Economy Electric Actuated Stainless 3 Piece Ball Valve

- Stainless Steel Body 316
- Powerful Electric Actuator
- Full Bore,
- Limit Switches/Manual Override
- Various Voltages
- Screwed BSPT (other connections on request)

Description

Our Economy stainless steel full bore 3 piece ball valve is fitted onto a powerful Electric Actuator. Suitable for slightly aggressive fluids, the valve is fully maintainable with RPTFE seats with end connections of screwed BSPT. Valve pressures up to 1000 PSI. Temperature Range -20°C to 180°C

Description – ¼” to 4”

A Perfect combination of a maintainable, full bore ball valve and powerful HQ electric rotary ¼ turn actuator. The valve is manufactured in 316 stainless steel and is a 3 piece design that’s fully maintainable. The seats are reinforced RPTFE. The end connections are screwed BSPT. The actuator can be supplied in a wide range of voltages. This unit offers as standard, limit switches, condensation heaters, optical indicator and manual override.

All information is sourced from our manufacturer’s data and is intended for guidance only - Valves Online can accept no liability for changes, omissions or errors.

www.valvesonline.co.uk e-mail: sales@valvesonline.co.uk
HQ005 standard actuator fitted to our full bore 1000 psi rated stainless steel ball valve offers On/Off control (power to open and power to close) for automatic isolation. Wiring diagrams are in the lid of the actuator and online. This actuator fits neatly onto the three piece valve and offers a perfect match, giving economy, performance and long life.

Features
Multi voltage design (Single phase & 24V)
High corrosion resistance, anodized & painted housing
4 off Limit switches
Torque output: 50 Nm
low current, long-life actuator due to unique brushless DC motor ensuring high reliability
2 off M20 cable entries
IP67 weatherproof enclosure
F03/F04/F05/F07 mounting base with 14mm Star drive
Captive cover bolts
Visual beacon indicator & LED lamps
70% Duty Rating (on/off only)
Declutchable manual override handwheel
Electronic torque limiter

<table>
<thead>
<tr>
<th>Size</th>
<th>Electric Actuator</th>
<th>A</th>
<th>B</th>
<th>W (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>HQ005</td>
<td>50</td>
<td>174</td>
<td>3.06</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>HQ005</td>
<td>60</td>
<td>174</td>
<td>3.08</td>
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<td>1/2&quot;</td>
<td>HQ005</td>
<td>75</td>
<td>174</td>
<td>3.11</td>
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<tr>
<td>3/4&quot;</td>
<td>HQ005</td>
<td>80</td>
<td>182</td>
<td>3.49</td>
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<tr>
<td>1&quot;</td>
<td>HQ005</td>
<td>90</td>
<td>189</td>
<td>3.87</td>
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<tr>
<td>1.1/4&quot;</td>
<td>HQ005</td>
<td>110</td>
<td>193</td>
<td>4.64</td>
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<tr>
<td>1.1/2&quot;</td>
<td>HQ005</td>
<td>120</td>
<td>210</td>
<td>5.6</td>
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<tr>
<td>2&quot;</td>
<td>HQ005</td>
<td>140</td>
<td>217</td>
<td>6.4</td>
</tr>
</tbody>
</table>

Standard Actuator Specification
- **Enclosure**: Weatherproof IP67
- **Power Supply**: 85 - 265 VAC 1 ph, 50/60Hz / 24 VAC/DC
- **Operating Time**: 90° - 13 seconds
- **Limit Switches**: 4 x SPDT, 25OV AC 10A (2 std. & 2 additional)
- **Space Heater**: 2W Anti Condensation
- **Manual Override**: Handwheel Declutchable
- **Duty Cycle (on/offduty)**: S4, 70% (average load of 80% for Max. torque) S2, 50% (average load of 80% for Max. torque)
- **Travel Angle**: 330°
- **Conduit Entries**: 2 x M20
- **Ambient Temperature**: -20°C to +80°C
- **External Coating**: Dry Powder, Polyester

Performance
- **MODEL**: HQ005
- **TORQUE (Nm)**: 50
- **SPEED 90° 50/60Hz**: 13
- **CURRENT 110/1/50**: 0.1A
- **(A) 220/1/50**: 0.05A
- **24 VAC/DC**: 0.8 A
- **WEIGHT**: 2.6
- **MAX.SQ.DRIVE**: 14
- **ISO 5211 mtg. base**: F03, F04, F05, F07

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HQ008 – HQ015 Electric Actuator is a much more robust unit and offers On/Off control (power to open and power to close) for automatic isolation. Wiring diagrams are in the lid of the actuator and also online. This actuator fits neatly onto the three piece full bore ball valve and offers a perfect match, giving performance and longlife.

