



Company: WT Engineering Systems

Name:

Date: 8/13/2008

**Pump:**

Size: VS3A-B-1  
 Type: V/VIS-SERIES  
 Synch speed: Adjustable  
 Curve: VS3A-B-1  
 Specific Speeds:  
 Dimensions:  
 Speed: 2380 rpm  
 Dia: 229 mm  
 Impeller: 38615-103  
 nq: ---  
 S: ---  
 Suction: 100 mm  
 Discharge: 80 mm

**Search Criteria:**

Flow: 70 m Head: 80 m

**Fluid:**

Water  
 Density: 997.2 kg/m<sup>3</sup>  
 Viscosity: 1.104 cP  
 NPSHa: --- m  
 Temperature: 15.6 °C  
 Vapor pressure: 1.773 kPa a  
 Atm pressure: 101.4 kPa a

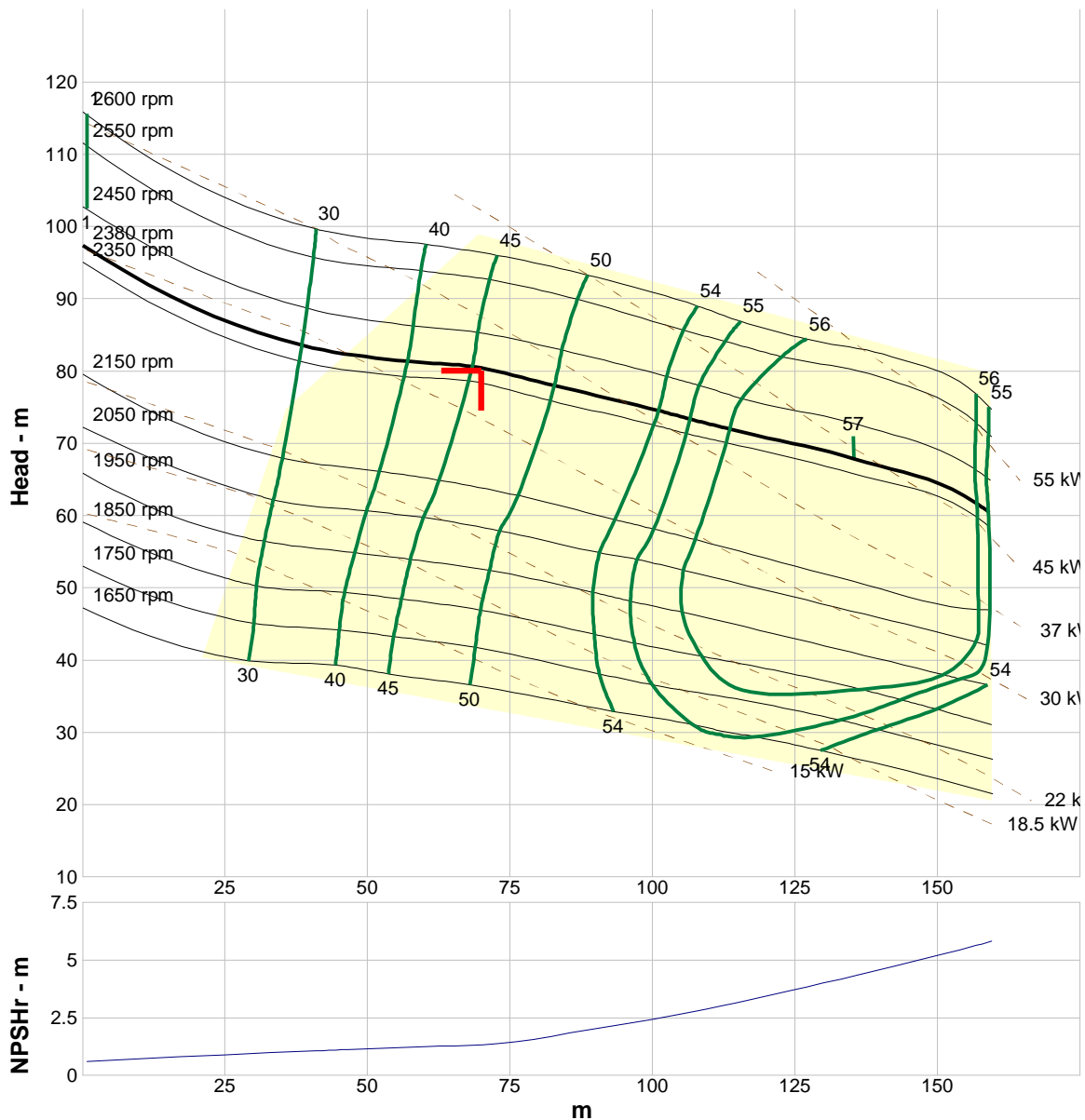
**Motor:**

Standard: IEC --- kW  
 Enclosure: TEFC Speed: ---  
 Frame: ---  
 Sizing criteria: Max Power on Design Curve

**Pump Limits:**

Temperature: --- °C  
 Pressure: --- kPa g  
 Sphere size: 63.5 mm  
 Power: --- kW  
 Eye area: --- mm<sup>2</sup>

---- Data Point ----	
Flow:	70 m
Head:	80.3 m
Eff:	46%
Power:	33.5 kW
NPSHr:	1.35 m
---- Design Curve ----	
Shutoff head:	97.4 m
Shutoff dP:	953 kPa
Min flow:	--- m
BEP:	57% @ 135 m
NOL power:	47.6 kW @ 159 m
-- Max Curve --	
Max power:	59 kW @ 159 m



**Performance Evaluation:**

Flow m	Speed rpm	Head m	Efficiency %	Power kW	NPSHr m
84	2380	77.7	50	35.3	1.8
70	2380	80.3	46	33.5	1.35
56	2380	81.5	40	31.4	1.22
42	2380	83.1	32	29.6	1.08
28	2380	87.3	24	27.7	0.922