Series VSX
Base Mounted - Double Suction
VSC, VSCS and VSH Models
50 Hertz
Performance Curves
USEFUL PUMP FORMULAS

<table>
<thead>
<tr>
<th>Formula</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure ( (\text{PSI}) = \frac{\text{Head (Feet)} \times \text{Specific Gravity}}{2.31} )</td>
<td></td>
</tr>
<tr>
<td>Head ( (\text{Feet}) = \frac{\text{Pressure (PSI)} \times 2.31}{\text{Specific Gravity}} )</td>
<td></td>
</tr>
<tr>
<td>Vacuum ( \text{(Inches of Mercury)} = \text{Dynamic Suction Lift (Feet)} \times 0.883 \times \text{Specific Gravity} )</td>
<td></td>
</tr>
<tr>
<td>Horsepower ( \text{(Brake)} = \frac{\text{GPM} \times \text{Head (Feet)} \times \text{Specific Gravity}}{3960 \times \text{Pump Efficiency}} )</td>
<td></td>
</tr>
<tr>
<td>Horsepower ( \text{(Water)} = \frac{\text{GPM} \times \text{Head (Feet)} \times \text{Specific Gravity}}{3960} )</td>
<td></td>
</tr>
<tr>
<td>Efficiency ( \text{(Pump)} = \frac{\text{Horsepower (Water)}}{\text{Horsepower (Brake)}} \times 100 \text{ Per Cent} )</td>
<td></td>
</tr>
<tr>
<td>NPSH ( \text{(Available)} = \text{Positive Factors – Negative Factors} )</td>
<td></td>
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</table>

Affinity Laws: Effect of change of speed or impeller diameter on centrifugal pumps.

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<td>Impeller Diameter</td>
<td>( Q_2 = \frac{D_2^2}{D_1^2} Q_1 )</td>
<td>( H_2 = \left(\frac{D_2}{D_1}\right)^2 H_1 )</td>
</tr>
<tr>
<td>Speed</td>
<td>( Q_2 = \frac{\text{RPM}_2}{\text{RPM}_1} Q_1 )</td>
<td>( H_2 = \left(\frac{\text{RPM}_2}{\text{RPM}_1}\right)^{\frac{3}{2}} H_1 )</td>
</tr>
</tbody>
</table>

Where \( Q = \text{GPM}, H = \text{Head}, P = \text{BHP}, D = \text{Impeller Dia.}, \text{RPM} = \text{Pump Speed} \).
1480 RPM PUMP CURVES

Series VSX

Bell & Gossett

5x6x13\%B
1480 RPM

NPSHr
(Ft) (M)

Series VSX

Bell & Gossett

6x8x13\%A
1480 RPM

NPSHr
(Ft) (M)

Date: 5/9/2007

Date: 11/28/2005
1480 RPM PUMP CURVES

Series VSX
Bell & Gossett

6x8x17 1/2A
1480 RPM

NPSHr
(Ft) (M)

Total Head
(CAPACITY)

0 200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400 3600 3800 4000

Series VSX
Bell & Gossett

8x10x17 1/2A
1480 RPM

NPSHr
(Ft) (M)

Total Head
(CAPACITY)

0 200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400 3600 3800 4000

Date: 8/1/2006

Date: 12/28/2006
1480 RPM PUMP CURVES

Series VSX

Bell & Gossett

10x12x17 1/2B
1480 RPM

12x14x17 1/2A
1480 RPM

Date: 12/28/2008

Date: 11/28/2005
1480 RPM PUMP CURVES

Series VSX

Bell & Gossett

16x18x19A
1480 RPM

NPSHr

Date: 6/27/207

NPSHr

Date: 12/26/2006

Series VSX

Bell & Gossett

8x10x22A
1480 RPM

NPSHr

Date: 6/27/207

NPSHr

Date: 12/26/2006
1480 RPM PUMP CURVES

Series VSX
Bell & Gossett
10x12x22A
1480 RPM

Series VSX
Bell & Gossett
12x14x22A
1480 RPM
1480 RPM PUMP CURVES

Series VSX

Bell & Gossett

14x16x22A
1480 RPM

TOTAL HEAD (m)

CAPACITY (GPM)

NPSHr (ft) (m)

Date: 6/20/07

Series VSX

Bell & Gossett

18x20x22A
1480 RPM

TOTAL HEAD (m)

CAPACITY (GPM)

NPSHr (ft) (m)

Date: 6/9/07
Xylem |'zɪləm|

1) The tissue in plants that brings water upward from the roots;
2) a leading global water technology company.

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