

Company: Bonneville Power Administration

Name:

Date: 11/25/2006



Pump:

Size: 6HH (1 stage)
 Type: Submersible
 Synch speed: 3450 rpm
 Curve: 6HH
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 3450 rpm
 Dia: 4.6875 in
 Impeller:
 Ns: 3450
 Nss: ---
 Suction: 4 in
 Discharge: 4 in
 Bowl size: 5.65 in
 Max lateral: 0.35 in
 Thrust K factor: 4.13 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

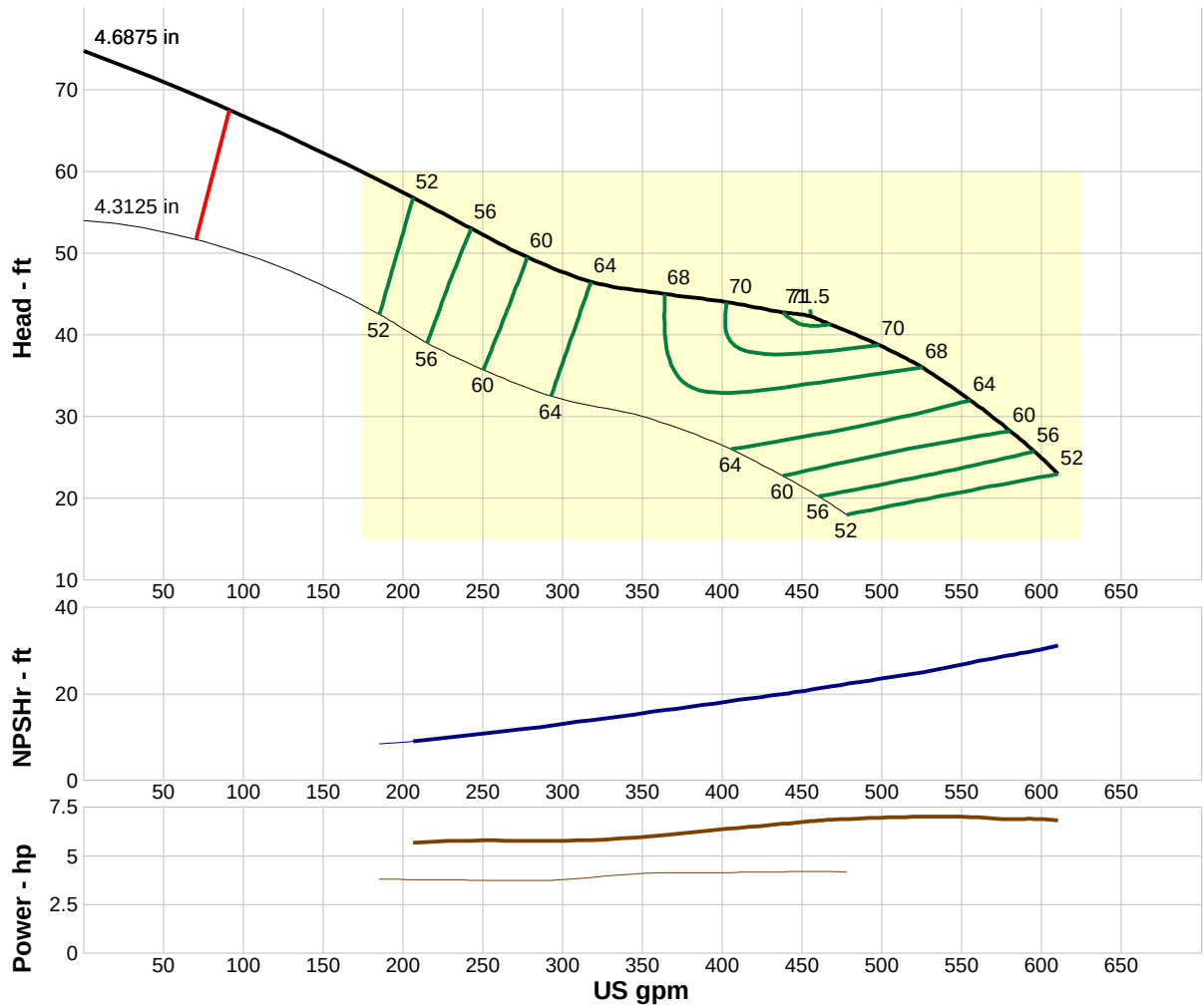
Motor:

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: 250 in
 Power: 60 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	455 US gpm
Head:	42.3 ft
Eff:	71.5%
Power:	6.79 hp
NPSHr:	21 ft
---- Design Curve ----	
Shutoff head:	74.8 ft
Shutoff dP:	32.3 psi
Min flow:	91 US gpm
BEP:	71.5% @ 455 US gpm
NOL power:	7.02 hp @ 525 US gpm
-- Max Curve --	
Max power:	7.02 hp @ 525 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
586	3450	27.3	58.4	6.9	29.4
488	3450	39.6	70.3	6.93	22.9
390	3450	44.3	69.4	6.29	17.6
293	3450	48.3	61.5	5.8	12.8
195	3450	57.7	50.8	5.65	8.53