

WEISS INSTRUMENTS

Hand Held Digital Thermometers

The Serviceman today needs an instrument that is reliable, durable and accurate, has usable functions and probes for measuring refrigeration and air-conditioning systems, and is reasonably priced. The Weiss DT51A and DT52A offer such a product for temperature measurement.

The DT51A-1 is a type K thermocouple based single probe thermometer with a range of -50/1999°F, resolution switch (0.1°F or 1°F), Data Hold feature, Max Memory, °F or °C switch and includes a general use probe.

The DT52A-4 is also type K thermocouple with two probe inputs that offer the differential feature required in refrigeration and air-conditioning service. Includes two velcro probes with the sensor built in, plus a bead probe and general probe with handle in an ABS carrying case.

Temperature indication follows National Bureau of Standards and IEC58 temperature/voltage tables for type K thermocouples which are supplied with the thermometer.



SPECIFICATIONS

ELECTRICAL

Measurement Range: -50 to 1300°C -50 to 1999°F
 Resolution: 0.1° or 1°
 Maximum Voltage at thermocouple Input: 60V DC, 24V AC
 RF Field Derating: Strong RF fields can adversely affect measurement accuracy.

ENVIRONMENTAL


Ambient Operating Range: 0 to 50°C 32 to 122°F
 Storage Temperature: -10 to 60°C -14 to 140°F
 Humidity: 0% to 90% (0 to 35°C) 0% to 70% (35 to 50°C)

ACCURACY

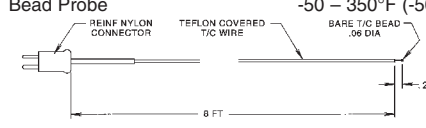
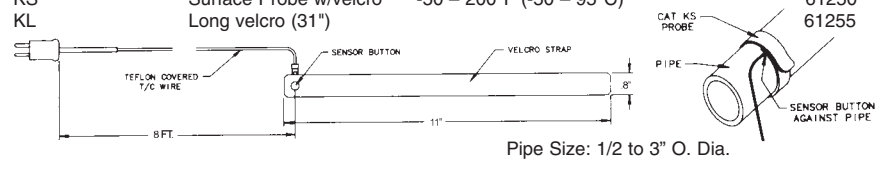
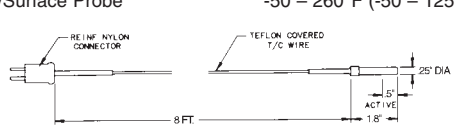
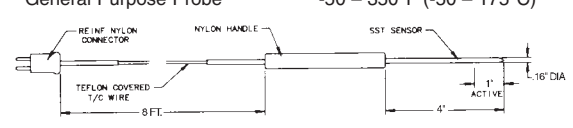
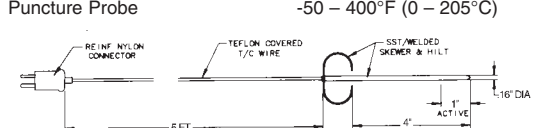
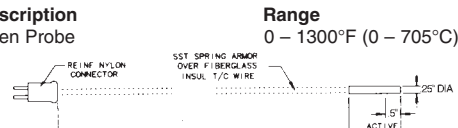
For single-thermocouple measurements.
 For T1-T2 Measurements accuracy is: $\pm(0.3\% \text{ of } T1-T2 \text{ reading} + 2^\circ\text{C})$
 $\pm(0.3\% \text{ of } T1-T2 \text{ reading} + 3^\circ\text{F})$

Function	Range	Accuracy + (% of reading +degrees)
°C	-50 C to 1000°C	0.3% ± 1°C
°F	-50 F to 1999°F	0.3% ± 2°F

GENERAL

Weight: 206 GM (7.2 oz)
 Dimension: 5.31"L x 2.83"W x 1.22"H (135x72x31mm)
 Battery: Standard 9V battery (NEDA 1604,6F22, or 006P)
 Battery life: Approx. 150 hours.
Low battery indication: The  (BT) is displayed when the battery voltage drops below the operating voltage.
Over range indication: OL
Measurement rate: 2.5 measurements per second.
Display: (4) 1/2" digit liquid crystal display, 14mm high LCD.
Yellow Grip Sleeve: Included.
Data Hold Feature - Max Hold Feature
Output Jack: For temperature recording or computer interface.
Instruction manual: Included.

FEATURES	DT51A-1	DT52A-2	DT52A-4	DT52B-2
Number of Probes	1-KG	2-KS	2-KS,1KG,1KB	2-KS
Differential Measurement	no	yes	yes	yes
°F or °C switch	yes	yes	yes	yes
Resolution 0.1° / 1°	yes	yes	yes	yes
Data Hold - Max Hold	yes	yes	yes	yes
Battery included	yes	yes	yes	yes
Carrying Case	yes	yes	yes	no
Pouch Case	-	-	-	yes

Cat. No.	Description	Range	IDN
KB	Bead Probe 	-50 – 350°F (-50 – 175°C)	61265
KS KL	Surface Probe w/velcro Long velcro (31") 	-50 – 200°F (-50 – 95°C)	61250 61255
KA	Air/Surface Probe 	-50 – 260°F (-50 – 125°C)	61260
KG	General Purpose Probe 	-50 – 350°F (-50 – 175°C)	61270
KP	Puncture Probe 	-50 – 400°F (0 – 205°C)	61280
KO	Oven Probe 	0 – 1300°F (0 – 705°C)	61290

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