Rotork Fluid Systems RCE electrohydraulic actuators is a range of rigid actuators for on/off and positioning with high torques in relation to size. Torques ranging from 50-5,000 Nm. The function is a cost-effective alternative to a spring return electric actuator. The unit consists of a hydraulic spring return actuator with manual override, electric motor, hydraulic pump and tank. The series has a wide range of applications and is resistant to environmental influence, even in marine environments. The electro-hydraulic actuators are recommended within district heating plants, oil and gas depots where Explosion-proof equipment is required and where pressurized air is not available or unsuitable.

Within the oil and power industry, safety is of the highest importance. In emergency situations the failsafe function close or open the valve automatically with the aid of a return spring in the actuator. RCE is available in designs where spring opens or spring closes. The actuator is constructed for direct mounting on valves according to ISO-standards.

Rotork has long experience of electro-hydraulic actuators. Actuators which have been in operation in arduous environments since the beginning of the eighties still work faultlessly. We can with a clear conscience say that they are a very high quality product. Please also look at Rotork Fluid Systems: Skilmatic- electro-hydraulic actuators or EH- linear electric hydraulic actuators.

Technical Data

- 50 Nm – 5,000 Nm.  442 lbf. in. – 44,248 lbf. in.  On – Off and positioning. Through impulse control from external system.
- Max pressure: 10 bar/145 psi*  
  Temp:  
  -20°C to +40°C  
  -4°F to +104°F  
  *RCE265  8bar/115psi
- Mounting face according to international standard ISO5211, DIN3337, DIN79, NAMUR, VDI/VDE 3845.
- Mounting kits for all 90° valves and accessories.
- Spring cartridge with pre-tensioned springs. Blow-out-proof drive shaft.
- Scotch Yoke provides increased torque in the end positions, smooth action, precise control, low air consumption and compact dimensions.
- High-quality materials for long working life and optimum corrosion resistance. Extruded anodized aluminium housing, RCE 210-260 have drive shafts and screws of stainless steel.
- Long life, maximum reliability.
Quality - Strength - Reliability

Quality
All RC actuators are made under strict quality control. We are certified to ISO 9001 and ISO 14001.
Our RC actuators comply with all standard international requirements, and all our products are CE-marked according to PED and ATEX.
The recognised high quality of our RCE actuators ensure our customers get top class actuating.

Strength
RCE actuators are strong. RCE200 with Scotch Yoke gives at least 50% more torque in the end positions, precisely where valves need it most. This ensures that valves work even after prolonged standstills.
RCE200 actuators have the lowest weight and smallest external dimensions for their torque output. Giving compact, light valve and actuator units, especially when using RC-M1 manual override. This reduces stresses on pipe work, especially when there is vibration in the pipe system.

Reliability
Simple, robust design. We use only top-quality materials in production, so our actuators last.

RC 200-SR spring return
Remote Control is always out in front when it comes to technology. Customers who switch to RC 200-SR have told us about the problems they had with other actuators and their small, weak springs. In contrast, all RC 200-SR actuators come with powerful pretensioned springs which are simple and easy to use.
RC 200-SR with its powerful return springs ensures that springs shut or open by air failure.

www.remotecontrol.se
RCE-SR - The flexible power package

Quality - Strength - Reliability

Valve block
With 3-way solenoid valve, speed adjustment of safety function and manometer entry

Stainless steel pipes
For high corrosion resistance

Electric motor

Switch box
Electric end-position indication

Polished cylinder bore
Minimum friction, maximum working life, maximum precision

Handwheel
For emergency operation

Indicator tube/air return
Gives closed loop environment-safe system and possibility of trouble shooting

Tank
For hydraulic oil

Spring cartridge
Easy to service Guaranteed reliability

Cylinder
Extruded anodised aluminium. Zero-maintenance, highly corrosion-resistant, easy to clean

Hole pattern
International standard ISO 5211, DIN 3337, NAMUR

Stardrive shaft
Tailored to international standards for square-section shafts. ISO 5211, DIN 79 och NAMUR

Centering ring
ISO 5211, DIN 3337, NAMUR

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Fax +46 (0)23 587 45
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falun.info@rotork.com

www.remotecontrol.se
**RCE-SR - Dimensions**

For horizontal piping with vertical stem see figure A page 6.

![Diagram of RCE-SR dimensions](image)

<table>
<thead>
<tr>
<th>Model</th>
<th>A1</th>
<th>A2</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>ØG</th>
<th>H</th>
<th>ØJ</th>
<th>K</th>
<th>L</th>
<th>WEIGHT</th>
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<tbody>
<tr>
<td>RCE230-SRM</td>
<td>165</td>
<td>180</td>
<td>140</td>
<td>140</td>
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<td>420</td>
<td>265</td>
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<tr>
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<td>317</td>
<td>390</td>
<td>470</td>
<td>515</td>
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<td>202</td>
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<td>RCE270-SRM</td>
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<td>360</td>
<td>250</td>
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</table>

*Weights refer to on-off actuators with 1 or 3-phase engine and RCE4L switch box.*

+5,5kg for Ex proof with EEEx e engine and 1990 switch box.

+18,5kg for Ex proof with EEEx d 3-phase engine and 1990 switch box.

