A150 Series

A150 torque 15NM, with manual override,
Actuator model: turn on off type, proportional type, timer control type (optional)
Valve body model:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>2 way</td>
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<tr>
<td>PVC</td>
<td>PVC</td>
<td>SS304 SS316</td>
<td>SS304 SS316</td>
<td>SS304 SS316</td>
<td>SS304 SS316</td>
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</tbody>
</table>

Technical Parameters 开关型技术参数

<table>
<thead>
<tr>
<th>Connection standard 连接标准</th>
<th>ISO5211 F03, F05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output axis specification 输出轴规格</td>
<td>Female octagonal 9<em>9 or 11</em>11</td>
</tr>
<tr>
<td>Maximum working pressure 最大介质压力</td>
<td>1.5MPa</td>
</tr>
<tr>
<td>Rated voltage 额定电压</td>
<td>DC12V; DC24V; AC24V; DC12~24V (Optional)</td>
</tr>
<tr>
<td>Wiring diagram 接线图</td>
<td>CR201; CR202; CR301; CR303; CR306; CR501; CR502; CR702; CR703; CR706 (Optional)</td>
</tr>
<tr>
<td>Life time 寿命</td>
<td>70000 times（testing pressure is 0.4MPa, medium is water）</td>
</tr>
<tr>
<td>Actuator material 执行器材质</td>
<td>Engineering Plastics PPO</td>
</tr>
<tr>
<td>Torque force 扭力</td>
<td>15 N.m</td>
</tr>
<tr>
<td>Cable Length 线长</td>
<td>0.5m; 1.5m (Optional)</td>
</tr>
<tr>
<td>Environment temperature 环境温度</td>
<td>-15℃ ~ 60℃</td>
</tr>
<tr>
<td>Liquid temperature 液体温度</td>
<td>2℃ ~ 90℃</td>
</tr>
<tr>
<td>Manual operation 手动操作</td>
<td>Yes</td>
</tr>
<tr>
<td>Open/close indicator 开关指示</td>
<td>Yes</td>
</tr>
<tr>
<td>Protection class 防护等级</td>
<td>IP67</td>
</tr>
</tbody>
</table>
model specification and main performance parameters (Testing pressure is 0.4MPa, Medium is water)

<table>
<thead>
<tr>
<th>Wiring diagram</th>
<th>Rotation</th>
<th>Open/ close time</th>
<th>Rated current (A)</th>
<th>Power(W)</th>
<th>Number of manual turns</th>
</tr>
</thead>
<tbody>
<tr>
<td>201/501</td>
<td>90°</td>
<td>≤11</td>
<td>/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>202/502</td>
<td></td>
<td></td>
<td>&lt;0.78</td>
<td>&lt;1</td>
<td>&lt;0.5</td>
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<tr>
<td>301/702</td>
<td></td>
<td></td>
<td>&lt;0.3</td>
<td>&lt;0.4</td>
<td>&lt;0.2</td>
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<tr>
<td>303/703</td>
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<td></td>
<td>&lt;0.3</td>
<td>&lt;0.42</td>
<td>&lt;0.2</td>
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<tr>
<td>306/706</td>
<td></td>
<td></td>
<td>&lt;0.78</td>
<td>&lt;1</td>
<td>&lt;0.5</td>
</tr>
</tbody>
</table>
A150 turn on/off type 2 way assembly diagram
A150 turn on/off type 3 way assembly diagram
Wiring diagram Turn on/off type

CR201 (2 wires control)

- RD connect with positive, the BK connect with negative, the valve closed, the actuator automatically power off after in place, the valve remains fully closed position.
- BK connect with positive, the RD connect with negative, the valve open, the actuator automatically power off after in place, the valve remains fully open position.

* Suitable Working Voltage: DC12V, DC24V
* Exceeding the working voltage is forbidden

CR501 (5 wires control, with feedback wire)

1. RD connect with positive, the BK connect with negative, the valve closed, the actuator automatically power off after in place.
2. BK connect with positive, the RD connect with negative, the valve open, the actuator automatically power off after in place.
4. GR & WT are connect when the valve open fully, YW & WT are connect when the valve closed fully

Suitable Working Voltage: DC12V, DC24V
Exceeding the working voltage is forbidden

Feedback wire capacity:
1. Voltage: DC0-35v; 2. Maximum current: 0.4A

CR202 (2 wires control—Reset function, Normally closed or normally open)
·When SW is closed, the valve open, the actuator automatically power off after in place
·When SW is open, the valve closed, the actuator automatically power off after in place

