



Company: Bonneville Power Administration

Name:

Date: 11/25/2006

Pump:

Size: 8HXH (1 stage)
 Type: Vertical
 Synch speed: 3450 rpm
 Curve: 8HXH
 Specific Speeds:
 Dimensions:
 Vertical Turbine:
 Speed: 3450 rpm
 Dia: 6 in
 Impeller:
 Ns: 3450
 Nss: ---
 Suction: 6 in
 Discharge: 6 in
 Bowl size: 7.75 in
 Max lateral: 0.281 in
 Thrust K factor: 3.62 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

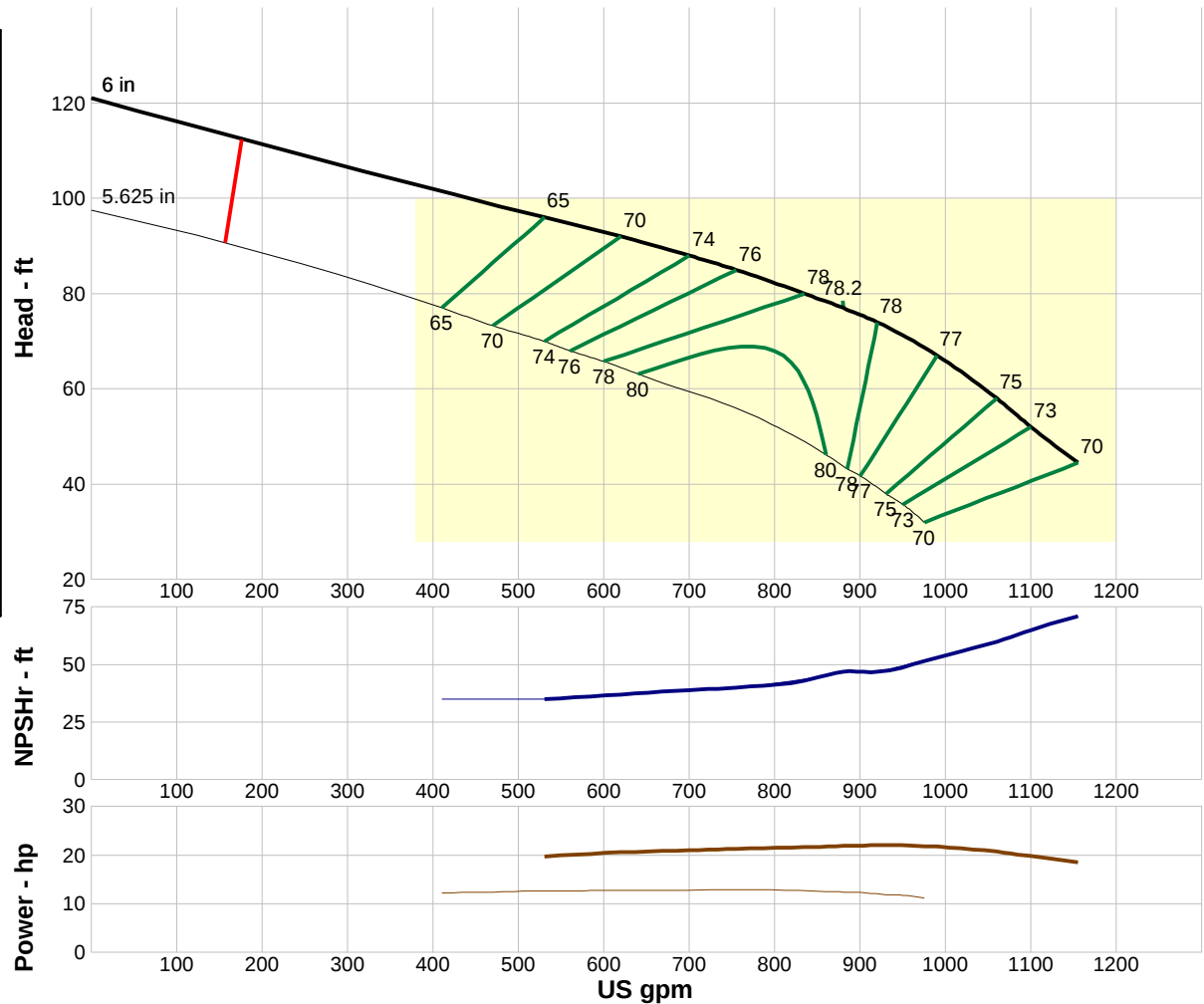
Motor:

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

Pump Limits:

Temperature: 140 °F
 Pressure: 410 psi g
 Sphere size: 0.5 in
 Power: 150 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	880 US gpm
Head:	77 ft
Eff:	78.2%
Power:	21.9 hp
NPSHr:	47 ft
---- Design Curve ----	
Shutoff head:	121 ft
Shutoff dP:	52.3 psi
Min flow:	176 US gpm
BEP:	78.2% @ 880 US gpm
NOL power:	22 hp @ 920 US gpm
-- Max Curve --	
Max power:	22 hp @ 920 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
1109	3450	50.8	72.5	19.6	66
924	3450	73.6	77.9	22	47.1
739	3450	85.9	75.4	21.2	39.7
554	3450	94.9	66.3	20	35.5
370	3450	104	56.1	18.3	31.4