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

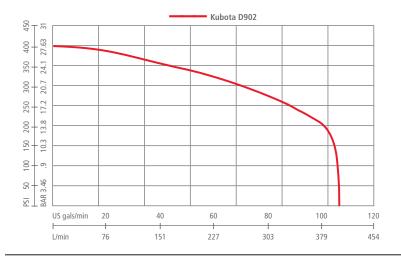
Features and Benefits

- 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:

Tvpe Detachable 4 stage Centrifugal

NFPA 1906 Medium Ratings

Pressure Rating of 50 GPM

High Pressure, Medium Flow, Description

Foam Compatible

Maximum Allowable

600 PSI (41.4 bar) Pressure

Maximum Discharge

Pressure 395 PSI (27.2 bar) 2" Male NPSH Thread Intake 1-1/2" Male NPSH thread Discharge **Priming Port** 1-1/2" Male NPSH Thread

Body & Diffusers Anodized corrosive resistant aluminum **Impellers**

3.67" Diameter; Anodized corrosive

resistant aluminum

Pump Shaft Stainless Steel

Maintenance Free; sealed ball bearing **Bearings Pump Seal** Blister-resistant carbon seal face, silicon

carbide seat, and fully integrated drive

bushing.

Hand tight quick release clamp 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)

12 Volt, 40 Amp **Charging:**

Battery Capacity

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

or equivalent

Intake System Naturally Aspirated

Cooling Liquid Cooled

Compression Ratio 24:1

3.9 quarts (3.7 liters) Oil Capacity

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 OptionGuzzler, 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 PANELRotary 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 PANELSTwo 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.



DUAL CONTROLS (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.



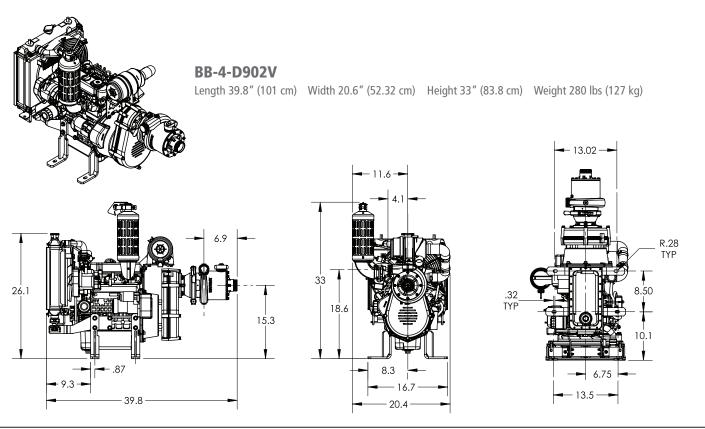
FUEL LINE CHECK
(Part Number 701466)
*Reduces engine start up
time by keeping fuel in the
fuel line to the engine.

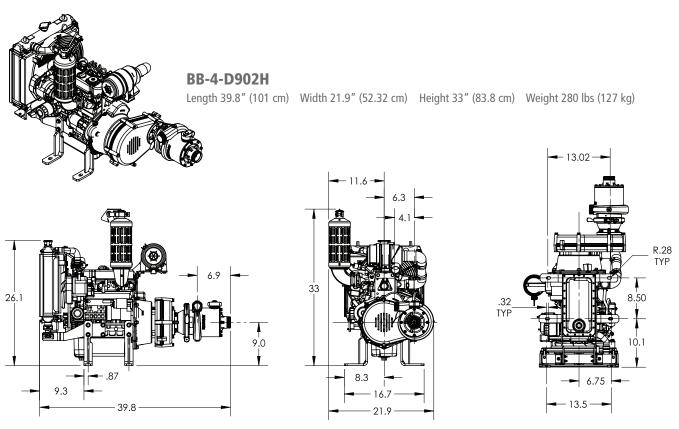


ISOLATORS (Part Number 701420) (Need to order 4)



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.

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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.

BB-4®-D902 is a trademark of Waterax.



