Data sheet EN

vft black line pumps



Black Hawk
BH3-10
BH2-10

Ed: 2023.08.30

Fire pump BH3-10

Up to 232 psi (16 bar) and 71 gpm (270 l/min).

Up to 145 psi (10 bar) and 95 gpm (360 l/min). **Motobomba BH2-10**

The **BH3 -10 and BH2-10 fire pump** are within the vft Black Hawk line of portable fire pumps. It combines an efficient and reliable 10 HP air-cooled **Briggs and Stratton Vanguard de un cilindro** engine with electronic cut-off, with the Speed Increaser vft and the VFT_3SP 3-stage or VFT_2SP 2-stage centrifugal pump, offering excellent medium pressure and high flow capacity. This combination can make long hose runs both in series and in parallel without losing performance.

It has a quick coupling system for the **VFT_3SP pump** that allows it to be replaced in the shortest possible time if a breakdown occurs. This pump is also used in the **BH3-13 and BH3-23** fire pumps, which allows a better management of the spare parts stock.

> Components made of high quality aluminum and stainless steel.
> Spare parts available through **customer.service@vallfirest.com.**
> With the best quality / price ratio
> 2 years warranty.



Applications

- Direct attack.
- Long hoses laid.
- Self-protection maneuvers with sprinklers.
- Tandem pumping for long distances.
- Parallel pumping for higher volumes.
- Assembly in skid units and extinguishing vehicles.

Features

- Rope manual starter.
- VFT_3SP pump easily interchangeable thanks to a quick release clamp.
- Compatible with VFT_2SP two-stage pumps.
- Maintenance-free speed increaser. Made of cast aluminum and high quality components.
- Choice of transport base: tubular frame (for greater maneuverability), or base for assembly on vehicles.
- Integrated fuel tank.
- Hand priming pump and pressure gauge included.
- Non-return valve for impulsion included.
- Pump compatible with foam-forming agent.

Specifications	BH3-10	BH2-10
Engine	Briggs and Stratton Vanguard 10HP	=
Centrifugal Pump	VFT 3 stage	VFT 2 stage
Dry weight	109 lbs | 49.5 kg	108 | 49 kg
Maximum Pressure	232 psi | 16 bar	145 psi | 10 bar
Maximum Flow	71 gpm | 270 L/min	95 gpm | 360 L/min
Dimensions	L: 34.5 in, W: 20 in, H: 18 in | L: 87.7 cm, W: 50.9 cm, H: 45.5 cm.	=

1. Engine BRIGGS & STRATTON VANGUARD 10HP



Motor Specifications	
Motor	4 strokes gasoline
Bore x Stroke	3.12 x 2.44 in | 79.2 x 62 mm
Displacement	305 cm^3
Compression ratio	8.1 : 1
Power	10 HP a 3600 rpm
No. of cylinders	1
Starter	Manual starter with manual recoil rope..
Engine oil capacity	28 oz | 0.8 L
Oil sensor	Yes
Dimensions in inch (l. x w. x h.)	16.6 x 12.4 x 16 in
Dimensions in mm (l. x w. x h.)	422 x 315 x 404 mm
Dry weight	57 lbs | 26 kg
Emissions certificate	EPA, CARB and EU stage 5

2. 3 or 2-Stage centrifugal pump (VFT_3SP, VFT_2SP)



VFT_2SP



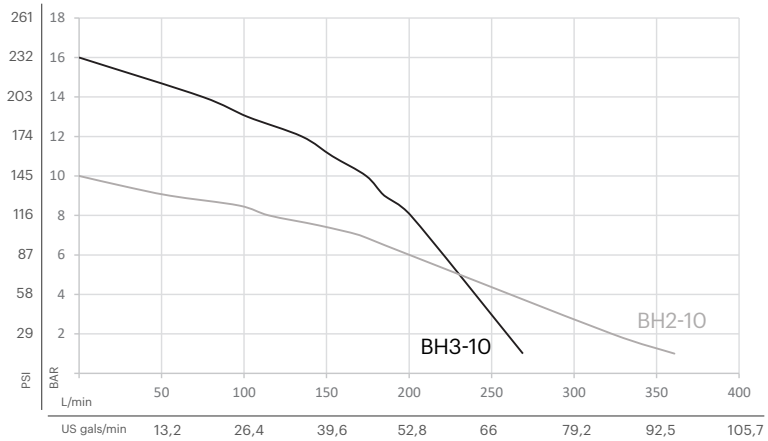
VFT_3SP.

