Probes for Foodservice

A variety of Type-K probes and accessories for simple, accurate temperature checks in professional kitchens.



COOPER-ATKINS

Handling Food is Your Business. Helping You Do it Safely is Ours.

Temperature can mean the difference between delivering food your customers love and serving up a slice of foodborne illness. At Cooper-Atkins, it's our goal to ensure you have just what you need to check temperatures in, on and around food and equipment.

Every Type-K thermocouple probe we offer is engineered for simplicity and accuracy in a different scenario. We back them all with a one-year manufacturer's limited warranty.

Pair our probes with any compatible Type-K thermocouple instrument for air, surface and internal temperature needs. Custom probes and kits can also be created upon request.



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Choosing the right probe

Cooper-Atkins probes can help you keep temperatures out of the danger zone at every step of prep. For help deciding which probe is right for each task on your checklist, consider:

What are you measuring?

First, think about what you're measuring and the way you'll need to measure it to determine what type of probe you'll need. For example: a pot of soup needs an insertion probe, a walk-in freezer needs an air probe, and a hot plate needs a surface probe.

What are the conditions?

Next, consider the conditions in your prep, cooking, storage, delivery intake or processing area. This will help you decide between direct-connect probes and probes with cables, and if you need a cable, what type is suitable.

For instance: measuring a chicken breast requires a direct-connect probe, while measuring oven temperature requires a cable probe that can withstand being shut into an oven door.



Insertion

Tests the internal temperature of solids, semi-solids and liquid food products.



Air

Monitors hot and cold ambient temperature as well as temperatures in coolers, freezers and ovens.



Surface

Spot-checks food and equipment surfaces during receiving, cooking, prep and holding.

Cable Type	Chemical Resistance	Abrasion Resistance	Cut Resistance
Polyurethane Jacket	Good	Excellent	
Silicone with Embedded Aramid Fiber	Excellent	Good	
FEP Jacket	Excellent	Excellent	Good
Stainless Steel Overbraid	Good	Outstanding	Outstanding
Flexible Armored Cable	Outstanding	Outstanding	Outstanding



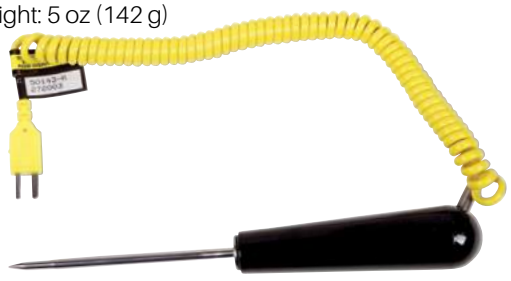
INSERTION PROBES

Match insertion probes to the consistency of the food for better accuracy, durability and safety. We offer probes with tips suitable for thick/frozen solids, thin/delicate solids, semi-solids and liquids.

50143-K Heavy Duty Needle Probe

A sculpted handle paired with our sturdiest probe; able to penetrate thick, dense and frozen foods with ease.

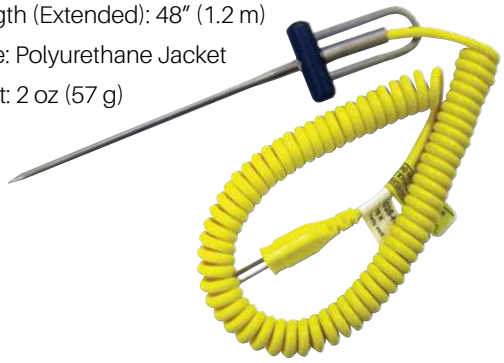
- Temperature Range: -40° to 500°F (-40° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 176°F (80°C)
- Response Time (Liquid): 5 seconds
- Tip Diameter: 0.150" (3.8 mm)
- Shaft Length: 4" (102 mm) 8", 18" and 24" Available
- Cable Length (Extended): 48" (1.2 m)
- Cable Type: Polyurethane Jacket
- Unit Weight: 5 oz (142 g)



50335-K Needle Probe

A versatile choice for any instrument; with a 3-foot cable that stretches for an easy view of your instrument's display.

- Temperature Range: -40° to 500°F (-40° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 176°F (80°C)
- Response Time (Liquid): 4 seconds
- Tip Diameter: 0.125" (3.2 mm)
- Shaft Length: 4.5" (114 mm)
- Cable Length (Extended): 48" (1.2 m)
- Cable Type: Polyurethane Jacket
- Unit Weight: 2 oz (57 g)



50361-K Armored Meat Probe

A PVC handle and a heavy-duty, 10-foot armored cable; able to stand up to heat and abrasion.

