

FAQ 02-21: How do I choose a feedthrough ?

Feedthroughs carry electrical signals, cooling water, and air through the vacuum chamber wall.

Flanges: Choose from 3 flange styles to mate with the flange/opening on your chamber. The 1" Bolt Feedthrough is an inexpensive way to make your connections, but is not recommended for UHV systems.

Electrical lines: For one or two sensors. Each electrical line is a separate shielded coax, terminating in a female BNC connector on the air side, and a female MicroDot connector on the vacuum side.

Water cooling lines: Water lines are normally supplied with 3/16" OD tubing, or with 1/8" Swagelok compression fittings. For most installations, the 1/8" OD tubing from the sensor is slipped inside the 3/16" line of the feedthrough, and welded or brazed in place. Compression fittings may be preferred if the installation must be changed occasionally.

Air lines: For actuating shutters. Air lines are normally supplied with 3/16" OD tubing, or with 1/8" Swagelok compression fittings. For most installations, the 1/8" OD tubing from the sensor is slipped inside the 3/16" line of the feedthrough, and welded or brazed in place. Compression fittings may be preferred if the installation must be changed occasionally.