The VFT3SP and VFT2SP are compact, efficient and reliable 3 and 2-stage centrifugal pumps.
The body and impellers are made of anti-corrosive aluminum. The axis and other components are made of stainless steel. Includes a high-quality mechanical seal specifically designed for the Vallfirest pumps.

- Pump compatible with foam-forming agent.
- Compatible with fire pump models: **BH3-13 , BH3-18 and BH3-23**.

VFT3SP and VFT2SP Specifications	
Succión	2" NPSH
Impulsión	1,5" NPSH

3. BH3/2-10 Performance

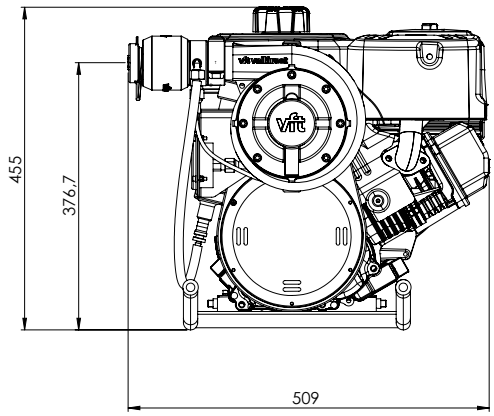


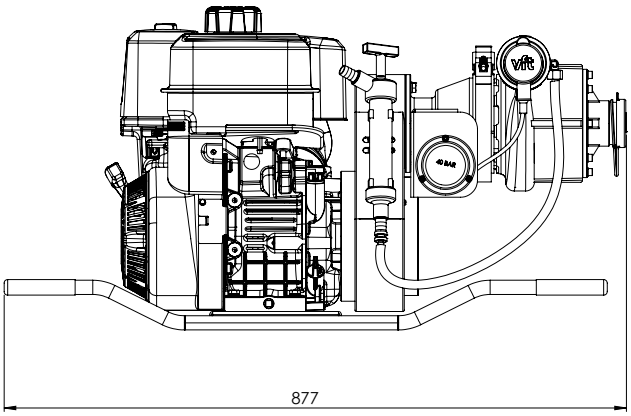
Performance data	BH2-10	BH3-10
Max. Flow	360 l/m	270 l/m
Max. Pressure	10 bar	16 bar
Max. Water Gauge	102 mH_2O	163 mH_2O

Pressure		Flow	
[Bar]	[PSI]	[L/Min]	[U.S. GPM]
BH2-10			
9	130.5	50	13.2
6	87	200	52.8
3	43.5	300	79.3
BH3-10			
14	203	75	19.8
10	145	175	46.2
3	43.5	250	66

4. Dimensions

Length: 34.5 in, Wide: 20 in, Height: 17.9 in | Length: 87.7 cm., Wide: 50.9 cm., Height: 45.5 cm.

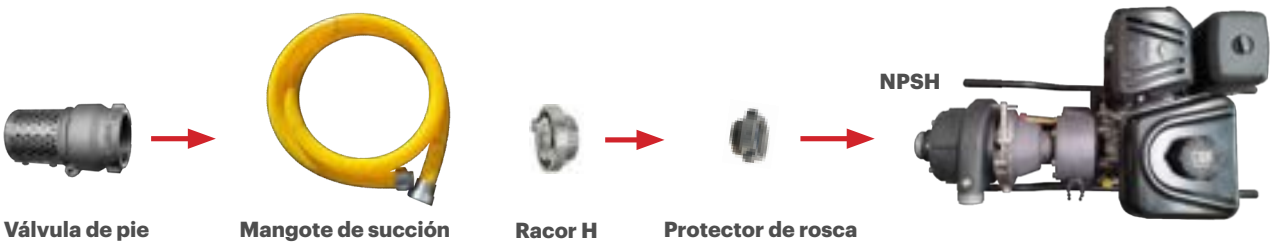




5. Required components for operation

WATER SUCTION

A suction hose and foot valve are required to filter the water.



Válvula de pie **Mangote de succión** **Racor H** **Protector de rosca**

OPERATION

A coupling wrench is required to tighten and loosen thread protectors / adapters. It is necessary to prime the pump manually before operating..



