



Company: Bonneville Power Administration

Name:

Date: 2/8/2007

Selection: FPI

Pump:

Size: AF12-11-1750

Type: AXIAL FLOW

Synch speed: 1800 rpm

Curve:

Specific Speeds:

Dimensions:

Speed: 1750 rpm

Line: A (12)

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

Size: 40 hp

Speed: 1800

Frame: 324T

Sizing criteria: Max Power on Design Curve

Pump Limits:

Temperature: --- °F

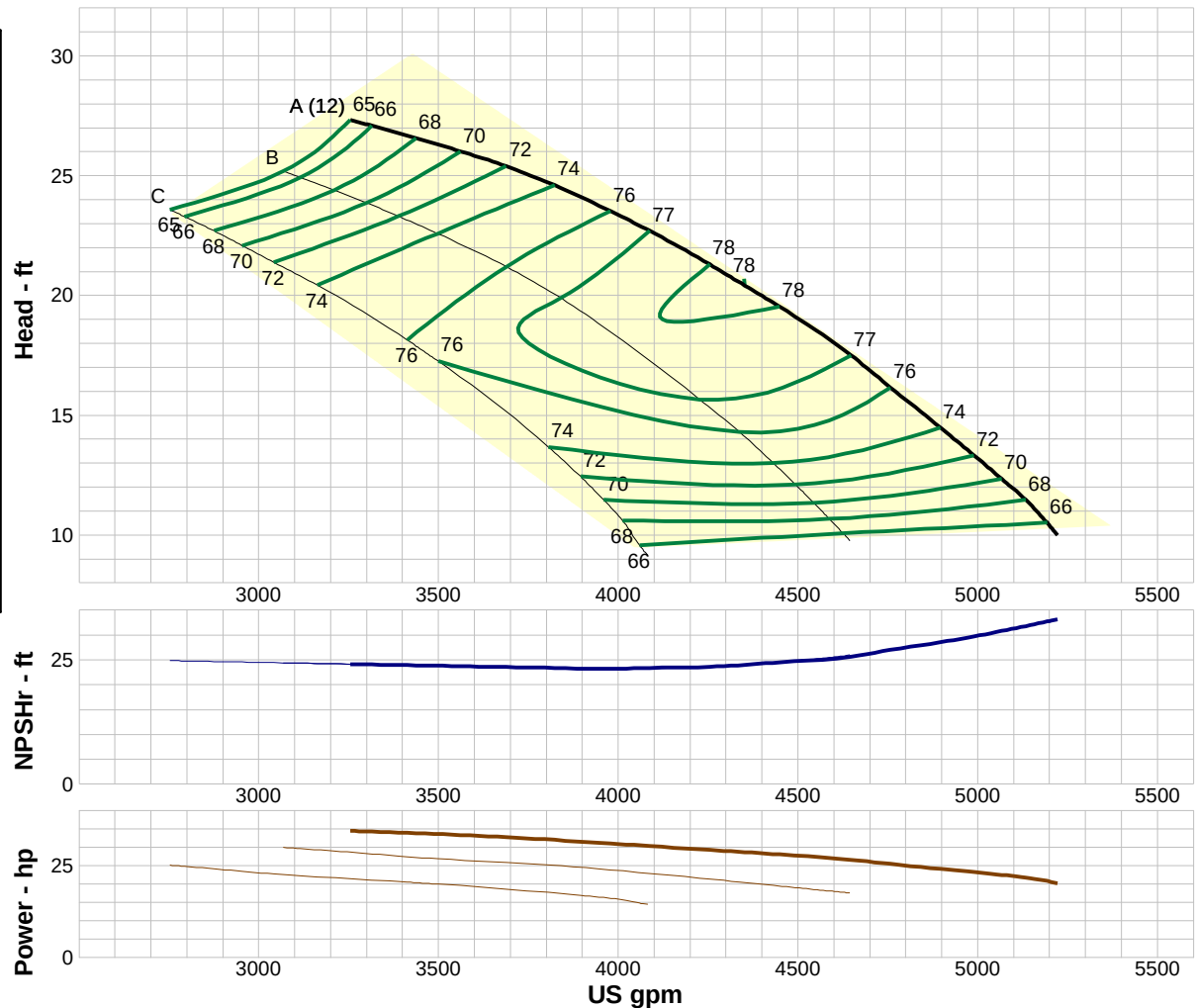
Pressure: --- psi g

Sphere size: --- in

Power: --- hp

Eye area: --- in²

---- Data Point ----	
Flow:	4350 US gpm
Head:	20.4 ft
Eff:	78%
Power:	28.7 hp
NPSHr:	24 ft
---- Design Curve ----	
Shutoff head:	26.4 ft
Shutoff dP:	11.4 psi
Min flow:	--- US gpm
BEP:	78% @ 4350 US gpm
NOL power:	34.5 hp @ 3253 US gpm
-- Max Curve --	
Max power:	34.5 hp @ 3253 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
5011	1750	13	71.4	23.1	30
4176	1750	21.9	77.5	29.8	23.5
3341	1750	27	66.4	34.2	24
2506	1750	---	---	---	---
1670	1750	---	---	---	---