

Spectrum® Hollow Fiber Filter Modules

Hollow fiber filter TFF modules are offered with a broad range of sizes, surface areas and membrane chemistries designed to facilitate easy scale-up from small volume process development and R&D applications to commercial production. During scale-up, adding more fibers to process larger volumes enables consistency in the length of the filtration flow path even while the surface area of the filter is increased.

	Primary Application	Volume	Inlet/Outlet	Side Port	Scale Length	Effective Length (cm)	Total Length (cm)	Surface area
MicroKros								
	Process characterization, Small-volume TFF in a laboratory	1-100 ml	MLL	FLL	1 x FL	20	25	13 – 20 cm ²
					2 x FL	41.5	45	26 - 59 cm ²
					3 x FL	65	69	41 - 92 cm ²
MidiKros								
	Process development at small scale	100 ml - 3 L	FLL	FLL	1 x FL	20	25	75 – 190 cm ²
					2 x FL	41.5	45	155 - 390 cm ²
					3 x FL	65	69	245 - 610 cm ²
MiniKros Sampler								
	Batch TFF of small volumes	3 L - 15 L	0.75" TC	0.75" TC	1 x FL	20	25	490 – 1000 cm ²
					2 x FL	41.5	47	1000 - 2200 cm ²
					3 x FL	65	70	1600 - 3400 cm ²
MiniKros								
	Pilot-scale TFF	5 L - 50 L	1.5" TC	0.75" TC	1 x FL	20	25	0.16 - 0.31 m ²
					2 x FL	41.5	46	0.32 - 0.65 m ²
					3 x FL	65	70	0.51 - 1.0 m ²
KrosFlo®								
	Production-scale TFF	10 – 100L	3" TC	1.5" TC	1 x FL	20	23	0.78 - 1.6 m ²
					2 x FL	41.5	46	1.65 - 3.25 m ²
					3 x FL	65	69	2.55 - 5.10 m ²
KrosFlo® MAX								
	Production-scale TFF	100L – 1000+L	6" TC	1.5" TC	R65	49.9	73.5	4.30 - 10.40 m ²
					3 x FL	67.9	91.5	7.10 - 17.10 m ²
					R85	107.5	131.1	11.30 - 11.35 m ²