

Company: Bonneville Power Administration

Name:

Date: 11/26/2006



Pump:

Size: 10"5821
Type: 5800-HSC
Synch speed: 1200 rpm
Curve: 211006E
Specific Speeds:
Dimensions:
Speed: 1185 rpm
Dia: 14 in
Impeller: D10C1A
Ns: 2800
Nss: 10083
Suction: 12 in
Discharge: 10 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

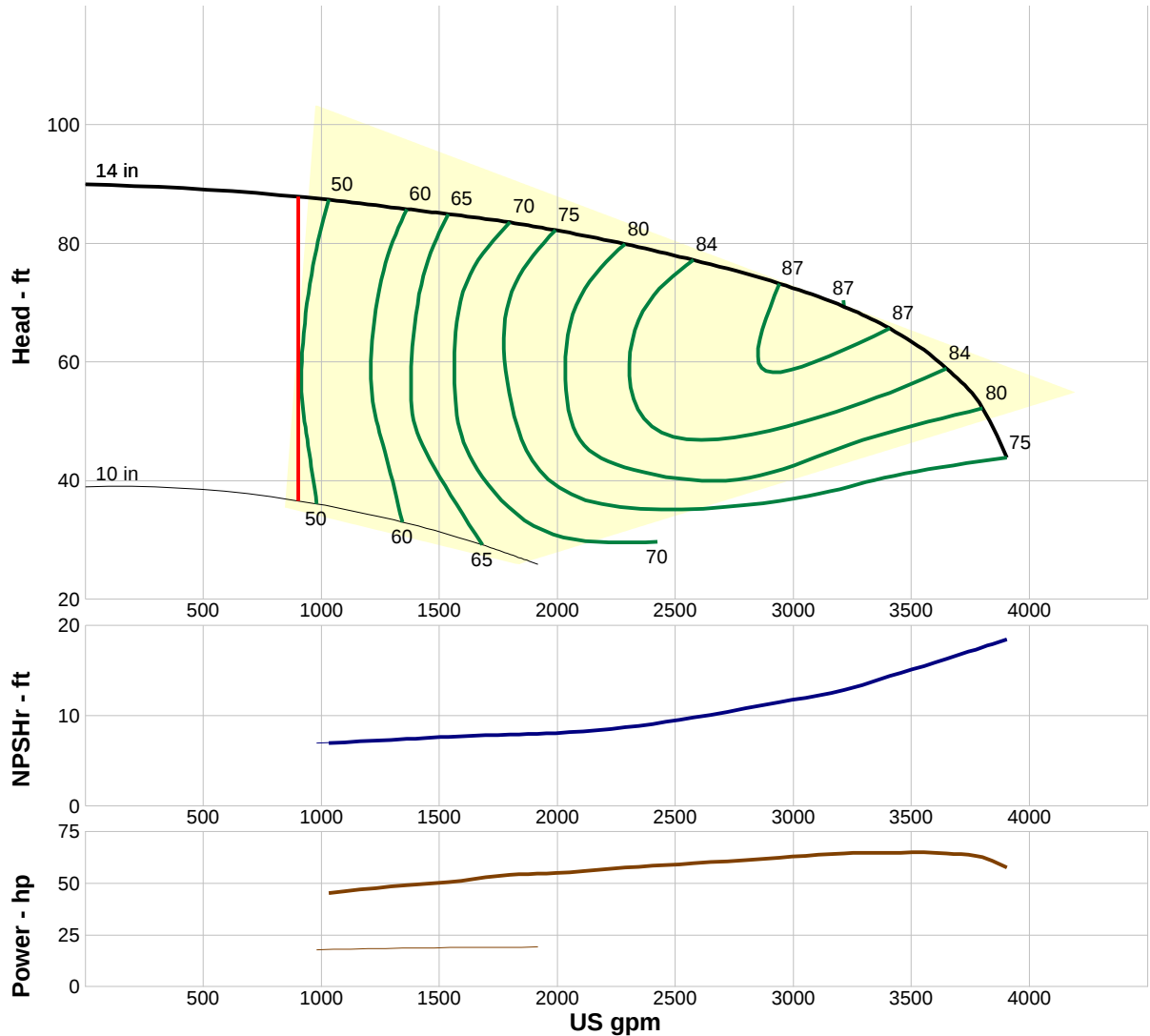
Motor:

Standard: NEMA
Enclosure: TEFC
Sizing criteria: Max Power on Design Curve
Size: 75 hp
Speed: 1200
Frame: 405T

Pump Limits:

Temperature: 160 °F
Pressure: 175 psi g
Sphere size: 1.13 in
Power: --- hp
Eye area: --- in²

---- Data Point ----	
Flow:	3213 US gpm
Head:	69.3 ft
Eff:	87%
Power:	64.6 hp
NPSHr:	12.9 ft
---- Design Curve ----	
Shutoff head:	89.9 ft
Shutoff dP:	38.9 psi
Min flow:	900 US gpm
BEP:	87% @ 3213 US gpm
NOL power:	64.9 hp @ 3405 US gpm
-- Max Curve --	
Max power:	64.9 hp @ 3405 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
3746	1185	54.5	81	63.3	17.2
3122	1185	70.6	87	63.9	12.4
2498	1185	77.9	83	59.2	9.53
1873	1185	83	72	54.5	8
1249	1185	86.3	57	47.9	7.29