How to install ceramic hermetic parts

Installation overview

Hermetic container
(Ultra-high vacuum or pressure container)

Ceramic hermetic part
(Connector)

Packing

Current feedthrough

How to connect seals

Soldered connection
Insertion connection
Bare crimp terminal connection
Through-hole connection

Crimping
Insertion contact
Soldering

Points to note when welding to a flange or chamber

If you want to weld a ceramic hermetic part directly to a SUS flange or chamber, please note the following.

1. Keep the thickness even, so that the two parts that are being welded reach the same temperature at the same time.
2. Create a heat release to prevent welding deformation from spreading.
3. Make the mounting hole dimension 0.1 to 0.3 mm larger than the outer diameter of the product.
4. When welding, fuse the matrices of both the part and the flange or chamber. (We recommend TIG welding.)
5. Set the conditions so that the temperature of the ceramics closest to the welding section is 200°C or less.
6. In order to prevent breakage of the insulator due to welding transition heat, ensure there is a distance of 10 mm or more between the welding section and the insulator.