



MODEL: TPS80

TRASH PUMP

Diesel Powered Specification

10HP – 7.1kW Energie Engine

1300 l/min

TECHNICAL DATA SHEET

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

TECHNICAL INFORMATION

MODEL	
TPS80-M-SF	Manual Recoil Start with Steel Frame
APPLICATIONS	
Industrial	Construction & Civil Engineering: Dewatering excavation sites, trenches and basements. Removing slurry, mud and sediment-laden water. Pumping water with gravel, sand or small stones from site runoff.
	Mining & Quarrying: Handling mine tailings, slurry or sludge containing rocks and sediment. Moving water mixed with sand, grit or fine ore particles.
	Wastewater & Sewage Management: Transferring sewage, sludge or industrial effluent with suspended solids. Temporary bypass pumping during maintenance of treatment plants.
	Industrial Cleaning: Cleaning tanks, pits and sumps with debris-laden liquids. Pumping water mixed with waste materials in factories (metal chips, sawdust, etc.).
Agricultural	Irrigation: Pumping water from rivers, ponds or canals that contain leaves, algae or small debris. Filling irrigation canals or tanks for field watering.
	Drainage & Dewatering: Removing excess water from flooded field after heavy rains. Draining ditches, ponds or low-lying farmland.
	Livestock & Aquaculture: Moving pond water or slurry that may contain feed particles, manure or sediment. Maintaining water levels in fish or shrimp ponds with suspended solids.
	Pesticide & Fertilizer Handling: Pumping water mixed with fertilizer or soil amendments that might contain sediment. Transferring liquid manure or compost tea to irrigation systems.

APPLICATIONS:

Industrial

Agricultural

énergies
power products
DIESEL ENGINE

MD

MEDIUM DUTY

TECHNICAL INFORMATION

Engine

Make	Energie
Model	VPHLD420
Power	10HP – 7.1kW / 3600 RPM
Type	Forced air cooled, 4-stroke diesel engine
Displacement	420cc / 0.42l
Fuel Type	Diesel
Starter	Recoil Start
Consumption	318 g/kWh / 2.65 l/h
Noise	90dB at 7m
Fuel Tank Size	12.5l
Oil Tank Size	1.1

Accessories Included

	Pipe Connector Fittings
	2 x 3 Inch Pipe Connecting Wrench
	Rubber Gaskets
	Suction Strainer
	Inlet Size: 80mm / 3"
	Material: Galvanized steel
	Hose Clamps x 3

Recommended Piping

	Inlet Hose
	Material: Rubber or Neoprene
	Type: Reinforced synthetic rubber
	Thickness: 3-6mm
	Outlet Hose
	Material: Rubber or Neoprene
	Type: Reinforced synthetic rubber
	Thickness: 3-6mm

Pump

Make	Energie
Model	HL80SPL
Inlet and Outlet	3" 80mm / 3" 80mm
Delivery Volume	1300l/min
Max head	27m
Suction lift	8m
Driving Power	6.3kW
Pump Body	Aluminium Alloy
Impeller	Cast Iron
Mechanical Seal	Carbon Ceramic
Working Speed	3600 RPM

Permissible Pumping

Allowable Liquids	Water (fresh, salt, wastewater)
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Solid Handling

Pump	27mm
Restricted by Strainer	19mm

Fuels & Lubricants (Recommended)

Gasoline	50ppm or better
Oils	15W/40

Consumables (Service parts)

Engine Air Filter	-
Engine Oil Filter	-
Engine Fuel Filter	-

Dimensions & Weights

Length	800 mm
Width	505 mm
Height	760 mm
Dry & Wet Weight	83 kg / 97 kg

Policies

Warranty	1 Year Limited Warranty
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TECHNICAL INFORMATION

Carbon Ceramic Seal Recommended Pumping Application

Water & Wastewater

Fresh Water, River Water, Ponds, Lakes, Muddy Water / Slurry with Sand and Silt, Sewage (with solids up to 19mm if using the standard suction strainer)

Industrial Fluids

Mild chemicals compatible with the elastomer used:
Can handle fluids with suspended solids (stones, leaves, debris) limited by strainer size

Slurry / Abrasive Fluids

Carbon-ceramic seals are abrasion-resistant, so you can pump:
Sand-laden water
Mud or sludge
Slurry from construction or agricultural sites

Carbon Ceramic Seal Not Recommended Pumping Application

Strong Oxidizers

Hydrogen peroxide (>30%), Peracetic acid, Nitric acid concentrated (>30%), Free chlorine, ozone
Reason: Can attack carbon/ceramic over time and degrade elastomer secondary seals.

