



Company: Bonneville Power Administration

Name:

Date: 2/8/2007

Selection: FPI

Pump:

Size: AF18-16-1180

Type: AXIAL FLOW

Synch speed: 1200 rpm

Curve:

Specific Speeds:

Dimensions:

Speed: 1180 rpm

Line: A (18)

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: 75 hp

Speed: 1200

Frame: 405T

Sizing criteria: Max Power on Design Curve

Pump Limits:

Temperature: --- °F

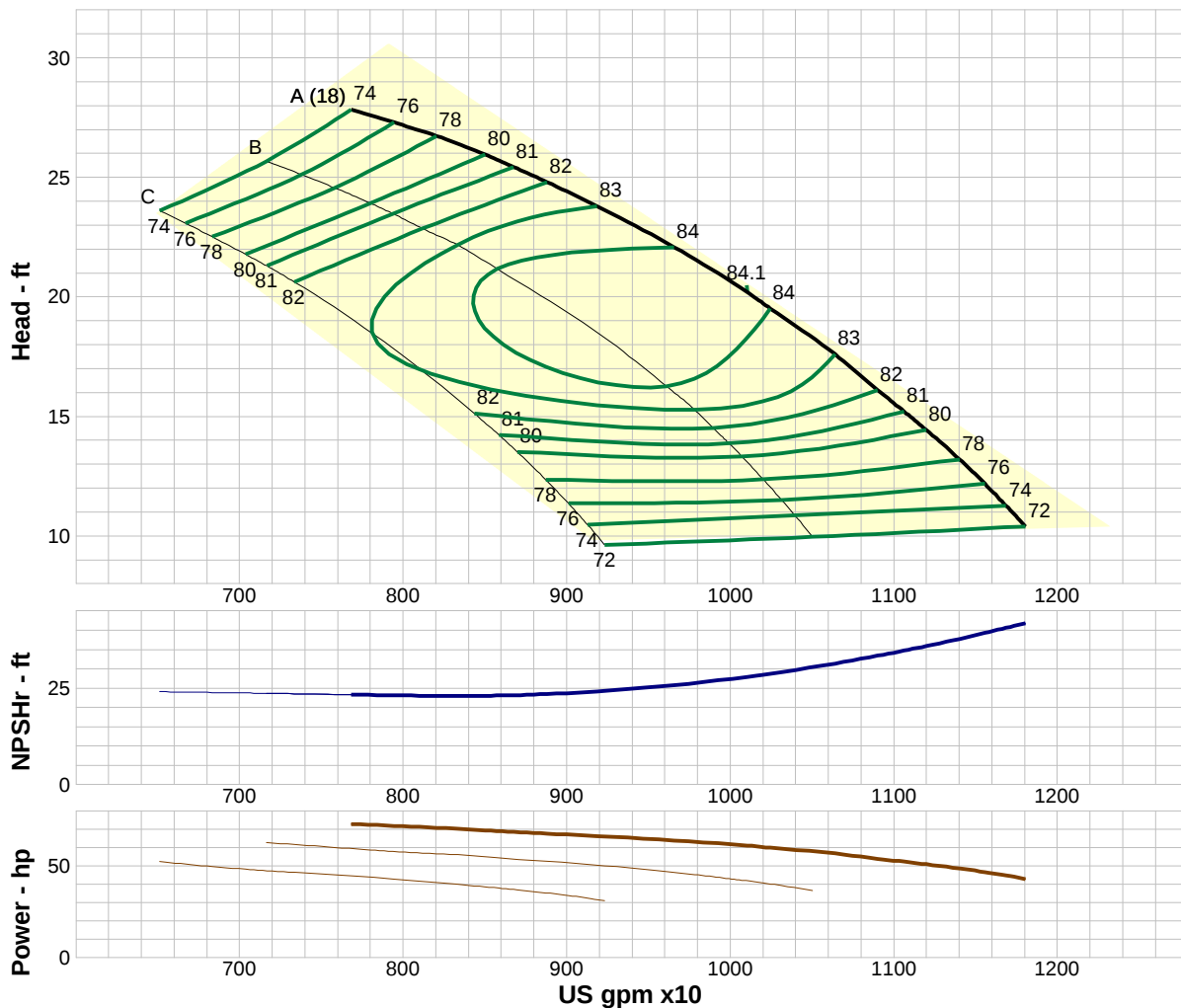
Pressure: --- psi g

Sphere size: --- in

Power: --- hp

Eye area: --- in²

---- Data Point ----	
Flow:	10100 US gpm
Head:	20.2 ft
Eff:	84.1%
Power:	61.3 hp
NPSHr:	28 ft
---- Design Curve ----	
Shutoff head:	27.4 ft
Shutoff dP:	11.8 psi
Min flow:	--- US gpm
BEP:	84.1% @ 10100 US gpm
NOL power:	73 hp @ 7679 US gpm
-- Max Curve --	
Max power:	73 hp @ 7679 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
11328	1180	13.6	78.7	49.5	37.1
9440	1180	22.9	83.5	65.2	25.1
7552	1180	---	---	---	---
5664	1180	---	---	---	---
3776	1180	---	---	---	---