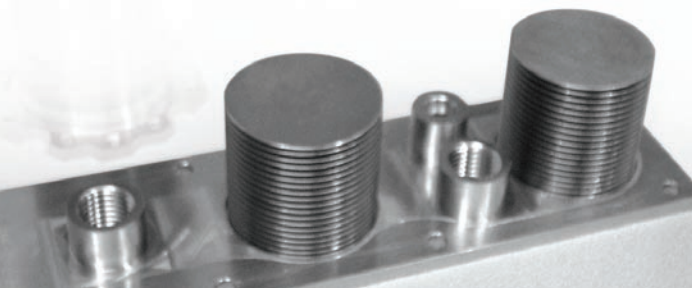


Metal bellows provide a hermetic all-metal pressure barrier and seal that can flex in multiple directions. Edge welded metal bellows, specifically, provide the most flex in the smallest amount of space. The flexible metal barrier, provided with the edge welded metal bellows as a basic building block, can be put to use in many different ways to perform a surprising variety of functions across many different industries.

Bellows & Flange Materials Available

Material	Standard Leak Rate Capability
316L SS	$<1 \times 10^{-9}$ std CC He/sec
AM350 SS	$<1 \times 10^{-9}$ std CC He/sec
Inconel/ Hastelloy	$<1 \times 10^{-5}$ std CC He/sec
Titanium	$<1 \times 10^{-9}$ std CC He/sec
Aluminum	$<1 \times 10^{-4}$ std CC He/sec



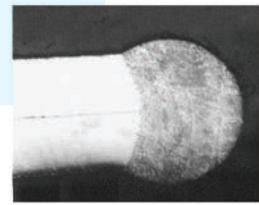
EDGE WELDED METAL BELLOWS DESIGN & MANUFACTURING

- Full application design assistance and manufacturing capabilities
- Serving the Vacuum, Semiconductor, Aerospace and commercial markets
- Assistance at the first call

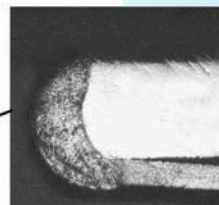


CUSTOM ENGINEERED BELLOWS





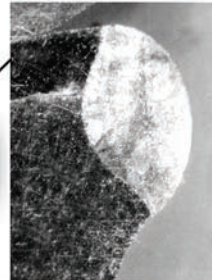
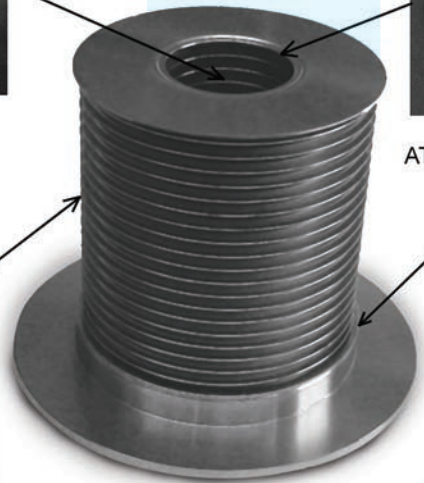
INSIDE DIAMETER WELD BEAD



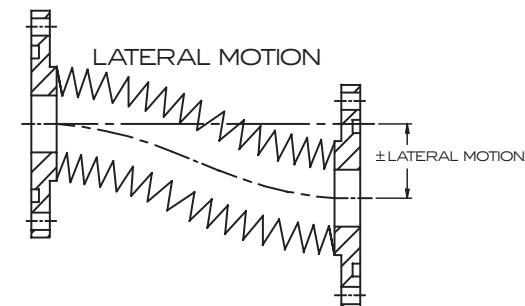
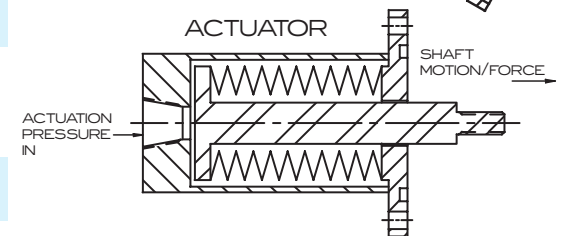
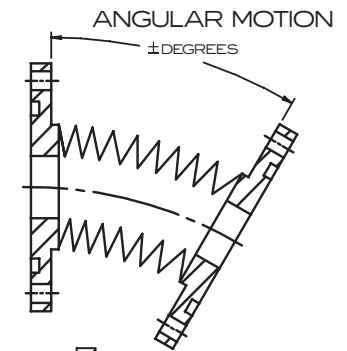
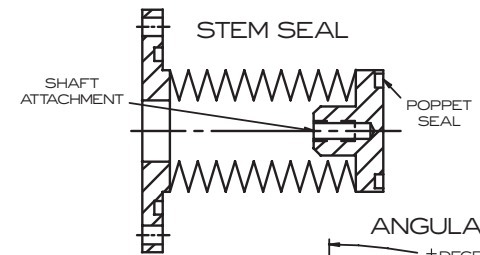
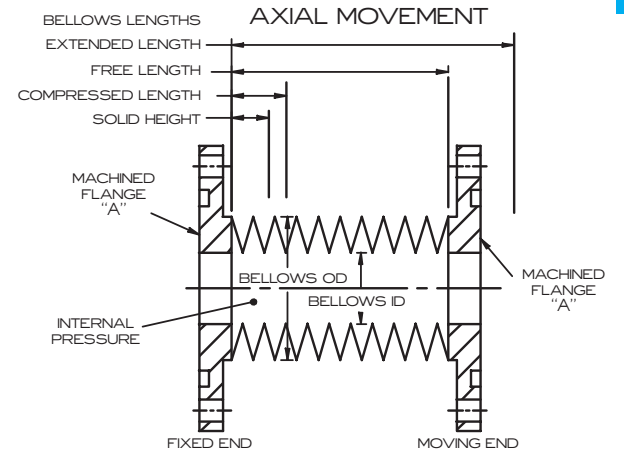
END PLATE ATTACHMENT WELD



OUTSIDE DIAMETER WELD BEAD



MACHINED FLANGE ATTACHMENT WELD



VACUUM APPLICATIONS

VALVE STEM SEAL The bellows seals a shaft hermetically while allowing axial shaft movement.

FEEDTHROUGH The bellows acts as a flexible seal, allowing movement of a tool within a sealed environment. Linear and angular motion for “wobble stick” applications is available.

ROTARY FEEDTHROUGH The bellows is used within a bearing housing to translate rotation from an input shaft to a co-linear output shaft while sealing hermetically, eliminating the need for a dynamic seal.

TORQUE COUPLING The bellows is used for precise transmission of rotary motion.

EXPANSION JOINT The bellows joint allows for expansion or contraction between two fixed bodies while maintaining a hermetic seal.

ACTUATOR The bellows acts as a piston converting pressure to linear motion eliminating the need for a dynamic seal.

VIBRATION DAMPER The bellows is used to isolate vibration from one end of the bellows to the other while sealing hermetically.