

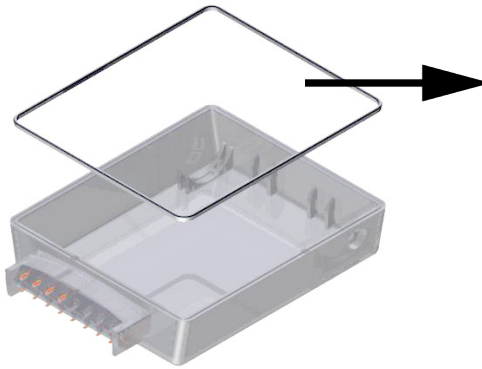
# Problem Solved!

## TECHSEAL INNOVATIONS - EXTRUDED AND SPLICED MICROPROFILE™



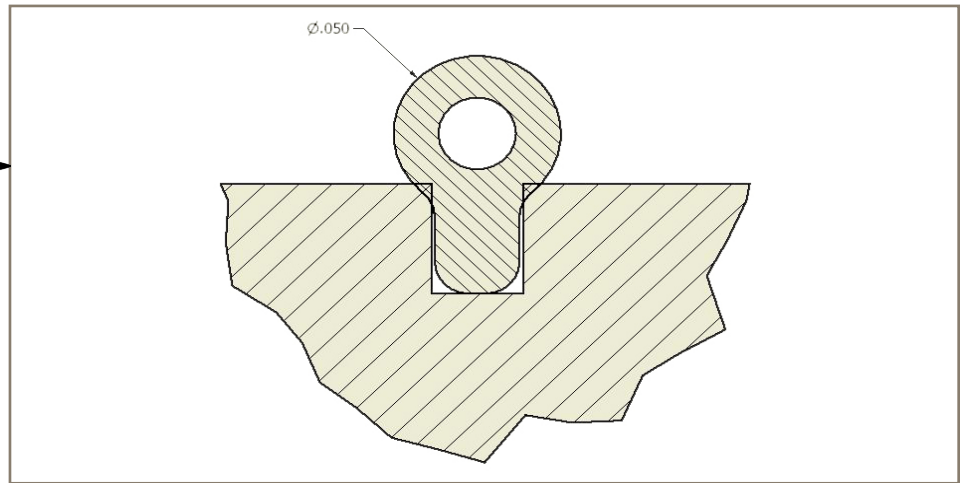
### Application

Plastic housing of a medical patient monitoring device.



(The image above is an illustration only, not a representation of an actual application.)

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**FEATURED PRODUCT:** Hollow Microprofile With Retention Feature

### Problem

A customer in the medical industry approached TechSeal with a plastic housing for a patient monitoring device. This plastic housing was thin, light weight, and had a very small groove (<0.050" in width) that could not retain

any type of seal. The customer evaluated several seal options and none of them seemed viable but the housing could not be redesigned. The customer then consulted with TechSeal's Application Engineers for the best sealing option,

given the current condition of the groove. Taking into consideration the tiny groove size and the thin plastic housing, TechSeal proposed the optimum sealing solution for the customer's problem.

### Parker Solution

TechSeal Division designed a hollow bulb microprofile sealing solution with a retention tab. The hollow bulb allowed for low compressive force, ensuring the plastic housing would not crack due to excessive deflection force.

In addition, because the existing groove was too small, a seal small enough to fit into the groove would not have provided adequate sealing for the device. As a result, TechSeal's Application Engineers designed a tab into the bulb to hold the seal in place without compromising the sealability of the small hollow bulb profile.

Despite the very small size of the profile, TechSeal successfully extruded the profile out of a USP Class VI material and spliced the extrusion using the ParFab splicing process. Our technologies allow us to address concerns related to low closure force, small sealing surfaces, and seal retention. TechSeal's Application Engineers are ready to help the customers solve their toughest environmental sealing challenges.

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