

Company: Bonneville Power Administration

Name:

Date: 11/26/2006



Pump:

Size: 8"2821A
Type: 2800-HSC
Synch speed: 1200 rpm
Curve: 210806A
Specific Speeds:
Dimensions:
Speed: 1175 rpm
Dia: 9.63 in
Impeller: J8C1A3
Ns: 4208
Nss: 8664
Suction: 10 in
Discharge: 8 in

Pump Limits:

Temperature: 160 °F
Pressure: 250 psi g
Sphere size: 0.88 in
Power: --- hp
Eye area: --- in²

Search Criteria:

Flow: --- US gpm
Head: --- ft

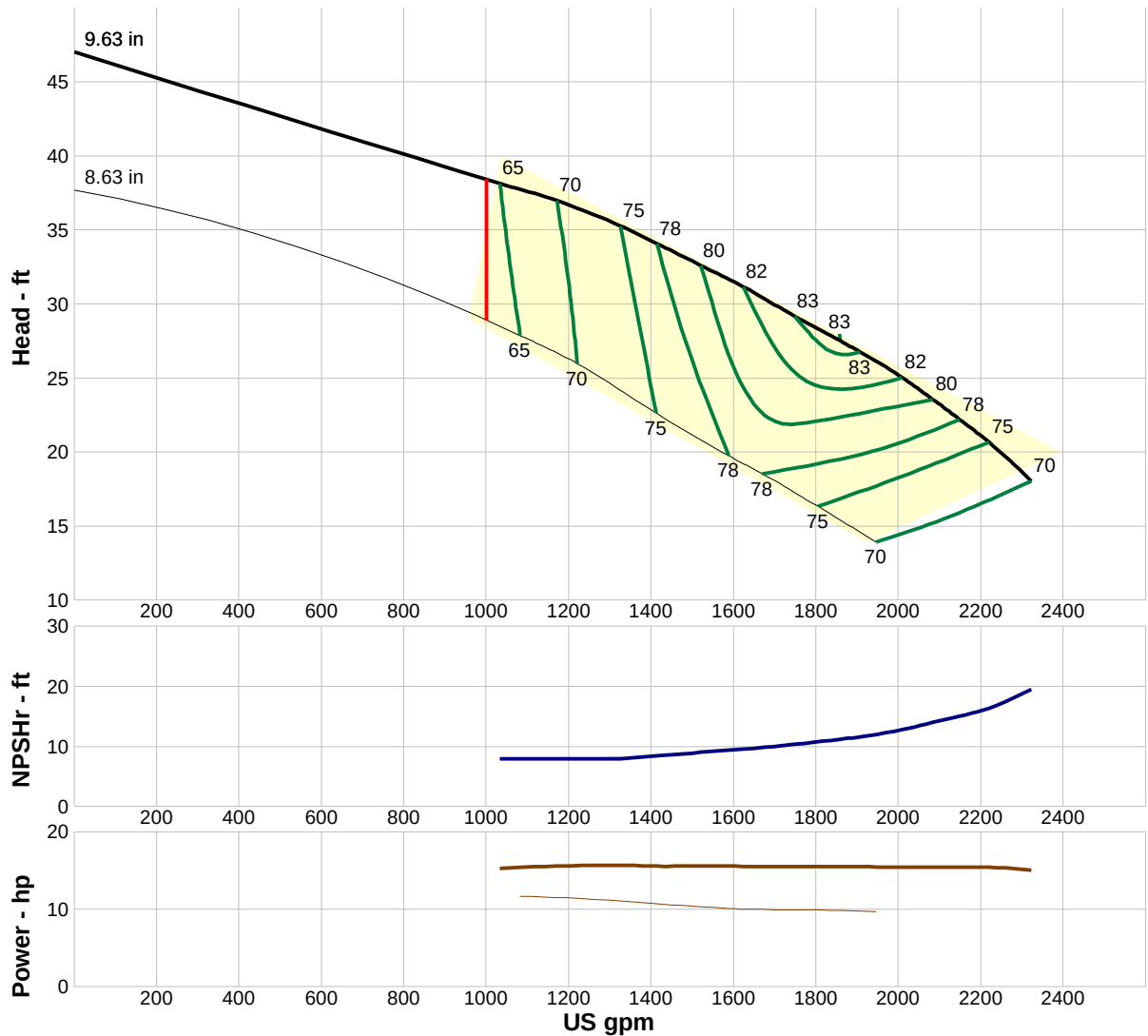
Fluid:

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: 20 hp
Speed: 1200
Frame: 286T

---- Data Point ----	
Flow:	1857 US gpm
Head:	27.5 ft
Eff:	83%
Power:	15.5 hp
NPSHr:	11.2 ft
---- Design Curve ----	
Shutoff head:	47 ft
Shutoff dP:	20.3 psi
Min flow:	1000 US gpm
BEP:	83% @ 1857 US gpm
NOL power:	15.7 hp @ 1324 US gpm
-- Max Curve --	
Max power:	15.7 hp @ 1324 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
2228	1175	20.4	75	15.4	16.6
1857	1175	27.5	83	15.5	11.2
1486	1175	33.1	79	15.6	8.84
1114	1175	37.4	68	15.5	8
743	1175	---	---	---	---