



Company: Bonneville Power Administration

Name:

Date: 11/25/2006

Pump:

Size: 16PS (1 stage)
 Type: Vertical
 Synch speed: 1760 rpm
 Curve: 16PS
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 1760 rpm
 Dia: 13.187 in
 Impeller:
 Ns: 1760
 Nss: ---
 Suction: 12 in
 Discharge: 12 in
 Bowl size: 15.25 in
 Max lateral: 0.875 in
 Thrust K factor: 36 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

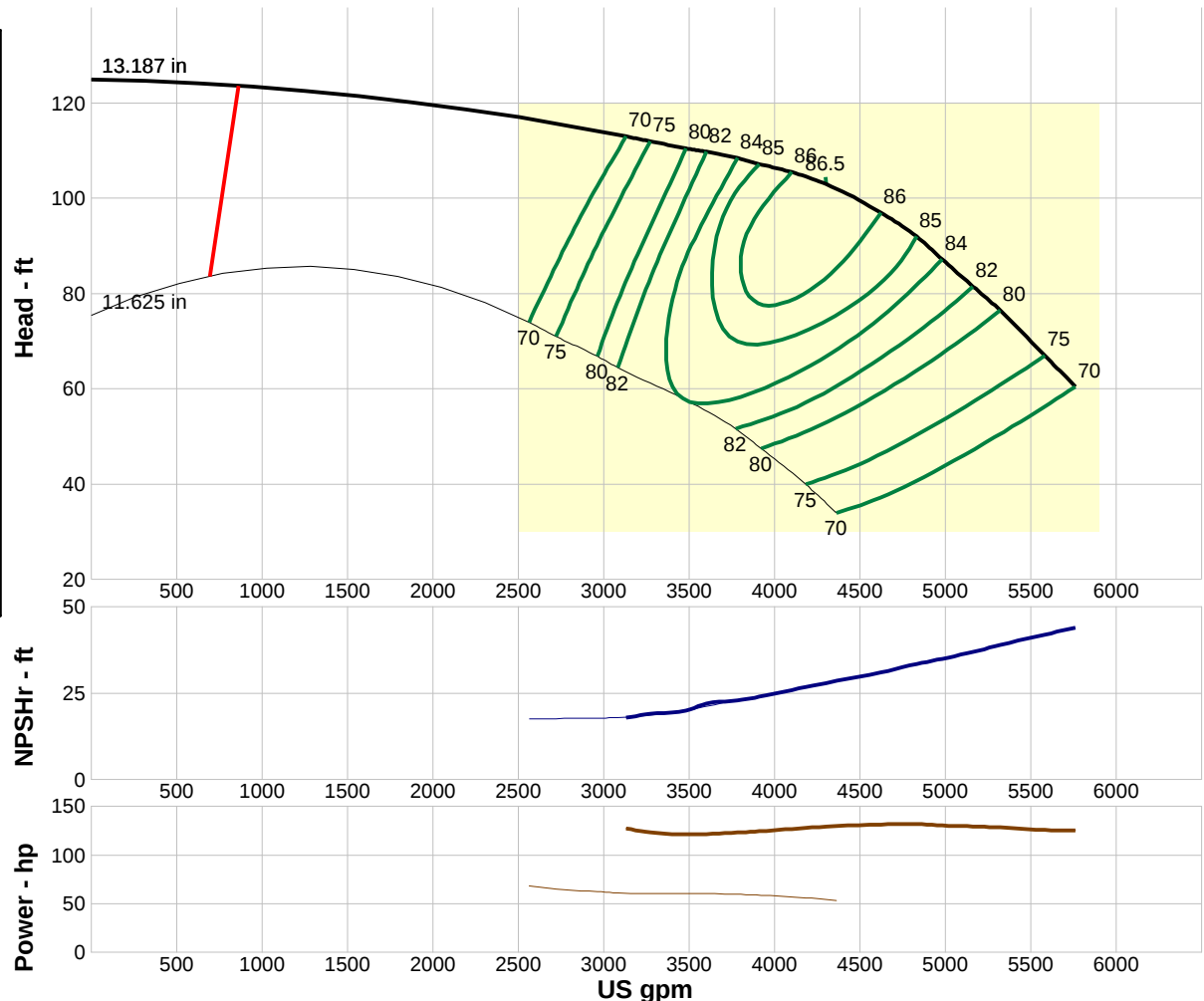
Motor:

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

Pump Limits:

Temperature: 140 °F
 Pressure: 457 psi g
 Sphere size: 1.218 in
 Power: 500 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	4300 US gpm
Head:	103 ft
Eff:	86.5%
Power:	129 hp
NPSHr:	28 ft
---- Design Curve ----	
Shutoff head:	125 ft
Shutoff dP:	54 psi
Min flow:	860 US gpm
BEP:	86.5% @ 4300 US gpm
NOL power:	180 hp @ 1428 US gpm
-- Max Curve --	
Max power:	180 hp @ 1428 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
5530	1760	68.8	76	126	41.4
4608	1760	97.2	86	132	30.9
3686	1760	109	83	122	22.5
2765	1760	114	57	139	15.4
1843	1760	118	24	167	8.81