- Temperature Range: -40° to 400°F (-40° to 205°C)
- Max Tip Temperature: 400°F (205°C)
- Max Cable Temperature: 400°F (205°C)
- Response Time (Liquid): 4 seconds
- Tip Diameter: 0.085" (2.2 mm)
- Shaft Length: 3.875" (98 mm)
- Cable Length (Extended): 10' (3 m)
- Cable Type: Flexible Armored Jacket
- Unit Weight: 6 oz (170 g)



Pro Tips

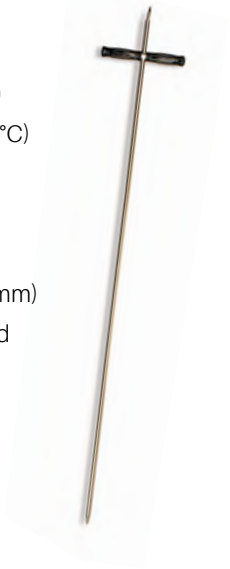
- Avoid excessive pressure when inserting probes.
- Do not use probes, even the most durable ones, as an ice pick.



50701-K Heavy Duty T-Handled Probe

A thick, 3-foot probe with a blunt tip, ideal for vat cooking or processing of foods made in steam-jacketed kettles.

- Temperature Range: -100° to 500°F (-73° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 400°F (205°C)
- Response Time (Liquid): 2 seconds
- Tip Diameter: 0.150" (3.8 mm)
- Shaft Length: 35" (889 mm)
- Cable Length (Extended): 36" (914 mm)
- Cable Type: Silicone with Embedded Aramid Fiber Braid
- Unit Weight: 15 oz (425 g)



51337-K DuraNeedle Probe with Flanged Connector

Features a flange to prevent the probe needle from getting stuck in dense foods, such as hard cheeses.

- Temperature Range: -100° to 500°F (-73° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Response Time (Liquid): 1 second
- Tip Diameter: 0.085" (2.2 mm)
- Shaft Length: 4" (102 mm)
- Unit Weight: 0.5 oz (14 g)



50337-K DuraNeedle Probe - Direct Connect

A sturdier needle that connects directly to your Bluetooth-enabled thermocouple instrument, for one-handed use.

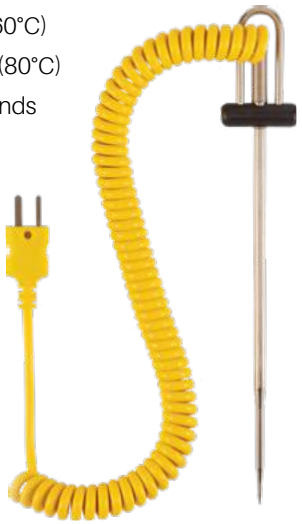
- Temperature Range: -100° to 500°F (-73° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Response Time (Liquid): 1 second
- Tip Diameter: 0.085" (2.2 mm)
- Shaft Length: 4" (102 mm)
- Unit Weight: 0.5 oz (14 g)



50336-K DuraNeedle Probe - Coil Cable

A sturdier needle for more dense foods, with a 3-foot cable that stretches for an easy view of your instrument's display.

- Temperature Range: -40° to 500°F (-40° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 176°F (80°C)
- Response Time (Liquid): 2 seconds
- Tip Diameter: 0.085" (2.2 mm)
- Shaft Length: 6" (152.4 mm)
- Cable Length (Extended): 48" (1.2 m)
- Cable Type: Polyurethane Jacket
- Unit Weight: 2 oz (57 g)

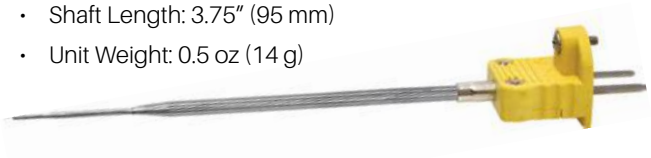


iNSERTION PROBES

51210-K MicroNeedle Probe with Flanged Connector

Features a flange to prevent the probe needle from getting stuck in tender foods, such as soft cheeses.

- Temperature Range: -100° to 500°F (-73° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Response Time (Liquid): 1 second
- Tip Diameter: 0.043″ (1 mm)
- Shaft Length: 3.75″ (95 mm)
- Unit Weight: 0.5 oz (14 g)



Pro Tip

MicroNeedle probe tips are fragile so handle with care.

50210-K MicroNeedle Probe - Direct Connect

A slim needle for more delicate foods; allows one-handed operation of Bluetooth-enabled instruments.

