PES

DATA SHEET FOR VERTICAL PUMP

Spec. No.
Prep. By | Apr. By
Date
Sheet 1 of 1 | Rev. 0

Applicable To: X Proposals O Purchase O As Built
Note: X indicates "applicable"
O Indicates Information to be Completed by Purchaser;
O By Manufacturer

For | Site
Unit | Service: Ethanol Loading
No. Pumps Req'd: 10 | No. Motors Req'd: 10 | Provided By: Pump Mfr. | Mtd By
Item No.: P-1/2/3/4/5/6/7/8/9/10 | Item Description
No. Engines Req'd: - | No. Turbines Req'd: - | Provided By | Mtd By
Item No. | Item Description
Pump Mfr. | Size and Type | Serial No.

OPERATING CONDITIONS, EACH PUMP

Liquid: Gasoline	USGPM at P.T. Nor.: 500	Rated	
	Disch. Press., Barg: 3.2		
P.T. °C, Nor.: 40	Max.: 70	Suct. Press., Barg max.: -0.3	Rated
Vap. Press. at P.T, Psia: 10		Diff. Head, m.: 48	
Vis. at P.T.,	cP: 0.9	NPSHA, m.: -	
Corr/Eros. Caused by: HC		Hyd. HP	
Location: O Indoor X Outdoor	Area:	O Safe X Hazardous	
Working: O Continuous X Intermittent		O Random	

PERFORMANCE

Proposal Curve No.
RPM | NPSHR (Water)
Eff. | BHP Rated
Max. Head Rated IMP
Min. Continuous gpm
Rotation (Viewed from CPLG End)

CONSTRUCTION

Nozzles	Size	Rating	Facing	Location
Suction	VTS	150 #	RF	
Discharge	VTS	150#	RF	

Case-mount: O Centerline O Foot O Bracket O Vert. (Type)
- Split: O Axial O Rad; Type Volute O SGL O DBL O Diffuser
- Press: O Max. Allow, psig °F; O Hydro Test psig
- Connect: X Vent X Drain O Gage

Impeller Dia.: O Rated O Max. O Type:
Mount: O Between Brgs O Overhung
Bearings-type: O Radial O Thrust
Lube: O Ring Oil O Flood O Oil Mist O Flinger O Pressure
Coupling: O Mfr. Metastream or Eq. O Model Sparkproof
Driver Half Mtd By: O Pump Mfr. O Driver Mfr. O Purchaser
Packing: O Mfr. & Type O Size/No. of Rings
Mech. Seal: O Mfr. & Model YES API Class. Code API-682
O Mfr. Code

SHOP TESTS

X Non-Wit. Perf. O Wit. Perf.
X Non-Wit. Hydro O Wit. Hydro
X NPSH Req'd. O Wit. NPSH
X Shop Inspection
O Dismant. & Insp. After Test
O Other

MATERIALS

Pump: O
Casing: Cast Iron
Impeller : Carbon Steel
Baseplate: Steel

AUXILIARY PIPING

O C.W. Pipe Plan O CU; O SS; O Tubing; O Pipe
O Total Cooling Water Req'd, gpm O Sight F.I. Req'd
O Packing Cooling Injection Req'd: O Total gpm O psig
O Seal Flush Pipe Plan O CS O SS O Tubing O Pipe
O External Seal Flush Fluid O gpm O psig
O Auxiliary Seal Plan O CS O SS O Tubing O Pipe
O Aux. Seal Quench Fluid

VERTICAL PUMPS

Pit or Sump Depth
Min. Submergence Req'd.
Column Pipe: O Flanged O Threaded
Line Shaft: O Open O Enclosed
Brgs: O Bowl O Line Shaft
Brg. Lube O Water O Oil O Grease
Float & Rod O CS O SS O BRZ O None
Float Switch O
Pump thrust,lb. O UP O Down