* Suitable Working Voltage: **AC24V, DC12-24V**
* Exceeding the working voltage is forbidden

Please Note A150 CR202 must need charge time >1 minute for every time use

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**CR502**  (5 wires control, Reset function, With feedback signal)

![Diagram of CR502](image)

·When SW is closed, the valve open, the actuator automatically power off after in place
·When SW is open, the valve closed, the actuator automatically power off after in place

* GR & WT are connect when the valve open fully, YW & WT are connect when the valve closed fully
* Suitable Working Voltage: **AC24V, DC12-24V**
* Exceeding the working voltage is forbidden

**Feedback wire capacity:**
1. Voltage: DC0-35v; 2. Maximum current: 0.4A

Please Note A150 CR202 must need charge time >1 minute for every time use

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**CR301**  (3 wires control)

![Diagram of CR301](image)

·RD & GR connect with positive, BK connect with negative
·When OPEN( RD) & SW connected, the valve open, the actuator automatically power off after in place, valve remains fully open position
·When CLOSE(GR) & SW connected, the valve closed, the actuator automatically power off after in place, valve remains fully closed position.

* Suitable Working Voltage: DC12V, DC24V, AC24v, DC12v-24v
* Exceeding the working voltage is forbidden
CR702 (7 wires control)

1. RD & GR connect with positive, the BK connect with negative
2. When RD & SW connected, the valve open, the actuator automatically power off after the valve fully open.
3. When GR & SW connected, the valve closed, the actuator automatically power off after the valve fully closed.
4. BL & GY connect with the valve’s fully open signal wiring
5. YW & WT connect with the valve’s fully closed signal wiring
   * Suitable Working Voltage: DC12V, DC24V, AC24V, DC12v-24v
   * Exceeding the working voltage is forbidden

- Feedback wire capacity:
  1. Voltage: DC0-35v; 2. Maximum current: 0.4A

CR3 03 Wiring Diagram (3 wires control)

- RD connect with positive, GR connect with SW & positive
- BK connect with negative
- When the SW of GR closed, the valve OPEN, the actuator automatically power off after in place, remains fully closed position
- When the SW of GR open, the valve CLOSED, the actuator automatically power off after in place, remains fully open position.
  * Suitable Working Voltage: DC12V, DC24V, AC24v, DC12-24v
  * Exceeding the working voltage is forbidden

CR7 03 Wiring Diagram (7 wires control with feedback signal)
RD& GR connect with positive, the BK connect with negative.
SW CLOSED, the valve OPEN, the actuator automatically power off after in place
SW OPEN, the valve CLOSED, the actuator automatically power off after in place.
BL & GY connect with the valve’s fully open signal wiring
YW & WT connect with the valve’s fully closed signal wiring.
* Suitable Working Voltage: DC12V, DC24V, AC24V, DC12-24V
* Exceeding the working voltage is forbidden

Feedback wire capacity:
1. maximum voltage DC36V, AC220V; 2. maximum current 0.4 A.

CR3 06 Wiring Diagram (3 wires control – Power reset function)

1) Power off(failure), valve close
RD& GR connect with positive, the BK connect with negative
SW CLOSED, the valve close, the actuator automatically power off after in place
SW OPEN, the valve open, the actuator automatically power off after in place.

Power off, valve close itself.

2) Power off(failure), valve open
RD& GR connect with positive, the BK connect with negative
SW CLOSED, the valve open, the actuator automatically power off after in place
SW OPEN, the valve close, the actuator automatically power off after in place.

Power off, valve open itself.
* Suitable Working Voltage: AC24V, DC12V-24V
* Exceeding the working voltage is forbidden

CR706 (7 wires control)

1) Power off(failure), valve close
RD& GR connect with positive, the BK connect with negative
SW CLOSED, the valve close, the actuator automatically power off after in place
SW OPEN, the valve open, the actuator automatically power off after in place.
Power off, valve close itself.

2) Power off (failure), valve open
   · RD& GR connect with positive, the BK connect with negative
   · SW CLOSED, the valve open, the actuator automatically power off after in place
   · SW OPEN, the valve close, the actuator automatically power off after in place.

Power off, valve open itself.

   · BL & GY connect with the valve’s fully open signal wiring
   · YW & WT connect with the valve’s fully closed signal wiring.
   * Suitable Working Voltage: AC24V, DC12V-24V
   * Exceeding the working voltage is forbidden