Fluids Causing Thermal Shock

Hot concentrated acids poured into cold water, Rapidly changing temperature fluids
Reason: Ceramic is brittle and can crack under sudden temperature changes.

Extremely Abrasive Solids (Beyond Design)

Large rocks, metal pieces, or debris bigger than impeller/strainer limits
Reason: Even though carbon/ceramic is wear-resistant, extremely hard solids can chip the faces or damage the impeller.

Silicon Carbide Seal Recommended Pumping Application

Water & Wastewater

Fresh Water, River Water, Pond Water, Muddy Water, Silt, Sand-laden Water, Slurry or Sludge with Abrasive Solids (within strainer limits).
SiC faces are highly resistant to abrasion, so ideal for dirty water or slurry.

Chemicals (depending on O-ring material)

NBR O-ring: mild water, light oils, some detergents
Viton O-ring: fuels, hydrocarbons, light acids, alcohols
EPDM O-ring: mild alkalis, some acids, detergents
The SiC faces themselves are chemically inert, so the limitation comes from the O-ring.

Abrasive Fluids

Sand-laden water, slurry, wastewater with small solids
SiC is extremely wear-resistant → much longer life than carbon/ceramic or tungsten carbide in abrasive applications

High Temperature Fluids

SiC can tolerate up to 250 °C, so hot water, steam (low-pressure) or warm chemicals are feasible
Elastomer temperature limits still apply

Silicon Carbide Seal Not Recommended Pumping Application

Strong Oxidizers

Concentrated hydrogen peroxide (>30%), Peracetic acid, Aqua regia, Free chlorine, ozone
Even though SiC is chemically resistant, these can attack the elastomer O-ring and sometimes corrode pump metals.

Strong Acids / Bases (Depending on O-ring)

Concentrated sulfuric acid (>50%), Concentrated nitric acid, Concentrated NaOH / KOH
May attack the O-ring or cause corrosion elsewhere in the pump.

Ketones / Polar Solvents

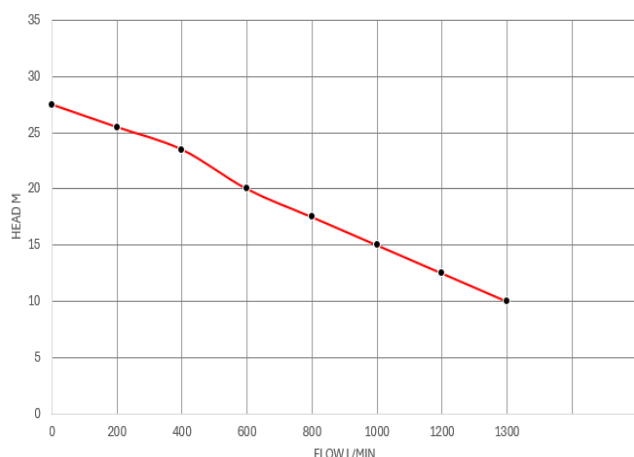
Acetone, MEK, MIBK, Glycol ethers, esters
Cause swelling or degradation of O-rings, even though SiC faces remain stable.

Extremely Abrasive or Oversized Solids

Rocks, metal chunks, sticks larger than impeller / strainer limit (19mm for HL80SPL standard strainer)
Can damage the impeller and may eventually stress the seal faces.

PUMP CURVE

PERFORMANCE CURVE



TP80 TRASH PUMP

Flow (l/min)	Head (M)
0	27,5
200	25,5
400	23,5
600	20
800	17,5
1000	15
1200	12,5
1300	10

PRODUCT VIEWS

SIDE VIEW



BACK VIEW



SIDE VIEW



FRONT VIEW



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DEALER DETAILS