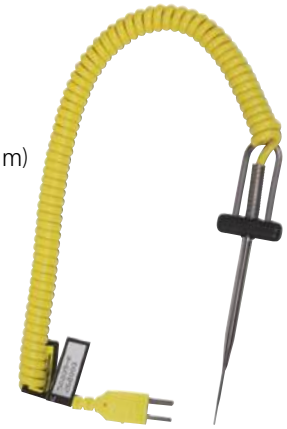
- Temperature Range: -100° to 500°F (-73° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Response Time (Liquid): 1 second
- Tip Diameter: 0.043″ (1 mm)
- Shaft Length: 3.75″ (95 mm)
- Unit Weight: 0.5 oz (14 g)



50209-K MicroNeedle Probe - Coil Cable

A slim needle for more delicate foods, with a 3-foot cable that stretches for an easy view of your instrument's display.

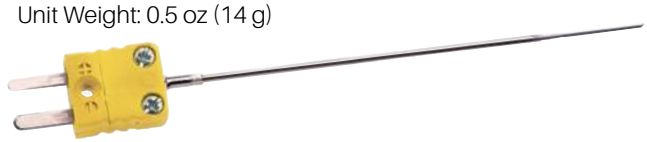
- Temperature Range: -100° to 500°F (-73° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 176°F (80°C)
- Response Time (Liquid): 1 second
- Tip Diameter: 0.043″ (1 mm)
- Shaft Length: 3.5″ (89 mm)
- Cable Length (Extended): 48″ (1.2 m)
- Cable Type: Polyurethane Jacket
- Unit Weight: 2 oz (57 g)



50207-K UltraFine Chiseled Tip Probe - Direct Connect

Responsive, with minimal impact on semi-soft and thin foods; connects directly to a Bluetooth-enabled instrument for one-handed use.

- Temperature Range: -100° to 500°F (-73° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Response Time (Liquid): 1 second
- Tip Diameter: 0.043″ (1 mm)
- Shaft Length: 3.75″ (95 mm)
- Unit Weight: 0.5 oz (14 g)





50299-K Burger Patty Probe

A depth indicator makes it easy to consistently insert this probe the correct amount.

- Temperature Range: -100° to 500°F (-73° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 400°F (205°C)
- Response Time (Liquid): 1.5 seconds
- Tip Diameter: 0.188″ (4.8 mm)
- Shaft Length: 8″ (203 mm)
- Cable Length (Extended): 48″ (1.2 m)
- Cable Type: Silicone with Embedded Aramid Fiber Braid
- Unit Weight: 3 oz (85 g)



50360-K Oven Needle Probe

A 3-foot cable that can withstand being shut in an oven door; ideal for keeping tabs on meats during roasting.

- Temperature Range: -40° to 500°F (-40° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 600°F (316°C)
- Response Time (Liquid): 2 seconds
- Tip Diameter: 0.085″ (2.2 mm)
- Shaft Length: 5.5″ (140 mm)
- Cable Length (Extended): 35″ (889 m)
- Cable Type: Stainless Steel Overbraid
- Unit Weight: 1 oz (28 g)



50208-K Fry Vat Probe

Designed to measure at a consistent depth; includes optional clip for attachment to a vessel; also suitable for soups and stews.

- Temperature Range: -40° to 400°F (-40° to 205°C)
- Max Tip Temperature: 4
- Max Cable Temperature
- Response Time (Liquid)
- Tip Diameter: 0.188″ (4.
- Shaft Length: 7.3″ (185
- Cable Length (Extende
- Cable Type: Flexible Arr
- Unit Weight: 3 oz (85 g)





AIR PROBES

Monitor temperatures in the spaces where you store and prepare food. We offer hand-held probes for ambient air and clip-on probes that can be mounted inside freezers, coolers or ovens.

39138-K Air Probe Bare Tip with 36″ Cable

An exposed, more sensitive tip makes this probe suitable for temperature measurements of ambient air or airstreams.

- Temperature Range: -328° to 400°F (-200° to 205°C)
- Max Tip Temperature: 400°F (205°C)
- Max Cable Temperature: 400°F (205°C)
- Response Time: 1 sec. (Liquid) & 7 sec. 5 m/sec. (Air)
- Cable Length (Extended): 36″ (914 mm)
- Cable Type: FEP Jacket
- Unit Weight: 1 oz (28 g)



50306-K Oven/Cooler/Freezer Probe with Clip

Includes a stabilizing clip to simplify air measurements; resistant to extremely hot and cold temperatures.

