

Company: Bonneville Power Administration

Name:

Date: 2/9/2007

Selection: Gould Centrifugal Pump



Pump:

Size: 3BF1
 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.

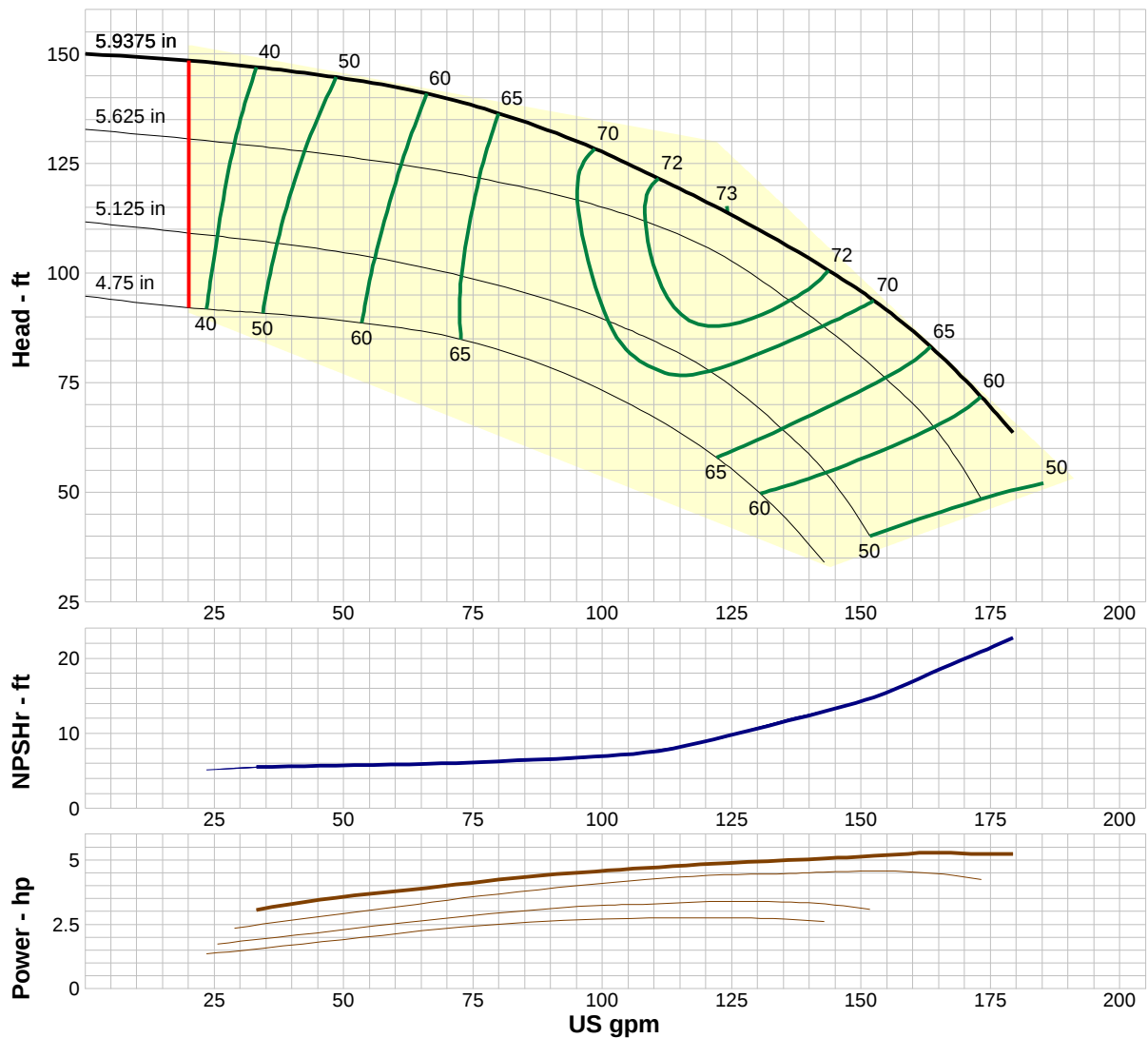
Pump Selection Warnings:

Design curve maximum power exceeds limit for the pump.

Pump Limits:

Temperature: 212 °F
 Pressure: 175 psi g
 Sphere size: 0.3125 in
 Power: 5 hp
 Eye area: --- in²

---- Data Point ----	
Flow:	124 US gpm
Head:	114 ft
Eff:	73%
Power:	4.88 hp
NPSHr:	9.65 ft
---- Design Curve ----	
Shutoff head:	150 ft
Shutoff dP:	64.8 psi
Min flow:	20 US gpm
BEP:	73% @ 124 US gpm
NOL power:	5.28 hp @ 163 US gpm
-- Max Curve --	
Max power:	5.28 hp @ 163 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
172	3500	73.1	61	5.24	20.5
143	3500	101	72	5.06	13
114	3500	120	72	4.76	8.16
85.8	3500	134	67	4.34	6.51
57.2	3500	143	55	3.73	5.83