

New!

Exact-Temp Thermometers

High-precision instruments to monitor freezers, ultralow freezers, blood bank freezers, refrigerators, incubators and ovens as well as climate chambers.

- Thermometers traceable to international standards (with certificate of conformance & accuracy)
- Available as digital or conventional thermometers (organic or mercury filling, with/without safety coating)
- Unbreakable plastic bottles
- Attached magnets for easy wall or door mounting
- Individual serial number



Zertifikat Konformität & Genauigkeit / Certificate of Conformance & Accuracy

Dieses Thermometer, gekennzeichnet mit der Serien-Nr.: _____
wurde mit einem Normal-Instrument verglichen. Die Anzeigenauigkeit dieses
Instruments ist rückführbar auf internationale Normale (PTB, NIST)

This thermometer identified by above mentioned Serial-number was verified by
direct comparison to high precision temperature calibration equipment. The accuracy
of this instrument is traceable to international Standards (PTB, NIST)

Standard Serial No.: 5102

Datum der Prüfung / Calibration Date _____

Norbert Gegenwarth

QA Calibration

Ludwig Schneider

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Ludwig Schneider

High-precision measuring instruments for
temperature and density

Exact-Temp Thermometers

Continuously precise measurements

Exact-temp thermometers are high-precise instruments to monitor cooling and tempering devices in laboratories, medical technology and R&D. Each thermometer is mounted in an unbreakable plastic bottle, filled with a special medium to ensure accurate measurements even at open doors. They are supplied with magnets for space-saving wall or door fixing. Exact-temp thermometers are very reliable and economical because they work independent from any mains or battery connection.

Traceable to international standards

Exact-temp thermometers are available with organic or mercury filling in varying measuring ranges and scale units. The instruments are carefully aged to ensure a high accuracy. Exact-temp thermometers are calibrated with a reference and are therefore traceable to international standards. All instruments will be delivered with a certificate of conformance and accuracy.

On request we provide also a works certificate or DAkkS-Calibration certificate (two calibration points as standard). These high precision thermometers are especially suitable for monitoring certified quality management systems.

