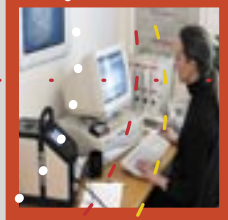
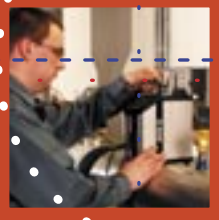


JOFRA™ CTC Series

**Compact
Temperature
Calibrator**

NOW
Up to 1205°C / 2200 °F
with the CTC-1200A



A fast, timesaving, and reliable true temperature calibrator designed for on-site use. The CTC series is a fast dry-block that offers both interchangeable inserts, the MVI stability circuitry, and calibration software. Both speed and portability are superior to liquid baths. Dry-block calibrators do not require hazardous liquids and provide a wide temperature range.

Calibrate your RTD's, thermocouples, thermoswitches, thermistors, and other common temperature sensing devices.

Temperature ranges

CTC-140A	-17 to 140°C / -1 to 284°F
CTC-320A	33 to 320°C / 91 to 608°F
CTC-320B	33 to 320°C / 91 to 608°F
CTC-650A	33 to 650°C / 91 to 1202°F
CTC-650B	33 to 650°C / 91 to 1202°F
CTC-1200A	300 to 1205°C / 572 to 2200°F

Fast calibration is timesaving

The specially designed heating block profile heats up to 320°C / 608°F in just 4 minutes and to 650°C / 1202°F in only 10 minutes.

High flexibility

You are not limited by fixed holes. Interchangeable insertion tubes are used to match the diameter of your sensor-under-test.

Enhanced stability

MVI circuitry ensures stability despite mains supply variations in the process environment.

Timesaving features

Fast one-key-one-function access to the automatic switch test and auto stepping.

Documentation made easy

RS232 communication interface and AMECAL-LIGHT calibration software package are part of the standard

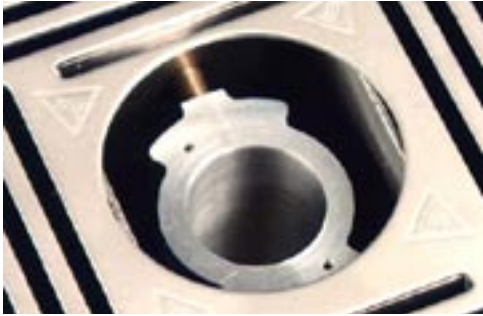


PRODUCT DESCRIPTION

The CTC series is designed for both on-site and maintenance shop use. The applications are generally critical process control but can vary based on calibration and testing requirements. The user interface is easy and intuitive. One-key-one-function gives you quick access to timesaving features such as the switch test or the auto-stepping function. All models feature a large, backlit LCD display panel, which is easy-to-read even in well-lit areas. Units feature an informative display that provides icons and information regarding the status of the CTC and the calibration in-progress. The JOFRA CTC series consists of six different models that differ in temperature ranges and immersion depths. All units offer similar features. A rugged, slim-line, aluminum outer casing with die-cast top and bottom protects the CTC series of dry-block calibrators. For easy documentation and automatic calibration, all units are delivered with RS232 serial communication and AMECAL-LIGHT PC calibration software.

Fast heating and cooling

The CTC-320A and the CTC-650A contain an innovative heating block profile. This design heats up the CTC-320A to maximum temperature in just 4 minutes and the CTC-650A in only 10 minutes. The fast performance of the heating block is due to the special profile that minimizes mass and yet, still accepts an insertion tube with a 25 mm / 1 in. outer diameter. This design is a balanced compromise between temperature stability / homogeneity and rapid heating / cooling.

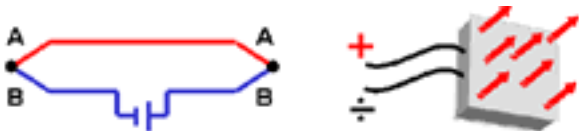


Deep immersion depth

The model CTC-320B and CTC-650B models offer a deeper immersion depth of 200 mm / 7.9 in. If you have liquid-filled sensors or other sensors that require a deeper immersion depth, look for the B versions. While the units do not heat and cool as quickly as their shorter counterparts, they offer the capability to accommodate longer sensors.

