

**Pump Data Sheet - HYDROMATIC**

Company: Phoenix Pumps, Inc.  
 Name:  
 Date: 8/28/2006

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**Pump:**

Size: 40RP/40RPD  
 Type: Self-Primer4  
 Synch speed: 1800 rpm  
 Curve: PAGE 127  
 Specific Speeds:  
 Dimensions:  
 Speed: 1750 rpm  
 Dia: 9.16 in  
 Impeller:  
 Ns: ---  
 Nss: ---  
 Suction: 4 in  
 Discharge: 4 in

**Search Criteria:**

Flow: --- US gpm      Head: --- ft

**Fluid:**

Water  
 SG: 1  
 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: 20 hp  
 Speed: 1800  
 Frame: 256T

**Pump Limits:**

Temperature: 140 °F  
 Pressure: --- psi g  
 Sphere size: 3 in  
 Power: --- hp  
 Eye area: --- in<sup>2</sup>

**---- Data Point ----**

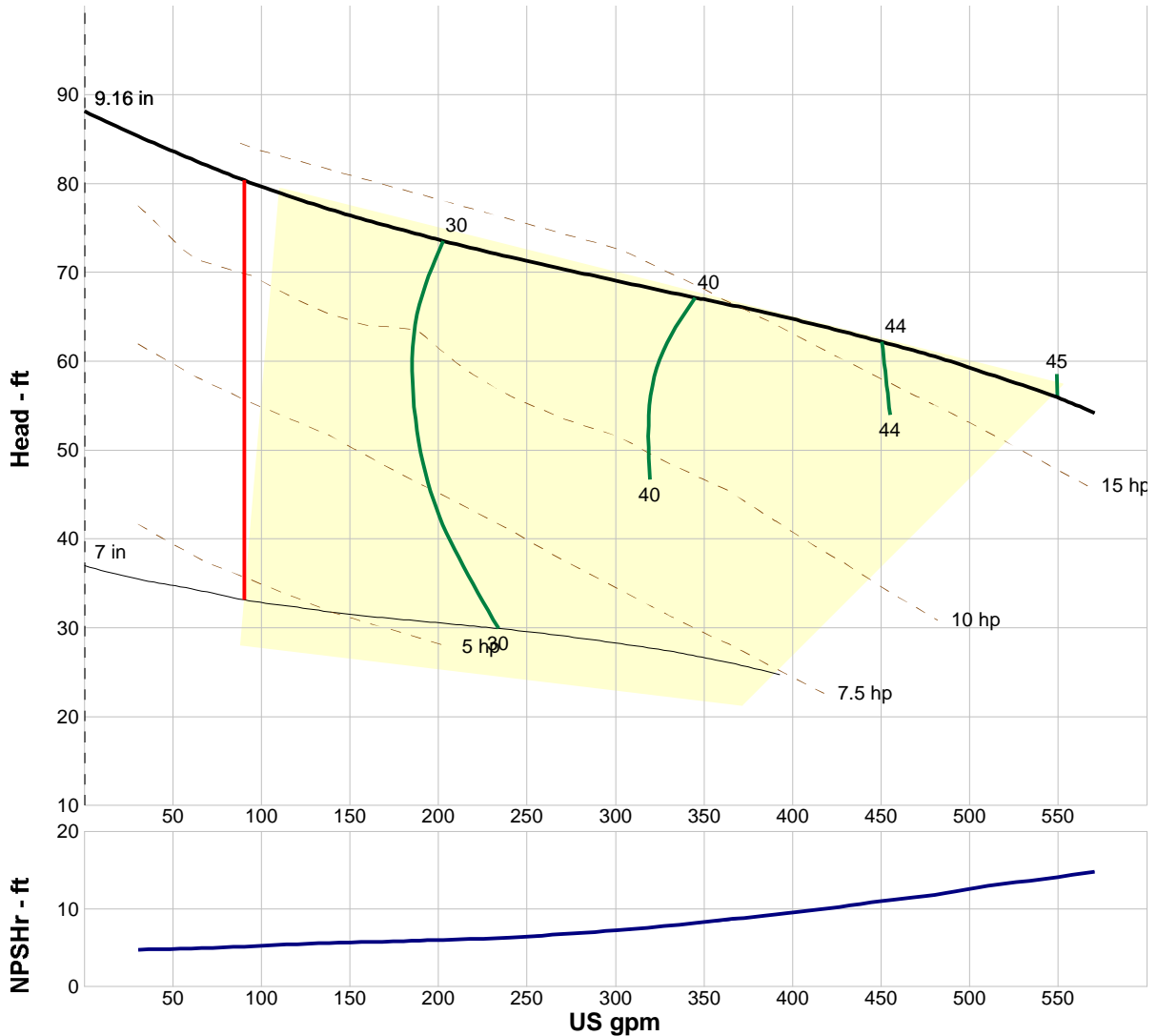
Flow: 549 US gpm  
 Head: 55.9 ft  
 Eff: 45%  
 Power: 17.1 hp  
 NPSHr: 14.1 ft

**---- Design Curve ----**

Shutoff head: 88.1 ft  
 Shutoff dP: 38.1 psi  
 Min flow: 90 US gpm  
 BEP: 45% @ 549 US gpm  
 NOL power:  
 17.2 hp @ 570 US gpm

**-- Max Curve --**

Max power:  
 17.2 hp @ 570 US gpm



**Performance Evaluation:**

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
547	1750	56.1	45	17.1	14.1
456	1750	61.9	44	16.1	11.2
365	1750	66.3	41	14.9	8.72
274	1750	70.2	35	13.7	6.88
182	1750	74.6	27	12.6	5.89