

## B2X-D902 DIESEL



### DATA SHEET

## MID-RANGE PRESSURE 2-STAGE FIRE PUMP

The **WATERAX B2X-D902** pump pairs a reliable high performance Mid-Range 2-stage pump end with a powerful **Kubota D902-E4B 3-Cylinder Fuel Injected Liquid Cooled 25 HP Diesel Engine** to achieve pressures of up to **180 PSI (12.4 bar)** and flow rates reaching **310 GPM (1173 lpm)**. A strong show of both pressure and volume makes it the ideal pump for vehicle mounted applications dedicated to municipal and wildland urban interface operations.

It is fully compatible with the **DCP**, supporting both **single** and **dual control panel** configurations. The engine speed can be controlled via the **DCP** using a linear throttle actuator.

The **WATERAX** quick release clamp provided on the **B2X** pump provides ease of maintenance without having to disassemble the complete pump unit thus significantly reducing equipment downtime.

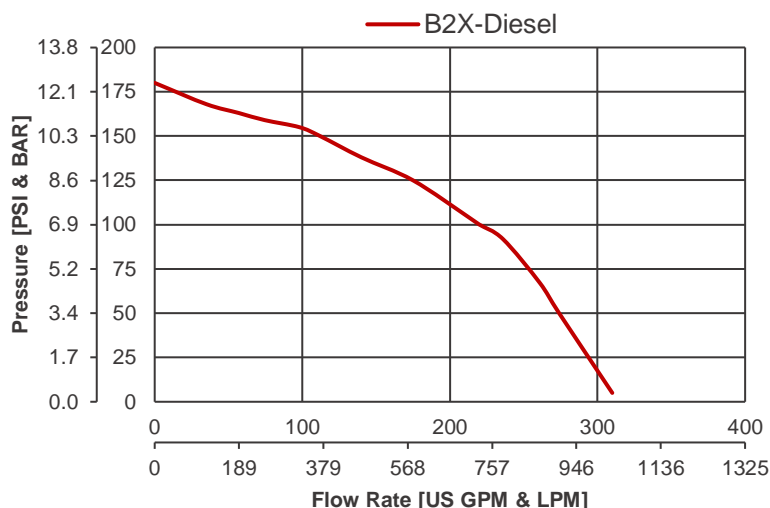
### Applications

- Vehicle mounted applications
  - Brush trucks
  - Initial attack units
  - Slip-on units
- Booster reel
- 2x 1-1/2" simultaneous attack lines
- 2-1/2" supply line
- Structure protection
- Water transfer
- Boat fire pump

### Features and Benefits

- Versatile fire pump offering firefighting, hose reel, multiple attack lines and water transfer capabilities.
- Quick release clamp and swappable pump ends for minimal equipment downtime and inventory
- Belt drive system for reliable, low maintenance performance
- Aluminium alloy pump components and anodized parts for lighter weight and greater resistance to corrosion
- Comprehensive user and service manuals
- Single or Dual control panel with remote throttle control
- EPA Certified

## SPECIFICATIONS



### Flow rate at specified pressure

Maximum Pressure: 180 PSI (12.4bar)  
 Free flow: 310 US gals/min (1173 L/min)  
 Maximum Head 415' (127 m)

| Flow Rate |        |   | Pressure |        |
|-----------|--------|---|----------|--------|
| US GPM    | (LPM)  |   | PSI      | (BAR)  |
| 274       | (1037) | @ | 50       | (3.4)  |
| 220       | (833)  | @ | 100      | (6.9)  |
| 112       | (424)  | @ | 150      | (10.3) |

