## **Temperature calibrator TP 17450**

TP Basic // Dry block // Room temperature...450 °C // RT...842 °F





#### **Highlights**

- · Very easy operation with 4-button control and integrated reference temperature sensor
- · Low weight and stable handle for easy transport
- Optional accessory: Transport case with or without trolley
- Qualified for SIKA Gold Service
- Particularly suitable for the simultaneous calibration of many devices under test in the medium temperature range up to 450 °C (842 °F)

#### **TP Basic**

The temperature calibrators of the TP Basic series are characterised by their **efficiency and portability**. The series consists of dry block calibrators covering a wide temperature range and are used on site, e.g. in **marine applications**.

The easy operation, the integrated internal reference temperature sensor and the dry block calibration function ensure an **extremely easy calibration process**.

#### **SIKA temperature calibrators**

Temperature calibrators are used for the verification of the functionality and calibration of temperature measuring devices and temperature sensors. As the sole German manufacturer of these devices, we develop and produce our "Made in Germany" temperature calibrators with a special focus on long-term reliability and utmost accuracy in combination with easy operation. We can rely on more than 40 years of experience in doing this: SIKA's first dry block temperature calibrator was launched all the way back in 1980.

Every SIKA temperature calibrator is meticulously tested for accuracy and stability. This is attested by our standard calibration certificate, which we issue with every temperature calibrator, or by means of an optional DAkkS calibration certificate [German accreditation body]. This is to guarantee that you receive a perfect product which can be traced back to national and international temperature measurement standards.

SIKA Dr. Siebert & Kühn GmbH & Co. KG Struthweg 7-9 // 34260 Kaufungen // Germany www.sika.net

### **Features**

#### **Easy operation**

- The TP 17450 can be operated with only four buttons: Two arrow buttons for setting the target temperature, one button for confirmation and one return button
- Thus, temperatures can be set as easily as, for example, in the air conditioning system in your car
- Any operational errors can be nearly excluded. You do not need any specifically trained staff or time-consuming briefings



#### **SIKA Gold Service**

SIKA Gold Service provides a comprehensive service package for the regular recalibration of your temperature calibrator. You will benefit from exclusive savings and discounts as well as special promotions reserved to SIKA Gold Service members.

- You will save 33% in the recalibration of your temperature calibrator
- You will receive a 10% discount on any repairs that may become necessary
- You will receive preferential invitations to product presentations, symposia, practice days and exclusive training offers





### **Technical data**

Temperature range	Room temperature450 °C	Room temperature842 °F		
Dimension of the calibration insert	Ø 60 x 150 mm (calibration insert easily exchangeable)			
Dry block	2 00 X 100 Hill (Gallaration Hoert ed	exonicing cable)		
Display accuracy	±0.6 °C	±1.08 °F		
Temperature stability	±0.1 °C	±0.18 °F		
Resolution of the temperature display	0.1 °C	0.1 °F		
Reference temperature sensor	internal, fixed installation			
Dimensions				
→ Width	150 mm			
→ Height	330 + 70 mm (Handle)			
→ Depth	270 mm			
Weight	Approx. 7.5 kg			
Power supply	230240 VAC, 50 / 60 Hz			
Power consumption	Approx. 2000 W			
Display				
Display	2-line, 4-digit digital display red / green, unit °C / °F			
Approvals				
	C E ROHS REAC			

SIKA Dr. Siebert & Kühn GmbH & Co. KG
Struthweg 7-9 // 34260 Kaufungen // Germany
www.sika.net

02/2022 // V1.0 2 // 4

# **Article numbers**

To order a complete calibrator, you need two article numbers:

- 1. Calibrator
- 2. Calibration insert

In addition, depending on your individual calibration requirements, you can order additional calibration inserts, necessary certificates and other accessories.

1. Calibrator					
Temperature range		Function	Calibration insert [mm]	Power supply	Article number
Room temperature450 °C	RT842 °F	Dry block	Ø 60 x 150	230 V	EP174500601500

2. Calibration insert				
Bore holes [mm]	Function	Calibration insert [mm]	Material	Article number
1x Ø 3.5, 1x Ø 6.5, 1x Ø 8.5, 1x Ø 10.5	Dry block	Ø 60 x 150	Brass	EZ15060B04MS01
$2x \varnothing 3.5$ , $2x \varnothing 4.5$ , $2x \varnothing 6.5$ , $2x \varnothing 8.5$ , $2x 10.5$	Dry block	Ø 60 x 150	Brass	EZ15060D10MS80
3x Ø 3.5, 3x Ø 6.5, 3x Ø 8.5, 3x 10.5	Dry block	Ø 60 x 150	Brass	EZ15060D12MS82
2x Ø 3.5, 1x Ø 4.5, 1x Ø 5.0, 1x 5.5, 1x Ø 6.5, 1x Ø 8.5, 1x Ø 9.0, 1x Ø 9.5, 1x Ø 10.5	Dry block	Ø 60 x 150	Brass	EZ15060D10MS84
Without bore holes	Dry block	Ø 60 x 150	Brass	EZ15060B00MS06
Calibration insert incl. 1 bore hole of choice	Dry block	Ø 60 x 150	Brass	Please indicate bore
Each additional bore hole	Dry block	Ø 60 x 150	Brass	holes in the order

3. Calibration certificate - Select your calibration certificates as needed  Each calibrator is already delivered with a standard calibration certificate (6 test points).	Article number
SIKA works calibration certificate (similar to standard calibration certificate + marking on the calibrator)	EKTPWP1FKT
DAkkS calibration certificate (3 test points + measurement uncertainty determination)	EKTPDAKKS1FKT
Each additional test point DAkkS calibration certificate	EKTPDAKKSZUSP
SIKA Gold Service works calibration certificate	EKTPGOLDWP
SIKA Gold Service DAkkS	EKTPGOLDDAKKS

