When a GAC actuator is installed on an engine and electronically connected to compatible GAC governing system components, a high performance speed control system results. The design baseline for GAC actuators incorporates fast responses, multi-voltage usage, and proven reliability to allow for more precise control. All of GAC actuators are easy to install with no maintenance required.

**ATB Series**

- **Designed to out-live the life of the engine**
- **12 or 24 VDC**
- **25mm to 40mm Bore Size**
- **Packard Connector**

### ATB T1 Series

- ATB251T1N-12 or -24 25mm
- ATB251T1F-12 or -24 25mm / Position Feedback Sensor
- ATB301T1N-12 or -24 30mm
- ATB301T1F-12 or -24 30mm / Position Feedback Sensor
- ATB351T1N-12 or -24 35mm
- ATB351T1F-12 or -24 35mm / Position Feedback Sensor
- ATB401T1N-12 or -24 40mm
- ATB401T1F-12 or -24 40mm / Position Feedback Sensor

### ATB T2 Series

- **12 or 24 VDC**
- **45mm to 65mm Bore Size**
- **Packard Connector**

### ATB T3 Series

- **12 or 24 VDC**
- **75mm Bore Size**
- **Packard Connector**

### ATB T1 Series

- ATB251T1N-12 or -24 25mm
- ATB251T1F-12 or -24 25mm / Position Feedback Sensor
- ATB301T1N-12 or -24 30mm
- ATB301T1F-12 or -24 30mm / Position Feedback Sensor
- ATB351T1N-12 or -24 35mm
- ATB351T1F-12 or -24 35mm / Position Feedback Sensor
- ATB401T1N-12 or -24 40mm
- ATB401T1F-12 or -24 40mm / Position Feedback Sensor

### ATB T2 Series

- **12 or 24 VDC**
- **45mm to 65mm Bore Size**
- **Packard Connector**

### ATB T3 Series

- **12 or 24 VDC**
- **75mm Bore Size**
- **Packard Connector**

*Call GAC for sizes 95mm and above*
GAC’s Pump Mounted Actuators are field proven proportional actuators designed to mount directly to fuel injection pumps to achieve an integrated proportional servo fuel package. Since the design has no sliding parts and its components are sealed; outstanding reliability results with no maintenance required.

### 100 Series
- For Stanadyne ‘D’ Series Pumps
- For Delphi DPG Pumps
- 12 or 24 VDC

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADC100-12 or -24</td>
<td>Stanadyne ‘D’ Series Pump / Commercial Connector</td>
</tr>
<tr>
<td>ADD103B-12 or -24</td>
<td>Delphi DPG / DP210G Pumps / Packard Connector / Mating Connector</td>
</tr>
<tr>
<td>ADE103B-12 or -24</td>
<td>Delphi DPG / DP210G Pumps / Packard Connector with Mating Connector Harness</td>
</tr>
</tbody>
</table>

### 175/176 Series
- For Bosch ‘P’ and ‘A’ Pumps
- Connects Directly to the Fuel Rack
- Manual Shut-Off Mechanism
- 12 or 24 VDC

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD175A-12 or -24</td>
<td>Bosch ‘P’ Pump / Packard Connector</td>
</tr>
<tr>
<td>ADE175A-12 or -24</td>
<td>Bosch ‘P’ Pump / Packard Connector with Mating Connector</td>
</tr>
<tr>
<td>ADD176A-12 or -24</td>
<td>Bosch ‘A’ Pump / Left Hand Rack / Packard Connector</td>
</tr>
<tr>
<td>ADE176A-12 or -24</td>
<td>Bosch ‘A’ Pump / Left Hand Rack / Packard Connector with Mating Connector / Cold Start Assist</td>
</tr>
</tbody>
</table>

### 275 Series
- Bosch ‘P’ 3000 - 7000 Fuel Injection Pump
- Controls Pumps on Engines up to 12-Cylinders
- Manual Shut-Off Mechanism

<table>
<thead>
<tr>
<th>Model</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ACB275H</td>
<td>Multi VDC / MIL Connector</td>
</tr>
<tr>
<td>ACE275H-24</td>
<td>24 VDC / Packard Connector</td>
</tr>
<tr>
<td>ACE275HD-24</td>
<td>24 VDC / Packard Connector / Heavy Duty Bearing Retention</td>
</tr>
<tr>
<td>ACE275J-24</td>
<td>24 VDC / High Torque Return Spring with Oil Drain Fitting</td>
</tr>
<tr>
<td>ACE275K</td>
<td>24 VDC / Heavy Duty Bearing Retention / Packard Connector / Position Feedback Sensor</td>
</tr>
</tbody>
</table>