+20,5kg for Ex proof with EEEx d 1-phase engine and 1990 switch box.

+2,5kg for positioning.
RCE-SR - Dimensions

For vertical piping with horizontal stem see figure D page 6.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>GØ</th>
<th>H</th>
<th>JØ</th>
<th>K</th>
<th>L</th>
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<td>RCE280-SRM</td>
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<td>735</td>
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</tbody>
</table>

*Weights refer to on-off actuators with 1 or 3-phase engine and RCE4L switch box.  
+5,5kg for Ex proof with EEx e engine and 1990 switch box.  
+18,5kg for Ex proof with EEx d 3-phase engine and 1990 switch box.  
+20,5kg for Ex proof with EEx d 1-phase engine and 1990 switch box.  
+2,5kg for positioning.
RCE-SR - Installing positions

A: Horizontal piping, valve stem vertical upwards. Recommended standard mounting.

B: Horizontal piping, valve stem horizontal.
B1: (picture) Actuator along piping, Special design.
B2: Actuator mounted across piping, Recommended standard mounting.

C: Horizontal piping, valve stem vertical downwards. Special design.

D: Vertical piping, valve stem horizontal.
D1: (picture) Actuator along piping. Recommended standard mounting.

NOTE!
The actuators on these pictures are only illustrations of the mounting positions. Dimensions and measurements varies depending on actuator size and classification. Dimensions please see page 4 & 5.
## RCE-SR - Technical data

### Torque and hole pattern

<table>
<thead>
<tr>
<th>Type</th>
<th>Torque Nm, Springs adapted for 7 bar. Hydraulic pressure 8 bar</th>
<th>Valve fitting measurements</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Hydraulic pressure opens 0° 60° 90° 90° 60° 0°</td>
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<tr>
<td>RCE230-SRM</td>
<td>113 50 65 81 39 55</td>
<td>F07/F10 17</td>
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<tr>
<td>RCE240-SRM</td>
<td>226 104 133 163 80 115</td>
<td>F10/F07 22</td>
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<tr>
<td>RCE250-SRM</td>
<td>355 160 210 255 125 175</td>
<td>F10/F12 22</td>
</tr>
<tr>
<td>RCE260-SRM</td>
<td>710 325 420 515 250 350</td>
<td>F12/F10 27</td>
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<tr>
<td>RCE265-SRM</td>
<td>1145 470 580 695 355 525</td>
<td>F12/F10 27</td>
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<tr>
<td>RCE270-SRM</td>
<td>1480 670 870 1060 520 720</td>
<td>F14 36</td>
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<td>RCE280-SRM</td>
<td>2970 1360 1750 2150 1050 1470</td>
<td>F16 46</td>
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### Electrical data

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<th>Power consumption</th>
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<th>Output</th>
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<tr>
<td>230V 3-phase</td>
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<td>230V 1-phase</td>
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</table>

*0.25kW

### Hydraulic

**Pump:** Gear pump

**Pump pressure:** Pre-adjusted at 8 bar. Max 10 bar. Connection for pressure gauge.

**Temp range:** -20°C to +40°C and Ex zon 1. Other ranges on request.

**Oil type:** Standard: ExxonMobile Unvis HVI 13. Optional: Aero Shell Fluid 4 or 41. Castrol Aero HF585B.

### Operation times

<table>
<thead>
<tr>
<th>Type</th>
<th>On Off With blocking valve</th>
<th>On Off Without blocking valve</th>
<th>Positioning</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Open Close</td>
<td>Open Close</td>
<td>Open Close</td>
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<tr>
<td>RCE230-SRM</td>
<td>6 6</td>
<td>3 3</td>
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<td>RCE240-SRM</td>
<td>8 8</td>
<td>5 5</td>
<td>6 3</td>
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<tr>
<td>RCE250-SRM</td>
<td>13 16</td>
<td>8 7</td>
<td>8 4</td>
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<td>RCE260-SRM</td>
<td>29 29</td>
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<td>RCE265-SRM</td>
<td>26 22</td>
<td>26 22</td>
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<tr>
<td>RCE270-SRM</td>
<td>33 32</td>
<td>33 26</td>
<td>35 14</td>
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<tr>
<td>RCE280-SRM</td>
<td>62 54</td>
<td>62 50</td>
<td>61 26</td>
</tr>
</tbody>
</table>
RC accessories

Control equipment
Solenoid valves are available for all voltages, in standard or Ex-proof versions.

Installation
Rotork Sweden’s mounting kits are ideally suited to fitting actuators to valves, ensuring reliable operation and long life. We offer installation and testing at the client’s premises or at any of our workshops.

Training
To ensure our products are used correctly and effectively, we offer product training on site at the customer’s premises when commissioning or at Rotork companies anywhere in the world.

Service
Our factory trained engineers can assist you with installation and commissioning, service and maintenance.

Firejacket
Where function under extreme conditions is required. Are available on request. Temperatures and exposure conditions shall be set on request.

Roof
Weather protection for exterior-mounted actuators.

All Remote Control actuators are
100% leak and function tested
Delivered with instructions in all EU languages

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We reserve the right to make changes without notice
Ref No 306A / Art No 980306