Design Features

Blackmer CRL pumps are specifically designed for harsh CO₂ transfer pump duty — handling a dry, non-lubricating liquid at sub-zero temperatures and high differential pressures. The CRL8 is constructed of ASTM 536 ductile iron that will withstand sudden thermal shock and stress well beyond the capabilities of cast iron. Replaceable casing liners and end discs allow easy rebuilding of the pump, without removing the pump from the piping.

Standard features include Buna O-rings, external ball bearings, mechanical seals, 8-inch ANSI flanged port sizes and a maximum rated capacity of 1,020 gpm (231 m³/h). An optional bolt-on relief valve is available to protect the pump from excessive pressure.

Base-mounted unit assemblies with commercial gear reduction drives are available. Consult factory for details.

Applications

The Blackmer CRL8 is for high capacity CO₂ applications such as a charge pump in CO₂ injection well fracing, terminal operations, barge and ship loading, and off-loading applications.

Benefits

Utilizing Blackmer’s unique sliding vane design, these positive displacement rotary pumps offer the best combined characteristics of sustained high level performance, energy efficiency, trouble-free operation and low maintenance cost.

How Blackmer’s sliding vane action works
CRL8 Pump
Liquid CO₂ Transfer, Ductile Iron

Maximum Operating Limits

<table>
<thead>
<tr>
<th>Pump Model</th>
<th>Differential Pressure</th>
<th>Nominal Flowrate</th>
<th>Minimum Temperature</th>
<th>Working Pressure</th>
<th>Pump Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>psi</td>
<td>bar</td>
<td>gpm</td>
<td>L/min</td>
<td>°F</td>
</tr>
<tr>
<td>CRL8</td>
<td>100</td>
<td>6.8</td>
<td>1,020</td>
<td>3,860</td>
<td>-30</td>
</tr>
</tbody>
</table>

Dimensions

<table>
<thead>
<tr>
<th>Pump Model</th>
<th>A (in.)</th>
<th>B (in.)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>E (mm)</th>
<th>F (mm)</th>
<th>J (mm)</th>
<th>L (mm)</th>
<th>Approx. Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRL8</td>
<td>2⁵/₈</td>
<td>⅜</td>
<td>565</td>
<td>264</td>
<td>578</td>
<td>273</td>
<td>749</td>
<td>937</td>
<td>1,010 lbs.</td>
</tr>
</tbody>
</table>

FLOW

FLOW (gpm) vs. Differential Pressure (psi)

POWER

Horsepower vs. Differential Pressure (psi)

Dimensions

Optional Relief Valve

Process | Energy | Military & Marine
PSG Grand Rapids
1809 Century Avenue SW, Grand Rapids, MI 49503-1530 USA
T 616.241.1611 • F 616.241.3752
blackmer.com

© 2017 BLACKMER