

EBI 100 Precision Data Loggers

With the EBI 100 data loggers, ebro offers reliable measurement devices for routine control according to German guidelines and ISO 15883.

The precision data loggers are available in different versions including temperature or temperature / pressure loggers with and without external probes. They record the temperature and pressure variation over time during the washer-disinfector or sterilizer process and can easily be read out on a computer using the Winlog.med software. This software will make the test evaluation easy, and automatically calculates the A_0 value.

Applications:

- Routine control of steam sterilizers
- Routine control of washer-disinfectors and washer-disinfectors for endoscopes





Integrated sensor

Rigid metal probe

Bendable metal
probeLuer-Lock
connection

Tube connection

General technical specifications: valid for all EBI 100 Data Loggers*

Accuracy: Temperature	±0.3 °C
Resolution: Temperature	0.1 C
Accuracy: Pressure (only pressure data loggers)	±20 mbar
Resolution: Pressure (only pressure data loggers)	1 mbar
Sensor: Temperature	Pt 1000, internal
Sensor: Pressure (only pressure data loggers)	Piezo resistive pressure sensor (temperature compensated)
Sampling rate	1 sec to 24 hours
Measurement mode	<ul style="list-style-type: none"> • Endless measurement • Measurement start / stop time • Measurement immediately until end of memory • Measurement from start time
Operating temperature	EBI 100-T100: -40 °C ... +150 °C EBI 100-T101: -85 °C ... +85 °C
Storage temperature	-40 °C ... +70 °C
Battery	Lithium button cell, 3,6 V, replaceable
Battery lifetime	Up to 2 years, depending on measurement interval and operating temperature (EBI 100-T101: only 100 hours at -85 °C / -121 °F)
Dimensions (L x W x H)	48 x 48 x 24 mm**
Weight	Approximately 70 g**
Housing material	Stainless steel (V4a), PEEK
Protection class	IP 68 (-30 °C ... +150 °C / -22 °F ... +302 °F)
Certificate	Factory calibration certificate

* Please find the exact technical data of each EBI 100 logger type on the next pages.

** Dimensions and weight just refer to the EBI 100 housing.

EBI 100-T10x (Low) Temperature Data Logger

Integrated sensor



Technical Data

Measurement range	EBI 100-T100: -40 °C ... +150 °C (-40 °F ... +302 °F) EBI 100-T101: -85 °C ... +85 °C (-121 °F ... +185 °F)
Data memory	27,000 measurement values

- 1 internal temperature sensor, Pt 1000

Type	Description	Part No.
EBI 100-T100	Temperature Data Logger, 1-port, internal	1340-6500
EBI 100-T101	Low Temperature Data Logger, 1-port, internal	1340-6501

EBI 100-T21x Temperature Data Logger

Rigid metal probe



Technical Data

Measurement range	-40 °C ... +150 °C (-40 °F ... +302 °F)
Data memory	27,000 measurement values

- 1 external temperature sensor, radial, pointed, Ø 3 mm

Type	Description	Part No.
EBI 100-T210	Temperature logger, 1-channel, L = 50 mm	1340-6502
EBI 100-T211	Temperature logger, 1-channel, L = 75 mm	1340-6503

EBI 100-T23x Temperature Data Logger

Rigid metal probe



Technical Data

Measurement range	-40 °C ... +150 °C (-40 °F ... +302 °F)
Data memory	27,000 measurement values

- 1 external temperature sensor, axial, pointed, Ø 3 mm

Type	Description	Part No.
EBI 100-T230	Temperature logger, 1-channel, L = 50 mm	1340-6506
EBI 100-T231	Temperature logger, 1-channel, L = 75 mm	1340-6507
EBI 100-T232	Temperature logger, 1-channel, L = 100 mm	1340-6508
EBI 100-T233	Temperature logger, 1-channel, L = 150 mm	1340-6509

EBI 100-T26x Bottle Logger Rigid metal probe



Please see page 42 for suitable bottle, can and glass adapters.

