Temperature & Pressure

CALIBRATION SOLUTIONS

www.sika.net

Wherever you measure

- we are there!

Product advantages & typical applications

Technical data






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Why calibrate?

Temperature and pressure are among the most measured variables in technology, which is why the interest in exact and reliable measurement is particularly high.
But even the best sensor or transducer changes its characteristic properties through a wide variety of influences. This drift cannot be prevented and the display values are incorrect. These deviations can be determined by calibration and documented with a certificate. All sensors that have a significant influence on the process should be calibrated before commissioning. Often these calibrations are also specified by guidelines and standards.

Our products in the field of calibration technology have been developed and manufactured with regard to long-term reliability, highest quality and according to DAkkS requirements. Thanks to our accredited calibration laboratory, we can supplement our extensive product range with an extensive range of services.

You benefit

from our experience as manufacturer

Innovation & Tradition - The key to success

SIKA has been an integral part of calibration technology since the early 1980s. Together with PTB we have developed the guideline R5-4 for the calibration of temperature dry well calibrators. As a family business still managed by the 4th generation, we combine tradition and innovation and stand for forward-thinking trends in calibration technology.

- Innovative testing and production technologies
- Solution-oriented, responsive design department
- Continuously growing and powerful development department
- Continuous process optimization (e.g. DIN EN ISO 9001, KaiZen)
- Further development of market-driven series

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OEM solutions

The right product for your assortment

There are only a few limits to the adaptation of our products. By detailed arrangements our calibrators can be adapted technically as well as optically to your wishes. This creates individual measuring instruments that match your corporate design, meet your technical requirements and fit seamlessly into your product range.

Modifications

- Temperature and pressure ranges
- Special calibration sleeves
- Programmings
- Software
- Language versions (all languages)
- Individual interface configuration
- Menu operation
- Shape / Colour

Further adaptations on request

Many well-known manufacturers worldwide rely on SIKA calibration technology „Made in Germany". Benefit from our know-how and let the „SIKA heart" beat in your products.

On-site expertise

In service for you worldwide

Technical sales in the field*

Personal advice on site is the foundation for a successful cooperation. That is why we have high demands on our technical sales staff operating throughout Germany: They have a technical background, comprehensive product knowledge and, with their many years of experience, stand for competent advice and extensive application knowledge.

Their proximity to customers and markets enables us to offer solutions tailored to your individual requirements. On the basis of extensive product training and the regular exchange of experience with product specialists in the office, we are able to guarantee the high quality of advice provided by our field service.

Service

- Demonstration devices and individual on-site consultation
- Recalibration and adjustment
- Certificates
- Repair and maintenance
- Free disposal of old equipment

* Available in Germany, Austria and Switzerland

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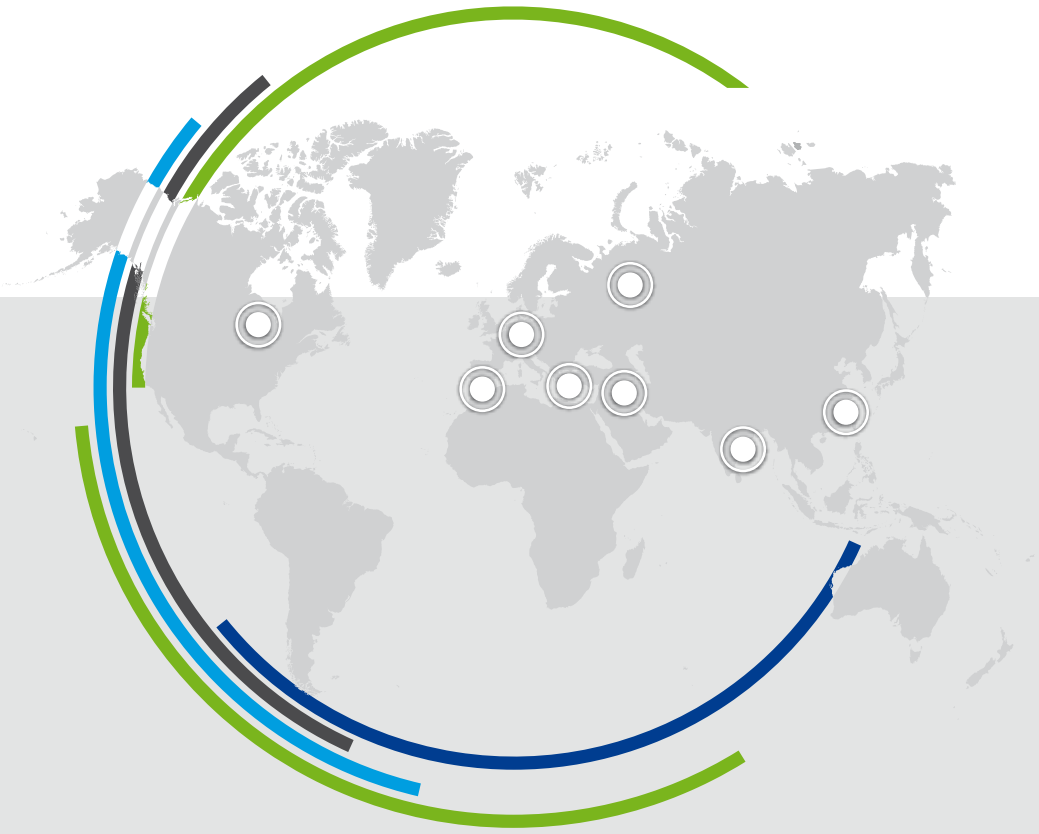
> *With our extensive network of sales partners all over the world, we currently achieve an export quota of around 55 %.*

Worldwide network of sales partners

Thanks to the intensive work of our business development, our export quota has steadily increased in recent years. The insights gained into regional markets have also had a positive influence on the development of new products.

Our steadily growing dealer network enables us to offer our customers abroad a high-quality local service: Customers in the marine industry can have their calibrators recalibrated in specially set up service points. Specially certified „Calibration Service Partners" offer comprehensive service for industrial customers.

Regular workshops, training and further education at our headquarters in Kaufungen ensure a regular exchange of market-relevant know-how and knowledge of the latest product developments.



Calibration means

reliability for you and your customers

You calibrate on site - with SIKA

- The use of portable devices enables the thermometer check directly in the plant. This reduces downtime to a minimum and also eliminates the transport risk associated with laboratory dispatch.
- The on-site solution also offers a control advantage: It determines not only the measurement error from the sensor, but also that of the entire measurement chain.

> *We will be pleased to advise you on the selection of the right instrument and on the safe performance of calibration tasks in practice.*

Increasing demands on measuring equipment

In addition to numerous guidelines and legal regulations (HACCP, FDA, EHEDG, ATEX,...), internal specifications and certifications (ISO, TÜV,...) often play a central role in every company in complying with precise measurement values. Only regularly calibrated sensors guarantee their accuracy and thus ensure long-term operational reliability. No matter whether stationary in the calibration laboratory or in the field applications directly at the measuring point, SIKA calibrators support you.

- Compliance with limit values
- Avoidance of failures and downtimes
- Minimize maintenance times
- Quality assurance and control
- Traceability and documentation
- Audit security

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Manufacturer-independent recalibration and maintenance of your test equipment with all our experience from over 115 years as a manufacturer for measuring instruments.

We calibrate for you - recalibration at SIKA

We recalibrate your test equipment according to the DAkkS standard.

Temperature laboratory

- Accredited for the temperature range of -30...1300 °C.
- In this measuring range thermocouples, indicating temperature measuring and testing devices as well as dry-block calibrators can be calibrated.
- Resistance thermometers can be calibrated in the range of -30...960 °C.

Pressure laboratory

- The calibration laboratory for the measured variables "absolute pressure and positive pressure" for the calibration of indicating analogue and digital pressure measuring instruments as well as pressure sensors with electrical output signal such as 0...10 V or 4...20 mA.
- Calibration is performed as a comparison measurement against a DAkkS reference standard piston pressure gauge with defined pressures in the range of 1...1200 bar.
- The smallest possible measurement uncertainties are 0.7 mbar, depending on the measuring range.


DAkkS
Deutsche Akkreditierungsstelle

Deutsche Akkreditierungsstelle GmbH

Beliehene gemäß § 8 Absatz 1 AkkStelleG i.V.m. § 1 Absatz 1 AkkStelleGBV
Unterzeichnerin der Multilateralen Abkommen
von EA, ILAC und IAF zur gegenseitigen Anerkennung

Akkreditierung

Die Deutsche Akkreditierungsstelle GmbH bestätigt hiermit, dass das Kalibrierlaboratorium

SIKA Dr. Siebert & Kühn GmbH & Co. KG
Struthweg 7-9, 34260 Kaufungen

die Kompetenz nach DIN EN ISO/IEC 17025:2005 besitzt, Kalibrierungen in folgenden Bereichen durchzuführen:

Mechanische Messgrößen
- Druck

Thermodynamische Messgrößen
Temperaturmessgrößen
- Widerstandsthermometer
- Thermopaare, Thermoelemente
- Temperatur-Blockkalibratoren
- direktanzeigende Thermometer
- Temperaturanzeigegeräte und -simulatoren

Elektrische Messgrößen
Gleichstrom- und Niederfrequenzmessgrößen
- Gleichspannung
- Gleichstromstärke
- Gleichstromwiderstand

Registration number
D-K-19636-01-00

Laboratory for electrical quantities

- Resistors and resistance measuring instruments can be calibrated in the range of 0...2 kΩ. Depending on the resistance value, the smallest possible measurement uncertainty is 0.1 mΩ
- DC voltage measuring devices and transmitters can be calibrated in the range of 0...20 VDC with the smallest possible measurement uncertainty from 2 µV onwards.
- DC testing and measuring devices for standard signals (0)4...20 mA can be calibrated with the smallest possible measurement uncertainty starting at 0.05 µA

Temperature calibrators

Multifunction

→ Easy switching between
- Dry block function
- Microbath function
- Infrared function
- Surface function

Your benefit:
→ Universal application
→ One multifunction calibrator can replace up to four standard instruments

Modern operating concept

→ Intuitive operation of calibration functions
→ Easy management of calibration data on the calibrator
→ High robustness

Your benefit:
→ Quick calibrator setup
→ All functions at a glance

Practical accessories e.g. barcode reader

→ Fast database access
→ Simplification of data search

Your benefit:
→ Efficient working
→ Error minimization

LAN / WLAN connection

→ Data exchange between calibrator and terminal (e.g. PC)
→ Accessible remote access to data and processes without software driver installation (web application)

Your benefit:
→ Simple calibrator setup with specific calibration tasks
→ Monitoring of calibration orders no longer location-dependent

The scope of services varies depending on the model, please note the technical data.

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Status control

→ Model-based multi-variables control system with predictive temperature control

Your benefit:
→ Fastest stabilization times on the market
→ Unique control stability in the mK range

Calibration tasks

→ Creation of calibration tasks that can be reused at any time

Your benefit:
→ Efficient working
→ Simplified handling, even for complex calibration procedures

Bootloader

→ Allows software extensions of the calibrator

Your benefit:
→ Simple software updates on site
→ Future security

Overview of functions

Series	TP Basic	TP Solid	TP Premium
Dry block	✓	✓	✓
Micro calibration bath		✓	✓
Multifunctionality			✓
Resolution	0.1...1 °C	0.01...1 °C	0.001...0.01 °C
Accuracy	0.4...1 °C	0.2...2 °C	0.1 °C...0.3 °C
Internal reference sensor	✓	✓	✓
PC interface		✓	✓
External reference sensor			✓
Integrated measuring instrument			✓

Temperature calibrators

The series

TP Basic

Sophisticated technology - easy handling

Efficiency and portability characterize the temperature calibrators of the TP Basic series. This series consists of dry-block calibrators that cover a wide temperature range and are used on site. Designed to ensure convenient calibration of temperature sensors, they impress with their simple operation and the sophisticated use of various automated functions. The optimum thermal coupling from the block to the test piece is achieved by a precisely matched transition sleeve. This sleeve can be manufactured according to customer specifications and thus enables the simultaneous calibration of a wide range of temperature sensors.

