

Customer: ACCURATE CALIBRATION
1924 PINNACLE DR.
AURORA, IL, 60502
(630)269-1480

P.O. Number: 344983
ID Number: R051089

Description: TEMPERATURE CALIBRATOR
Manufacturer: EUROTHERM
Model Number: MEMOCAL 2000
Serial Number: 02.41.002791
Technician: CHASE LOVETTE

Calibration Date: 11/10/2015
Calibration Due: 02/10/2016
Procedure: EUROTHERM MEMOCAL 2000
Rev: 1/21/2011
Temperature: 70 F
Humidity: 32 % RH
As Found Condition: OUT OF TOLERANCE
Calibration Results: LIMITED CALIBRATION

On-Site Calibration: ..

Comments: This certificate replaces certificate A2037973.

Calibrated in accordance with AMS 2750 E.

Resistance calibrated to 400 ohms. RTD calibrated to 150 Deg C.

Limiting Attribute: SEE CERTIFICATE COMMENTS

Both units are not used

This instrument has been calibrated using standards traceable to the National Institute of Standards and Technology, derived from natural physical constants, ratio measurements or compared to consensus standards. Unless otherwise noted, the method of calibration is direct comparison to a known standard.

Reported uncertainties are expressed as expanded uncertainty values at an approximately 95% confidence level using a coverage factor of K=2. Statements of compliance are based on test results falling within specified limits with no reduction by the uncertainty of the measurement.

TMI's Quality System is accredited to ISO/IEC 17025 and ANSI/NCSL Z540-1 by A2LA. ISO/IEC 17025 is written in a language relevant to laboratory operations, meeting the principles of ISO 9001 and aligned with its pertinent requirements. This calibration is within the current A2LA Scope of Accreditation and complies with the requirements of ISO/IEC 17025 and TMI's Quality Manual, QM-1.

Results contained in this document relate only to the item calibrated. Calibration due dates appearing on the certificate or label are determined by the client for administrative purposes and do not imply continued conformance to specifications.

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ANTHONY ROGERS, BRANCH MANAGER

JACK SHULER, QUALITY MANAGER

Calibration Standards

Asset Number	Manufacturer	Model Number	Date Calibrated	Cal Due
2823A07541	HEWLETT PACKARD	3458A	5/4/2015	5/4/2016
4610013	FLUKE	5720A/003	6/13/2015	6/13/2016
RFD7526A-156	FLUKE	7526A-156	5/19/2015	5/19/2016



