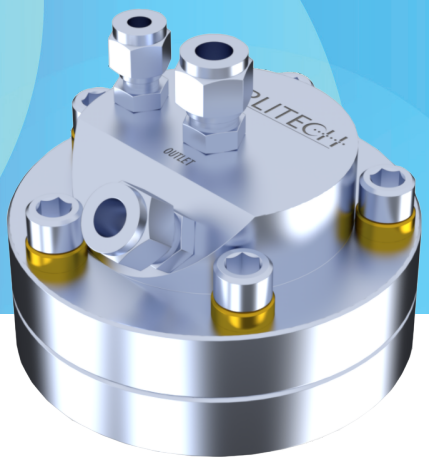
STERLITECH

CF047X

Circular Crossflow Cell - High Pressure



Introduction & Standard Features:

- Circular membranes prepared with vacuum deposition techniques can now be tested with tangential flow
- Only small membrane areas needed, conserving membrane material costs
- Compact design minimizes cell footprint on lab bench space
- Broad operating pressure range allows for testing of circular MF, UF, NF, and RO membranes, as well as Ultra High Pressure RO membranes.
- Able to be fitted into existing Sterlitech crossflow filtration skids and systems

Materials:

- 316 Stainless Steel Cell Body
- Viton O-rings (additional O-ring materials available upon request)
- High pressure 316 stainless steel compression inlet/outlet fittings
- Bolted Assembly

Applications:

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

Specifications:

Parameter	Description
Membrane Size	47-49 mm
Membrane Active Area	14.6 cm^2 (2.26 $inch^2$)
Cell Body Material	316 Stainless Steel
Maximum Pressure*	172 bar (2500 PSI) @ 22°C, 71.6°F
Maximum Temperature*	150°C (302°F)
O-rings	Viton* (Other materials available)
pH Range	Membrane Dependent
Cross Flow Velocity	Variable
Connections	
Inlet/Outlet Size (Tube OD)	3/8” Compression
Permeate Size (Tube OD)	1/4” Compression
Securing Method	High Strength Bolts (5x)

Ordering Information:

SKU	1160442
Product Name	CF047X Circular Cell Assembly, Crossflow, 316 SS

*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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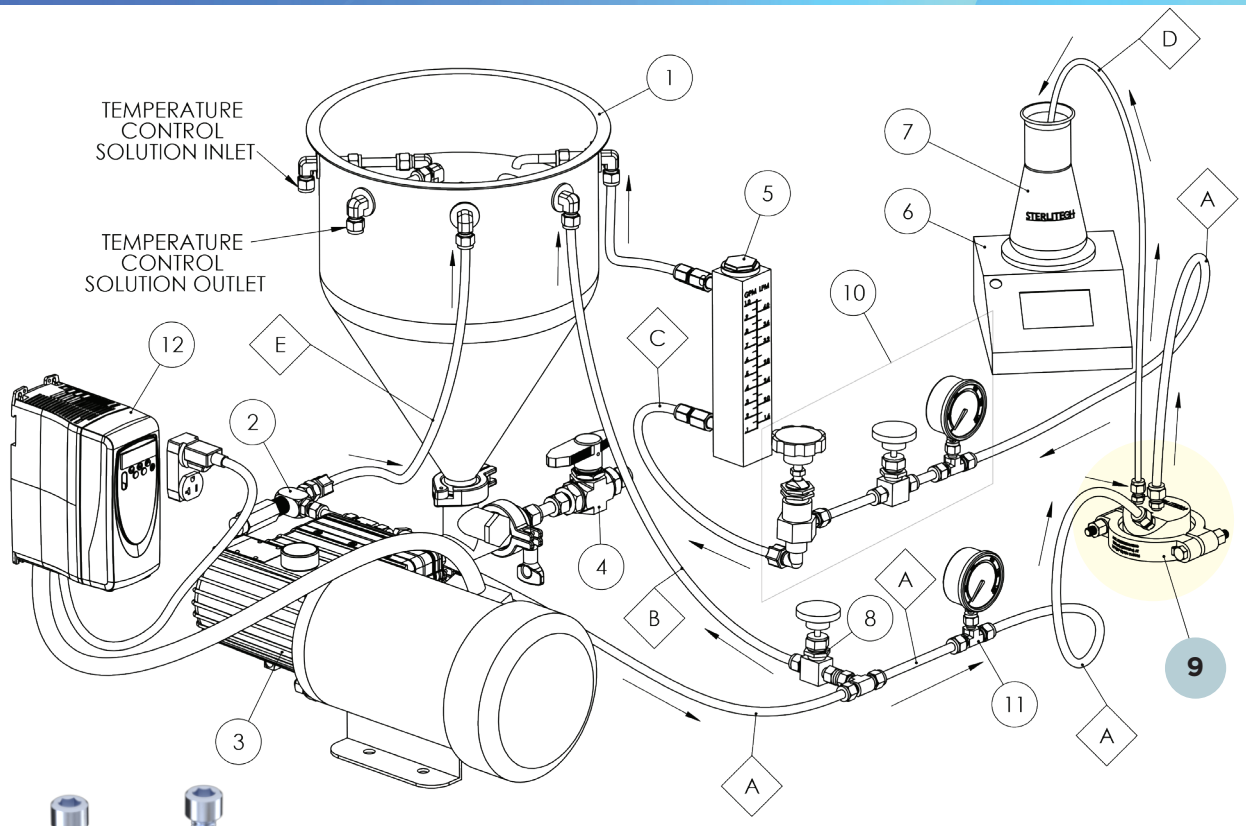

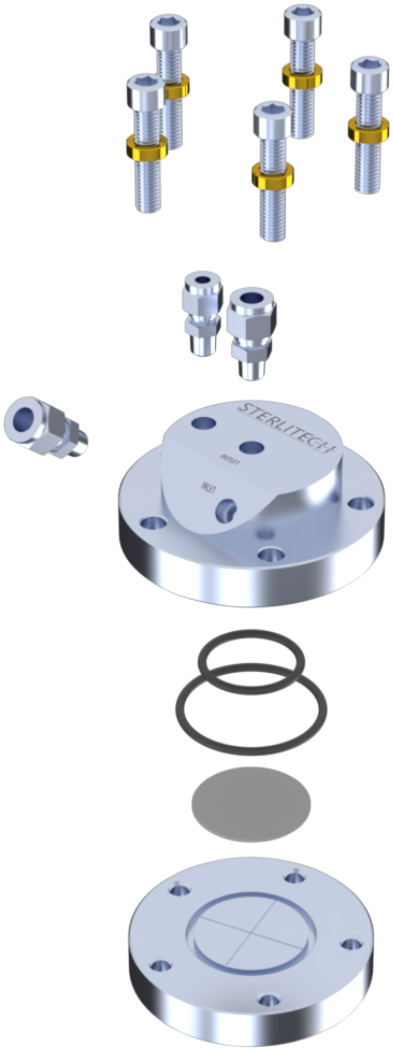

Crossflow System Flow Diagram for Circular Cells

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	**CIRCULAR CF 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

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