TP Solid

Higher accuracies and special designs

Flexibility is at the forefront of the TP Solid series of temperature calibrators: In addition to dry-block calibrators with the highest accuracy, there are also microcalibration baths with which almost any temperature sensor can be checked regardless of its shape. Both offer a simple and intuitive operation as well as quick access to extensive functions. Here you will also find suitable products for calibrating zero point and high temperature.

Multifunction (TP Premium) → Dry block - Microbath - Infrared - Surface

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TP Premium

Fastest calibration and hybrid technology

Optimum performance, superior ease of use and multiple calibration functions characterize the calibrators of the TP Premium series. With the help of the intuitive menu structure, all necessary entries can be made quickly and easily, whether on a coloured, graphic-capable display or the generous touch screen. A constantly growing range of supported temperature ranges covers more and more temperature sensors on the market. These can be calibrated with a resolution of up to 0.001 °C and thus meet the highest demands, e.g. in the food and pharmaceutical industries. The extensive accessory program of the TP Premium series allows time-saving calibration setups.

- **Patented control technology (time saving up to 50 %)**
- **World's fastest dry-block temperature calibrators**
- **Hybrid technology (Peltier elements and heating cartridges)**
- **Wide temperature range with cooling and heating function on the market**
- **Fastest stabilization times on the market**
- **Patented touch screen function**
- **Gauge management with barcode scanner (accessory)**
- **Stability up to 0.001 °C**

50 % faster

Experience and knowledge from space travel make the innovative temperature calibrators of the TP Premium series the fastest and temperature-stable calibrators on the market. They are equipped with a temperature controller based on a completely new operating principle. In contrast to the functionality of conventional calibrators, the properties of the test object are modelled virtually here. Due to a special control algorithm, a significantly shorter calibration time and a temperature stability in the millikelvin range, unique for portable calibrators, are achieved.

„Time is money" - the advantages for the user are obvious: Shorter calibration times mean shorter machine downtimes. Depending on the production process, considerable cost savings are possible by using TP Premium calibrators.

- **Reduction of waiting times before reaching the thermal balance from approx. 30 minutes to 25 to 15 minutes.**
- **Energy savings over the service life of a temperature calibrator of up to 5 MWh.**
- **Reliable achievement of the thermal equilibrium, so that unnecessary calibration uncertainties are avoided.**

Pressure calibrators

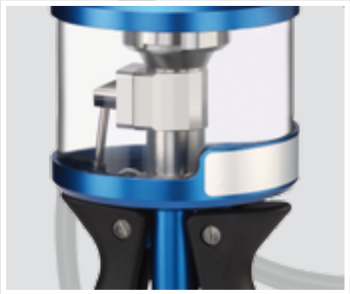
Regulation

→ Ultra-fine thread pitch
→ Stepless pressure generation
→ Tool-free switching between vacuum and overpressure

Your benefit:
→ Precise and simple regulation in the mbar range

Pneumatic or hydraulic

→ Pneumatic test pumps for Low and medium pressure range
→ Hydraulic test pumps for Medium and high pressure range
→ Oil-free up to 1000 bar



The scope of services varies depending on the model, please note the technical data.

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Reference pressure gauge

→ Temperature compensated measuring cells and electronics
→ Up to 13 unit characters
→ Measuring ranges between -1...2500 bar

Your advantage:
→ Suitable reference pressure gauges for almost all required measuring ranges

Overview pressure generation

Function	Type	Pressure range	Air	Oil	Water
Hand test pump	P 4	-0,3...4 bar	✓		
	P 40.2	-0,95...40 bar	✓		
	P 60	-0,95...60 bar	✓		
	P 700.3	0...700 bar		✓	✓
	P 1000.2	0...1000 bar		✓	✓
Table-top test pump	P 700 T	0...700 bar		✓	
	P 700.G2	0...700 bar		✓	
	P 700.GW	0...700 bar			✓
	P 1000.G	0...1000 bar		✓	
	P 1000.GW	0...1000 bar			✓
	P 1400.G	0...1400 bar		✓	

Manual pressure generation

→ Smooth-running pressure generation thanks to ergonomic handles
→ Operation without additional power supply

Your advantages:
→ Immediate on-site use

Pressure calibrators =

Test pumps + reference pressure gauge

Pressure calibration is the comparison between the displayed values of a pressure measuring device and the display values of a pressure standard whose accuracy is known. Often the device to be tested cannot be removed from the running process. To avoid long downtimes, the calibration is carried out on site. For a prescribed function test or for accuracy control, the test item is connected to the hand test pump or table test pump, e.g. by means of a pressure hose. Digital pressure gauges with highest precision serve as compact reference instruments.

SIKA offers you a complete range of pressure calibrators for a wide variety of applications, enabling you to efficiently perform virtually any test and calibration task.

With the right combination of pressure generation and reference pressure gauge, on-site calibrations can be carried out very quickly and cost-effectively in everyday use.

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Basic

For beginners and professionals

Whether to supplement your existing equipment or as an introduction to pressure calibration, each test pump includes a suitable pressure hose in the Basic version. The hoses of the hydraulic pumps are equipped with a self-sealing quick coupling.

Solid

Well equipped for use in the field

The Solid full version is available in a sturdy transport case for all common connection threads inch, conical or metric adapters as well as a suitable sealing kit. Depending on the pump, the case also offers space for up to two pressure references*.

* Reference pressure gauges are available separately as required.

Test pumps

Hand test pumps and table-top units

Requirements for pressure sources

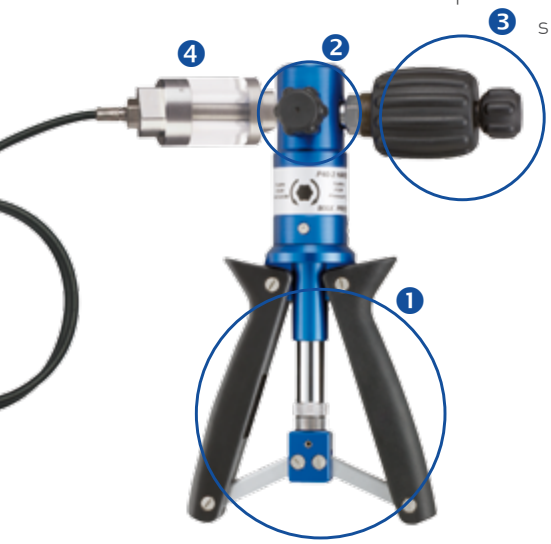
Essential requirements for manual pressure generation are:

- **Simple adaptation of test specimens**
- **Uncomplicated and easy pressure build-up**
- **Maintenance-free operation**

These aspects were of course taken into account and optimally implemented in the design of our test pumps.

The test pumps

Air, water or oil are used as pressure media. Air is the ideal test medium, especially in areas of application where the test object is not wetted or no aggressive or ionizing substances may be used. Depending on the desired pressure range, you have the choice between the mobile hand pumps or the portable table devices when it comes to stationary use. In contrast to complex and sensitive plate scales, the table-top test pumps do not have to take gravity or complicated alignment into account, as a direct comparison measurement is carried out. Another advantage of all models is the one-handed operation with handle, lever or spindle, which also makes frequently occurring test runs ergonomic.



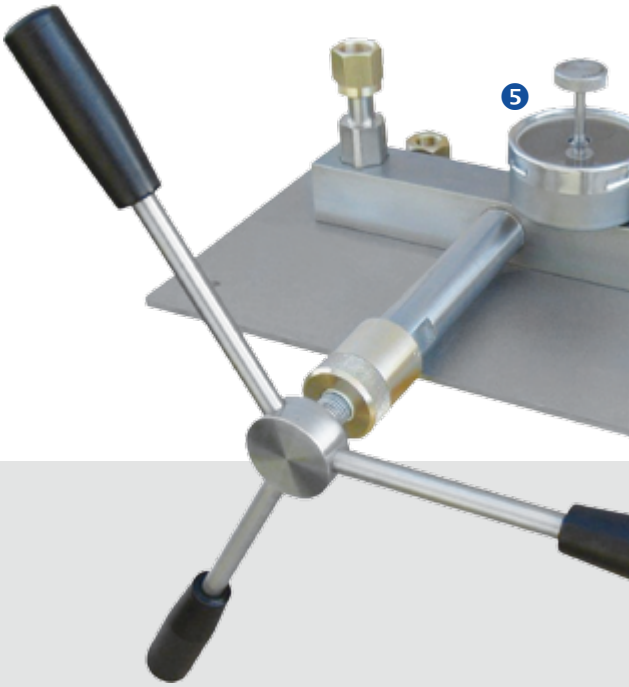
Pneumatic

The pneumatic test pumps by SIKA meet requirements that other suppliers can often only cover with several pumps.

❶ The pressure build-up in the medium pressure range up to 60 bar by means of a handle is unique.
❷ The integrated negative pressure generation enables working in the vacuum range up to -950 mbar. The change from overpressure to negative pressure generation takes place without additional tool directly with a change-over valve.
❸ For precise adjustment in the low mbar range, a large volume control valve with ultra-fine thread pitch is used, thus enabling settings in the precision pressure range.
❹ Dirt trap (accessory) - prevents the transfer of the smallest dirt particles and moisture from a test specimen to the pump (up to 35 bar).

Hydraulic

The easy-to-operate hydraulic test pumps have been specially developed for the medium to high pressure range.
A built-in reservoir ❺ serves as a receptacle for the hydraulic fluid. Depending on the version, pressures from 700 bar up to 1400 bar can be generated.



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Reference pressure gauges

Digital pressure gauges or hand-held measuring instruments

The reference pressure gauges

Digital pressure gauges are particularly well suited for both stationary and mobile measurement and display of pressures. Its use as a pressure reference makes it easy to check, set and calibrate other pressure measuring devices directly on site. The high accuracy in signal acquisition is achieved by powerful measuring cells with electronic linearization of the characteristic curve. The right instruments are available for extensive measuring tasks.

Direct mounting or built-in version

The compact, handy design proves itself in daily use. Large diameters of up to 250 mm, as is usual with precision manometers, are a thing of the past.
The small space requirement simplifies direct installation. If necessary, installation versions for front mounting in control cabinets or operating panels are available.

Advantages at a glance

- Accurate and reliable measurement
- High operational readiness
- Easy and fatigue-free reading with illuminated display
- Very well suited for difficult on-site use
- Uncomplicated use, simple installation
- Added value through additional functions
- Ex versions

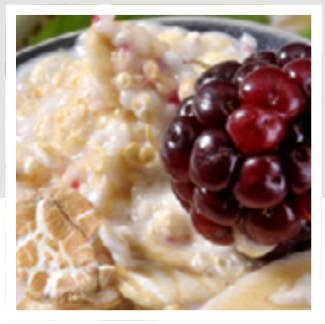
Energy supply industry

- Maintenance / Servicing
- Compliance with safety limits for temperatures and pressures
- Compliance with operating times and downtimes
- Process documentation

At home in your

Medical engineering

- Maintaining sterile temperatures
- Climate control
- Plant engineering



Food

- Adherence to product quality
- Check complete measuring chain
- Hygiene control

Pharmaceuticals & chemicals

- Process monitoring
- Temperature zone testing
- System cleaning

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Marine sector

- Exhaust gas temperature monitoring
- Cooling water monitoring
- Condition monitoring
- Recalibration on board

industry!

?