4. Accessories	Article number
Transport case without trolley	EZTPKOFFER20
Transport case with trolley	EZTPKOFFER20TG
Transport bag	XE2193

SIKA Dr. Siebert & Kühn GmbH & Co. KG
Struthweg 7-9 // 34260 Kaufungen // Germany
www.sika.net

Technical datasheet

02/2022 // V1.0 3 // 4

## **Overview of SIKA temperature calibrators**

#### Our series: Basic. Solid. Premium.

- Dry block calibrators of the TP Basic series impress with their uncomplicated operation and high cost-effectiveness.
   They are particularly suitable for use on ships or in industrial applications.
- Equipped with a PC interface, the dry block calibrators and calibration baths of the TP Solid series cover a wide temperature range with high accuracy.
- For the highest demands on accuracy and flexibility:
   The dry-block and multi-function temperature calibrators of the TP Premium series represent the pinnacle of our technical development. Equipped with an integrated touch screen, a PC interface, an external reference sensor and integrated measuring instrument, this series offers extreme accuracies for all calibration tasks.

Temperature range (RT=Room temperature)	Function	Accuracy		Features	Block dimensions [Ø mm x depth mm]	Туре
-55 °C 200 °C -67 °F 392 °F	Dry block	±0.4 °C	±0.72 °F	TP Basic	28 x 150	TP 17200
	Dry block	±0.2 °C	±0.36 °F	TP Solid	28 x 150	TP 17200S
	Dry block	±0.2 °C	±0.36 °F	TP Premium	28 x 150	TP 37200E.2
-35 °C 155 °C -31 °F 311 °F	Calibration bath	±0.1 °C	±0.18 °F	TP Solid	60 x 170	TP M165S
	Dry block	±1 °C	±1.80 °F	TP Basic	28 x 150	TP 17165M
	Dry block	±0.4 °C	±0.72 °F	TP Basic	28 x 150	TP 17165
	Dry block	±0.2 °C	±0.36 °F	TP Solid	28 x 150	TP 17165S
	Dry block	±0.2 °C	±0.36 °F	TP Premium	28 x 150	TP 37165E.2
-35 °C 165 °C	Dry block ext.	±0.2 °C	±0.36 °F			
-31 °F 329 °F	Dry block int.	±0.3 °C	±0.54 °F			
	Air Shield Insert	±0.099 °C	±0.1782 °F	TP Premium	60 x 170	TP 3M165E.2
	Calibration bath	±0.1 °C	±0.18 °F	TI TICITIIIIII	00 x 170	11 31111032.2
	Infrared	±0.5 °C	±0.9 °F			
	Surface	±1 °C	±1.88 °F			
-30 °C 165 °C	Dry block	±0.4 °C	±0.72 °F	TP Basic	60 x 150	TP 17166
-22 °F 329 °F	Dry block	±0.2 °C	±0.36 °F	TP Solid	60 x 150	TP 17166S
-10 °C 100 °C 14 °F 212 °F	Dry block	±0.05 °C	±0.09 °F	TP Solid	7 x 6.5 x 150	TP 17Zero
RT 200 °C RT 392 °F	Dry block	±1 °C	±1.80 °F	TP Basic	18 x 150	TP 18200E
	Calibration bath	±0.2 °C	±0.36 °F	TP Solid	60 x 170	TP M255S
RT 255 °C RT 491 °F	Dry block ext. Dry block int. Air Shield Insert Calibration bath, tub insert, ext. Calibration bath, tub insert, int. Calibration bath, direct filling, ext. Calibration bath, direct filling, int. Infrared Surface	±0.25 °C ±0.5 °C ±0.08 °C ±0.35 °C ±0.53 °C ±0.18 °C ±0.46 °C ±0.5 °C ±1 °C	±0.45 °F ±0.9 °F ±0.144 °F ±0.63 °F ±0.954 °F ±0.324 °F ±0.828 °F ±0.9 °F ±1.8 °F	TP Premium	60 x 170	TP 3M255E.2
	Dry block	±0.6 °C	±1.08 °F	TP Basic	60 x 150	TP 17450
	Dry block	±0.3 °C	±0.54 °F	TP Solid	60 x 150	TP 17450S
RT 450 °C RT 842 °F	Dry block Air Shield Insert Infrared Surface	±0.3 °C ±0.2 °C ±0.5 °C ±1 °C	±0.54 °F ±0.36 °F ±0.9 °F ±1.8 °F	TP Premium	60 x 150	TP 37450E.2
RT 650 °C RT 1202 °F	Dry block	±1 °C	±1.8 °F	TP Basic	28 x 150	TP 17650M
	Dry block	±0.8 °C	±1.44 °F	TP Basic	28 x 150	TP 17650
	Dry block	±0.4 °C	±0.72 °F	TP Solid	28 x 150	TP 17650S
RT 700 °C	Dry block	±0.43 °C	±0.744 °F			
RT 1292 °F	Air Shield Insert	±0.27 °C	±0.486 °F	TP Premium	29 x 150	TP 37700E.2
RT 850 °C RT 1562 °F	Dry block	±1 °C	±1.8 °F	TP Basic	18 x 100	TP 18850E
400 °C 1300 °C 752 °F 2372 °F	Dry block	±2 °C	±3.6 °F	TP Solid	28 x 200	TP 281300E

Subject to technical modifications and errors

