AH series Impact Pneumatic Hammer
Low air pressure, strong impact force

Characteristics

- High power, litter lubrication.
- Frequency and impact intervals are controlled by the solenoid valve.
- Can be used in extremely harsh environment.

Typical applications

- Stock bin, hopper, pipe, exit for filter.
- Eliminate the hanging material on the wall in the container, and empty the pipe.
- Outdoors, high humidity occasions.

Structure

- Aluminum shell, corrosion resistant, and with special lubricant grease.
- Long service life, adaptable to different occasions.

Parameter

<table>
<thead>
<tr>
<th>Model</th>
<th>Working pressure</th>
<th>Air consumption</th>
<th>Impact force</th>
<th>Impact energy</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MPa</td>
<td>L/min</td>
<td>Kg·m/S²</td>
<td>N·m</td>
<td>kg</td>
</tr>
<tr>
<td>AH-30</td>
<td>0.3~0.7</td>
<td>0.05~0.13</td>
<td>1.9</td>
<td>13</td>
<td>1.25</td>
</tr>
<tr>
<td>AH-40</td>
<td>0.3~0.7</td>
<td>0.15~0.37</td>
<td>4.2</td>
<td>22</td>
<td>2.20</td>
</tr>
<tr>
<td>AH-60</td>
<td>0.3~0.7</td>
<td>0.33~0.77</td>
<td>11.2</td>
<td>49</td>
<td>5.35</td>
</tr>
<tr>
<td>AH-80</td>
<td>0.4~0.6</td>
<td>0.60~1.40</td>
<td>24.2</td>
<td>109</td>
<td>11.20</td>
</tr>
<tr>
<td>AH-100</td>
<td>0.5~0.7</td>
<td>0.86~1.55</td>
<td>48.5</td>
<td>220</td>
<td>12.05</td>
</tr>
</tbody>
</table>

Note: The data is from Kistler 3-axis Dynamometer on the heavy duty experimental bench. The frequency and force value will decrease when the installation rigidity is poor.

Dimensions (for reference)

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mm</td>
<td>mm</td>
<td>mm</td>
<td>mm</td>
<td>G thread</td>
<td>G thread</td>
</tr>
<tr>
<td>AH-30</td>
<td>Φ9</td>
<td>Φ67</td>
<td>Φ82</td>
<td>135</td>
<td>G1/4</td>
<td>G1/8</td>
</tr>
<tr>
<td>AH-40</td>
<td>Φ11</td>
<td>Φ77</td>
<td>Φ98</td>
<td>175</td>
<td>G1/4</td>
<td>G1/4</td>
</tr>
<tr>
<td>AH-60</td>
<td>Φ12.5</td>
<td>Φ110</td>
<td>Φ143</td>
<td>220</td>
<td>G1/4</td>
<td>G1/4</td>
</tr>
<tr>
<td>AH-80</td>
<td>Φ17</td>
<td>Φ140</td>
<td>Φ170</td>
<td>275</td>
<td>G3/8</td>
<td>G3/8</td>
</tr>
<tr>
<td>AH-100</td>
<td>Φ17</td>
<td>Φ150</td>
<td>Φ195</td>
<td>310</td>
<td>G3/8</td>
<td>G3/8</td>
</tr>
</tbody>
</table>
AH-2 series Relay Pneumatic Hammer

**Product features**

- The striking force of the second generation of explosion-proof pneumatic hammer (patent applied) is adjusted by adjusting the air pressure. If the striking force is too small to remove the blocking, it needs to increase the air pressure. On the contrary, if the striking force is too large, it can decrease the pressure.
- If the customer chooses the wrong model and appears the strong or weak impact phenomenon, the striking force can also be resolved by adjusting the air pressure.
- The changeable structure of hammer ensures the selection convenience. If installing the relaying pipes, then several hammers can work simultaneously, which greatly reduces the construction cost.

**Performance parameters**

<table>
<thead>
<tr>
<th>Model</th>
<th>Working pressure</th>
<th>Strike period</th>
<th>Air consumption</th>
<th>Strike energy</th>
<th>Impact force</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>MPa</td>
<td>Times/min</td>
<td>L/back</td>
<td>N·m</td>
<td>Kg·m/S²</td>
<td>Corresponding hammer strike (lbs)</td>
</tr>
<tr>
<td>AH30-2</td>
<td>0.3~0.5</td>
<td>1~6</td>
<td>0.06~0.14</td>
<td>5.6~13.2</td>
<td>1.2~1.9</td>
<td>less than 1</td>
</tr>
<tr>
<td>AH40-2</td>
<td>0.3~0.5</td>
<td>1~4</td>
<td>0.16~0.36</td>
<td>9.3~22.5</td>
<td>2.7~4.2</td>
<td>1~1.5</td>
</tr>
<tr>
<td>AH60-2</td>
<td>0.3~0.5</td>
<td>1~3</td>
<td>0.32~0.78</td>
<td>20.8~49.8</td>
<td>7.0~11.2</td>
<td>1.5~3</td>
</tr>
</tbody>
</table>