Your Branch

- For precise pressure and temperature measurement
- For a longer lifetime of your machines and plants
- For your process documentation

Automotive

- Maintenance of test benches
- Sensor testing of vulcanization systems

Calibration service

- On-site calibration
- Laboratory use

Energy supply industry

Power generation & district heating

Recommended products

- Temperature calibrators
  - → TP Basic dry block calibrator for temperatures up to 850 °C
  - → TP Solid micro calibration bath for temperatures up to 225 °C
- Pressure calibrators
  - → Pneumatic hand test pumps for pressures up to 60 bar
  - → Hydraulic hand test pumps and pressure generators for pressures up to 1400 bar
  - → Digital reference pressure gauges with data logger

The compact and transportable temperature and pressure calibrators can also be used comfortably in difficult places.

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Application examples

- Maintenance and servicing of safety temperature limiter
- Compliance with safety limits for exhaust gas temperature measurement
- Heating and cooling water monitoring
- Testing of pressures in steam pipes
- Compliance with operating times and downtimes
- Process documentation

Food

Processing, storage & transport

Recommended products

- Temperature calibrators
  - → TP Premium dry block calibrator for temperatures from -55 °C up to 650 °C, with hygienic touch display
  - → TP Premium micro calibration bath for special shapes and custom sensors for temperatures from -35 °C up to 165 °C
  - → Special adapter sleeve for aseptic sensors
- Pressure calibrators
  - → Pneumatic hand test pumps for pressures up to 60 bar
  - → Hydraulic hand test pumps and pressure generators for pressures up to 700 bar
  - → Digital reference pressure gauges with data logger

Aseptic sensors can also be fully accommodated in our special dry-block calibration sleeve thanks to the unique stepped bore. Due to the even temperature distribution, measuring errors are avoided!

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Application examples

- Hygiene monitoring in cooking lines, filling plants and packaging lines
- Check measuring chain
- Documentation and compliance with consistent product quality
- Compliance with safety limits in temperature-critical areas
- Reduction of maintenance periods and downtimes
- Cold chain monitoring

Pharmaceuticals & chemicals

Production & laboratory applications

Recommended products

- Temperature calibrators
  - → TP Premium dry block calibrator for temperatures from -55 °C up to 200 °C, with hygienic touch display and patented control technology
  - → TP Premium multifunction bath inclusive infrared and surface function and customer-specific linearization
- Pressure calibrators
  - → Pneumatic hand test pumps for pressures up to 60 bar
  - → Hydraulic hand test pumps and pressure generators for pressures up to 700 bar
  - → Digital reference pressure gauges with data logger, intrinsically safe

Check every sensor in your system with only one calibrator! Multifunctional calibrators with dry block, microbath, infrared and surface function.

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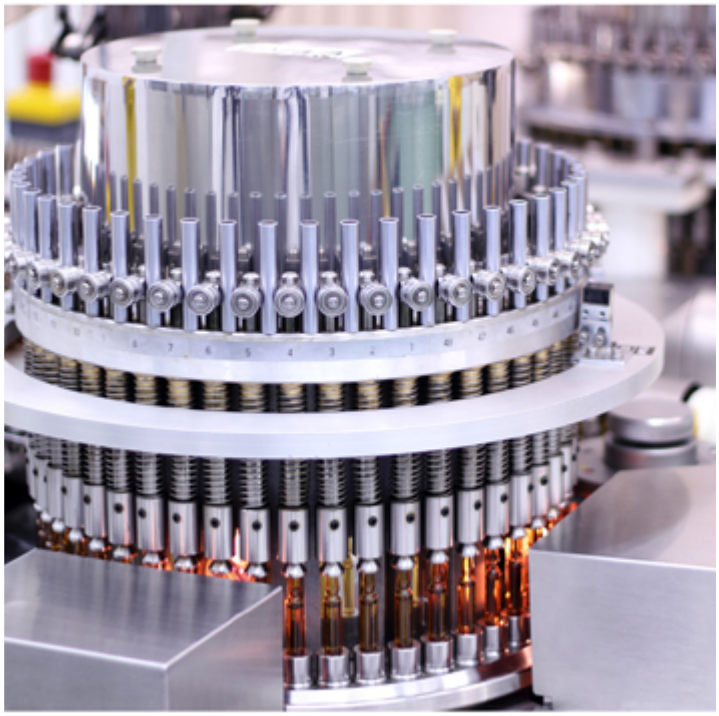
Application examples

- Hygiene monitoring, filling plants and packaging lines
- Check measuring chain
- Documentation and compliance with consistent product quality
- Process monitoring
- Temperature zone testing
- Plant cleaning



Medical engineering

Production, research & development

Recommended products

- Temperature calibrators
  - → TP Premium dry block calibrator for temperatures from -55 °C bis 200 °C, with hygienic touch display and patented control technology
  - → TP Premium multifunction bath for special shapes and custom sensors, incl. infrared and surface function and stability up to 0.001 °C
- Pressure calibrators
  - → Pneumatic hand test pumps for pressures up to 60 bar
  - → Hydraulic hand test pumps and pressure generators up to 1000 bar for on-site and laboratory use
  - → Digital reference pressure gauge with data logger and highest accuracy

“Faster validation processes by simultaneous calibration of up to 57 probes with highest accuracy.”

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Application examples

- Compliance with quality standards, guidelines and certifications
- Calibration within the scope of GDP (Good Distribution Practice)
- Temperature monitoring in freezers/chambers, ovens and heating cabinets
- Temperature maintenance and monitoring in sterilization equipment, cleaning and disinfection systems
- Climate control
- Plant construction and maintenance
- Process documentation

Automotive

Production & quality assurance

Recommended products

- Temperature calibrators
  - → TP Basic Dry block calibrator for temperatures up to 850 °C,
  - → TP Premium Dry block calibrator for temperatures from -55 °C up to 650 °C, with hygienic touch display

- Pressure calibrators
  - → Pneumatic hand test pumps for pressures up to 60 bar
  - → Hydraulic hand test pumps and pressure generators up to 1400 bar

“Save time during quality inspection thanks to automated calibration. You just program your test points - the rest is done by the calibrator!”

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Application examples

- Temperature measurement in test benches
- Temperature and pressure monitoring in vulcanization plants
- Documentation and compliance with consistent product quality
- Reduction of maintenance and downtimes
- Process monitoring

Marine sector

Measuring & monitoring on board

Recommended products

- Temperature calibrators
  - → TP 17650M dry block calibrator for temperatures up to 650 °C, compact design for on-site use
  - → TP 17165M dry block calibrator for temperatures from -35 °C up to 165 °C
- Pressure calibrators
  - → Pneumatic hand test pumps for pressures up to 60 bar, light and compact for mobile use
  - → Hydraulic hand test pumps and pressure generators up to 1000 bar
- Rekalibration set
  - → Digital hand-held calibrator
  - → Digital reference pressure gauge
  - → Temperature reference sensor

Easy handling even under harsh environmental conditions. Ready for use at any time!

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Application examples

- Exhaust gas temperature measurement
- Temperature monitoring in the engine, e.g. cylinder oil and cooling water
- Turbocharger/charge air Temperature & pressure monitoring
- Maintenance and servicing of mobile and stationary measuring instruments
- Hold temperature monitoring and documentation
- Compliance with limit values for emissions and international maintenance and safety standards (SOLAS, ISM,...)


SIKA
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Out
ACHTUNG! HOHE TEMPERATUR
ATTENTION! HIGH TEMPERATURE
高温注意

Technical data

Temperature calibrators

Pressure calibrators

For any questions or comprehensive technical consulting, please contact:

Sales Department

Phone: +49 5605 803-0
Email: info@sika.net

TP 3M // Multifunction // -35...255 °C

BEST SELLER

Type	Highlights	Order code
TP 3M165E.2	Patented control technology - time saving up to 50% High calibration volume Fastest stabilisation times on the market Patented touchscreen function Management of device under test with barcode scanner (Accessories) Optional with stainless steel case (for pharmaceutical and food industry)	EP3M1626015U3 XE2102 EP3M1626015U3SS

Technical data		
Type	TP 3M165E.2	TP 3M255E
Control sensor	(internal / external)	
Hysteresis	±0.25 °C / ±0.025 °C (internal / external)	
Temperature range*	-35...165 °C -25...150 °C (at surface calibration)	RT...255 °C RT...200 °C (at surface calibration)
Micro calibration bath		
Accuracy **Stability**	±0.1 °C ±0.010 °C / ±0.005 °C (internal / external)	±0.2 °C ±0.05 °C (internal)
Measurement zone	110...150 mm	
Dry block		
Accuracy **Stability**	±0.3 °C ±0.010 °C / ±0.005 °C (internal / external)	±0.3 °C ±0.05 °C (internal)
Measurement zone	123...163 mm	
Infrared		
Accuracy **Stability**	±0.5 °C ±0.020 °C / ±0.020 °C (internal / external)	±0.5 °C ±0.05 °C (internal)
Measurement zone	110 mm	
Surface		
Accuracy **Stability**	±1 °C ±0.150 °C (external)	±1 °C ±0.2 °C (external)
Measurement zone	Surface	

* At an ambient temperature of 20 °C / 68 °F

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Transition times*	TP 3M165E.2	TP 3M255E
Cooling time		
→ RT...-30 °C**	40 min (Dry block) 65 min (Micro calibration bath)	
→ Tmax...RT	24 min (Dry block) 25 min (Micro calibration bath)	105 min (Dry block) 78 min (Micro calibration bath)
Heating time		
→ RT...Tmax	32 min (Dry block) 50 min (Micro calibration bath)	23 min (Dry block) 105 min (Micro calibration bath)
→-35 °C...165 °C	37 min (Dry block) 56 min (Micro calibration bath)	
Stabilisation time		
With ext. reference		
→ to ±0.05 °C	From 5 min	
→ to ±0.005 °C	From 10 min	

General data		
Type	TP 3M165E.2	TP 3M255E
Interface	Ethernet, 3 x USB	
Calibrator dimensions		
→ Width	210 mm	
→ Height	380 + 50 mm	
→ Depth	300 mm	
Block dimensions		
→ Diameter	Ø 60 mm	
→ Depth	170 mm	
Weight	Approx. 13 kg	Approx. 8,5 kg
Power supply	100...240 VAC, 50 / 60 Hz	
Power consumption	Approx. 375 W	Approx.1000 W
Display unit		
Display	Brilliant Color-Touchscreen (7"), multi panel safety glass, viewing angle 120...140° Brightness 400 cd / m², Unit °C / °F / K	
Display range	-50...165 °C	0...255 °C
Resolution	0.1 /0.01 /0.001 °C / °F / K	

* Further information on transition times on request, all data refer to tests with new devices
** Cooling time to Tmin (-35 °C) differs

TP 3M // Multifunction // -35...255 °C

Order code		
Type	TP 3M165E.2	TP 3M255E
Internal measuring instrument		
→ Without	EP3M16026015U3	EP3M250E6015U3
→ With	EP3M16M26015U3	

Equipment for requested type with separate order code

Equipment	**Example → EPLIK**	**DB**	**I**	**00**	**0**
Linearisation					
With Linearisation	EPLIK				
Function					
Dry block		DB			
Micro calibration bath		LI			
Tub insert		TI			
Infrared		IR			
Surface*		SU			
Reference sensor					
Internal			I		
External			E		
Adjustment to medium					
No medium**				00	
Water (2...95 °C)				01	
Silicone oil 10 cSt (-35...155 °C)				10	
Silicone oil 20 cSt (7...220 °C)				20	
Silicone oil 50 cSt (50...270 °C)				50	
Customised medium				99	
Test points					
Standard					0
Customised					K

* Only with ext. reference sensor
** No medium = Dry block, infrared, surface

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TP 37 // Dry block // -55...200 °C

BEST SELLER

Type	Highlights	Order code
TP 37200E.2	Patented control technology - time saving up to 50% Worldwide fastest Dry block temperature calibrator Hybrid technology (Peltier elements and heating cartridges) Widest temperature range with cooling and heating function on the market Fastest stabilisation times on the market Patented touchscreen function Management of device under test with barcode scanner (Accessories)	EP3720022815U3 XE2102