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Data Sheet

Parameter	Nominal	Minimum	Maximum	As Found	As Left	Uncertainty	Unit	ADJ/FAIL
mV Output Accuracy, -4 to 20 mV range	-4.00000	-4.00060	-3.99940	-4.00001	-4.00001	0.372 uV	mV	
mV Output Accuracy, -4 to 20 mV range	0.00000	-0.00040	0.00040	0.00010	0.00010	0.3 uV	mV	
mV Output Accuracy, -4 to 20 mV range	5.00000	4.99925	5.00075	5.00061	5.00061	0.39 uV	mV	
mV Output Accuracy, -4 to 20 mV range	10.00000	9.99850	10.00150	10.00062	10.00062	0.48 uV	mV	
mV Output Accuracy, -4 to 20 mV range	15.00000	14.99775	15.00225	15.00110	15.00110	0.57 uV	mV	
mV Output Accuracy, -4 to 20 mV range	20.00000	19.99700	20.00300	20.00118	20.00118	0.66 uV	mV	
mV Output Accuracy, -40 to 200 mV range	-40.00000	-40.00600	-39.99400	-40.00203	-40.00203	1.02 uV	mV	
mV Output Accuracy, -40 to 200 mV range	0.00000	-0.03600	0.03600	-0.00659	-0.00659	0.3 uV	mV	
mV Output Accuracy, -40 to 200 mV range	50.00000	49.99250	50.00750	49.99835	49.99835	1.2 uV	mV	
mV Output Accuracy, -40 to 200 mV range	100.00000	99.98500	100.01500	100.00046	100.00046	2.1 uV	mV	
mV Output Accuracy, -40 to 200 mV range	150.00000	149.9775	150.0225	149.9989	149.9989	1.95 uV	mV	
mV Output Accuracy, -40 to 200 mV range	200.00000	199.9700	200.0300	200.0004	200.0004	2.5 uV	mV	
mV Output Accuracy, -400 to 2000 mV range	-400.00000	-400.0600	-399.9400	-400.0247	-400.0247	4.7 uV	mV	
mV Output Accuracy, -400 to 2000 mV range	0.00000	-0.36000	0.36000	-0.05713	-0.05713	0.3 uV	mV	
mV Output Accuracy, -400 to 2000 mV range	500.00000	499.9250	500.0750	499.9511	499.9511	5.8 uV	mV	
mV Output Accuracy, -400 to 2000 mV range	1000.00000	999.8500	1000.1500	999.9347	999.9347	11.3 uV	mV	
mV Output Accuracy, -400 to 2000 mV range	1500.00000	1499.7750	1500.2250	1499.9327	1499.9327	17 uV	mV	
mV Output Accuracy, -400 to 2000 mV range	2000.00000	1999.7000	2000.3000	1999.9144	1999.9144	22.5 uV	mV	
mV Output Accuracy, -4 to 20 V range	-4.000000	-4.000800	-3.999200	-4.000185	-4.000185	44.5 uV	V	
mV Output Accuracy, -4 to 20 V range	0.000000	-0.005000	0.005000	-0.000421	-0.000421	0.3 uV	V	
mV Output Accuracy, -4 to 20 V range	5.000000	4.999000	5.001000	5.000071	5.000071	55.5 uV	V	
mV Output Accuracy, -4 to 20 V range	10.000000	9.998000	10.002000	9.999552	9.999552	110.5 uV	V	
