

# Micro RFC Columns

## Radial Flow Chromatography

Micro Columns are tubular columns with the smallest possible volume to mimic larger radial processes. These small scale columns come in various bed heights and different bed volumes. Ideal columns for initial development and feasibility studies or Virus Validation.

- Plug & Play, Äkta ready
- Self-pack or pre-packed and pre-validated
- Linear scalable, derived from process volumes
- Acrylic body to monitor (packing) process
- Reproducible packing and -results
- Expected lifetime 100 packings
- Customization possible



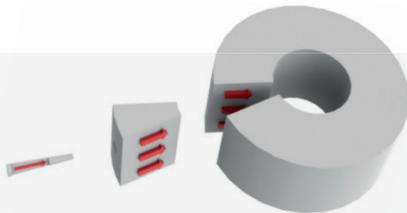
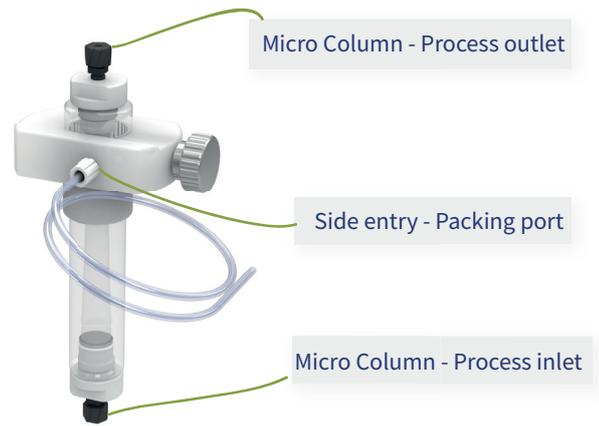
**Bed height** 3 - 30 cm

**Bed volume** 2 - 25 ml



### Applications:

- ✓ Virus clearance studies
- ✓ Feasibility studies
- ✓ Resin performance studies
- ✓ Process development



Mini/Micro Columns - MP Wedge - Full radial

### Micro Column Packing unit

Linear upscaling 1:10.000

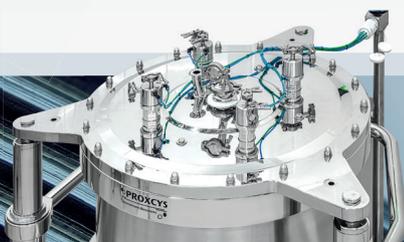
Bed height



Transparent acrylic body



Plug drivers



# Micro RFC Columns

## Radial Flow Chromatography

High Performance Radial Flow Columns (HP-RFC) excel in throughput and performance at short bed height adsorptive separations. Mostly, but not exclusively, used in capture-elute applications. RFC is an efficient, low pressure technology for bio-molecule fractionations. The compact column geometry offers high throughput in process, pilot or lab scale. The Proxcys column designs are robust, resulting in exceptionally industrial compatibility since the use of RFC columns offers a large tolerance for errors, like accidental air, flow and pressure variations.

Proxcys Micro Columns are tubular columns with the smallest possible volume to mimic larger radial processes. This makes them ideal for initial development and feasibility studies or Virus Validation. Micro RFC columns can be customized in terms of bed height, bed volume, frit porosities, connectors etc.

### RFC Micro Columns

The Micro Column is the ideal mockup for full Radial Flow Chromatography column performance with very small scale column volumes. Similar to large scale RFC columns, the integrated packing port ensures an evenly and firm gel bed build-up. By the Column Packing unit, packing is straightforward and reduces handling for repetitive, reproducible packings.

The Micro Columns are designed to provide optimal performance. Several frit porosities, to match with bead sizes between 10µm and 300µm, are available upon request. Proxcys offers resin studies to select the right frit porosity. All columns can be delivered pre-packed with resin of choice, including column qualification and packing parameters.

More information? Contact us via [sales@proxcys.com](mailto:sales@proxcys.com).



### Stock models:

Micro Column	MC303	MC605	MC1210
Bed height (cm)	3	6	12
Bed volume (ml)	2,5	5	10

### Performance Axial vs Radial

Avr. Linear Velocity (cm/h)	Flow (ml/min)
50	0.75
100	1.50
200	3.00
300	4.50
400	6.00

When comparing performance of Radial with Axial columns it is important to take LV (linear velocity) into the equation, as velocity has a large impact on the Dynamic Binding Capacity.

Micro Columns are suitable for **any process resin**. Column configuration tailored to application. Truly linear scalable to large process volumes by keeping all column characteristics identical.



### Starterkit

The tubular 'small scale' columns are easy to use and designed for exploring Radial Flow Chromatography. Ideal for initial development or scaling down for virus clearance studies!

A starterkit contains several Micro Columns with a **3, 6 and 12 cm bed height** varying in volumes from 3 to 10 ml. A packing port is also included. This kit can be tailored to requirements and the columns can be delivered pre-packed.

If you are interested to see how Radial Flow Chromatography columns can improve your process, apply for the starterkit via [sales@proxcys.com](mailto:sales@proxcys.com).