Engine: Kubota D902-E4B – 24.8 hp



### Engine Specifications

|  |  |
|--|--|
| <b>Model &amp; Type</b>                | Kubota D902-E4B 3-Cylinder Fuel Injected Liquid Cooled Diesel Engine |
| <b>Net Power</b>                       | 24.8 HP (18.5 kW) @ 3600 RPM   |
| <b>Net Torque</b>                      | 40.6 lb-ft (55 Nm) @ 2600 RPM  |
| <b>Max. Bare Idle Speed</b>            | 900 to 1000 RPM  |
| <b>Bore &amp; Stroke</b>               | 2.83 x 2.9 inches (72 x 73.6 mm)                                     |
| <b>Displacement</b>                    | 54.80 cubic inches (898 cc)  |
| <b>Electric Starting System</b>        | 12 VDC, 1.0 kW Starter (with glow plug)                              |
| <b>Charging</b>                        | 12 Volt, 40 Amp  |
| <b>Battery Capacity (5Hr Capacity)</b> | 12 Volt, 52 Amp-Hour or equivalent                                   |
| <b>Intake System</b>                   | Naturally Aspirated  |
| <b>Cooling</b>                         | Liquid Cooled  |
| <b>Compression Ratio</b>               | 24:1   |
| <b>Oil Capacity</b>                    | 3.9 quarts (3.7 liters)  |
| <b>Oil Type (API Classification)</b>   | API CJ-4   |
| <b>Emissions</b>                       | Meets current CARB, EPA, and CE requirements.                        |
| <b>Fuel Type</b>                       | Ultra Low Sulfur (15 ppm or less)                                    |
| <b>Muffler</b>                         | Rain Cap Standard, Forestry Approved Spark Arrestor Optional.        |

### Pump Specifications

|                                   |   |
|-----------------------------------|---|
| <b>Type</b>                       | Detachable, 2-stage, Centrifugal                                      |
| <b>Ratings</b>                    | ISO 9 and NFPA 1906 Medium Pressure Rating of 50 GPM (Texas Only)     |
| <b>Color</b>                      | Red   |
| <b>Description</b>                | Medium Pressure, Medium Flow, Foam Compatible                         |
| <b>Maximum Allowable Pressure</b> | 400 PSI (27.6 bar)  |
| <b>Drive Ratio</b>                | 1.88:1  |
| <b>Intake</b>                     | 3" NPT Female / 4" Victaulic Combination                              |
| <b>Discharge</b>                  | 2-1/2" NPT Female / 3" Victaulic Combination                          |
| <b>Priming Port</b>               | 1/4" Female NPT Thread  |
| <b>Body &amp; Diffusers</b>       | Anodized corrosive resistant aluminum                                 |
| <b>Impellers</b>                  | 4.00" Diameter; Anodized corrosive resistant aluminum                 |
| <b>Special feature</b>            | The entire pump separates completely from the engine/speed increaser. |
| <b>Bearings</b>                   | Maintenance Free; sealed ball bearing and sintered bronze sleeve      |
| <b>Pump Seal</b>                  | Maintenance Free; heat resistant silicone carbide                     |
| <b>Clamp</b>                      | Hand tight quick release clamp (no tools needed)                      |
| <b>Drive Unit</b>                 | Timing Belt and Pulley. Speed Increaser                               |
| <b>Pump Shaft</b>                 | Stainless Steel   |
| <b>Speed Increaser</b>            | Horizontal or Vertical  |

## SPECIFICATIONS

### Primer Specifications:

|                                       |  |
|---------------------------------------|--|
| <b>Hand Primer Option</b>             | Guzzler, Diaphragm Type; Reliable, Lightweight and Rugged                          |
| <b>Intake and Discharge Port Size</b> | ½" Female NPT  |
| <b>Construction</b>                   | Aluminum Handle, composite body, buna-n reinforced diaphragm and flapper valves    |
| <b>Lift</b>                           | 12 feet (3.7 m) [up to approximately 16 feet (4.8 m) with suction hose foot valve] |
| <b>Head Capacity</b>                  | 30 ft (9.1 m)  |
| <b>Maximum Pressure</b>               | 15 PSI (1.03 bar)  |
| <b>Maximum Service Temp</b>           | 150° F (66° C)   |
| <b>Volume per Stroke</b>              | 0.44 quart (0.42 liter)  |
| <b>Dimensions (L x W x H)</b>         | 12-3/4" x 4-1/2" x 4-5/16" (324 x 114 x 110 mm)                                    |
| <b>Weight</b>                         | 1.70 lbs (0.77 kg)   |
|                                       | Shipped loose with connection hardware and 6 feet of hose                          |