mV Output Accuracy, -4 to 20 V range	15.000000	14.997000	15.003000	14.999811	14.999811	225 uV	V	
mV Output Accuracy, -4 to 20 V range	20.000000	19.996000	20.004000	20.000185	20.000185	290 uV	V	
mV Measurement Accuracy, -20 to 20 mV range	-20.000	-20.003	-19.997	-19.997	-19.997	1.48 uV	mV	
mV Measurement Accuracy, -20 to 20 mV range	0.000	0.000	0.000	0.001	0.001	1 uV	mV	
mV Measurement Accuracy, -20 to 20 mV range	5.000	4.999	5.001	5.001	5.001	1.12 uV	mV	
mV Measurement Accuracy, -20 to 20 mV range	10.000	9.999	10.002	10.000	10.000	1.24 uV	mV	
mV Measurement Accuracy, -20 to 20 mV range	15.000	14.998	15.002	15.001	15.001	1.36 uV	mV	
mV Measurement Accuracy, -20 to 20 mV range	20.000	19.997	20.003	20.001	20.001	1.48 uV	mV	
mV Measurement Accuracy, -200 to 200 mV range	-200.00	-200.03	-199.97	-199.97	-199.97	5.8 uV	mV	
mV Measurement Accuracy, -200 to 200 mV range	0.00	0.00	0.00	0.00	0.00	1 uV	mV	
mV Measurement Accuracy, -200 to 200 mV range	50.00	49.99	50.01	49.99	49.99	2.7 uV	mV	
mV Measurement Accuracy, -200 to 200 mV range	100.00	99.99	100.02	99.99	99.99	3.4 uV	mV	
mV Measurement Accuracy, -200 to 200 mV range	150.00	149.98	150.02	150.00	150.00	4.6 uV	mV	
mV Measurement Accuracy, -200 to 200 mV range	200.00	199.97	200.03	200.00	200.00	5.8 uV	mV	
mV Measurement Accuracy, -2 to 2 V range	-2.0000	-2.0003	-1.9997	-1.9998	-1.9998	30 uV	mV	
mV Measurement Accuracy, -2 to 2 V range	0.0000	0.0000	0.0000	0.0000	0.0000	1 uV	mV	
mV Measurement Accuracy, -2 to 2 V range	0.5000	0.4999	0.5001	0.5000	0.5000	9 uV	mV	
mV Measurement Accuracy, -2 to 2 V range	1.0000	0.9999	1.0002	0.9999	0.9999	16 uV	mV	
mV Measurement Accuracy, -2 to 2 V range	1.5000	1.4998	1.5002	1.5000	1.5000	23 uV	mV	
mV Measurement Accuracy, -2 to 2 V range	2.0000	1.9997	2.0003	2.0000	2.0000	30 uV	mV	
mV Measurement Accuracy, -20 to 20 V range	-20.000	-20.004	-19.996	-19.996	-19.996	320 uV	V	
mV Measurement Accuracy, -20 to 20 V range	0.000	0.000	0.000	0.000	0.000	1 uV	V	
mV Measurement Accuracy, -20 to 20 V range	5.000	4.999	5.001	4.999	4.999	95 uV	V	
mV Measurement Accuracy, -20 to 20 V range	10.000	9.998	10.002	9.999	9.999	170 uV	V	
mV Measurement Accuracy, -20 to 20 V range	15.000	14.997	15.003	14.999	14.999	245 uV	V	



