



## MODEL: HP50-2

HIGH-PRESSURE PUMP  
Gasoline Powered Specification

4.8HP – 3.6kW Honda Engine  
350 l/min

### TECHNICAL DATA SHEET

FOR USE IN NON-REGULATED TERRITORIES ASIA MIDDLE EAST AND AFRICA

## TECHNICAL INFORMATION

### MODEL

HP50-2-M-SF	Manual Recoil Start with Steel Frame
HP50-2-M-SFW	Manual Recoil Start with Steel Frame and Wheels
HP50-2-E-SF	Electric Start with Steel Frame
HP50-2-E-SFW	Electric Start with Steel Frame and Wheels

### APPLICATIONS

<b>Industrial</b>	<b>General Water Supply / Pressure Boosting:</b> For factories or plants needing water at elevated head (cooling and processing).
	<b>Dewatering in Mines and Construction Sites:</b> Removing water from pits, shafts basements and tunnels.
	<b>High-Pressure Washing and Cleaning:</b> Cleaning of machinery, concrete surfaces, tanks and vessels using high pressure jets.
	<b>Fire Fighting / Fire Suppression Systems:</b> As backup or portable pumps for fire mains, hydrants or mobile fire units in industrial facilities.
	<b>Cooling / Dust Suppression:</b> Spraying water mist in dust-generating areas (e.g. in sawmills, crushers and foundries). Cooling surfaces or heat sinks (depending on pressure and nozzle design).
<b>Agricultural</b>	<b>Field Irrigation:</b> Supplying water under pressure to sprinkler systems or hose reels to cover crops. Suitable for orchards, vegetable beds and even large field perimeters if head and pipe size are sufficient.
	<b>Pumping from Rivers / Dams to Storage Tanks:</b> If pump has sufficient suction lift + discharge head, can draw from natural sources into tanks or elevated storage.
	<b>Dewatering / Food Control on Farms:</b> After heavy rains, draining waterlogged fields.
	<b>Spraying and Washdown:</b> Filling spray rigs (for pesticide/herbicide/fertilizer) where higher pressures help atomize. Cleaning of farm equipment, livestock facilities and milking parlours.
	<b>Livestock Water Supply:</b> Distributing water to troughs or watering points where gravity feed doesn't work (elevated points).

### APPLICATIONS:

Industrial  
Agricultural

**HONDA**  
GASOLINE ENGINE

**MD**

**MEDIUM DUTY**

## TECHNICAL INFORMATION

### Engine

Make	Honda
Model	GP 160
Power	4.8HP – 3.6kW / 3600 RPM
Type	Single-cylinder Four Stroke Air cooled
Displacement	163cc / 0.163l
Fuel Type	Gasoline
Starter	Recoil Start / Electric Start
Consumption	280 g/kwh / 1.4 l/h
Noise	80dB at 7m
Fuel Tank Size	3.1l
Oil Tank Size	0.6l

### Pump

Make	Energie
Model	HP50-2
Inlet and Outlet (inch)	2" 50mm / 2" 50mm
Delivery Volume	350 l/m
Max head	73m
Suction lift	5m
Driving Power	4.8kW
Pump Body	Aluminium Alloy
Impeller	Aluminium Alloy
Mechanical Seal	Carbon Ceramic
Working Speed	3600 RPM

### Accessories Included

	<b>Pipe Connector Fittings</b>
	2 x 2 inch Connecting Wrench
	Rubber Gaskets

### Permissible Pumping

Allowable Liquids	Clean fresh water, slightly dirty water, treated water.
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### Solid Handling

Pump	0mm
Restricted by Strainer	0mm



### Fuels & Lubricants (Recommended)

Gasoline	95ppm or better
Oils	15W/40

### Consumables (Service parts)

Engine Air Filter	Contact Dealer Directly
Engine Oil Filter	Contact Dealer Directly
Engine Fuel Filter	Contact Dealer Directly

### Recommended Piping

	<b>Inlet Hose</b>
	Material: Flexible PVC
	Type: Rigid PVC spiral or steel wire spiral
	Thickness: 4-6mm
	<b>Outlet Hose</b>
	Material: PVC or TPU (thermoplastic polyurethane)
	Type: Polyester woven jacket
	Thickness: 2-5mm

### Dimensions & Weights

Length	500 mm
Width	435 mm
Height	415 mm
Dry & Wet Weight	20.3 kg / 24 kg

### Policies

Warranty	1 Year Limited Warranty
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## TECHNICAL INFORMATION

### Carbon Ceramic Seal Recommended Pumping Application

**Clean Water:**

Ideal for carbon-ceramic seals. Include borehole water, tap water and dam/tank water (if free from sand and solids). Used in firefighting, irrigation and industrial washdown.

