



**DELTA ENVIRONMENTAL<sup>®</sup>**  
**D1C20-21 SERIES**  
**CENTRIFUGAL SUBMERSIBLE**  
**GRINDER PUMP**

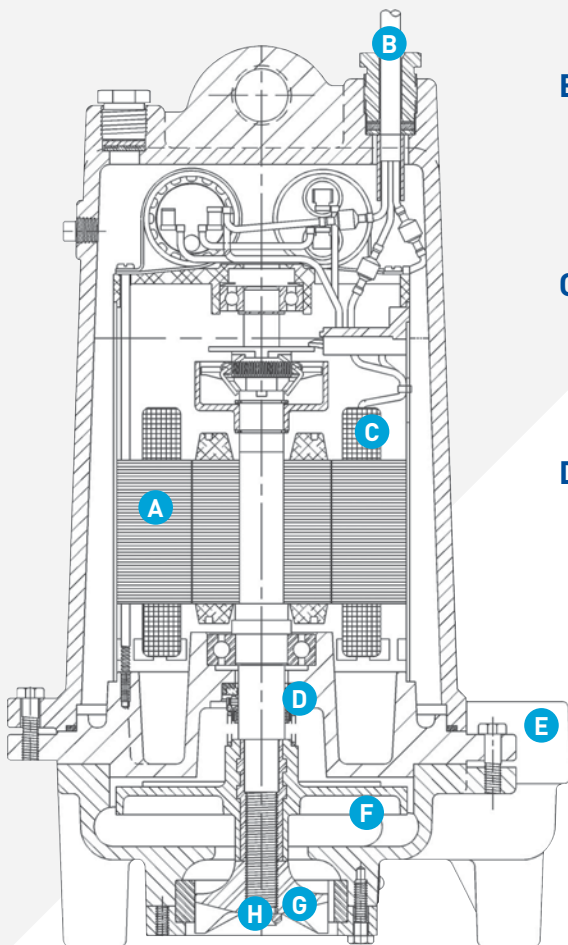


# DELTA ENVIRONMENTAL® D1C20 SERIES

## Centrifugal Submersible Grinder Pump

### The Changing Force in Pressure Sewer

The reliable D1C20-21 2 hp centrifugal submersible grinder pump offering by Delta Environmental is designed to be rugged and economical for low pressure sewer system applications. Long discharge runs or high static heads are not a problem. The Delta Environmental D1C20-21 grinder pump features an innovative hardened cutter mechanism and recessed impeller design 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 proven to be a superior solution that is cost effective and minimally disruptive to the natural environment. For additional information, please contact your local Delta Environmental representative.



#### A. Powerful Motor

2 hp, 3450 RPM, 230V, 1 phase. High torque oil-filled motor conducts heat and lubricates bearings.

#### B. Cable Entry System

Provides double seal protection. Cable jacket sealed by compression fitting. Individual wires sealed by potting epoxy. Power cord can be replaced without disturbing motor.

#### C. Overload-Heat Sensor

Protects motor from burn-out due to excessive heat from any overload condition. Automatically resets when motor has cooled.

#### D. Shaft Seal

The mechanical seal is constructed with a ceramic stationary face and a carbon rotating face and is field proven for long service life.

#### E. Volute Case

Cast iron, 1-1/4" vertical, flanged discharge.

#### F. Impeller

Engineered thermoplastic recessed impeller handles ground slurry without clogging or binding. Provides unobstructed flow passage. Reduces radial loads, pump-out vanes help keep trash from seal, reduces pressure at seal face.

#### G. Grinder Assembly

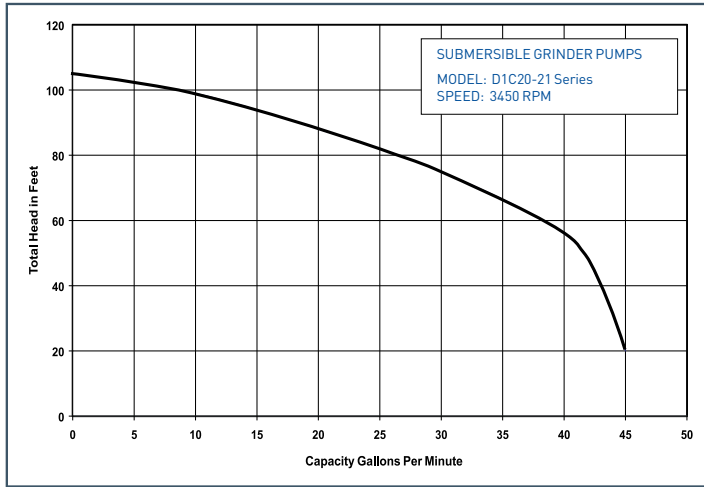
Grinder impeller and shredding ring are replaceable without dismantling pump. Constructed of 440 SST hardened to 56 – 60 Rockwell.

