

 **TOHATSU**

NEW ***VF53AS***

4stroke gasoline engine driven
portable fire pump



4stroke

Fuel Injection



VF53AS – TOHATSU' s new category of portable fire pumps

The 1st 4stroke gasoline engine driven fire pumps manufactured in Japan, with electronic fuel injection system

Key Features

1. Low emission: With more awareness to environments, low emission is an indispensable factor to achieve less impact to environment.
CO (Carbon Monoxide) emission 43%reduced
HC(Hydrocarbon) + NOx (Nitrogen Oxide) emission 90%reduced
Exhaust smoke 98% reduced
 2. Excellent fuel economy – Efficient consumption of energy assures longer operation. Fuel consumption: 48percent reduced
 3. Low noise and low vibration – Noise reduction is carried out for better communications of operators: 9dB reduced
 4. Liability in engine starting – Assuring stable engine starting under any weather condition.
- * All the data is compared with current Tohatsu 2stroke engine models under operation at 4Bar (58psi)



New features

1. **4 stroke inline 3** - The 1st portable fire pumps in Japan mounted high performance 3cylinder 4stroke engine.
2. **ECU** - Monitoring weather and operating condition by several kinds of sensors, ECU (Engine control unit) precisely controls the fuel injection and ignition timing for 4stroke engines.
3. **Injection** - Battery-less electronically controlled fuel injection that provides complete combustion, quick throttle response, and excellent fuel economy.
4. **Capsule engine housing** – Upper and lower engine cowlings provides low noise and waterproofing of engine. Upper cowling is easily detachable for maintenance.
5. **Lower level fuel tank** – Located on lower and front control panel side, makes it easy to refill fuel and contributes to stability, less vibration due to lower gravity. Fuel cock removed for this model, it's not necessary to open/close fuel cock each time.
6. **Large seize aluminum vacuum pump** – 2 times in volume, but half in weight of current model of vacuum pump, provides big improvement of priming time.

Following functions are provided same as current models.

1. Auto priming system
2. Cooling water circulation system with large seize strainer
3. Auto shut down
4. Overheat protection sensor
5. Sealed type battery (Maintenance free)
6. Auto battery charger

Optional equipments

1. **Full automatic control system** – New developed remote control panel equipped additionally, provides starting, priming, and stopping of engine automatically.
2. **External fuel tank:** Connector is equipped as standard accessory, external stainless 20liter fuel tank can be attached for long term operation.
3. **Operating light** – Operating condition is visible away from pump.
4. **Floodlight projector:** 12V-55W halogen floodlight helps night operation.

**Tohatsu portable fire pump
Model VF53AS**

Specifications

Model:		VF53AS
Engine:	Type:	Water cooled 4 stroke inline-3
	Engine model:	3WT61A
	Bore & Stroke:	61mm x 60mm (2.36in. X 2.40in.)
	Piston displacement:	526 cc (32.1 cu.in.)
	Authorized output:	29.5 PS/ 22 kW
	Fuel tank:	10 liters (2.64 US gals)
	Fuel consumption:	8.5 liters/h. at rated discharge (2.24US gals/h.)
	Ignition:	C.D.Ignition
	Starting system:	Starter motor and automatic recoil system
	Lubrication:	Wet sump
Pump:	Type:	Single suction, single stage, high pressure turbine pump
	Discharge port coupling:	JIS fire thread (B-9912), 2-1/2"(65mm) male
	Suction port coupling:	JIS fire thread (B-9912), 3"(75mm) male
	Priming:	Rotary-vane vacuum pump
	Pump speed:	5,400rpm at 0.55Mpa 5,650rpm at 0.8Mpa
Pump performance: (Suction height: 3m)		1,130 liters (298 US gals) /min. at 0.55 Mpa (80psi) 780 liters (206 US gals) /min. at 0.8 Mpa (116psi)
Dimensions:		Overall length: 670mm (26.3 inch) Overall width: 790mm (31.1 inch) Overall height: 740mm (29.1 inch)
Mass (Dry):		98kg (216.1 lbs)
Max. suction height:		Approx. 9m (29.5 feet)
Battery		12V 16Ah/5h
Floodlight projector (Option)		55W

Attached documents

1. Outline drawing
2. Performance Curves