|                                       |  |
|---------------------------------------|--|
| <b>Electric Primer Option</b>         | 12 VDC Piston Type Vacuum Pump                                       |
| <b>Intake and Discharge Port Size</b> | 3/8" Female NPT  |
| <b>Construction</b>                   | Corrosion Resistant Aluminum with Bronze Sleeve and Composite Piston |
| <b>Max. Current Draw</b>              | 105 amps   |
| <b>Lift</b>                           | 25 feet (7.6 m)  |
| <b>Vacuum</b>                         | 22 in-Hg   |
| <b>Dimensions</b>                     | 9" x 4-1/8" x 7-1/2" (229 x 105 x 191 mm)                            |
| <b>Weight</b>                         | 8.1 lbs (3.7 kg)   |
| <b>Vehicle Units</b>                  | Shipped loose with mounting plate, hardware, and 6 feet of hose      |

### Frame Specifications:

|                      |              |
|----------------------|--------------|
| <b>Vehicle Mount</b> | 4 Leg Mounts |
|----------------------|--------------|

### Controls Specifications:

|   |  |
|---|--|
| <b>Digital Control Panel<br/>(Standard)</b> | Digital Control Panel DCP200 with push buttons ( <i>OFF</i> to turn Off Engine, <i>Enter</i> to cycle display screen menu, <i>Armed</i> to enables RUN Function, <i>Run</i> to start the engine, <i>Rabbit</i> and <i>Turtle</i> to move the throttle up and down), a LED indicator (becomes red when there is an error) and a screen displaying parameters; RPM, Throttle Position, Pressure Gauge, Coolant Temp, Battery Voltage and, Current Status. Low Water Pressure Protection, Low Oil Warning and High Coolant Temperature safety features are integrated in the panel. |
| <b>PMSCP-Diesel</b>                         | Push Button On/Off Switch (lit when on), Low Pressure Protection Switch (lit when on), Push Button Engine Start, Glow Plug Timer, Low Oil Pressure, Warning Light, High Water Temperature Warning Light, Vernier Throttle, Pump Discharge Pressure Gage and mounting for optional electric primer momentary control toggle switch (comes in electric primer kit).  |
| <b>CONTROL PANEL DIESEL G1</b>              | Rotary OFF/RUN/Start Switch; LED Indicators for glow plug preheat, alternator charge failure, Low oil pressure, and high Low Pump Pressure Protection Override Switch; Oil Pressure Gage; Voltage Gage; Tachometer and Hour meters.  |

