



**FLUKE®**

**Calibration**

# Industrial temperature calibration selection guide

**Look inside for:**

**Field metrology wells**

**Infrared calibrators**

**Handheld and field dry-wells**

**Micro-baths**

**Environmental monitoring**

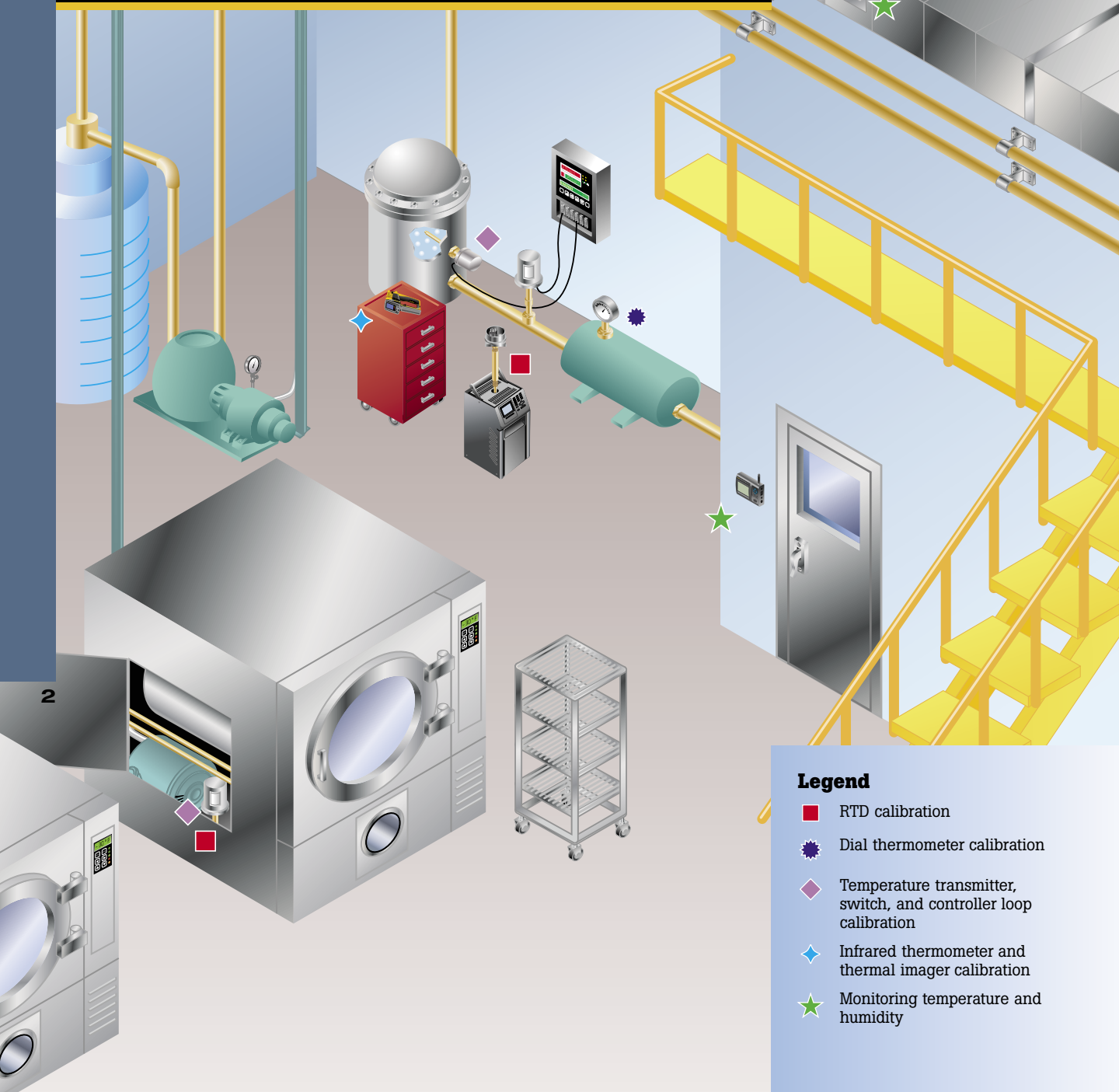
**Thermometer readouts**

**Reference sensors**

# Temperature measurement and calibration

*Tools for industrial instrumentation and calibration technicians*

# Selection guide



2








## Legend






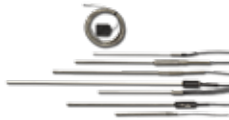
- RTD calibration
- ⚙ Dial thermometer calibration
- ◆ Temperature transmitter, switch, and controller loop calibration
- ◆ Infrared thermometer and thermal imager calibration
- ★ Monitoring temperature and humidity








