North American 1600- B and 1600- BP Diaphragm Air Motors with Speed Control

The 1600 Air Motor reacts rapidly to small incremental changes in the instrument air signal. 1600- B Air Motors incorporate a volume chamber and adjustable needle valve to slow the reaction time of the air motor. This speed control device enables the air motor performance to be closely matched to that of the control instrument, thus eliminating the “hunting effect” and undesirable oscillations associated with poor system design.

The 1600- BP Air Motor incorporates the above, but also uses a positioner to increase the available torque. Refer to Bulletin 1600 for information on available torque, and additional data on the air motor.

DIMENSIONS

<table>
<thead>
<tr>
<th>1600-B Assembly</th>
<th>1600-BP Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight: 33 lbs</td>
<td>Weight: 35 ½ lbs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R930-6022</th>
<th>Needle Valve Position (from closed position)</th>
<th>Opening Time in seconds</th>
<th>Closing Time in seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2½ Turns</td>
<td>31</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>2 Turns</td>
<td>42</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>1½ Turns</td>
<td>81</td>
<td>89</td>
</tr>
</tbody>
</table>

1600-BK or 1600-BPK Speed Control Kits are offered for adding the speed control feature to an existing 1600 or 1600- P Air Motor. Kits consist of:

- 1600-BK
  - 2-5510-1 Chamber
  - 2-5511-1 Air Tube
  - R916-4141 Elbow Fittings
  - R930-6022 ¼” Needle Valve
  - R066-2650 Hex Head Cap Screws

- 1600-BPK
  - 2-5510-1 Chamber
  - 2-5512-1 Air Tube
  - R916-4141 Elbow Fittings
  - R930-6022 ¼” Needle Valve
  - R066-2650 Hex Head Cap Screws

Order by specifying 1600-BK or 1600-BPK Speed Control Kit.

DIMENSIONS SHOWN ARE SUBJECT TO CHANGE. PLEASE OBTAIN CERTIFIED PRINTS FROM FIVES NORTH AMERICAN COMBUSTION, INC. IF SPACE LIMITATIONS OR OTHER CONSIDERATIONS MAKE EXACT DIMENSION(S) CRITICAL.

WARNING: Situations dangerous to personnel and property may exist with the operation and maintenance of any combustion equipment. The presence of fuels, oxidants, hot and cold combustion products, hot surfaces, electrical power in control and ignition circuits, etc., are inherent with any combustion application. Parts of this product may exceed 160°F in operation and present a contact hazard. Fives North American Combustion, Inc. urges compliance with National Safety Standards and Insurance Underwriters’ recommendations, and care in operation.