

**CHAMBER/LOAD PROBE ENTRY ADAPTER
FOR
FEDEGARI AUTOCLAVES**

APPLICATION

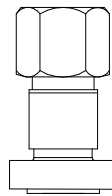
The design of the entry ports on Fedegari autoclaves are specific to Fedegari and other standard components that can be used on most other autoclaves can not be used. The standard design of the chamber/load probe entry port on Fedegari autoclaves makes use of a fixed plate on the outside of the chamber and a loose mating plate which is held in place by a mechanical clamp arrangement. The plates will allow up to six probes to be passed through the six holes of the two plates and between the plates are silicone rubber 'O' rings for each probe. The mechanical clamp forces the 'O' rings to seal around the probe cable.

PROBLEM

The silicone rubber 'O' ring has a very small cross sectional area of around 1.0mm in which to seal on the cable jacket of the probe and is a potential leak source. When replacing a chamber/load probe, the 'O' rings which are usually tight on the jacket need to be rolled back off the jacket and placed on the new probe jacket. Since cables are usually at least 3 to 5 metres in length this is time consuming and during this process the 'O' rings are often mislaid.

SOLUTION

The CPF-FE1 adapter uses a single Teflon® sealant with up to six holes. Each hole has sufficient internal clearance to allow it pass easily over the probe cable jacket and the natural lubricating characteristic of Teflon® allows it to be passed down the cable quickly and with ease. The Teflon® sealant provides a sealing length of 12.0mm on the cable jacket of each installed probe. The adapter has a mounting plate that mates with the Fedegari fixed plate and allows the existing mechanical clamp to be used. After fitting the mounting plate and inserting the probes, the cap nut of the adapter is tightened which produces a longitudinal force driving an internal follower against the Teflon® sealant. The internal seat of the adapter resists this force and the Teflon® sealant deforms within the adapter and around the cable jacket to provide a seal against loss of chamber pressure/vacuum. For further information please see Product Data sheet PDS-025-FE1.

**BENEFIT**

During autoclave production cycles and validation procedures, chamber pressure/vacuum is maintained leading to maximum efficiency. When it is necessary to replace a single or several chamber/load probes the time taken for this activity is substantially reduced.

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