FB & MB

a smarter way to calibrate temperature

Products and Services:

- Beamex® Field Temperature Block (FB Series)
- Beamex® Metrology Temperature Block (MB Series)
- Beamex® Smart Reference Probes
- Temperature Calibration Laboratory Services

beamex
WORLD-CLASS CALIBRATION SOLUTIONS™

A smarter way to calibrate temperature!

Introducing a smarter way to calibrate temperature

Beamex introduces a smarter, more efficient and accurate solution for calibrating temperature. It is a complete solution for temperature calibration with various different products and services, such as a series of high-quality dry blocks for field and laboratory use, smart reference probes and temperature calibration laboratory services.

High-quality dry blocks

Beamex has two different dry block series: the Beamex® FB Series Field Temperature Blocks and the Beamex® MB Series Metrology Temperature Blocks. The dry blocks in the FB Series are lightweight, high-accuracy temperature dry blocks for industrial field use. The dry blocks in the MB Series deliver bath-level accuracy for industrial applications.

Smart reference probes

Beamex® Smart Reference Probes are high-quality and very stable reference PRT probes with an integrated memory storing the individual probe coefficients. They are available in two versions: 300 mm straight version or a 90° bent version.

Temperature calibration laboratory services

Services provided by an accredited calibration laboratory for various different temperature measurement products.

Part of the Beamex® Integrated Calibration Solution

Make the most out of the Beamex® dry blocks by using them together with selected documenting Beamex® MC-calibrators.

Beamex® MB Series

Portable temperature dry block that provides bath-level accuracy for industrial applications.

Main features:

- High accuracy: a dry block that provides bath-level accuracy
- Built-in high-accuracy reference probe input (in R model)
- Immersion depth up to 200 mm
- Wide temperature range from –45 °C to +700 °C
- Accredited calibration certificate included as standard
- Part of Beamex® Integrated Calibration Solution (ICS)
- Warranty: 1 year

Available models:

MB Model	Range
MB140 / MB140R	–45 °C … +140 °C
MB155 / MB155R	–30 °C … +155 °C
MB425 / MB425R	+35 °C … +425 °C
MB700 / MB700R	+50 °C … +700 °C

The R models include an internal reference thermometer with a connection for external reference sensor.

Beamex® FB Series

Lightweight, high-accuracy temperature dry block for industrial field use.

Main features:

- Lightweight, portable and fast field block
- High accuracy
- Built-in high-accuracy reference probe input (in R model) supporting plug-and-play smart probes
- Temperature ranges from –25 °C to +660 °C
- Accredited calibration certificate included as standard
- Part of Beamex® Integrated Calibration Solution (ICS)
- Warranty: 1 year

Available Models:

FB Model	Range
FB150 / FB150R	–25 °C … +150 °C
FB350 / FB350R	+33 °C … +350 °C
FB660 / FB660R	+50 °C … +660 °C

The R models include an internal reference thermometer with a connection for external reference sensor.


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25.00
0.1
1007.0
-0.02
0.084
20.96
21.42
20.5

Introducing an integrated and automated temperature calibration solution.
Seamless connectivity!

The Beamex® dry blocks communicate with the selected Beamex® MC-calibrators enabling fully automated temperature calibration and documentation!

About Beamex® Integrated Calibration Solution

The Beamex® Integrated Calibration Solution improves the quality and efficiency of the entire calibration system through faster, smarter and more accurate management of all calibration assets and procedures. Beamex calibrators, workstations, calibration software and professional services form the most integrated, automated calibration system available.

Integrated temperature calibration

Beamex® MB and FB dry blocks are great dry blocks when used as stand-alone products. However, they are more than just normal dry blocks. When you combine them with the Beamex® Integrated Calibration System, you get the most out of them.

Beamex® CMX Calibration Management Software can be used to plan the calibration procedures and save the calibration results. Procedures can be downloaded from the CMX to the Beamex documenting MC-calibrator. The MC-calibrator communicates with the Beamex dry blocks enabling fully automated temperature calibration and documentation. The results can then be uploaded to the CMX.

This saves a lot of valuable time, eliminates any error related to manual entry and assures repeatable calibration procedures.