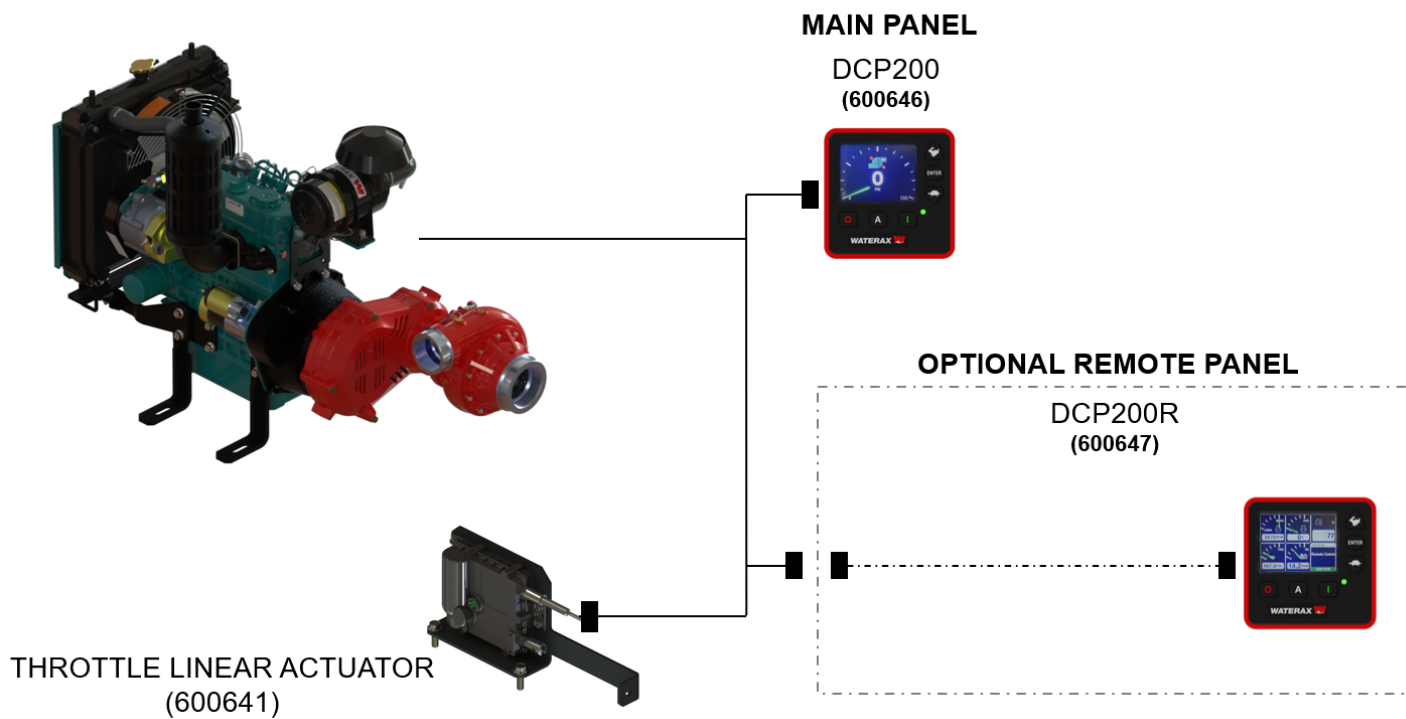
**NOTE:** All panels come with FastWire Connections for ease in installation and maintenance. Standard FastWire is for the DCP. Special FastWire models are available for PMSCP-Diesel and G1 panel.

## CONTROL PANEL

Digital Control Panel – DCP 200



### Single or Dual Control Panel Configuration



## PRODUCT SELECTION

### Product Selection Matrix

|                     |                   |                                  | B2X-D902V          | B2X-D902H         |
|---------------------|-------------------|----------------------------------|--------------------|-------------------|
| STANDARD INCLUSIONS | Primer            | Guzzler Hand Primer              | o                  | o                 |
|                     |                   | Electric Primer                  | o                  | o                 |
|                     | Muffler           | Rain Cap                         | s                  | s                 |
|                     |                   | Forestry Approved Spark Arrestor | o                  | o                 |
|                     | Drive Orientation | Vertical                         | s                  | -                 |
|                     |                   | Horizontal                       | -                  | s                 |
|                     | Controls          | DCP                              | o                  | o                 |
|                     |                   | PMSCP-DIESEL                     | o                  | o                 |
|                     |                   | CONTROL PANEL DIESEL G1          | o                  | o                 |
|                     | FastWire          | FWX-D902-3 3' Extension Harness  | o                  | o                 |
| Dimensions          |                   |                                  | 38.3"x 20.3"x32.3" | 38.3"x22.5"x32.3" |
| Weight              |                   |                                  | 280 lbs (127 kg)   | 280 lbs (127 kg)  |