### DIMENSIONS

<table>
<thead>
<tr>
<th>Size</th>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>G</th>
<th>W (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21/2”</td>
<td>HQ008</td>
<td>185</td>
<td>335</td>
<td>100</td>
<td>70</td>
<td>208</td>
<td>120</td>
<td>15.2</td>
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<tr>
<td>3”</td>
<td>HQ015</td>
<td>205</td>
<td>380.5</td>
<td>142</td>
<td>87</td>
<td>265</td>
<td>160</td>
<td>29</td>
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<td>4”</td>
<td>HQ020</td>
<td>240</td>
<td>380.5</td>
<td>142</td>
<td>87</td>
<td>265</td>
<td>160</td>
<td>37.4</td>
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</tbody>
</table>

### PRESSURE V TEMPERATURE CHART

![Pressure vs Temperature Chart](chart.png)
# TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Actuator Specification for HQ005</th>
<th>Actuator Specification for HQ008/HQ0020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enclosure</strong></td>
<td>Waterproof IP67</td>
</tr>
<tr>
<td>Power Supply</td>
<td>110/220V 50/60Hz, 24 VAC/VDC</td>
</tr>
<tr>
<td>Operating Time</td>
<td>30 Secs</td>
</tr>
<tr>
<td>Limit Switches</td>
<td>4 x SPDT, 250V AC 3A</td>
</tr>
<tr>
<td>Space Heater</td>
<td>2W</td>
</tr>
<tr>
<td>Manual Override</td>
<td>Handwheel Declutchable</td>
</tr>
<tr>
<td>Duty Cycle (on/off duty)</td>
<td>S4, 70% (average load of 80% for Max. torque) / S2, 50% (average load of 80% for Max. torque)</td>
</tr>
<tr>
<td>Travel Angle</td>
<td>90°</td>
</tr>
<tr>
<td>Conduit Entries</td>
<td>2 x M20</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>minus 20°C to +80°C</td>
</tr>
<tr>
<td>External Coating</td>
<td>Dry Powder, Polyester</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actuator Specification</th>
<th>Type (model)</th>
<th>Max Output Torque</th>
<th>Operating Time 50/60Hz</th>
<th>Motor Class</th>
<th>Rated Current (A)</th>
<th>Weight W (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HQ005</td>
<td>50NM</td>
<td>14/13 Secs</td>
<td></td>
<td>0.8</td>
<td>2.6</td>
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<tr>
<td></td>
<td>HQ008</td>
<td>80NM</td>
<td>16/13 Secs</td>
<td>24VAC</td>
<td>0.1</td>
<td>2.6</td>
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<tr>
<td></td>
<td>HQ015</td>
<td>150NM</td>
<td>25/21 Secs</td>
<td>110VAC</td>
<td>0.05</td>
<td>3.4</td>
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<tr>
<td></td>
<td>HQ020</td>
<td>200NM</td>
<td>25/21 Secs</td>
<td>220 VAC</td>
<td>0.8</td>
<td>6.6</td>
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</tbody>
</table>

## Actuator Specification for HQ005

- **Enclosure**: Waterproof IP67
- **Power Supply**: 110/220V 50/60Hz, 24 VAC/VDC
- **Operating Time**: 30 Secs
- **Limit Switches**: 4 x SPDT, 250V AC 3A
- **Space Heater**: 2W
- **Manual Override**: Handwheel Declutchable
- **Duty Cycle (on/off duty)**: S4, 70% (average load of 80% for Max. torque) / S2, 50% (average load of 80% for Max. torque)
- **Travel Angle**: 90°
- **Conduit Entries**: 2 x M20
- **Ambient Temperature**: minus 20°C to +80°C
- **External Coating**: Dry Powder, Polyester

## Valve Specification

- **Body**: CF8M
- **Thread**: BSPT Female
- **Seal**: Reinforced PTFE
- **Stem Seal**: PTFE
- **Ball**: SU316
- **Pressure Rating**: 1000 PSI
- **Ends**: CF8M
- **Approvals**: ATEX, CE, PED

## OPTION SPECIFICATION

- **PIU**: Potentiometer Unit (1K – 10K)
- **PCU**: Proportional Control Unit (In/Out: 0-10VDC, 4-20mA)
- **CPT**: Current Position Transmitter (Output 4-20mA)
- **TS**: Torque overload indicator module (single & redundancy)