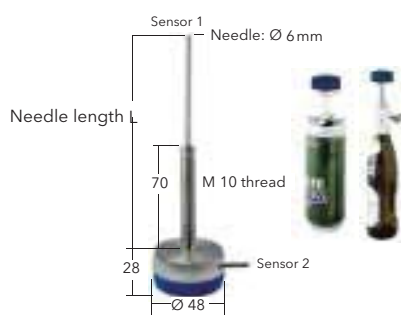
Technical Data

Measurement range	-40 °C ... +150 °C (-40 °F ... +302 °F)
Data memory	27,000 measurement values

Type	Description	Part No.
EBI 100-T261	Bottle logger, 1-channel, L = 135 mm	1340-6518
EBI 100-T262	Bottle logger, 1-channel, L = 190 mm	1340-6519
EBI 100-T263	Bottle logger, 1-channel, L = 245 mm	1340-6520
EBI 100-T264	Bottle logger, 1-channel, L = 270 mm	1340-6521
EBI 100-T265	Bottle logger, 1-channel, L = 300 mm	1340-6522

- 1 external temperature sensor, axial, blunt, Ø 6 mm

EBI 100-T46x Bottle Logger Rigid metal probes



Please see page 42 for suitable bottle, can and glass adapters.

Technical Data

Measuring range	-40 °C ... +150 °C (-40 °F ... +302 °F)
Data memory	2 x 13,500 measurement values

Type	Description	Part No.
EBI 100-T461	Bottle logger, 2-channel, L = 135 mm	1340-6523
EBI 100-T462	Bottle logger, 2-channel, L = 190 mm	1340-6524
EBI 100-T463	Bottle logger, 2-channel, L = 245 mm	1340-6525
EBI 100-T464	Bottle logger, 2-channel, L = 270 mm	1340-6526
EBI 100-T465	Bottle logger, 2-channel, L = 300 mm	1340-6527

- 2 external temperature sensors, axial and radial, blunt, Ø 6 mm

EBI 100-T221 Temperature Data Logger Bendable metal probe



Technical Data

Measurement range	-40 °C ... +150 °C (-40 °F ... +302 °F)
Data memory	27,000 measurement values

- 1 external temperature sensor, radial, bendable, blunt, Ø 1.5 mm

Type	Description	Part No.
EBI 100-T221	Temperature data logger, 1-channel, L = 500 mm	1340-6505

EBI 100-T241 Temperature Data Logger

Bendable metal probe



For a suitable silicone protection box, please see page 42.

- 1 external temperature sensor, axial, bendable, blunt, Ø 1.5 mm

Technical Data

Measurement range	-40 °C ... +150 °C (-40 °F ... +302 °F)
Data memory	27,000 measurement values

Type	Description	Part No.
EBI 100-T241	Temperature data logger, 1-channel, L = 500 mm	1340-6512

EBI 100-T441 Temperature Data Logger

Bendable metal probes



- 2 external temperature sensors, axial, bendable, blunt, Ø 1.5 mm

Technical Data

Measurement range	-40 °C ... +150 °C (-40 °F ... +302 °F)
Data memory	2 x 13,500 measurement values

Type	Description	Part No.
EBI 100-T441	Temperature data logger, 2-channel, L = 500 mm	1340-6529

EBI 100-TP230 Temperature / Pressure Data Logger

Rigid metal probe



- 1 external temperature sensor, axial, Pt 1000, Ø 2 mm
- 1 internal pressure sensor, piezo resistive

Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar to 4000 mbar
Data memory	2 x 9,000 measurement values

Type	Description	Part No.
EBI 100-TP230	Temperature / Pressure logger, 2-channel, L = 40 mm	1340-6554

EBI 100-TP231 Temperature / Pressure Data Logger

Luer-Lock connection



- 1 external temperature sensor, axial, blunt, Ø 2 mm
- 1 internal pressure sensor, piezo resistive

Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar ... 4000 mbar
Data memory	2 x 9.000 Messwerte

Type	Description	Part No.
EBI 100-TP231	Temperature/pressure data logger, 2-channel, L = 40 mm	1340-6555

EBI 100-TP200 Temperature / Pressure Data Logger

Tube connection and M10x1 internal thread



- 1 external temperature sensor, axial, Pt 1000, Ø 2 mm
- 1 internal pressure sensor, piezo resistive

Technical Data

Measurement range: temperature	0 °C ... +150 °C (+32 °F ... +302 °F)
Measurement range: pressure	1 mbar to 4000 mbar
Data memory	2 x 9,000 measurement values

