

Company: SIMFLO

Name:

Date: 4/21/2022

Pump:

Size: SM16M (1 stage)

Type: VERTTURBINE
Synch Speed: 1800 rpm

Curve: Impeller: SM16M

Specific Speeds: Ns: 3689
Nss: 10720

Dimensions: Suction: 12 in
Discharge: 12 in

Vertical Turbine: Bowl Size: 15.2 in
Max Lateral: 1.38 in
Thrust K Factor: 31 lbf/ft

Pump Limits:

Temperature: ---
Pressure: 457 psi g
Sphere Size: 1 in

Power: 887 hp
Eye Area: 78.5 in²

Search Criteria:

Flow: 4000 US gpm

Head: 62 ft

Fluid:

Water
Density: 62.32 lb/ft³
Viscosity: 0.9946 cP
NPSHa: ---

Temperature: 68 °F
Vapor Pressure: 0.3391 psi a
Atm Pressure: 14.7 psi a

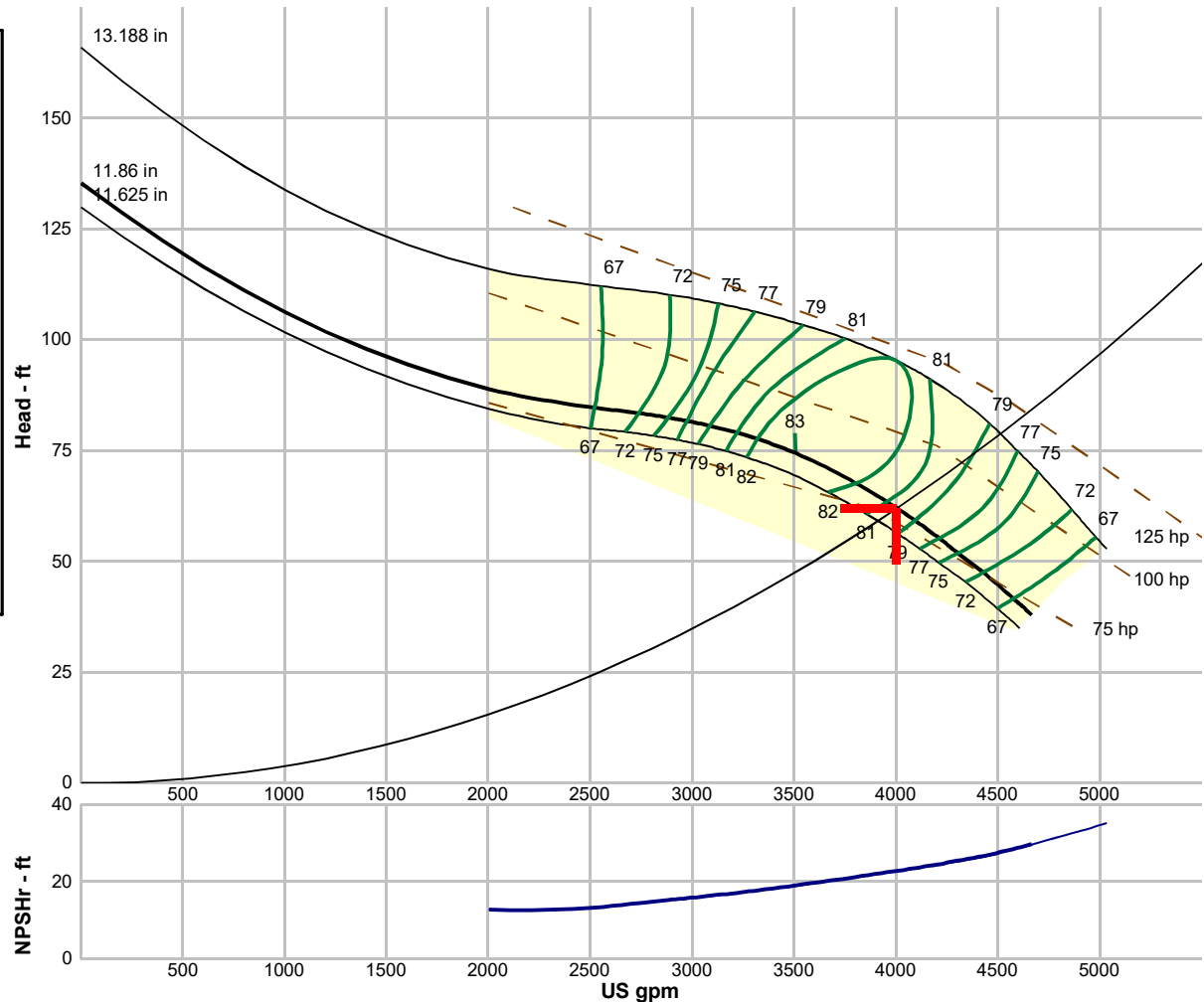
Motor:

Standard: US
Enclosure: TYPE 1

Size: 100 hp
Speed: 1800 rpm
Frame: ---

Sizing Criteria: Max Power on Design Curve

---- Duty Point ----	
Flow:	4002 US gpm
Head:	62.1 ft
Eff:	80.3%
Power:	78 hp
NPSHr:	22.9 ft
---- Design Curve ----	
Shutoff Head:	135 ft
Shutoff dP:	58.6 psi
Min Flow:	---
BEP:	83% @ 3506 US gpm
NOL Power:	80.4 hp @ 2520 US gpm
-- Max Curve --	
Max Power:	118 hp @ 4164 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
4800	1770	---	---	---	---
4000	1770	62.1	80.3	78	22.8
3200	1770	79.3	80.7	79.3	17
2400	1770	85.7	64.8	79.9	13.2
1600	1770	---	---	---	---