Technical data		
Type	TP 37200E.2	TP 37165E.2
Control sensor	Switchable internal / external	
Hysteresis	±0.25 °C / ±0.025 °C (internal / external)	
Temperature range*	-55...200 °C	-35...165 °C
Dry block		
Accuracy **Stability**	±0.2 °C ±0.010 °C / ±0.005 °C (internal / external)	±0.2 °C ±0.010 °C / ±0.005 °C (internal / external)
Measurement zone	110...150 mm	110...150 mm

* At an ambient temperature of 20 °C / 68 °F

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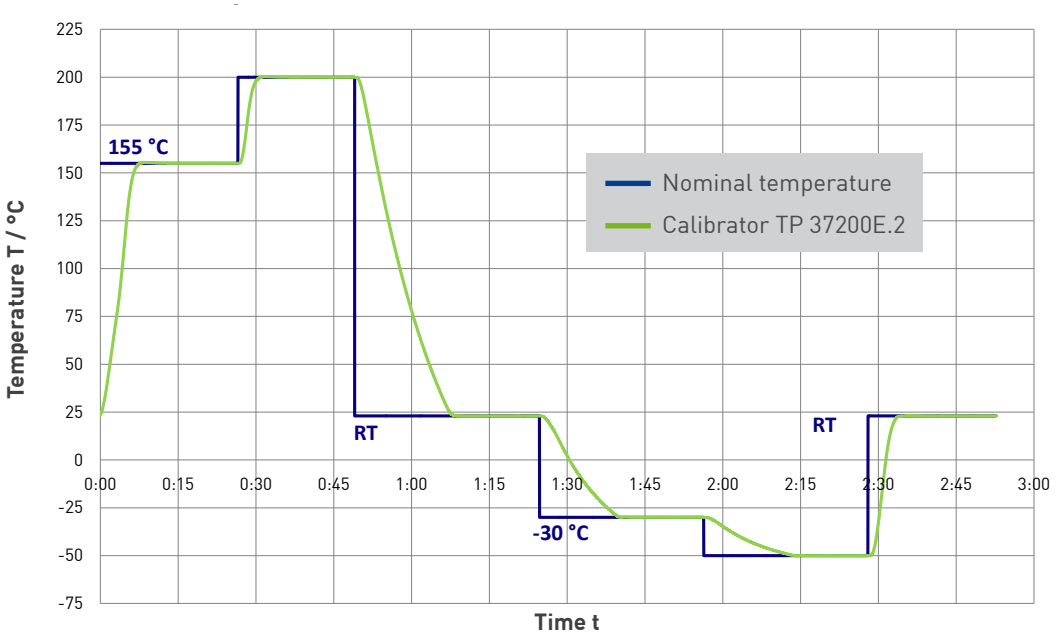
Transition times*	TP 37200E.2	TP 37165E.2
Cooling time		
→ RT...Tmin**	35 min (-50 °C)	13 min (-30 °C)
→ Tmax...RT	18 min	11 min
Heating time		
→ RT...Tmax	9 min	14 min
→-Tmin...Tmax	12 min	16 min
Stabilisation time		
With ext. reference sensor		
→ to ±0.05 °C	From 1 min	From 1 min
→ to ±0.005 °C	From 5 min	From 5 min

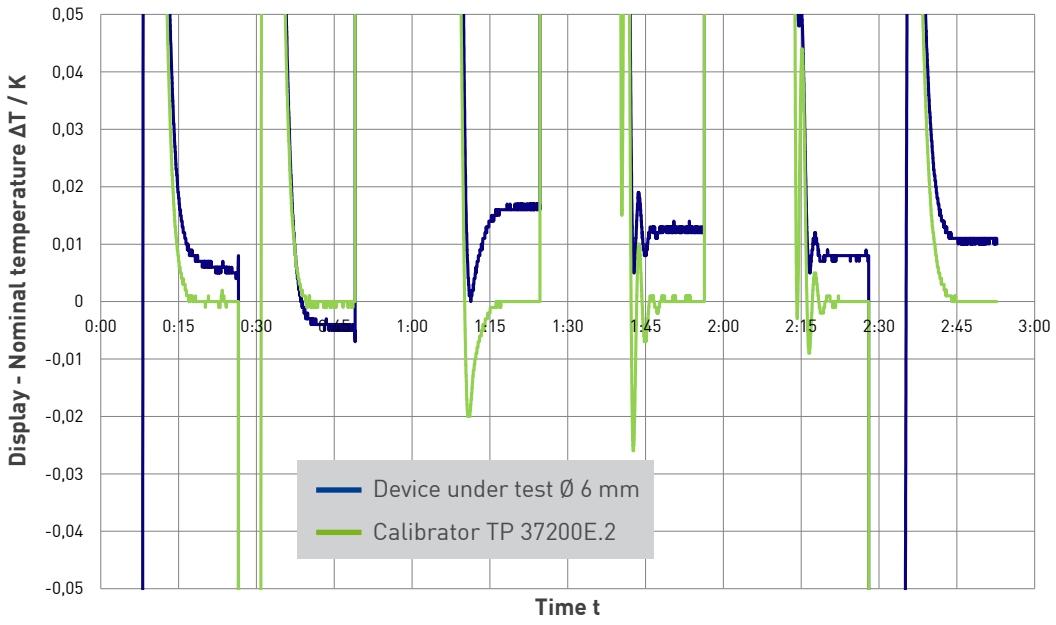
General data		
Type	TP 37200E.2	TP 37165E.2
Interface	Ethernet, 3 x USB	
Calibrator dimensions		
→ Width	210 mm	
→ Height	380 + 50 mm	
→ Depth	300 mm	
Block dimensions		
→ Diameter	Ø 28 mm	
→ Depth	150 mm	
Weight	Approx. 12.5 kg	Approx. 10 kg
Power supply	100...240 VAC, 50 / 60 Hz	
Power consumption	Approx. 555 W	Approx. 375 W
Display unit		
Display	Brilliant Color-Touchscreen (7"), multi panel safety glass, Viewing angle 120...140° Brightness 400 cd / m², Unit °C / °F / K	
Display range	-60...200 °C	-50...165 °C
Resolution	0.1 / 0.01 / 0.001 °C / °F / K	

* Further information on transition times on request, all data refer to tests with new devices
** Cooling time to Tmin (-55 °C / -35 °C) differs

TP 37 // Dry block // -55...200 °C

Temperature steps TP 37200E.2 with external reference





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Order code		
Type	TP 37200E.2	TP 37165E.2
Internal measuring instrument → Without → With	 EP3720022815U3 EP3720M22815U3	 EP3716022815U3 EP3716M22815U3

Equipment for requested type with separate order code

Equipment	Example → EPLIK	DB	I	00	0
Linearisation					
With linearisation	EPLIK				
Function					
Dry block		DB			
Reference sensor					
Internal			I		
External			E		
Adjustment to medium					
No medium				00	
Test points					
Standard					0
Customised					K

TP 38 // Special versions // -35...650 °C

Technical data		
Type	TP 38165	TP 38650
Control sensor	Switchable internal / external	
Temperature range*	-35...165 °C	RT...650 °C
Dry block		
Accuracy **Stability**	±0.1 °C 0.01...0.05 °C	±0.2 °C 0.03...0.1 °C
Measurement zone	110...150 mm	
Display unit		
Display	Monochrome, graphic display Units °C / °F / K / Ω / mV / mA	
Display range	-50...165 °C	0...650 °C
Resolution	0.01 °C	

* At an ambient temperature of 20 °C / 68 °F

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General data		
Type	TP 38165	TP 38650
Interface	RS232, USB (optional)	
Calibrator dimensions → Width → Height → Depth	 153 mm 347 mm 348 mm	
Block dimensions → Diameter → Depth	 Ø 28 mm 150 mm	 Ø 28 mm 150 mm
Weight	Approx. 12 kg	Approx. 10 kg
Power supply → Standard → Optional	 100...240 VAC, 50 / 60 Hz	 230...240 VAC, 50 / 60 Hz, 100...115 VAC, 50 / 60 Hz
Power consumption	Approx. 400 W	Approx. 1000 W

Order code		
Type	TP 38165	TP 38650
	EP381500281503	EP386000281500

Equipment for requested type with separate order code

Equipment	**Example → EPLIK**	**DB**	**I**	**00**	**0**
Linearisation					
With Linearisation	EPLIK				
Function					
Dry block		DB			
Reference sensor					
Internal			I		
External			E		
Adjustment to medium					
No medium				00	
Test points					
Standard					0
Customised					K

Options	Order code
Type	TP 38650
Power supply → 100...115 V	 EP386000281502

TP 17 // Dry block // -55...650 °C

Technical data					
Type	TP 17200S	TP 17165S	TP 17166S	TP 17450S	TP 17650S
Control sensor	internal				
Temperature range*	-55...200 °C	-35...165 °C	-35...165 °C	RT...450 °C	RT...650 °C
Dry block					
Accuracy **Stability**	±0.2 °C ±0.05 °C	±0.2 °C ±0.05 °C	±0.2 °C ±0.05 °C	±0.3 °C ±0.05 °C	±0.4 °C ±0.05 °C
Measurement zone	110...150 mm				
Display unit					
Display	2-line, 4-digit display red / green, unit °C / °F				
Display range	-60...200 °C	-50...165 °C	-50...165 °C	0...450 °C	0...650 °C
Resolution	0.01 °C between -9.99...99.99 °C, else 0.1 °C			0.01 °C between RT...99.99 °C, else 0.1 °C	

* At an ambient temperature of 20 °C / 68 °F

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General data					
Type	TP 17200S	TP 17165S	TP 17166S	TP 17450S	TP 17650S
Interface	RS485, RS232 or USB (optional)				
Calibrator dimensions → Width → Height → Depth	 210 mm 380 + 50 mm 300 mm	 210 mm 380 + 50 mm 300 mm	 210 mm 380 + 50 mm 300 mm	 150 mm 330 + 70 mm 270 mm	
Block dimensions → Diameter → Depth	 Ø 28 mm 150 mm	 Ø 28 mm 150 mm	 Ø 60 mm 150 mm	 Ø 60 mm 150 mm	 Ø 28 mm 150 mm
Weight	Approx. 12.5 kg	Approx. 10 kg	Approx. 7.5 kg		
Power supply → Standard → Optional	 100...240 VAC, 50 / 60 Hz			 230...240 VAC, 50 / 60 Hz	 230...240 VAC, 50 / 60 Hz, 100...115 VAC, 50 / 60 Hz 115...230 VAC, 50 / 60 Hz
Power consumption	Approx. 555 W	Approx. 375 W		Approx. 2000 W	Approx. 1000 W

Order code					
Type	TP 17200S	TP 17165S	TP 17166S	TP 17450S	TP 17650S
	EP17200S281503	EP17160S281503	EP17160S601503	EP17450S601500	EP17650S281500

Options	Order code
Type	TP 17650S
Power supply → 100...115 V → 100...240 V	 EP17650S281502 EP17650S281503

TP 17 and TP 28 // Special versions // -10...1300 °C


TP 17ZERO


TP 281300E

Technical data		
Type	TP 17ZERO	TP 281300E
Control sensor	internal	
Temperature range*	-10...100 °C	400...1300 °C
Dry block		
Accuracy **Stability**	±0.05 °C at 0 °C ±0.05 °C at 0 °C	±2 °C ±0.5 °C
Measurement zone	110...150 mm	bei 200 mm
Display unit		
Display	1-line, 4-digit display red, unit °C (°F optional)	2-line, 4-digit display red / green, unit °C / °F
Display range	-10...100 °C	0...1300 °C
Resolution	0.1 °C	1 °C

