



WATERAX 
WE MOVE WATER



MARK-3[®]
HIGH-PRESSURE
FIRE PUMP SOLUTIONS

Performance. Reliability. Legacy.

A proven fire-pump platform engineered in four
purpose-built configurations.

A LONG PROUD HISTORY OF MOVING WATER

Our journey started in 1898, and we are proud to continue serving the firefighting industry with innovative and reliable products.

We take pride in our pump innovation journey that began with the WAJAX DDV and led to the new MARK-3[®] Watson Edition, which is named after our founder, John Colquhoun Watson Jack. This first ever purpose-built engine for wildland firefighting sets a new benchmark of excellence for high-pressure fire pumps and is the first of its kind in the industry.

We are proud to continue our mission to place powerful and efficient pumps into the hands of wildland firefighters, and we remain committed to moving technology forward while maintaining our tradition of excellence.

We look forward to working together to create a safer and more resilient world.



**1929-1938
WAJAX DDVC**



**1938-1952
WAJAX DDVA**



**1954-1960
WAJAX MARK-1**



**1963-1964
WAJAX MARK-2M**



**1961-1962
WAJAX MARK-2**



**1964-2013
WAJAX MARK-3[®]**



**2022
WATERAX MARK-3[®]
WATSON EDITION**



**2014-
WATERAX MARK-3**

ONE PLATFORM. MULTIPLE APPLICATIONS.



**WILDFIRE
OPERATIONS**



**FIREFIGHTING IN
MOUNTAINOUS AREAS**



**RELAY TANK
PUMPING**



**RURAL INFRASTRUCTURE
PROTECTION**

READY WHEN EVERY SECONDS COUNT

The **MARK-3**® pump is built for rapid deployment, straightforward operation, and dependable performance in the most demanding field conditions. Designed with real-world responders and operators in mind, every configuration delivers reliability where infrastructure is limited and access is challenging.

Each unit offers:

- **A compact, rugged design** that enables easy transport, fast setup, and efficient storage—ideal for narrow access roads, remote terrain, and mobile operations.
- **Consistent, high-pressure water delivery** capable of moving water long distances from rivers, ponds, tanks, or other static sources.
- **Intuitive starting and control systems** that minimize setup time and reduce operator fatigue in high-stress situations.
- **Integrated, field-ready layouts** that keep essential components organized, protected, and immediately accessible when seconds matter.

VERSATILITY BUILT INTO EVERY CONFIGURATION

Engineered as a flexible, high-performance platform, the **MARK-3**® pump supports a wide range of fire-protection and water-movement applications, including:

- Rural fire protection.
- Auxiliary fire pumps on fire apparatus.
- Forestry & land management.
- Disaster response & emergency water movement.
- Direct attack wildfire operations.
- Relay tank pumping for remote watering during firefighting operations.
- High-elevation firefighting in mountainous areas, where pressure and reliability are critical.
- In series pumping over long distances.
- Parallel pumping for higher volumes.

A MODERN PUMP FOR THE MODERN FIREFIGHTER

Maintaining the tradition while moving technology forward: the **MARK-3**® Watson Edition plugs right into your existing **MARK-3**® water-moving systems. It will set a new benchmark of excellence for high-pressure fire pumps in the wildland firefighting community for generations to come. The **MARK-3**® Watson Edition greatly improves user experience in the following areas:

Mobility

Unit is 30% lighter and 20% smaller.

- Integrated carriage system
- Easy loading / unloading
- Option to backpack engine side up or down
- Integrated carry handle

Safety

Pump design and features to improve firefighter safety.

- Ergonomic carriage system reduces the risk of back injuries
- Padded straps protect shoulders and back from bruising
- Muffler heat shield protects against severe burns
- Lighter pump reduces incidence and severity of slips, trips, falls and transport-related injuries

User-friendliness

Smart, intuitive and easy to use.

