

Company: Bonneville Power Administration

Name:

Date: 11/25/2006



Pump:

Size: 6LC-1C (1 stage)
 Type: Submersible
 Synch speed: 3450 rpm
 Curve: 6LC-1C
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 3450 rpm
 Dia: 4.4687 in
 Impeller:
 Ns: 3450
 Nss: ---
 Suction: 4 in
 Discharge: 4 in
 Bowl size: 5.65 in
 Max lateral: 0.281 in
 Thrust K factor: 1.5 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

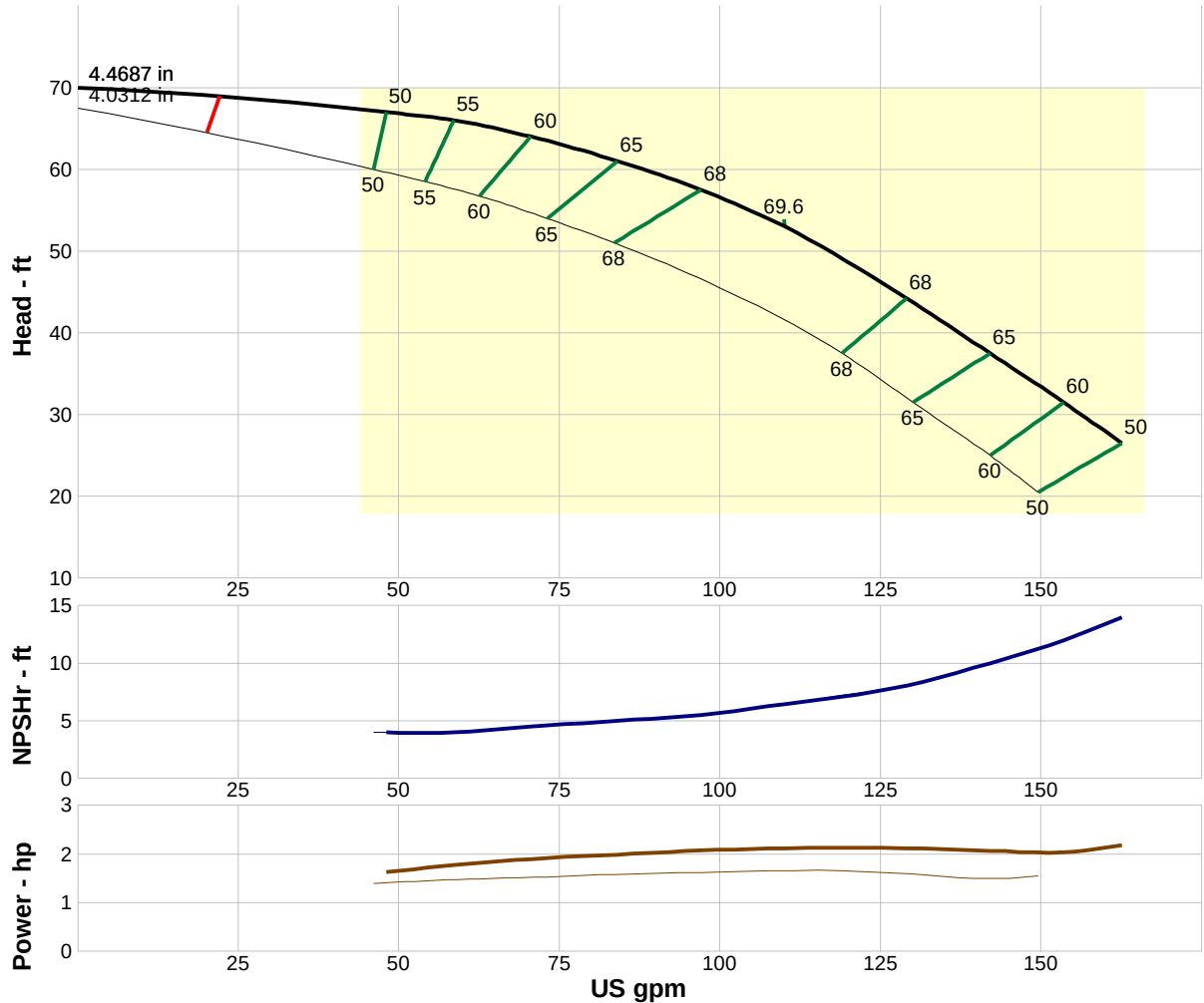
Motor:

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

Pump Limits:

Temperature: 140 °F
 Pressure: 400 psi g
 Sphere size: 0.25 in
 Power: 150 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	110 US gpm
Head:	53 ft
Eff:	69.6%
Power:	2.12 hp
NPSHr:	6.46 ft
---- Design Curve ----	
Shutoff head:	70 ft
Shutoff dP:	30.3 psi
Min flow:	22 US gpm
BEP:	69.6% @ 110 US gpm
NOL power:	2.17 hp @ 163 US gpm
-- Max Curve --	
Max power:	2.17 hp @ 163 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
156	3450	30.1	57.2	2.07	12.6
130	3450	43.7	67.8	2.12	8.21
104	3450	55.1	68.9	2.09	6.02
78	3450	62.3	62.8	1.95	4.78
52	3450	66.6	51.9	1.68	4