- Temperature Range: -100° to 600°F (-73° to 316°C)
- Max Tip Temperature: 600°F (316°C)
- Max Cable Temperature: 600°F (316°C)
- Response Time: 1 sec. (Liquid) & 10 sec. 5 m/sec (Air)
- Shaft Length: 2.125″ (54 mm)
- Cable Length (Extended): 43″ (1.1 m)
- Cable Type: Stainless Steel Overbraid
- Unit Weight: 1 oz (28 g)



50416-K Air Probe Bare Tip15′ Cable

An exposed, more sensitive tip with a longer cable, for temperature measurements of air from a distance.

- Temperature Range: -328° to 400°F (-200° to 205°C)
- Max Tip Temperature: 400°F (205°C)
- Max Cable Temperature: 400°F (205°C)
- Response Time: 1 sec. (Liquid) & 7 sec. 5 m/sec. (Air)
- Cable Length (Extended): 15′ (4.6 m)
- Cable Type: FEP Jacket
- Unit Weight: 2 oz (57 g)





50332-K Hand-Held Air Probe - Coil Cable

Impressive temperature range; suited to measuring air temps in walk-ins, as well as near AC or heating vents.

- Temperature Range: -100° to 500°F (-73° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 176°F (80°C)
- Response Time: 10 sec. (Liquid) & 5 m/sec. (Air)
- Shaft Length: 4" (102 mm)
- Cable Length (Extended): 48" (1.2 m)
- Cable Type: Polyurethane Jacket
- Unit Weight: 2 oz (57g)