**With works certificate
(Ref.-No.:/03)**

**With DAkkS calibration certificate
(Ref.-No.:/04)**

Application	Ref.-No.	Type	Measuring range (°C)	Scale unit (°C)	Accuracy (°C)	Length (mm)	Thermometer filling	Volume, bottle material	Bottle filling
Thermometers with organic filling									
Ultralow freezers	70 001 11	ULF-010S	-90 to +20	1.0	± 2	180	red	60 ml, PETG	Sand
Freezers	70 101 11	F-100-01S	-25 to -5	0.1	± 0,2	235	blue	60 ml, PETG	Ethylene glycol mixture
	70 001 12	F-010-1S	-30 to 0	0.5	± 1	130	red	30 ml, PETG	Ethylene glycol mixture
Refrigerators	70 101 12	R-200-01S	-2 to +10	0.1	± 0,2	230	blue	60 ml, PETG	Ethylene glycol mixture
	70 001 14	R-020-1S	-5 to +15	0.5	± 1	130	rot	30 ml, PETG	Ethylenglykol-Gemisch
Blood bank freezers	70 001 13	BB-100S	-5 to +20	0.5	± 1	150	red	250 ml, PETG	Ethylene glycol mixture
	70 101 13	BB-210-01S	-2 to +10	0.1	± 0,2	230	blue	250 ml, PETG	Ethylene glycol mixture
Incubators	70 101 14	I-300-01S	+15 to +30	0.1	± 0,2	180	blue	60 ml, PETG	Ethylene glycol mixture
	70 001 15	I-030-1S	+18 to +50	0.5	± 1	130	red	30 ml, PETG	Ethylene glycol mixture
	70 101 15	I-310-01S	+25 to +45	0.1	± 0,2	190	blue	60 ml, PETG	Ethylene glycol mixture
Ovens	70 001 16	OV-070S	+20 to +130	1.0	± 2	135	red	30 ml, PC	Vermiculite
	70 001 17	OV-080-S	+35 to +200	1.0	± 2 (>100 °C: ±3)	180	red	60 ml, PFA	Vermiculite
	70 101 16	OV-700S	+50 to +115	0.5	± 1°C	240	blue	60 ml, PC	Vermiculite
Thermometers with mercury filling (Hg)									
Freezers	70 101 43	F-100-01	-25 to -5	0.1	± 0,1	210	Hg	60 ml, PETG	Ethylene glycol mixture
	70 001 43	F-010-1	-30 to 0	0.5	± 0,5	110	Hg	30 ml, PETG	Ethylene glycol mixture
Refrigerators	70 001 44	R-020-1	-5 to +15	0.5	± 0,5	120	Hg	30 ml, PETG	Ethylene glycol mixture
	70 101 44	R-200-01	-2 to +10	0.1	± 0,1	180	Hg	60 ml, PETG	Ethylene glycol mixture
Blood bank freezers	70 101 45	BB-210-01	-2 to +10	0.1	± 0,1	180	Hg	250 ml, PETG	Ethylene glycol mixture
	70 101 46	I-300-01	+15 to +30	0.1	± 0,1	180	Hg	60 ml, PETG	Ethylene glycol mixture
Incubators	70 001 45	I-030-1	+18 to +50	0.5	± 0,5	130	Hg	30 ml, PETG	Ethylene glycol mixture
	70 101 47	I-310-01	+25 to +45	0.1	± 0,1	190	Hg	60 ml, PETG	Ethylene glycol mixture
Ovens	70 001 46	OV-070	+20 to +130	1.0	± 1	135	Hg	30 ml, PC	Vermiculite
	70 001 47	OV-080	+35 to +200	1.0	± 1 (>100 °C: ±1,5)	180	Hg	60 ml, PFA	Vermiculite
	70 101 48	OV-700-01	+95 to +115	0.1	± 0,1	200	Hg	60 ml, PC	Vermiculite

