The advantages of all electric, the advantages of hydraulic united in one compact unit

The ASR series Ultimate hydraulic control system for injection molding machine!

AC servo motor driven revolution control system

All electric machine strengths
- Energy Saving
- Durability
- Low Noise Level
- Stability
- Maintenance

Conventional hydraulic machine strengths
- Energy Saving
- Durability
- Cost Merit
- Pressure Holding

The ASR series
- Performance at low pressure
- Low noise level
- Cost merit
- Pressure holding
- Maintenance

Merits of ASR series
- Low cost: Reduced initial and running costs compared to all electric machines
- High performance: Special high power motor (SPM) + variable displacement piston pump
  - a. Extreme low speed molding and continuous pressure holding performance are both greatly improved
  - b. Excellent repeatability.
- High response: Ultra precision molding due to high response injection and high efficient piston pump
- Energy saving: Electric power consumption less than half of conventional hydraulic, or the same as all electric machine. Dramatic reduction in stand by power consumption
- NEW: By using a 2 flow pump, we have now increased the energy saving and further reduced machine size
- Longer lifetime: Special servo coupling increases shaft lifetime
- Less wiring: The integrated controller+driver and exclusive cables means less wiring and less room for error

March 2008
Model Number and Specifications

### Model Number Designation

**ASR3-4G-HXS-A00-11**

**Series**
- ASR1
- ASR2
- ASR3
- ASR4
- ASR5
- ASR10

**Power Supply**
- None: AC200V
- 4: AC400V

**Power Drive Capacity**
- C: M

**Max. Operating Pressure**
- H: 21 MPa
- C: 16 MPa (ASR2)

### Design No.

**Parameter No.**
- A00: Std. value at shipment

**Port Position**
- (ASR1-ASR5)
  - None: Axial Ported, S: Side Ported

**Port Position**
- (ASR10)
  - A: Side Ported (Horizontal)
  - B: Side Ported (Vertical)

**Pump displacement**
- X: Single, W: Dual flow

Note: Flow rate (Pump displacement) can be freely adjusted by the user.

### Specifications

<table>
<thead>
<tr>
<th></th>
<th>ASR1</th>
<th>ASR2</th>
<th>ASR3</th>
<th>ASR4</th>
<th>ASR5</th>
<th>ASR10</th>
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<tbody>
<tr>
<td><strong>Flow Control</strong></td>
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<tr>
<td>Max. Flow L/min</td>
<td>40</td>
<td>55</td>
<td>90</td>
<td>130</td>
<td>200</td>
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<td>Hysteresis</td>
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<tr>
<td>Repeatability</td>
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<tr>
<td>Max. Allowable Input Signal V</td>
<td>6.25</td>
<td>5.75</td>
<td>5.0</td>
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<tr>
<td><strong>Pressure Adjustment MPa</strong></td>
<td>0.1 - 21</td>
<td>0.1 - 16</td>
<td>0.1 - 21</td>
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<tr>
<td>Max. Allowable Input Signal V</td>
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<td><strong>Supply</strong></td>
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<td>Electric Power Supply</td>
<td>AC200 to 230V</td>
<td>AC380 to 480V</td>
<td>50Hz/60Hz, 3-Phases</td>
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<td>Permissible Voltage Fluctuation</td>
<td>AC170 to 253V</td>
<td>AC323 to 528V</td>
<td>50Hz/60Hz, 3-Phases</td>
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</tbody>
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