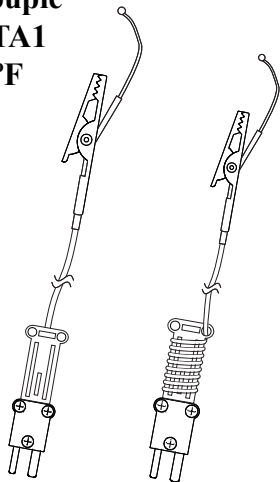
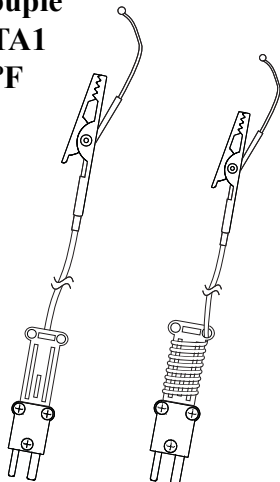


**K-type, Clip-on
Thermocouple
Model: ATA1
Max: 400°F**



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Thermocouple
Model: ATA1
Max: 400°F**



Description

The ATA1, K-Type, thermocouple can be used continuously to take temperature readings up to 400°F and a one time use of 482°F. The ATA1 can be used with any thermometer which accepts a K-type thermocouple.

The alligator clip allows the user to affix the ATA1 to a fixed surface, allowing the user to take hands free measurements. The ATA1 also comes with a wrap tab making it easy to wind and store the thermocouple.

Operation

To use the ATA1 plug it into any thermometer accepting a K-type thermocouple and adjust the device to the appropriate settings.

Calibration

Due to variances in the thermocouple wire and other parts of the system, a field calibration should be conducted before use. Field calibration typically gives +/- 1°F overall accuracy. The instructions for this calibration should be in the operating manual for the thermometer.

Specifications

Thermocouple Conductors: K-type Nickel Chromium/Nickel Aluminum, 2300°F maximum (insulation limits max. see probe insulation).

Accuracy: -50°F to 400°F +/- 4°F,

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Range: -50°F to 400°F maximum continuous operation. Single exposure use at 482°F.

Probe insulation: While calibration and atmosphere will affect maximum useful temperature in applications, this insulation is designated to withstand a maximum continuous use at 400°F (240°C) and a single exposure use at 482°F (250°C).

Plug: K-Type Thermocouple male mini plug.

Broken Wires:

Due to frequent bending, the K-type thermocouple wire may break or come loose, typically near the plug. To repair, cut and strip the thermocouple wire near the plug. The red wire is the (-) wire and it belongs on the wider of the two plugs. Loosen the screws on plugs and wind the conductors around the appropriate screws and tighten. Finally, position the plugs into the tab and screw the tab back together.



WARNINGS



When testing hot temperatures, the thermocouple and metal alligator clip may become hot. Do not handle the thermocouple or the metal clip when hot.

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Warranty

The ATA1, K-Type, clip-on thermocouple is warranted against manufacturer's defects for one year. This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the instrument. Any implied warranty arising out of the sale of Fieldpiece's products including but not limited to implied warranties of merchantability, and fitness for purpose, are limited to the above. Fieldpiece shall not be liable for incidental or consequential damages.

Service

Return any defective ATA1 to Fieldpiece for warranty service along with proof of purchase. Contact Fieldpiece for out of warranty repair charges.



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		Relative Humidity (%RH)													
Dry Bulb Temperature (°F)	Wet Bulb Temperature °F														
		50	52	54	56	58	60	62	64	66	68	70	72	74	76
	55	71	82	94											
	60	49	58	68	78	89	100								
	65	32	40	49	57	66	75	85	95						
	70	20	27	34	41	48	56	64	73	81	91	100			
	75	11	17	22	28	35	41	48	55	63	70	78	87	96	
	80	4	9	14	19	24	30	36	42	48	54	61	68	76	84
	85		3	7	12	16	21	26	31	36	42	48	54	60	67
	90			2	6	10	14	18	23	27	32	37	42	48	53
	95				2	5	9	12	16	20	24	28	33	37	42
	100					2	5	8	11	15	18	22	25	29	34
	105						2	4	7	10	13	16	20	23	27
	110							2	4	7	9	12	15	18	21
	115								2	4	6	9	11	14	16

Relative Humidity (%RH)

Relative humidity is often found to help evaluate air comfort or to find the target superheat of an air conditioning system. There are a few ways to find %RH. You can use an accessory head like the ARH4 to measure %RH, wet bulb, dew point or dry bulb directly. You could also use an actual sling psychrometer, or use the ATA1 thermocouple and an ATWB1 wet bulb thermocouple with the chart to the left.

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Dry Bulb Temperature (°F)	Wet Bulb Temperature °F														
		50	52	54	56	58	60	62	64	66	68	70	72	74	76
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	70	20	27	34	41	48	56	64	73	81	91	100			
	75	11	17	22	28	35	41	48	55	63	70	78	87	96	
	80	4	9	14	19	24	30	36	42	48	54	61	68	76	84
	85		3	7	12	16	21	26	31	36	42	48	54	60	67
	90			2	6	10	14	18	23	27	32	37	42	48	53
	95				2	5	9	12	16	20	24	28	33	37	42
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