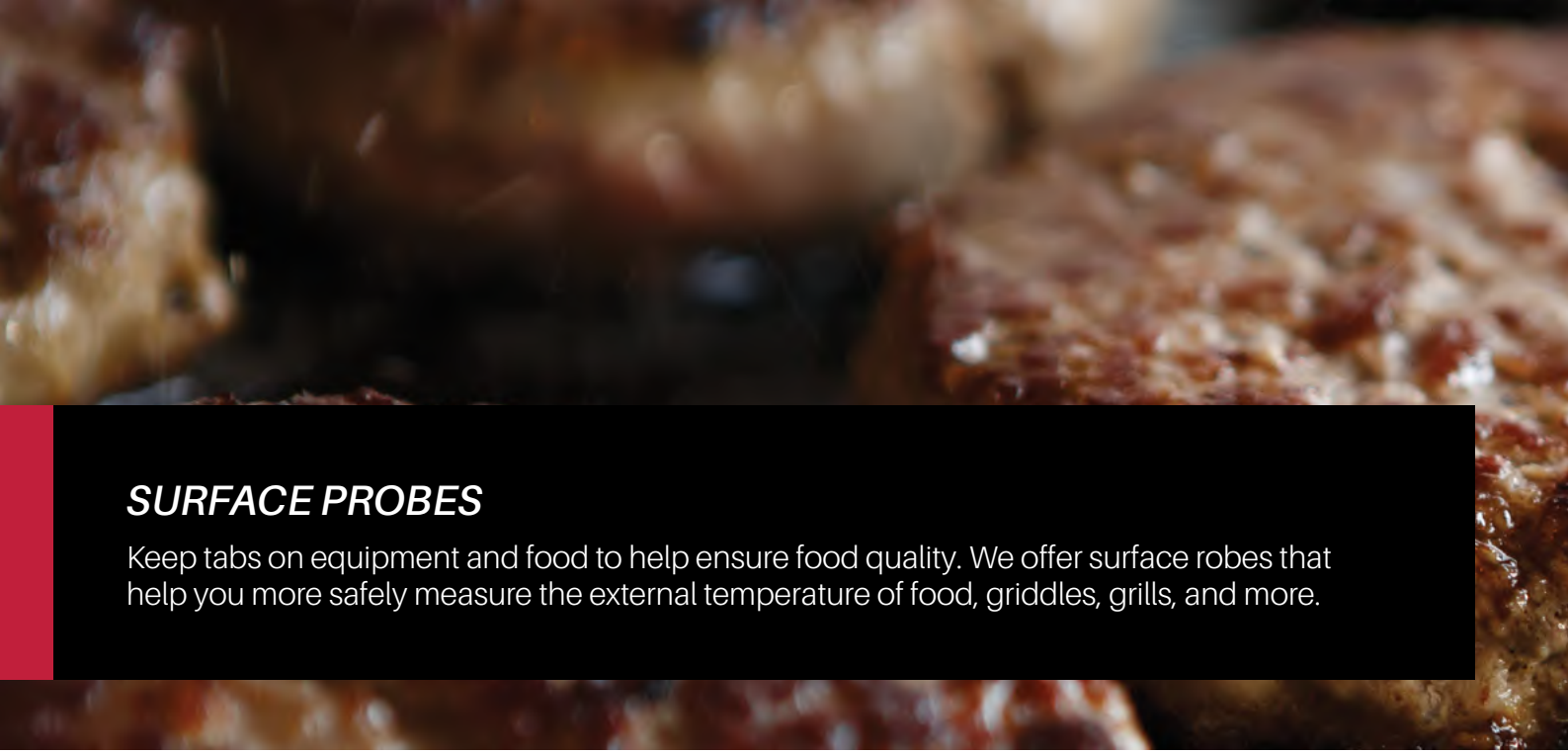


52048-K Solid Simulator

In ~2 hours, this probe takes on the temperature of food in cold storage, refrigerators, freezers or delivery trucks.

- Temperature Range: -40° to 180°F (-40° to 82°C)
- Max Tip Temperature: 180°F (82°C)
- Response Time: Stabilization of Simulator – up to 2 hours
- Cable Length (Extended): 6" (152 mm)
- Cable Type: FEP Jacket
- Unit Weight: 2.5 oz (71 g)





SURFACE PROBES

Keep tabs on equipment and food to help ensure food quality. We offer surface robes that help you more safely measure the external temperature of food, griddles, grills, and more.

50001-K Right Angle Flat Surface Probe

Features a 90-degree bend in the stem for a more comfortable, stable grip during temp checks of horizontal surfaces.

- Temperature Range: -40° to 400°F (-40° to 205°C)
- Max Tip Temperature: 400°F (205°C)
- Max Cable Temperature: 400°F (205°C)
- Response Time (Oiled Surface): 7 seconds
- Shaft Length: 9" (229 mm)
- Cable Length (Extended): 30" (762 mm)
- Cable Type: Flexible Armored Cable
- Unit Weight: 6 oz (170 g)



50012-K 120° Angle Surface Probe

An angled bend in the stem, for a more comfortable, stable grip during temp checks of vertical surfaces.

- Temperature Range: -40° to 500°F (-40° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 176°F (80°C)
- Response Time (Oiled Surface): 4 seconds
- Shaft Length: 4.5" (114 mm)
- Cable Length (Extended): 48" (1.2 m)
- Cable Type: Polyurethane Jacket
- Unit Weight: 5 oz (142 g)



50014-K Weighted Griddle Surface Probe

Extra heft helps keep this probe in place on a griddle surface, so it's easy to take temperatures hands-free while cooking.

- Temperature Range: -40° to 500°F (-40° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 400°F (205°C)
- Response Time (Oiled Surface): 2 seconds
- Cable Length (Extended): 30" (762 mm)
- Cable Type: Flexible Armored Cable
- Unit Weight: 2 lb (907 g)



Pro Tip

The #1 source of error in surface temperatures readings is from insufficient heat transfer. To improve heat transfer, put a small amount of oil or grease on a large surface area and press the probe down firmly.



50318-K Ceramic Tip Straight Stem Probe

Use from above; a ceramic disc with exposed wires reads quickly and can withstand extreme temperatures.

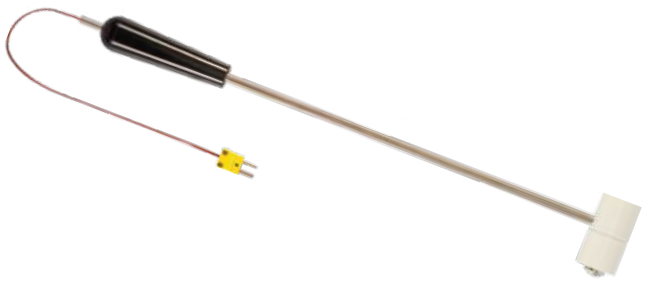
- Temperature Range: -40° to 1202°F (-40° to 650°C)
- Max Tip Temperature: 1202°F (650°C)
- Max Cable Temperature: 176°F (80°C)
- Response Time (Oiled Surface): 1 second
- Shaft Length: 4″ (102 mm)
- Cable Length (Extended): 48″ (1.2 m)
- Cable Type: Polyurethane Jacket
- Unit Weight: 5 oz (142 g)



50004-K UHC Probe

Designed to measure temperatures in universal holding cabinets and other hot-holding environments.

