Doc Ref No. HDP80-1-HONDA/REV1,
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énergie power products

HDP
HONDA DIAPHRAGM PUMP



MODEL: EDP80-1

DIAPHRAGM PUMP

Gasoline Powered Specification

4.8HP – 3.6kW Honda Engine
333 l/min

TECHNICAL DATA SHEET

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

TECHNICAL INFORMATION

MODEL	
HDP80-1-M-SFW	Manual Recoil Start with Steel Frame and Wheels
APPLICATIONS	
Industrial	**Chemical Processing:** Transfer of acids, alkalis, and solvents. Handling corrosive chemicals safely, as many diaphragm pumps are made with chemically resistant materials (like PTFE or polypropylene). Metering or dosing chemicals into processes.
	Wastewater and Sewage Treatment: Pumping sludge, slurry, and wastewater. Handling solids-laden or abrasive fluids, which traditional centrifugal pumps might struggle with. Chemical injection for water treatment.
	Mining and Construction: Dewatering applications (removing water from construction sites, mines, and tunnels). Handling abrasive slurries containing sand, gravel, or sediments. Transferring mud, cement slurry, and thick fluids.
	Food and Beverage Industry: Moving viscous liquids like syrups, sauces, or dairy products. Hygienic versions of diaphragm pumps are used to avoid contamination. Handling solids-in-liquid mixtures safely (e.g., fruit pulp, grains).
Agricultural	**Irrigation and Water Transfer:** Pumping water from rivers, ponds, or reservoirs to fields. Portable irrigation systems for crops. Drainage or dewatering of flooded fields.
	Fertilizer and Nutrient Application: Transferring liquid fertilizers or nutrient solutions. Handling slurries of manure or compost without clogging. Precise dosing into irrigation systems (fertigation).
	Pesticide and Herbicide Spraying: Transferring chemical sprays safely from tanks to sprayers. Resistant to corrosive or aggressive chemicals in pesticides or herbicides. Can be used in mixing or recirculating tanks.
	Livestock and Dairy Applications Pumping slurry, manure, or wastewater from barns and pens. Handling cleaning solutions and waste in dairy and livestock operations. Moving feed liquids or supplements safely.

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
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	EDP80-1
Inlet and Outlet (inch)	3” 80mm / 3” 80mm
Delivery Volume	350 l/m
Max head	15m
Suction lift	7m
Driving Power	1.5kW
Pump Body	Die-cast aluminium alloy
Flexible Diaphragm	Neoprene
Priming	Self-priming
Working Speed	900, 1400 and 2900 rpm

Permissible Pumping	
Allowable Liquids	For wastewater, for industrial water, acid, slurry, oil
Solid Handling	
Pump	50mm
Restricted by Strainer	-

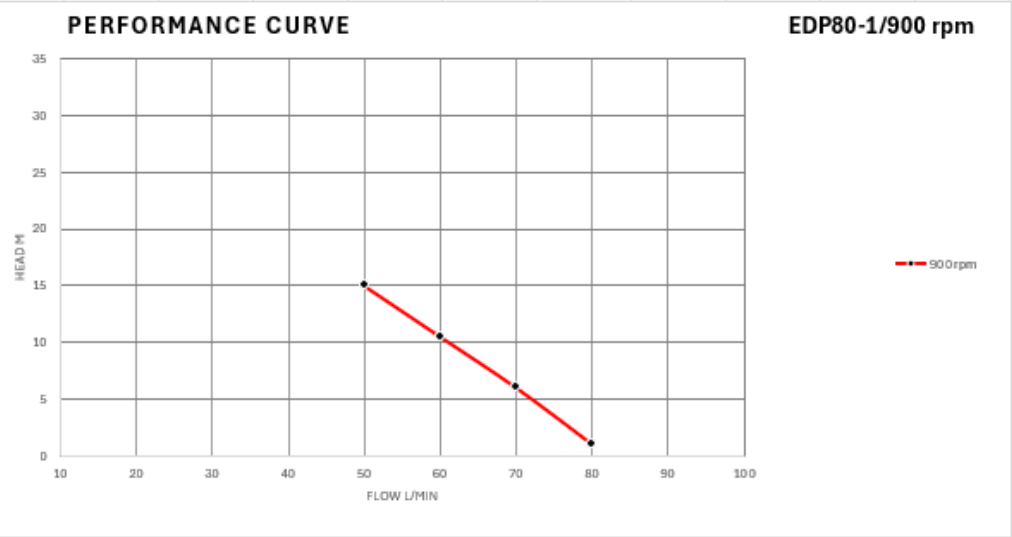
Fuels & Lubricants (Recommended)	
Gasoline	95ppm or better
Oils	15W/40
Consumables (Service parts)	
Engine Air Filter	Contact Dealer Directly
Engine Oil Filter	Contact Dealer Directly
Engine Fuel Filter	Contact Dealer Directly

Dimensions & Weights	
Length	615 mm
Width	485 mm
Height	600 mm
Dry Weight	62 kg
Policies	
Warranty	1 Year Limited Warranty

