## WATERAX



## BB-4®-D902 Vehicle mount

#### **DATA SHEET**

## HIGH PRESSURE 4-STAGE FIRE PUMP

The WATERAX BB-4-D902 pump pairs a reliable high performance 4-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 395 PSI (27.2 bar) and flow rates reaching 106 GPM (401 L/Min). Strong enough to operate as a source pump for tandem and parallel pumping, it is also optimal for direct attack firefighting, remote watering, sprinkler systems, and is a popular choice for slip-on units.

The *WATERAX* quick release clamp provided on the **BB-4**® pump lets you replace a damaged pump end in the field with minimal equipment downtime. The 4-stage pump end on the **BB-4**® is identical to the pump end n the **MARK-3**® unit, which greatly reduces your spare parts inventory and improves your ability to respond to unforeseen equipment damage.

## **Applications**

- Slip-on units
- Attack line firefighting
- Long hose lay for remote watering during firefighting operations
- High elevation firefighting in mountainous areas
- Accuracy in flow trajectory when structure firefighting
- Tandem pumping over long distances
- Parallel pumping for higher volumes

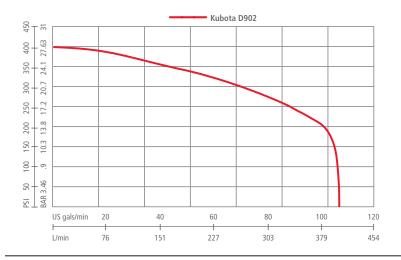
#### **Features and Benefits**

- Quick release clamp and swappable pump ends for minimal equipment downtime and inventory
- Sealed bearing to eliminate pump end greasing in the field
- 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
- EPA Certified





#### **SPECIFICATIONS**



#### Flow rate at specified pressure

Maximum Pressure: 395 PSI (27.2 bar) Free flow: 106 GPM (401 lpm) Maximum Head: 911' (278 m)

Flow	Rate		Pressure	
US GPM	(LPM)		PSI	(BAR)
103	(390)	@	150	(10.3)
95	(360)	@	250	(17.2)
55	(208)	@	350	(24.1)

Engine: Kubota D902-E4B - 25 hp



### **Pump Specifications:**

**Type** Detachable 4 stage Centrifugal

**Ratings** NFPA 1906 Medium

Pressure Rating of 50 GPM

**Description** High Pressure, Medium Flow,

Foam Compatible

Maximum Allowable

**Pressure** 600 PSI (41.4 bar)

**Maximum Discharge** 

Pressure395 PSI (27.2 bar)Intake2" Male NPSH ThreadDischarge1-1/2" Male NPSH threadPriming Port1-1/2" Male NPSH Thread

Body & Diffusers Anodized corrosive resistant aluminum

**Impellers** 3.67" Diameter; Anodized corrosive

resistant aluminum

**Pump Shaft** Stainless Steel

BearingsMaintenance Free; sealed ball bearingPump SealBlister-resistant carbon seal face, silicon

carbide seat, and fully integrated drive

bushing.

**Clamp** Hand tight quick release clamp

(no tools needed)

**Drive Unit** Timing Belt and Pulley; Speed Increaser

Speed Increaser

**Position** Horizontal or Vertical

**Drive Ratio** 1.88: 1 **Color** Red

**Special Feature** The entire pump separates completely

from the engine/speed increaser.

### **Engine Specifications:**

Model & Type Kubota D902-E4B 3-Cylinder Fuel

Injected Liquid Cooled Diesel

Engine

**Net Power** 24.8 HP (18.5 kW) @ 3600 RPM

**Net Torque** 40.6 lb-ft (55 Nm) @ 2600 RPM

Max. Bare Idle Speed 900 to 1000 RPM

**Bore & Stroke** 2.83 x 2.9 inches (72 x 73.6 mm) **Displacement** 54.80 cubic inches (898 cc)

**Electric Starting System** 12 VDC, 1.0 kW Starter

(with glow plug)

Charging: 12 Volt, 40 Amp

**Battery Capacity** 

**(5Hr Capacity)** 12 Volt, 52 Amp-Hour

or equivalent

Intake System Naturally Aspirated

**Cooling** Liquid Cooled

Compression Ratio 24:1

**Oil Capacity** 3.9 quarts (3.7 liters)

Oil Type

(API Classification) API CJ-4

**Emissions:** Meets current CARB, EPA, and CE

requirements.

