



Company: Bonneville Power Administration

Name:

Date: 11/25/2006

Pump:

Size: 8HH (1 stage)
 Type: Vertical
 Synch speed: 3450 rpm
 Curve: 8HH
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 3450 rpm
 Dia: 6.365 in
 Impeller:
 Ns: 3450
 Nss: ---
 Suction: 6 in
 Discharge: 6 in
 Bowl size: 7.5 in
 Max lateral: 0.375 in
 Thrust K factor: 8 lb/ft

Search Criteria:

Flow: --- US gpm Head: --- ft

Fluid:

Water
 Density: 62.25 lb/ft³
 Viscosity: 1.105 cP
 NPSHa: --- ft
 Temperature: 60 °F
 Vapor pressure: 0.2563 psi a
 Atm pressure: 14.7 psi a

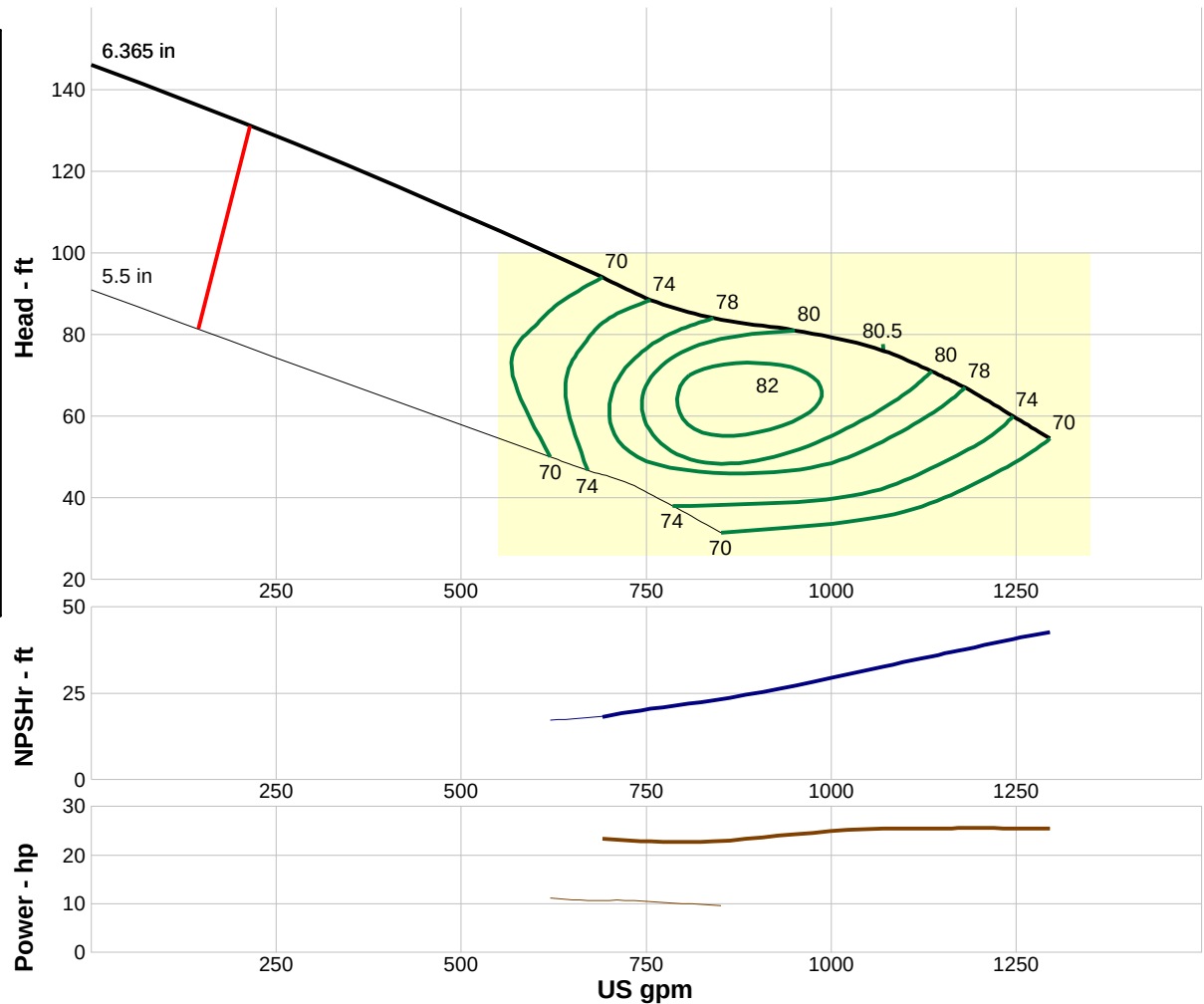
Motor:

Standard: NEMA
 Enclosure: TEFC
 Sizing criteria: Max Power on Design Curve
 --- hp
 Speed: ---
 Frame: ---

Pump Limits:

Temperature: 140 °F
 Pressure: 300 psi g
 Sphere size: 0.5 in
 Power: 150 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	1070 US gpm
Head:	76 ft
Eff:	80.5%
Power:	25.5 hp
NPSHr:	32.8 ft
---- Design Curve ----	
Shutoff head:	146 ft
Shutoff dP:	63.1 psi
Min flow:	214 US gpm
BEP:	80.5% @ 1070 US gpm
NOL power:	27.8 hp @ 214 US gpm
-- Max Curve --	
Max power:	27.8 hp @ 214 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
1243	3450	60.2	74.1	25.5	40.7
1036	3450	77.4	80.4	25.2	31.2
829	3450	84.6	77.5	22.8	22.7
622	3450	99.1	65.8	24	15.9
414	3450	115	53	25.9	8.7