Is your application throwing you a curve? We have the solution for you!

**CR40 Series Curved Rail**

The CR40 series curved rail is designed with the engineer in mind. It allows the most flexibility when trying new ideas. You have the freedom to quickly create and experiment with open and closed loop guide motion systems.

Carriages are designed for smooth rolling motion when mated with our interchangeable straight and curved rail sections.

**Rail Section Types:**
- Straight
- 90 Degree Turn
- 180 Degree Turn

Each hardened steel rail is designed to allow for mating with any of the CR40 series rail sections. Our special rail geometry provides continuous engagement of the carriage rollers at all positions along the rail.

**Carriages:**
- Three Cam Roller Bearing Type
- Field Adjustable Preload

Curved rail products can be found in medical lab equipment. Applications include moving samples along a processing line or scanning applications where a camera or other sensing device needs to move in a particular curvilinear fashion. These can also be found in light industrial automation applications such as assembly line part processing.
All rail mounting holes are designed to allow clearance for an M8 socket head cap screw. Starting hole position from each end of a rail section is fixed at 10 mm (0.4 inches).

**Carriage Technical Specifications**

**Load Capacity**

- Fa - Axial Static = 222.4 N (50 lbs)
- Fr - Radial Static = 222.4 N (50 lbs)

**Moment Capacity**

- Mx - Roll = 2.6 N·m (23 in-lbs)
- My - Pitch = 6.0 N·m (53 in-lbs)
- Mz - Yaw = 3.0 N·m (26.5 in-lbs)

**RAIL SECTIONS AVAILABLE NOW**

- **Straight** - starting at 170mm (6.7 inches) going up to 1220mm (48.0 inches) in length
- **90 degree Turn** - 150mm (5.9 inches) Radius
- **180 degree Turn** - radii ranging from 100mm (3.9 inches) to 350mm (13.8"

**Bill of Materials (Example)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Part Number</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CR40-L620-NB</td>
<td>Straight Section</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>CR40-R150-A180-NB</td>
<td>180 Degree Turn</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>CR40-C3-M6-NB</td>
<td>Carriage</td>
<td>2</td>
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</tbody>
</table>

Website: [www.tpa-us.com/curved-rail-system.html](http://www.tpa-us.com/curved-rail-system.html)