- Temperature Range: -40° to 300°F (-40° to 149°C)
- Max Tip Temperature: 300°F (149°C)
- Max Cable Temperature: 400°F (205°C)
- Response Time (Oiled Surface): 4 seconds
- Shaft Length: 12″ (305 mm)
- Cable Length (Extended): 12″ (305 mm)
- Cable Type: FEP Jacket
- Unit Weight: 6 oz (170 g)



50319-K Ceramic Tip Right Angled Probe

Use from the side; a ceramic disc with exposed wires reads quickly and can withstand extreme temperatures.

- Temperature Range: -40° to 1202°F (-40° to 650°C)
- Max Tip Temperature: 1202°F (650°C)
- Max Cable Temperature: 176°F (80°C)
- Response Time (Oiled Surface): 1 second
- Shaft Length: 5″ (127 mm)
- Cable Length (Extended): 48″ (1.2 m)
- Cable Type: Polyurethane
- Unit Weight: 6 oz





CASES

14245-1 Large Hard Carry Case

This case stores up to 2 thermocouple instruments and 6 probes. Work with us to create a custom kit with foam inserts configured to fit your selections.

- Housing Material: ABS plastic
- Overall Dimensions: 17″ x 12″ x 3″ (43 cm x 30 cm x 8 cm)



14240 Small Hard Carry Case

This case stores 1 thermocouple instrument and 2-3 smaller probes. Work with us to create a custom kit with foam inserts configured to fit your selections.

- Housing Material: ABS plastic
- Overall Dimensions: 8.5″ x 6″ x 2.5″ (15 cm x 22 cm x 6 cm)



14235 Medium Hard Carry Case

This case stores up to 1 thermocouple instrument and 3 probes. Work with us to create a custom kit with foam inserts configured to fit your selections.

- Housing Material: ABS plastic
- Overall Dimensions: 12″ x 8″ x 3″ (30 cm x 20 cm x 8 cm)



9339 Soft Pouch Carry Case

Stores 1 thermocouple instrument and 1 probe; attaches to a belt for hands-free carrying with you all day.

- Housing Material: Nylon
- Overall Dimensions: 3.5″ x 8.5″ x 1″ (22 cm x 9 cm x 2.5 cm)



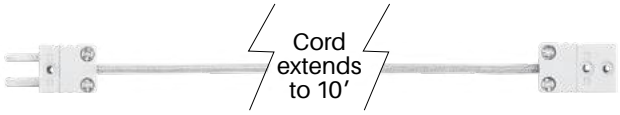


MISCELLANEOUS

10046-K Reinforced 10′ Extension Cable

Adds significant length to probes; can also be used with direct-connect probes when a cable is needed.

- Max Cable Temperature: 0° to 400°F (-18° to 205°C)
- Cable Length (Extended): 10′ (3 m)
- Cable Type: Fluoroelastomer Outer Jacket Over Metal Braid and Aramid Fibers
- Unit Weight: 3 oz (85 g)



9150-0-8 Probe Wipes

Keep in a convenient location to ensure probes are cleaned before and after each use, as recommended.

- Wipe Count: 200
- Wipe Dimensions: 2″ x 2″ (50 mm x 50 mm)
- Ingredients: 70% Isopropyl Alcohol



10040-K 48″ Coiled Retractable Extension Cable

Adds four feet in length to probes; can also be used with direct-connect probes when a cable is needed.