#### H. Shaft And Fasteners

The shaft and all fasteners are made from stainless steel.

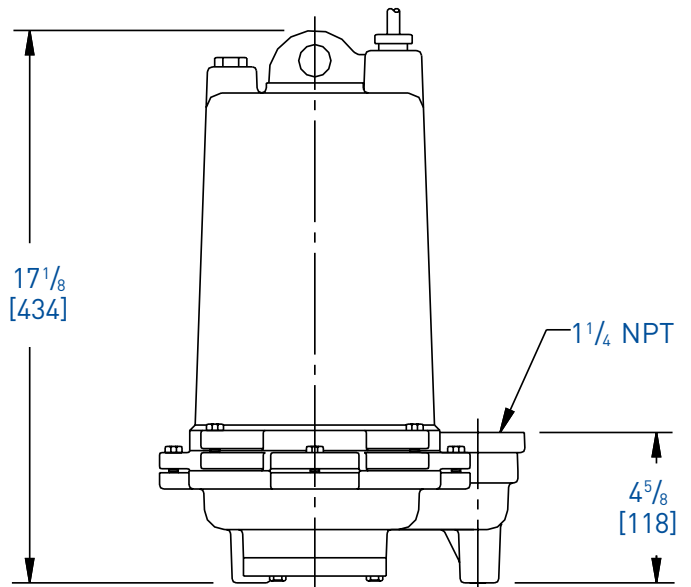
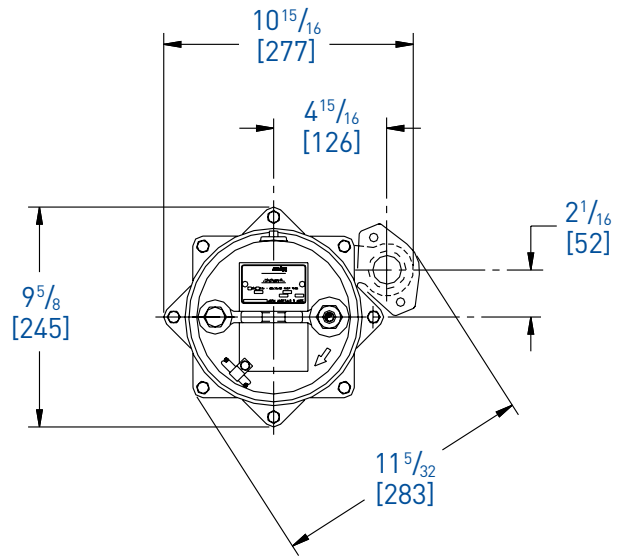
# Pump Details

## Pump Performance



## Pump Dimensions

[Dimensions in MM]



### Pump Capabilities

Liquids Handling	Domestic raw sewage	
Intermittent Liquid Temp.	up to 140° F	up to 60° C
Winding Insulation Temp. (Class F)	311° F	155° C
Motor Electrical Data	2 hp, 3450 RPM, 1 ph - capacitor start/run, 230 volt, 60 Hz, 15.0 amps	
Third Party Approvals	CSA, UL	
Acceptable pH Range	6-9	
Specific Gravity	.9-1.1	
Viscosity	28-35 SSU	
Discharge, NPT	1-1/4 in.	31.75 mm
Min. Sump Dia.	Simplex	24 in. 61.0 cm
	Duplex	36 in. 91.4 cm