* At an ambient temperature of 20 °C / 68 °F

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General data		
Type	TP 17ZERO	TP 281300E
Interface		RS485, RS232 or USB (optional)
Calibrator dimensions → Width → Height → Depth	 150 mm 330 + 70 mm 270 mm	 510 mm 290 mm 415 + 100 mm
Block dimensions → Diameter → Depth	 7 drillings with Ø 6,5 mm 150 mm	 Ø 28 mm 200 mm
Weight	Approx. 7 kg	Approx. 17,5 kg
Power supply	100...240 VAC, 50 / 60 Hz	230...240 VAC, 50 / 60 Hz,
Power consumption	Approx. 225 W	Approx. 1000 W

Order code		
Type	TP 17ZERO	TP 281300E
	EP171000B71503	EP28138E000003

TP M // Micro calibration bath // -35...255 °C


TP M165S


TP M255S

Technical data		
Type	TP M165S	TP M255S
Control sensor	internal	
Temperature range*	-35...165 °C	RT...255 °C
Micro calibration bath		
Accuracy **Stability**	±0.1 °C ±0.05 °C	±0.2 °C ±0.05 °C
Measurement zone	110...150 mm	
Display unit		
Display	2-line, 4-digit display red / green, unit °C / °F	
Display range	-50...165 °C	0...255 °C
Resolution	0.01 °C between -9.99...99.99 °C, else 0.1 °C	

* At an ambient temperature of 20 °C / 68 °F

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General data		
Type	TP M165S	TP M255S
Interface	RS485, RS232 or USB (optional)	
Calibrator dimensions → Width → Height → Depth	 210 mm 380 + 50 mm 300 mm	 150 mm 330 + 70 mm 270 mm
Block dimensions → Diameter → Depth	 Ø 60 mm 170 mm	
Weight	Approx. 12.5 kg	Approx. 7.5 kg
Power supply → Standard → Optional	 100...240 VAC, 50 / 60 Hz	 230...240 VAC, 50 / 60 Hz, 100...115 VAC, 50 / 60 Hz 100...240 VAC, 50 / 60 Hz
Power consumption	Approx. 375 W	Approx. 1000 W

Order code		
Type	TP M165S	TP M255S
	EPMB160S601503	EPMB250S601500

Equipment for requested type with separate order code

Equipment	Example → EPLIK	LI	I	01	0
Linearisation					
With linearisation	EPLIK				
Function					
Micro calibration bath		LI			
Tub insert		TI			
Reference sensor					
Internal			I		
Adjustment to medium					
Water (2...95 °C)				01	
Silicone oil 10 cSt (-35...155 °C)				10	
Silicone oil 20 cSt (7...220 °C)				20	
Silicone oil 50 cSt (50...270 °C)				50	
Test points					
Standard					0
Customised					K

Options	Order code
Type	TP M255S
Power supply → 100...115 V → 100...240 V	 EPMB250S601502 EPMB250S601503

TP 17 // Dry block // -55...650 °C

Technical data					
Type	TP 17200	TP 17165	TP 17166	TP 17450	TP 17650
Control sensor	internal				
Temperature range*	-55...200 °C	-35...165 °C	-35...165 °C	RT...450 °C	RT...650 °C
Dry block					
Accuracy **Stability**	±0.4 °C ±0.1 °C	±0.4 °C ±0.1 °C	±0.4 °C ±0.1 °C	±0.6 °C ±0.1 °C	±0.8 °C ±0.1 °C
Measurement zone	110...150 mm				
Display unit					
Display	2-line, 4-digit display red / green, unit °C / °F				
Display range	-60...200 °C	-50...165 °C	-50...165 °C	0...450 °C	0...650 °C
Resolution	0.1 °C				

* At an ambient temperature of 20 °C / 68 °F

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General data					
Type	TP 17200	TP 17165	TP 17166	TP 17450	TP 17650
Calibrator dimensions → Width → Height → Depth	 150 mm 330 + 70 mm 270 mm	 210 mm 380 + 50 mm 300 mm		 150 mm 330 + 70 mm 270 mm	 150 mm 330 + 70 mm 270 mm
Block dimensions → Diameter → Depth	 Ø 28 mm 150 mm		 Ø 60 mm 150 mm	 Ø 60 mm 150 mm	 Ø 28 mm 150 mm
Weight	Approx. 12.5 kg	Approx. 10 kg		Approx. 7.5 kg	
Power supply → Standard → Optional	 100...240 VAC, 50 / 60 Hz		 230...240 VAC, 50 / 60 Hz		 230...240 VAC, 50 / 60 Hz 100...115 VAC, 50 / 60 Hz 100...240 VAC, 50 / 60 Hz
Power consumption	Approx. 555 W	Approx. 375 W		Approx. 2000 W	Approx. 1000 W

Order code					
Type	TP 17200	TP 17165	TP 17166	TP 17450	TP 17650
	EP172000281503	EP171600281503	EP171600601503	EP174500601500	EP176500281500

Options	Order code
Type	TP 17650
Power supply → 100...115 V → 100...240 V	 EP176500281502 EP176500281503

TP 17 // Dry block // -35...650 °C

Technical data		
Type	TP 17165M	TP 17650M
Control sensor	internal	
Temperature range*	-35...165 °C	RT...650 °C
Dry block		
Accuracy **Stability**	±1 °C ±0.1 °C	±1 °C ±0.1 °C
Measurement zone	110...150 mm	
Display unit		
Display	2-line, 4-digit display red / green, unit °C / °F	
Display range	-50...165 °C	0...650 °C
Resolution	1 °C	
Approvals		

* At an ambient temperature of 20 °C / 68 °F

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General data		
Type	TP 17165M	TP 17650M
Calibrator dimensions → Width → Height → Depth	 150 mm 330 + 70 mm 270 mm	 150 mm 330 + 70 mm 270 mm
Block dimensions → Diameter → Depth	 Ø 28 mm 150 mm	 Ø 28 mm 150 mm
Weight	Approx. 10 kg	Approx. 7.5 kg
Power supply → Standard → Optional	 100...240 VAC, 50 / 60 Hz	 230...240 VAC, 50 / 60 Hz 100...115 VAC, 50 / 60 Hz 100...240 VAC, 50 / 60 Hz
Power consumption	Approx. 375 W	Approx. 1000 W

Order code		
Type	TP 17165M	TP 17650M
	EP17160M281503	EP17650M281500

Options	Order code
Type	TP 17650M
Power supply → 100...115 V → 100...240 V	 EP17650M281502 EP17650M281503

TP 18 // Special versions // Room temperature *(RT)*...850 °C

Technical data		
Type	TP 18200E	TP 18850E
Control sensor	internal	
Temperature range*	RT...200 °C	RT...850 °C
Dry block		
Accuracy **Stability**	±1 °C ±0.1 °C	±1 °C ±0.1 °C
Measurement zone	60...100 mm	
Display unit		
Display	2-line, 4-digit display red / green, unit °C / °F	
Display range	0...200 °C	0...850 °C
Resolution	1 °C	

* At an ambient temperature of 20 °C / 68 °F

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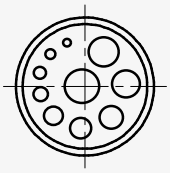
General data		
Type	TP 18200E	TP 18850E
Calibrator dimensions → Width → Height → Depth	 220 mm 96 mm 230 mm (handle + 50 mm)	 330 mm (handles + 70 mm) 270 mm 150 mm
Block dimensions → Diameter → Depth	 Ø 18 mm 100 mm	
Weight	Approx. 4 kg	Approx. 14 kg
Power supply → Standard → Optional	 230...240 VAC, 50 / 60 Hz, 100...115 VAC, 50 / 60 Hz	 230...240 VAC, 50 / 60 Hz
Power consumption	Approx. 200 W	Approx. 2000 W

Order code		
Type	TP 18200E	TP 18850E
	EP18200E181000	EP18850E18100

Options	Order code
Type	TP 18200E
Power supply → 100...115 V	 EP18200E181002

Accessories // Adapter sleeves // Measuring inserts

Accessories		Order code	
Adapter sleeve (including one drilling)	Calibrators with dry block function	According configuration	
More drillings	Custom	According configuration	
Black body sleeve for calibration of infrared thermometers	Ø 60 x 150mm and Ø 60 x1 70mm	EZ15060B03AL41IR	
Tub insert for micro calibration bath	Ø 60 x 170 mm	EZTPMBEK000000	
Adapter sleeve for surface temperature sensors	Calibrators with block dimensions 170 mm (depth)	EZ20460B03AL05OF	

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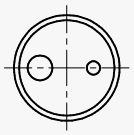
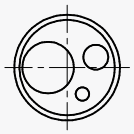
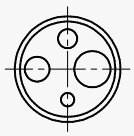
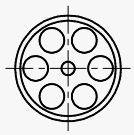
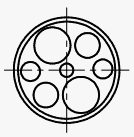
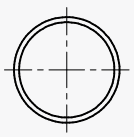
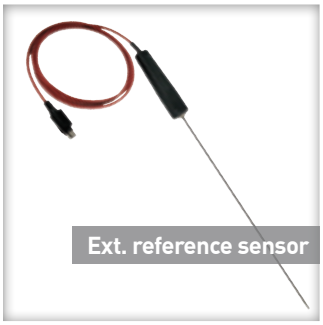
Accessories // Adapter sleeves // Standard configuration

Series	TP M / TP 3M	TP 17	TP 17 / TP 37 / TP 38	
Dimensions	Ø 60 mm	Ø 60 mm	Ø 28 mm	
Material	Aluminium	Brass* / Aluminium	Brass	
Drillings	**Order code**			
1x 3.5 mm (⅛ in) 1x 6.5 mm (¼ in)	EZ16360B02AL69	EZ15060B02MS27 / EZ15060D02AL18	EZ15028H02MS01	
1x 3.5 mm (⅛ in) 1x 6.5 mm (¼ in) 1x 13.5 mm (½ in)	EZ16360B03AL19	EZ15060I03MS53 / EZ15060D03AL54	EZ15028B03MS17	
1x 3.5 mm (⅛ in) 1x 5.0 mm (3/16 in) 1x 6.5 mm (¼ in) 1x 9.5 mm (⅜ in)	EZ16360C04AL46	EZ15060D04MS55 / EZ15060D04AL17	EZ15028G04MS44	
1x 3.5 mm (⅛ in) 6x 6.5 mm (¼ in)	EZ16360C07AL44	EZ15060D07MS56 / EZ15060D07AL14	EZ15028D07MS22	
1x 3.5 mm (⅛ in) 2x 5.0 mm (3/16 in) 2x 6.5 mm (¼ in) 2x 9.5 mm (⅜ in)	EZ16360C07AL45	EZ15060D07MS57 / EZ15060D07AL15	EZ15028G07MS43	
No drilling	EZ16360000AL00	EZ15060B00MS06 / EZ15060B00AL00	EZ15028000MS00	

* Only for TP 17450

Accessories // Certificates // Recalibration



Certificates	Order code
SIKA-Works calibration certificate 1st function	EKTPWP1FKT
SIKA-Works calibration certificate 2nd function	EKTPWP2FKT
SIKA-Works calibration certificate 3rd function	EKTPWP3FKT
SIKA-Works calibration certificate 4th function	EKTPWP4FKT
DAkkS calibration certificate 1st function	EKTPDAKKS1FKT
DAkkS calibration certificate 2nd function	EKTPDAKKS2FKT
DAkkS calibration certificate 3rd function	EKTPDAKKS3FKT
DAkkS calibration certificate 4th function	EKTPDAKKS4FKT
Additional test point DAkkS-Certificate	EKTPDAKKSZUSP
SIKA-Works calibration certificate for calibrator and measuring inputs	EKTPWPMINST
DAkkS-Certificate for calibrator and measuring inputs	EKTPDAKKSMINST