Temperature calibration with the Beamex® Integrated Calibration Solution, step by step

- In the Beamex® CMX, run a search to select which temperature instruments need to be calibrated.
- Download the instruments to be calibrated onto the connected Beamex documenting calibrator.
- Take the calibrator and the temperature block with you to where the instruments are located.
- Connect the Beamex calibrator to the temperature block. Connect the instrument to the calibrator and/or temperature block.
- Start a fully automatic calibration. The Beamex calibrator will control the temperature block and read the instrument.
- When the calibration procedure is ready, calibration results are stored in the calibrator's memory.
- Go to the next instrument to be calibrated, make connections and run the calibration procedure.
- After all of the necessary instruments have been calibrated, go to the computer, connect the calibrator to CMX and upload all of the calibration results from the calibrator to the CMX.
- The calibration results will be stored in the CMX database, and the calibration certificates can be printed out if necessary.
- If necessary, the CMX can be integrated to communicate with the company's Maintenance Management System to retrieve work orders from the MMS and to acknowledge that the work has been completed.


22.673°C
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Main Features of the Beamex® MB

The Beamex® Metrology Temperature Block (MB) is a high accuracy temperature dry block. It delivers bath-level accuracy in a convenient dry block. It enables you to take laboratory-level accuracy performance with you out to the field.

The unique dual zone control techniques enable excellent stability and uniformity. Immersion depth to 203 mm and temperature ranges from –45 °C … +700 °C.

High accuracy and stability

With a conventional dry block, you typically needed an external reference sensor if you wanted better accuracy. The Beamex® MB has accurate internal temperature measurement and display accuracy up to ±0.1 °C, so you can get high accuracy even without an external reference sensor. With the unique temperature control techniques the Beamex® MB has excellent stability up to ±0.005 °C. This kind of stability has usually been found only in baths, not in dry blocks.

Built-in high-accuracy reference input (in R model)

If you want the best accuracy from the MB, there is a possibility to connect an external reference sensor into the reference sensor connection (R model). This eliminates the need for a separate reference thermometer. The reference sensor measurement is accurate up to ±0.006 °C. ITS-90 or CVD coefficients can be used to compensate any sensor errors.

Wide temperature range from –45 °C to +700 °C

A wide temperature range from –45 °C to 700 °C is available with the various models.

User friendly

The large LCD display, dedicated numeric keyboard and multilingual, menu-based user interface makes the Beamex® MB easy to use. A graphic and audible stability indicator lets you know when a block is stable. The HOT warning light indicates when the block is hot (over +50 °C). The warning light blinks as long as the block is too hot to touch, even when the unit is switched off or when the mains cable is disconnected.

Axial uniformity

With the unique dual zone control and extended well depth, the Beamex® MB has an excellent axial uniformity up to ±0.02 °C.

Radial uniformity

Radial uniformity is the temperature difference between the holes in insert. It is naturally crucial that the reference sensor and the sensor being tested are at the same temperature. The Beamex® MB offers radial uniformity up to ±0.01 °C.

Loading

With the extended well depth and the dual zone temperature control feature, the Beamex® MB can compensate the effect of loading and provides loading specifications up to ±0.005 °C.

Immersion Depth

The Beamex® MB series provides immersion depth up to 203 mm (160 mm in MB140), which, together with the control techniques, provides more stable calibration. Moreover, a deeper immersion depth reduces the stem conduction error (heat loss into the atmosphere), especially in higher temperatures.

Accredited calibration certificate

Each Beamex® MB Metrology Temperature Block is delivered with an accredited calibration certificate.

Part of the Beamex® Integrated Calibration Solution

The communication port enables communication with selected documenting Beamex MC-calibrators for automating calibration and documentation, making the Beamex® MB products part of the Beamex® Integrated Calibration System. Combined with the Beamex® MC5 calibrator, loop calibrations are possible on conventional, HART® and Fieldbus temperature transmitters with sensors.


25.00°C

Main Features of the Beamex® FB Beamex Field Temperature Block

The Beamex® Field Temperature Block (FB) is an ideal temperature block for industrial field use. It is lightweight and easy to carry. It is a very fast dry block, yet it provides excellent accuracy.

Lightweight, portable

The Beamex® FB Field Temperature Block is ideal for industrial field use. It only weights about 8 kg, and it is small enough to carry around.

Speed

The Beamex® FB is extremely quick to reach various temperatures, i.e. it cools down to –25 °C in 15 minutes and heats up to +660 °C in 15 minutes. This saves time and increases productivity.

Accuracy and performance

The Beamex® FB is an easily portable unit that also provides excellent calibration accuracy. The display accuracy is up to ±0.2 °C. Its control technology provides great stability up to ±0.01 °C. The dual zone controlled block provides excellent axial uniformity up to ±0.04 °C and radial uniformity up to ±0.01 °C.

