



Company: Bonneville Power Administration

Name:

Date: 11/25/2006

Pump:

Size: 18HH-2C (1 stage)
 Type: Vertical
 Synch speed: 1760 rpm
 Curve: 18HH-2C
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 1760 rpm
 Dia: 14 in
 Impeller:
 Ns: 1760
 Nss: ---
 Suction: 12 in
 Discharge: 12 in
 Bowl size: 18 in
 Max lateral: 0.469 in
 Thrust K factor: 35 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

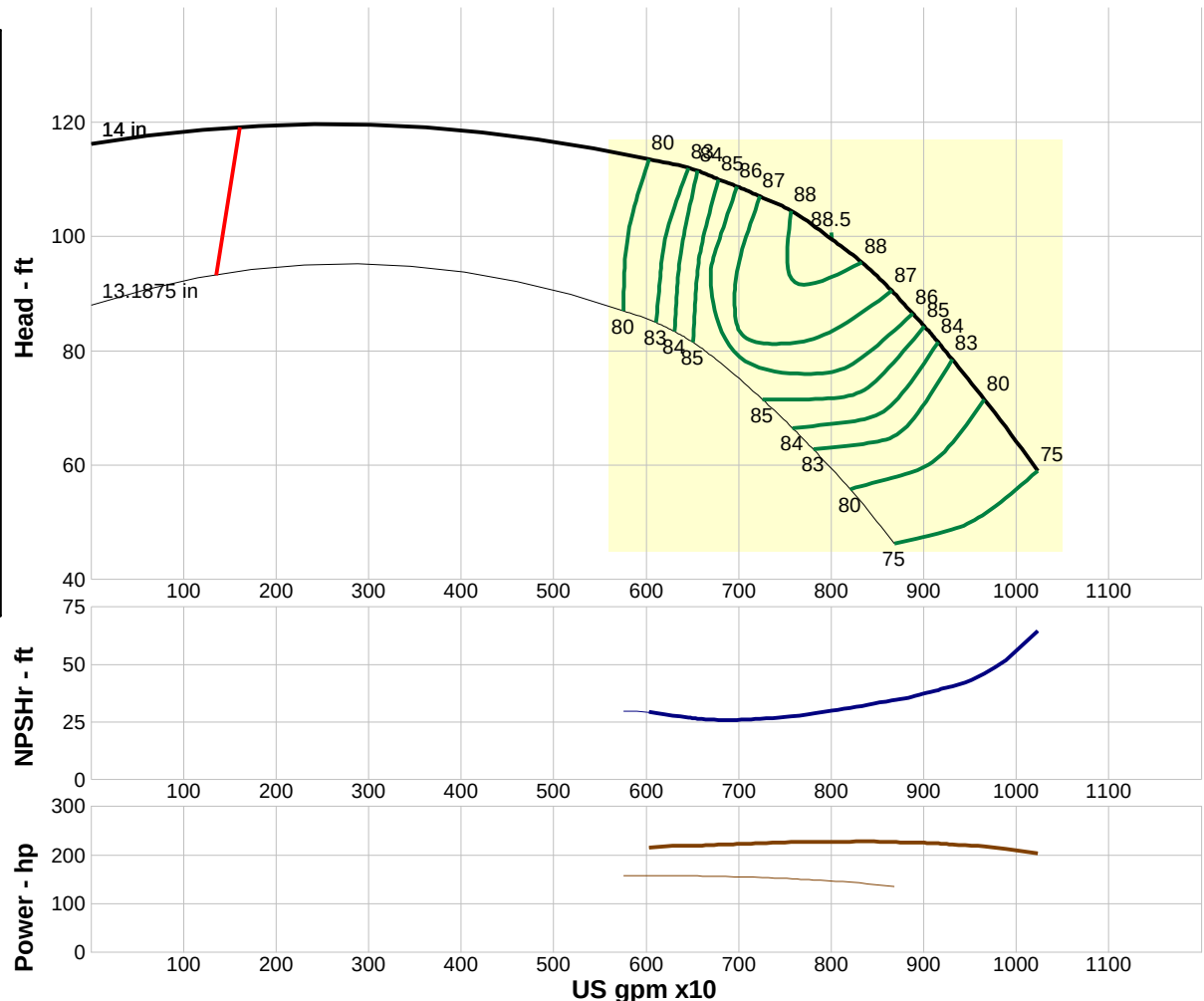
Motor:

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

Pump Limits:

Temperature: 140 °F
 Pressure: 314 psi g
 Sphere size: 0.875 in
 Power: 1000 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	8000 US gpm
Head:	99.5 ft
Eff:	88.5%
Power:	227 hp
NPSHr:	30 ft
---- Design Curve ----	
Shutoff head:	116 ft
Shutoff dP:	50.3 psi
Min flow:	1600 US gpm
BEP:	88.5% @ 8000 US gpm
NOL power:	228 hp @ 8325 US gpm
-- Max Curve --	
Max power:	228 hp @ 8325 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
9816	1760	67.9	78.6	214	51.3
8180	1760	97.3	88.2	228	31.1
6544	1760	112	83.9	220	26.5
4908	1760	114	72.1	206	36.1
3272	1760	115	60.6	190	45.7