CTC-140A heating/cooling block

The model CTC-140A features Peltier elements. In 1834, Jean Peltier, a French physicist found that an "opposite thermocouple effect" could be observed when an electric current was connected to a thermocouple. Heat would be absorbed at one of the junctions and discharged at the other junction. This effect is called the "PELTIER EFFECT".



High accuracy at high temperatures

The CTC-1200A contains a unique designed well with the internal sensor placed in the specially drilled inserts and a non-linear heating element. In combination with the MVI circuitry this design ensures high accuracy and excellent stability when calibrating different sizes of sensors without use of an external reference sensor.

The CTC-1200A offers an immersion depth of 110 mm / 4.3 in. for calibrating sensors up to a diameter of 12 mm / ½ in. Besides these advantages the CTC-1200A is smallest in its class and thereby easy to carry into the process.

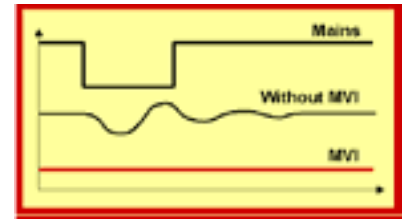
MVI - Improved temperature stability

MVI stands for "Mains power Variance Immunity". Unstable mains power supplies are a major contributor to on-site calibration inaccuracies. Traditional temperature calibrators often become unstable in production environments where large electrical motors, heating elements, and other devices are periodically cycled on and off. The cycling of supply power can cause the temperature regulator to perform

inconsistently leading to both inaccurate readings and unstable temperatures.

The CTC series apart from the CTC-140A employ the MVI, thus avoiding such stability problems. The MVI circuitry continuously monitors the supply voltage and ensures a constant energy flow to the heating elements.

The CTC-140A does not require the MVI circuitry because the Peltier elements are energized with a stabilized DC voltage.



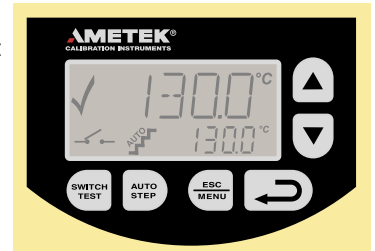
Easy-to-use, intuitive operation

All instrument controls may be performed from the front panel. The heat source is positioned away from the panel. This design helps to protect the operator.

The main functions on the CTC series are designed with one-key-one-function logic. This means that there are no sub-menus or difficult to remember multiple keystrokes necessary to access primary functions.

The easy-to-read, backlit display features dedicated icons, which help in identifying instrument conditions and operational steps.

The easy-to-read, backlit display features dedicated icons, which help in identifying instrument conditions and operational steps.



Set temperature

The "Up" and "Down" arrow keys allow the user to set the exact temperature desired with a resolution of 0.1°C or °F.

Instrument setups

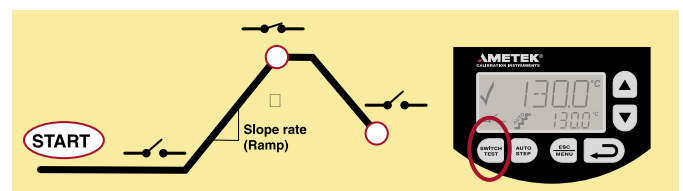
The CTC series stores the complete instrument setup, including: engineering units, stability criteria, resolution, display contrast, slope (ramp) rate, auto step settings, and maximum temperature.

Stability indicator

The bold checkmark on the display indicates that the calibrator has reached the desired set temperature and is stable. The operator may change the stability criteria and establish a greater sense of security in the calibration results. A convenient countdown timer is activated five minutes before the unit reaches stability.