Recalibration	Order code
Document of pre-adjustment values (block) re-calibration (each function)	EKTPEW
Adjustment (block) re-calibration (each function)	EKTPJUSTAGE
Adjustment TT Scan and adjustment internal measuring instrument	EKTPJUSTAGESCAN

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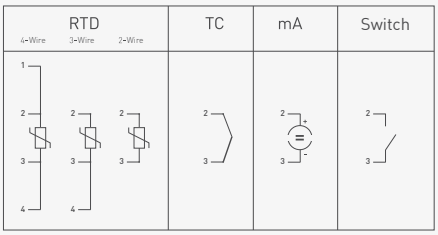
Accessories	For type	Order code
Transport		
Transport case	TP 17650	EZTPKOFFER002
	TP 17450, TPM 255	EZTPKOFFER003
	TP 17165, TP 17200, TP37 165, TP 37200	EZTPKOFFER004
	TP M165, TP 17166, TP 3M165	EZTPKOFFER005
	TP 37700	EZTPKOFFER006
	TP 18200	EZ999999990001
	TP 281300	EZ999999990006
	TP 18850	EZ999999990005
Transport case with trolley attachment frame	TP 17650	EZTPKOFFER002TG
	TP 17450, TPM 255	EZTPKOFFER003TG
	TP 17165, TP 17200, TP37 165, TP 37200	EZTPKOFFER004TG
	TP M165, TP 17166, TP 3M165	EZTPKOFFER005TG
	TP 37700	EZTPKOFFER006TG
Transport bag	TP 17000	XE2193
PC		
PC software (without TT-Scan)	TP 17200S, TP 17165S, TP 17166S, TP M165S, TP M255S, TP 17450S, TP 17650S, TP 281300E	EZ999999999971
PC software (with TT-Scan)	TP 17200S, TP 17165S, TP 17166S, TP M165S, TP M255S, TP 17450S, TP 17650S, TP 281300E	EZ380000000001
Converter RS485 to USB	TP 17200S, TP 17165S, TP 17166S, TP M165S, TP M255S, TP 17450S, TP 17650S, TP 281300E, TP 38165, TP38650	EZ170000000002
Converter RS232 to USB	TP 38165, TP 38650	EZ380000000002
Network switch	TP 37200, TP 37165, TP 3M165, TP 3M255	XE2103
Barcode scanner	TP 37200, TP 37165, TP 3M165, TP 3M255	XE2102
Wifi router	TP 37200, TP 37165, TP 3M165, TP 3M255	XE2101
Calibration		
Tripod	TP M165, TP M255	EZTPMSG0000000
Calibration liquid - Silicone oil 50 cSt (50...270 °C)	Calibrators with micro calibration bath fuction	EZSÖ0500000000
Calibration liquid - Silicone oil 20 cSt (7...220 °C)	Calibrators with micro calibration bath fuction	EZSÖ0200000000
Calibration liquid - Silicone oil 10 cSt (-35...155 °C)	Calibrators with micro calibration bath fuction	EZSÖ0100000000
Calibration liquid (Silicone oil), 5 cSt (-40...123°C)	Calibrators with micro calibration bath fuction	EZSÖ0050000000
Ext. reference sensor TFEE 255-3-300 (-55...255 °C)	TP 38165	W033P413000XX002
Ext. reference sensor TFEE 650-3-300 (-35...650 °C)	TP 38650	W034P413000XX002
Ext. reference sensor TF 255-3-300 (-55...255 °C)	TP 37200, TP 37165, TP 3M165, TP 3M255	W033P413000GX002
Customised linearisation TFEE	TP 38165, TP 38650	EKTFEE-LIN0000

Accessories // Measuring instrument // TT-Scan

Scanner unit TT-Scan

Properties		
Possibilities to connect		
Version	Scanner device with precision measuring instrument	
Measuring inputs	Switchable For up to 8 sensors Sensor type free configurable	
General data		
Power supply	230 VAC ±10 %, 50/60 Hz via adapter	
Power consumption	Approx. 10 W	
Dimensions (D x W x H)	200 x 140 + 40 x 380 mm	7.87 x 5.51 + 1.57 x 14.96 in
Weight	Approx. 2.5 kg	Approx. 5.51 lbs
Equipment features		
	32 x 4 mm/1.26 x 0.16 in connections free of thermal voltage Connection for external calibration reference sensor External cold junction available Serial USB data interface, incl. USB data cable	
Options		
	Aluminium transport case, test & calibration software, DAkkS certificate, SIKA works certificate, external calibration reference sensors	

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Accessories // Measuring instrument // TT-Scan // Measuring inputs

	Version	Measuring range		Tolerance	
Resistance thermometer EN 60751					
Pt100 **Pt500** **Pt1000**	2-, 3-, 4-wire	-90.00 °C...850.00 °C	-130.00 °F...1562.0 °F	±0.005 % full scale ±0.01 °C	±0.005 % full scale ±0.02 °F
Connection possibility through 4 mm connections free of thermal voltage					
Thermocouples according to DIN EN 60584 / DIN 43710					
Type K	NiCr-NiAl	-90.00...999.99 °C 1000.0...1370.0 °C	-130.00...1831.9 °F 1832.0...2498.0 °F	±0.007 % full scale ±0.01 °C ±0.005 % full scale ±0.1 °C	±0.007 % full scale ±0.02 °F ±0.005 % full scale ±0.18 °F
Type J	FeCu-Ni	-90.00...900.00 °C	-130.00...1652.0 °F	±0.005 % full scale ±0.01 °C	±0.005 % full scale ±0.02 °F
Type N	NiCrSi - NiSiMg	-90.00...999.99 °C 1000.0...1370.0 °C	-130.00...1831.98 °F 1832.0...2498.0 °F	±0.007 % full scale ±0.01 °C ±0.005 % full scale ±0.1 °C	±0.007 % full scale ±0.02 °F ±0.005 % full scale ±0.18 °F
Type E	NiCr-CuNi	-90,00...700.00 °C	-130.00...1292.0 °F	±0.005 % full scale ±0.01 °C	±0.005 % full scale ±0.02 °F
Type R	Pt13Rh – Pt	0.00...999.99 °C 1000.0...1760.0 °C	32.00...1831.9 °F 1832.0...3200.0 °F	±0.05 % full scale ±0.01 °C ±0.03 % full scale ±0.1 °C	±0.05 % full scale ±0.02 °F ±0.03 % full scale ±0.18 °F
Type T	Cu-CuNi	-90.00...400.00 °C	-90.00...400.00 °F	±0.01 % full scale ±0.01 °C	±0.01 % full scale ±0.02 °F
Type B	Pt30Rh-Pt6Rh	0.00...999.99 °C 1000.0...1820.0 °C	32.00...1831.98 °F 1832.0...3308.0 °F	±0.05 % full scale ±0.01 °C ±0.03 % full scale ±0.1 °C	±0.05 % full scale ±0.02 °F ±0.03 % full scale ±0.18 °F
Type S	Pt10Rh-Pt	0.00...999.99 °C 1000.0...1760.0 °C	32.00...1831.98 °F 1832.0...3200.0 °F	±0.05 % full scale ±0.01 °C ±0.03 % full scale ±0.1 °C	±0.05 % full scale ±0.02 °F ±0.03 % full scale ±0.18 °F
Type L	Fe-CuNi	-90.00...900.00 °C	-130.00...1652.0 °F	±0.005 % full scale ±0.01 °C	±0.005 % full scale ±0.02 °F
Type U	Cu-CuNi	90.00...600.00 °C	194.00...1112.0 °F	±0.01 % full scale ±0.01 °C	±0.01 % full scale ±0.02 °F
Automatic comparison point compensation between 0 °C/32 °F and 60 °C/140 °F Accuracy of the comparison point Pt100 DIN class A Possibility of connection through 4 mm/0.16 in connections free of thermal voltage					
Standard signal input					
Current (switchable)	mA	0(4)...20 mA		±0.015 % full scale ±0.01 mA	
Transmitter supply 24 VDC, I_{max} = 30 mA, Possibility of connection through 4 mm/0.16 in connections free of thermal voltage					
Temperature switch					
Automatic detection of an edge change, determining the hysteresis, Independent detection normally closed / normally open Potential-free input contacts (U_{max} = 5 V, I_{max} = 1 mA) Possibility of connection through 4 mm/0.16 in connections free of thermal voltage					
Calibration reference sensor connection					
Pt100	4-wire	-90.00...850.00 °C	-90.00...850.00 °F	±0.005 % full scale ±0.01 °C	±0.005 % full scale ±0.02 °F
Polynomial correctable through internal parameters or through external EEPROM inside the sensor Possibility of connection through 7-pin built-in socket					

Multi channel measuring instrument	Order code
8-channel measuring instrument	ET3849U0308003
SIKA-Works calibration certificate measuring inputs	EKTTSCAN00000W
DAkkS-Certificate measuring inputs	EKTTSCAN00000D
PC-Software (Block + measuring inputs)	EZ380000000001
Reference sensor TFEE 255-3-300 (-55...255 °C)	W033P413000XX002
Reference sensor TFEE 650-3-300 (-35...650 °C)	W034P413000XX002
Sensor specific linearization TFEE	EKTFEE-LIN0000
SIKA-Works certificate TF or TFEE	EKTMK0000000W
DAkkS-Certificate for TF or TFEE (-30...500°C)	EKTMK0000000D

Pneumatic // -0.95...60 bar

P40.2 Basic

P60 Solid

Your Advantages		
Type	**P40.2**	**P60**
	• Testing, adjustment and calibration of all types of pressure gauges • 3 in 1: vacuum, low pressure and medium pressure calibration • Exact adjustment in the mbar range thanks to ultra-fine thread pitch and large volume control valve • Tool-free change between positive pressure and vacuum generation	• Like P40.2 • Single pneumatic hand pressure pump up to 60 bar

Technical Data		
Type	**P40.2**	**P60**
Pressure ranges → Negative pressure → Positive pressure	 -0.95 bar 40 bar	 -0.95 bar 60 bar
Pressure medium	Air	
Connections		
Reference pressure gauge	G¼	
Test sample	G¼ with quick coupling and pressure hose (1 m)	
Basic		
Dimensions	Approx. 240 x 170 x 50 mm	
Weight	Approx. 1.1 kg	
Solid		
Dimensions (case)	Approx. 450 x 370 x 110 mm	
Weight	Approx. 4.2 kg	
+ Adapter kit	Chrome-plated brass, G⅛, G¼, G⅜, G½, ⅛ NPT, ¼ NPT, ½ NPT, M12 x 1.5, M20 x 1.5, G⅛, G¼	
+ Seal kit	PA flat gaskets and O-rings	

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Order code		
Type	**Version**	**Order number**
P40.2	Basic Solid (incl. case and adapter)	EPPM040EBL0000 EPPM0400BL0000
P60	Basic Solid (incl. case and adapter))	EPPM060EBL0000 EPPM0600BL0000

Pneumatic // -0.3...4 bar

Your advantages	
Typee	**P4**
	• Testing, adjustment and calibration of all types of pressure gauges • Long-term stable measurements without pressure loss due to hermetically sealable vacuum chamber • Precise adjustment in the mbar range thanks to ultra-fine thread pitch and large volume control valve • Tool-free change between overpressure and vacuum generation • Smallest mobile hand test pump on the market

Technical data	
Typee	**P4**
Pressure ranges → Negative pressure → Positive pressure	 -0.3 bar (depending on test sample / reference) 4 bar
Pressure medium	Air
Connections	
Reference pressure gauge	G¼ female thread with PA hose (2 x 1 m)
Test sample	G¼ with quick coupling and pressure hose (1 m)
Basic	
Dimensions	Approx. 225 x Ø 55 mm
Weight	Approx. 980 g
Solid	
Dimensions (case)	Approx. 450 x 370 x 110 mm
Weight	Approx. 4.2 kg
+ Adapter kit	Chrome-plated brass, G⅛, G¼, G⅜, G½, ⅛ NPT, ¼ NPT, ½ NPT, M12 x 1.5, M20 x 1.5, G⅛, G¼
+ Seal kit	PA flat gaskets and O-rings