Built-in, high-accuracy reference input (in R model) supporting plug-and-play smart probes

The Beamex® FB has an internal reference thermometer (in R models), which enables connections to the Beamex® Smart Reference Sensors. These sensors have a memory that contains all the sensor correction data. This enables the use of the reference sensor as a real plug-and-play.

Accredited calibration

Each Beamex® FB Field Temperature Block is delivered with an accredited calibration certificate.

Usability

The large LCD display, function keys and multilingual, menu-based user interface makes the Beamex® FB easy to use. A graphic and audible stability indicator lets you know when a block is stable. The HOT warning light indicates when the block is hot (over +50 °C). The warning light blinks as long as the block is too hot to touch, even when the unit is switched off or when the mains cable is disconnected.

Part of the Beamex® Integrated Calibration Solution

The communication port enables communication with selected Beamex® MC calibrators for automating calibration and documentation, making the Beamex® FB products part of the Beamex® Integrate Calibration System. Combined with the Beamex® MC5 calibrator, loop calibrations are possible on conventional, HART® and Fieldbus temperature transmitters with sensors.

Beamex® FB Series Specifications

	FB150	FB350	FB660
Temperature range at 23 °C	–25 °C to 150 °C (–13 °F to 302 °F)	33 °C to 350 °C (91 °F to 662 °F)	50 °C to 660 °C (122 °F to 1220 °F)
Display accuracy	±0.2 °C Full range	±0.2 °C Full range	±0.35 °C at 50 °C ±0.35 °C at 420 °C ±0.5 °C at 660 °C
Stability	±0.01 °C Full range	±0.02 °C at 33 °C ±0.02 °C at 200 °C ±0.03 °C at 350 °C	±0.03 °C at 50 °C ±0.05 °C at 420 °C ±0.05 °C at 660 °C
Axial uniformity at 40 mm (1.6 in)	±0.05 °C Full range	±0.04 °C at 33 °C ±0.1 °C at 200 °C ±0.2 °C at 350 °C	±0.05 °C at 50 °C ±0.35 °C at 420 °C ±0.5 °C at 660 °C
Radial uniformity	±0.01 °C Full range	±0.01 °C at 33 °C ±0.015 °C at 200 °C ±0.02 °C at 350 °C	±0.02 °C at 50 °C ±0.05 °C at 420 °C ±0.10 °C at 660 °C
Loading effect (with a 6.35 mm reference probe and three 6.35 mm probes)	±0.006 °C Full range	±0.015 °C Full range	±0.015 °C at 50 °C ±0.025 °C at 420 °C ±0.035 °C at 660 °C
Hysteresis	±0.025 °C	±0.06 °C	±0.2 °C
Immersion depth	150 mm (5.9 in)		
Insert OD dimensions	30 mm (1.18 in)	25.3 mm (0.996 in)	24.4 mm (0.96 in)
Heating time	16 min: 23 °C to 140 °C 23 min: 23 °C to 150 °C 25 min: –25 °C to 150 °C	5 min: 33 °C to 350 °C	15 min: 50 °C to 660 °C
Cooling time	15 min: 23 °C to –25 °C 25 min: 150 °C to –25 °C	32 min: 350 °C to 33 °C 14 min: 350 °C to 100 °C	35 min: 660 °C to 50 °C 25 min: 660 °C to 100 °C
Resolution	0.01 °C / °F		
Display	LCD, °C or °F user-selectable		
Size (H x W x D)	290 mm x 185 mm x 295 mm (11.4 x 7.3 x 11.6 in)		
Weight	8.16 kg (18 lb)	7.3 kg (16 lb)	7.7 kg (17 lb)
Power requirements	230 V (±10%) 50/60 Hz, 575 W 100 V to 115 V (±10%) 50/60 Hz, 635 W	230 V (±10%), 50/60 Hz, 1800 W 100 V to 115 V (±10%), 50/60 Hz, 1400 W	230 V (±10%), 50/60 Hz, 1800 W 100 V to 115 V (±10%), 50/60 Hz, 1400 W
Computer interface	RS-232	RS-232	RS-232
Calibration	Accredited calibration certificate provided		
Environmental operating conditions	0 °C to 50 °C, 0% to 90% RH (non-condensing)		
Specifications valid in environmental conditions	13 °C … 33 °C		