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mV Measurement Accuracy, -20 to 20 V range	20.000	19.996	20.004	19.999	19.999	320 uV	V	
mA Output Accuracy, 0 to 21 mA range	0.0000000	-0.0030000	0.0030000	0.0000000	0.0000000	0.04 uA	mA	
mA Output Accuracy, 0 to 21 mA range	1.0000000	0.9970000	1.0030000	0.9995194	0.9995194	0.075 uA	mA	
mA Output Accuracy, 0 to 21 mA range	5.0000000	4.9970000	5.0030000	4.9992810	4.9992810	0.175 uA	mA	
mA Output Accuracy, 0 to 21 mA range	10.0000000	9.9970000	10.0030000	9.9992630	9.9992630	0.3 uA	mA	
mA Output Accuracy, 0 to 21 mA range	15.0000000	14.9970000	15.0030000	14.9988000	14.9988000	1.145 uA	mA	
mA Output Accuracy, 0 to 21 mA range	21.0000000	20.9970000	21.0030000	20.9982900	20.9982900	1.403 uA	mA	
mA Measurement Accuracy, -20 to 20 mA range	-20.000	-20.003	-19.997	-19.997	-19.997	2.65 uA	mA	
mA Measurement Accuracy, -20 to 20 mA range	0.000	-0.006	0.006	0.000	0.000	0.02 uA	mA	
mA Measurement Accuracy, -20 to 20 mA range	5.000	4.999	5.001	5.000	5.000	0.85 uA	mA	
mA Measurement Accuracy, -20 to 20 mA range	10.000	9.999	10.002	10.000	10.000	1.45 uA	mA	
mA Measurement Accuracy, -20 to 20 mA range	15.000	14.998	15.002	15.001	15.001	2.05 uA	mA	
mA Measurement Accuracy, -20 to 20 mA range	20.000	19.997	20.003	20.001	20.001	2.65 uA	mA	
mA Measurement Accuracy, -130 to 130 mA range	-130.00	-130.03	-129.97	-130.00	-130.00	33.7 uA	mA	
mA Measurement Accuracy, -130 to 130 mA range	0.00	-0.05	0.05	0.00	0.00	0.02 uA	mA	
mA Measurement Accuracy, -130 to 130 mA range	10.00	10.00	10.00	10.00	10.00	1.45 uA	mA	
mA Measurement Accuracy, -130 to 130 mA range	50.00	49.99	50.01	50.00	50.00	14.5 uA	mA	
mA Measurement Accuracy, -130 to 130 mA range	100.00	99.98	100.02	100.01	100.01	26.5 uA	mA	
mA Measurement Accuracy, -130 to 130 mA range	130.00	129.97	130.03	130.01	130.01	33.7 uA	mA	
RTD Pt. 100 Ohm Measurement, 20.68 Ohms	-195.0	-195.3	-194.7	-195.0	-195.0	0.025 Deg C	Deg C	
RTD Pt. 100 Ohm Measurement, 60.26 Ohms	-100.0	-100.3	-99.7	-100.0	-100.0	0.025 Deg C	Deg C	
RTD Pt. 100 Ohm Measurement, 100.00 Ohms	0.0	-0.3	0.3	0.1	0.1	0.025 Deg C	Deg C	
RTD Pt. 100 Ohm Measurement, 119.40 Ohms	50.0	49.7	50.3	50.2	50.2	0.025 Deg C	Deg C	
RTD Pt. 100 Ohm Measurement, 138.51 Ohms	100.0	99.7	100.3	100.3	100.3	0.025 Deg C	Deg C	
RTD Pt. 100 Ohm Measurement, 157.33 Ohms	150.0	149.7	150.3	150.3	150.3	0.025 Deg C	Deg C	
RTD Pt. 100 Ohm Measurement, 280.98 Ohms	500.0	499.7	500.3	500.5	500.5	0.025 Deg C	Deg C	L
RTD Pt. 100 Ohm Measurement, 389.02 Ohms	845.0	844.7	845.3	845.9	845.9	0.025 Deg C	Deg C	L
Resistance Measurement Accuracy	0.0	-0.2	0.2	0.0	0.0	0.01 Ohms	Ohms	
Resistance Measurement Accuracy	10.0	9.8	10.2	10.1	10.1	0.01542 Ohms	Ohms	
Resistance Measurement Accuracy	100.0	99.8	100.2	100.1	100.1	0.0183 Ohms	Ohms	
Resistance Measurement Accuracy	200.0	199.8	200.2	200.1	200.1	0.0266 Ohms	Ohms	
Resistance Measurement Accuracy	300.0	299.8	300.2	300.2	300.2	0.0299 Ohms	Ohms	
Resistance Measurement Accuracy	400.0	399.8	400.2	400.2	400.2	0.0332 Ohms	Ohms	
Resistance Measurement Accuracy	500.0	499.8	500.2	500.4	500.4	0.0365 Ohms	Ohms	L
Resistance Measurement Accuracy	790.0	789.8	790.2	790.4	790.4	0.04607 Ohms	Ohms	L
Thermocouple Measurement Accuracy, Type E	-328.0	-328.4	-327.6	-328.4	-328.4	0.288 Deg F	Deg F	
Thermocouple Measurement Accuracy, Type E	-200.0	-200.4	-199.6	-200.4	-200.4	0.288 Deg F	Deg F	
Thermocouple Measurement Accuracy, Type E	0.0	-0.4	0.4	-0.4	-0.4	0.234 Deg F	Deg F	
Thermocouple Measurement Accuracy, Type E	32.0	31.6	32.4	31.6	31.6	0.234 Deg F	Deg F	
Thermocouple Measurement Accuracy, Type E	200.0	199.6	200.4	199.6	199.6	0.234 Deg F	Deg F	
Thermocouple Measurement Accuracy, Type E	400.0	399.6	400.4	399.7	399.7	0.234 Deg F	Deg F	
Thermocouple Measurement Accuracy, Type E	600.0	599.6	600.4	599.9	599.9	0.234 Deg F	Deg F	
Thermocouple Measurement Accuracy, Type E	800.0	799.6	800.4	799.9	799.9	0.234 Deg F	Deg F	
Thermocouple Measurement Accuracy, Type E	1000.0	999.6	1000.4	999.9	999.9	0.234 Deg F	Deg F	
Thermocouple Measurement Accuracy, Type E	1200.0	1199.6	1200.4	1199.8	1199.8	0.252 Deg F	Deg F	
Thermocouple Measurement Accuracy, Type E	1400.0	1399.6	1400.4	1399.8	1399.8	0.252 Deg F	Deg F	
Thermocouple Measurement Accuracy, Type E	1600.0	1599.6	1600.4	1599.9	1599.9	0.252 Deg F	Deg F	