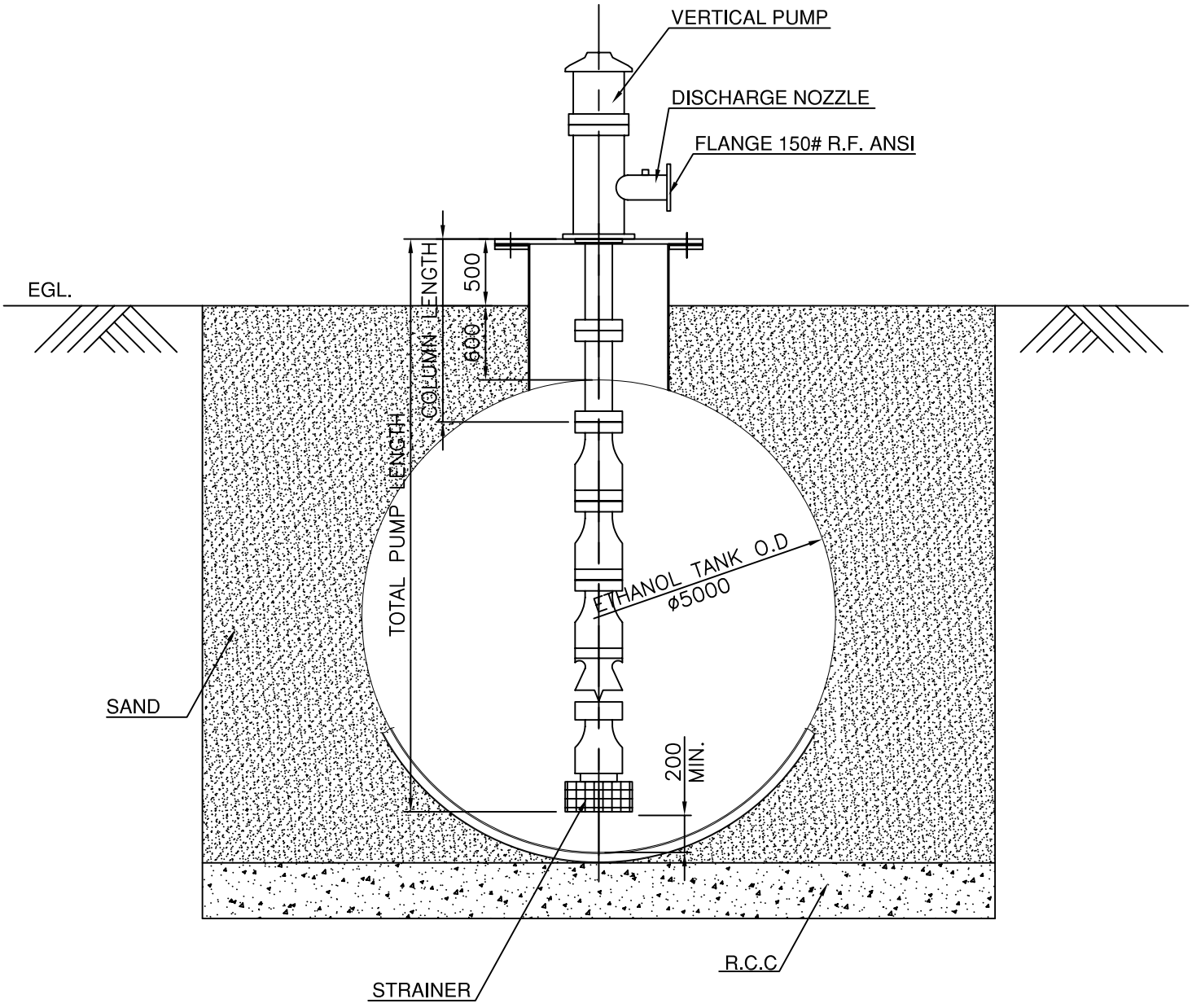
MOTOR DRIVER

HP | RPM | Frame | Volts/Phase/Cycles: 380/3/50
Mfr. | Bearings | Lube
Type: Note -10 | Insul.: F | Full Load Amps
Enc: TEFC (explosion proof) | Temp. Rise, °C: 80 | Locked Rotor Amps
O VHS O VSS Vert. Thrust Cap., lb.
Protection: Thermal overload relay

Approx. WT. Pump & Base
Motor | Turbine

Notes VTS = Vendor to specify

1 Pump shall be as per ASME/ANSI B73.1 or equivalent.
2 Vendor to confirm the HP or kW of motors.
3 Pump shall be mounted on top of EDC vessels of and submerged down to the bottom of the vessel, Hence Total pump length shall be advised by Vendor. (Refer attached Typical installation diagram/sketch)
4 Vendor to advise number of stages of the pump
5 The suction lift of the pump shall be 5 meters
6 Vendor to provide Pump Base plate and Optional sub-base mounting detail.
7 Pump shall be equipped with inline strainer at the bottom.
8 Pump's motor and casing shall be explosion proof.
9 Vendor to provide information / Literature regarding the pumps adequacy to handle petroleum fluids like Ethanol
10 Pump shall be running with variable frequency drive located at Motor control station (MCC)
11 Pumps shall be provided with a single mechanical seal. All seals shall be in compliance with API 682.



TYPICAL INSTALLATION DETAIL FOR VERTICAL PUMP TO BE MOUNTED ON EDC VESSEL.