Series A-C 9100 50 Hz

LARGE HORIZONTAL SPLIT CASE BASE MOUNTED - DOUBLE SUCTION PUMP PERFORMANCE CURVES
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USEFUL PUMP FORMULAS

Pressure (PSI) = Head (feet) x Specific Gravity \( \frac{2.31}{2.31} \)

Head (feet) = Pressure (PSI) x 2.31 \( \frac{\text{Specific Gravity}}{} \)

Vacuum (in. of mercury) = Dynamic Suction Lift (feet) x .883 x Specific Gravity

Horsepower (brake) = \( \frac{\text{GPM} \times \text{Head (feet)} \times \text{Specific Gravity}}{3960 \times \text{Pump Efficiency}} \)

Horsepower (water) = \( \frac{\text{GPM} \times \text{Head (feet)} \times \text{Specific Gravity}}{3960} \)

Efficiency (pump) = \( \frac{\text{Horsepower (water)}}{\text{Horsepower (brake)}} \times 100 \text{ per cent} \)

NPSH (available) = Positive Factors - Negative Factors

AFFINITY LAWS: Effect of change of speed or impeller diameter on centrifugal pumps

<table>
<thead>
<tr>
<th>Impeller Diameter Change</th>
<th>Feet Head</th>
<th>BHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>( Q_2 = \frac{D_2}{D_1} Q_1 )</td>
<td>( H_2 = \left( \frac{D_2}{D_1} \right)^2 H_1 )</td>
<td>( P_2 = \left( \frac{D_2}{D_1} \right)^3 P_1 )</td>
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</tbody>
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<table>
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<tr>
<th>Speed Change</th>
<th>Feet Head</th>
<th>BHP</th>
</tr>
</thead>
<tbody>
<tr>
<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)^2 H_1 )</td>
<td>( P_2 = \left( \frac{\text{RPM}_2}{\text{RPM}_1} \right)^3 P_1 )</td>
</tr>
</tbody>
</table>

Where Q = GPM, H = Head, P = BHP, D = Impeller Diameter, RPM = Pump Speed
1500 RPM PUMP CURVES

G&L Pumps

PUMP 12x8x22M SERIES A-C 9100

TOTAL HEAD (FT) (m)

533 mm A
487 mm B
441 mm C
396 mm D
350 mm E
304 mm F

533 mm A
487 mm B
441 mm C
396 mm D
350 mm E
304 mm F

NOTE: Polished Volute is Standard on this Pump.

G&L Pumps

PUMP 12x8x22L SERIES A-C 9100

TOTAL HEAD (FT) (m)

584 mm A
538 mm B
493 mm C
447 mm D
401 mm E
353 mm F
304 mm G

584 mm A
538 mm B
493 mm C
447 mm D
401 mm E
353 mm F
304 mm G

NOTE: Polished Volute is Standard on this Pump.

G&L Pumps

IMPELLER DATA

IMP. NO. P-3595 NO. OF VANES 5
MAX. DIA. 533 mm MIN. DIA. 305 mm
MAX. SPHERE 35.56 mm INLET AREA 439 cm²

NOTE: Polished Volute is Standard on this Pump.

G&L Pumps

IMPELLER DATA

IMP. NO. P-2595 NO. OF VANES 6
MAX. DIA. 584 mm MIN. DIA. 305 mm
MAX. SPHERE 41.00 mm INLET AREA 517 cm²

NOTE: Polished Volute is Standard on this Pump.

Minimum recommended flow is 40% B.E.P.
1500 RPM PUMP CURVES

G&L Pumps

PUMP 14x10x20S SERIES A-C 9100

TOTAL HEAD

G&L Pumps

PUMP 14x10x20L SERIES A-C 9100

SUMMARY OF CURVES

Minimum recommended flow is 40% B.E.P.

Minimum recommended flow is 50% B.E.P.
1500 RPM PUMP CURVES

NOTES:

- PUMP 16x12x23 SERIES A-C 9100
- PUMP 16x14x17 SERIES A-C 9100

NOTE: 17-4 PH shaft material is standard at this speed.
1000 RPM PUMP CURVES
Xylem [ˈzɪləm]

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

We're 12,500 people unified in a common purpose: creating innovative solutions to meet our world’s water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

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