Standard **s** Option **o** Not applicable **-**

### Options & Accessories

**Sold Separately**



**GZPRIMERKIT**  
Guzzler Hand Primer  
with hose & valve

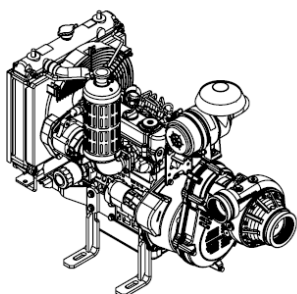


**EPRIMERKIT**  
Electric Primer w/ plate,  
5' harness & switch



**B-6365**  
CHECK VALVE MANIFOLD 1-1/2 NPSH

# TECHNICAL DRAWINGS



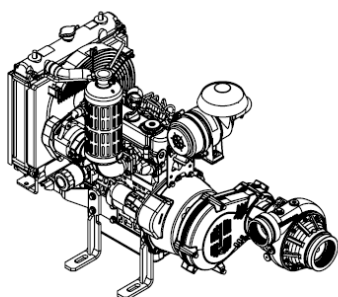
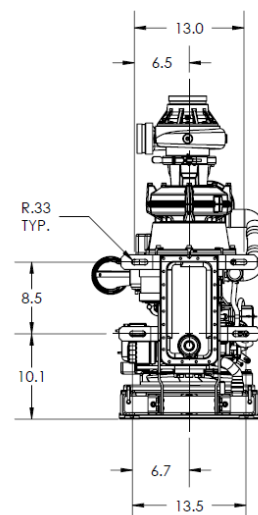
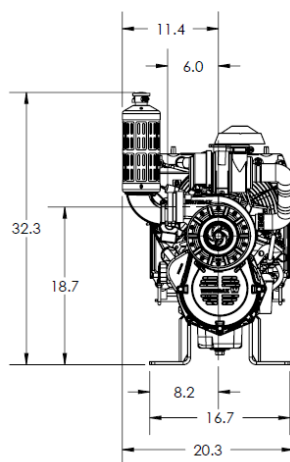
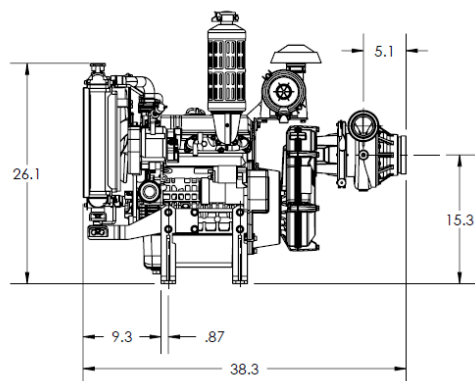
## B2X-D902V

**Length 38.3"**  
(97 cm)

**Width 20.3"**  
(51.6 cm)

**Height 32.3"**  
(82 cm)

**Weight 280 lbs**  
(127 kg)



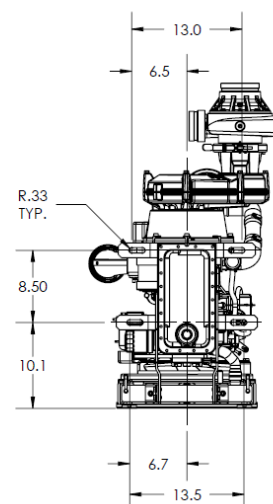
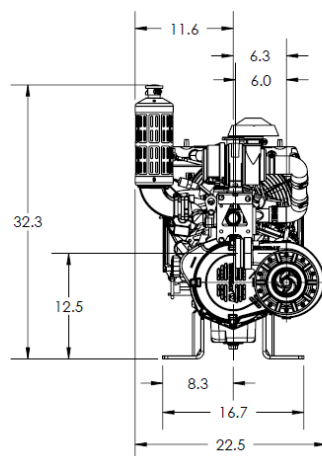
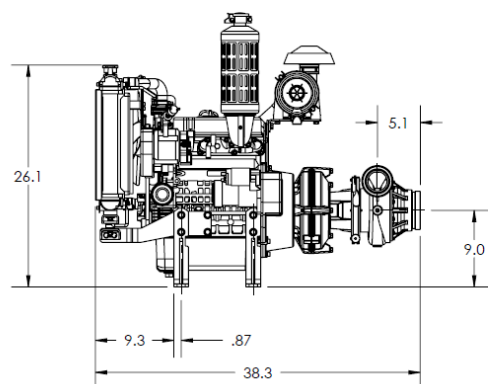
## B2X-D902H

