Pump Data Sheet - Fairbanks Morse Pump, 60 Hz

Company: Bonneville Power Administration
Name:
Date: 11/26/2006

Fairbanks Morse
Pentair Water

Pump:

Size: 3"5876

Type: 5800-HSC
Synch speed: 1800 rpm

Speed: 1760 rpm
Dia: 10 in

Curve: 760304A

Impeller: G3B1A

Specific Speeds:

Ns: 1096
Nss: 10190

Dimensions:

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

Temperature: 60 °F
Vapor pressure: 0.2563 psi a
Atm pressure: 14.7 psi a

NPSHa: --- ft

Motor:

Standard: NEMA
Enclosure: TEFC

Size: 15 hp
Speed: 1800
Frame: 254T

Sizing criteria: Max Power on Design Curve

---- Data Point ----	
Flow:	320 US gpm
Head:	87.3 ft
Eff:	68%
Power:	10.4 hp
NPSHr:	4.67 ft

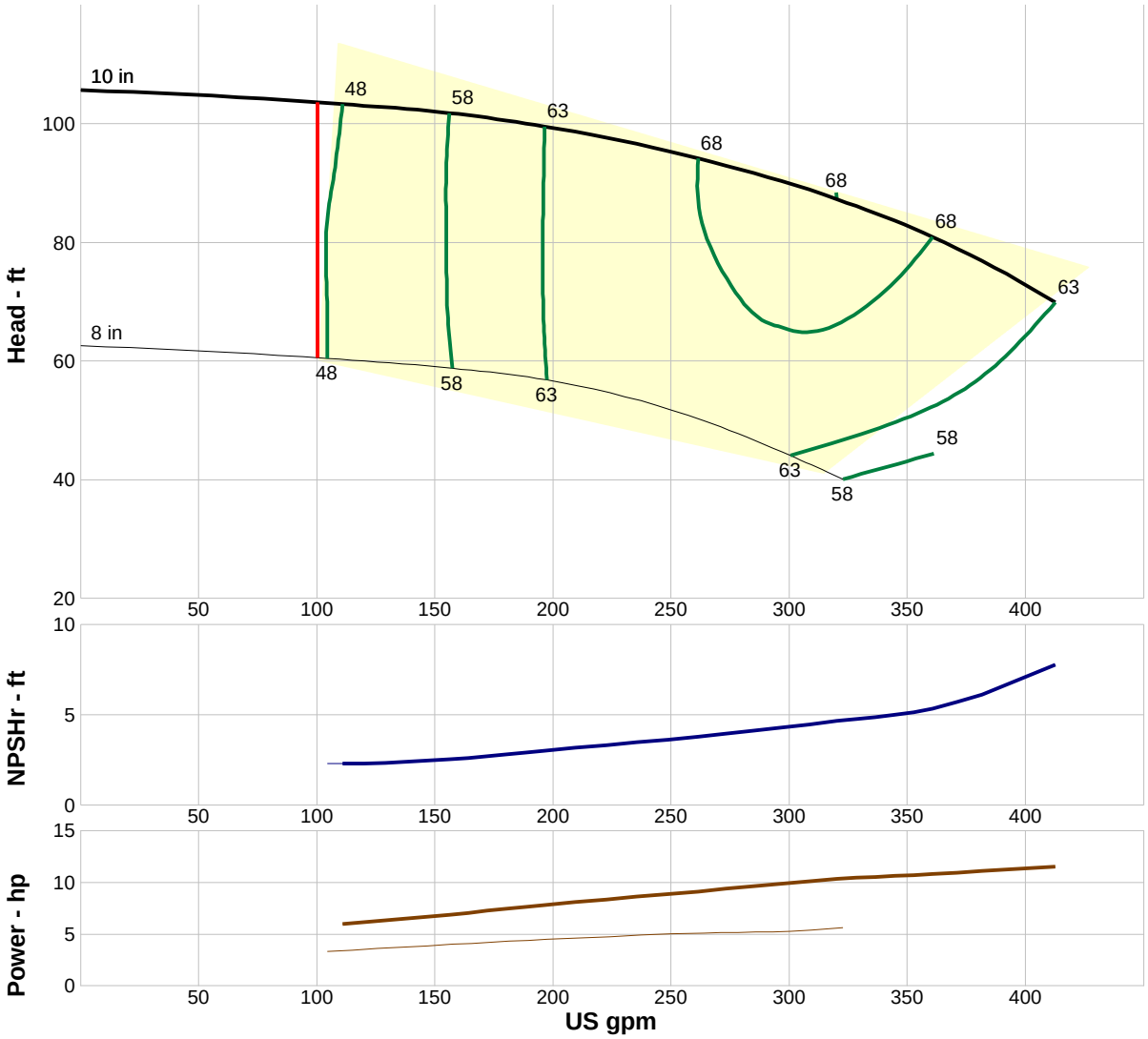
---- Design Curve ----	
Shutoff head:	106 ft
Shutoff dP:	45.7 psi
Min flow:	100 US gpm

BEP: 68% @ 320 US gpm

NOL power:
11.6 hp @ 412 US gpm

-- Max Curve --

Max power:
11.6 hp @ 412 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
396	1760	73.4	65	11.3	7.03
330	1760	85.7	68	10.5	4.84
264	1760	93.9	68	9.19	3.85
198	1760	99.4	63	7.86	3.05
132	1760	103	53	6.44	2.41