Data Sheet – ROBOT EE-Interface Endplate

Generation 2000 Valve Platforms

ROBOT End Effector Interface

The Numatics 2005, 2012 & 2035 series valve manifolds with EE-Interface Endplate allows direct connectivity to the FANUC EE robot connection. It provides the user, quick and easy integration of Numatics 2005/2012/2035 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), 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 (sold separately) to the M27- 26 Pin “P1” connector on the manifold endplate.

Technical Data

<table>
<thead>
<tr>
<th>Endplate Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Endplate Part Number</td>
<td>240-173</td>
</tr>
<tr>
<td>Valve Support</td>
<td>2005, 2012 &amp; 2025 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>

<table>
<thead>
<tr>
<th>Electrical Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>+24 VDC +/- 10%</td>
</tr>
<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>

<table>
<thead>
<tr>
<th>Mechanical Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Endplate Weight</td>
<td>221 grams</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Range</td>
<td>-10° to 115° F (-23° to 46° C)</td>
</tr>
<tr>
<td>Humidity</td>
<td>95% relative humidity: non-condensing</td>
</tr>
</tbody>
</table>
Pin Out Diagram

**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)

AKZEC00003NA27

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

2005  2012  2035

Z = Robot End Effector Connection Interface

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

EXAMPLE:

AKZEC00002NA27
051BB4Z2MN00061
051BA4Z2MN00061
05100PZ20N00000
ASSEMBLED
Connection Options

Pressure Switch Integration

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)