

Company: Bonneville Power Administration

Name:

Date: 11/26/2006



Pump:

Size: 12"5822
Type: 5800-HSC
Synch speed: 900 rpm
Curve: 221208A
Specific Speeds:
Dimensions:
Speed: 885 rpm
Dia: 18 in
Impeller: D12B1A
Ns: 1732
Nss: 10190
Suction: 14 in
Discharge: 12 in

Pump Limits:

Temperature: 160 °F
Pressure: 175 psi g
Sphere size: 1 in
Power: --- hp
Eye area: --- in²

Search Criteria:

Flow: --- US gpm
Head: --- ft

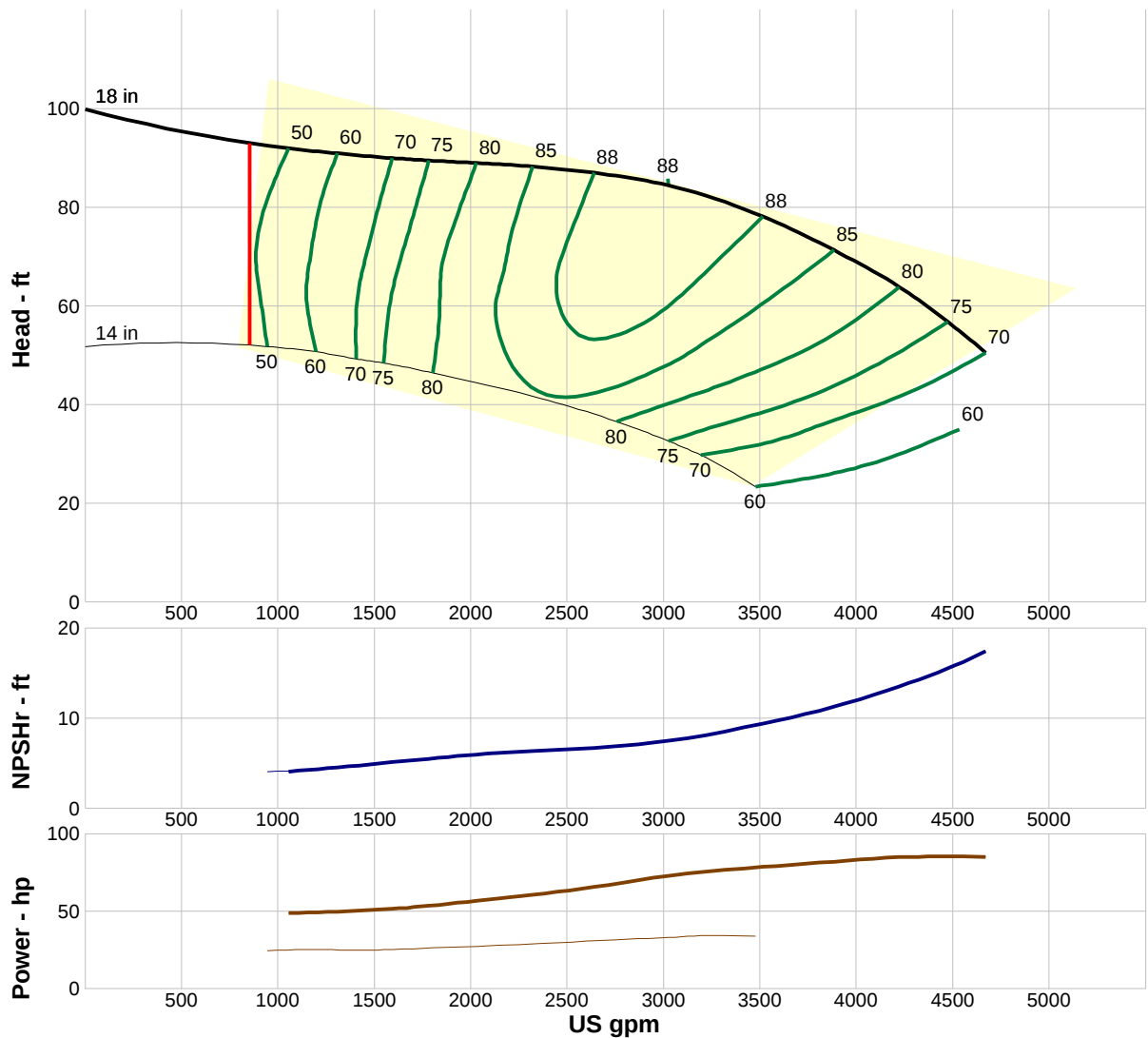
Fluid:

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
Size: 100 hp
Speed: 900
Frame: 445T

---- Data Point ----	
Flow:	3023 US gpm
Head:	84.4 ft
Eff:	88%
Power:	73.1 hp
NPSHr:	7.51 ft
---- Design Curve ----	
Shutoff head:	99.8 ft
Shutoff dP:	43.2 psi
Min flow:	850 US gpm
BEP:	88% @ 3023 US gpm
NOL power:	85.5 hp @ 4472 US gpm
-- Max Curve --	
Max power:	85.5 hp @ 4472 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
4482	885	56.5	75	85.5	15.6
3735	885	74	86	80.8	10.6
2988	885	84.6	88	72.5	7.44
2241	885	88.4	84	59.8	6.27
1494	885	90.3	67	51.1	4.95