

SUBMERSIBLE SOLIDS HANDLING PUMPS



HELPING YOUR SYSTEM FLOW

PENTAIR HYDROMATIC SUBMERSIBLE SOLIDS HANDLING PUMPS ARE FIELD PROVEN AND RELIABLE

You can depend on Hydromatic pumps to provide years of reliable service. As one of the oldest submersible pump manufacturers in the world, Hydromatic offers you field-proven pumps and systems for all your requirements. We also supply complete technical support and ongoing engineering assistance for the life of the pump.

RUGGED, SAFE PUMPS

When government regulations or area classifications require hazardous location pumps, you can depend on Hydromatic submersible solids handling pumps.

Now you can get certified, Class I, Division 1, Group C and/or D hazardous location pumps for applications such as sewage wet wells where flammable gases exist.

GET THE SAME RELIABILITY

With Hydromatic hazardous location pumps, you get the same reliability and efficiency designed into the non-hazardous location pumps. Plus, you get added safety advantages with FM approved, hazardous location, Hydromatic pumps.

Reliable, safe operation is ensured because all castings are inspected for porosity before, during and after machining. After assembly each hazardous location pump is thoroughly inspected to ensure reliable performance.

HPS SERIES – PREMIUM EFFICIENT SOLIDS HANDLING PUMPS

Hydromatic HPS series pumps help you win the battle against modern flushables, thanks to an innovative hydraulic design bringing upgraded clog resistance over legacy Hydromatic products. A semi-open impeller in conjunction with an adjustable cutter plate handles debris with ease for optimal solids handling performance. These pumps utilize premium efficient motor designs to help reduce total cost of ownership throughout the life of the pump. HPS Series pumps are available from 10–40 HP with multiple hydraulic curves. Learn more at pentair.com/nextgen.

VORTEX – RECESSED IMPELLER OPTION

Recessed impellers specialize in handling abrasive liquids with great solids handling performance. The recessed impeller creates a liquid vortex in the volute directing solids, slurry, sludge, grit, or stringy fibrous material through the pump. The liquid vortex in the volute allows for media to travel through the volute with minimal contact to the impeller, inherently extending the life of the components in abrasive applications. In addition, recessed models are ideal for a high head, low flow application as they can perform up to shut-off head without damage.

INSTALLATIONS

MUNICIPAL

- ◆ Wastewater transfer
- ◆ Wastewater treatment plants
- ◆ Wastewater lift stations
- ◆ Subdivisions
- ◆ Airports
- ◆ Storm water

COMMERCIAL

- ◆ Building wastewater systems
- ◆ Wastewater
- ◆ Hospitals
- ◆ Motels
- ◆ Apartments
- ◆ Schools
- ◆ Churches
- ◆ Universities
- ◆ Campgrounds
- ◆ Amusement parks

INDUSTRIAL

- ◆ Wastewater
- ◆ Sump
- ◆ Spray wash
- ◆ Storm water

STANDARD PUMP FEATURES

A. MOTOR

Oil filled to efficiently dissipate heat and lock out damaging moisture so you receive reliable pumping service. Easily field serviceable.

B. CONNECTION BOX

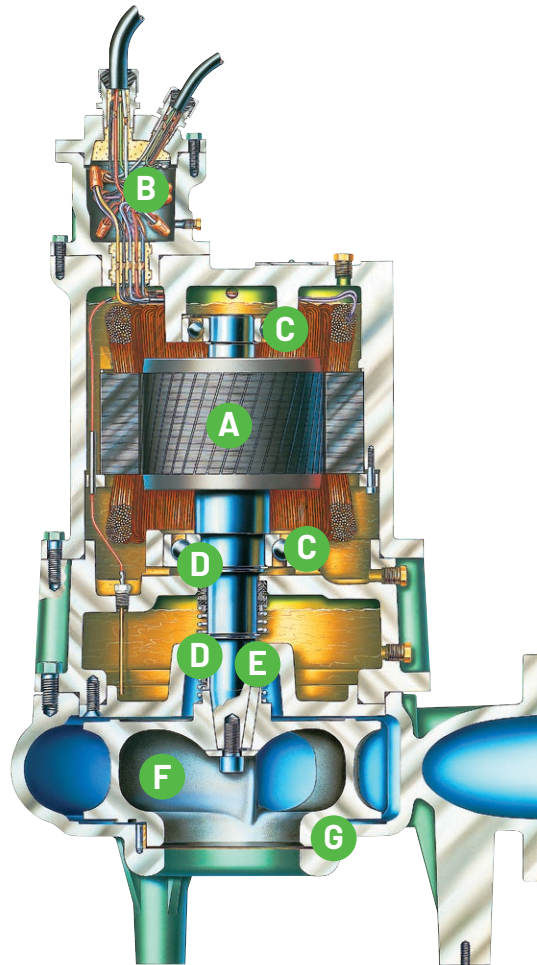
Two epoxy barriers and a compression fitting prevent water contamination of the motor area, assuring long-term reliable operation. Additionally, epoxy encapsulation and stripped leads positively eliminate "wicking" from the cable.

