



Company: Bonneville Power Administration

Name:

Date: 2/8/2007

Selection: FPI

Pump:

Size: AF42-36-440

Type: AXIAL FLOW

Synch speed: 450 rpm

Curve:

Specific Speeds:

Dimensions:

Speed: 440 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: 40950 US gpm

Head: 15.5 ft

Eff: 84.7%

Power: 189 hp

NPSHr: 20.3 ft

---- Design Curve ----

Shutoff head: 19.2 ft

Shutoff dP: 8.3 psi

Min flow: --- US gpm

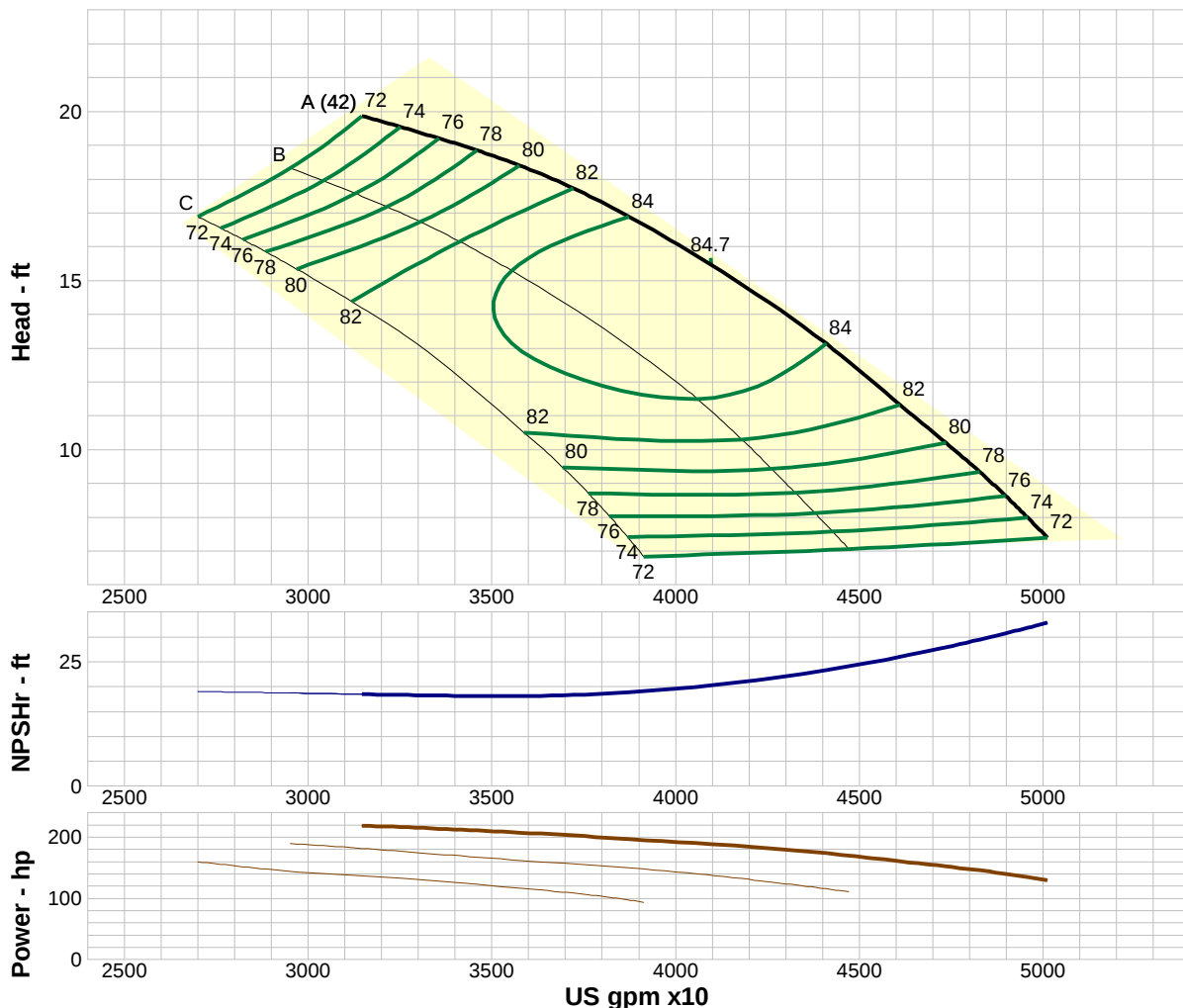
BEP: 84.7% @ 40950 US gpm

NOL power: 219 hp @ 31454 US gpm

-- Max Curve --

Max power:

219 hp @ 31454 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
48095	440	9.5	78.4	147	29.2
40079	440	16	84.4	192	19.7
32063	440	19.7	73.2	218	18.4
24047	440	---	---	---	---
16032	440	---	---	---	---