WATERAX



DATA SHEET

HIGH PRESSURE 4-STAGE FIRE PUMP

The *WATERAX* BB-4 -18 pump pairs a reliable high performance 4-stage pump end with a powerful **Briggs** & Stratton 4-stroke 18 HP engine to achieve pressures of up to 440 PSI (30.3 BAR) and flow rates reaching 104 GPM (394 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 on the **MARK-3**® unit, which greatly reduces your spare parts inventory and improves your ability to respond to unforeseen equipment damage. You can also quickly install a mid-range **B2X**[™] pump end as needed for supply or structure firefighting.

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

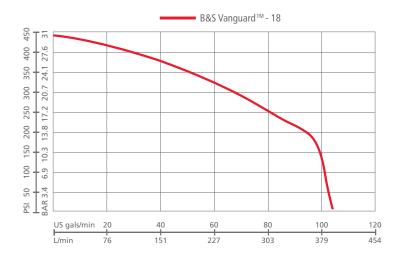
Features and Benefits

- 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: 440 PSI (30.3 bar) Free flow: 104 US gals/min (394 L/min) Maximum Head: 1016' (310 m)

Flow Rate			Pressure		
US GPM	(LPM)		PSI	(BAR)	
100	(379)	@	150	(10.3)	
80	(303)	@	250	(17.2)	
50	(189)	@	350	(24.1)	

Engine: Briggs & Stratton® VanguardTM - 18 hp



Pump Specifications:

Type: Detachable 4 stage Centrifugal

Ratings: ISO 9 and NFPA 1906 Medium Pressure Rating of 50 GPM

Description: High Pressure, Medium Flow, Foam Compatible

Maximum Allowable Pressure: 600 PSI (41.4 bar)
Intake: 2" Male NPSH Thread
Discharge: 1-1/2" Male NPSH Thread
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

Bearings: Maintenance Free; sealed ball bearing
Pump Seal: Heat resistant, Maintenance Free

Clamp: Hand tight quick release clamp (no tools needed)

Drive Unit: Timing Belt and Pulley; Speed Increaser

Speed Increaser Position: Vertical
Drive Ratio: 1.88: 1
Color: Red

Special Feature: The entire pump separates completely from the engine/speed increaser.

Engine Specifications:

Model & Type: Briggs and Stratton Vanguard 4-cycle, horizontal shaft, twin cylinder, OHV

Maximum Power:18 HP (13.4 kW) @ 4000 RPMMaximum Torque:26.9 lb-ft (36.5 Nm) @ 2800 RPMBore & Stroke:2.83 x 2.76 inches (72 x 70 mm)Displacement:34.78 cubic inches (570 cc)Starting System:12 VDC electric start with recoil start

Ignition: Magnatron

Charging: 16 AMP regulating alternator

Wiring: Pre-wired for FastWire panel connections (panels purchased separately).

Governor: Mechanical
Cooling: Air Cooled
Lubrication: Oil, Full pressure
Oil Capacity: 1.8 quarts (1.7 liters)
Fuel Pump: 18 inch lift.

Emissions: Meets current CARB, EPA, and CE requirements.

Fuel Type: Gasoline [unleaded, 86 minimum octane, 10% maximum ethanol]

Fuel Consumption: 1.6 US gals/hr (6.1 liters/hr)

Optional Integrated Fuel Tank Option: 7 US quarts (6.6 liters) with manual shut off valve

Muffler: Forestry approved spark arrestor





SPECIFICATIONS

Primer Specifications:

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

Intake and Discharge Port Size: 1/2" Female NPT

Aluminum Handle, composite body, buna-n reinforced diaphragm and flapper valves Construction: Lift:

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

Head Capacity: 30 ft (9.1 m) Maximum Pressure: 15 PSI (1.03 bar) Maximum Service Temp: 150° F (66° C) Volume per Stroke: 0.44 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

Exhaust Primer Option: Venturi Type (when selected mounted to exhaust primer muffler)

Venturi Construction: Brass

Exhaust Valve Construction: Aluminum with stainless shaft and disc Operation: Remote mount push/pull cable.

Vacuum: Minimum of 17 in-Hg

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) 22 in-Hg Vacuum:

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

Weight: 8.1 lbs (3.7 kg)

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

Frame Specifications:

Vehicle Mount: Black flat base with tubular horizontal legs. (Provided with industrial grade stud

isolators - shipped loose)

Controls Specifications:

Engine supplied controls: Choke & Throttle levers.

Remote exhaust: Pull cable

FastWire quick connect: Loomed engine wire harness (pre-wired to engine) with 8 pin Molex MX150L Industrial

> Sealed Male Connector. All Vehicle Mounted BB-4 pumps are equipped with FastWire quick connect engine wire harness for plug & play ease in connecting pump engine, power, and control components such as the WATERAX Control Panels MCP, PMSCP,

WCP* Series.

MCP, PMSCP, WCP* Series WATERAX Control Panels:

* Water and/or foam level monitors, electric primer, work light options available.

Note: Refer to the WATERAX Control Panel data sheet and specifications to select a remote mount panel and/or call your WATERAX dealer to customize your own control panel with water and/or foam level monitors, and toggle switches for optional electric

primer and work light.