C. BEARINGS

Heavy-duty upper and lower ball bearings are submerged in oil to provide permanent lubrication and ensure long service life.

D. SEALS

A dual seal system operates in an oil chamber to provide long pump service life. Various seal options available.



E. SHAFT

The stainless steel shaft eliminates corrosion and fatigue for longer pump life. The minimum shaft overhang decreases deflection and increases bearing and seal life. Tapered shaft allows for easy removal of impeller.

F. IMPELLER

Hydromatic solids handling pumps are available with a wide range of impellers for different applications. Pump-out vanes on the top shroud prevent the buildup of materials in the seal area and extend the life of the thrust bearing by significantly reducing axial thrust.

G. RENEWABLE CASE WEAR RING

Easily replaceable, true wear ring, with a top pullout design for easy disassemble operation.

HAZARDOUS LOCATION PUMP FEATURES

FLAME-PROOF JOINTS

Flame-proof joints have 1-1/4" flame paths. These close tolerance joints prevent any internal spark or fire from escaping into the environment.

MOTOR HOUSING

The hazardous location housing wall is thicker throughout the case to give you extra containment capability.

HEAVY-DUTY BEARINGS

Hydromatic pumps provide you heavy-duty bearings (minimum B-10 life of 50,000 hours) for long pump life.

TWO MOISTURE SENSORS

Two moisture sensors in the oil chamber provide extra security. The sensors are electrically isolated and made with stainless steel connections and stainless steel probes.

OIL-FILLED MOTOR

DEPENDABLE OPERATION

The Hydromatic pump's oil-filled motor keeps the windings cool, eliminates moisture, and permanently lubricates the bearings to provide reliable pumping service.

The oil bath keeps the motor and bearings cool by dissipating heat and maintaining the correct operating temperature. The oil transfers heat generated in the motor windings to the housing where it is dissipated by the surrounding wet well media. Airborne moisture contamination is locked out so that moisture, which condenses with temperature changes, does not cause premature motor and bearing failure.

The oil bath also permanently lubricates the bearings which minimizes heat and flushes contaminant away from bearing races. Maintenance costs are reduced because bearings do not require routine service and motors do not require a secondary cooling apparatus. Oil-filled motors ensure dependable, reliable service!

DUAL SEAL SYSTEM/MOISTURE SENSOR

DUAL SEAL SYSTEM GIVES LONG PUMP SERVICE LIFE

The mechanical dual seal system protects the motor from water with one upper shaft seal and one below an oil chamber. The oil chamber provides lubrication for the seals and traps any moisture that may leak through the lower seal. The upper seal operates entirely in oil. The dual seal design gives the pump exceptionally long service life by keeping pumped media out of the motor housing.

MOISTURE SENSOR DECREASES DOWNTIME AND MAINTENANCE COSTS

The moisture sensor, provided as a standard feature on all solids handling pumps, saves money and decreases downtime by allowing you to take corrective action before an expensive bearing or motor failure occurs. The internal sensor detects the presence of moisture in the oil chamber and signals that the lower seal is beginning to leak.

Some manufacturers put a moisture sensor in the motor area and moisture is not detected until after it affects the bearings and motor itself.



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