# Selection guide

**FLUKE**®

**Calibration**

	Field metrology wells			NEW! Precision infrared calibrators		Handheld dry-wells	
							
Model	9142/9142P page 4	9143/9143P page 4	9144/9144P page 4	4180 page 6	4181 page 6	9100S page 8	9102S page 8
Range	-25 °C to 150 °C 4-20 mA	33 °C to 350 °C 4-20 mA	50 °C to 660 °C 4-20 mA	-15 °C to 120 °C	35 °C to 500 °C	35 °C to 375 °C	-10 °C to 122 °C
Best accuracy	± 0.2 °C	± 0.2 °C	± 0.35 °C	± 0.35 °C	± 0.35 °C	± 0.25 °C	± 0.25 °C
Applications	◆	◆	◆	◆	◆	■	■

	Field dry-wells					Sensors	
							
Model	9009 page 9	9103 page 10	9140 page 10	9141 page 10	9150 page 10	PRT page 15	Thermistor page 15
Range(s)	-15 °C to 350 °C	-25 °C to 140 °C	35 °C to 350 °C	50 °C to 650 °C	150 °C to 1200 °C	-200 °C to 670 °C	0 °C to 100 °C
Best accuracy	± 0.2 °C	± 0.25 °C	± 0.5 °C	± 0.5 °C	± 5 °C	See pages 14-15	See pages 14-15
Applications	■ ◆	■ ◆	■ ◆	■ ◆	thermocouples	◆ ■ ◆	◆ ■ ◆

	Micro baths			Thermometer readouts and environmental monitoring			
							
Model	6102 page 11	7102 page 11	7103 page 11	1551A/1552A page 13	1523/1524 page 13	1529 page 14	1620A page 12
Range	35 °C to 200 °C	-5 °C to 125 °C	-30 °C to 125 °C	-200 °C to 300 °C	-200 °C to 2315 °C	-200 °C to 962 °C	15 °C to 35 °C 20%RH to 70%RH
Best accuracy	± 0.25 °C	± 0.25 °C	± 0.25 °C	± 0.05 °C	± 0.015 °C	± 0.006 °C	± 0.25 °C ± 2 %RH
Channels	n/a	n/a	n/a	n/a	1 or 2	4	2
Applications	◆	◆	◆	■ ◆	◆ ◆	◆ ◆	★

# Handheld dry-wells



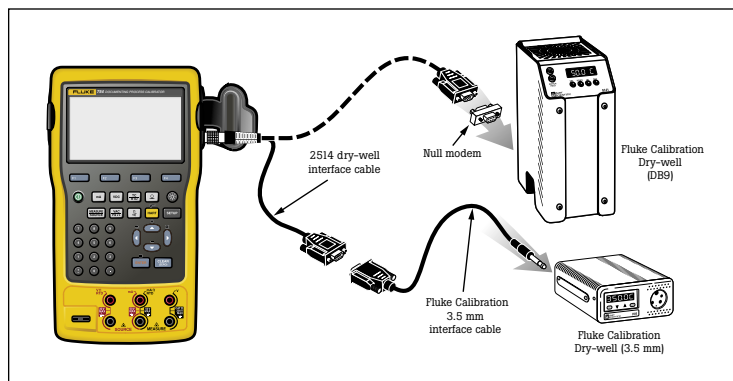
Temperature sensor calibration is easy with a handheld dry-well.

