058

## Engine Thermometer

### SPECIFICATIONS:

Measuring range: 0 to 100°C  
 Model: G / I & G  
 Connection: 3/8" BSP & 1/2" BSP  
 Stem Length: 35mm, 50mm, 75mm

Thermometers generally used on cooling water system.



AK00059

## Tank Thermometer

Model: Measuring Range  
 T-35 (Copper) -10 to 110°C & F  
 T (Brass Chrome) -10 to 110°C & F  
 S (Stainless st) 0 to 150°C + F

Thermometers generally used in cargo tanks for the measurement of oil or water temperature.



AK00060

## Engine Thermometer

### SPECIFICATIONS:

Model: YS (Short Body), YL (Long Body), YXL (Extended Body)  
 Stem: 60mm, 70mm, 110mm  
 Range: 0 to 600°C  
 Connection: 1/2" BSP

Thermometers used for measurement of exhaust temperature, especially in yanmar engines.

## Glass Thermometer

### Solid Stem Stirring Thermometers

Extra strength bulb. Non-roll cap with ring top - Protective plastic case. Packed in tens.

305mm. Mercury Filled. 76mm Immersion

Model	Range	Division
AK00061	- 10 / 50C	0.5
	- 10 / 110C	0.5
	- 10 / 110C	1.0
	- 10 / 150C	1.0
	- 10 / 250C	1.0
	- 10 / 360C	2.0
	- 10 / 400C	2.0
	0 / 240F	1.0

305mm. Red Spirit Filled. 76mm Immersion

Model	Range	Division
AK00062	- 10 / 50C	0.5
	- 10 / 110C	1.0
	- 10 / 150C	1.0
	0 / 240F	1.0
	- 10 / 110C	1.0
	0 / 240F	(2.0F)

152mm. Mercury Filled. Total Immersion

Model	Range	Division	Length mm
AK00063	- 10 / 50C	1.0	
	- 10 / 110C	1.0	
	- 10 / 250C	5.0	
	- 10 / 360C	5.0	

### General Purpose Subdivided Thermometers

White back glass. Mercury filled. Total immersion

Model	Range	Division	Length mm
AK00064	-5 / 50C	0.2	305
	-5 / 50C	0.2	375
	-5 / 105C	0.2	375
	-5 / 50C	0.1	375
	-5 / 105C	0.1	470

### High Range Thermometer

Borosilicate glass. Mercury filled. 76mm immersion

0 / 600C 0.2

Other enclosed scale patterns available to order



AK00065

## Cabin Thermometer with wooden Base

### SPECIFICATIONS:

Measuring range: -30 to 50°C  
 Scale graduation: 1°C  
 Dimensions: (W) 42 x (H) 250 x (T) 9mm

Thermometer used for measuring room/ ambient temperature.

## Cold Room Thermometer (Plastic Case) with Hook

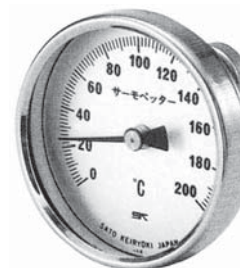
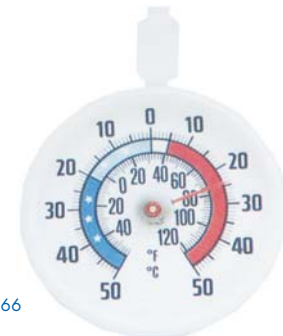
### SPECIFICATIONS:

Measuring range: -50 to 50°C  
 50 to 120°F  
 Scale graduation: 1°C and 2°F

Dimensions: 70mm dia  
 Sensors: Coil type

Thermometer used for measuring temperature in cold rooms and/ or refrigerators.

AK00066



AK00067

## Model - SKM Surface Magnetic Thermometer

### SPECIFICATIONS:

Case Dimensions: 64mm Ø Dia x 16mm (T)  
 Cover Material: SUS 304  
 Sensors Dimensions: Coil type  
 Temp. range: -40 to 60°C + F 0 to 120°C + F  
 0 to 160°C + F 0 to 200°C + F  
 0 to 300°C + F 0 to 400°C + F