CellRetention-300-DASbox P-SUBmerged™ ATF

World's most efficient Perfusion-SUB

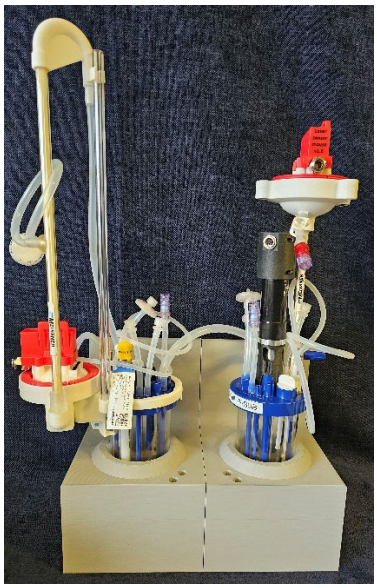
This unique setup SUBmerge the Hollow-Fiber-Filter inside the Single-Use-Bioreactor with the integrated inverted diaphragm Single-Use-Pump on top of the HFF. Extra ordinary benefits are:

Avoid fouling – avoid dead volume – avoid cell death – reduce shear force stress

Perfusion-SUBmerged in ATF perfusion cultivation by cell retention including also necessary Single-Use-Sensors. By variable, selectable broth velocity ranging 0 – 10 m/s fouling is regularly flushed out of the HFF and back into the SUB by the Thalia pump. SUBmerged HFF eliminate any need for hoses and connectors thus no dead volume. The inverted pump by nature cannot retain cells. SUBmerged has no fluid path restrictions and shear force stress is thus also eliminated.

General features of CellRetention SUBmerged-300 P-SUB:

- The Thalia diaphragm pump is directly integrated with the Meissner SepraPor HFF
- Working Volume range from 80 to 200 ml for >100 mio/CHO/cell/ml cell density
- Pumped volume and velocity accurately measured – no guessing.
- The complete and pre-assembled unit packed in dual film bags and precision irradiated.



LASER sensor mounted in the red bracket above the dome of the Thalia TM80 pump. The P-SUBmerged ATF SUB is driven by DASbox and supplied with complete hose set for easy installation.

The CellRetention-300 is from birth a P-SUB by integrating both the SUB, HFF, SUP, pH SUS in one package. Shown BioBlu SUB is heavily modified for the SUBmerged SepraPor HFF. The Thalia TM80 is driven by the Clotho Drive Unit and offers 1-50 ml/stroke capacity, 18 strokes/min and measure conveyed volume and velocity with 1 % accuracy.

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PerfuseCell

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