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Certificate of Calibration

Data Sheet

<u>Parameter</u>	<u>Nominal</u>	<u>Minimum</u>	<u>Maximum</u>	<u>As Found</u>	<u>As Left</u>	<u>Uncertainty</u>	<u>Unit ADJ/FAIL</u>
Thermocouple Measurement Accuracy, Type E	1832.0	1831.6	1832.4	1832.0	1832.0	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	-328.0	-328.5	-327.5	-328.5	-328.5	0.396 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	-200.0	-200.5	-199.5	-200.2	-200.2	0.396 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	0.0	-0.5	0.5	0.2	0.2	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	32.0	31.5	32.5	31.5	31.5	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	200.0	199.5	200.5	199.6	199.6	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	400.0	399.5	400.5	399.6	399.6	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	600.0	599.5	600.5	599.7	599.7	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	800.0	799.5	800.5	799.7	799.7	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	1000.0	999.5	1000.5	999.7	999.7	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	1200.0	1199.5	1200.5	1199.7	1199.7	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	1600.0	1599.5	1600.5	1599.6	1599.6	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	1800.0	1799.5	1800.5	1799.6	1799.6	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type J	2192.0	2191.5	2192.5	2191.6	2191.6	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	-328.0	-328.5	-327.5	-328.5	-328.5	0.36 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	-200.0	-200.5	-199.5	-200.4	-200.4	0.36 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	0.0	-0.5	0.5	-0.4	-0.4	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	32.0	31.5	32.5	31.8	31.8	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	200.0	198.0	202.0	199.9	199.9	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	400.0	398.0	402.0	399.6	399.6	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	600.0	598.0	602.0	599.7	599.7	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	800.0	798.0	802.0	799.7	799.7	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	1000.0	998.0	1002.0	999.7	999.7	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	1200.0	1198.0	1202.0	1199.8	1199.8	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	1400.0	1398.0	1402.0	1399.8	1399.8	0.252 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	1600.0	1598.0	1602.0	1599.6	1599.6	0.306 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	1800.0	1799.4	1800.6	1799.6	1799.6	0.306 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	2000.0	1999.4	2000.6	1999.4	1999.4	0.306 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	2200.0	2199.4	2200.6	2199.4	2199.4	0.306 Deg F	Deg F
Thermocouple Measurement Accuracy, Type K	2498.0	2497.1	2498.9	2497.5	2497.5	0.306 Deg F	Deg F
Thermocouple Measurement Accuracy, Type T	-328.0	-328.5	-327.5	-328.5	-328.5	0.36 Deg F	Deg F
Thermocouple Measurement Accuracy, Type T	-200.0	-200.5	-199.5	-200.4	-200.4	0.36 Deg F	Deg F
Thermocouple Measurement Accuracy, Type T	0.0	-0.5	0.5	-0.4	-0.4	0.27 Deg F	Deg F
Thermocouple Measurement Accuracy, Type T	32.0	31.5	32.5	31.5	31.5	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type T	200.0	199.8	200.2	199.8	199.8	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type T	400.0	399.8	400.2	399.9	399.9	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type T	600.0	599.8	600.2	600.1	600.1	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type T	752.0	751.8	752.2	751.8	751.8	0.234 Deg F	Deg F
Thermocouple Measurement Accuracy, Type R	-50.0	-52.6	-47.4	-51.7	-51.7	1.152 Deg F	Deg F
Thermocouple Measurement Accuracy, Type R	0.0	-2.6	2.6	-1.5	-1.5	0.954	Deg F
Thermocouple Measurement Accuracy, Type R	32.0	29.4	34.6	31.3	31.3	0.828	Deg F
Thermocouple Measurement Accuracy, Type R	200.0	198.4	201.6	199.2	199.2	0.828	Deg F
Thermocouple Measurement Accuracy, Type R	400.0	398.8	401.2	399.2	399.2	0.594	Deg F
Thermocouple Measurement Accuracy, Type R	600.0	599.2	600.8	599.7	599.7	0.594	Deg F
Thermocouple Measurement Accuracy, Type R	800.0	799.2	800.8	799.9	799.9	0.486	Deg F
Thermocouple Measurement Accuracy, Type R	1000.0	999.2	1000.8	999.9	999.9	0.486	Deg F
Thermocouple Measurement Accuracy, Type R	1200.0	1199.2	1200.8	1199.8	1199.8	0.468	Deg F