Llave para acoples



*Elegir Racor según impulsión

Cebador manual
(* incluido)

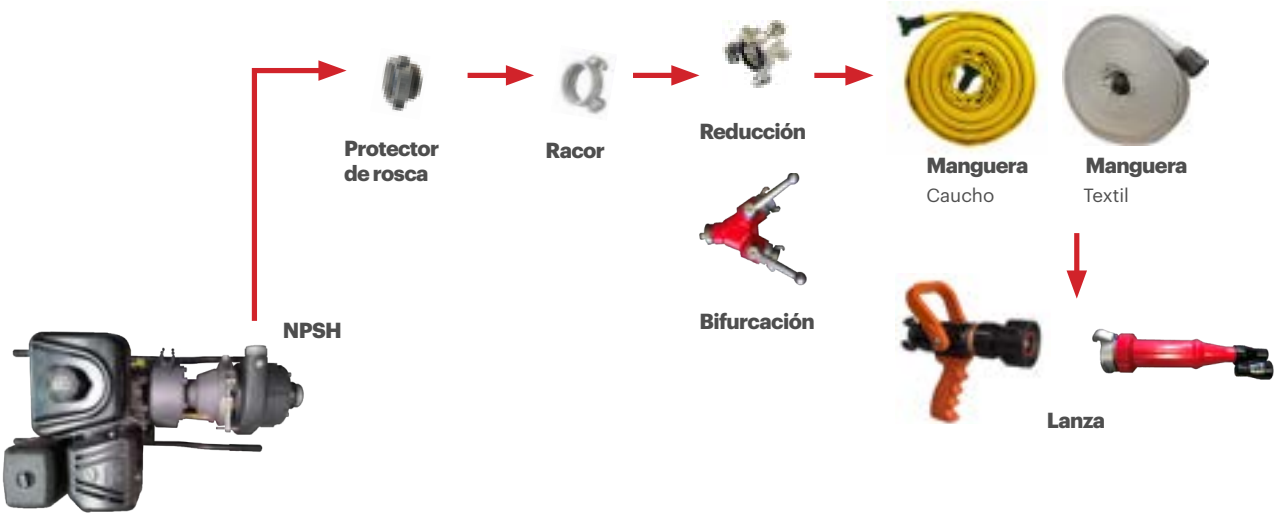
FUEL FEEDING

By a portable bottle.
See the different types of bottles available according to regulations.



WATER IMPULSION

For the impulsion, choose the couplings according to the type of hose and the laying configuration: direct attack or connection in series or in parallel of several fire pump units.
* See our **Pump setup** sheet for more information.



6. List of components

Thread protectors

Necessary to protect the original threads of the pump and adapt the NPSH thread to any other type of thread, allowing the connection of other couplings.



DVD3107-00001 **NPSH-NPSH 1-1/2”**
DVD3107-00002 **NPSH-BSP 1-1/2”**
DVD3107-00003 **NPSH-NH 1-1/2”**
DVD3108-00001 **NPSH-NPSH 2”**
DVD3108-00002 **NPSH-BSP 2”**
DVD3108-00003 **NPSH-NH 2”**

vft Pumps coupling wrench

Allows safe tightening and loosening of thread protectors and couplings.



DVD3112-00001

vft Foot valve

The foot valve with non-return system filters the water and allows the suction circuit and the pump to be primed.



DVD3105-00004 **NPSH 2"**
DVD3105-00005 **BSP 2"**
DVD3105-00006 **NH 2"**

Suction hose

Flexible wire reinforced suction hose



DVD3102-00001 **2" NPSH // L=3m**
DVD3102-00002 **2" BSP // L=3m**
DVD3102-00003 **2" NH // L=3m**
DVD3102-00004 **2" Storz 52-C // L=3m**

7. Optional accessories

Manual priming pump

Allows to manually prime the circuit through the pump impulsion.



DVD3104-00001 **NPSH 1-1/2”**
DVD3104-00002 **BSP 1-1/2”**
DVD3104-00003 **NH 1-1/2”**
DVD3104-00004 **Storz 52-C**
DVD3104-00005 **BCN 45**

Manual priming pump kit 1/4” BSPT

To mount on the 1/4 ”threaded connection of the pump. Includes valve and support clips for the primer that can be screwed onto the base of the fire pump.



DVD3103-00001

vft Pump repair kit

Includes different tools for the disassembly and assembly of the 2, 3 and 4 stage vft pumps.



DVD3115-AAA0A **Repair kit for 2, 3 and 4 stage vft pumps**

Hose choke

Tool that allows to quickly cut off the water flow to carry out operations such as, for example, lance changes or adding and removing hoses during direct attack.



DED5800-00000 **Hose choke FC-2540**
DED5801-00000 **Textile hose choke**

Protection base

Folding base made of resistant and waterproof canvas. It serves as protection for the fire pump in aggressive terrain and to contain tools and accessories during operation.



DVD3114-00001 **Protection base**

*See the price list to know all the components available depending on the threads, coupling tyes, diameters, etc. In case of doubt, contact your commercial agent or directly with **customer.service@vallfirest.com.**

Do you have any doubt? Contact us: **customer.service@vallfirest.com** | T. +34 938 678 779