

# Cool-Arc™ 40



The Cool-Arc™ 40 is a reliable and affordable water cooler for water-cooled MIG or TIG as well as plasma cutting applications. Available in both 115 and 230 volt models, the Cool-Arc 40 is compatible with all Lincoln water-cooled systems including Cobramatic®. The Cool-Arc 40 features a rugged industrial pump manufactured by Pro-Con®, the leading pump manufacturer for welding water coolers. This pump is an industry standard, making the Cool-Arc 40 easy to service and maintain. The Cool-Arc 40 operates smoothly and minimizes vibrations that would otherwise be transferred to the welding torch.

## Processes

TIG MIG PAC (Plasma Arc Cutting)  
PAW (Plasma Arc Welding)

## Advantage Lincoln

- Industry standard Pro-Con® internal water pump is easy to service and maintain and is designed for continuous operation, delivering a steady flow and pressure.
- Powerful “muffin-style” tube axial fan provides efficient cooling, low noise, and smooth operation to minimize vibration in the welding torch.
- Plastic, non-corrosive, 2-gallon reservoir limits loaded Cool-Arc 40 weight to 60 lbs.
- Unit can be mounted and operated either horizontally or vertically for minimal footprint.
- Compatible with all Lincoln water-cooled systems including Cobramatic water-cooled push-pull torches.
- Color-coded inlet and outlet coolant connections are standard female CGA-style (5/8-18 left-hand thread).
- No special coolant required for indoor use - uses tap water.
- CE (Europe) and C-Tick (Australia) compliant (K2187-1 only).

## Description

Input   Output 

## Recommended General Options

Horizontal Mounting Bracket, Vertical Mounting Bracket, Quick Connect Water Adapter, Water Cooler Hoses (CGA to QD), Water Cooler Hoses (CGA to CGA), Magnum® Flow Sensor, Pro-Torch™ Water-Cooled TIG Torches, Water Cooler Coolant

## Order

K1813-1 Cool-Arc™ 40 115/1/50/60  
K2187-1 Cool-Arc™ 40 220-240/1/50/60

## TECHNICAL SPECIFICATIONS

Product Name	Product Number	Input Power	Pump Hydraulic Rating		Reservoir gal. (ltr)	Input Current	Dimensions H x W x D inches (mm)	Net Weight lbs (kg)
			Open Flow English (metric)	Typical				
Cool-Arc™ 40	K1813-1	115/1/50/60	60 PSIG (4.14 bar)	53-57 PSIG (3.65-3.93 bar)	2 (7.57)	34 x 9 x 9 (863 x 229 x 229)	Empty: 45 (20.4) Full: 61.2 (27.7)	
Cool-Arc™ 40	K2187-1	220-240/1/50/60	1.66 gal/min (6.2 ltr/min)	.45-.60 gal/min (1.70-2.27 ltr/min)				

Note: K1813-1 includes a male, three prong, NEMA Type 5-15P plug.  
K2187-1 includes a two prong Continental European (Schuko) plug.

## A CLOSER LOOK

### COOLANT REQUIREMENTS

- **For Use Above Freezing:**  
Clean tap, distilled or deionized water.
  - **For Use Below Freezing:**  
50% pure ethylene glycol mixture, 50% water.
- **Important Application Note:**
    - **The Cool-Arc 40 is designed for continuous operation and should never be installed in conjunction with a water solenoid.** Therefore, if using the Cool-Arc 40 in a previous Magnum 10 or 20 application, the water solenoid on the power source should not be used.
    - **Do not use oil based coolants.**
    - **Do not use automotive antifreeze with rust or leak inhibitors.**

### RECOMMENDED OPTIONS

#### GENERAL OPTIONS

##### Horizontal Mounting Bracket

For mounting cooler horizontally on top of the power source. For use with CV-305, CV-400, CV-655, DC-400, DC-600, DC-655.  
**Order K559-2**

##### Vertical Mounting Bracket

For mounting cooler vertically in the cylinder rack. For use with CV-305 with K874 undercarriage, and Power Wave 455 with K1570-1 undercarriage.  
**Order K559-3**

##### Magnum® Flow Sensor

Protects valuable torches, guns and robotic welding systems from damage when loss of coolant flow has occurred for any reason, such as a blocked or kinked water line or ruptured hose.  
**Order K1536-1**

##### Quick Connect Water Adapter

Converts a male 5/8"-18 left hand hose fitting (CGA style) to a female quick connect fitting. The female quick connect mates with the male quick connect on water-cooled MIG guns or hoses.  
**Order KP1529-1**

##### Water Cooler Hoses (CGA to QD)

For use with wire feeders having female disconnect fittings. Kit contains two 25 ft. hoses with 5/8" left hand CGA fittings on cooler side and male quick disconnect fittings on the feeder end.  
**Order K1859-1**

##### Water Cooler Hoses (CGA to CGA)

For 5/8" LH CGA fitting applications at both cooler and wire feeder. Kit contains two 25 ft. hoses with 5/8" left hand CGA fittings on both ends of hose.  
**Order K1859-2**

##### Magnum 450WC Water-Cooled MIG and Gas-Shielded Flux-Cored Gun & Cable Assembly

Extend the life of your gas diffusers, nozzles and contact tips. Rated up to 450 amps, 100% duty cycle when used with 100% CO<sub>2</sub>. Requires K489-x Adapter Kit depending on wire feeder brand and model.  
**Order K684-x.**  
**Request Publication E12.70**

##### Python Water-Cooled Push-Pull MIG Gun & Cable Assembly

Interchangeable barrels and cups allow you to optimize the capabilities, cost and weight of your Python push-pull torch for each application. Rated up to 400 amps, 100% duty cycle with optional water-cooled barrel (KP2224-1) and Cup (KP2225-1).  
**Order K2212-x.**  
**Request Publication E12.13**

##### Pro-Torch™ Water-Cooled TIG Torches

Lightweight with ergonomically designed handles and superflex cables. Rugged and reliable for high performance welding applications.  
**Request Publication E12.150**



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