

# Continuous Molding Technology



# fact sheet

## Continuous Molding Technology Enhances Large Diameter O-Ring Performance

Historically, technology to produce large diameter molded o-rings has been limited by press and molding capabilities. Parker's proprietary continuous molding technology ensures the strength and reliability of large diameter FKM, HNBR, NBR and EPDM o-ring seals. Parker's solution eliminates the sealing performance problems sometimes found with common serpentine molding methods and spliced rings.

Spliced o-rings are a good solution for many non-critical applications. Potentially, they may be the weakest at their glued or vulcanized joints. Its physical properties, which differ to some degree from the rest of the ring, can affect a seal's reliability. A twisted or fatigued splice, for example, can open, creating failure, leakage and contamination issues.

Our homogenous molding technology is recommended for use in any large diameter o-ring groove where spliced or serpentine molded rings may present reliability issues. It has applications in virtually every market, including: aerospace, chemical processing, energy, oil and gas (EOG), industrial, semiconductor processing, and many others.

### ***Parker Innovation***

For over sixty years, Parker Hannifin has delivered some of the most innovative sealing solutions in the industry. Our proprietary continuous molding technology gives us the capability to produce o-rings of virtually any size and eliminate the need for splicing.

# Parker Continuous Molding Technology...

## Applications

- Large chambers, vessels, lids, doors and containers where spliced o-rings or serpentine rings may present reliability issues
- Vacuum, high pressure and specialty semi-dynamic applications<sup>†</sup>
- Anywhere the strength and integrity of homogeneous molded rings are critical for reliable seal performance

## Features and Advantages

- Consistent properties throughout the diameter of the ring
- Easier, more reliable installation versus serpentine molded o-rings
- Reduced potential contamination of leakage through spliced joints
- Material choices include basic FKM, HNBR, NBR, and EPDM materials<sup>†</sup>

<sup>†</sup> For additional information, consult a Parker Applications Engineer.

## Availability

<b>Inside Diameter (ID) Sizes &amp; Tolerances</b>	<b>ID's start at &gt; 35.000" ± .220 inches*</b>
<b>Cross-Section Sizes &amp; Tolerances (Existing Tooling Available)</b>	<b>.103 ± .006 inches .139 ± .008 inches .210 ± .010 inches .275 ± .012 inches .375 ± .012 inches Custom cross-section sizes are also available with a tooling cost (see below).</b>
<b>Custom Cross-Sections</b>	<b>Tooling costs for special cross sections (not covered by standard sizes above) \$15,000</b>
<b>Materials</b>	<b>FKM, HNBR, NBR, and EPDM. Contact a Parker applications engineer for other material options.</b>

\*ID tolerance increases ± .010 for every additional 1 inches of diameter