

Engine

746cc Tohatsu 2 strokes, water-cooled gasoline engine

Authorized output

55PS (40.5kW)

Pump performance

2050 liter / min. at 0.6MPa 1800 liter / min. at 0.8MPa

1500 liter / min. at 1.0MPa

Dry weight

94kg

#### Features of VC82ASE

More attractive features and functions are added to maximize efficiency of fire services.

### 1. Light weight and compact

Engine and pump castings are made of anti-corrosive aluminum-alloy to reduce weight and prolong working life. Compact unit in its class fits existing locker space, also can be carried by 2 firemen.

### 2. High pump performance

Both engine and pump are designed and developed exclusively for fire pumps by Tohatsu, ensuring higher pump performance for its class.

## 3. Reliable engine with oil injection/auto mixing oil delivery system

The engine of VC82ASE is originally designed by Tohatsu for this model. Equipped with oil pump, gasoline and engine oil are mixed automatically at a precise ratio to engine speed without mixing fuel and oil by operator.

### 4. Priming

Quick priming is provided by operating Rotary Vane Vacuum Pump.

- Prime 1meter in 4seconds (6m suction hose)
- Prime 3meter in 5.5seconds (6m suction hose)
- Prime 6meter in 8.0seconds (6m suction hose).

#### 5. Centralized control

All gauges, throttle dial, control switches, and other warning lamps are grouped on the control panel for easy operation.

### 6. Cooling water recirculation system

Engine cooling water is returned to the pump eliminating discharge outside of the pump, and contamination of surrounding area.

### 7. Unique auto choke carburetor

This device helps engine start easier in all seasonal temperature conditions.

## 8. Engine overheat protection sensor

Overheat protection is provided on this model to safeguard the engine from cooling water loss, and to protect engine when water is not discharging. This device stops the engine automatically when engine temperature reaches 80 degree. Reset switch is provided to release the sensor after it stops the engine.

## 9. Large capacity fuel tank

Integrated fuel tank with large capacity of 18liters ensures the fuel supply will last for 1 hour at maximum throttle opening and load.

### 10. 90 degree rotating discharge ports

### 11. Electric starter with back up recoil starter

An electric starter and back-up recoil starter are installed to guarantee starting engine under any conditions.

#### 12. Maintenance free battery

Equipped with sealed type and maintenance free battery, once the battery is filled with a specified electrolyte, no adding electrolyte is required.

#### Accessories

- 1. Battery charger
- 2. Floodlight projector
- 3. Plastic toolbox

# Adapters:

Some different type of adapters for suction port and discharge ports are available.

## Specifications

	Type:	2-stroke, 2-cylinder, water cooled gasoline engine
Engine:	Bore & Stroke:	78mm x 78mm (3.07 in. x 3.07 in.)
	Piston displacement:	746cc (45.52 cu.in.)
	Authorized output:	55PS/ 40.5 kW
	Fuel tank capacity:	18 liters (4.76 US gals)
	Fuel consumption:	20liters/h (5.29US gals/h)
	Ignition:	Flywheel magneto (C.D.I. system)
	Starting system:	Starter motor and automatic recoil system
	Lubrication:	Separate fuel/oil supply system (Auto mixing)
	Choke system:	Auto choke system
	Spark plug:	NGK BP7HS-10
	Light bulb:	12V-35W
	Battery:	12V-16Ah/5h
Pump:	Type:	Single suction, single stage, high pressure turbine pump
	Discharge port coupling:	JIS fire thread (B-9912), 2-1/2" male (Twin outlet)
	Suction port coupling:	JIS fire thread (B-9912), 3-1/2" male
	Priming:	Rotary-vane vacuum pump
Pump performance (Suction height: 3m)	Over 2,050 liters (Over 542 US gals)/min. at 0.6 MPa	
	Over 1,800 liters (Over 476 US gals)/min. at 0.8 MPa	
	Over 1,500 liters (Over 396 US gals)/min. at 1.0 MPa	
Dimensions:	Overall length:	Approx. 742mm (29.2 inch)
	Overall width:	Approx. 682mm (26.8 inch)
	Overall height:	Approx. 760mm (29.9 inch)
Mass:	94kg (207 lbs)	
Max. suction height:	Approx. 9m (29.5 feet)	