## Fluke Calibration 9100S and 9102S Handheld Dry-Well Temperature Calibrators

- A temperature source that you can take anywhere
- Fast and easy calibrations of temperature sensors
- 9100S model weighs only 2 lbs, 3 oz (1 kilogram)
- Temperature ranges from  $-10^{\circ}\text{C}$  to  $375^{\circ}\text{C}$
- Stability during calibrations to  $\pm 0.05^{\circ}\text{C}$
- Direct interface to the Fluke 754 Documenting Process Calibrator

Each unit includes RS-232 interface, instrument control software and a NIST-traceable calibration.

**Recommended accessories:** carrying case, additional inserts, reference temperature sensor and indicator, battery pack



Easily connect a Fluke 754 to a dry-well for a fully automated temperature calibration that includes the temperature transmitter and temperature sensor.

## Ordering information

**9100S** Handheld Dry-Well

**9300** Rugged Carrying Case, 9100

**9102S** Handheld Dry-Well, comes with your choice of two 3102 inserts

**9308** Hard Carrying Case, 9102/9132

**9320A** Battery Pack, 115V (9102S run time: 4 hrs)

**3102-1** Insert, AL 1/16 in (1.6 mm)

**3102-2** Insert, AL 1/8 in (3.2 mm)

**3102-3** Insert, AL 3/16 in (4.8 mm)

**3102-4** Insert, AL 1/4 in (6.4 mm) (Standard)

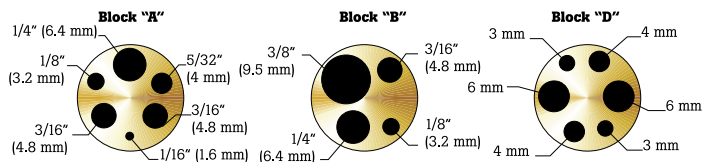
**3102-6** Insert, AL 3/8 in (9.5 mm) (Standard)

**3102-7** Insert, AL 7/16 in (11.1 mm) (Standard)

**3102-8** Insert, AL 5/32 in (4 mm) (Standard)

**2514** Dry-well interface cable to Fluke 754 Insert. Specify "A", "B", "D"

## 9100 fixed-block options



Calibration and metrology training from Fluke Calibration can help you and your staff become more knowledgeable in a wide variety of disciplines. Instructors are experts who work in electrical, temperature, pressure and flow calibration, and who really want to help you learn the foundation and techniques of metrology that you can put to immediate use in your workplace. Fluke Calibration offers introductory, intermediate, and advanced level courses in a variety of formats to meet your needs.

## Training Seminars in American Fork, Utah

[www.flukecal.com/tempcal\\_training](http://www.flukecal.com/tempcal_training)

Get real training from real experts that lays out the basics and builds up to more advanced material for more advanced learners.

- Principles of Temperature Metrology
- Advanced Topics in Temperature Metrology
- Infrared Temperature Metrology
- Temperature Calibration Product Training

## Service

Some of the best service and lowest uncertainties are available in our primary and secondary calibration laboratories located in the US and Europe. We offer NVLAP accredited calibration services in the US and UKAS accredited calibration services are available in Europe. Don't forget to pay a visit to our calibration laboratory when you come for training.



**Fluke Calibration.** *Precision, performance, confidence.™*

Electrical	RF	Temperature	Pressure	Flow	Software
------------	----	-------------	----------	------	----------

### Fluke Calibration

PO Box 9090, Everett, WA 98206 U.S.A.

### Fluke Europe B.V.

PO Box 1186, 5602 BD

Eindhoven, The Netherlands

### For more information call:

In the U.S.A. (877) 355-3225 or

Fax (425) 446-5116

In Europe/M-East/Africa +31 (0) 40 2675 200 or

Fax +31 (0) 40 2675 222

In Canada (800)-36-FLUKE or

Fax (905) 890-6866

From other countries +1 (425) 446-5500 or

Fax +1 (425) 446-5116

Web access: <http://www.flukecal.com>

©2011 Fluke Corporation.

Specifications subject to change without notice.

Printed in U.S.A. 9/2011 3246833B C-EN

Pub. ID: 11336-ENG, Rev 02

**Modification of this document is not permitted without written permission from Fluke Corporation.**