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Data Sheet

<u>Parameter</u>	<u>Nominal</u>	<u>Minimum</u>	<u>Maximum</u>	<u>As Found</u>	<u>As Left</u>	<u>Uncertainty</u>	<u>Unit ADJ/FAIL</u>
Thermocouple Measurement Accuracy, Type R	1400.0	1399.2	1400.8	1399.6	1399.6	0.468	Deg F
Thermocouple Measurement Accuracy, Type R	1600.0	1599.2	1600.8	1599.6	1599.6	0.468	Deg F
Thermocouple Measurement Accuracy, Type R	1800.0	1799.2	1800.8	1799.6	1799.6	0.468	Deg F
Thermocouple Measurement Accuracy, Type R	2000.0	1999.2	2000.8	1999.6	1999.6	0.432	Deg F
Thermocouple Measurement Accuracy, Type R	2200.0	2199.2	2200.8	2199.6	2199.6	0.432	Deg F
Thermocouple Measurement Accuracy, Type R	2800.0	2799.2	2800.8	2800.0	2800.0	0.432	Deg F
Thermocouple Measurement Accuracy, Type R	3200.0	3198.8	3201.2	3199.6	3199.6	0.504	Deg F
Thermocouple Measurement Accuracy, Type S	-50.0	-52.0	-48.0	-50.3	-50.3	1.08	Deg F
Thermocouple Measurement Accuracy, Type S	0.0	-2.0	2.0	-0.4	-0.4	0.9	Deg F
Thermocouple Measurement Accuracy, Type S	32.0	30.0	34.0	31.6	31.6	0.81	Deg F
Thermocouple Measurement Accuracy, Type S	200.0	198.8	201.2	199.6	199.6	0.81	Deg F
Thermocouple Measurement Accuracy, Type S	400.0	398.8	401.2	399.7	399.7	0.63	Deg F
Thermocouple Measurement Accuracy, Type S	600.0	599.2	600.8	600.3	600.3	0.63	Deg F
Thermocouple Measurement Accuracy, Type S	800.0	799.2	800.8	799.9	799.9	0.504	Deg F
Thermocouple Measurement Accuracy, Type S	1000.0	999.2	1000.8	999.9	999.9	0.504	Deg F
Thermocouple Measurement Accuracy, Type S	1200.0	1199.2	1200.8	1199.8	1199.8	0.486	Deg F
Thermocouple Measurement Accuracy, Type S	1400.0	1399.2	1400.8	1399.8	1399.8	0.486	Deg F
Thermocouple Measurement Accuracy, Type S	1600.0	1599.2	1600.8	1599.8	1599.8	0.486	Deg F
Thermocouple Measurement Accuracy, Type S	1800.0	1799.2	1800.8	1799.6	1799.6	0.486	Deg F
Thermocouple Measurement Accuracy, Type S	2000.0	1999.2	2000.8	1999.8	1999.8	0.486	Deg F
Thermocouple Measurement Accuracy, Type S	2200.0	2199.2	2200.8	2199.6	2199.6	0.486	Deg F
Thermocouple Measurement Accuracy, Type S	2800.0	2799.2	2800.8	2799.9	2799.9	0.486	Deg F
Thermocouple Measurement Accuracy, Type S	3200.0	3199.2	3200.8	3199.8	3199.8	0.558	Deg F
Thermocouple Measurement Accuracy, Type N	32.0	31.6	32.4	31.6	31.6	0.27	Deg F
Thermocouple Measurement Accuracy, Type N	200.0	199.6	200.4	199.6	199.6	0.27	Deg F
Thermocouple Measurement Accuracy, Type N	400.0	399.6	400.4	399.7	399.7	0.252	Deg F
Thermocouple Measurement Accuracy, Type N	600.0	599.6	600.4	599.7	599.7	0.252	Deg F
Thermocouple Measurement Accuracy, Type N	800.0	799.6	800.4	799.7	799.7	0.252	Deg F
Thermocouple Measurement Accuracy, Type N	1000.0	999.6	1000.4	999.7	999.7	0.252	Deg F
Thermocouple Measurement Accuracy, Type N	1200.0	1199.3	1200.7	1199.5	1199.5	0.252	Deg F
Thermocouple Measurement Accuracy, Type N	1400.0	1399.3	1400.7	1399.5	1399.5	0.252	Deg F
Thermocouple Measurement Accuracy, Type N	1600.0	1599.3	1600.7	1599.6	1599.6	0.288	Deg F
Thermocouple Measurement Accuracy, Type N	1800.0	1799.3	1800.7	1799.4	1799.4	0.288	Deg F
Thermocouple Measurement Accuracy, Type N	2000.0	1999.3	2000.7	1999.6	1999.6	0.288	Deg F
Thermocouple Measurement Accuracy, Type N	2200.0	2199.2	2200.8	2199.4	2199.4	0.288	Deg F
Thermocouple Measurement Accuracy, Type N	2370.0	2369.2	2370.8	2369.5	2369.5	0.288	Deg F
Thermocouple Measurement Accuracy, Type B	150.0	135.1	164.9	151.2	151.2	1.08	Deg F
Thermocouple Measurement Accuracy, Type B	200.0	185.1	214.9	201.2	201.2	1.08	Deg F
Thermocouple Measurement Accuracy, Type B	400.0	397.6	402.4	400.6	400.6	1.08	Deg F
Thermocouple Measurement Accuracy, Type B	600.0	597.6	602.4	600.6	600.6	1.08	Deg F
Thermocouple Measurement Accuracy, Type B	800.0	798.8	801.2	800.7	800.7	0.882	Deg F
Thermocouple Measurement Accuracy, Type B	1000.0	998.8	1001.2	1000.9	1000.9	0.882	Deg F
Thermocouple Measurement Accuracy, Type B	1200.0	1198.8	1201.2	1200.9	1200.9	0.738	Deg F
Thermocouple Measurement Accuracy, Type B	1400.0	1399.2	1400.8	1400.7	1400.7	0.738	Deg F
Thermocouple Measurement Accuracy, Type B	1600.0	1599.2	1600.8	1600.7	1600.7	0.594	Deg F
Thermocouple Measurement Accuracy, Type B	1800.0	1799.5	1800.5	1800.5	1800.5	0.594	Deg F
Thermocouple Measurement Accuracy, Type B	2000.0	1999.5	2000.5	2000.3	2000.3	0.594	Deg F