### 295 Series
- Bosch ‘P’ 9 and 10 Pumps
- Control Pumps on Engines up to 16 Cylinders
- 24 VDC

<table>
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<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE295-24</td>
<td>Packard Connector</td>
</tr>
<tr>
<td>ACE295F-24</td>
<td>Packard Connector / Position Feedback Sensor</td>
</tr>
</tbody>
</table>
GAC's Engine Mounted Actuators exhibit a high quality construction design for high temperature applications and are uniquely optimized to outperform externally mounted electric actuators and other competitive designs. Since GAC’s fast responding fuel control design has no sliding parts and its components are sealed; outstanding reliability results with no maintenance required.

### 110 Series
- For Deutz 1011 Engines
- For 2, 3, and 4 Cylinder.
- 12 or 24 VDC

ACD110-12 or -24  Deutsch Connector
ACE110-12 or -24  Deutsch Connector with Mating Connector

### 180 Series
- 12 or 24 VDC
- Deutz 1012/1013 & 2012 Engines
- Volvo 520/720 Engines

ADD180G-12 or -24  Packard Connector with Mating Connector

### ALR Series
- Pull Electrical Linear Actuators
- Mounts Directly to Engine's Fuel Pump
- Utilizes Precision Linear Ball Bearings instead of Bushings

ALR160-S03-12 or -24  12 or 24 VDC / Spade Connector / Shibaura Series
ALR190-I03-12 or -24  12 or 24 VDC / Spade Connector / Isuzu L-Series 3LB1 3LD1 3LD2 4LE1 4LE2
ALR190-I04-12 or -24  12 or 24 VDC / Packard Connector / Isuzu L-Series 3LB1 3LD1 3LD2 4LE1 4LE2
ALR190-K04-12 or -24  12 or 24 VDC / Packard Connector / Kubota Super S Series D905, D1005, D1105, D1105-T, V1305, V1505, V1505-T 3300 Series 3800
ALR190-KM03-12 or -24  12 or 24 VDC / Packard Connector / M03 Engines
ALR190-KV2403-12 or -24  12 or 24 VDC / Packard Connector / V2403 Engines
ALR190-KV3073-12 or -24  12 or 24 VDC / Packard Connector / V3073 Engines
ALR190-KV3307-12 or -24  12 or 24 VDC / Packard Connector / V3307 Engines
ALR190-M04-12 or -24  12 or 24 VDC / Packard Connector / Mitsubishi L-Series L2E L3E, S3L Series S3L, S4L Series S4L S4L2
ALR190-P04-12 or -24  12 or 24 VDC / Packard Connector / Perkins 404 700
ALR190-Y03-12 or -24  12 or 24 VDC / Spade Connector / Yanmar TNV Series 2TNV70 3TNV70 3TNV76 3TNV82A 3TNV84 3TNV84T 3TNV88 4TNV84 4TNV94L 4TNV98 4TNV98T / Isuzu C-Series 2CA 3CA 3CB 3CD 3CDT
ALR190-Y04-12 or -24  12 or 24 VDC / Packard Connector / Yanmar TNV Series 2TNV70 3TNV70 3TNV76 3TNV82A 3TNV84 3TNV84T 3TNV88 4TNV84 4TNV94L 4TNV98 4TNV98T / Isuzu C-Series 2CA 3CA 3CB 3CD 3CDT
GAC’s Universal actuators are proportional electro servo designed for mechanical actuation of fuel system control levers. They exhibit GAC’s uniquely optimized fuel control and will outperform externally mounted electric actuators. GAC’s sealed integral actuators are simple to install and possess no sliding parts, resulting in outstanding reliability and no maintenance required.

