

## High-Pressure Waterjet Cutting Pumps

### MODEL K50c **MODEL K60c** MODEL K100c

#### THE K-SERIES PUMP

Waterjet Systems International has been a premier manufacturer of replacement parts for use on KMT° waterjet pumps for over 30 years. Therefore, it's only natural that our loyal KMT waterjet customers would request a pump to complement their existing systems and sparepart stock.

Introducing the K-Series High-Pressure Waterjet Pump from WSI.

WSI's K-Series Waterjet Pumps were designed at the request of our KMT-style parts customers who wanted a quality WSI waterjet system that was interchangeable with their existing KMT-brand waterjet pumps. The result is a versatile, dependable WSI waterjet pump that surpasses the competition in value, construction, and performance.

K-Series pumps offer the ultimate in flexibility. Systems can be configured with an SLIV, SLIV+, SLV+, or SLV Classic style intensifier topworks, which eliminates the need for additional spare-part stock.

The WSI high-pressure components used on the K-Series pumps ensure maximum reliability of the high-pressure system and lower replacement costs vs. the competition. WSI's total quality commitment means only the highest quality components throughout the system, such as Bosch Rexroth hydraulic components, Allen-Bradley electrical components, and Autoclave Engineers

Reliability, savings, and value. The K-Series by WSI - it's nice to have options.

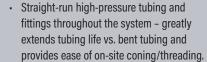
#### **Features** and Advantages

high-pressure fittings.









- Heavy-duty 3/16" (4.76 mm) frame design.
- Open-frame design for accessibility and ease of maintenance.
- Reduced stocking costs and little-to-no maintenance learning curve for existing KMT-style pump owners.
- Power-saving soft starter is standard.
- 1- and 2-liter attenuator capacity available.
- Extended-length 5 micron filtration interchangeable with KMT-brand waterjet pumps.

- Durable, heavy-gauge metal side and top covers with sound insulation.
- · Oversized hydraulic reservoir and high-efficiency plate heat exchanger for greener, more cost-effective cooling.
- Optional dual compensator provides simple control of the cutting pressure for tasks such as piercing and drilling.
- Optional redundancy can be added at time of purchase or later as production requirements increase.
- Hydraulic throttle block helps reduce shifting intensity on pressure reversals.
- Inlet, cutting water booster pump included.
- · Comprehensive set of spares, special tools, and manuals with each unit.

For businesses both large and small, WSI Waterjet Systems International is defined by its commitment to quality, value, and service, which continues long after the sale. WSI takes pride in being the globally established, recommended, and trusted designer, manufacturer, and servicer of ultra-high-pressure and high-performance waterjet cutting pumps and replacement parts. Only WSI delivers handcrafted, patented technology, reduced operation costs, a longer running life, and a truly unique approach to providing customers with the long-term relationship necessary for the successful operation and maintenance of its waterjet cutting pumps.





# High-Pressure Waterjet **Cutting Pumps**

### MODEL K50c MODEL K60c MODEL K100c

K100c

#### TECHNICAL SPECIFICATIONS

**Maximum Operating Pressure:** 

60,000 psi (4,140 bars)

**High-Pressure Flow Rate:** 

1.00 gpm (3.78 lpm)

Intensifier Cycle Rate:

27 cycles/min. at max. flow rate

**Electrical System:** 

Main Motor: 50 hp / 37 kW (TEFC)

208 VAC / 3 ph. / 60 Hz

230 VAC / 3 ph. / 60 Hz

460 VAC / 3 ph. / 60 Hz

190 VAC / 3 ph. / 50 Hz

380 VAC / 3 ph. / 50 Hz

Air/Oil Heat Exchanger Motor:

1/4 hp / 0.18 kW

120 VAC / 1 ph. / 60-50 Hz

208 VAC / 1 ph. / 60-50 Hz

230 VAC / 1 ph. / 60-50 Hz

Motor Speeds:

1800 rpm @ 60 Hz

1500 rpm @ 50 Hz

Controls:

120 VAC / 24 VDC

Safety Shutdown Circuits:

High Oil Temperature

Low Oil Level

Low Water Pressure

Intensifier Over-speed

Intensifier Stall

Shutdown "Overload"

**Hvdraulic System:** 

4.33 cu, in. (71 cu, cm) Axial Piston Pump Max. Operating Pressure: 3,000 psi (207 bars) Cooling Water Flow Rate: 2 gpm (7.56 lpm)

**Low-Pressure Cutting Water System:** 

Optimum Inlet Pressure: 65 psi (4.50 bars) Booster Pump Setting: 175 psi (12 bars)

Orifice Capacity at 55,000 psi (3,800 bars):