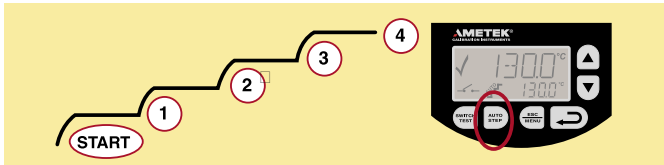
Automatic switch test

Operators can save a lot of time using the automatic thermo-switch test function to find values for the "Open" and "Close" temperatures. Additionally, this feature displays the hysteresis (deadband) between the two points. The feature ensures a very high repeatability when testing thermo-switches. Simply press the »SWITCH TEST« key to activate the function.



Auto-stepping

This feature saves manpower. The operator may stay in the control room, or another remote location, monitoring the output from the sensor-under-test while the CTC series calibrator is placed in the process and automatically changes the temperature using a programmed step value and rate. Up to 9 different temperature steps may be programmed, including the hold time for each step. This feature is also ideal for burning-in new sensors prior to installation: This minimizes initial drift and allows for initial testing. It is also useful for testing temperature data loggers.



Maximum temperature

From the setup menu, the user can select the maximum temperature limit for the calibrator. This function prevents damage to the sensor-under-test caused by the application of excessive temperatures.

Re-calibration/adjustments

The CTC series has a very easy and straight forward procedure for re-calibration/adjustment. There is no need for a screwdriver or PC software. The only thing you need is a reliable reference thermometer. Place this reference probe in the calibrator and follow the instructions on the display.

Liquid filled sensors and switches

The tall B models with an immersion depth of 190 mm / 7.5 in. are ideal for calibration of liquid filled sensors. The specially designed non-linear heating elements in the CTC-650B and the increased block mass provide a very homogeneous temperature throughout the block. It is essential for the quality of the calibration/test that the full length of the sensing part of the sensor is exposed to the same temperature. Calibrate analog reading devices or switches with very high repeatability.



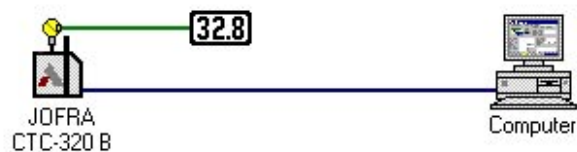
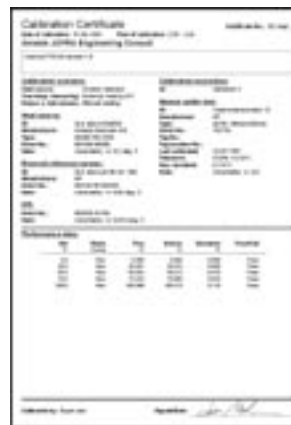
Simplified calibration documentation

All JOFRA CTC instruments are supplied with RS232 computer interface and the AMECAL-LIGHT Calibration software.

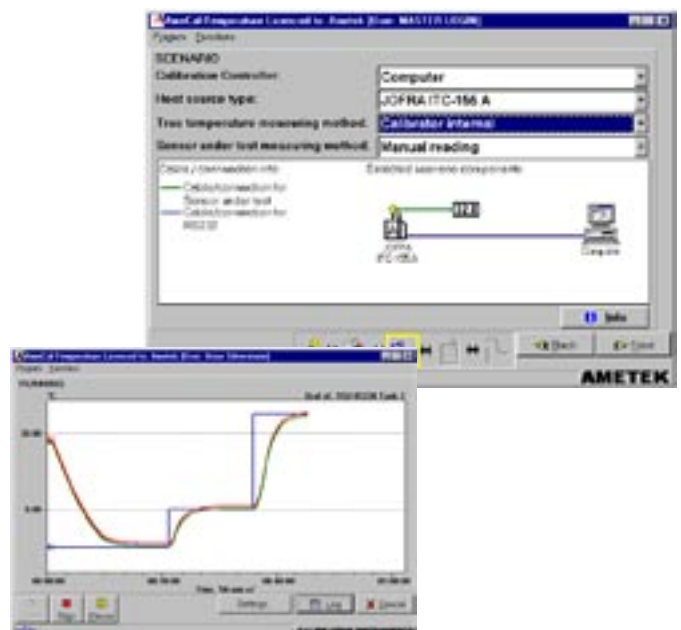
This WINDOWS®-based software allows the user to customize his or her calibration routines. The software is easy to use so you do not have to be a programmer to configure your own calibration procedures.

