

**CHAMBER/LOAD PROBE ENTRY ADAPTER
FOR
FINN-AQUA AUTOCLAVES**

APPLICATION

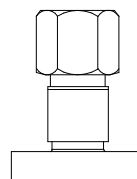
The design of the entry port for chamber/load probes on Finn-Aqua autoclaves relies on the compression of silicon rubber 'O' rings to effect a seal between the cable jacket of the probe and the mounting plate. Between this mounting plate and the fixed mating plate on the chamber there is a circular silicone rubber seal. Four M6 Allen screws are used to attach the mounting plate and at the same time provide the force to compress the 'O' rings.

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-FA1 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 Finn-Aqua fixed plate and allows the existing four M6 Allen screws and circular silicone rubber seal 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-FA1.

**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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