

Company: Bonneville Power Administration

Name:

Date: 2/9/2007

Selection: Gould Centrifugal Pump



Pump:

Size: 3BF2
Type: CC_ENDSUCTION
Synch speed: 3600 rpm
Curve: GP 3656/3756
Specific Speeds:
Dimensions:
Speed: 3500 rpm
Dia: 5.9375 in
Impeller:
Ns: ---
Nss: ---
Suction: 2 in
Discharge: 1.5 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:

Consult GOULDS to select a motor for this pump.

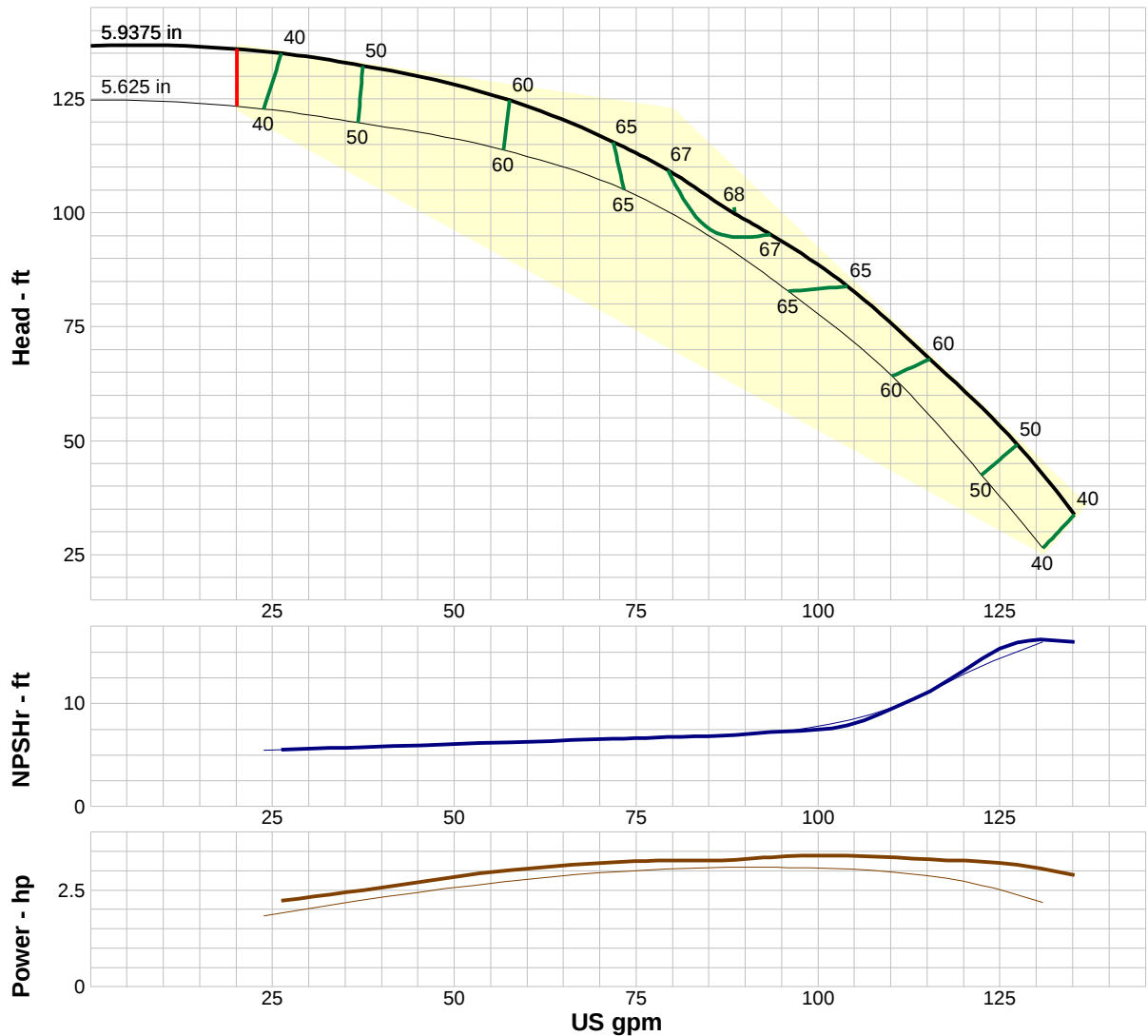
Pump Selection Warnings:

Design curve maximum power exceeds limit for the pump.

Pump Limits:

Temperature: 212 °F
Pressure: 230 psi g
Sphere size: 0.1875 in
Power: 3 hp
Eye area: --- in²

---- Data Point ----	
Flow:	88.5 US gpm
Head:	99.8 ft
Eff:	68%
Power:	3.28 hp
NPSHr:	6.96 ft
---- Design Curve ----	
Shutoff head:	137 ft
Shutoff dP:	59.1 psi
Min flow:	20 US gpm
BEP:	68% @ 88.5 US gpm
NOL power:	3.39 hp @ 104 US gpm
-- Max Curve --	
Max power:	3.39 hp @ 104 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
130	3500	43.9	47	3.07	16
108	3500	78.2	63	3.36	9.08
86.4	3500	102	68	3.28	6.91
64.8	3500	120	63	3.12	6.41
43.2	3500	130	53	2.65	5.91