ROBOT End Effector Interface

The Numatics 500 Series valve manifold with EE-Interface Endplate allows direct connectivity to the FANUC EE robot connection. It provides the user, quick and easy integration of Numatics 501, 502 & 503 solenoid valves and I/O; without the need for external junction boxes or wire terminations.

The Endplate incorporates the standard M27 - 26 Pin “EE-Interface” connector (found on appropriately equipped FANUC robots), and an M23 - 12 Pin pass through connector for input sensor blocks; along with an integrated M12 - 5 Pin connector for external Pressure Switch connection.

All appropriate control signals are routed from the robots EE-Interface (RI-Signal) via a single multi-conductor cable assembly (available from Fanuc), to the M27- 26 Pin “P1” connector on the manifold endplate.

Technical Data

Endplate Data

<table>
<thead>
<tr>
<th>Endplate part Number</th>
<th>P599AE509838001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valve Support</td>
<td>501, 502, 503 Series</td>
</tr>
<tr>
<td>Input Capability</td>
<td>8 Points, Discrete PNP</td>
</tr>
<tr>
<td>Output Capability (coils)</td>
<td>8 Points, Discrete PNP</td>
</tr>
</tbody>
</table>

Electrical Data

<table>
<thead>
<tr>
<th>Voltage</th>
<th>+24 VDC +/- 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE-Interface Robot Connection</td>
<td>M27 26 Pin Male – P1</td>
</tr>
<tr>
<td>Auxiliary Input Interface</td>
<td>M23 12 Pin Female – J2</td>
</tr>
<tr>
<td>Auxiliary Pressure Switch Interface</td>
<td>M12 5 Pin Female – J3</td>
</tr>
</tbody>
</table>

Mechanical Data

| Endplate weight            | 408 grams |

Operating Data

<table>
<thead>
<tr>
<th>Temperature Range</th>
<th>-10º to 115º F (-23º to 46º C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humidity</td>
<td>95% relative humidity: non-condensing</td>
</tr>
</tbody>
</table>
**J3 Connector – M12 5 Pin Female – Pressure Switch Interface**

Pin #1 = +24 VDC  
Pin #2 = HBKD  
Pin #3 = 0 VDC  
Pin #4 = PPABN  
Pin #5 = P.E.  

**P1 Connector – M27 26 Pin Male – EE Interface**

Pin #1 = Output #1  
Pin #2 = Output #2  
Pin #3 = Output #3  
Pin #4 = Output #4  
Pin #5 = Output #5  
Pin #6 = Output #6  
Pin #7 = Output #7  
Pin #8 = Output #8  
Pin #9 = Input #1  

Pin #10 = Input #2  
Pin #11 = Input #3  
Pin #12 = Input #4  
Pin #13 = Input #5  
Pin #14 = Input #6  
Pin #15 = Input #7  
Pin #16 = Input #8  
Pin #17 = +24 VDC  
Pin #18 = +24 VDC  
Pin #19 = + 24 VDC  
Pin #20 = + 24 VDC  
Pin #21 = 0 VDC  
Pin #22 = HBKD  
Pin #23 = PPABN  
Pin #24 = 0 VDC  
Pin #25 = N.C.  
Pin #26 = N.C.  

**J2 Connector – M23 12 Pin Female – Input Interface**

Pin #1 = Input #1  
Pin #2 = Input #2  
Pin #3 = Input #3  
Pin #4 = Input #4  
Pin #5 = Input #5  
Pin #6 = Input #6  

Pin #7 = Input #7  
Pin #8 = Input #8  
Pin #9 = 0 VDC  
Pin #10 = 0 VDC  
Pin #11 = +24 VDC  
Pin #12 = P.E.
Ordering Example
(Please access the online configuration tool for proper order/part number information)

8503AVZB300VA27

A27 = Fanuc Robot EE Connection Interface
D28 = Fanuc Robot EE Connection Interface + Muffler in End Plates
Z = Robot End Effector Connection Interface

ASCO Numatics Valves Series Supported
Separate valve catalogs can be referenced on the ASCO website

EXAMPLE:
8503AVZB300VA27
R503A1B40MA00F1
R503A1B40MA00F1
8503AMM22MA0010
ASSEMBLED
Connection Options

FANUC EE Cable – ME-1800-151-xxx

*From 0.5M to 3.0M; 0.5M Increments
(Available from FANUC Robotics)

(All Cables, Pressure Switches and Input Modules sold separately)