







# Temperature measurement and calibration

Tools for industrial instrumentation and calibration technicians

## 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** 





# Selection guide

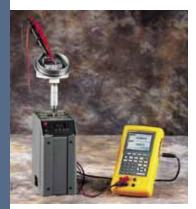
#### Calibration

	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 ℃	± 0.25 ℃
Applications	•	•	•	+	+		

	Field dry-wells		Sensors				
			9			•	
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 ℃	± 0.25 °C	± 0.5 °C	± 0.5 °C	± 5 °C	See pages 14-15	See pages 14-15
Applications	■ *	■ *	■ *	- *	thermocouples	<b>♦■</b> *	<b>◆■</b> *

	Micro baths			Thermometer readouts and environmental monitoring				
							23.74c 43.1s	
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 ℃ to 200 ℃	-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 ℃	± 0.015 ℃	± 0.006 °C	± 0.25 °C ± 2 %RH	
Channels	n/a	n/a	n/a	n/a	1 or 2	4	2	
Applications	*	*	*	■ *	<b>*</b>	<b>*</b>	*	

## Field dry-wells and furnaces



Fluke Calibration dry-wells interface directly to the Fluke 754 for fully automated calibration.

#### **Ordering information**

9103 Dry-Well, -25 °C to 140 °C

9140 Dry-Well, 35 °C to 350 °C 9141 Dry-Well, 50 °C to 650 °C

9150 Thermocouple Furnace, 150 °C to 1200 °C

9316 Rugged Carrying Case for 9103

9308 Rugged Carrying Case for 9140

9309 Rugged Carrying Case for 9141

9315 Rugged Carrying Case for 9150

2514 Dry-Well Interface Cable to Fluke 744 Insert (interchangeable). Specify "A", "B", "C", "D"



#### Fluke Calibration 9103, 9140 and 9141 Field Dry-Wells and 9150 Thermocouple Furnace

Temperature sensor test and calibration

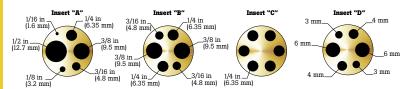
- · Lightweight and very portable
- Accuracy to ± 0.25 °C
- RS-232 and Interface-it software included
- · Interchangeable inserts
- 9103 goes as low as -25 °C.
- 9140 is 6 pounds (2.7 kg) and 9141 is 3.6 kg (8 pounds)
- 9140 and 9141 reach max temp in 12 minutes
- 9150 extends up to 1200 °C covering a wide range of T/C types.
- Direct interface to Fluke 754

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

Each dry-well includes one of four

available well inserts, an optional carrying case, RS-232 interface, instrument control software and a NIST-traceable calibration.

#### 9103, 9140, 9141 and 9150 Insert Options



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#### Calibration

### **Training**

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

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.™



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