R Model Specifications	FB
Resistance range	0 Ω to 400 Ω
Resistance accuracy [1]	0 Ω to 42 Ω: ±0.0025 Ω 42 Ω to 400 Ω: ±60 ppm of reading
Characterizations	ITS-90, CVD, IEC-60751, Resistance
Temperature accuracy (100 ohm PRT) [2]	±(0.015 °C + 0.008% of temperature reading)
Sensor connection	4-wire, 6-pin Smart Lemo
Calibration	Accredited calibration certificate provided

1) Measurement accuracy specifications apply within the specified environmental operating conditions and assume 4-wires for PRTs.
2) The built-in reference thermometer readout accuracy does not include the sensor probe accuracy.

Beamex® MB Series Specifications

	MB140	MB155	MB425	MB700
Temperature range at 23 °C	–45 °C to 140 °C (–49 °F to 284 °F)	–30 °C to 155 °C (–22 °F to 311 °F)	35 °C to 425 °C (95 °F to 797 °F)	50 °C to 700 °C [3] (122 °F to 1292 °F)
Display accuracy	±0.1 °C Full range	±0.1 °C Full range	±0.1 °C to 100 °C ±0.15 °C to 225 °C ±0.2 °C to 425 °C	±0.2 °C to 425 °C ±0.25 °C to 660 °C
Stability	±0.005 °C Full range	±0.005 °C Full range	±0.005 °C to 100 °C ±0.008 °C to 225 °C ±0.01 °C to 425 °C	±0.005 °C to 100 °C ±0.01 °C to 425 °C ±0.03 °C to 700 °C
Axial uniformity **40 mm (1.6 in)**	±0.08 °C to –35 °C ±0.04 °C to 0 °C ±0.02 °C to 50 °C ±0.07 °C to 140 °C	±0.025 °C to 0 °C ±0.02 °C to 50 °C ±0.05 °C to 155 °C	±0.05 °C to 100 °C ±0.09 °C to 225 °C ±0.17 °C to 425 °C	±0.09 °C to 100 °C ±0.22 °C to 425 °C ±0.35 °C to 700 °C
Radial uniformity	±0.01 °C Full range	±0.01 °C Full range	±0.01 °C to 100 °C ±0.02 °C to 225 °C ±0.025 °C to 425 °C	±0.01 °C to 100 °C ±0.025 °C to 425 °C ±0.04 °C to 700 °C
Loading effect (with a 6.35 mm reference probe and three 6.35 mm probes)	±0.02 °C to –45 °C ±0.005 °C to –35 °C ±0.01 °C to 140 °C	±0.005 °C to –30 °C ±0.005 °C to 0 °C ±0.01 °C to 155 °C	±0.01 °C Full range	±0.02 °C to 425 °C ±0.04 °C to 700 °C
Hysteresis	±0.025 °C	±0.025 °C	±0.04 °C	±0.07 °C
Immersion depth	160 mm (6.3 in)	203 mm (8 in)	203 mm (8 in)	203 mm (8 in)
Resolution	0.001 °C / °F			
Display	LCD, °C or °F, user-selectable			
Key pad	Ten key with decimal and +/– button. Function keys, menu key, and °C / °F key.			
Insert OD dimensions	30.0 mm (1.18 in)	30.0 mm (1.18 in)	30.0 mm (1.18 in)	29.2 mm (1.15 in)
Cooling time	44 min: 23 °C to –45 °C 19 min: 23 °C to –30 °C 19 min: 140 °C to 23 °C	30 min: 23 °C to –30 °C 25 min: 155 °C to 23 °C	220 min: 425 °C to 35 °C 100 min: 425 °C to 100 °C	235 min: 700 °C to 50 °C 153 min: 700 °C to 100 °C
Heating time	32 min: 23 °C to 140 °C 45 min: –45 °C to 140 °C	44 min: 23 °C to 155 °C 56 min: –30 °C to 155 °C	27 min: 35 °C to 425 °C	46 min: 50 °C to 700 °C
Size (H x W x D)	366 x 203 x 323 mm (14.4 x 8 x 12.7 in)			
Weight	14.2 kg (31.5 lb)	14.6 kg (32 lb)	12.2 kg (27 lb)	14.2 kg (31.5 lb)
Power requirements	230 VAC (±10%), 550 W 115 VAC (±10%), 550 W	230 VAC (±10%), 550 W 115 VAC (±10%), 550 W	230 VAC (±10%), 1025 W 115 VAC (±10%), 1025 W	230 VAC (±10%), 1025 W 115 VAC (±10%), 1025 W
Computer interface	RS-232			
Calibration	Accredited calibration certificate provided			
Environmental operating conditions	5 °C to 40 °C, 0% to 80% RH (non-condensing)			
Specifications valid in environmental conditions	18 °C … 28 °C			

3) Calibrated to 660 °C; reference thermometer recommended at higher temperatures.

