

Professional Measurement Technology

ACCORDING TO HACCP STANDARDS



Core Temperature Measurement

Basic Fold-Back Thermometer TLC 700
Temperature measurements according to HACCP standards.



Application: e. g. core temperature measurement of food

The TLC 700 offers:

- Compact design with foldable penetration probe
- Exchangeable color ring, to relate the TLC to a certain department of your company
- Measurement range of -30 °C to +220 °C
- \pm 0.5 °C (-30 °C to +100 °C) accuracy exceeds standard requirements
- User replaceable battery
- Waterproof housing (IP 65)
- Calibration certificate included

A guide to temperature limits

These temperature values insure optimum freshness:

Food

Transport and Storage Temperature			
Fresh milk products	≤ +6 °C		
Milk at a Dairy	≤ +6 °C		
Pasteurized milk, repackaged milk	2° 8+ ≥		
Butter	\leq +10 °C (\leq +6 °C for transport)		
Dessert	≤ +7 °C		
Cheese (except hard cheese)	≤ +10 °C		
Ice cream, prepackaged	\leq -18 °C (\leq -20 °C for transport)		
Ice cream, scooped and served	≤ -10 °C		
Eggs (if eggs to be stored over 18 days)			
Egg products (deep frozen)	≤ -18 °C		
Egg products (frozen)	≤ -12 °C		
Egg products (fresh)	≤ +4 °C		
Raw egg-containing food products (e.g. fresh mayonnaise)	≤ +7 °C		
Bakery products with partially baked filling	≤ +7 °C		
Fresh meat products, fresh meat (including big game)	≤ +7 °C		
Fresh poultry (rabbit and small game)	≤ +4 °C		
Exception: flightless birds (as approved)	≤ +7 °C		
Meat preparation	≤ +4 °C		
Meat preparation (production and sales on site)	≤ +7 °C		
Cold cut plates	≤ +7 °C		
Ground meat	≤ +2 °C		
Ground meat (production and sales on site): 24 hours delivery	\leq +7 °C (\leq +2 °C for transport)		
Offal / Organ meats	≤ +3 °C		
Meat, poultry, fish (frozen)	≤ -12 °C		
Meat, poultry, fish (deep frozen)	≤ -18 °C		
Fish, fish products	in melting ice or ≤ +2 °C		
Smoked fish	≤ +7 °C		
Fishery products (marinaded, soured, smoked)	\leq +7 °C (\leq +6 °C for transport)		
Fishery products (fresh) plus crawfish and mollusk products			
Delicacies	≤ +7 °C		
Raw fruit and vegetables	≤ +7 °C		
Salads, fresh and / or crushed, delicacies salads	≤ +7 °C		

Retained samples for testing

Save for a minimum of 10 days

Hot Meals	
Heated (core temperature) Food oil quality Food counter	\geq +70 °C \geq 24 % TPM \geq +65 °C
Cold Meals	
Storana tamparatura until	~ ±7°C

Disinfection facilities

serving

Water	≥ +82 °C

German Food Inspectors recommend ebro® instruments

- Thermometers
- Temperature
 Data Loggers
- Food Oil Quality Meter



Flexible Core Temperature Measurement

Core Thermometer TTX 200 Flexible core temperature measurements through temperature probe with cable.





Application: temperature control, e. g. during the manufacturing of food

The TTX 200 offers:

- Fast and easy core temperature measurement with the external sensor with 60 cm silicone cable and handle
- Very large display with big numbers for easy reading
- Measurement range of -30 °C to +199.9 °C
- Waterproof housing (IP 65)
- Calibration certificate included

Food oil quality Measurement

Food Oil Monitor Set* FOM 330-1 Objective evaluation of the quality of frying oil.







Applications: restaurants, catering, snack stands a.s.o., for control of quality of frying oil

The FOM 330 offers:

- Determination of the frying oil quality in the range of 0 % to 40 % TPM
- Maintaining a constantly high food quality
- Get clear measurement results
- All around visible signal lamp for displaying the food oil quality
- Reduction of costs due to exact knowledge of the right time to change the oil
- Robust, waterproof (IP 67), easy to clean housing
- Calibration certificate included

^{*}Set consists of food oil monitor, protection cover and carrying case.

Monitoring / Recording the temperature

Temperature data logger EBI 20-T1 with internal temperature sensor.





Applications: Continuous monitoring of the temperature during the transport and storage of food.

The EBI 20-T1 offers:

- Internal temperature sensor
- Measuring range from -30 °C to +70 °C
- Min/Max values in display
- Shock proof and water proof housing (IP 67)
- Calibration certificate included

Note: The logger requires the software Winlog.basic and an interface EBI IF-20. The EBI 20-T1-set contains both.

Surface and Core Temperature Measurement

Dual Infrared/Fold-Back Thermometer TLC 750i Convenience of accuracy and speed in one device.



The TLC 750i offers:

- Contamination free surface measurement and core temperature measurement in one device
- Temperature range of -50 °C to +250 °C
- Display with backlight for reading in dark environments
- Display can be upside down for reading from both sides
- Waterproof housing (IP 65)
- Calibration certificate included

Туре	Description	Item Number
TLC 700	Basic Fold-Back Thermometer	1340-5735A
TTX 200	Type T Core Thermometer	1340-5150A
FOM 330-1	Food Oil Monitor-Set	1340-2702A
CO 330	Reference oil for the Food Oil Monitor FOM 330	1341-2700
EBI 20-T1	Temperature data logger with internal temperature sensor	1601-0042A
EBI 20-T1-Set	Temperature data logger set (temperature logger, evaluation software, interface)	1601-0046A
EBI 20-IF	Interface for EBI 20, incl. cable and evaluation software	1601-0020
EBI 20-WM	EBI 20 wall bracket with padlock	1601-0030
EBI 20-WM-1	EBI 20 truck wall bracket	1601-0033
TLC 750i	Dual Infrared-/Fold-Back Thermometer	1340-5736A
AG 121	Nylon Case for TLC 750i	1341-0624
AG 190	Drill for frozen food	1341-3834

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