**Fuel Type** Ultra Low Sulfur (15 ppm or less)

Muffler Rain Cap Standard,

Forestry Approved Spark

Arrestor Optional.

All features are not available on every model. Please refer to the product selection matrix to select the proper model.





#### **SPECIFICATIONS**

#### **Primer Specifications**

**Hand Primer Option** Guzzler, Diaphragm Type; Reliable, Lightweight and Rugged

Intake and Discharge Port Size ½" Female NPT

**Construction** Aluminum Handle, composite body, buna-n reinforced diaphragm

and flapper valves

Lift 12 feet (3.7 m) [up to approximately 16 feet (4.8 m) with suction hose footvalve]

Head Capacity30 ft (9.1 m)Maximum Pressure15 PSI (1.03 bar)Maximum Service Temp150° F (66° C)Volume per Stroke0.44 quart (0.42 liter)

**Dimensions (L x W x H)** 12-3/4" x 4-1/2" x 4-5/16" (324 x 114 x 110 mm)

**Weight** 1.70 lbs (0.77 kg)

Shipped loose with connection hardware and 6 feet of hose

**Electric Primer Option** 12 VDC Piston Type Vacuum Pump

Intake and Discharge Port Size 3/8" Female NPT

**Construction** Corrosion Resistant Aluminum with Bronze Sleeve and Composite Piston

 Max. Current Draw
 105 amps

 Lift
 25 feet (7.6 m)

 Vacuum
 22 in-Hq

**Dimensions** 9" x 4-1/8" x 7-1/2" (229 x 105 x 191 mm)

**Weight** 8.1 lbs (3.7 kg)

**Vehicle Units** Shipped loose with mounting plate, hardware, and 6 feet of hose

**Frame Specifications** 

**Vehicle Mount** 4 Leg Mounts.

**Controls Specifications** 

PMSCP-Diesel 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).

**G1 PANEL**Rotary OFF/RUN/Start Switch; LED Indicators for glow plug preheat, alternator

charge failure, low oil pressure, and high engine temperature. Tachometer, Hourmeter, and low oil pressure and high engine temperature shut down.

**DUAL CONTROL PANELS**Two individual panels each having a rotary OFF/RUN/Start Switch; LED Indicators

for glow plug preheat, alternator charge failure, low oil pressure, and high engine temperature. Tachometer, Hourmeter, and low oil pressure and high engine

temperature shut down.

**NOTE:** All panels come with FastWire Connections for ease in installation and maintenance. A 3 foot extension is also available.

All features are not available on every model. Please refer to the product selection matrix to select the proper model.





## **PRODUCT SELECTION**

PRODUCT SELECTION MATRIX			BB-4-D902V	BB-4-D902H
STANDARD INCLUSIONS	Primer	Guzzler Hand Primer	0	0
		Electric Primer	0	0
	Muffler	Rain Cap	S	S
		Forestry Approved Spark Arrestor	0	0
	Drive Orientation	Vertical	S	-
		Horizontal	-	S
	Controls	PMSCP-DIESEL	0	0
		G1 PANEL	0	0
		Dual Control Panels	0	0
	Fastwire	FWX-D902-3 3' Extension Harness	0	0
	Dimensions	LxWxH	39.8"x 20.6" x 33"	39.8"x 21.9" x 33"
	Weight		280 lbs (127 kg)	280 lbs (127 kg)

Standard S Option O Not applicable -

#### **OPTIONS AND ACCESSORIES**

**Sold Separately** 

#### **CONTROLS**



PMSCP-DIESEL
(Part Number 250278)
Panel Mount Standard Control Panel
w/ FastWire CTRL connector.



**G1 PANEL** (Part Number 250287)

Engine OFF/RUN/START, Glow Plug LED Indicator, Battery Low Voltage Warning LED Indicator, Low Oil Pressure LED Indicator and Shutdown, High Water Temperature LED Indicator and Shutdown, Hourmeter, and Analog Tachometer.