Exact Temp Thermometers with Safety Coating

Application	Ref.-No.	Type	Measuring range (°C)	Scale unit (°C)	Accuracy (°C)	Length (mm)	Thermometer filling	Volume, bottle material	Bottle filling
Thermometers with organic filling									
Ultralow freezers	80 001 11	ULF-010S	-90 to +20	1.0	± 2	180	red	60 ml, PETG	Sand
Freezers	80 101 11	F-100-01S	-25 to -5	0.1	± 0,2	235	blue	60 ml, PETG	Ethylene glycol mixture
	80 001 12	F-010-1S	-30 to 0	0.5	± 1	130	red	30 ml, PETG	Ethylene glycol mixture
Refrigerators	80 101 12	R-200-01S	-2 to +10	0.1	± 0,2	230	blue	60 ml, PETG	Ethylene glycol mixture
	80 001 14	R-020-1S	-5 to +15	0.5	± 1	130	red	30 ml, PETG	Ethylene glycol mixture
Blood bank freezers	80 001 13	BB-100S	-5 to +20	0.5	± 1	150	red	250 ml, PETG	Ethylene glycol mixture
	80 101 13	BB-210-01S	-2 to +10	0.1	± 0,2	230	blue	250 ml, PETG	Ethylene glycol mixture
Incubators	80 101 14	I-300-01S	+15 to +30	0.1	± 0,2	180	blue	60 ml, PETG	Ethylene glycol mixture
	80 001 15	I-030-1S	+18 to +50	0.5	± 1	130	red	30 ml, PETG	Ethylene glycol mixture
Ovens	80 101 15	I-310-01S	+25 to +45	0.1	± 0,2	190	blue	60 ml, PETG	Ethylene glycol mixture
	80 001 16	OV-070S	+20 to +130	1.0	± 2	135	red	30 ml, PC	Vermiculite
	80 001 17	OV-080-S	+35 to +200	1.0	± 2 (>100 °C: ±3)	180	red	60 ml, PFA	Vermiculite
	80 101 16	OV-700S	+50 to +115	0.5	± 1°C	240	blue	60 ml, PC	Vermiculite
Thermometers with mercury filling (Hg)									
Freezers	80 101 43	F-100-01	-25 to -5	0.1	± 0,1	210	Hg	60ml / PETG	Ethylene glycol mixture
	80 001 43	F-010-1	-30 to 0	0.5	± 0,5	110	Hg	30ml / PETG	Ethylene glycol mixture
Refrigerators	80 001 44	R-020-1	-5 to +15	0.5	± 0,5	120	Hg	30ml / PETG	Ethylene glycol mixture
	80 101 44	R-200-01	-2 to +10	0.1	± 0,1	180	Hg	60ml / PETG	Ethylene glycol mixture
Blood bank freezers	80 101 45	BB-210-01	-2 to +10	0.1	± 0,1	180	Hg	250ml / PETG	Ethylene glycol mixture
	80 101 46	I-300-01	+15 to +30	0.1	± 0,1	180	Hg	60ml / PETG	Ethylene glycol mixture
Incubators	80 001 45	I-030-1	+18 to +50	0.5	± 0,5	130	Hg	30ml / PETG	Ethylene glycol mixture
	80 101 47	I-310-01	+25 to +45	0.1	± 0,1	190	Hg	60ml / PETG	Ethylene glycol mixture
Ovens	80 001 46	OV-070	+20 to +130	1.0	± 1	135	Hg	30ml / PC	Vermiculite
	80 001 47	OV-080	+35 to +200	1.0	± 1 (>100 °C: ±1,5)	180	Hg	60ml / PFA	Vermiculite
	80 101 48	OV-700-01	+95 to +115	0.1	± 0,1	200	Hg	60ml / PC	Vermiculite

Thermometers with safety coating

All thermometers are encapsulated with a high-grade safety coating to protect contents, users and environment from splintered glass or display fluid leakage. Coating: PTFE/FEP, transparent



Digital Exact-Temp Thermometers

High-precision instruments to monitor freezers, blood bank freezers, incubators, climate chambers, ultralow freezers and ovens. Each sensor is mounted in an unbreakable plastic bottle, filled with a special medium to ensure accurate measurings even at open doors.

Digital Exact-temp thermometers offer the simultaneous display of 3 temperatures (beside the minimum and maximum temperature the ambient temperature is indicated). The plastic bottle with liquid and precision sensor has to be placed into the device to be monitored, while the display unit remains visible outside.

An audible alarm will sound when the temperature rises above or goes below the set temperature.

Product features

- Thermometers traceable to international standards (with certificate of conformance & accuracy: accuracy $\pm 0,5$ °C, resolution 0,1 °C)
- Temperature units: °C or °F
- 3 display modes: maximum, minimum and ambient temperature
- Alarm function
- Alkaline battery (AAA) included
- Breakage protected PETG plastic bottles (with 30 ml ethylene glycol mixture)
- Bottles with attached magnets for easy wall or door mounting
- Individual serial number

Exact-temp thermometer bottles are supplied with magnets for space-saving wall or door fixing.

Digital Exact-temp thermometers are calibrated with one temperature and will delivered with certificate of conformance & accuracy.

The instruments are available with works certificate on request (Ref.-No.:/03).

Application	Ref.-No.	Measuring range (°C)	Certified temperature (°C)	Bottle filling
Ultralow freezers	63927	-50 to 70	-20	Ethylene glycol mixture
Ice point	63801	-50 to 70	0	Ethylene glycol mixture
Refrigerators	63893	-50 to 70	4	Ethylene glycol mixture
Incubators/water bath	63894	-50 to 70	37	Ethylene glycol mixture
Ambient/room	63895	-50 to 70	21	Ethylene glycol mixture

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