

Lifter Bellows

OVERVIEW

Lifter Bellows are designed with custom face seals for semiconductor processing equipment. In order to move the silicon wafers being produced, the lifter bellows and actuator assembly produce a leak tight mechanism to transport the wafer. BellowsTech edge welded bellows have low leak rates, custom designs and flexibility for motion.

BellowsTech's goal is to ensure proper wafer placement and seating. With in-house design expertise, our engineers will build a solution to match the speed and size requirements of the application.

Lifter bellows assemblies are available in a variety of materials including AM350, 304L and 316L stainless steel. For applications requiring reduced weight, Titanium is also available.

While BellowsTech offers over eighty standard bellows diaphragms, custom diaphragms can be designed to customer specifications. Contact the factory for more information.



TYPICAL INDUSTRIES

Semiconductor Processing

Automation Equipment

Test Stands

BENEFITS

Low Leak Rate

Custom Configurations

Long Stroke

SPECIFICATIONS

Material	Stainless Steels, Alloys, & Titanium available. Consult Factory.
Thickness	From 0.002" and up every 0.001"
Standard Leak Rate	From $<1 \times 10^{-9}$ std CC He/sec (check material)
Size Ranges	
Outside Diameter	0.358" (9.0932mm) to 22.205" (564mm)*
Inside Diameter	0.198" (5.029mm) to 19.921" (505.99mm)*
Shapes	Round; Non-Round avail. Contact Factory
Length	Up to 96" (244 cm)

Why Choose Edge Welded Bellows?

Of the three major metal bellows technologies, edge welded metal bellows have the highest stroke length, reaching 90% of its free length. This flexibility allows for increased expansion and contraction of the bellows. Edge welded bellows can be exposed to extreme temperatures and media with a wide selection of materials. Both the inside and outside of the bellows can be exposed liquids and gases. Edge welded metal bellows also have a high cycle life to produce repeatable results and round or square shapes.