



Company: Bonneville Power Administration

Name:

Date: 2/8/2007

Selection: FPI

Pump:

Size: AF42-36-505

Type: AXIAL FLOW

Synch speed: 515 rpm

Curve:

Specific Speeds:

Dimensions:

Speed: 505 rpm

Line: A (42)

Impeller:

Ns: ---

Nss: ---

Suction: --- in

Discharge: --- in

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

--- hp

Speed: ---

Frame: ---

Sizing criteria: Max Power on Design Curve

Pump Limits:

Temperature: --- °F

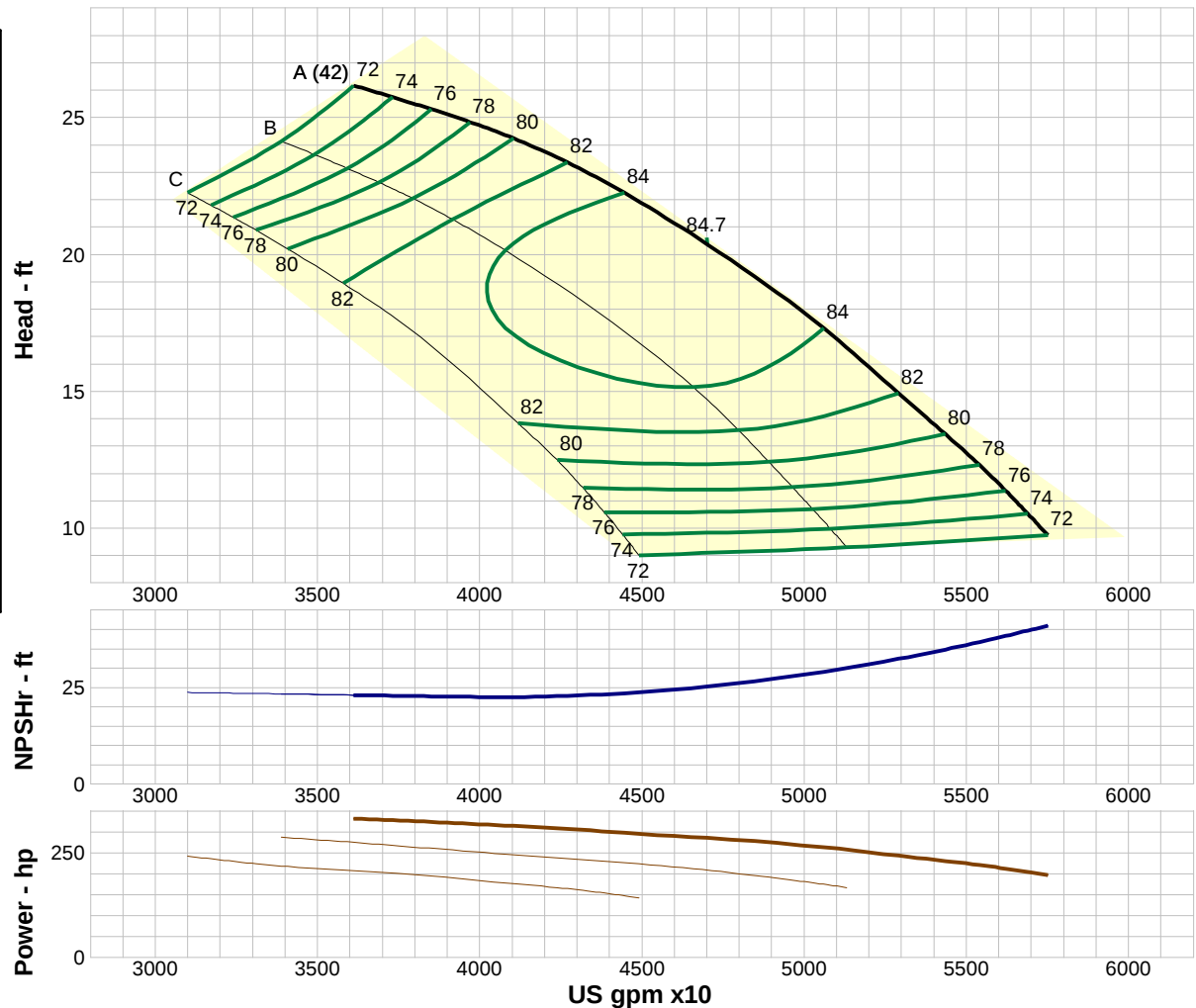
Pressure: --- psi g

Sphere size: --- in

Power: --- hp

Eye area: --- in²

---- Data Point ----	
Flow:	47000 US gpm
Head:	20.4 ft
Eff:	84.7%
Power:	285 hp
NPSHr:	25.3 ft
---- Design Curve ----	
Shutoff head:	25.3 ft
Shutoff dP:	10.9 psi
Min flow:	--- US gpm
BEP:	84.7% @ 47000 US gpm
NOL power:	331 hp @ 36100 US gpm
-- Max Curve --	
Max power:	331 hp @ 36100 US gpm



The performance is guaranteed for the design point only when pumping clean water at 85 degrees F. Consult factory for certified performance curve.

Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
55200	505	12.5	78.3	222	36.4
46000	505	21.1	84.4	290	24.6
36800	505	25.9	73.2	329	23
27600	505	---	---	---	---
18400	505	---	---	---	---