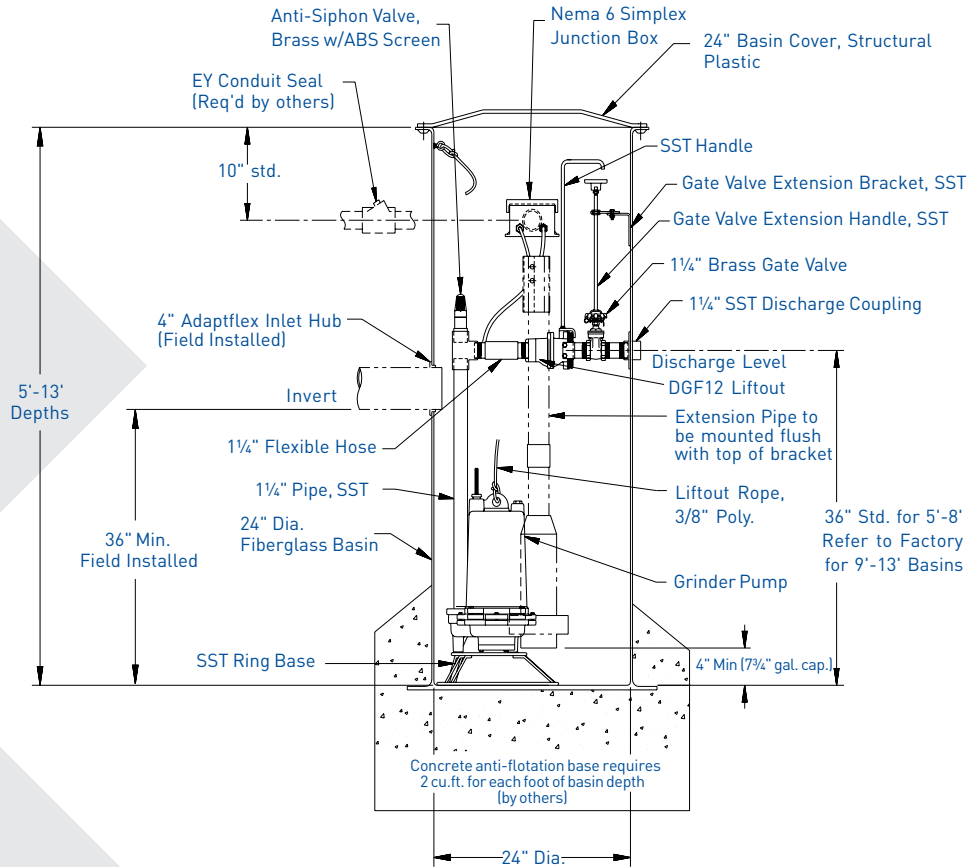
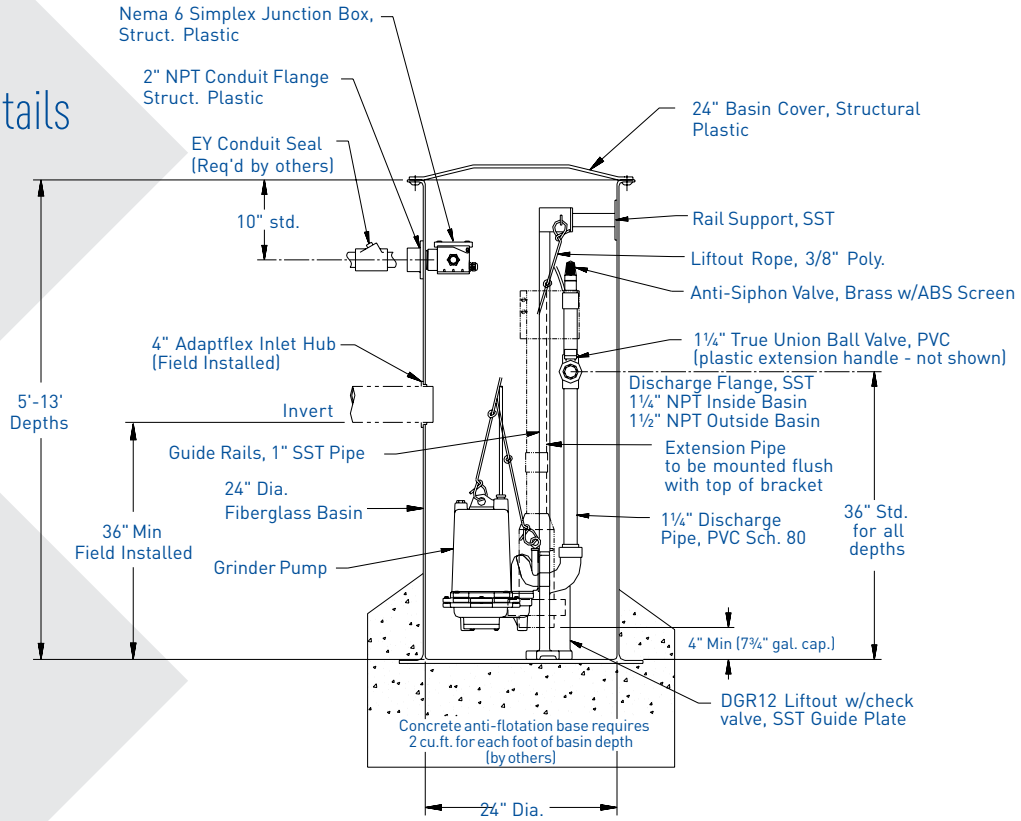
### Construction Materials

Motor Housing, Seal Housing, Volute Case	Cast iron, Class 30, ASTM A48	
Power Cord, 20'	14/3 SJOW/SJOW-A	
Mechanical Seal	Std.	carbon & ceramic
	Opt.	tungsten carbide
Pump, Motor Shaft	416 SST	
Fasteners	300 Series SST	
Shredding Ring Grinder Impeller	440 SST, 58-60 Rockwell	
Recessed Impeller	eng. thermoplastic	

### Motor Electrical Data

Hazardous Location	HP	Volts	Phase	Start Amps	Run Amps	Run kW	Start KVA	Run KVA	NEC Code	NEC Service Factor
D1C20-21	2	230	1	51.9	15.0	2.9	11.9	3.5	G	1.25

# Installation Details



8263 FLORIDA BLVD., DENHAM SPRINGS, LA 70727, 225-665-6162, 1 (800) 219-9183 | WWW.DELTAENVIRONMENTAL.COM

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