### 104 Series
- Briggs & Stratton Engines
- Kohler 12 - 30 HP Engines
- <25 msec Response
- Environmentally Sealed

**ADD104-12**  
12 VDC / 0.29 lb-ft Torque / Male Spade

### 120 Series
- Rotary Actuators
- Sized for Engines up to 150 hp
- 1.0 lb-ft Torque
- For Small Inline Fuel Pumps or Carburetors

**ACB120**  
Multi VDC / MIL Connector / 25° Rotation

**ADB120**  
Multi VDC / MIL Connector / 25° Rotation

**ADB120E4**  
Multi VDC / MIL Connector / Fuel Metering / Cummins PT Fuel System

**ADC120S-12 or -24**  
12 or 24 VDC / Commercial Connector / 25° Rotation / Serrated Shaft

### 225 Series
- 2.2 lb-ft Torque
- 25° Rotation
- < 45 msec Response
- For Multi-Plunger Fuel Pumps & Carburetors

**ACB225**  
Multi VDC / MIL Connector

**ADB225**  
Multi VDC / MIL Connector / Diecast Housing

**ADC225S-12 or -24**  
12 or 24 VDC / Commercial Connector / Serrated Shaft

**ADC225GS-12 or -24**  
12 or 24 VDC / Commercial Connector / Serrated Shaft / Lilser Rate Return Spring

**ADC225JS-12 or -24**  
12 or 24 VDC / Commercial Connector / Serrated Shaft / Greater Rate Return Spring

**ADC225KS-12 or -24**  
12 or 24 VDC / Commercial Connector / Serrated Shaft / High Temperature Applications

### ALN Series
- Push Linear Actuators
- High Quality Antifriction Bearings
- Replaces Competitive Models
- 22mm Stroke

**ALN025-12 or -24**  
12 or 24 VDC / 0.25 ft.lb. / Spade Connector

**ALN025A-12 or -24**  
12 or 24 VDC / 0.25 ft.lb. / Spade Connector / Clevis Kit

**ALN050-12 or -24**  
12 or 24 VDC / 0.50 ft.lb. / Spade Connector

**ALN050A-12 or -24**  
12 or 24 VDC / 0.50 ft.lb. / Spade Connector / Clevis Kit

### 2001 Series
- Rotary Actuator
- 12.0 lb-ft Torque
- < 80 msec Response
- Sized for engines from 400 - 1800 hp

**ACB2001**  
24 VDC / 12.0 Max lb-ft Torque / 35° Rotation
## Cable Harnesses
- CH1203: Actuator - 12' - 6 pin MIL Connector
- CH1210: Actuator - 12' - 90° Connector (MIL)
- CH1212: Actuator - 30' - 6 pin MIL Connector
- CH1215: Packard - Actuator Mating Half
- CH1515: AB Position Sensor Mating Half - 6' Shielded / Feedback Sensor

## Mating Connectors
- EC1000: Actuator Straight / Military Style Connector
- EC1010: Actuator 90° / Military Style Connector
- EC1120: 110 Series - Mating Half
- EC1300: Packard - Electric Actuator
- EC1515: AB Feedback Sensor Mating Half Connector

## Installation Kits
- KT130: ALN Series Actuators
- KT153: ACE175A Series - Motorpal Pump
- KT175-RS-R: ADD175 Series / Bosch 'A' Pump / Right Hand Rack
- KT176A: ADE176A Series - Bosch 'A' Pump
- KT231J: Bosch RSV - Left Side - Used With ALN050
- KT232J: Bosch RSV - Right Side
- KT275: ACB275 - Bosch 3000 Pump / Camshaft Bearing Kit
- KT276: ACB275 - Bosch 7000 Pump / Camshaft Bearing Kit
- KT278: ACB275 Actuators - RB RP21 with RB Plate
- KT278-1: ACB275 Actuators - RP21
- KT283: ACD175 BYC 'P' Pump
- KT295: ACE295 Actuators
- KT289: ADD175 - Bosch 'P' Pump / Governor Only

## Levers
- LE1100-3: 4.8" - ADC Actuators - 3/16" Holes / Smooth Shaft
- LE1200-3: 4.8" - ACB/ADB Actuators - 1/4" Holes / Serrated Shaft
- LE1400-1: 4.3" - ACB/ADB Actuators - 3/16" Holes / Serrated Shaft
- LE1400-2: 4.3" - ACB/ADB Actuators - 1/4" Holes / Serrated Shaft
- LE1400-4: 3.3" - ACB/ADB Actuators - 1/4" Holes / Smooth Shaft
- LE1500-1: 4.3" - ADC Actuators - 3/16" Holes / Smooth Shaft
- LE1500-2: 4.3" - ADC Actuators - 1/4" Holes / Smooth Shaft
- LE2000: 4.4" - ACB2001 - M8 Holes

## Threaded Rod
- RD100: 1/4 - 28 (Price per Inch of Length)
- RD102: 1/4 - 28 - Precut to 12"