Bettis RPE-Series

The RPE-Series is the heavy duty rack & pinion actuator from Bettis. Its rugged industrial design offers a tough “workhorse” range of valve actuators due to a unique set of features.

These features combine to provide a reliable actuator that:

- Improves valve automation to ensure your plant uptime and prevent unplanned downtime
- Makes your installation and maintenance simple and easy due to the standardized customer interfaces
- Allows you to apply the actuator indoors and outdoors, at extreme temperatures, harsh duty and corrosive atmospheres

The Right Size of Actuator

Spring-return actuator can be equipped with up to 6 different spring sets per actuator size. This allows you to select and configure the most economical actuator size for your application.

The robust and “work-horse” performance actuator for any harsh environment

1. Heavy duty body castings provide maximum protection in the harsh environment of process plant locations
2. Polyurethane powder coating provides excellent corrosion resistance on housing and end caps
3. One piece blow-out proof, pressure balanced, pinion allows safe in-field re-configuration from Fail-Close to Fail-Open. The use of aerospace type alloy 7075 T6, provides the best combination of corrosion resistance, high strength and a lightweight construction as well as providing protection against galvanic corrosion
4. VDI/VDE 3845 (NAMUR) top accessory interface
5. Precision dual stroke adjustment provides accurate and intuitive end of stroke adjustment for the Open and Closed valve position
6. Low maintenance bearings for pistons and pinion
7. Accurately designed and machined components assure a perfect fit and long cycle life
8. VDI/VDE 3845 (NAMUR) solenoid interface
9. Dual ISO5211 mounting patterns allow low-profile direct mounting to valves
10. Stainless steel or Deltatone® coated fasteners

General Specifications

<table>
<thead>
<tr>
<th>Torque Range:</th>
<th>Double-Acting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>119 to 39498 lbf.in (13.4 to 4449 Nm)</td>
</tr>
<tr>
<td>Spring-Return</td>
<td>20 to 21188 lbf.in (2 to 2394 Nm; spring end torque)</td>
</tr>
<tr>
<td>Rotation:</td>
<td>Factory set at 90°</td>
</tr>
<tr>
<td>Temperature Range:</td>
<td>-4°F to 175°F (-20°C to 80°C)</td>
</tr>
<tr>
<td>Finish:</td>
<td></td>
</tr>
<tr>
<td>Body and end caps:</td>
<td></td>
</tr>
<tr>
<td>Cast aluminium, anodized</td>
<td></td>
</tr>
<tr>
<td>and polyurethane powder</td>
<td></td>
</tr>
<tr>
<td>coated</td>
<td></td>
</tr>
<tr>
<td>Pinion:</td>
<td></td>
</tr>
<tr>
<td>High grade aluminium,</td>
<td></td>
</tr>
<tr>
<td>hard anodized</td>
<td></td>
</tr>
<tr>
<td>Pistons:</td>
<td></td>
</tr>
<tr>
<td>Chromated</td>
<td></td>
</tr>
<tr>
<td>Fasteners:</td>
<td></td>
</tr>
<tr>
<td>Stainless steel or Deltatone® coated</td>
<td></td>
</tr>
<tr>
<td>Lubrication:</td>
<td>Lubricated for life</td>
</tr>
<tr>
<td>Pressure Range:</td>
<td>2.9 to 120 psig (0.2 to 8.3 barg)</td>
</tr>
<tr>
<td>Pressure Media:</td>
<td>Air, dry or lubricated and inert gases</td>
</tr>
</tbody>
</table>
Advanced Design leads to Application Flexibility

**Advanced design techniques**
Bettis RPE-Series is the result of 40-years of production and design refinement following stringent engineering standards to perform under the toughest, heavy duty applications.

**Modular Construction** allows the maximum flexibility across a wide range of applications. In addition, new spring design allow for different air pressures to fit choice of valve.

**Maximum corrosion protection** in every Bettis RPE is achieved by using anodized body and end cap, stainless steel or Deltatone® coated external steel parts and a polyurethane powder coat. It is tested to pass a 1000 hours salt spray to the ASTM B117 standard to assure a corrosion free long service life.

Ease of Use from Installation to Configuration to Maintenance

**Compliance to the relevant interface standards** ensures standardization of the valve mounting, solenoid mounting and top mounted switch box or positioner mounting.

**Dual Stroke Adjustment** provides precise intuitive end of stroke adjustment for the Open and Closed valve position.

**Low Maintenance Bearings**
The actuator is lubricated for life. Together with the high performance synthetic bearings, the actuator provides long working life with low maintenance requirements.

Safety, Performance and Global Compliance

**Functional and personal safety** is your plant’s number one priority. The spring cartridge design provides maximum personnel safety during maintenance and ensures that “Fail Safe” actuators will always do just that.

<table>
<thead>
<tr>
<th>Quality</th>
<th>ISO9001:2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valve Flange</td>
<td>ISO 5211</td>
</tr>
<tr>
<td>Solenoid</td>
<td>VDI/VDE3845</td>
</tr>
<tr>
<td>Top Accessories</td>
<td>VDI/VDE3845</td>
</tr>
<tr>
<td>Explosive Areas</td>
<td>ATEX 2014/34/EU</td>
</tr>
<tr>
<td>Pressure Safety</td>
<td>PED 2014/68/EU</td>
</tr>
<tr>
<td>Mechanical Safety</td>
<td>MD 2006/42/EC</td>
</tr>
<tr>
<td>Hazardous Substances</td>
<td>ROHS 2011/65/EU</td>
</tr>
</tbody>
</table>

Bettis RPE pneumatic actuators are manufactured to meet **worldwide quality and safety standards**.

Drive inserts and dual drilling patterns on the valve flange **make direct mounting flexible**, no matter if the valve stem is; square, flat head, or round with key way.
Certifications

Bettis RPE-Series pneumatic actuators are manufactured to meet the following worldwide quality and safety standards:

Safety Standards

Product Interface Standards
VDI/VDE3845 (NAMUR)
ISO – 5211

Company Operations Standards
ISO – 9001 Quality Assurance

World Area Configuration Centers (WACC) offer sales support, service, inventory and commissioning to our global customers. Choose the WACC or sales office nearest you:

NORTH & SOUTH AMERICA
10300 Northwest Freeway
Houston TX 77065
USA
T +1 281 477 4100
Av. Hollingsworth
325 Iporanga Sorocaba
SP 18087-105
Brazil
T +55 15 3413 8888

ASIA PACIFIC
No. 9 Gul Road
#01-02 Singapore 629361
T +65 6777 8211
No. 1 Lai Yuan Road
Wuqing Development Area
Tianjin 301700
P. R. China
T +86 22 8212 3300

MIDDLE EAST & AFRICA
P. O. Box 17033
Jebel Ali Free Zone
Dubai
T +971 4 811 8100

Afric
P. O. Box 10305
Jubail 31961
Saudi Arabia
T +966 3 340 8650

24 Angus Crescent
Longmeadow Business Estate East
P.O. Box 6098 Greenstone
1616 Modderfontein Extension 5
South Africa
T +27 11 451 3700

EUROPE
Holland Fasor 6
Székesfehérvár 8000
Hungary
T +36 22 53 09 50

Strada Biffi 165
29017 Fiorenzuola d’Arda (PC)
Italy
T +39 0523 944 411

For complete list of sales and manufacturing sites, please visit
www.emerson.com/actuationtechnologieslocations or contact us at
info.actuationtechnologies@emerson.com

©2019 Emerson. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. 
Bettis™ is a mark of the Emerson family of companies. All other marks are property of their respective owners.