R model specifications	MB
Resistance Range	0 Ω to 400 Ω
Resistance Accuracy [1]	0 Ω to 20 Ω: ±0.0005 Ω 20 Ω to 400 Ω: ±25 ppm of reading
Characterizations	ITS-90, CVD, Resistance
Temperature Accuracy (100 ohm PRT) [2]	Below zero: ±(0.006 °C + 0.001% of temperature reading) Above zero: ±(0.006 °C + 0.003% of temperature reading)
Sensor Connection	4-wire, 6-pin Lemo
Calibration	Accredited calibration certificate provided

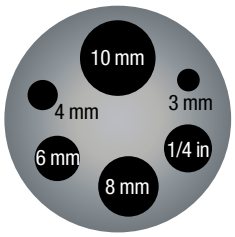
1) Measurement accuracy specifications apply within the specified environmental operating conditions and assume 4-wires for PRTs.
2) The built-in reference thermometer readout accuracy does not include the sensor probe accuracy.

Inserts

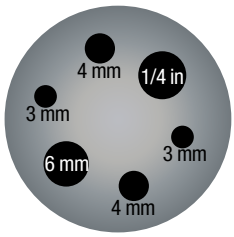
Inserts for FB models:

Insert	Model	Description
MH1	FB150	Multihole, metric / reference; ¼", 3 mm, 4 mm, 6 mm, 8 mm, 10 mm
MH1	FB350, FB660	Multihole, metric / reference; ¼", 4 mm, 6 mm, 8 mm, 10 mm
MH2	All models	Multihole, metric / reference; ¼", 2x3 mm, 2x4 mm, 6 mm
B	All models	Blank
Special	All models	Special

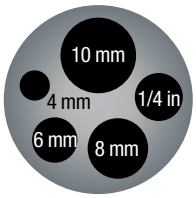
Please contact Beamex for custom inserts.



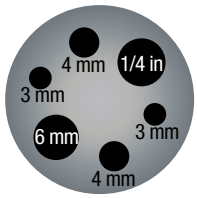
FB150-MH1



FB150-MH2



FB350-MH1
FB660-MH1

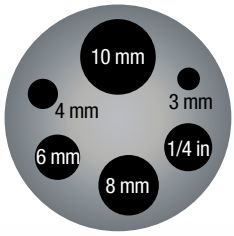


FB350-MH2
FB660-MH2

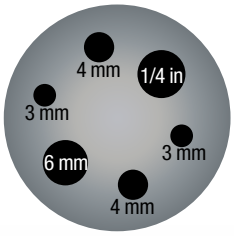
Inserts for MB models:

Insert	Model	Description
MH1	All models	Multihole, metric / reference; ¼", 3 mm, 4 mm, 6 mm, 8 mm, 10 mm
MH2	All models	Multihole, metric / reference; ¼", 2x3 mm, 2x4 mm, 6 mm
B	All models	Blank
Special	All models	Special

Please contact Beamex for custom inserts.



MH1



MH2

Beamex® Smart Reference Probes

The Beamex® Smart Reference Probe is a high-quality and extremely stable PRT probe with an integrated memory that stores the individual sensor coefficients. The sensor works as plug-and-play with Beamex® FB series of temperature blocks (R model). The temperature block automatically reads the sensor coefficients from the sensor and makes the necessary adjustments. This eliminates the need to enter the coefficients manually. The sensor can also be used with the Beamex® MB series of temperature blocks (R model). The sensor coefficients can be manually entered via the MB user interface. The sensor is available as a 300 mm straight version or a 90° bent version, making it an ideal reference sensor for the Beamex® Temperature Block.