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Data Sheet

<u>Parameter</u>	<u>Nominal</u>	<u>Minimum</u>	<u>Maximum</u>	<u>As Found</u>	<u>As Left</u>	<u>Uncertainty</u>	<u>Unit ADJ/FAIL</u>
Thermocouple Measurement Accuracy, Type B	2200.0	2199.5	2200.5	2200.3	2200.3	0.594	Deg F
Thermocouple Measurement Accuracy, Type B	2600.0	2599.5	2600.5	2600.2	2600.2	0.594	Deg F
Thermocouple Measurement Accuracy, Type B	3000.0	2999.5	3000.5	3000.2	3000.2	0.486	Deg F
Thermocouple Measurement Accuracy, Type B	3276.0	3275.5	3276.5	3276.1	3276.1	0.486	Deg F
Thermocouple Output Accuracy, Type E	-328.0	-328.4	-327.6	-328.0	-328.0	0.288	Deg F
Thermocouple Output Accuracy, Type E	-200.0	-200.4	-199.6	-200.3	-200.3	0.288	Deg F
Thermocouple Output Accuracy, Type E	32.0	31.6	32.4	31.8	31.8	0.234	Deg F
Thermocouple Output Accuracy, Type E	600.0	599.6	600.4	599.7	599.7	0.234	Deg F
Thermocouple Output Accuracy, Type E	1000.0	999.6	1000.4	999.6	999.6	0.234	Deg F
Thermocouple Output Accuracy, Type E	1829.0	1828.6	1829.4	1828.8	1828.8	0.252	Deg F
Thermocouple Output Accuracy, Type J	-328.0	-328.5	-327.5	-328.3	-328.3	0.252	Deg F
Thermocouple Output Accuracy, Type J	-200.0	-200.5	-199.5	-200.4	-200.4	0.252	Deg F
Thermocouple Output Accuracy, Type J	32.0	31.5	32.5	31.7	31.7	0.234	Deg F
Thermocouple Output Accuracy, Type J	800.0	799.5	800.5	799.8	799.8	0.234	Deg F
Thermocouple Output Accuracy, Type J	1600.0	1599.5	1600.5	1599.7	1599.7	0.252	Deg F
Thermocouple Output Accuracy, Type J	2192.0	2191.5	2192.5	2191.8	2191.8	0.252	Deg F
Thermocouple Output Accuracy, Type K	-328.0	-328.5	-327.5	-328.3	-328.3	0.36	Deg F
Thermocouple Output Accuracy, Type K	-200.0	-200.5	-199.5	-200.5	-200.5	0.36	Deg F
Thermocouple Output Accuracy, Type K	32.0	31.5	32.5	32.4	32.4	0.252	Deg F
Thermocouple Output Accuracy, Type K	600.0	598.0	602.0	599.3	599.3	0.252	Deg F
Thermocouple Output Accuracy, Type K	1600.0	1598.0	1602.0	1599.0	1599.0	0.306	Deg F
Thermocouple Output Accuracy, Type K	2498.0	2497.1	2498.9	2498.3	2498.3	0.306	Deg F
Thermocouple Output Accuracy, Type T	-328.0	-328.5	-327.5	-327.7	-327.7	0.36	Deg F
Thermocouple Output Accuracy, Type T	-200.0	-200.5	-199.5	-199.9	-199.9	0.36	Deg F
Thermocouple Output Accuracy, Type T	32.0	31.5	32.5	31.9	31.9	0.27	Deg F
Thermocouple Output Accuracy, Type T	200.0	199.8	200.2	199.8	199.8	0.234	Deg F
