**ACCESSORIES - GEAR ACTUATOR**

Powell Multi-Turn Valves can be supplied with Adapto Gears. For installed Powell valves, gear units with adaptor parts are available. Adapto Gear units are also available separately for any Multi-Turn valve application.

Powell Adapto Gear Actuators are fully enclosed, light weight, maintenance free Bevel Gear units for valves which require gearing to facilitate operation. The actuators mount quickly and easily as installation does not require special complicated parts. The manual valve actuators, Type AA, B, and C, have been designed for simplicity, high efficiency and ease of adaptability to make them ideal for use on both small and large valves. The input shaft is mounted on antifriction bearings and the bevel gear drive sleeve is supported by an integral bearing arrangement. The actuator does not take any of the valve stem thrust since the thrust is absorbed in the valve stem bushing.

**Typical Adapto-Gear Installation:**

a. Remove the handwheel.
b. Remove bolts from the yoke, mount the adaptor, replace bolts and tighten.
c. Install the sleeve and key on stem bushing.
d. Mount gear operator on adaptor and bolt together.
e. Conversion is completed.

For installed Powell valves, adaptors are provided so that new stem bushings or bonnets are not necessary. Field conversion can be completed without removing the valve from service.

**Advantages**

- Anti-friction bearings permit ease of operation.
- Housing protects gears from dirt, dust, and other foreign materials. Also good as a safety factor to protect operating personnel.
- Housing has provision for plug or pipe stem protector when required. Sealed housing retains the lubricant and protects the moving parts.
- Adaptors for air wrench operation can be supplied on order.

<table>
<thead>
<tr>
<th>Model</th>
<th>Max Torque</th>
<th>Gear Ratio</th>
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<tbody>
<tr>
<td><strong>Model AA-18 Actuator</strong></td>
<td>996 ft-lb (1350 Nm)</td>
<td>2.92:1</td>
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<tr>
<td><strong>Model B-24 Actuator</strong></td>
<td>1990 ft-lb (2700 Nm)</td>
<td>4.07:1</td>
</tr>
<tr>
<td><strong>Model C-24 Actuator</strong></td>
<td>3980 ft-lb (5400 Nm)</td>
<td>6:1</td>
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