After calibration you can print out certificates that contain all necessary information for your ISO-9000 or similar quality systems.

The AMECAL-LIGHT software supports automatic calibration for all JOFRA dry-block calibrators equipped with an RS232 serial data interface including the JOFRA DTI-1000 digital thermometer. For semi-automatic calibrations, the software also supports liquid baths, ice points, or other dry-block heating and cooling sources. Using the software's "SCENARIO" function allows for combining instruments in virtually any configuration.



Upgrade to the AMECAL-TEMPERATURE software and be able to store all your results in a certificate database, sensor database and instrument database and use the database function history and search.



FUNCTIONAL SPECIFICATIONS

Mains specifications

Voltage CTC-140/320/650/1200.. 115V(90-127), 230V(180-254)
 Voltage CTC-650B 115V(105-127),230V(210-254)
 Frequency 45 - 65 Hz
 Power consumption (max.) CTC-140A..... 150 VA
 Power consumption (max.) CTC-320B 600 VA
 Power consumption (max.) CTC-1200A 650 VA
 Power consumption (max.) CTC-320A / 650A/B..... 1150 VA

Temperature range

CTC-140A
 Maximum 140°C / 284°F
 Minimum @ ambient temp. 0°C / 32°F..... -30°C / -22°F
 Minimum @ ambient temp. 23°C / 73°F..... -17°C / 1°F
 Minimum @ ambient temp. 40°C / 104°F..... -2°C / 28°F
 CTC-320A/B..... 33 to 320°C / 91 to 608°F
 CTC-650A/B..... 33 to 650°C / 91 to 1202°F
 CTC-1200A..... 300 to 1205°C / 572 to 2200°F

Resolution (user-selectable)

Selectable 1° or 0.1°C/°F

Stability

CTC-140A ±0.05°C / 0.09°F
 CTC-320A/B..... ±0.1°C / 0.18°F
 CTC-650A / 1200A..... ±0.1°C / 0.18°F
 CTC-650B ±0.05°C / 0.09°F
 Measured after the stability indicator has been on for 10 minutes.
 Measuring time is 30 minutes.

Time to stability (approximate)

CTC-140A 5 minutes
 CTC-320/650 8 minutes
 CTC-1200A 20 minutes

Accuracy

CTC-140A ±0.4°C / 0.7°F
 CTC-320A/B..... ±0.5°C / 0.9°F
 CTC-650A ±0.9°C / 1.62°F
 CTC-650B ±0.6°C / 1.08°F
 CTC-1200A..... ±2.0°C / 3.6°F
 Specification when using the internal reference. (Load 4 mm OD reference probe in the center of the insert).

Immersion depth

CTC-140A (insulation included) 115 mm / 4.5 in.
 CTC-320A / 650A / 1200A..... 110 mm / 4.3 in.
 CTC-320B / 650B..... 190 mm / 7.5 in.

Heating time

CTC-140A
 -17 to 23°C / 1 to 73°F 3 minutes
 23 to 140°C / 73 to 284°F 15 minutes
 CTC-320A
 33 to 320°C / 91 to 608°F 4 minutes
 CTC-650A
 33 to 650°C / 91 to 1202°F 10 minutes
 CTC-320B
 33 to 320°C / 91 to 608°F 20 minutes
 CTC-650B
 33 to 650°C / 91 to 1202°F 39 minutes
 CTC-1200A
 28 to 1205°C / 82 to 2200°F 45 minutes

Cooling time

CTC-140A
 100 to 0°C / 212 to 32°F 10 minutes
 0 to -15°C / 32 to 5°F 16 minutes
 140 to 100°C / 284 to 212°F 2 minutes
 CTC-320A
 320 to 100°C / 608 to 212°F 16 minutes
 CTC-650A
 650 to 100°C / 1202 to 212°F 28 minutes
 CTC-320B
 320 to 100°C / 608 to 212°F 22 minutes
 CTC-650B
 650 to 100°C / 1202 to 212°F 62 minutes
 CTC-1200A
 1205 to 300°C / 2200 to 572°F 120 minutes

Switch input (dry contact)

Test voltage Maximum 5 VDC
 Test current Maximum 2.5 mA

AMECAL software

Minimum hardware requirements for AMECAL-LIGHT and AMECAL-TEMPERATURE calibration software.