PRODUCT SELECTION

PRODUCT SELECTION MATRIX		BB-4-18V	BB-4-18VT	BB-4-18VX	BB-4-18VXT	
STANDARD INCLUSIONS	Primer	Guzzler Hand Primer	-	-	-	-
		Remote Exhaust Primer w/Control Cable PART-763	-	-	S	S
		Exhaust Primer	-	-	-	-
		Electric Package - Electric Primer, LED work light, & Battery	-	-	-	-
	Muffler	B&S horizontal low tone	-	-	-	-
		Dual B&S low tone	S	S	-	-
		Exhaust primer muffler	-	-	S	S
	Fuel Tank	Integral / 7 US qts (6.6 L)	-	S	-	S
		Integral / 4 US qts (3.8 L) w/ 3-way valve	-	-	-	-
	Controls	Engine Mount Control Panel	-	-	-	-
	Discharge Gauge	0-600 psi, 2-1/2" dial	-	-	-	-
	Check Valve Manifold	1-1/2" NPSH	-	-	-	-
	FastWire CTRL Cable	B&S 3' CTRL Cable with 8 pin connector (FWC-B-3)	S	S	S	S
	Weight		153 lbs (69 kg)	157 lbs (71 kg)	161 lbs (73 kg)	165 lbs (75 kg)

OPTIONS & ACCESSORIES

Sold Seperately

Controls









VCBLKIT Vernier Throttle Cable

Primer

PMSCP Panel Mount Standard Control Panel w/ FastWire CTRL connector.

MCP Mini Control Panel w/ FastWire CTRL connector.

WCP WATERAX Control Panel w/ FastWire PWR & CTRL connectors.

GZPRIMERKIT Guzzler Hand Primer with hose & valve



BATKIT-66 Deep Cycle Battery Kit w/ FWP-9 cable

Electric Kit



FastWire Cables



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



WLIGHTKIT LED Work Light w/5' harness & toggle switch



FWX-3 3' CTRL Cable Extension w/ two 8 pin connectors

FWP-20 20' PWR Cable with lugs & Anderson conn. FWP-9 9' PWR Cable w/ lugs & Anderson conn. FWP-3 3' PWR Cable w/ lugs

& Anderson conn.

Fuel Tank

Pump Intake & Discharge Adapters



12-401B-NS-TRPD Fuel Line EPA quick conn. to hose 1/4"

FA-452

Remote Fuel Tank 6.6 US Gallons w/ quick conn.

FA-452-3 Remote Fuel Tank 3.2 US Gallons w/ quick conn.

12-401B-NS-TRPD Fuel Line quick conn. to SAE 45 Flare



ADP-A-FM20SV ADP-A-FM15S ADP-A-FM15SP ADP-A-FM15SV

ADP-A-FM20S

ADP-A-FM20SP

B-6365

Adapter 2" NPSH Female to NPSH Male Adapter 2" NPSH Female to NPT Male Adapter 2" NPSH Female to Victaulic

ADP-A-FM15SN Adapter 1-1/2 " NPSH Female to NH Male Adapter 1-1/2" NPSH Female to NPSH Male Adapter 1-1/2" NPSH Female to NPT Male

Adapter 1-1/2" NPSH Female to Victaulic

Check valve manifold 1-1/2 NPSH

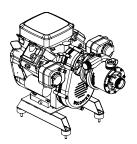


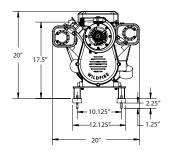
TECHNICAL DRAWINGS

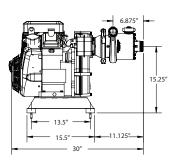
BB-4-18V

Length 30" (77.5 cm) Width 20" (45.75 cm) Height 20" (51 cm)

Weight 153 lbs (69 kg)



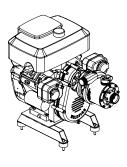


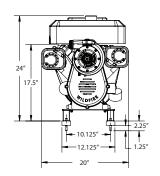


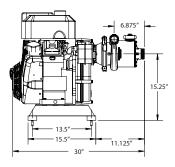
BB-4-18VT

Length 30" (77.5 cm) Width 20" (48.25 cm) Height 24" (61 cm)

Weight 157 lbs (71 kg)





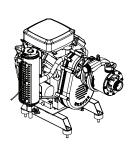


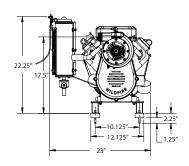
BB-4-18VX

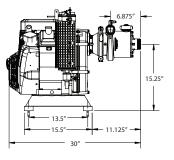
Length 30" (77.5 cm)

Width 23" (63.5 cm)

Height 22.25" (56.5 cm) Weight 161 lbs (73 kg)







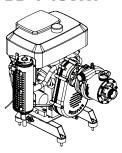
BB-4-18VXT

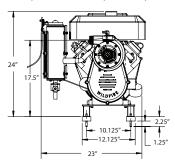
Length 30" (77.5 cm)

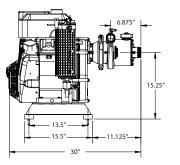
Width 23" (63.5 cm)

Height 24" (61 cm)

Weight 165 lbs (75 kg)









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® is a trademark of Waterax.