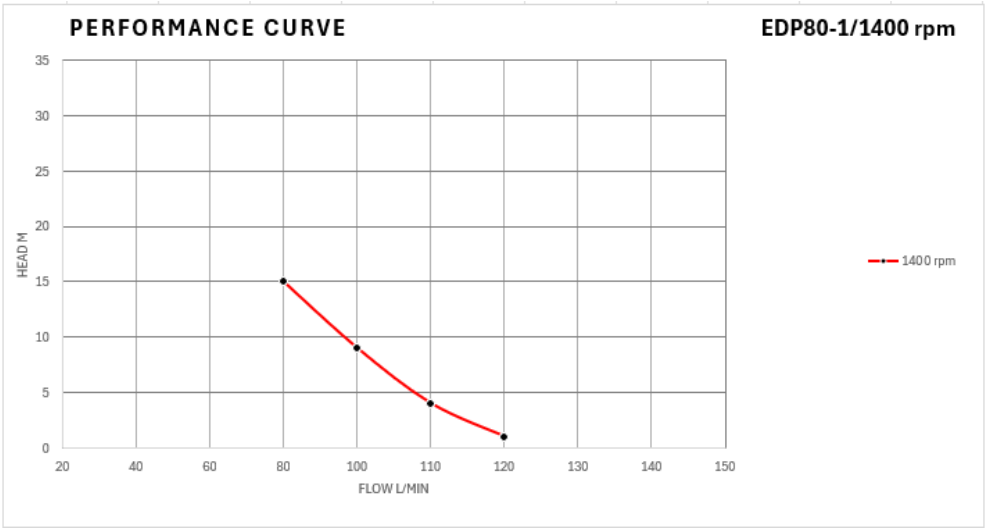
TECHNICAL INFORMATION

Neoprene Diaphragm Recommended Pumping Application
Water and Wastewater Clean water, rainwater, groundwater, borehole water, sediment water, wastewater (mild contamination), stormwater, drainage pits pond/dam water, manure lagoon water (light solids). Resistant to swelling in water. Good abrasion resistance. Handles fine solids without tearing. Does not harden when exposed to moisture.
Mild Chemical Solutions Carbonic acid, acetic acid (weak vinegar solutions), boric acid, phosphoric acid (very diluted), mild detergents, mild soap solutions, light cleaning chemicals, light fertilizer liquids, some herbicide mixtures, non-corrosive pesticide dilutions, foliar spray residues. Good resistance to mild corrosion. Stable in ph ranges 5 to 9.
Oils and Petroleum Byproducts (light types only) Light lubricating oils, transmission fluid (light), vegetable oils, hydraulic oils (non-aromatic, low aggressiveness). Important: it should only pump low concentration or non-aggressive oils.
Slurries and Solids-bearing Liquids Sand, silt / mud, clay, cement-water mixtures, limewater, sludge with organic sediments, food-processing waste (non-oily). Neoprene has very good tear resistance. Smooth texture resists abrasion wear. Good compression properties.
Industrial Applications Construction site dewatering, mining pit drainage (mild), industrial wash bays, waste collection pits, tank cleaning, neutralization pits, flood control pumping, marine bilge pumping and fishery and aquaculture processing water.
Neoprene Diaphragm Not Recommended Pumping Application
Strong Acids Sulfuric acid (high risk), hydrochloric acid, nitric acid, concentrated phosphoric acid, chromic acid, battery acid. Neoprene will bubble, soften, and crack.
Strong Bases (Alkalis) Sodium hydroxide (caustic soda), Potassium hydroxide, Ammonium hydroxide Industrial degreasers, Strong alkaline cleaners. These cause severe swelling and diaphragm failure.
Fuels and Hydrocarbons Petrol / gasoline, diesel, paraffin, kerosene, benzene, toluene, xylene, crude oil, aromatic solvents, mineral spirits. These result in rapid softening and rupture.
Solvents and Chemicals Acetone, MEK, Ethanol (high concentration), IPA (isopropyl alcohol), Paint thinners, Dry cleaning fluids, Ketones and Esters. Neoprene is not solvent-resistant.
Very Abrasive or Sharp Solids Broken glass, metal shards, ceramic chips, sharp gravel and coal chunks. These can slice or puncture the diaphragm.

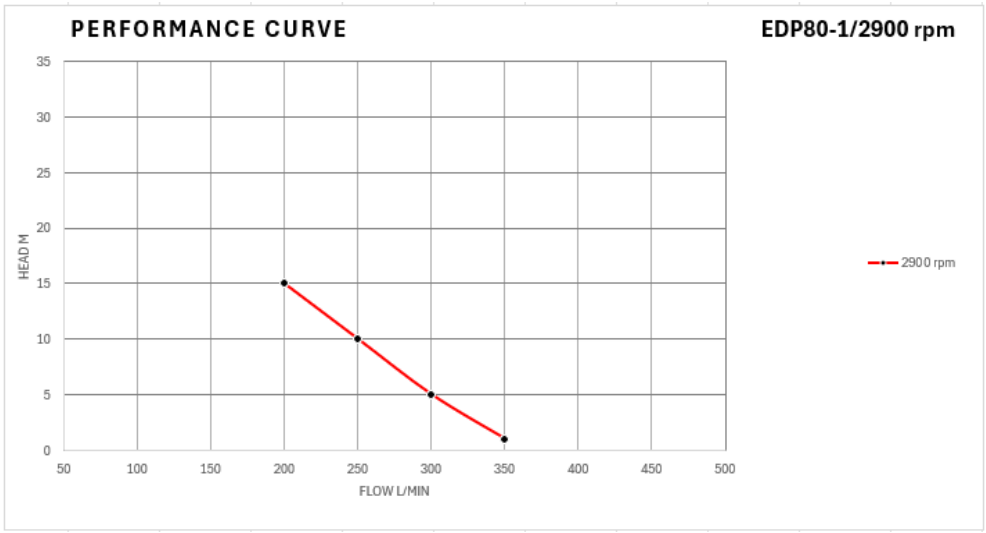
PUMP CURVE



Head(M)	Flow(l/min)
15	50
10	60
6	70
1	80



Head(M)	Flow(l/min)
15	80
9	100
4	110
1	120



Head(M)	Flow(l/min)
15	200
10	250
5	300
1	350

PRODUCT VIEWS

SIDE VIEW



BACK VIEW



SIDE VIEW



FRONT VIEW



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