

Connector, Valve, and Fitting Seals

For Medical Devices

No. Assigned by Group

JBL's Precision Extruded and Cut Seals Made From FDA or USP Class VI Materials Provide Critical Sealing Solutions for Medical Connectors, Valves, and Fittings.

Applications: Medical connectors, valves, and fittings requiring static face or static radial seals and discs for a variety of healthcare device sealing requirements.

Potential Customers: There are three primary categories of potential customers:

1. Manufacturers of connectors, valves, and fittings that have a specialty line of Medical products.
2. Medical product design facilities.
3. Plastic injection molders of Medical devices.

Design Requirements: Engineered static face or radial seals made from either FDA "White List" or USP Class VI materials with precision tolerances. Free of flash, parting lines, non-fills, and voids. Rapid prototype delivery and production ramp-up capabilities are required.

The JBL Solution: The Parker JBL Division has a large variety of FDA "White List" and USP Class VI Elastomer formulations. (See USP and FDA Specialty Elastomers Bulletin No. 5408B1-USA)

By utilizing an extrusion and precision cut process, JBL seals are free of flash, parting lines, non-fills, and voids, which are common concerns with molded parts. To ensure cleanliness, finished parts can be washed in deionized water and double bagged under environmentally controlled conditions.

Summary: JBL's precision extrusion and cutting process offers the designer and manufacturer of connectors, valves, and fittings the best static seal product with no tooling cost, a broad range of materials to choose from, design flexibility, and speed to market.



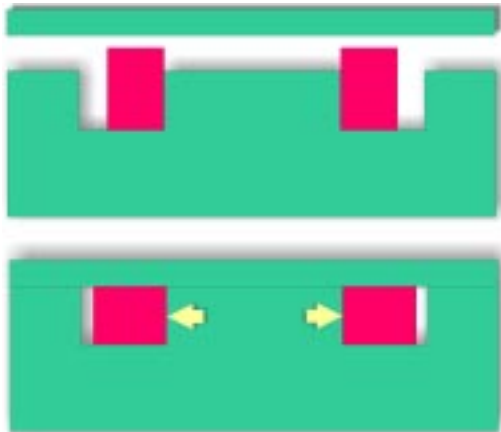
Key Features:

- Static seals that are individually engineered to properly fit each application.
- Maximum sealing surface contact vs. round cross sections.
- Over 50 FDA "White List" and USP Class VI materials ranging from 40 to 80 Durometer Shore A . (See USP & FDA Specialty Elastomers Bulletin No. 5408B1-USA)
- Translucent, white, or custom colored compounds.
- Exclusive use of "Sealing Grade" Materials.
- Lot traceability with every shipment.
- Cost effective solutions compared to molded or die cut products.
- No tooling for OD/ID combinations
- No flash, parting lines, or non fills.
- JBL Design and Manufacturing process provides flexibility and speed to market.
- JBL inPHorm "Product Design and Material Selection Software" available.
- JBL Applications Engineering Support.

JBL Static Seal Design Concepts

ID Stretch Fit

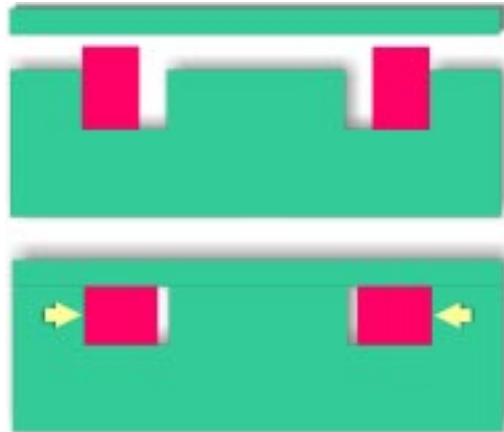
External Pressure



When compressed the seal will deform outward into the gland void area, following the path of least resistance, yet maintaining the desired sealing footprint.

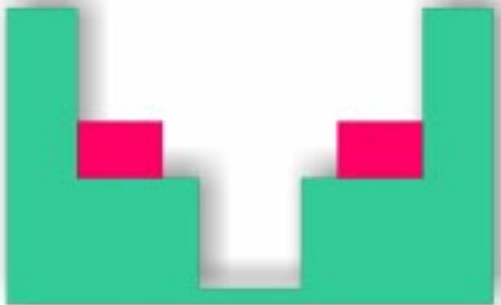
OD Interference Fit

Internal Pressure



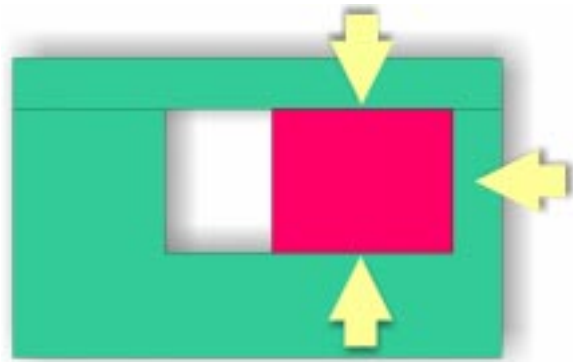
When compressed the seal will deform inward into the gland void area, following the path of least resistance, yet maintaining the desired sealing footprint.

No Groove ID



If the gland area does not have an inside diameter, use an OD interference fit.

Flat Surface Sealing Advantage



When the sealing surfaces are assembled, the seal element is contained on three sides. Contact against the seal actually takes place prior to complete compression.

Extruded Profiles