**Dimensions (for reference)**

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Thread</th>
<th>E</th>
<th>F</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH30-2</td>
<td>132</td>
<td>Ø82</td>
<td>Ø67</td>
<td>Ø9.5</td>
<td>G1/8</td>
<td>G1/8</td>
<td>G1/4</td>
<td></td>
</tr>
<tr>
<td>AH40-2</td>
<td>160</td>
<td>Ø98</td>
<td>Ø75</td>
<td>Ø11</td>
<td>G1/4</td>
<td>G1/8</td>
<td>G1/4</td>
<td></td>
</tr>
<tr>
<td>AH60-2</td>
<td>228</td>
<td>Ø145</td>
<td>Ø105</td>
<td>Ø15</td>
<td>G1/4</td>
<td>G1/8</td>
<td>G1/4</td>
<td></td>
</tr>
</tbody>
</table>
AH-2 series Relay Pneumatic Hammer

- Please wear a helmet, safety shoes, and belts during installing.
- When the plate of the installation part is relatively thin, please weld the reinforcing plates, otherwise the installation part may be damaged due to the impact.
- If welding the reinforcing plates, please make sure there is no gap between the reinforcing plate and the hopper, and reserve a 10 mm exhaust port to facilitate the air exhausting and fully conduct the impact force. In order to avoid the damage of the hopper, please weld more layers.
- In order to prevent falling off, please use the cable to lift and fix the hammer body, otherwise the bolt may loose and fall off due to the impact.
- When fixing the body and flange with bolts, please clamp the spring gaskets at both upper and lower parts, and tighten it in strict accordance with the tightening torque requirements, and inspect regularly.
- Please equip air filter before piping. Garbage or dust may cause operation incorrectly.
- Do not exceed the required impact force when using, otherwise it may cause damage to the storage silo or installation part.
- Please set the time interval for more than 1 second when continuously strike. If the time interval is less than 1 second, it may lead to malfunction.
- Make sure the striking surface of flange is solid and flat, if necessary, please weld reinforcing bars. (As below)

- Suitable installation location can maximize the pneumatic hammer’s performance.

Applied to large storage silo
Applied to small storage silo
Applied to bad-fluidity storage silo
Applied to empty the pipe
Applied to the silo wall
Ah-2 series Relay Pneumatic Hammer

Relay piping

- The pneumatic hammer can be centralized by multiple sets and hit at the same time. This function can be realized by using relay piping.
- Relay piping, as a piping method to connect multiple air hammers directly, is a connection control mode of connecting the relay port of the first air hammer to the air intake of the next air hammer by using the relay air pipes. However, according to the different operation methods, the maximum number of connected hammers is limited.
- During the relay piping, the compressed air in the relay pipe may also cause air hammer to strike. Therefore, the working pressure and the length of the relay pipe should not exceed the specified value.
- During the long-distance piping, due to the pressure difference, the impact force will also be different, which can be made up by properly increasing the pressure. In order to maximize its stability, a quick exhaust valve can be set near the air hammer to improve its striking performance.
- When piping the relay, please set the striking interval of the air hammer at more than 1 second. If the number of relay hammers increases, please further extend the interval setting time.

Explosion-proof pneumatic hammer dedicated controller

Characteristics

The explosion-proof controller special for pneumatic hammer is without power supply, solenoid valve, timer and other control circuits. It can not only control one pneumatic hammer, but also control multiple hammers at the same time if it is equipped with relay pipes. It is very practical, safe and convenient in the whole equipment installation.

Performance parameters

<table>
<thead>
<tr>
<th>Explosion-proof control instrument model</th>
<th>Environment</th>
<th>Working pressure (MPa)</th>
<th>Fluid temperature (°C)</th>
<th>Number of operations (times/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KLSX-8J</td>
<td>indoors/outdoors</td>
<td>0.3~0.7</td>
<td>5~55</td>
<td>1~60</td>
</tr>
</tbody>
</table>

Notes:

- When installing, please fix it with bolts to prevent accidental injury caused by falling.
- When moving the equipment, please close the hand guide valve besides the controller to prevent accidents caused by the sudden start of the air hammer.
- After the work, please be sure to close the hand guide valve beside the controller, because the air hammer will continue to strike during the continuous air supply.
- The unstable air pressure will cause misoperation of the controller. The air pressure rising, the strikes increase, while the pressure decreasing, the strikes will decrease. Therefore, please install the air pressure regulator in front of the controller to facilitate the stable operation of the controller and the air hammer.
- If need to install electric control as the air supply end of the controller, as a timer, please ensure to use the three-way solenoid valve to facilitate the discharge of residual gas.

Pipe restrictions

<table>
<thead>
<tr>
<th>Pneumatic hammer model</th>
<th>SK30-2</th>
<th>SK40-2</th>
<th>SK60-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance between the controller and hammer</td>
<td>2M</td>
<td>3M</td>
<td>8M</td>
</tr>
</tbody>
</table>
Installation, application and operation of the vibrators

Make sure the installation locations are carefully selected to ensure the optimal performance. The installation surface must be clean and flat. Please note that the uneven surface may cause the vibrator to work incorrectly due to the torsional vibration of itself.

- Installation on hopper

- Application on the channel steel

- Select the installation method according to the model

- Installation on the sieve

- Material onveying pipe

- Material feeding

**examples**

- foundry
- industry
- pipeline
- transportation
- hopper
- feeding
- control
- supply
- hopper
- discharge
- compaction /
- testing
- filtrate
- conveyor