- INTEL™ 486 processor (PENTIUM™ 200 MHz recommended)
- 16 MB RAM (32 MB recommended)
- 40 MB free disk space on hard disk prior to installation
- Standard VGA (640 x 480, 16 colors) compatible screen (800 x 600, 256 colors recommended)
- CD-ROM drive for installation of the program
- 1 free RS232 serial port



KEY FEATURE TABLE

Automatic switch test

Finds switching temp. Open, close, hysteresis
Slope rate, programmable 0.1 to 9.9 °C/°F

Auto stepping

Programmable Up to 9 steps
Dwell time on each step Programmable

Enhanced stability

Unstable mains protection MVI Circuitry
Clear stability indication Yes, in display

Multi-information display

Stability indicator Bold checkmark
Countdown timer before stable 4 minutes
Temperature SET and READ simultaneously
Alphanumeric messages Yes
Calibration status icons Yes

Training mode (heating/cooling block disabled)

Simulation of all functions Yes
Simulating heating and cooling Approx. 100° per minute

Service facilities

Adjustment of the unit from the keypad Yes
Self explaining guide in display Yes
Other information Displays serial number,
software revision level, and last calibration date

Setup facilities

Stability criteria Extra time before
"stable indication" is shown
Display resolution 0.1° or 1°C/°F
Temperature units °C or °F
Slope rate 0.1 to 9.9°/minute
Maximum temperature Any value within range



PHYSICAL SPECIFICATIONS

Instrument dimensions

CTC-140A, CTC-320A, CTC-650A
L x W x H:241 x 139 x 325 mm / 9.5 x 5.5 x 12.8 in.
CTC-320B, CTC-650B, CTC-1200A
L x W x H:241 x 139 x 408 mm / 9.5 x 5.5 x 16.1 in.

Instrument weight

CTC-140A7 kg / 15.5 lb
CTC-320A 5 kg / 11 lb
CTC-650A 6 kg / 13 lb
CTC-320B7 kg / 15.5 lb
CTC-650B 10.5 kg / 23 lb
CTC-1200A 12 kg / 26.5 lb

Insert dimensions

CTC-140A
Diameter x length 19 mm x 100 mm / 0.75 x 3.9 in.
CTC-320A, CTC-650A
Diameter x length 26 mm x 120 mm / 1.0 x 4.7 in.
CTC-320B, CTC-650B
Diameter x length 26 mm x 200 mm / 1.0 x 7.9 in.
CTC-1200A
Diameter x length 27 mm x 155 mm / 1.6 x 6.1 in.

Weight of non-drilled insert (approximate)

CTC-140A 75 g / 2.6 oz
CTC-320A 170 g / 5.8 oz
CTC-650A 510 g / 17.8 oz
CTC-320B 280 g / 9.8 oz
CTC-650B 860 g / 30.3 oz
CTC-1200A 460 g / 16.3 oz

Shipping (including optional carrying case)

Weight: CTC-140A 12.5 kg / 27.6 lb
Weight: CTC-320A 11 kg / 24 lb
Weight: CTC-650A 12 kg / 27 lb
Weight: CTC-320B 13.5 kg / 21 lb
Weight: CTC-650B 17 kg / 37 lb
Weight: CTC-1200A 18 kg / 39 lb
Size L x W x H: 507 x 232 x 415 mm / 19.9 x 9.1 x 16.3 in.

Shipping (without carrying case)

Weight: CTC-140A 10 kg / 22 lb
Weight: CTC-320A 8 kg / 17.5 lb
Weight: CTC-650A 9.5 kg / 21 lb
A Size L x W x H:465 x 255 x 470 mm / 16.4 x 9.8 x 14.6 in.
Weight: CTC-320B 11 kg / 24 lb
Weight: CTC-650B 14 kg / 26 lb
Weight: CTC-1200A 15 kg / 32 lb
B Size L x W x H:465 x 255 x 470 mm / 18.9 x 9.3 x 17.3 in.

