

DELTA ENVIRONMENTAL[®]

D1P20-21 (50 HZ) SERIES

Submersible Semi-Positive Displacement Grinder Pump

The reliable D1P20-21 semipositive displacement grinder pump offered by Delta Environmental is specifically designed to meet the demands in Low Pressure Sewer (LPS) systems for the residential developer applications. The D1P20-21 grinder pump is ideal for high head applications involving single-family residences and cottages and features an innovative hardened cutter mechanism to effectively macerate typical domestic sewage solids into a fine slurry. As the world evolves from concrete septic tanks and large piping gravity collection systems to more innovative wastewater solutions, the use of submersible grinder pumps in Low Pressure Sewer (LPS) systems for the residential developer applications has proved to be a superior alternative. Complete packaged systems are available to make installation quick and simple. For additional information, please contact your local Delta Environmental representative.

Applications

- Residential or Industrial Sewage Discharge Applications

Features

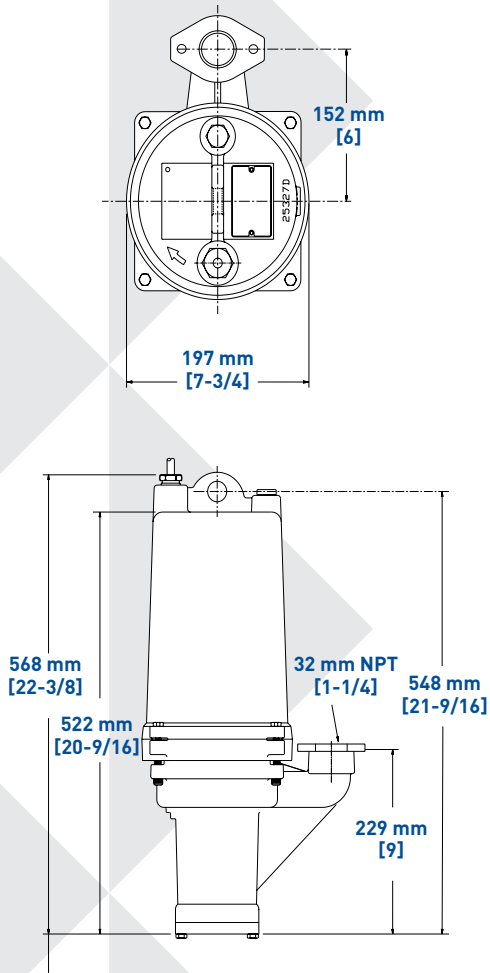
- 1.5 kW, 50 Hz, 1460 RPM, 230V, 1 phase. High torque oil-filled motor conducts heat and lubricates bearings. Class F VFD continuous duty rated.
- Heavy-duty ball bearings, upper (radial) and lower (thrust), are continuously lubricated by oil to ensure long service life.
- Overload heat sensor protects motor from burn-out due to excessive heat from any overload condition. Automatically resets when motor has cooled.
- The mechanical seal is constructed with a ceramic stationary face and a carbon rotating face and is field proven for long service life.
- 300 Series SST single lobe rotor.
- Buna-N double helix stator.
- Grinder impeller and shredding ring are replaceable without dismantling pump. Constructed of 440 SST hardened to 56 – 60 Rockwell.
- The water resistant power cord with molded plug is available in 6 m (20') length.



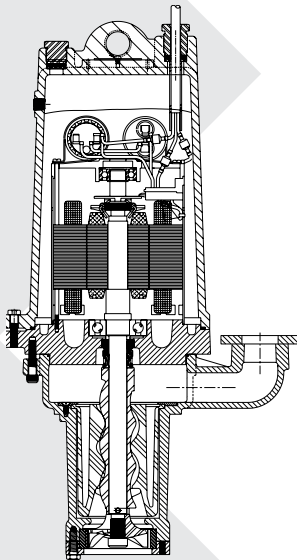
Pump Construction

Construction Materials	
Motor Housing	cast iron, Class 30, ASTM A48
Volute Case	cast iron, Class 30, ASTM A48
Shaft	stainless steel
Cutters	440C hardened 55-60 Rockwell C
Power Cord	6 m SJOW/SJOW-A
Rotor	Buna-N, DBL Helix
Stator	300 series SST, single lobe
Mechanical Seal	Seal – carbon and ceramic Seal body – stainless steel Spring – stainless steel Bellows – Buna-N
Bearings – Upper and Lower	single ball

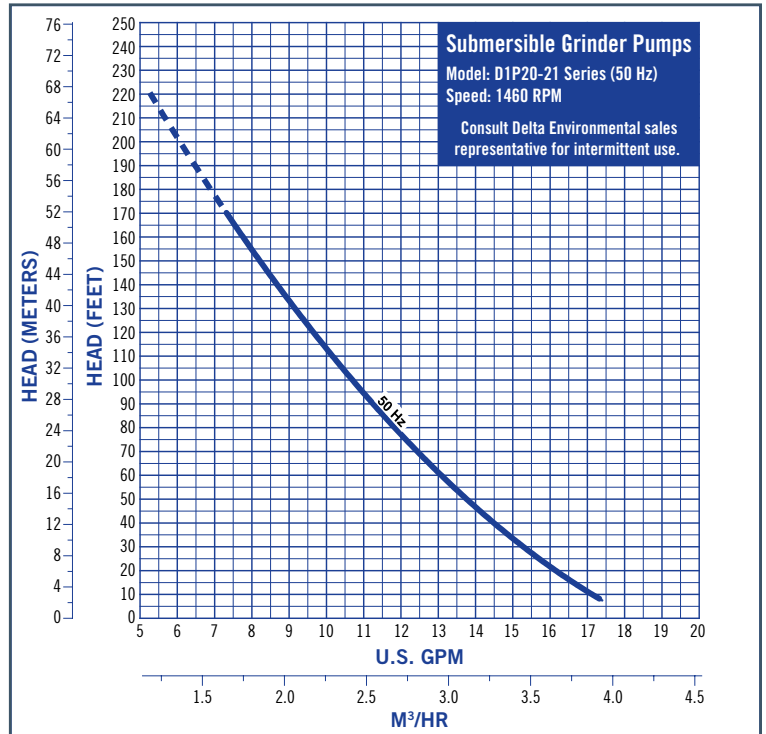
Dimensional Data [Dimensions in inches]



Sectional View



Pump Performance



Motor Electrical Data								
Model Number	kW (HP)	Volts	Phase	Hertz	Full Load Amps	Run KW	Start KVA	Run KVA
D1P20-21	1.5 (2)	230	1	50	8.0	-	8.05	1.84

Pump Capabilities		
Winding Insulation Temp. (Class F)	311°F	155°C
Discharge, NPT	1¼ in.	32 mm
Liquids Handling	domestic raw sewage	
Intermittent Liquid Temp.	up to 140°F	up to 60°C
Motor	1.5 kW capacitor start	
Electrical (50 Hz)	230V, 8.0 A, 1460 rpm, 1 ph, 50 Hz	
Acceptable pH Range	6 - 9	
Unit Weight	85 lbs.	39 kg

