EVI 9S

17 mm Solenoid System
The EVI 9S system by AMISCO includes a wide range of solenoid operators designed for pneumatic valves. All solenoids of this system have the guide tube with a diameter of 8 mm. The system is designed for use with air. Please contact Amisco for use with other media.

**COIL**

The coil is available with different electrical terminations. Types, power and other characteristics are described in the following pages. All coils feature:

- heat resistant bobbin moulded with 30% glass filled thermoplastic polyester material
- class H wire 200°C according to IEC 60317/13
- built-in magnetic yoke made by low carbon iron
- flux ring for increased performances
- encapsulation with high quality specially designed glass filled nylon.

The use of other materials is possible upon special agreements. Coils are rated to class F. The coil is designed and constructed in accordance to EN 60204.1 and VDE 0580 and it is suitable for industrial ambient conditions. For use in different ambients with high humidity, please, take contact with Amisco. Copper and plastic materials used are UL-Listed.

**SOLENOID OPERATOR**

Plunger and core are made by a magnetic stainless steel specially designed for solenoid applications. The guide tube is made with brass (stainless steel is possible upon special agreement). The plunger is normally equipped with NBR rubber seals. Other materials like FKM are available upon request. The armature assembly is designed for more than 50 million cycles.

**COMPLETE SOLENOID OPERATOR**

The coil is fastened to the plungerguide tube by means of a knurled nut for ease of change over without interrupting the pneumatic circuit. The plungerguide tube is fixed to the valve body either by means of a M12x0.5 thread [thread version] or by a mounting plate with screws [flange mounting version]. Amisco doesn’t supply the plate. The suggested interface dimensions of the valve body are shown on the right side. Any change to the prescribed dimensions can effect the performances of the solenoid operator.

The specifications and drawings contained herein are believed to be correct and are given in good faith, however no liability is accepted therefore. Manufacturer reserves the right to modify said specifications and drawings without notice for technical or commercial reasons.
SOLENOID SYSTEMS
for 2/2 and 3/2 way normally closed and normally open valves

Coil EVI 9

<table>
<thead>
<tr>
<th>Electrical termination</th>
<th>Part Number</th>
<th>Characteristics</th>
<th>DC</th>
<th>AC (50 Hz)</th>
<th>AC (60 Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminals AMP 2.8x0.5 width 9.4 mm</td>
<td>0908S...</td>
<td>Rated power DC W</td>
<td>2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terminals DIN 43650 C width 8.0 mm</td>
<td>0908D...</td>
<td>Inrush power AC VA</td>
<td>4.8</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Flying leads</td>
<td>0908C...</td>
<td>Rated power AC VA</td>
<td>3.6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coil temperature rise @ 50°C ambient T</td>
<td>57</td>
<td>62</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Copper temperature rise @ 50°C ambient T</td>
<td>60</td>
<td>70</td>
<td>60</td>
</tr>
</tbody>
</table>

Operator S7

<table>
<thead>
<tr>
<th>Type</th>
<th>Part Number</th>
<th>Characteristics</th>
<th>DC</th>
<th>AC (50 Hz)</th>
<th>AC (60 Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/2 way NC Flange 3/2 way NC Thread</td>
<td>07L...</td>
<td>Inlet orifice Ø mm</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>07F...</td>
<td>Exhaust orifice Ø mm</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Working pressure bar</td>
<td>0-10</td>
<td>0-10</td>
<td>0-10</td>
</tr>
<tr>
<td>2/2 way NC Flange 2/2 way NC Thread</td>
<td>07L...</td>
<td>Inlet orifice Ø mm</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>07F...</td>
<td>Working pressure bar</td>
<td>0-10</td>
<td>0-10</td>
<td>0-10</td>
</tr>
<tr>
<td>3/2 way NO Flange (inlet from the top) 3/2 way NO Thread (inlet from the top)</td>
<td>07L...</td>
<td>Inlet orifice Ø mm</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>07F...</td>
<td>Working pressure bar</td>
<td>0-10</td>
<td>0-10</td>
<td>0-10</td>
</tr>
</tbody>
</table>

Note:

- Voltage tolerance: ± 10%
- Coil Temperature Range: -40°C ÷ +50°C
- Operator Temperature Range: -10°C ÷ +50°C
- Duty cycle: 100%

Standard voltages: 24 - 110 - 230 VAC
Other voltages on request

For different orifice sizes and pressures contact AMISCO.
**EVI 9 AMP 2.8 x 0.5**

M3 Torque 0.4 ÷ 0.6 Nm

PART NUMBER 0908S...