Shipping (carrying case only)

Weight: 5.0 kg / 11 lb
Size L x W x H: 507 x 232 x 415 mm / 19.9 x 9.1 x 16.3 in.

Miscellaneous

Serial data interface RS232 (9-pin Male)
Operating temperature 0 to 40°C / 32 to 104°F
Storage temperature -20 to 60°C / -4 to 140°F
Humidity 0 to 90% RH
Protection class IP-10

STANDARD DELIVERY

Standard delivery CTC140 / 320 / 650 / 1200

- CTC dry-block calibrator (user specified)
- Mains power cable (user specified)
- Traceable certificate - temperature performance
- Insert (user specified)
- Tool for insertion tubes
- User's manual (multi-language)
- Reference manual (English)
- Test cables (1 x red, 1 x black)
- RS232 cable (9-pin)
- Calibration software, AMECAL-LIGHT
- CTC-140A only: 3 pcs. insulation plugs for: 6, 10, 13 mm (1/4, 3/8, 1/2 in.) sensors
- CTC-1200A only: Insulation plugs (3 pcs) matching the insert

ACCESSORIES

Part no.	Description
123198	CTC series, reference manual
123199	CTC series, user manual
123408	Carrying case for version A less CTC-1200A
123409	Carrying case for version B plus CTC-1200A
122832	Cleaning brush, 4 mm (3/Pkg)
60F174	Cleaning brush, 6 mm (3/Pkg)
122822	Cleaning brush, 8 mm (3/Pkg)
60F135	Mains cable, 115V, USA, Type B
60F139	Mains cable, 220V, Australia, Type F
60F138	Mains cable, 220V, Italy, Type E
60F137	Mains cable, 220V, South Africa, Type D
60F141	Mains cable, 230V, Denmark, Type G
60F140	Mains cable, 230V, Europe, Type A
60F143	Mains cable, 230V, Israel, Type I
60F142	Mains cable, 230V, Switzerland, Type H
60F136	Mains cable, 240V, UK, Type C
105366	RS232 cable
104203	Test cable set
104216	Heat shield
60F170	Tool for insertion tube
123469	Insulation plug (CTC-140A only) 3 pcs. for 6 mm / 1/4 in. 10 mm / 3/8 in. 13 mm / 1/2 in.
65-F100	Insulation tube 100 mm (4 in.)
105173	10 insulation plates
105813	Calibration software AMECAL-TEMPERATURE
124003	Calibration software AMECAL-LIGHT
124528	Reference sensor Ø4.5 mm type N CTC-1200A
124414	Insulation plug 12 mm ½ in. CTC-1200A (3 pcs.)
124415	Insulation plug 1/8 in. 3, 4 mm CTC-1200A (3 pcs.)
124416	Insulation plug 5, 6 mm / 1/4, 3/16 in. CTC-1200A (3 pcs.)
124518	Insulation plug 7, 8, 9 mm / 5/16 in. CTC-1200A (3 pcs.)
124519	Insulation plug 10, 11 mm / 3/8, 7/16 in. CTC-1200A (3 pcs.)
124520	Suspension holder for sensor to CTC-1200A

Inserts, heat shield, and cleaning brushes

Always use the original inserts where material and physical dimensions have been optimized. A drilling guide is included if you buy undrilled inserts.

The heat shield protects the sensor/transmitter under test from the heated air.

Use the cleaning brushes to clean the borings in your inserts when necessary.



Insulation tube and plates

Improve your calibration uncertainty by insulating the sensor-under-test. Minimize the heat dissipation from the top of the block and through the sensor-under-test. This insulation is important for all dry-block calibrators without the dual-zone heating block.



Carrying case

The optional protective carrying case ensures safe transportation and storage of the instrument and all associated equipment.



Heat shield

An external heat shield is available and may be placed on top of the calibrator to reduce the hot air stream around the sensor-under-test. This is especially important for testing thermocouples having head-mounted transmitters with cold-junction compensation.