- LED visual interface
- Engine operating status
- Troubleshooting function
- High temperature protection

Ease of start

*Starting a **MARK-3**® pump has never been this easy!*

- Less force required for easier pull start
- Foothold for improved steadiness
- Engine warm-up indicator
- Anti-flooding feature reduces risk of flooding engine



THE EVOLUTION OF THE ICONIC MARK-3®



4-Stage High-Pressure Pump End

Same Performance, Less Weight, More Compact

- 30% smaller impellers
- 50% reduction in pump end weight
- Optimized hydraulic efficiency
- Corrosion-free composite material



High-Performance Engine

Smaller, Quieter, More Powerful

- Unmatched power-to-weight ratio
- Purpose-built
- More power, 30% lighter
- Perfectly optimized for smaller pump end

Modern User Interface

Smart and Intuitive

- Maintenance indicator
- Fuel depletion indicator
- Engine warm-up indicator
- Loss of prime protection (overspeed)
- High temperature protection (overheat)
- USB port for advanced diagnostics
- Bluetooth® connectivity



Composite Base Frame

Light, Flexible, and Durable

- Lightweight composite material
- Vibration and shock dampening
- Extended durability
- Foothold for steady pull start
- “Snow shoe” concept for improved grounding in swampy terrain
- More than twice the contact area compared to previous MARK-3® model
- Military-grade Fidlock® quick-release system to instantly remove carrying straps (Item No. 701798)

Smart.

Modern User Interface
and Diagnostics



Light.

44 lbs (20 kg)

Powerful.

High-Performance
WATERAX 140cc engine

Item No.: 100137

MARK-3[®] WATSON EDITION

The **MK3-W** carries forward the legacy of the original MARK-3[®] with cutting-edge innovation. Precision-engineered for maximum performance, it's built to deliver unmatched power-to-weight ratio and reliability in the most extreme conditions. The MK3-W is meant to be used at **full throttle!**

The MK3-W is qualified after being tested in accordance with the USDA Forest Service 100-hour endurance test conducted in San Dimas.

NSN NUMBERS

- NSN 4320-01-723-2109: PUMP UNIT, CENTRIFUGAL, NFES-0147 (Pump only)
- NSN 4320-01-723-2106: PUMP UNIT, CENTRIFUGAL, NFES-0600 (Pump with accessory kit)
- NSN 4240-01-723-2111: HARNESS, WATER PUMP, NFES-0314

MARK-3[®] WATSON EDITION WITH INTEGRATED FUEL TANK

The **MK3-WW** is purpose-built to deliver exceptional portability and endurance for wildland firefighting operations. Its integrated **1 US gallon (3.8 L)** fuel tank provides up to **~45 minutes** of uninterrupted runtime at full throttle - **100%** and **~65 minutes** at **75%** throttle, allowing crews to stay focused on suppression efforts instead of refueling.

When operations extend beyond the initial attack, a three-way fuel valve enables quick, seamless connection to an external fuel source—ensuring continuous power exactly where and when it's needed.



MK3-W
Item no: **100137**

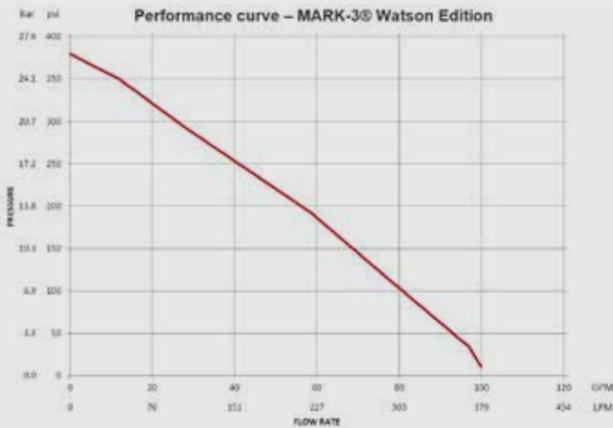
Flow rate at specified pressure

Maximum pressure: **380 PSI** (26.2 Bar)
Free flow: **100 US gals/min** (379 L/min)
Maximum head: **877'** (267 m)
Dry weight: **44 lbs** (20 kg)



Performance

Flow			Pressure	
US GPM	L/min		PSI	Bar
80	303	@	100	6.9
70	265	@	150	10.3
40	151	@	250	17.2



