

Company: Bonneville Power Administration

Name:

Date: 11/25/2006



Pump:

Size: 8LC-2C (1 stage)
 Type: Vertical
 Synch speed: 1760 rpm
 Curve: 8LC-2C
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 1760 rpm
 Dia: 5.9375 in
 Impeller:
 Ns: 1760
 Nss: ---
 Suction: 6 in
 Discharge: 6 in
 Bowl size: 7.687 in
 Max lateral: 0.281 in
 Thrust K factor: 2.6 lb/ft

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

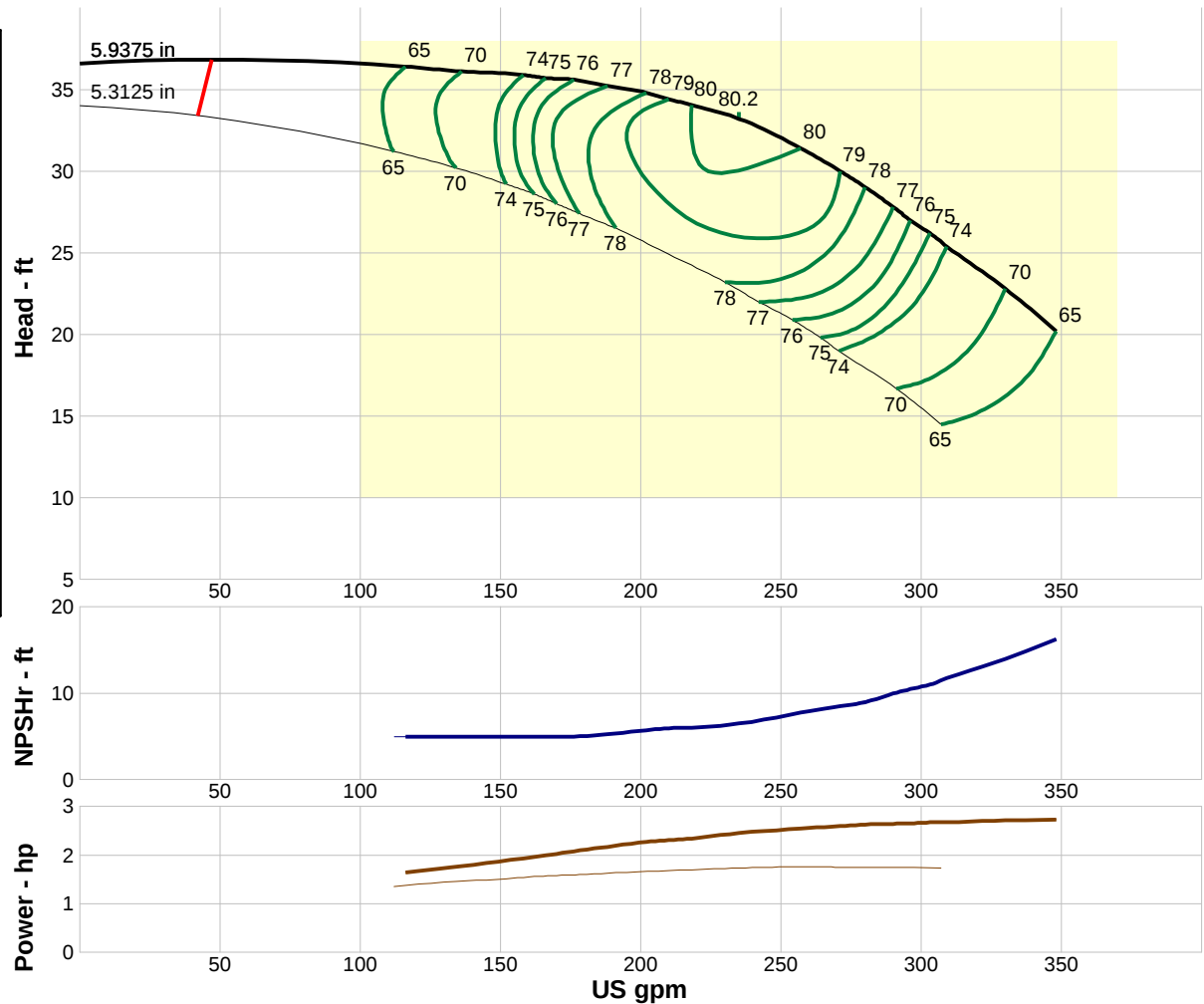
Motor:

Standard: NEMA --- hp
 Enclosure: TEFC Speed: ---
 Frame: ---
 Sizing criteria: Max Power on Design Curve

Pump Limits:

Temperature: 140 °F
 Pressure: --- psi g
 Sphere size: 0.25 in
 Power: 150 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	235 US gpm
Head:	33.2 ft
Eff:	80.2%
Power:	2.46 hp
NPSHr:	6.5 ft
---- Design Curve ----	
Shutoff head:	36.6 ft
Shutoff dP:	15.8 psi
Min flow:	47 US gpm
BEP:	80.2% @ 235 US gpm
NOL power:	2.73 hp @ 348 US gpm
-- Max Curve --	
Max power:	2.73 hp @ 348 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
334	1760	22.2	68.9	2.72	14.5
278	1760	29.2	78.2	2.62	8.89
222	1760	33.9	80	2.37	6.12
167	1760	35.7	75.1	2	5
111	1760	36.4	63.8	1.61	5