Model	Description
RPRT-420-300	Reference PRT, max 420 °C, length 300 mm, straight
RPRT-420-230A	Reference PRT, max 420 °C, length 230 mm (before angle), 90° angled
RPRT-660-300	Reference PRT, max 660 °C, length 300 mm, straight
RPRT-660-230A	Reference PRT, max 660 °C, length 230 mm (before angle), 90° angled

Main features:

- Temperature range –200 °C… 420 °C / 660 °C.
- High stability, up to ±0.007 °C
- 300 mm straight and 90° bent versions
- Accredited calibration certificate with data and ITS-90 coefficients included as standard.

Specifications

Parameter	RPRT-420-300 & RPRT-420-230A	RPRT-660-300 & RPRT-660-230A
Temperature range	–200 to 420 °C	–200 to 660 °C
Nominal resistance at 0.010 °C	100 Ω ±0.5 Ω	100 Ω ±0.5 Ω
Temperature coefficient	0.003925 Ω/Ω/°C	0.0039250 Ω/Ω/°C
Sheath diameter x length	Straight: 6.35 mm ±0.08 mm x 305mm ±3 mm (0.25 in ±0.003 x 12 in ±0.13 in) Angled: 6.35 mm ±0.08 mm x 300 mm ±6 mm (0.25 in ±0.003 x 11.75 in ±0.25 in)	6.35 mm ±0.08 mm x 305 mm ±0.08 mm (0.25 in ±0.003 in x 12 in ±0.13 in)
Short-term repeatability [1]	±0.007 °C at 0.010 °C ±0.013 °C at max temp	±0.007 °C at 0.010 °C ±0.013 °C at max temp
Drift [2]	±0.007 °C at 0.010 °C ±0.013 °C at max temp	±0.007 °C at 0.010 °C ±0.013 °C at max temp
Hysteresis	±0.010 °C maximum	±0.010 °C maximum
Sensor length	50.8 mm (2.0 in)	30 mm ±5 mm (1.2 in ±0.2 in)
Sensor location	9.5 mm ±3.2 mm from tip (0.375 in ±0.13 in)	3 mm ±1 mm from tip (0.1 in ±0.1 in)
Sheath material	Inconel® 600	Inconel® 600
Maximum immersion (nominal)	Straight: 305 mm (12 in) Angled: 210 mm (8.3 in)	Straight: 305 mm (12 in) Angled: 210 mm (8.3 in)
Minimum immersion (<5 mK error)	102 mm (4.0 in)	100 mm (3.9 in)
Minimum insulation resistance	500 MΩ at 23 °C	500 MΩ at 23 °C, 10 MΩ at 670 °C
Transition junction temperature range [3]	–50 °C to 150 °C	–50 °C to 200 °C
Transition junction dimensions	Straight: 76.2 mm x 10.7 mm (3.0 in x .38 in) Angled: 70 mm x 10.6 mm (2.8 in x .42 in)	71 mm x 12.5 mm (2.8 in x .42 in)
Typical response time	8 seconds	12 seconds
Self heating (in 0 °C bath)	60 mW/°C	50 mW/°C
Lead-wire cable	Teflon® cable, Teflon® insulated, 24 AWG stranded, silver plated copper	Teflon® cable, Teflon® insulated, 24 AWG stranded, silver plated copper
Lead-wire length	1.8 m (6 ft)	1.8 m (6 ft)
Lead-wire temperature range	–50 °C to 150 °C	–50 °C to 250 °C

1) Three thermal cycles from min to max temp, includes hysteresis, 95% confidence
2) After 100 hrs at max temp, 95% confidence
3) Temperatures outside this range will cause irreparable damage. For best performance, transition junction should not be too hot to touch.

Temperature Calibration Laboratory

Utilize the Beamex calibration know-how

A traceable, accredited calibration certificate is needed if a plant operates according to a quality system, such as the ISO 9000 quality system and/or if the company must provide proof of measurements and traceability to their customers. Regular recalibrations of the calibration equipment also ensure that high quality of specifications is maintained.

Beamex's accredited, ISO 9001 and ISO 17025, state-of-the-art calibration laboratory provides recalibration services for a wide range of calibration products and different measurement signals. The calibration laboratory provides recalibration services for temperature, pressure and electrical signals.

Beamex has had a calibration laboratory since the 1970s. The laboratory was granted its first accreditation in 1993. Today, Beamex also has an accredited temperature laboratory.

Each new Beamex® MB Series or FB Series product, as well as the Beamex® Smart Reference Probes, are delivered with a traceable, accredited calibration certificate.