MK3-WW
Item no: **100159**

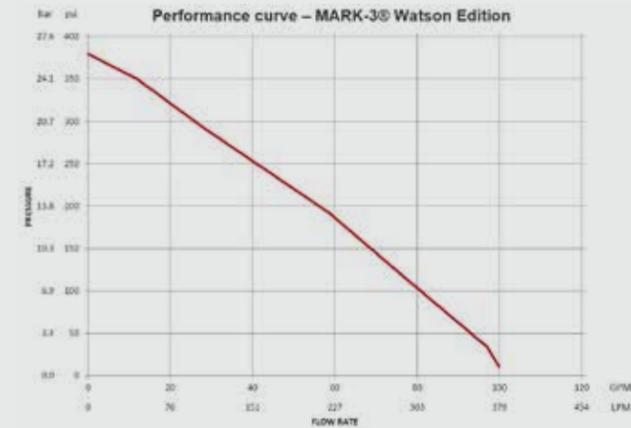
Flow rate at specified pressure

Maximum pressure: **380 PSI** (26.2 Bar)
Free flow: **100 US gals/min** (379 L/min)
Maximum head: **877'** (267 m)
Dry weight: **53.2 lbs** (24.1 kg)
Wet weight: **59.6 lbs** (27 kg)



Performance

Flow			Pressure	
US GPM	L/min		PSI	Bar
80	303	@	100	6.9
70	265	@	150	10.3
40	151	@	250	17.2



FIELD-PROVEN PERFORMANCE

- Powered by a **WATERAX 140cc - 10.7 HP engine** for proven reliability and longevity.
- Bluetooth connectivity, enabling **real-time monitoring** via a **mobile app with a dashboard interface**.

The MARK-3[®] Watson Edition brings advanced monitoring capabilities to the fireline.

Designed for demanding field conditions, the MK3-WW combines rugged protection, lightweight mobility, and reliable performance to support both rapid deployment and sustained operations in remote terrain.

MYWATERAX PUMP DASHBOARD MOBILE APP

The ultimate tool for real-time pump monitoring!

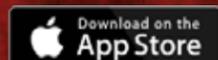
Stay in control of your **MARK-3® Watson Edition** pump with seamless Bluetooth® connectivity. The MyWATERAX app provides live performance insights, engine speed, temperature, and runtime—helping you optimize your pump's efficiency when it matters most.

KEY FEATURES:

- Real-time data for tracking engine performance.
- Connection history log for better operational insights.
- User-friendly interface for quick access to critical data.
- Geolocation capabilities to log pump locations and optimize fleet management.

The app works on both phone and tablet, ensuring you're always ready to tackle the next challenge.

Download now and take control of your pump in the field!



MARK-3® ESSENTIAL

MARK-3® Essential pump is built for crews who value reliability over refinement and performance over features. It delivers the legendary high-pressure capability of the MARK-3® platform in its most stripped-down, mission-ready configuration—engineered to perform when conditions are harsh and failure is not an option.

Every MARK-3® Essential pump is fully mechanical by design, eliminating unnecessary complexity and reducing points of failure. With no electronic systems to manage, crews get consistent starts, predictable operation, and confidence in the field—whether deployed for wildland firefighting, industrial response, or remote operations.

Just high-pressure performance engineered to run at full throttle when it counts.

APPLICATIONS:

- Direct attack wildfire operations.
- Relay tank pumping for remote watering during firefighting operations.
- High-elevation firefighting in mountainous areas.
- In series pumping over long distances.
- Parallel pumping for higher volumes.

FEATURES AND BENEFITS:

- Quick-release clamp and detachable pump end for minimal equipment downtime.
- Sealed bearing to eliminate pump end greasing in the field.
- Aluminum alloy pump components and anodized parts for lighter weight and greater resistance to corrosion.
- Anti-flooding feature significantly reduces risk of flooding engines.
- Optional backpack straps available.



MARK-3[®] ESSENTIAL

The **MK3-ES** delivers the trusted high-pressure performance of the MARK-3[®] platform in its simplest and most rugged form. Designed for crews who prioritize durability and straightforward operation. Lightweight, compact, and easy to deploy, the MK3-ES is ideal for use as a primary, auxiliary, or industrial-use pump.

Only the essentials - designed around what truly matters.