Thermocouple Output Accuracy, Type T	400.0	399.8	400.2	399.8	399.8	0.234	Deg F
Thermocouple Output Accuracy, Type T	752.0	751.8	752.2	751.8	751.8	0.234	Deg F
Thermocouple Output Accuracy, Type R	-50.0	-52.6	-47.4	-50.9	-50.9	1.152	Deg F
Thermocouple Output Accuracy, Type R	32.0	29.4	34.6	31.0	31.0	0.828	Deg F
Thermocouple Output Accuracy, Type R	600.0	599.2	600.8	599.5	599.5	0.594	Deg F
Thermocouple Output Accuracy, Type R	1600.0	1599.2	1600.8	1599.5	1599.5	0.468	Deg F
Thermocouple Output Accuracy, Type R	2200.0	2199.2	2200.8	2199.5	2199.5	0.432	Deg F
Thermocouple Output Accuracy, Type R	3200.0	3198.8	3201.2	3199.0	3199.0	0.504	Deg F
Thermocouple Output Accuracy, Type S	-50.0	-52.0	-48.0	-51.4	-51.4	1.08	Deg F
Thermocouple Output Accuracy, Type S	32.0	30.0	34.0	30.9	30.9	0.81	Deg F
Thermocouple Output Accuracy, Type S	600.0	599.2	600.8	599.5	599.5	0.63	Deg F
Thermocouple Output Accuracy, Type S	1600.0	1599.2	1600.8	1599.3	1599.3	0.486	Deg F
Thermocouple Output Accuracy, Type S	2200.0	2199.2	2200.8	2199.4	2199.4	0.486	Deg F
Thermocouple Output Accuracy, Type S	3200.0	3199.2	3200.8	3199.2	3199.2	0.558	Deg F
Thermocouple Output Accuracy, Type N	32.0	31.6	32.4	32.4	32.4	0.27	Deg F
Thermocouple Output Accuracy, Type N	600.0	599.6	600.4	600.4	600.4	0.252	Deg F
Thermocouple Output Accuracy, Type N	1400.0	1399.3	1400.7	1399.9	1399.9	0.252	Deg F
Thermocouple Output Accuracy, Type N	1600.0	1599.3	1600.7	1599.9	1599.9	0.288	Deg F
Thermocouple Output Accuracy, Type N	2000.0	1999.3	2000.7	1999.6	1999.6	0.288	Deg F
Thermocouple Output Accuracy, Type N	2370.0	2369.2	2370.8	2369.8	2369.8	0.288	Deg F
Thermocouple Output Accuracy, Type B	150.0	135.1	164.9	149.0	149.0	0.6	Deg F



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Data Sheet

<u>Parameter</u>	<u>Nominal</u>	<u>Minimum</u>	<u>Maximum</u>	<u>As Found</u>	<u>As Left</u>	<u>Uncertainty</u>	<u>Unit ADJ/FAIL</u>
Thermocouple Output Accuracy, Type B	1200.0	1198.8	1201.2	1199.0	1199.0	0.738	Deg F
Thermocouple Output Accuracy, Type B	1600.0	1599.2	1600.8	1599.4	1599.4	0.594	Deg F
Thermocouple Output Accuracy, Type B	2000.0	1999.5	2000.5	1999.5	1999.5	0.594	Deg F
Thermocouple Output Accuracy, Type B	2600.0	2599.5	2600.5	2599.5	2599.5	0.594	Deg F
Thermocouple Output Accuracy, Type B	3276.0	3275.5	3276.5	3275.6	3275.6	0.486	Deg F



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