

Company: Bonneville Power Administration

Name:

Date: 11/25/2006



Pump:

Size: 7SS50 (1 stage)
 Type: Submersible
 Synch speed: 3450 rpm
 Curve: 7SS50
 Specific Speeds:
 Dimensions:
 Speed: 3450 rpm
 Dia: 6 in
 Impeller:
 Ns: 3450
 Nss: ---
 Suction: --- in
 Discharge: --- in

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

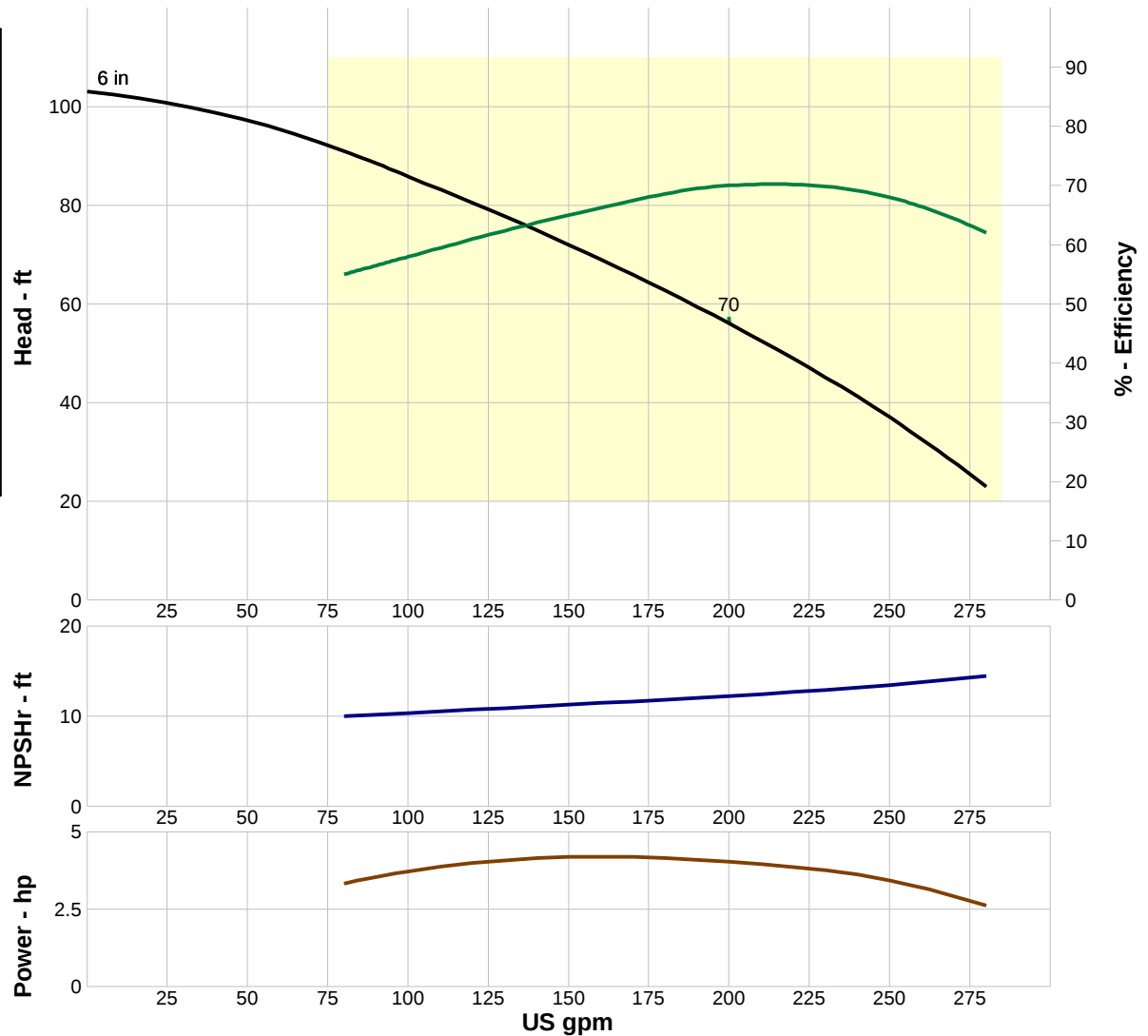
Motor:

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

Pump Limits:

Temperature: 140 °F
 Pressure: 540 psi g
 Sphere size: 1.5 in
 Power: --- hp
 Eye area: --- in²

---- Data Point ----	
Flow:	200 US gpm
Head:	56 ft
Eff:	70%
Power:	4.04 hp
NPSHr:	12.3 ft
---- Design Curve ----	
Shutoff head:	103 ft
Shutoff dP:	44.5 psi
Min flow:	40 US gpm
BEP:	70% @ 200 US gpm
NOL power:	4.2 hp @ 150 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
269	3450	28.1	64.2	2.92	14.1
224	3450	46.9	69	3.75	12.9
179	3450	62.7	67.9	4.11	11.9
134	3450	76.4	62.8	4.05	11
89.6	3450	88.5	56.4	3.53	10.2