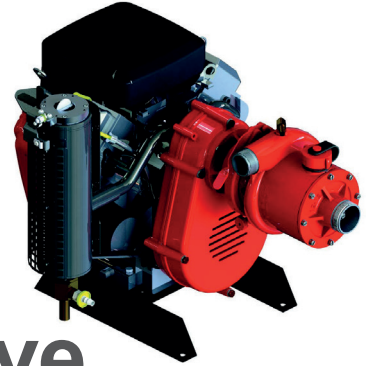


# WATERAX



## BB-4<sup>®</sup>-18V Vehicle mount vertical drive

### 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<sup>®</sup>** pump lets you replace a damaged pump end in the field with minimal equipment downtime. The 4-stage pump end on the **BB-4<sup>®</sup>** is identical to the pump end on the **MARK-3<sup>®</sup>** 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<sup>™</sup>** 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

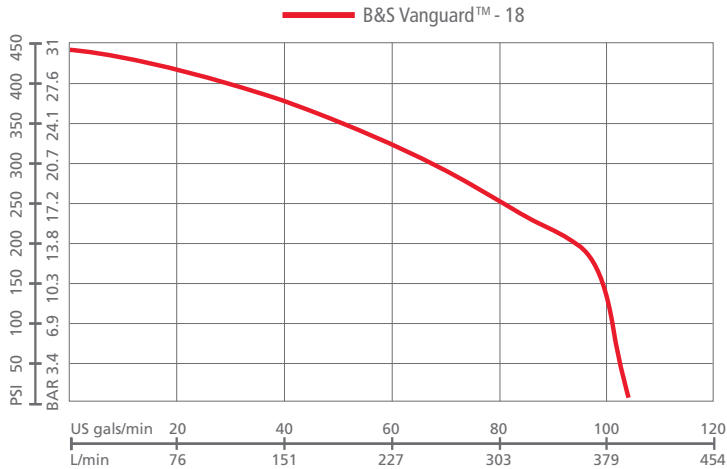
### Features and Benefits

- 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



**WE MOVE  
WATER**

# 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® Vanguard™ - 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 RPM
- Maximum Torque: 26.9 lb-ft (36.5 Nm) @ 2800 RPM
- Bore & 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:

<b>Hand Primer Option:</b>	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 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)
Vacuum:	22 in-Hg
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:	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.
WATERAX Control Panels:	MCP, PMSCP, WCP* Series * 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 Separately**

### Controls



**VCBLKIT**  
Vernier Throttle Cable









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



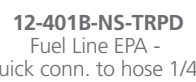



**MCP**  
Mini Control Panel  
w/ FastWire CTRL connector.



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

Primer	Electric Kit	FastWire Cables
 <p><b>GZPRIMERKIT</b> Guzzler Hand Primer with hose &amp; valve</p>	 <p><b>BATKIT-66</b> Deep Cycle Battery Kit w/ FWP-9 cable</p>	 <p><b>FWC-B-3</b> 3' B&amp;S CTRL Cable w/ lugs &amp; 8 pin conn.</p>
 <p><b>EPRIMERKIT</b> Electric Primer w/ plate, 5' harness &amp; switch</p>	 <p><b>WLIGHTKIT</b> LED Work Light w/ 5' harness &amp; toggle switch</p>	 <p><b>FWX-3</b> 3' CTRL Cable Extension w/ two 8 pin connectors</p>
		<p><b>FWP-20</b> 20' PWR Cable with lugs &amp; Anderson conn.</p> <p><b>FWP-9</b> 9' PWR Cable w/ lugs &amp; Anderson conn.</p> <p><b>FWP-3</b> 3' PWR Cable w/ lugs &amp; Anderson conn.</p>

Fuel Tank	Pump Intake & Discharge Adapters
 <p><b>FA-452</b> Remote Fuel Tank 6.6 US Gallons w/ quick conn.</p>	 <p><b>ADP-A-FM20S</b> Adapter 2" NPSH Female to NPSH Male <b>ADP-A-FM20SP</b> Adapter 2" NPSH Female to NPT Male <b>ADP-A-FM20SV</b> Adapter 2" NPSH Female to Victaulic</p>
 <p><b>FA-452-3</b> Remote Fuel Tank 3.2 US Gallons w/ quick conn.</p>	<p><b>ADP-A-FM15SN</b> Adapter 1-1/2" NPSH Female to NH Male <b>ADP-A-FM15S</b> Adapter 1-1/2" NPSH Female to NPSH Male <b>ADP-A-FM15SP</b> Adapter 1-1/2" NPSH Female to NPT Male <b>ADP-A-FM15SV</b> Adapter 1-1/2" NPSH Female to Victaulic</p>
<p><b>12-401B-NS-TRPD</b> Fuel Line EPA - quick conn. to hose 1/4"</p>	 <p><b>B-6365</b> Check valve manifold 1-1/2" NPSH</p>
<p><b>12-401B-NS-TRPD</b> Fuel Line - quick conn. to SAE 45 Flare</p>	

