

## TECHNICAL SHEET

# WATERAX MARK-3 Watson Edition Fire Pump

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

The 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 pumps reduce 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
- Integrated hour meter and tachometer
- 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

#### **COMPONENTS**

#### 4-Stage High-Pressure Pump End

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

#### **High-Performance Engine**

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









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### **Modern User Interface**

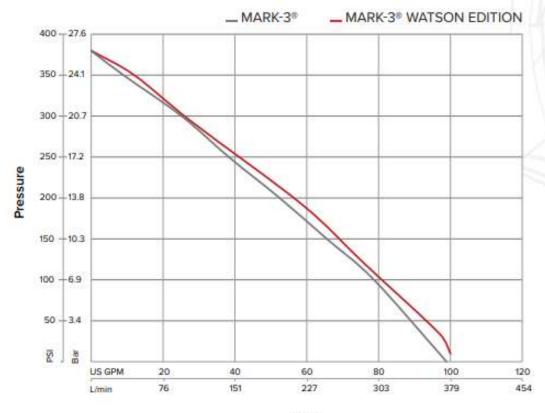
- Maintenance indicator
- Fuel depletion indicator
- Engine warm-up indicator
- Loss of prime protection (overspeed)
- High temperature protection (overheat)
- Integrated hour meter and tachometer
- USB port for advanced diagnostics
- Bluetooth® connectivity

### **One-Piece Composite Base Frame**

- 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® guick-release system to instantly remove carrying straps



### PERFORMANCE



Flow









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### **TECHNICAL SPECIFICATIONS**

- ENGINE: WATERAX 140cc, 2-cycle, air-cooled, Nikasil® coated
- **POWER:** 7.9 kW @ 7,700 RPM
- TORQUE: 10 Nm @ 7,050 RPM
- **EXHAUST SYSTEM:** Painted stainless steel muffler with spark arrestor USDA Forest Service Standard 5100-01
- SOUND LEVEL: Does not exceed 90 dBA @ 13 feet
- MUFFLER HEAT SHIELD: Painted stainless steel
- **RECOIL STARTER:** Mechanical rewind starter with manual rope starter backup
- CARBURETOR: Diaphragm carburetor
- FUEL CONNECTION: Mercury CAD & INT Model (MK3W) SAE Flare 45 - USA Mode (MK3W-U)
- SPARK PLUG: M14 x 9.5 mm reach, resistor, copper core, nickel electrodes
- **IGNITION:** Prufrex® CDIM capacitive discharge ignition module with overspeed safety cutoff
- USER INTERFACE MODULE: OFF button with daylight visible LEDs. Prufrex® ESG with overspeed and overheat protection. USB-C connector and Bluetooth® wireless connection
- **POWER GENERATOR:** Ducati Energia 20 W, 13 V, 1.5 A with voltage regulator module
- PUMP END: Detachable 4-stage centrifugal high-pressure
- **PUMP CLAMP:** Quick-release lightweight pump clamp
- COUPLING: Reinforced flexible gear coupling sleeve
- VOLUTE & COVER: Anodized aluminum alloy
- IMPELLERS: Composite PPS GF reinforced
- **DIFFUSERS**: Composite PPS GF reinforced crossover design with marine grade aluminum vane tips
- SEAL: Balanced elastomeric bellows and silicon carbide mechanical rotary seal
- BEARING: Maintenance-free 12 mm double row sealed bearing
- BUSHING: Sintered bronze bushing
- SHAFT: Stainless steel
- CONNECTIONS: Inlet 2" Male NPSH / Outlet 1.5" Male NPSH
- BACKPACK FRAME: Composite frame with integrated backboard and vibration mounts
- STRAPS: Padded strap with military-grade Fidlock® quick-release system
- **CARRY HANDLE:** Aluminum powder coated black
- **DIMENSIONS:** L 549 x W 305 x H 356 mm
- DRY WEIGHT: 19 kg
- LUBRICATION: Fuel mix ratio: 50:1 (gasoline to oil)
- 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)
- FUEL CONSUMPTION: 5.7 L/hr
- MAX HEAD: 267 m
- MAX PRESSURE: 26.2 Bar
- MAX FLOW: 379 L/min







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