INSERTS FOR CTC SERIES

General inserts description

Inserts for CTC-140A and CTC-320A/B are made of aluminum. Inserts for CTC-650A/B are made of brass. Inserts for CTC-1200A are made of high-temperature steel alloy.

All specifications about hole sizes are referring to the outer diameter of the sensor-under-test. The correct clearance size is applied in all predrilled inserts.

Inserts - undrilled

Inserts	140A part no.	320A part no.	650A part no.	320B part no.	650B part no.	1200A part no.
5-pack, undrilled insertion tubes	60F448	100175	100194	60F356	60F420	124403

Inserts - predrilled - metric

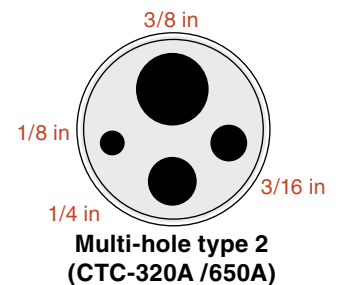
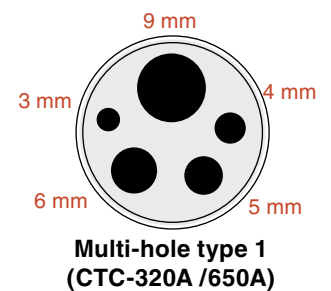
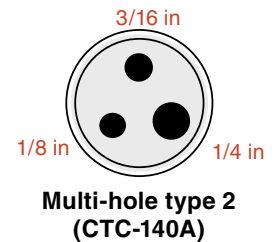
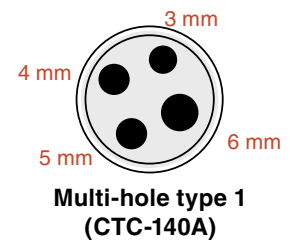
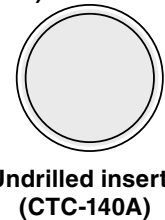
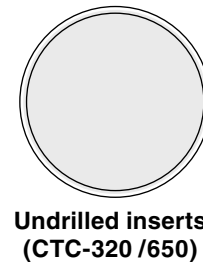
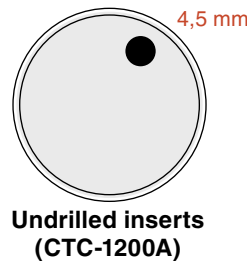
Probe diameter	140A part no.	320A part no.	650A part no.	320B part no.	650B part no.	1200A part no.
3 mm	123428	123436	123444	N/A	N/A	124503
4 mm	60F451	100177	100196	60F359	60F423	124406
5 mm	123429	123437	123445	123452	123460	124504
6 mm	60F453	100179	100198	60F361	60F425	124407
7 mm	123430	123438	122516	123453	123461	124505
8 mm	105185	100182	100201	105190	105195	124506
9 mm	105186	100183	100202	105191	105196	124507
10 mm	105187	100185	105188	105192	105197	124508
11 mm	123431	100188	100204	105193	105198	124509
12 mm	123432	100186	100206	105194	105199	124510
13 mm	123433	60F339	105189	123454	123462	N/A
14 mm	N/A	100190	100208	123455	123463	N/A
15 mm	N/A	100191	100209	123456	123464	N/A
16 mm	N/A	123439	123446	123457	123465	N/A
18 mm	N/A	123440	122517	123458	123466	N/A
20 mm	N/A	123441	122518	123459	123467	N/A
Multi-hole type 1	123479	123475	123476	N/A	N/A	N/A

*Note: CTC-140A only: All multi-hole inserts are delivered with a matching insulation plug.
 CTC-1200A only: Remember to order matching insulation plugs. (See accessories).

