

Company: Bonneville Power Administration

Name:

Date: 11/25/2006



Pump:

Size: 14HH-2C (1 stage)
 Type: Vertical
 Synch speed: 1760 rpm
 Curve: 14HH-2C
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 1760 rpm
 Dia: 10.5625 in
 Impeller:
 Ns: 1760
 Nss: ---
 Suction: 10 in
 Discharge: 10 in
 Bowl size: 14 in
 Max lateral: 1 in
 Thrust K factor: 20 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

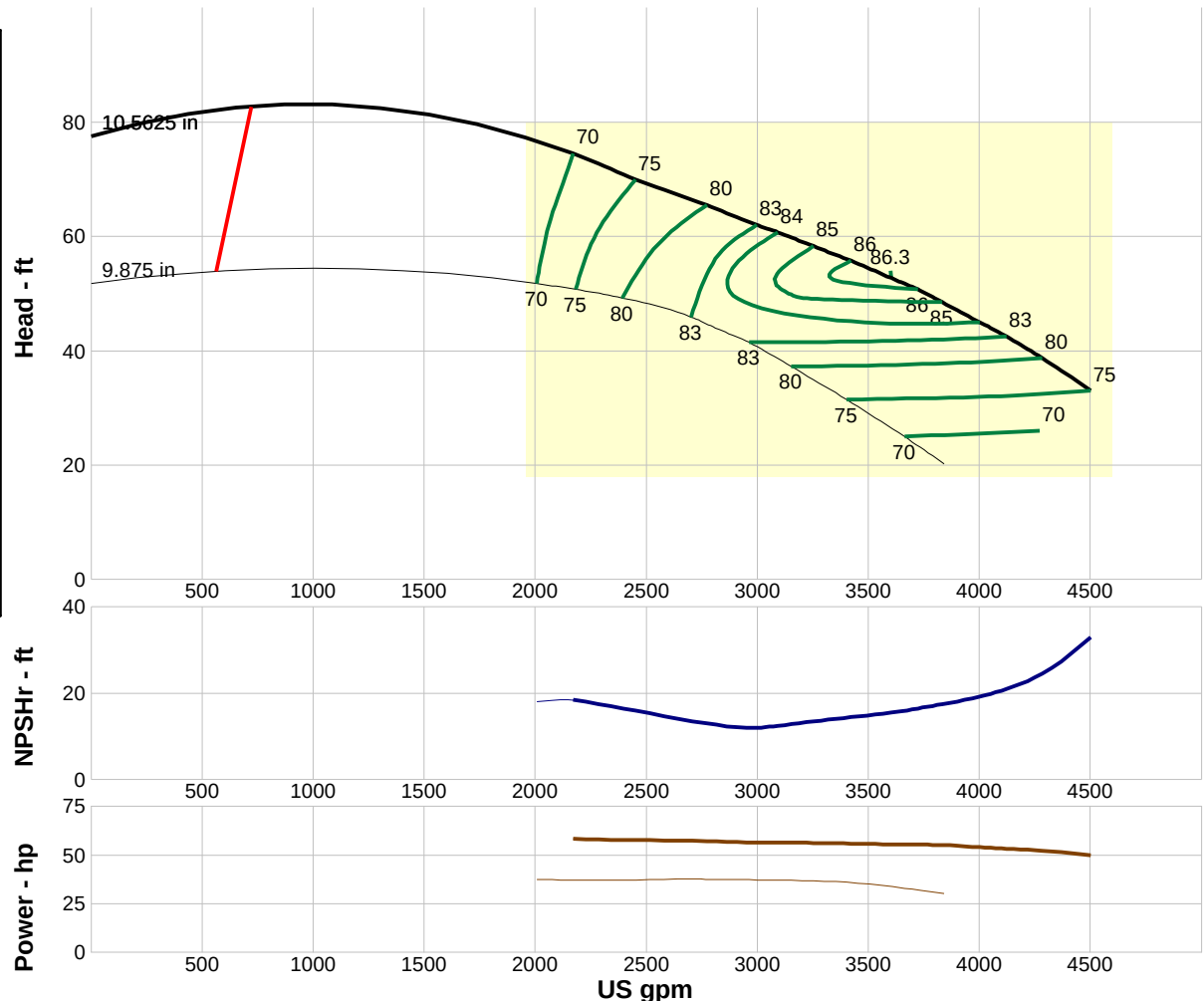
Motor:

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

Pump Limits:

Temperature: 140 °F
 Pressure: 250 psi g
 Sphere size: 0.5 in
 Power: 450 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	3600 US gpm
Head:	52.8 ft
Eff:	86.3%
Power:	55.6 hp
NPSHr:	15.5 ft
---- Design Curve ----	
Shutoff head:	77.5 ft
Shutoff dP:	33.5 psi
Min flow:	720 US gpm
BEP:	86.3% @ 3600 US gpm
NOL power:	61.3 hp @ 720 US gpm
-- Max Curve --	
Max power:	61.3 hp @ 720 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
4320	1760	37.7	79.1	51.9	26
3600	1760	52.8	86.3	55.6	15.5
2880	1760	63.8	81.5	56.9	12.5
2160	1760	74.5	69.8	58.3	18.6
1440	1760	75.5	57	59.8	25