

Company: Bonneville Power Administration

Name:

Date: 11/26/2006



Pump:

Size: 3"5876
Type: 5800-HSC
Synch speed: 3600 rpm
Curve: 760302A
Specific Speeds:
Dimensions:
Speed: 3570 rpm
Dia: 10 in
Impeller: G3B1A
Ns: 1104
Nss: 10335
Suction: 4 in
Discharge: 3 in

Pump Limits:

Temperature: 160 °F
Pressure: 175 psi g
Sphere size: 0.44 in
Power: --- hp
Eye area: --- in²

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

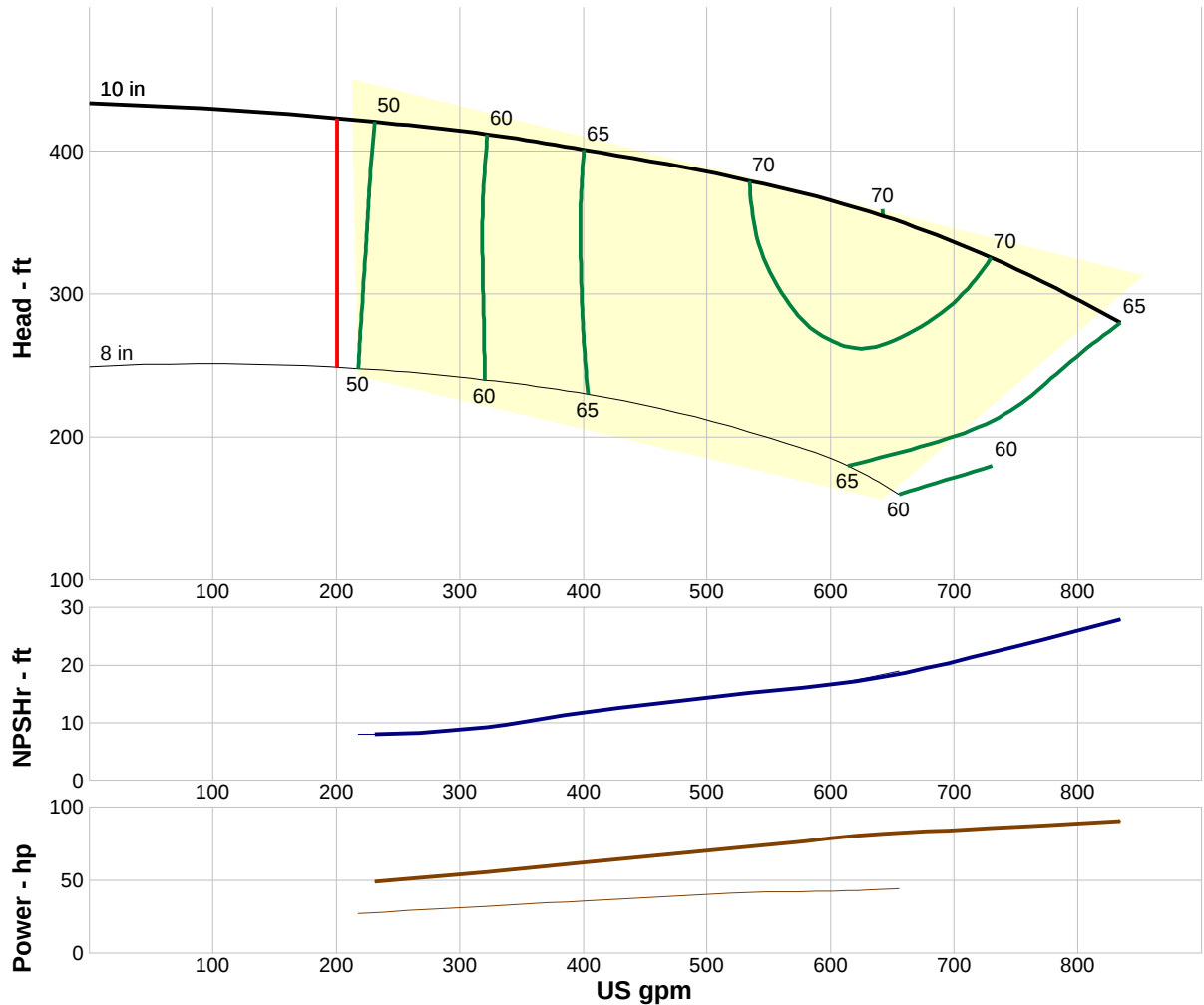
Motor:

Standard: NEMA
Enclosure: TEFC
Sizing criteria: Max Power on Design Curve
Size: 100 hp
Speed: 3600
Frame: 405TS

Pump Selection Warnings:

Pump shutoff dP exceeds limit for the pump.

---- Data Point ----	
Flow:	642 US gpm
Head:	355 ft
Eff:	70%
Power:	82 hp
NPSHr:	18 ft
---- Design Curve ----	
Shutoff head:	433 ft
Shutoff dP:	187 psi
Min flow:	200 US gpm
BEP:	70% @ 642 US gpm
NOL power:	90.7 hp @ 834 US gpm
-- Max Curve --	
Max power:	90.7 hp @ 834 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
800	3570	295	67	89	26.1
667	3570	346	70	83	19.2
534	3570	379	70	73	15.2
400	3570	401	65	62.3	11.8
267	3570	417	54	51.7	8.51