Inserts - predrilled - imperial (inch)

Probe diameter	140A part no.	320A part no.	650A part no.	320B part no.	650B part no.	1200A part no.
1/8 in.	60F450	100176	100195	60F358	60F422	124511
3/16 in.	60F452	100178	100197	60F360	60F424	124512
1/4 in.	60F454	100180	100199	60F362	60F426	124404
5/16 in.	60F456	100181	100200	60F364	60F428	124513
3/8 in.	60F458	100184	100203	60F366	60F430	124514
7/16 in.	60F460	100187	100205	60F368	60F432	124515
1/2 in.	60F462	100189	100207	60F370	60F434	124405
9/16 in.	60F464	60F344	60F408	60F372	60F436	N/A
5/8 in.	60F466	100192	100210	60F374	60F438	N/A
11/16 in.	N/A	60F348	60F412	60F376	60F440	N/A
3/4 in.	N/A	100193	100211	60F378	60F442	N/A
3/16 in.	N/A	60F352	60F416	105184	60F444	N/A
7/8 in.	N/A	60F354	60F418	60F377	60F446	N/A
Multi-hole type 2	123480	123477	123478	N/A	N/A	N/A

*Note: CTC-140A only: All multi-hole inserts are delivered with a matching insulation plug.
 CTC-1200A only: Remember to order matching insulation plugs. (See accessories).




JOFRA CTC ORDER INFORMATION

Order number	Description
	Base model number
CTC-140A	CTC-140A, -17 to 140°C / -1 to 284°F
CTC-320A	CTC-320A, 33 to 320°C / 91 to 608°F
CTC-650A	CTC-650A, 33 to 650°C / 91 to 1202°F
CTC-320B	CTC-320B, 33 to 320°C / 91 to 608°F - Deep immersion depth
CTC-650B	CTC-650B, 33 to 650°C / 91 to 1202°F - Deep immersion depth
CTC-1200A	CTC-1200A, 300 to 1205°C / 572 to 2200°F
	Power supply
115	115 VAC, 50/60Hz
230	230 VAC, 50 Hz
	Mains power cable type
A	EUROPEAN, 230 V,
B	USA/CANADA, 115 V
C	UK, 240 V
D	SOUTH AFRICA, 220 V
E	ITALY, 220 V
F	AUSTRALIA, 240 V
G	DENMARK, 230 V
H	SWITZERLAND, 220 V
I	ISRAEL, 230 V
	Insert type and size
003	Metric, pre-drilled, 3 mm
004	Metric, pre-drilled, 4 mm
005	Metric, pre-drilled, 5 mm
006	Metric, pre-drilled, 6 mm
007	Metric, pre-drilled, 7 mm
008	Metric, pre-drilled, 8 mm
009	Metric, pre-drilled, 9 mm
010	Metric, pre-drilled, 10 mm
011	Metric, pre-drilled, 11 mm
012	Metric, pre-drilled, 12 mm
013	Metric, pre-drilled, 13 mm
014	Metric, pre-drilled, 14 mm
015	Metric, pre-drilled, 15 mm
016	Metric, pre-drilled, 16 mm
018	Metric, pre-drilled, 18 mm
020	Metric, pre-drilled, 20 mm
125	Inch, pre-drilled, 1/8 in.
187	Inch, pre-drilled, 3/16 in.
250	Inch, pre-drilled, 1/4 in.
312	Inch, pre-drilled, 5/16 in.
375	Inch, pre-drilled, 3/8 in.
437	Inch, pre-drilled, 7/16 in.
500	Inch, pre-drilled, 1/2 in.
562	Inch, pre-drilled, 9/16 in.
625	Inch, pre-drilled, 5/8 in.
688	Inch, pre-drilled, 11/16 in.
750	Inch, pre-drilled, 3/4 in.
813	Inch, pre-drilled, 13/16 in.
875	Inch, pre-drilled, 7/8 in.
M01	Multi-hole insert type 1
M02	Multi-hole insert type 2
	Options
C	Carrying case
F	Traceable certificate (standard for Europe, Asia, Australia and Africa)
G	NIST traceable certificate (standard for Western Hemisphere)
H	Accredited certificate
X	Placeholder character for unused option

CTC-650A 230 A M01 CFX Sample order number (all 18 characters)
 JOFRA CTC-650A series dry-block, 230 VAC power with European power cord and insert: Pre-drilled multi-hole type 1 (1 x 3mm, 1 x 4mm., 1 x 5mm, 1 x 6mm, 1 x 9mm) including carrying case and traceable certificate.

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software
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signal



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