**Treated / Lightly Chlorinated Water:** Pool water, storage tanks with mild chlorine or disinfectant. Ceramic resists mild chemicals (carbon handles low chlorine levels).

**Agricultural Spray Solutions (Water-Based):**

Fertilizer mixes, herbicides, fungicides and pesticides that dissolved in water. Must be non-abrasive and not strongly acidic or alkaline. Common in orchards, vineyards and crop spraying rigs.

**Firefighting Foam and Wetting Agents:**

Compatible with water-based foam concentrates at low to moderate concentration.

**Light Detergents / Disinfectants:**

Water-based cleaning fluids for equipment washdown, barn hygiene and light industrial cleaning. Works well if chemicals are diluted and non-abrasive.

### Carbon Ceramic Seal Not Recommended Pumping Application

**Abrasive Liquids (Sand, Slurry, Muddy Water):**

Carbon face wears rapidly when exposed to grit. Causes scoring, leaks and short seal life. River water with silt, mining slurries and wastewater with solids.

**Oils, Fuels, Hydrocarbons (Petrol, Diesel, Kerosene and Lubricants):**

Seal faces may tolerate, but elastomers swell and degrade. Risk of fire/explosion if pump isn't explosion-proof. Industrial and agricultural pumps with carbon-ceramic seals are not fuel rated.

**Corrosive Chemicals (Acids, Strong Alkalis and Solvents):**

Acids attack carbon and elastomers. Alkalis weaken carbon and harden seals. Solvents (acetone, alcohols, MEK) swell O-rings and break down elastomers. Not suitable for chemical industry processes.

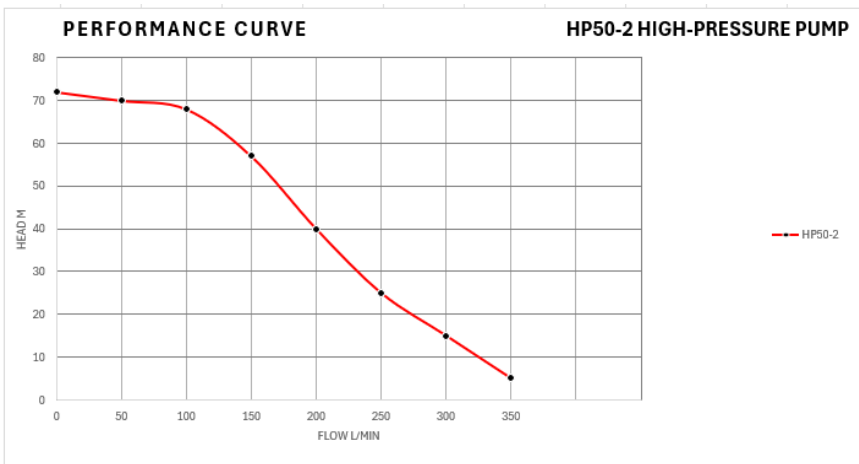
**Sea Water/Saline Water:**

Short-term possible, but salt corrodes pump housing and shaft. Carbon-ceramic seal wears faster due to crystallized salts. Elastomers degrade due to salinity and heat.

**Hot Water/Steam (>80°C):**

Ceramic may crack under rapid temperature change. Carbon loses strength with heat. Elastomer hardens and leaks.

## PUMP CURVE



Flow (L/min)	Head (M)
0	72
50	70
100	68
150	57
200	40
250	25
300	15
350	5

## PRODUCT VIEWS

### SIDE VIEW



### BACK VIEW



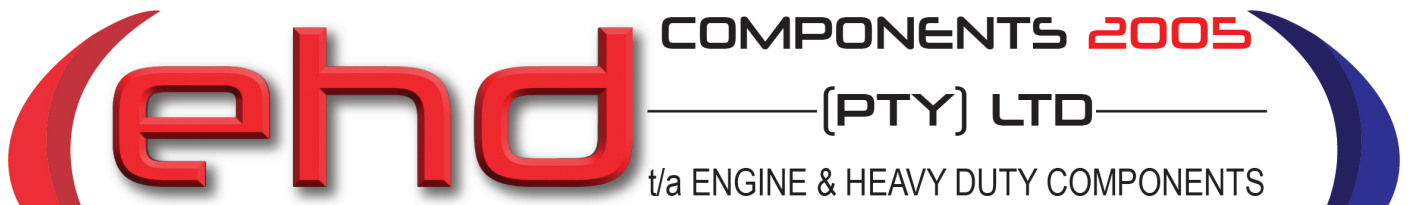
### SIDE VIEW



### FRONT VIEW



## APPROVED DISTRIBUTOR



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