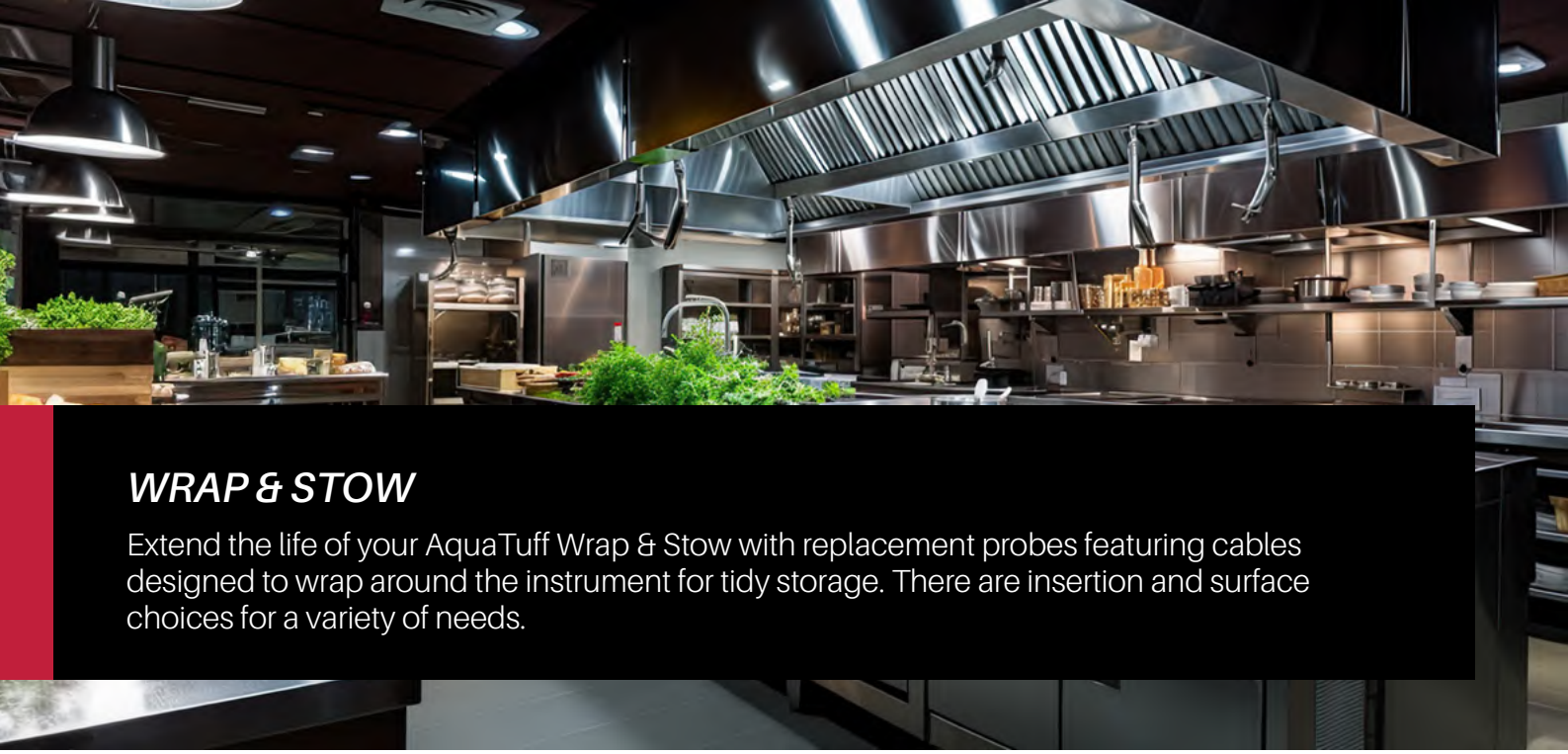
- Max Cable Temperature: 176°F (80°C)
- Cable Length (Extended): 48″ (1.2 m)
- Cable Type: Polyurethane Jacket
- Unit Weight: 2 oz (57 g)



Best Practices for Cleaning Probes

Proper cleaning before and after probe use will help prevent foodborne illness, extend probe life, and assure compliance with HACCP guidelines. Should you need to remove stubborn grease from a probe, use a scouring pad or steel wool. Do not leave probes in sanitizing solution for an extended period.





WRAP & STOW

Extend the life of your AquaTuff Wrap & Stow with replacement probes featuring cables designed to wrap around the instrument for tidy storage. There are insertion and surface choices for a variety of needs.

55032-K DuraNeedle Replacement Probe

This probe features a sturdy needle for thick or frozen foods and is specifically designed to pair with Wrap & Stow instruments. Easy to replace with no calibration needed.

- Temperature Range: -100° to 500°F (-73° to 260°C)
- Max Tip Temperature:
- Max Cable Temperatu
- Response Time (Liqui
- Tip Diameter: 0.085″ (
- Shaft Length: 4″ (102
- Cable Length (Extenc
  35.5″ (902 mm)
- Cable Type: Silicone \
  Embedded Aramid I
- Unit Weight: 2 oz (57 g



55035-K Angled Surface Replacement Probe

This probe features a bell-shaped tip for surface temperature
measurements and is specifically designed to pair with Wrap & Stow instruments. Easy to replace with no calibration needed.