Quantity / Orifice Diameter

1 - 0.014 in. (0.35 mm)

2 - 0.010 in. (0.25 mm)

4 - 0.007 in. (0.17 mm)

8 - 0.005 in. (0.12 mm)

**Physical Dimensions:** 

Height: 54 inches (1.37 meters) Width: 42 inches (1.06 meters) Length: 64 inches (1.62 meters) Weight: 2,800 pounds (1,270 kg) K50c

**Maximum Operating Pressure:** 

60,000 psi (4,140 bars)

**High-Pressure Flow Rate:** 

1.10 gpm (4.15 lpm)

**Intensifier Cycle Rate:** 

31 cycles/min. at max. flow rate

**Electrical System:** 

Main Motor: 60 hp / 45 kW (TEFC)

208 VAC / 3 ph. / 60 Hz

230 VAC / 3 ph. / 60 Hz

460 VAC / 3 ph. / 60 Hz 190 VAC / 3 ph. / 50 Hz

380 VAC / 3 ph. / 50 Hz

Air/Oil Heat Exchanger Motor:

1/4 hp / 0.18 kW

120 VAC / 1 ph. / 60-50 Hz

208 VAC / 1 ph. / 60-50 Hz

230 VAC/ 1 ph. / 60-50 Hz

Motor Speeds:

1800 rpm @ 60 Hz

1500 rpm @ 50 Hz

Controls:

120 VAC / 24 VDC

Safety Shutdown Circuits:

High Oil Temperature

Low Oil Level

Low Water Pressure

Intensifier Over-speed

Intensifier Stall

Shutdown "Overload"

**Hydraulic System:** 

4.33 cu. in. (71 cu. cm) Axial Piston Pump Max. Operating Pressure: 3,000 psi (207 bars) Cooling Water Flow Rate: 2 gpm (7.56 lpm)

**Low-Pressure Cutting Water System:** 

Optimum Inlet Pressure: 65 psi (4.50 bars) Booster Pump Setting: 175 psi (12 bars)

Orifice Capacity at 55,000 psi (3,800 bars):

Quantity / Orifice Diameter

1 - 0.015 in. (0.38 mm)

2 - 0.011 in. (0.28 mm)

5 - 0.007 in. (0.17 mm)

9 - 0.005 in. (0.12 mm)

**Physical Dimensions:** 

Height: 54 inches (1.37 meters)

Width: 42 inches (1.06 meters)

Length: 64 inches (1.62 meters)

Weight: 2,900 pounds (1,315 kg)

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**Maximum Operating Pressure:** 60,000 psi (4,140 bars)

**High-Pressure Flow Rate:** 

2.00 gpm (7.56 lpm)

**Intensifier Cycle Rate:** 

34 cycles/min. at max. flow rate

**Electrical System:** 

K60c

Main Motor: 100 hp / 75 kW (TEFC)

208 VAC / 3 ph. / 60 Hz

230 VAC / 3 ph. / 60 Hz

460 VAC / 3 ph. / 60 Hz

190 VAC / 3 ph. / 50 Hz

380 VAC / 3 ph. / 50 Hz

Air/Oil Heat Exchanger Motor:

1/4 hp / 0.18 kW

120 VAC / 1 ph. / 60-50 Hz

208 VAC / 1 ph. / 60-50 Hz

230 VAC/ 1 ph. / 60-50 Hz

Motor Speeds:

1800 rpm @ 60 Hz

1500 rpm @ 50 Hz

Controls:

120 VAC / 24 VDC

Safety Shutdown Circuits:

High Oil Temperature

Low Oil Level

Low Water Pressure

Intensifier Over-speed

Intensifier Stall

Shutdown "Overload"

**Hydraulic System:** 

8.54 cu. in. (140 cu. cm) Axial Piston Pump Max. Operating Pressure: 3,000 psi (207 bars) Cooling Water Flow Rate: 4 gpm (15.12 lpm)

**Low-Pressure Cutting Water System:** 

Optimum Inlet Pressure: 65 psi (4.50 bars) Booster Pump Setting: 175 psi (12 bars)

Orifice Capacity at 55,000 psi (3,800 bars):

Quantity / Orifice Diameter

1 - 0.020 in. (0.51 mm)

2 - 0.014 in. (0.35 mm) 4 - 0.010 in. (0.25 mm)

8 - 0.007 in. (0.17 mm)

**Physical Dimensions:** 

Height: 54 inches (1.37 meters) Width: 42 inches (1.06 meters)

Length: 72 inches (1.83 meters) Weight: 4,200 pounds (1,905 kg)

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

WSI produces their own waterjet parts and is in no way associated with KMT. KMT is a registered trademark of American Industrial Partners.