Type	Description	Part No.
EBI 100-TP200	Temperature/pressure data logger, 2-channel, L = 40 mm, with tube connection	1340-6552

Interfaces and Software Sets for EBI 100



- Set SI 1100** for EBI 10, EBI 100 and EBI 11
- 2-port Interface IF 100
 - Software Winlog.pro
 - USB connection
 - Includes antenna



- Set SI 1110** for EBI 100 and EBI 11
- 2-port Interface IF 100-1
 - Software Winlog.pro
 - USB connection



- Set SI 1200** for EBI 10 and EBI 100
- 4-port Interface IF 200
 - Software Winlog.pro
 - USB connection
 - Includes antenna



- Set SI 2100** for EBI 10, EBI 100 and EBI 11
- 2-port Interface IF 100
 - Software Winlog.med
 - USB connection
 - Includes antenna



- Set SI 3200** for EBI 10 and EBI 100
- 4-port Interface IF 200
 - Software Winlog.validation
 - USB connection
 - Includes antenna

all Sets: Colored LEDs signaling programming, readout and incorrect development

Please find complete routine control sets on page 43.

For more information about EBI 100 accessories, please see page 42.

Type	Description	Part No.
SI 1100	Set: EBI IF 100 interface and Winlog.pro software	1340-6061
SI 1110	Set: EBI IF 100-1 interface and Winlog.pro software	1340-6561
SI 1200	Set: EBI IF 200 interface and Winlog.pro software	1340-6062
SI 2100	Set: EBI IF 100 interface and Winlog.med software	1340-6064
SI 3200	Set: EBI IF 200 interface and Winlog.validation software	1340-6068

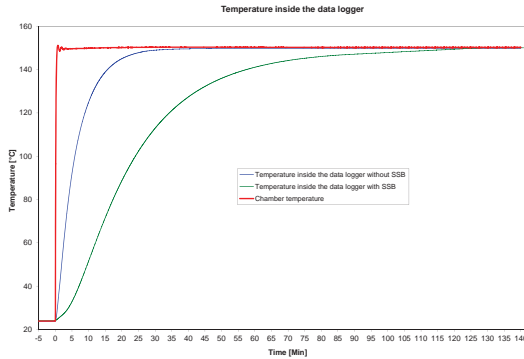
Accessories for EBI 100



Silicone protection box AL 100 for EBI 100-T241

- Protects temperature logger against heat peaks
- Protects temperature logger against mechanical damage
- Extends the life of temperature data loggers

Ø 78mm, Height: 44mm



Battery change set AL 103

for EBI 10 and EBI 100
Consisting of 3 batteries, 3 O-rings with grease, cross slot screw driver, silicone grip and silicone protection box cover for battery exchange.

AL 104 Battery Set
for EBI 10 and EBI 100
Consisting of 3 batteries and 4 O-rings with grease.



Can adapter set EBI DA-Set

With this adapter set you can fix the data loggers at cans or plastic bags. Designed for data loggers of the EBI-series with axial, radial or external sensors. Hereby you assure the use to ensure proper sensor placement.



Can adapter EBI DA
for bottle loggers
(see page 39)



Bottle adapter EBI FL-S
silicone
for bottle loggers
(see page 39)



Bottle adapter EBI FL-1T
with 2 lateral threaded rods.
Also suitable for cans.
When ordering, please specify type of bottle and bottle size.



Grommets for sensor fixing EBI NI-140
Allows precise mounting of the logger sensor in cans and glass.



Compression fitting EBI KV-3
Allows precise mounting of the logger sensor in glass (caps).

Please find complete routine control sets from page 43.

For EBI 100 interfaces and software, please see page 41.

Type	Description	Part No.
AL 100	Silicone protection box	1340-6020
AL 103	Battery change set for EBI 10 and EBI 100	1100-0117
AL 104	Battery set for EBI 10 and EBI 100, 3 batteries	1100-0118
EBI DA	Can adapter for bottle loggers	1340-1963
EBI DA-Set	Can adapter set	1340-1984
EBI FL-S	Bottle adapter, silicone	1340-1961
EBI FL-1T	Bottle adapter with lateral threaded rods	1340-2185
EBI NI-140	Grommets up to 140 °C / 284 °F (100 pieces)	1340-1988
EBI KV-3	Compression fitting EBI KV-3	1340-2005