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Order code		
Type	**Version**	**Order nummer**
P4	Basic Solid (incl. case and adapter)	EPPM004EBL0000 EPPM0040BL0000

Hydraulic // 0...1000 bar

P700.3 Basic

P1000.2 Solid

Your advantages	
Type	**P700.3 / P1000.2**
	• Testing, adjustment and calibration of all types of pressure gauges • Precise adjustment thanks to ultra-fine thread pitch and large volume control valve • High pressure generation with minimum effort • Large calibration volume (300 ml)

Technical data		
Type	**P700.3**	**P1000.2**
Pressure range	0...700 bar	0...1000 bar
Pressure medium	Demineralized water or hydraulic oil	
Connections		
Reference pressure gauge	G¼	
Test sample	G¼ with quick coupling and pressure hose (1 m)	G¼ with quick coupling and high pressure hose (1 m)
Basic		
Dimensions	Approx. 255 x 225 x 85 mm	
Weight	Approx. 1,7 kg	Approx. 1,9 kg
Solid		
Dimensions (case)	Approx. 450 x 370 x 125 mm	
Weight	Approx. 4,8 kg	Approx. 5 kg
+ Adapter kit	Stainless steel, G⅛, G¼, G⅜, G½, ⅛ NPT, ¼ NPT, ½ NPT, M12 x 1.5, M20 x 1.5, G⅛, G¼	
+ Seal kit	PA flat gaskets and O-rings	

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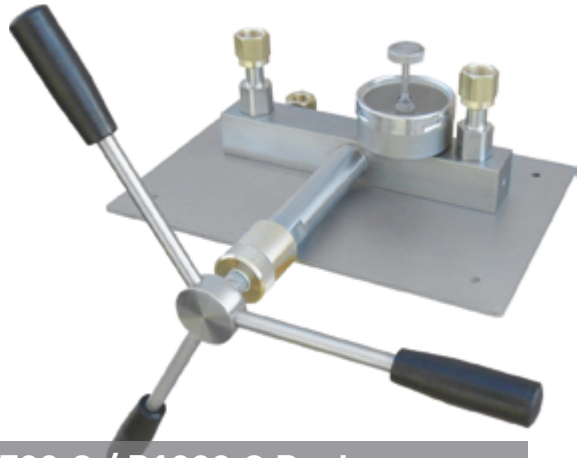
Order code		
Type	**Version**	**Order number**
P700.3	Basic Solid (incl. case and adapter)	EPPM700EBL0000 EPPM7000BL0000
P1000.2	Basic Solid (incl. case and adapter)	EPPM1K0EBL0002 EPPM1K00BL0002

Hydraulic // 0...1400 bar

P700.T Basic



P700.G / P1000.G Basic

Your advantages		
Type	**P700.T**	**P700.G2 / P700. GW / P1000.GW / P1400.G**
	• Simultaneous calibration of several test samples thanks to large tank volume • Fast pressure generation with low effort	• Oil-free pressure generation up to 1000 bar • Simple and fast pressure generation with smooth-running spindle

Technical data					
Type	**P700.T**	**P700.G2**	**P700.GW**	**P1000.GW**	**P1400.G**
Version	Lever pump	Spindle pump			
Pressure range	0...700 bar	0...700 bar	0...700 bar	0...1000 bar	0...1400 bar
Pressure medium	Hydraulic oil		Demineralized water		Hydraulic oil
Connections					
Reference pressure gauge	G¼	G⅜ left, G¼, G½			
Test sample	G¼ with quick coupling and pressure hose (1 m)	G⅜ left, G¼, G⅜, G⅛			
Basic					
Dimensions	Approx. 500 x 110 x 160 mm	Approx. 340 x 225 x 130 mm			
Weight	Approx. 5.6 kg	Approx. 9.9 kg			
Solid					
Dimensions (case)	Approx. 575 x 470 x 230 mm	Approx. 450 x 370 x 150 mm			
Weight	Approx. 10.2 kg	Approx. 12.6 kg			
+ Adapter kit	Stainless steel, G⅛, G¼, G⅜, G½, ⅛ NPT, ¼ NPT, ½ NPT, M12 x 1.5, M20 x 1.5, G⅛, G¼				
+ Seal kit	PA flat gaskets and O-rings				

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Order code			
Type	**Version**		**Order number**
P700T	Lever pump	Basic Solid (incl. case and adapter)	EPPT700E000020 EPPT7000000020
P700.G2	Spindle pump	Basic Solid (incl. case and adapter)	E8PG700E000020 E8PG7000000020
P700.GW		Basic Solid (incl. case and adapter)	E8PG700E000010 E8PG7000000010
P1000.GW		Basic Solid (incl. case and adapter)	E8PG1K0E000010 E8PG1K00000010
P1400.G		Basic Solid (incl. case and adapter)	E8PG1K4E000020 E8PG1K40000020

-1...1000 bar

E2 / D2

BEST SELLER

C2

Your advantages	
Type	**E2 / D2 / C2**
	• Suitable for aggressive media • Illuminated display • Robust and compact design with edge protection

Technical data			
Type	**E2**	**D2**	**C2**
Pressure ranges	Between -1...1000 bar		
Accuracy (full scale)	0.5 %	0.1 %	0.05 %
Adjustment options			
Linearisation	Via adapter		
Tare / Zero	✓		
Selectable units			
Pressure	bar, mbar, kPa, MPa, PSI, kg/cm², mH_2O, inH_2O		
Features			
Measuring inputs	1 x direct		
Display			
Display	Multi-functional LCD, 4 ½ digit, with illumination		
Functions	Bargraph, display filter, min / max value		
Measuring rate			
Standard	10 ms		
Peak	10 ms		
Process connection			
Thread	G¼		
Material	Stainless steel 1.4404		
Medium temperature	-20...80 °C		
For aggressive media	✓		

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General data	
Type	E2 / D2 / C2
Housing	
Degree of protection	IP67
Dimension	Ø 80 mm, T=30 mm H=100 mm
Material	Zinc casting
Operating temperature	0...50 °C
Weight	540 g
Power supply	
Auto-off function	✓
Battery type	2x 1,5 V AA
Battery operation	1500 h
Approvals	
	DNV GL type approval Certificate No. TAA00001CJ
Certificate (optional)	
DAkkS certificate Works certificate	

Order code				
Type	**Accuracy (full scale)**	**Pressure range**	**Resolution**	**Order number**
E2	0.5 %	-1...3 bar	1 mbar	EME8REF-E2-0003
		-1...5 bar	1 mbar	EME8REF-E2-0005
		-1...10 bar	1 mbar	EME8REF-E2-0010
		-1...20 bar	1 mbar	EME8REF-E2-0020
		-1...40 bar	10 mbar	EME8REF-E2-0040
		-1...60 bar	10 mbar	EME8REF-E2-0060
		0...100 bar	10 mbar	EME8REF-E2-0100
		0...160 bar	10 mbar	EME8REF-E2-0160
		0...250 bar	100 mbar	EME8REF-E2-0250
		0...400 bar	100 mbar	EME8REF-E2-0400
		0...700 bar	100 mbar	EME8REF-E2-0700
		0...1000 bar	100 mbar	EME8REF-E2-1000
D2	0.1 %	-1...3 bar	1 mbar	EME8REF-D2-0003
		-1...5 bar	1 mbar	EME8REF-D2-0005
		-1...10 bar	1 mbar	EME8REF-D2-0010
		-1...20 bar	1 mbar	EME8REF-D2-0020
		-1...40 bar	10 mbar	EME8REF-D2-0040
		-1...60 bar	10 mbar	EME8REF-D2-0060
		0...100 bar	10 mbar	EME8REF-D2-0100
		0...160 bar	10 mbar	EME8REF-D2-0160
		0...250 bar	100 mbar	EME8REF-D2-0250
		0...400 bar	100 mbar	EME8REF-D2-0400
		0...700 bar	100 mbar	EME8REF-D2-0700
		0...1000 bar	100 mbar	EME8REF-D2-1000
C2	0.05 %	-1...10 bar	1 mbar	EME8REF-C2-0010
		-1...20 bar	1 mbar	EME8REF-C2-0020
		-1...40 bar	10 mbar	EME8REF-C2-0040
		-1...60 bar	10 mbar	EME8REF-C2-0060
		0...100 bar	10 mbar	EME8REF-C2-0100
		0...160 bar	10 mbar	EME8REF-C2-0160
		0...250 bar	100 mbar	EME8REF-C2-0250
		0...400 bar	100 mbar	EME8REF-C2-0400
		0...700 bar	100 mbar	EME8REF-C2-0700
		0...1000 bar	100 mbar	EME8REF-C2-1000

BEST SELLER

Type		**Order number**
E2	Accuracy 0,5 %, pressure range -1...3 bar, resolution 1 mbar	EME8REF-E2-0003
	Accuracy 0,5 %, pressure range -1...40 bar, resolution 10 mbar	EME8REF-E2-0040
	Accuracy 0,5 %, pressure range 0...700 bar, resolution 100 mbar	EME8REF-E2-0700
	Accuracy 0,5 %, pressure range 0...1000 bar, resolution 100 mbar	EME8REF-E2-1000
D2	Accuracy 0,1 %, pressure range -1...3 bar, resolution 1 mbar	EME8REF-D2-0003
	Accuracy 0,1 %, pressure range -1...40 bar, resolution 10 mbar	EME8REF-D2-0040
	Accuracy 0,1 %, pressure range 0...700 bar, resolution 100 mbar	EME8REF-D2-0700
	Accuracy 0,1 %, pressure range 0...1000 bar, resolution 100 mbar	EME8REF-D2-1000

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-1...1000 bar

Your advantages			
Type	**E-Ex**	**D-Ex**	**L-Ex**
	• For use in potentially explosive atmospheres • Suitable for aggressive media • Oil- and grease-free version available • Robust and compact design with edge protection		• Like E-Ex / D-Ex • Additional PC interface for direct data transfer • Higher accuracy

Technical data			
Type	**E-Ex**	**D-Ex**	**L-Ex**
Pressure ranges	Between 0...300 bar	Between -1...700 bar	Between -1...1000 bar
Accuracy (full scale)	0.5 %	0.1 %	0.05 %
Adjustment options			
Tare / Zero	✓		
Selectable units			
Pressure	bar	bar, mbar, hPa, kPa, MPa, PSI, kp/cm²	bar, mbar, hPa, kPa, MPa, PSI, mmHg, inHg, cmH2O, mH2O, inH2O, ftH2O, Kp/cm²
Features			
Measuring inputs	1 x direct		1 x direct
Oil- and grease-free version (optional)	✓ (< 200 bar)		
PC connection			RS 485
Display			
Display	Multi-functional LCD, 4 digit		Multi-functional LCD, 5 digit
Min / Max value	✓		✓
Measuring rate			
Standard	500 ms		
Process connection			
Thread	G¼ / H16 UNF		G¼
Material	Stainless steel1.0718 zinc-plated / Stainless steel 1.4435		Stainless steel1.4435
Medium temperature	0...50 °C		0...50 °C
For aggressive media	✓		✓

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General data			
Type	**E-Ex**	**D-Ex**	**L-Ex**
Housing			
Degree of protection	IP65		IP65 (Front) / IP54
Dimension	Ø 70 mm, T=30 mm H=100 mm		Ø 80 mm, T=40 mm H=120 mm
Material	ABS plastic		ABS plastic
Operating temperature	0...50 °C		0...50 °C
Weight	130 g		210 g
Power supply			
Auto-off function	✓		✓
Battery type	1x 3 VCR		1x 3 VCR
Battery operation	1000 h		2000 h
Approvals			
	Ex II 1G EEx ia II C T5/T6		Ex II 2G Ex ia II C T6
Certificates (optional)			
DAkkS certificate Works certificate			