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**EVI 9 DIN 43650-C**

EN 175301-803 ISO 4400

M2.5 Torque 0.4 ÷ 0.6 Nm

PART NUMBER 0908D...

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**EVI 9 Flying Leads**

500 mm flying leads as a standard, AWG 24

PART NUMBER 0908C...
**COIL CODING SPECIFICATIONS**

**MARKING**
- ZN = Standard - no logo
- AM = Standard + Amisco logo
- ... = customized coil

**PART NUMBER:**

```
0 9 0 8 Y K 5 5 5 4 4 *
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**ELECTRICAL CONNECTION**
- S = AMP 2.8x0.5
- D = DIN 43650 C
- C = Flying leads

**SUPPLY CURRENT**
- A = Alternating current (A.C.)
- D = Direct current (D.C.)
- R = Rectified alternating current (R.A.C.)

**NOMINAL VOLTAGE**

<table>
<thead>
<tr>
<th>Nominal Voltage</th>
<th>Power</th>
<th>Winding Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>12VDC</td>
<td>2.5W</td>
<td>01</td>
</tr>
<tr>
<td>24VDC</td>
<td>2.5W</td>
<td>01</td>
</tr>
<tr>
<td>24VAC</td>
<td>3.6VA</td>
<td>02</td>
</tr>
<tr>
<td>110VAC</td>
<td>3.6VA</td>
<td>02</td>
</tr>
<tr>
<td>230VAC</td>
<td>3.6VA</td>
<td>01</td>
</tr>
</tbody>
</table>

**EVI 9S WINDING CODE**

Example: 024 = 24V
- 220 = 220 V

Alternative possibilities for **CUSTOMER LOGO**
EXAMPLES OF MAIN APPLICATIONS

3/2 NC

2/2 NC

3/2 NO

2/2 OPERATOR

3/2 OPERATOR
### OPERATOR CODING SPECIFICATIONS

#### PART NUMBER: 07 X A A A A A R 9 C Z K

- **TYPE**
  - L = Flange
  - F = Thread

- **DRAWING NUMBER**
  - 07 L 3/2 NC = 05480
  - 07 F 3/2 NC = 06260

- **SUPPLY CURRENT**
  - A = Alternating current (A.C.)
  - D = Direct current (D.C.)

- **FUNCTION**
  - 2 = 2/2 way
  - 3 = 3/2 way

- **FUNCTION**
  - C = Normally closed
  - O = Normally open

- **SEALS**
  - N = NBR
  - V = FKM

- **FASTENING SYSTEM**
  - N = Without fastening system. Fastening nuts to be ordered separately as below.

#### FASTENING NUTS (Note: tightening torque 0.4 ÷ 0.6 Nm)

<table>
<thead>
<tr>
<th>Fastening Nut Description</th>
<th>P/N</th>
<th>Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium knurled nut</td>
<td>540222</td>
<td><img src="M7x0.5.png" alt="Diagram" /></td>
</tr>
<tr>
<td>O-ring 9 x 1.5</td>
<td>500355</td>
<td><img src="9x1.5.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>
We declare under our sole responsibility that the product:

**Coil type: EVI 9**

Nominal voltage: up to 240V  
Nominal Power: up to 2.4W [DC] or 3.6VA [AC]  
Ambient temperature: -40 ÷ +50 °C  
Tolerance range on nominal values: ±10%

Type of connection and other information are available on Amisco catalogue or on request.

*Is conform to the following directives:*
- 2014/35/UE LV  
- 2011/65/UE RoHS

with reference (if applicable) to the following harmonized standards:
- EN 12100 [2010]  
- EN 60204/1 [2006]  
- EN 60664/1 [2007]  
- VDE 0580 [2011]

Filippo Rotondo  
Amisco Technical Division Manager  
Paderno Dugnano, 20 April 2016

The data supplied in Amisco catalogues are to be consulted, and pertinent accident prevention regulations are to be followed during product installation and use. Any unauthorized work performed by purchaser or by third parties can impair its functions, and relieves Amisco of all warranty claims and liability for any resulting damage.