

**Pump Data Sheet - Cornell**



Company: DXB Pump & Power  
 Name: Engineering  
 Date: 07/01/2019

High flow pumpset w550/30SAP  
 JCB 65kw Stage 3b engine  
 Maximum pumpspeed 1650rpm



Pump:			
Size:	8NNW	Dimensions:	Suction: ---
Type:	Cutter		Discharge: ---
Synch Speed:	Adjustable		
Dia:	356 mm		
Curve:	8NNWVA		

Fluid:			
Name:	Water		
SG:	1	Vapor Pressure:	0.0177 bar a
Density:	999 kg/m <sup>3</sup>	Atm Pressure:	1.01 bar a
Viscosity:	1.1 cP		
Temperature:	15.6 °C		

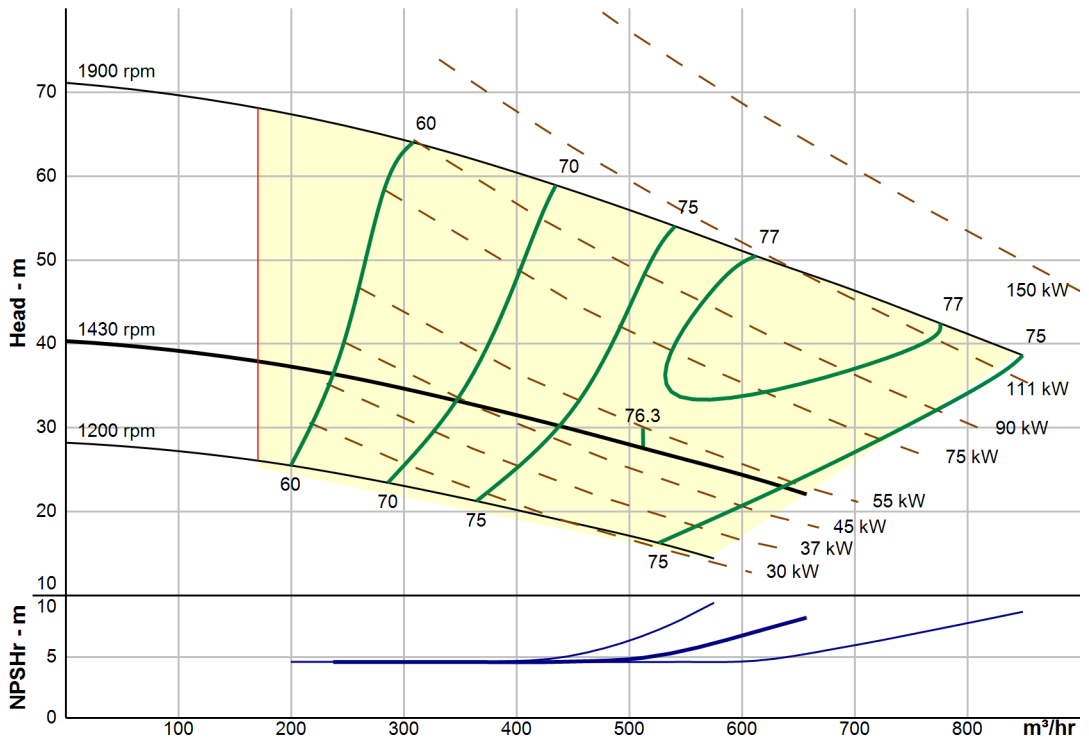
Search Criteria:			
Flow:	---	Near Miss:	---
Head:	---	Static Head:	0 m

Pump Limits:			
Temperature:	---	Sphere Size:	85.9 mm
Wkg Pressure:	---		

**Motor:**  
 Consult Cornell to select a motor for this pump.

**Pump Selection Warnings:**  
 None

--- Duty Point ---	
Flow:	512 m <sup>3</sup> /hr
Head:	27.6 m
Eff:	76%
Power:	50.4 kW
NPSHr:	4.92 m
Speed:	1650 rpm
--- Design Curve ---	
Shutoff Head:	40.3 m
Shutoff dP:	3.95 bar
Min Flow:	170 m <sup>3</sup> /hr
BEP:	76.3% @ 512 m <sup>3</sup> /hr
NOL Power:	53 kW @ 657 m <sup>3</sup> /hr
--- Max Curve ---	
Max Power:	119 kW @ 849 m <sup>3</sup> /hr



**Performance Evaluation:**

Flow	Speed	Head	Efficiency	Power	NPSHr
m <sup>3</sup> /hr	rpm	m	%	kW	m
631	1430	23.2	75	52.9	7.55
526	1430	27.1	76	50.6	5.23
421	1430	30.8	74	47.4	4.59
316	1430	34.1	67	43.2	4.58
210	1430	36.9	58	37.8	4.58



DXB PUMP & POWER w500/25SAP high flow sound attenuated pumpset is designed to operate in noise and emission sensitive environments such as EU countries where legislation dictates that only equipment with the cleanest engines and smallest carbon footprint may work.

The DXB Pump & Power w500/25SAP comes exclusively with the Cornell Warrior impeller design with anti-ragging technology for use in the most challenging sewage bypass projects where foreign matter and "rag" is contained within the liquid.

All DXB Pump & Power pumpsets come with a Cornell Redi-prime pump complete with 50cfm priming system and patented Cycloseal run dry mechanical seal design