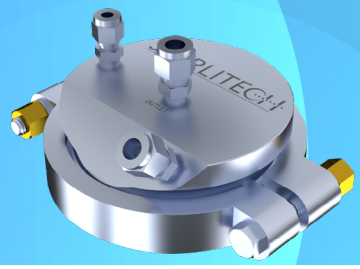
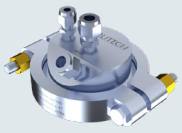
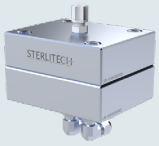
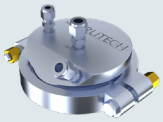
STERLITECH

Membrane/Process Development Cell Quick Reference Guide

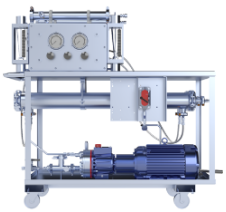


	Discoverer	Pioneer	Innovator	Explorer	Researcher	Developer	Investigator
							
Filter Holder	HP4750(X)	CF047	CF016	CF042	CF090	Sepa	1812
Membrane Active Area	14.6 cm²	14.6 cm²	20.6 cm²	42 cm²	53 cm²	140 cm²	0.27-0.46 m²
Typical Permeate	1.5-15 mL/min	1-10 mL/min	1-10 mL/min	2-20 mL/min	2.5-25 mL/min	7-70 mL/min	350-2,300 mL/ min
Recommended Feed Rate	N/A	0.1-0.5 LPM	0.5-2.5 LPM	0.5-2.5 LPM	0.1-0.7 LPM	0.5-6.0 LPM	See Mfr. Spec Sheet
Max. Operating Pressure* (Model & Material Dependent)	138 bar (2000PSI)	69 bar (1000 PSI)	69 bar (1000 PSI)	69 bar (1000 PSI)	69 bar (1000 PSI)	138 bar (2000PSI)	69 bar (1000 PSI)
Material Options	SS316 Hastelloy® C-276	SS316	Acrylic Delrin SS316 PTFE Hastelloy® C-276	Acrylic Delrin SS316 PTFE Hastelloy® C-276	SS316	Acrylic PEEK SS2507 SS316 Hastelloy® C-276	SS316
Configuration Options	Dead-End	Cross Flow	Cross Flow, Forward Osmosis	Cross Flow, Forward Osmosis	Cross Flow	Cross Flow, Forward Osmosis	Cross Flow

Introduction & Standard Features:

- Sterlitech Cross/Tangential Flow Test Cells are bench-scale cross/tangential flow membrane text cells used in pressure driven applications.
- Products designed for small scale crossflow filtration testing using polymetric flat sheet membranes in a wide range of RO, NF, UF and MF.
- Stelitech also offers a bench-scale test cell for tubular ceramic membranes.

Sterlitech also offers fully integrated membrane test systems with this cell. Check out more details at sterlitech.com/custom-test-skids



Operating Manuals Available Online at Sterlitech.com/pdf-downloads or By Following Our QR Code Below:

*Note: Maximum pressure and temperature ratings are dependent on a variety of factors. Listed values are guidelines based upon material properties and can not be guaranteed in every application.

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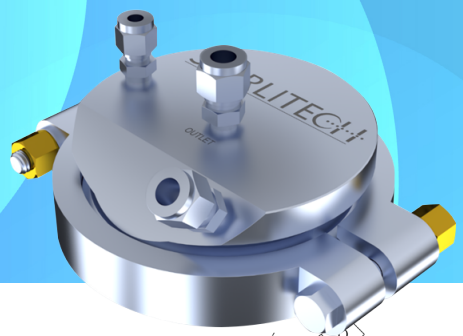
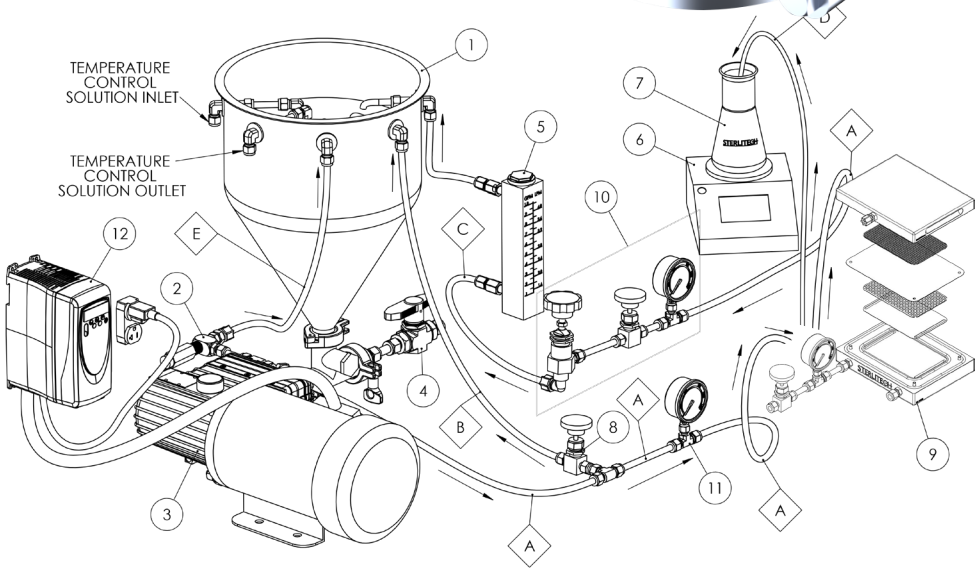


Introduction & Standard Features:

- Membranes prepared with vacuum deposition techniques can now be tested with tangential flow
- Compact design minimizes cell footprint on lab bench space
- Broad operating pressure range allows for testing of circular MF, UF, NF, and RO membranes
- Interchange components within existing Sterlitech crossflow filtration skids and systems



Crossflow System Flow Diagram

Item No.	Part Description
1	5 GAL CONICAL FEED TANK W/ TEE & CHILLER COIL
2	PRESSURE RELIEF VALVE
3	MOTOR & PUMP ASSEMBLY
4	DRAIN VALVE
5	FLOW METER
6	SCALE FOR MEASURING PERMEATE FLUX
7	PERMEATE COLLECTOR
8	BY-PASS NEEDLE WITH 3/8" "T" FITTING
9	CELL ASSEMBLY
10	CONCENTRATE CONTROL VALVE ASSEMBLY
11	FEED PRESSURE GAUGE
12	VARIABLE FREQUENCY DRIVE (VFD)
A	3/8" HIGH PRESSURE FLEX OR RIGID TUBING, FEED LINE
B	3/8" LOW PRESSURE TUBING, BY-PASS LINE
C	3/8" LOW PRESSURE TUBING, RETURN LINE
D	1/4" LOW PRESSURE TUBING, PERMEATE OUTPUT LINE
E	3/8" LOW PRESSURE TUBING, RELIEF RETURN LINE

Applications:

- Biological or biopharmaceutical processing
- Concentration of fruit juices and extracts
- Food and beverage processing
- Desalination of brackish water or seawater
- Purification of rinse in electroplating tanks
- Municipal or industrial water and wastewater purification

Ordering Information:

www.sterlitech.com

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