MARK-3[®] ESSENTIAL WITH INTEGRATED FUEL TANK

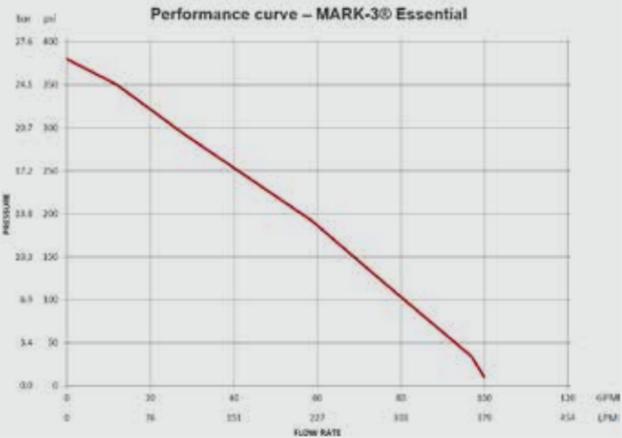
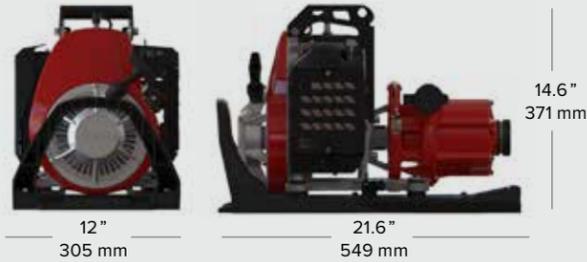
The **MK3-EWS** delivers the trusted high-pressure performance of the MARK-3[®] platform with the simplicity and durability of a fully mechanical system. Designed for crews who need a dependable, no-nonsense pump, it features an integrated **1 US gallon (3.8 L)** fuel tank that delivers up to **~45 minutes** of uninterrupted runtime at full throttle - **100%** and **~65 minutes** at **75%** throttle.

Ideal for rapid deployment scenarios where minimizing refueling interruptions is critical.



MK3-ES
Item no: **100168**

Flow rate at specified pressure
Maximum pressure: **380 PSI** (26.2 Bar)
Free flow: **100 US gals/min** (379 L/min)
Maximum head: **877'** (267 m)
Dry weight: **43 lbs** (19.5 kg)



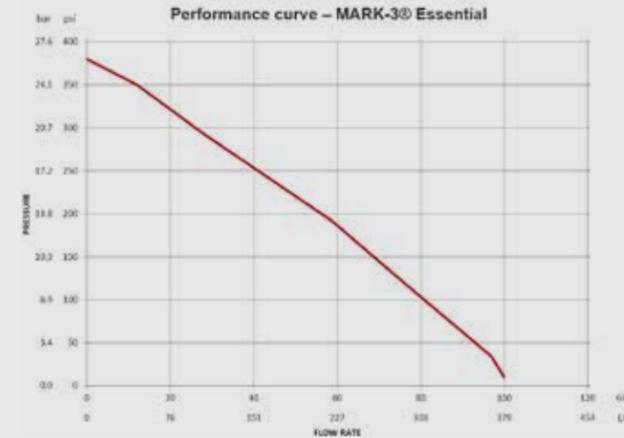
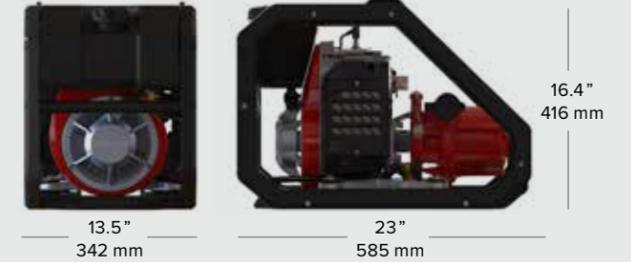
Performance

Flow			Pressure	
US GPM	L/min		PSI	Bar
80	303	@	100	6.9
70	265	@	150	10.3
40	151	@	250	17.2



MK3-EWS
Item no: **100169**

Flow rate at specified pressure
Maximum pressure: **380 PSI** (26.2 Bar)
Free flow: **100 US gals/min** (379 L/min)
Maximum head: **877'** (267 m)
Dry weight: **51.7 lbs** (23.5 kg)
Wet weight: **58.1 lbs** (26.4 kg)



Performance

Flow			Pressure	
US GPM	L/min		PSI	Bar
80	303	@	100	6.9
70	265	@	150	10.3
40	151	@	250	17.2

Just field-proven reliability designed to perform in demanding wildfire and industrial environments.