Order code				
Type	**Accuracy (full scale)**	**Pressure range**	**Resolution**	**Order number**
E-Ex	0.5 %	-1...30 bar 0...300 bar	10 mbar 100 mbar	EME8REF-E-EX30 EME8REF-E-E300
D-Ex	0.1 %	-1...3 bar -1...30 bar -1...60 bar 0...300 bar 0...700 bar	1 mbar 10 mbar 10 mbar 100 mbar 200 mbar	EME8REF-D-EX03 EME8REF-D-EX30 EME8REF-D-EX60 EME8REF-D-EX300 EME8REF-D-EX700
L-Ex	0.05 %	-1...2 bar -1...10 bar -1...20 bar 0...200 bar 0...400 bar 0...700 bar 0...1000 bar	0.1 mbar 1 mbar 1 mbar 10 mbar 50 mbar 100 mbar 100 mbar	EME8REF--12EL-5 EME8REF--01EL-5 EME8REF-03EL-5 EME8REF-02EL-5 EME8REF-04EL-5 EME8REF-07EL-5 EME8REF-10EL-5

-1...2000 bar

J

Your advantages	
Type	**J**
	• Suitable for aggressive media • For relative pressure and vacuum • Data logger and PC interface for direct data transfer

Technical data	
Type	**J**
Pressure ranges	Between 0...500 mbar and between -1...2000 bar
Accuracy (full scale)	Max. 0.1 %
Adjustment options	
Linearisation	6 points
Tare / Zero	✓
Selectable units	
Pressure	bar, mbar, hPa, kPa, MPa, PSI, mmHg, inHg, cmH_2O, mH_2O, inH_2O, kg/cm^2
Temperature	°C, °F
Features	
Measuring inputs	1 x direct
PC interface	USB (B)
Data memory	
Number of memory	660 000 values (auto)
Recording interval	1 s...10 h
Recording duration	1 min...1000 h
Data sets	Pressure / Temperature
Display	
Display	Multi-functional LCD, 4 digit, with illumination
Functions	Bargraph, display filter, min / max values
Measuring rate	
Standard	100 ms
Process connection	
Thread	G½
Material	Stainless steel 1.4542
Medium temperature	-10...70 °C
For aggressive media	✓

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General data	
Type	J
Housing	
Degree of protection	IP65 (front) / IP40
Dimension	86 x 86 mm, T=40 mm H=135 mm
Material	Aluminium
Operating temperature	-10...70 °C
Weight	900 g
Power	
Auto-off function	✓
Battery type	internal accu
Ext. power	USB
Battery operation	2000 h
Certificate (optional)	
DAkkS certificate	
Works certificate	

Order code

Type	**Accuracy (full scale)**							
J	0.2%	EME8AE	JT					
	0.1%	EME8AE	JU					
Certificate								
Without certificate				0				
SIT certificate				Z				
Vacuum/Relative								
Relative pressure					R			
Vacuum					V			
Pressure range	**Resolution**							
0...100 mbar	0.1 mbar					00B1		
0...250 mbar	0.1 mbar					0B25		
0...500 mbar	0.1 mbar					00B5		
(-1)/0...1 bar	1 mbar					001B		
(-1)/0...2.5 bar	1 mbar					02B5		
(-1)/0...5 bar	1 mbar					005B		
(-1)/0...10 bar	10 mbar					010B		
(-1)/0...20 bar	10 mbar					020B		
(-1)/0...40 bar	10 mbar					040B		
(-1)/0...60 bar	10 mbar					060B		
0...100 bar	100 mbar					100B		
0...250 bar	100 mbar					250B		
0...350 bar	100 mbar					350B		
0...500 bar	100 mbar					500B		
0...700 bar	100 mbar					700B		
0...1000 bar	1 bar					1KB0		
0...1500 bar	1 bar					1KB5		
0...2000 bar	1 bar					2KB0		
Customer-specific measuring range*						XXXX		
Interface								
USB								S
Example order number		**EME8AE**	**JT**	**0**	**R**	**00B1**		**S**

* Further measuring ranges on request.

-1...2500 bar

P

P built-in version

Your advantages	
Type	**P**
	• Suitable for aggressive media • For relative pressure and vacuum • PC interface for direct data transfer

Technical data	
Type	P
Pressure ranges	Between 0...500 mbar and between -1...2500 bar
Accuracy (full scale)	0.2 %, 0.5 % or 0.05 %
Adjustment options	
Linearisation	6 point
Tare / Zero	✓
Selectable units	
Pressure	bar, mbar, kPa, MPa, PSI
Features	
Measuring inputs	1 x direct
PC interface (optional)	RS232
Built-in version (optional)	✓
Display	
Display	Multi-functional LCD, 4 digit (0.5 % / 0.2 %), 5 digit (0.05 % / 0.025 %)
Functions	Bargraph, display filter, min / max values
Measuring rate	
Standard	100 ms
Process connection	
Thread	G½
Material	Stainless steel 1.4542
Medium temperature	0...50 °C
For aggressive media	✓

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General data	
Type	P
Housing	
Degree of protection	IP65 (front) / IP40
Dimension	86 x 86 mm, T=40 mm H=135 mm
Material	Aluminium
Operating temperature	0...50 °C
Weight	900 g
Power	
Auto-off function	✓
Battery type	2 x 1,5 V AAA
Ext. power	24 VDC
Battery operation	8000 h
Certificate (optional)	
DAkkS certificate	
Works certificate	

Order code

Type	**Accuracy (full scale)**								
P	0.5 %				EME8AE	PG			
	0.2 %				EME8AE	B2			
	0.05 %				EME8AE	LD			
Certificate									
Without certificate							0		
SIT certificate							Z		
Vacuum/Relative									
Relative pressure								R	
Vacuum								V	
Pressure range	**Resolution**	**0.5 %**	**0.2 %**	**0.05 %**					
0...500 mbar		1 mbar	0.1 mbar	0.1 mbar					00B5
(-1)/0...1 bar		1 mbar	1 mbar	0.1 mbar					001B
(-1)/0...2.5 bar		1 mbar	1 mbar	0.5 mbar					02B5
(-1)/0...5 bar		1 mbar	1 mbar	0.5 mbar					005B
(-1)/0...10 bar		10 mbar	10 mbar	1 mbar					010B
(-1)/0...20 bar		10 mbar	10 mbar	2 mbar					020B
(-1)/0...40 bar		10 mbar	10 mbar	5 mbar					040B
(-1)/0...60 bar		10 mbar	10 mbar	5 mbar					060B
0...100 bar		100 mbar	100 mbar	10 mbar					100B
0...250 bar		100 mbar	100 mbar	20 mbar					250B
0...350 bar		100 mbar	100 mbar	50 mbar					350B
0...500 bar		100 mbar	100 mbar	50 mbar					500B
0...700 bar		100 mbar	100 mbar	50 mbar					700B
0...1000 bar		1 bar	1 bar	100 mbar					1KB0
0...1500 bar		1 bar	1 bar	200 mbar					1KB5
0...2000 bar		1 bar	1 bar	500 mbar					2KB0
0...2500 bar		1 bar	1 bar						2KB5
Customer-specific measuring range*									XXXX
Interface									
Without									0
RS 232									S
Example order number					**EME8AE**	**PG**	**0**	**R**	**00B5**	**0**

* Further measuring ranges on request.

Accessoires // Test pumps // Digital pressure gauges

Case


DAkkS-Certificate


Dirt trap


Adapter G¼ - G¼


Pressure hose

For pneumatic test pumps		Order code
Hose	Polyamid, 1 m, chromed cap nut G¼ (female)	EPPM040SCHLA01
DIN adapter set	Chromed brass, 11 adapter, G¼ (female) - xxx	EPPM040ADAPT01
DIN single adapter	Chromed brass, lasered, G¼ (male) -xxx	
	G¼ A - G⅛ I	FHP011
	G¼ A - G⅜ I	FHP012
	G¼ A - G½ I	FHP013
	G¼ A - NPT⅛ I	FHP014
	G¼ A - NPT¼ I	FHP015
	G¼ A - NPT½ I	FHP016
	G¼ A - M12 x 1,5 I	FHP017
	G¼ A - M20 x 1,5 I	FHP018
	G¼ A - G⅛ A	FHP019
	G¼ A - G¼ A	FHP020
	G¼ A - G¼ I	FHP021
DIN seal set for DIN adapter	Different o-rings and thread tape seals in plastic box	EPPM040DICHT01
reducing adapter P40 adapter set	Chromed brass, G¼ (male) - G⅛ (female)	EPPM040ADAPP40
Dirt trap	Up to max. 35 bar	EME8IDT6001000
Service kit seal set P40.2/ P60	Internal main piston and valve seals	EPPM040DICHT02
Fine adjust/ release valve	Complete valve system	EPPM040REGVE01
Replacement valve P40.2/ P60	Inlet and outlet valve incl. seals for replacement	EPPM040VENTIL01
Case blue P4	SIKA logo, foam lining and rigit foam inlay	XHP 180
Case blue P40.2/ P60	SIKA logo, foam lining and rigit foam inlay	EPPM040KOFFE01
Case grey P40.2/ P60	Neutral version, foam lining and rigit foam inlay	EPPM040KOFFE02
Rotary union	Brass G¼ (male) - G½ (female)	EPPM040WIRBEL01

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For hydraulic test pumps		Order code
Hose	Polyamide, 1 m, MiniMess®, chromed cap nut MM1620 (female)	XHP104
High pressure hose P1000.2	Chromed cap nut with 2 adapters G¼ (male) - G¼ (female)	EME8HP10000000
Pressure gauge connection	MiniMess®, bulk head, chromed steel, MM1620 (male) - G¼ (female)	XHP103
Testpoint	MiniMess®, coupling, chromed steel MM1620 (male) - G¼ (male)	XHP214
Rotary union	MiniMess® direct connection, chromed steel M1620 (female) - G¼ (female)	EME81620I-G14I
DIN adapter set	Stainless steel, 11 adapter, G¼ (male) - xxx	EPPM700ADAPT01
DIN single adapter	Stainless steel, lasered, G¼ (male) - xxx	
	G¼ A - G⅛ I	FHP033
	G¼ A - G⅜ I	FHP034
	G¼ A - G½ I	FHP035
	G¼ A - NPT⅛ I	FHP022
	G¼ A - NPT¼ I	FHP036
	G¼ A - NPT½ I	FHP023
	G¼ A - NPT⅜ I	FHP024
	G¼ A - M12 x 1,5 I	FHP037
	G¼ A - M20 x 1,5 I	FHP038
	G¼ A - G⅛ A	FHP039
	G¼ A - G¼ A	FHP040
	G¼ A - G¼ I	FHP041
DIN seal set for DIN adapter	Different o-rings and thread tape seals in plastic box	EPPM040DICHT01
Cone seal Ref. P, Q, R, J	>1500 bar	EME8AECONO000
Hydraulic oil	plastic bottle, 0.25 litre	EZHÖ0100000000
Case blue P700.3 / P1000.2	SIKA logo, foam lining and rigit foam inlay	XHP 212

For digital pressure gauges		Order code
All types	DAkkS certificate (10 measuring points)	EKDRUCK000000D
	SIKA works certificate (10 measuring points)	EKDRUCK000000W
Type P	RS 232 C cable	EME8AEQCCABLE0
	Linearisation type P (0.05%): accuracy 0.025 % full scale (from ≥ 10 bar)	On request
Type P / J	Software calibration (PresKal)	EME8AEPCSW0000
	Software monitoring (DEMO)	EME8AESWTDEMKA
Type J	Software Datalogger (Analyzer Light)	EME8AESWANALLI
Type L-Ex / E-Ex / D-Ex	Oil and greasefree version up to max. 200 bar, 60 °C	On request

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