**Length 38.3"**  
(97 cm)

**Width 22.5"**  
(57.1 cm)

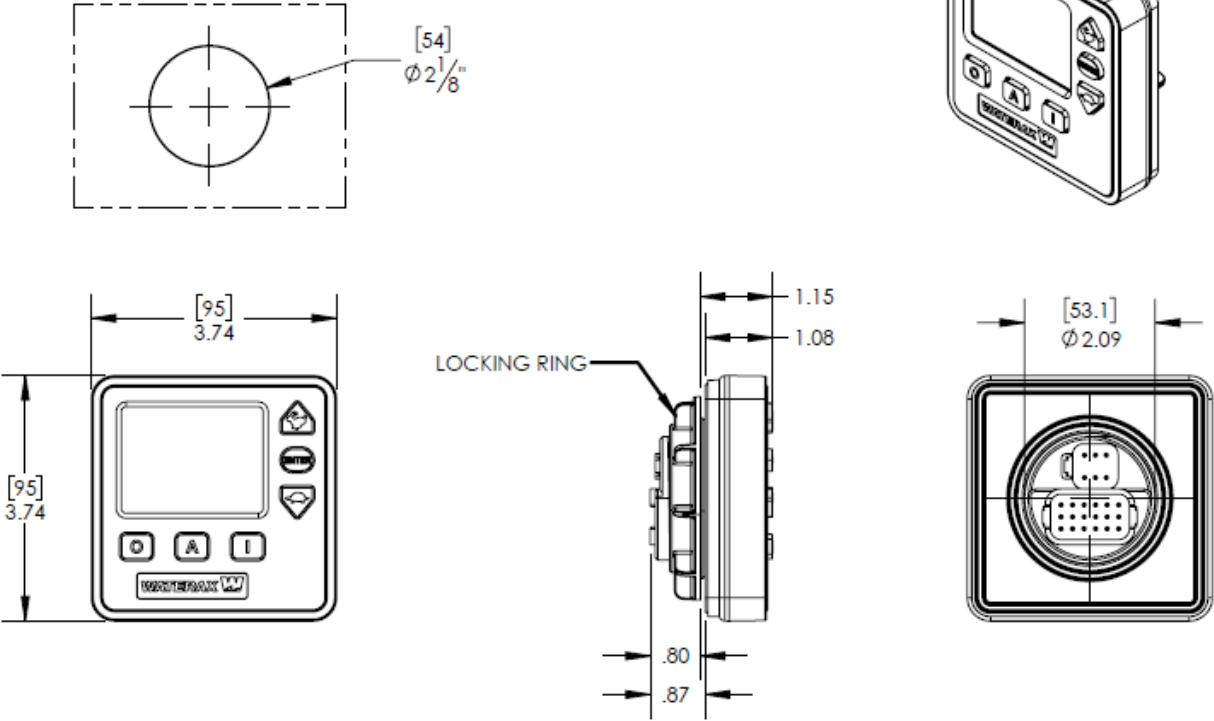
**Height 32.3"**  
(82 cm)

**Weight 280 lbs**  
(127 kg)



**DCP200**

**REQUIRED PANEL CUT OUT:**



# **WATERAX**

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To help you stay **#ReadyForWildfires**, we've made a few changes, placing 100% of our focus on manufacturing our core products, portable fire pumps.

To do so, we've established a network of trusted supply and distribution partners that can help us provide *WATERAX* pumps quickly in addition to water-handling equipment and accessories.

For immediate assistance when it comes to pumps and water-handling accessories, please [contact your local dealer](#).

For genuine spare parts, visit our [online store](#).