Beamex's accredited temperature calibration laboratory

- Temperature and resistance calibrations
- Recalibration services for the temperature range –80 °C … +660 °C
- Uncertainty starting from a few mK in fixed cell and in comparison calibrations. Please visit www.beamex.com for the detailed Scope of Accreditation.
- Services include recalibration, adjustment and repair tasks

Calibration services for various measurement devices:

- Temperature dry blocks and baths
- PRT probes (such as Pt25, Pt100, etc).
- Temperature indicators combined with sensor
- Thermocouples (certain types)
- Loop calibration of calibrator + temperature sensor
- Temperature transmitters combined with sensor
- Calculation of sensor correction coefficients (ITS-90, CVD, IEC 60751)
- Adjustment and repair of equipment

Main benefits:

- High-quality and accredited, ISO 9001 and ISO 17025 certified, state-of-the-art equipment – fixed point cells, comparison baths, reference SPRT's, thermometers, etc.
- Regular recalibrations maintain the high quality of specifications
- Extensive calibration know-how and experience
- Wide range of calibration services available (pressure, temperature, electrical signals)

Accredited calibration laboratory

Beamex's Accredited Calibration Laboratory (K026) has been accredited and approved by FINAS (Finnish Accreditation Service). FINAS is a member of all Multilateral Recognition Agreements / Mutual Recognition Arrangements (MLA/MRA) signed by European and other international organizations, i.e. European Co-operation for Accreditation (EA), International Laboratory Accreditation Cooperation (ILAC) and International Accreditation Forum Inc. (IAF).

FINAS
Finnish Accreditation Service
K026 (EN ISO/IEC 17025)

ilac-MRA

Ordering Information

Model	R (Reference)	Mains voltage	Insert	Accessories	Description
FB150					
FB350					
FB660					
MB140					
MB155					
MB425					
MB700					
	R				Reference
	x				No Reference
		230			230 VAC
		115			115 VAC
			MH1		Multihole 1
			MH2		Multihole 2
			B		Blank
			S		Special
			x		None
				TC	Transport Case

Example order codes:

- FB150 – R – 230 – MH1 – TC
- FB660 – x – 230 – B – x

Standard Accessories

- Power Cord
- RS-232 Cable
- User Guide
- Accredited Calibration Certificate
- LEMO Connector for reference sensor (R models only)
- Block Insulator (in MB140, MB155, MB425 and FB150)
- Tongs (insert removal tool)

Optional Accessories

- Transport Case for temperature block
- Inserts


CALIBRATION CERTIFICATE

Related products and services

Portable calibrators

Beamex's range of portable MC-calibrators for field calibration is known for their accuracy, versatility and also for meeting both high and uncompromised quality standards.

Workstations

A workstation can be considered ideal when most of the maintenance and calibration tasks are performed in the workshop. Beamex's workstation is a modular testing and calibration system designed for use in workshops and laboratories.

Calibration software

Beamex® CMX Calibration Management Software

The Beamex® CMX is calibration management software that assists in documenting, planning, analyzing and, finally, optimizing calibration work. The CMX's scalable technology and user configuration allows you to integrate it easily into other systems for a one-of-kind calibration system that fits your specific needs completely.

The CMX also helps to meet the regulatory requirements, whether your plant's calibration system needs to comply with ISO 17025, cGMP or 21 CFR Part 11. By using the CMX, you will have all your calibration results in a traceable and auditable form, either printed on paper or stored in electronic format in a database.

Professional services

Recalibration and service

There are many benefits from using the services provided by Beamex's accredited calibration laboratory on a regular basis. It ensures that the calibration equipment remains in excellent condition and you are also able to provide, if needed, up-to-date proof of the calibrator's measurement accuracy.

Training and installation

Beamex provides worldwide services for installation and training. This way you are able to have your new calibration system up and running in no time. You also learn about the capabilities of Beamex calibration equipment, how to use it and how your organization will benefit the most from it.

Accessories

PG series of calibration pumps

The PG series includes hand-held, lightweight pressure and vacuum sources for field use. The PG series of hand pumps are ideal pressure/vacuum generators to be used as accessories for pressure and vacuum calibration.

External pressure modules

The external pressure modules introduce new configuration possibilities and add flexibility, as it is possible to calibrate even more pressure ranges with the same calibrator. This way, the Beamex calibration equipment meets your needs even better.


PORTABLE CALIBRATORS


WORKSTATIONS


PROFESSIONAL SERVICES


CALIBRATION SOFTWARE

beamex

WORLD-CLASS CALIBRATION SOLUTIONS®

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