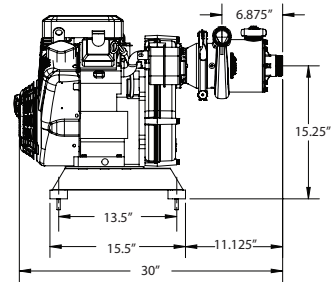
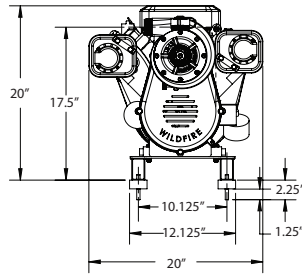
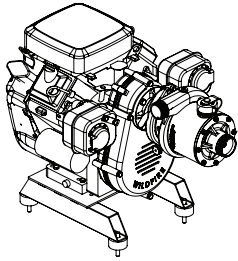


**WE MOVE WATER**

# TECHNICAL DRAWINGS

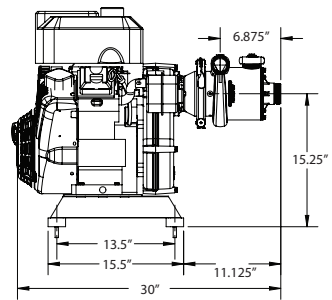
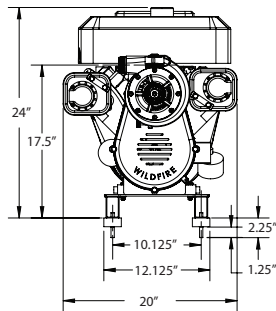
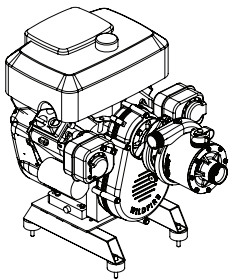
## BB-4-18V

Length 30" (77.5 cm) Width 20" (45.75 cm) Height 20" (51 cm) Weight 153 lbs (69 kg)



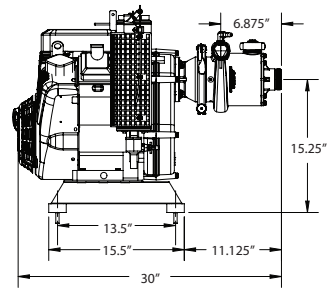
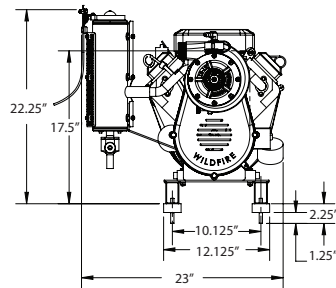
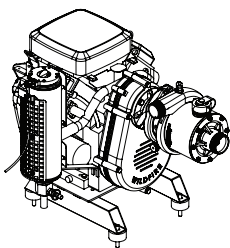
## BB-4-18VT

Length 30" (77.5 cm) Width 20" (48.25 cm) Height 24" (61 cm) Weight 157 lbs (71 kg)



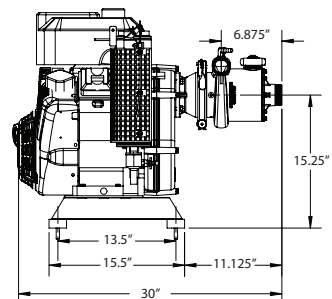
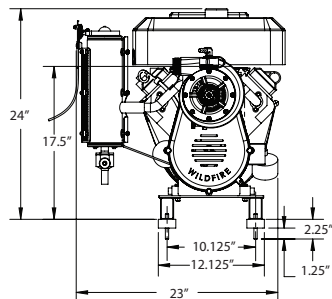
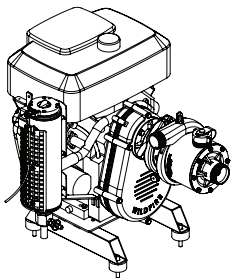
## BB-4-18VX

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](mailto: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.



**WE MOVE  
WATER**