(Part Number 600609)

#### ELECTRIC KIT FASTWIRE CABLES



**BATKIT-66** (Part Number 250239) Deep Cycle Battery Kit w/ FWP-9 cable



**WLIGHTKIT** (Part Number 250244) LED Work Light w/ 5' harness & toggle switch



**FWX-D902-3** (Part Number 600584) 3' CTRL Cable extension w/ two 14pin connectors



FWP-20 (Part Number 600071) 20' PWR Cable with lugs & Anderson conn.

#### FWP-9

(Part Number 600144) 9' PWR Cable w/ lugs & Anderson conn.

#### FWP-3

(Part Number 600129) 3' PWR Cable w/ lugs & Anderson conn.



## **PRODUCT SELECTION**

#### **OPTIONS AND ACCESSORIES**

**Sold Separately** 

#### **PRIMER**

#### **PUMP INTAKE & DISCHARGE ADAPTER**



**GZPRIMERKIT** (Part Number 250237) Guzzler Hand Primer with hose & valve



**EPRIMERKIT** (Part Number 250238) Electric Primer w/ plate, 5' harness & switch



300770 300771 ADAPTER 2" NPSH FEMALE TO VICTAULIC ADAPTER 1-1/2" NPSH FEMALE TO VICTAULIC



600428 CHECK VALVE MANIFOLD 1-1/2 NPSH

#### **ENGINE ACCESSORIES**



**SPARK ARRESTOR** (Part Number 701421) (Need to order 701422 with arrestor)



\*Required for installations where the fuel tank sits more than 8 inches below the bottom of the engine.



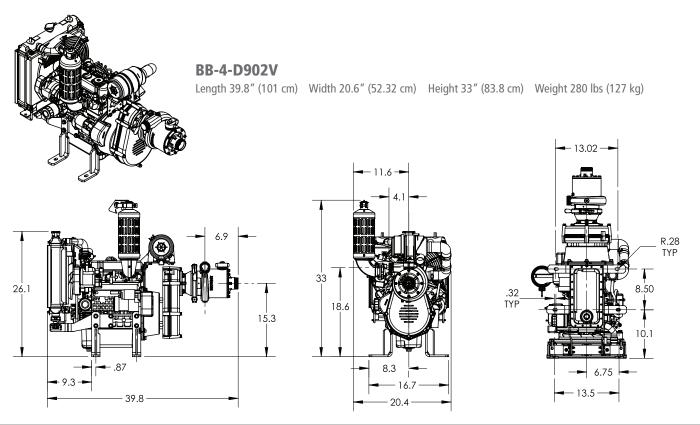
**FUEL LINE CHECK**(Part Number 701466)
\*Reduces engine start up time by keeping fuel in the fuel line to the engine.

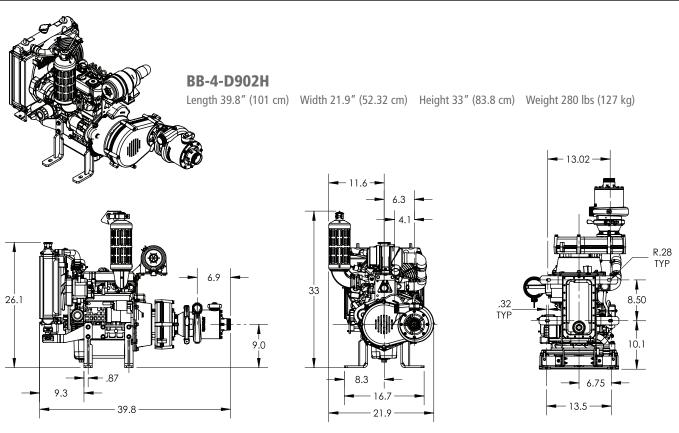


ISOLATORS (Part Number 701420) (Need to order 4)



## **TECHNICAL DRAWINGS**







# WATERAX

All information contained in this document including drawings is proprietary to *WATERAX* and may not be copied, reproduced or used in whole or in part without our prior written permission. The information in this document is subject to change without notice. Model displayed with multiple options. Weight and dimensions are approximated and may vary depending on options.

#### WATERAX INC.

6635 Henri-Bourassa W.
Montreal, QC H4R 1E1
T 514 637-1818
F 514 637-3985
TF 1 855 616 616-1818
info@waterax.com

#### waterax.com

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.

BB-4®-D902 is a trademark of Waterax.



