J Series

Screw Compressor Package

Single Stage
Open Type

https://mayekawa.com/americas/mna
**J-Series Screw Compressor Package**

**Premium efficiency screw compressor package**

**THE NEW STANDARD**

The J-Series with its innovative rotor profile has revolutionized the refrigeration industry. Due to our superior design and focus on energy efficiency, the COP (Coefficient of Performance) has even surpassed Mayekawa’s traditionally high standards.

**LOW TEMPERATURE APPLICATION BENEFITS**

The J-Series really outperforms its competition when operated at low temperatures single stage economized. With a large allowable compression ratio the J-Series can run single stage systems that traditionally had to be two stage, saving money and space and making system design simpler.

**FLOATING HEAD PRESSURE**

- Energy savings
- Extremely low noise and vibration
- 508 PSIG design pressure for a wide range of applications
- API (American Petroleum Institute) grade hydrodynamic radial bearings for a reliable and efficient operation
- Flange motor for easy motor alignment*. Both compressor and flange spacer are base mounted for ease of service.
  *(flange mounted motors on 170 and 220 only)

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Refrigerant</th>
<th>170J S / M / L</th>
<th>220J S / M / L</th>
<th>280J S / M / L</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH3 / HFC / CO2 / Propane</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight of Compressor</td>
<td>lb</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4,860 / 4,904 / 4,970</td>
<td>7,700 / 7,876 / 8,010</td>
<td>18,750 / 19,080 / 19,520</td>
</tr>
<tr>
<td>Min. Rotation</td>
<td>rpm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,450</td>
<td></td>
</tr>
<tr>
<td>Max. Rotation</td>
<td>rpm</td>
<td>4,500</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,600</td>
</tr>
<tr>
<td>Displacement @ 1,550 rpm</td>
<td>CFM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>276 / 359 / 467</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>606 / 788 / 1,025</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,335 / 1,735 / 2,259</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity Control</td>
<td></td>
<td>25 to 100% (or 30 to 100% in the case of L size)</td>
<td></td>
</tr>
<tr>
<td>Vi Control</td>
<td></td>
<td>Standard: 2.5 to 5.0</td>
<td></td>
</tr>
<tr>
<td>Design Pressure</td>
<td>MPA / PSI</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.5 / 508</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigerant Oil</td>
<td></td>
<td>Call local Mayekawa branch, or refer to compressor IOM manual.</td>
<td></td>
</tr>
</tbody>
</table>
THE COMPRESSOR
• Designed to provide more CFM for less HP. It is up to 13.9% more efficient than conventional screw compressors.
• World renowned MYCOM screw reliability
• Auto Vi from 2.5 to 5.0
• Infinite slide valve allows load and unload control from 25% to 100%.
• J-profile rotor for superior performance

PACKAGE FEATURES
• Hydraulic slide valve to match system load
• Variable or adjustable Vi for energy savings
• Options for water, thermosyphon, and liquid injection oil cooling
• MYPRO TOUCH+ control panel

NEW ROTOR PROFILE
J-profile engineering allows a more proficient meshing between the lobes, which are now 5 and 6 for male and female respectively. The end result is superior performance.

MYPRO TOUCH+
The next generation MYPRO TOUCH+ control panel is designed to maximize the performance of your MYCOM compressor package. The new touch screen interface boasts a revised control designed to minimize learning curve of a new control panel.

Standard Features
• USB connection
• Ethernet connectivity
• Modbus RTU protocol with standard remote control capabilities
• Password protection
• Available SD card storage
• Expandable system control
• Ethernet Protocol for AB CompactLogix and MicroLogix processors (default)

Optional Features
• Main status set points monitor available at any controller screen
• SSR I/O switch type
• Real time and Historical trending
• Programmable ID for optional analog inputs
• Calibration menu
• Class I, Div.2 option available
• Quick menu setpoint access

DIMENSIONS
Dimensions are for reference only. Please contact MYCOM for more detailed drawings.

<table>
<thead>
<tr>
<th></th>
<th>170J</th>
<th>220J</th>
<th>280J</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>2,637(103 13/16)</td>
<td>3,556 (140)</td>
<td>5,232 (206)</td>
</tr>
<tr>
<td>D</td>
<td>1,314 (51 4/3)</td>
<td>1,524 (60)</td>
<td>1,778 (70)</td>
</tr>
<tr>
<td>H</td>
<td>2,044 (80 7/16)</td>
<td>2,591 (102)</td>
<td>3,150 (124)</td>
</tr>
</tbody>
</table>

*220J and 280J for reference only.

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250-1554
280J for reference only.

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