

Company: Bonneville Power Administration

Name:

Date: 11/25/2006



Pump:

Size: 8HH (1 stage)
 Type: Vertical
 Synch speed: 1760 rpm
 Curve: 8HH
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 1760 rpm
 Dia: 6.365 in
 Impeller:
 Ns: 1760
 Nss: ---
 Suction: 5 in
 Discharge: 5 in
 Bowl size: 7.938 in
 Max lateral: 0.375 in
 Thrust K factor: 8 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

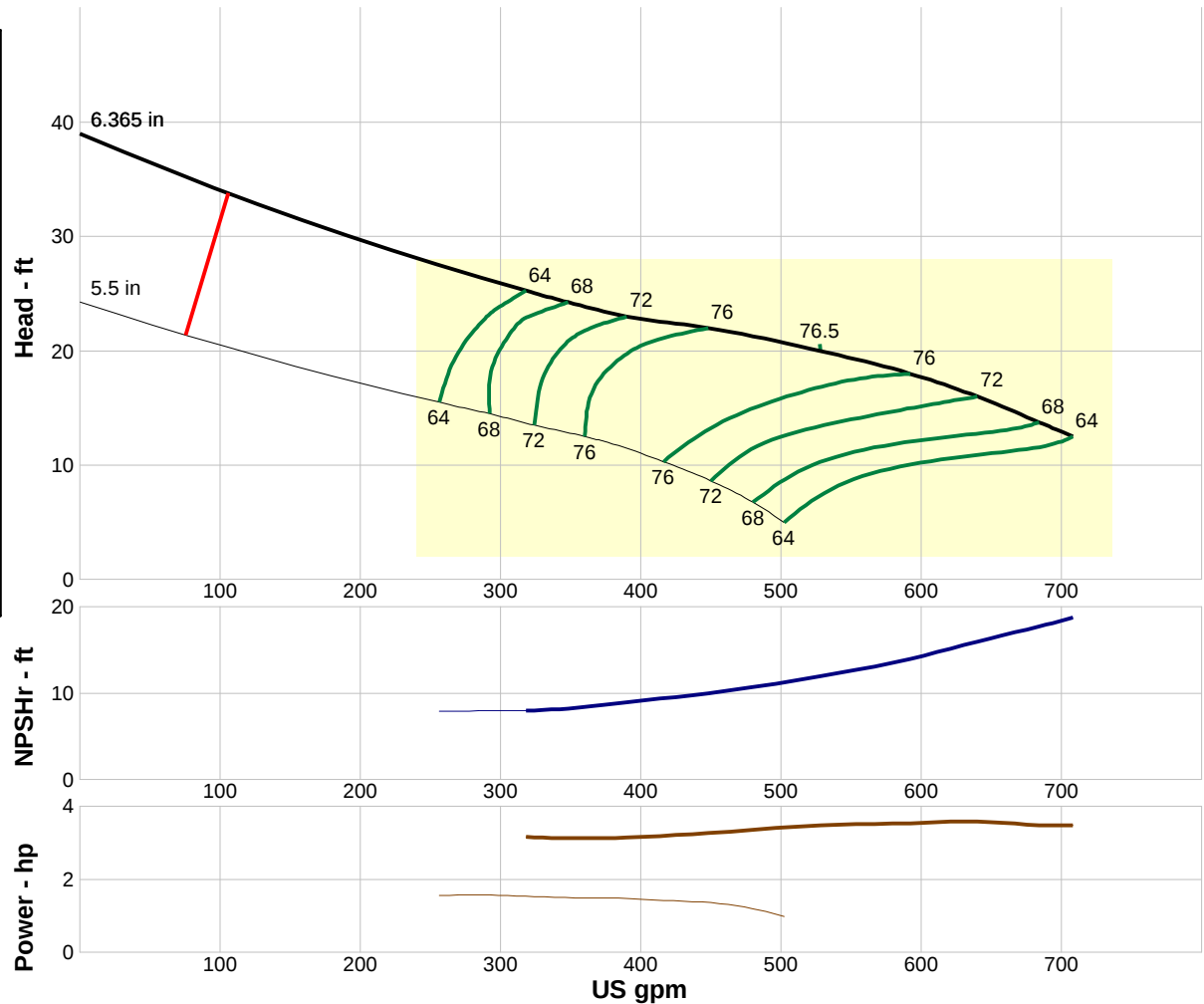
Motor:

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

Pump Limits:

Temperature: 140 °F
 Pressure: 692 psi g
 Sphere size: 1.125 in
 Power: 150 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	528 US gpm
Head:	20 ft
Eff:	76.5%
Power:	3.49 hp
NPSHr:	12 ft
---- Design Curve ----	
Shutoff head:	39 ft
Shutoff dP:	16.9 psi
Min flow:	106 US gpm
BEP:	76.5% @ 528 US gpm
NOL power:	3.59 hp @ 640 US gpm
-- Max Curve --	
Max power:	3.59 hp @ 640 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
679	1760	14	68.5	3.5	17.6
566	1760	18.8	76.2	3.52	13.2
453	1760	21.9	76	3.29	10.1
340	1760	24.5	66.9	3.14	8.18
226	1760	29.2	51.7	3.27	7.23