Its compact format and rugged components make it an excellent option for remote operations where mobility and endurance are essential.



TECHNICAL SPECIFICATIONS

	MARK-3® Watson Edition	MARK-3® Watson Edition with Integrated Fuel Tank	MARK-3® Essential	MARK-3® Essential with Integrated Fuel Tank
MODEL	MK3-W	MK3-WW	MK3-ES	MK3-EWS
ITEM NO	100137	100159	100168	100169
ENGINE	WATERAX 140cc, 2-cycle, air-cooled, Nikasil® coated			
POWER	10.7 HP (8 kW) @ 8000 RPM			
TORQUE	7.6 lb-ft (10 Nm) @ 7050 RPM			
DUTY RATING	Continuous duty at 100% throttle			
IGNITION	CDIM with backup overspeed protection			
PUMP END	Detachable, 4-stage, centrifugal, high-pressure, anodized aluminium, corrosion-resistant composite components (patent pending), foam compatible			
CONNECTIONS	Inlet 2" (51 mm) Male NPS Outlet 1.5" (38 mm) Male NPSH			
PUMP CLAMP	Quick-release lightweight pump clamp			
COUPLING	Reinforced flexible gear coupling sleeve			
SEAL	Balanced elastomeric bellows and silicon carbide mechanical rotary seal			
BEARING	Maintenance-free 15 mm double row sealed bearing			
CARRY FRAME	Composite with integrated backboard	Wrap-around reinforced composite	Composite with integrated backboard	Wrap-around reinforced composite
CARRY HANDLE	Lightweight aluminum painted black	-	Lightweight aluminum painted black	-
BACKPACK STRAPS	Optional: Padded straps with military grade quick release system		Padded straps with military grade quick release system	
STARTING SYSTEM	Mechanical rewind starter with manual rope starter backup			
FUEL SYSTEM	Carburetor: Zama® diaphragm carburetor with integrated fuel pump Priming: Stand-alone purge bulb - flood-proof			
FUEL TANK	Remote fuel tank: SAE 45 or Mercury QC	- Integrated fuel tank: 1 US Gallon (up to ~45 minutes run time) - Remote fuel tank: 3-way valve w/ SAE 45 or Mercury QC	Remote fuel tank: SAE 45 or Mercury QC	- Integrated fuel tank: 1 US Gallon (up to ~45 minutes run time) - Remote fuel tank: 3-way valve w/ SAE 45 or Mercury QC
FUEL TYPE	Gasoline: Unleaded 87 octane automotive gasoline (maximum 10% ethanol) Oil: 2-cycle mixing oil with API-TC, JASO FD and ISO-L-EGD certification (Amsoil Saber® Professional Synthetic) Mix Ratio: 50:1			
FUEL CONSUMPTION	At 75% load: 0.92 US gals/hr (3.5 L/hr) At 100% load: 1.5 US gals/hr (5.7 L/hr)			
AIR INTAKE SYSTEM	Air filter: Foam, oiled Ember separator: USFS 5100-273e approved			
EXHAUST SYSTEM	Muffler: Stainless steel – painted black Muffler heat shield: Stainless steel – painted black – replaceable Spark arrestor: USFS FS-5100-1 approved			
THROTTLE	Control with detents to prevent throttle drift			
USER INTERFACE MODULE	OFF button with multi-color daylight visible LEDs. Profrex® ESG		OFF button with four daylight visible LEDs.	
	Diagnostics and session data logging		-	
	Overspeed protection			
	Overheat warning			
	Overheat protection			
	Integrated hour meter & tachometer		-	
	Last engine state indicator			
	Low battery indicator			
COMMUNICATION	Warm up indicator			
	- Diagnostics Port Connection USB-C - Diagnostics Software WATSON Diagnostic Tool - Bluetooth® wireless connection - Mobile application: MyWATERAX app, IOS and Android		-	
	USFS 5100-274e		CE/EN 14466:2005+A1:2008	
	MANUFACTURER WARRANTY Earlier of 2 years or 100 hours			

PARTNER WITH WATERAX

Proven in wildfire response. Trusted for structure protection worldwide.

Sales engineering, specification documents, demos, and integration support available upon request.



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