- Temperature Range: -40° to 500°F (-40° to 260°C)
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 400°F (205°C)
- Response Time (Oiled Surface): 2 seconds
- Tip Diameter: 0.67″ (17 mm)
- Shaft Length: 6″ (152 mm)
- Cable Length (Extended): 35.5″ (902 mm)
- Cable Type: Silicone with Embedde
  Aramid Fiber Braid
- Unit Weight: 3 oz (85 g



55040-K MicroNeedle Replacement Probe

This probe features a slim needle for delicate foods
and is specifically designed to pair with Wrap & St
instruments. Easy to replace with no calibration r

- Temperature Range: -100° to 500°F (-73° to 26
- Max Tip Temperature: 500°F (260°C)
- Max Cable Temperature: 400°F (205°C)
- Response Time (Liquid): 1 second
- Tip Diameter: 0.043″ (1 mm)
- Shaft Length: 3.5″ (89 mm)
- Cable Length (Extended): 35.5″ (902
- Cable Type: Silicone with Embedded Aramid
- Unit Weight: 2 oz (57 g)

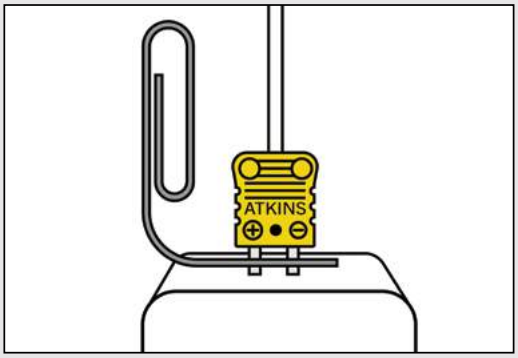


Troubleshooting

Is it the instrument or the probe? It's easy to get an answer. When the incorrect temperature is displayed on your thermocouple device, use the simple test here to find the source of the problem.

Test Instructions

1. Remove the probe from the instrument slightly, so the connector pins are partially exposed.
2. Place a small, metal object across both exposed pins – choose a paperclip, key or coin.
3. Once a connection is established between the two pins, check the temperature display.
4. If room temperature is shown, the probe needs to be replaced with a new one.
5. If something other than room temperature is shown, the instrument needs service.



Warranty

Any probe which proves to be defective in material or workmanship within 1 year of original purchase will be repaired or replaced, without charge, upon receipt of the probe prepaid with proof of purchase. This Limited Warranty does not cover damage in shipment or failure caused by tampering, obvious carelessness, or abuse, and is the purchaser's sole remedy.

Locating Probe Serial Number

You can identify when your probe was manufactured by the 4-digit serial number. The first two digits represent the week of manufacture and the second two digits represent the year of manufacture. For example: serial number 4612 was manufactured in the 46th week of 2012.



Probes with Cables

The serial number is located on the label fastened just above the mini-connector.



Direct Connect Probes

The serial number is imprinted on the mini-connector.



Wrap & Stow Probes

The serial number is located on the underside of the connector below the 2 insertion pins.

Support

When you contact our Technical Service Centers, a representative will attempt to isolate the problem with your product. If they are unable to isolate the issue, you will be asked to return the product for further inspection. In this case:

- You will be given a Return Goods Authorization (RGA) number.
- You will be asked to send the item(s) to our Service Center for evaluation by our Technical Service Specialists.
- Your product(s) will be serviced and...
  - If the problem is covered under our warranty terms, our product(s) will be repaired/replaced in 3-5 business days and returned to you, free of charge.
  - If the problem is not covered by our warranty terms, the Cooper-Atkins Warranty Department will call you within 3-5 days of receipt of the product(s) to offer the option of repair at the quoted price, or ordering a new unit at a discounted price. Based upon your approval, Cooper-Atkins will ship the repaired product or replacement to you.

Cooper-Atkins Warranty & Technical Support

Support can be requested by emailing:
CA.WarrantySupport@copeland.com



About Copeland

Copeland, a global provider of sustainable climate solutions, combines category-leading brands in compression, controls, software and monitoring for heating, cooling and refrigeration. With best-in-class engineering and design and the broadest portfolio of modulated solutions, we're not just setting the standard for compressor leadership; we're pioneering its evolution. Combining our technology with our smart energy management solutions, we can regulate, track and optimize conditions to help protect temperature-sensitive goods over land and sea, while delivering comfort in any space. Through energy-efficient products, regulation-ready solutions and expertise, we're revolutionizing the next generation of climate technology for the better.

About Cooper-Atkins

Cooper-Atkins has been a trusted brand in the food service and food processing industries since 1885. The Cooper-Atkins portfolio has evolved to offer a comprehensive range of temperature management products and monitoring needs to serve many different applications, from single-point solutions to more advanced technologies. Cooper-Atkins is a Copeland brand, a global leader in sustainable heating, cooling, and refrigeration solutions.

For additional information please contact your Cooper-Atkins representative.

Copeland Cold Chain LP
67-1869 | V0724

To learn more, visit **copeland.com/cooper-atkins**

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