

Company: Bonneville Power Administration

Name:

Date: 11/26/2006



Pump:

Size: 4"2874C
Type: 2800-HSC
Synch speed: 1800 rpm
Curve: 740404C
Specific Speeds:
Dimensions:
Speed: 1765 rpm
Dia: 9 in
Impeller: J4C1C1
Ns: 1943
Nss: 9240
Suction: 6 in
Discharge: 4 in

Pump Limits:

Temperature: 160 °F
Pressure: 300 psi g
Sphere size: 0.5 in
Power: --- hp
Eye area: --- in²

Search Criteria:

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

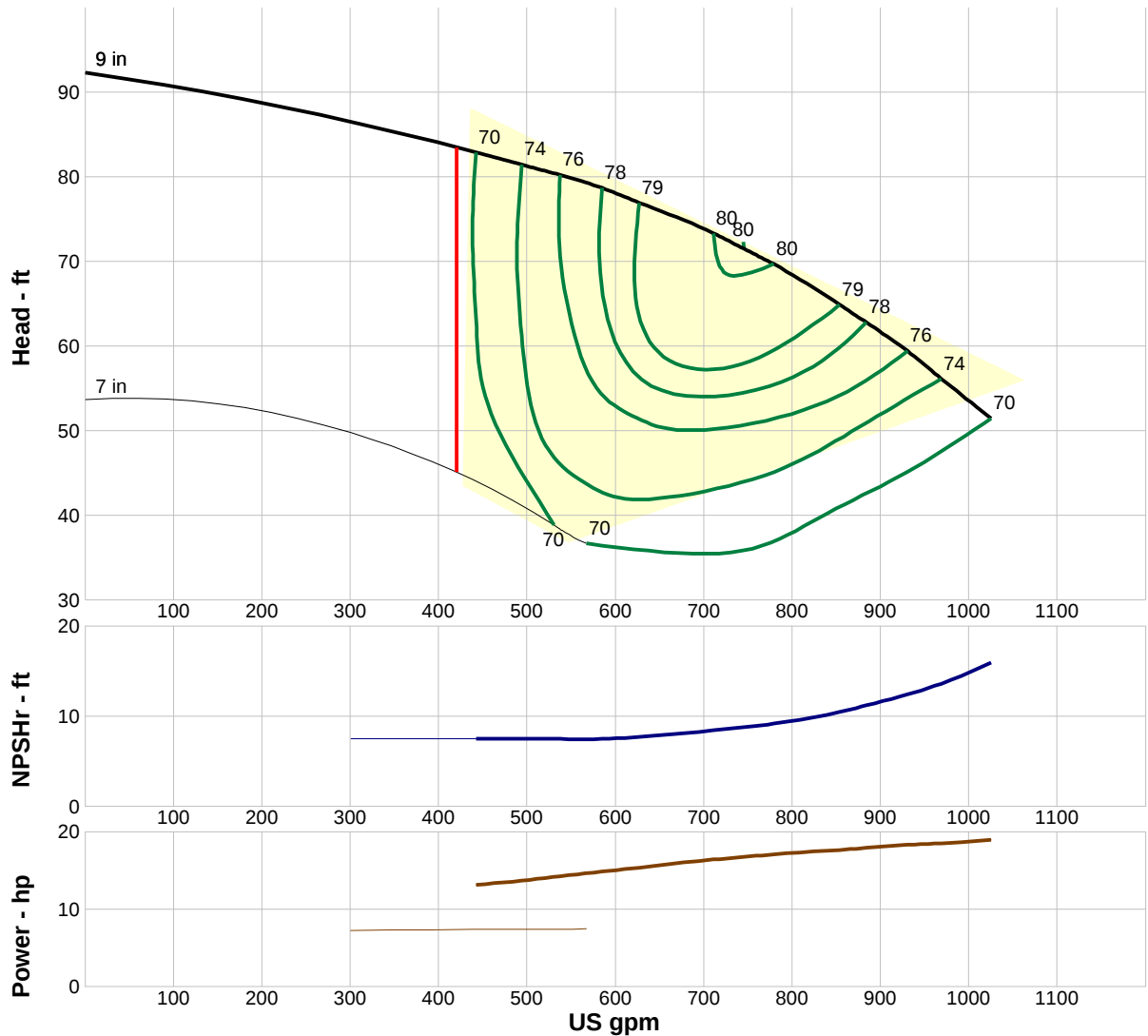
Fluid:

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: 1800
Frame: 256T

---- Data Point ----	
Flow:	745 US gpm
Head:	71.5 ft
Eff:	80%
Power:	16.8 hp
NPSHr:	8.8 ft
---- Design Curve ----	
Shutoff head:	92.3 ft
Shutoff dP:	39.9 psi
Min flow:	420 US gpm
BEP:	80% @ 745 US gpm
NOL power:	19 hp @ 1025 US gpm
-- Max Curve --	
Max power:	19 hp @ 1025 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
984	1765	54.9	73	18.7	14.3
820	1765	67.1	79	17.5	9.92
656	1765	75.7	79	15.8	7.99
492	1765	81.5	74	13.7	7.5
328	1765	---	---	---	---