

Vantage[®] L BioChromatography Laboratory Columns

For research and development

Ease of Operation

- Adjustable clip mechanism
- Easy to use finger tight tubing fittings; readily connected to FPLC[®]/HPLC systems

Capability

- Faster flow rates
- Uniform flow distribution
- Faster assembly and connection of multiple tubes
- Up or down flow
- Operation with short or long beds
- Scalability to pilot/production columns

Sanitary Design

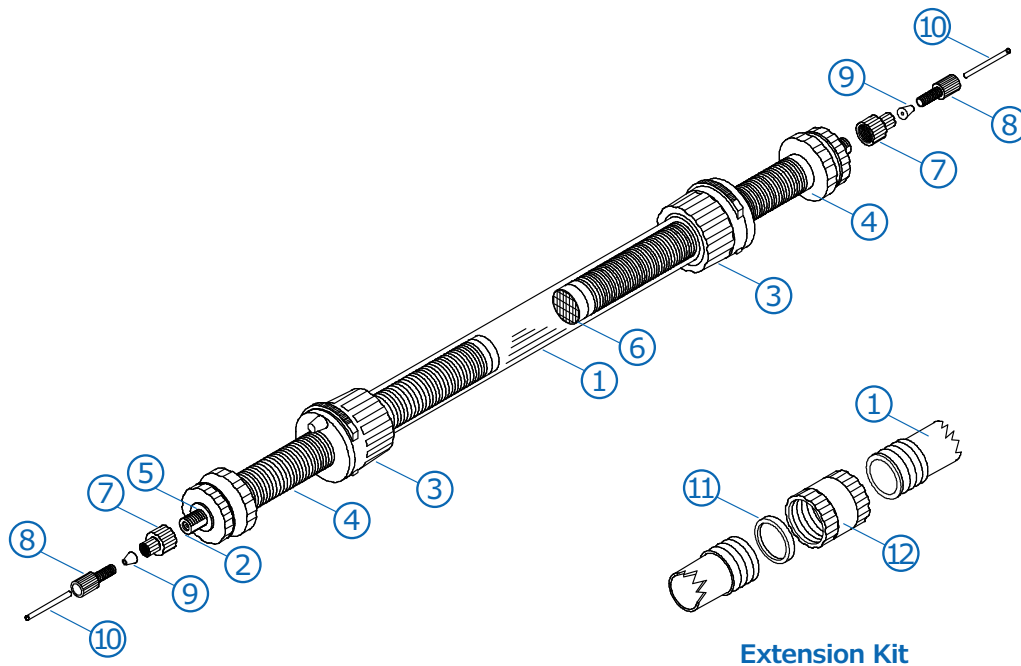
- Zero deadspace seal; no unswept areas in flow path

Other Features

- Biocompatible precision bore, solvent-resistant borosilicate glass tube



Vantage[®] L laboratory columns provide advanced design for the increased demands of biochromatography.



Extension Kit

Column Components

No.	Column Component	Materials of Construction	Wetted Part
1.	Column tube	Borosilicate glass	Yes
2.	Flow tube	Glass filled polypropylene	Yes
3.	Adjuster housing	Glass filled polypropylene	No
4.	Adjuster tube	Glass filled polypropylene	No
5.	Seal adjust knob	Polyamide	No
6.	Seal/bed support	Santoprene® Thermoplastic Elastomer/Polypropylene	Yes
7.	Flow tube adapter	Glass filled polypropylene	No
8.	Flangeless nut	Delrin® Plastic	No
9.	Ferrule	Tefzel® ETFE	Yes
10.	Flexible tube	Polypropylene	Yes
11.	Extension seal*	Santoprene® Thermoplastic Elastomer	Yes
12.	Extension ring*	Delrin® Plastic	No

*Part of extension kit, please see accessories table on the next page

Chemical Resistance

Substance	Concentration	Vantage®
Acetic Acid	<25%	✓
Acetone	100%	○
Acetonitrile	100%	○
Ethanol	<20%	✓
Ethanol	>20%	✓
Hydrochloric acid	1 M	✓
Isopropanol	<20%	✓
Isopropanol	100%	✓
Methanol	<10%	✓
Methanol	100%	✓
Dichloromethane	100%	✗

✓ = Resistant

✗ = Non resistant

○ = Limited resistance (dependent on contact temperature and time)

Substance	Concentration	Vantage®
Peracetic acid	300 ppm	✓
Phosphate buffer	2 M	✓
Potassium hydroxide	2 M	✓
Sodium chloride	4 M	✓
Sodium hydroxide	2 M	✓
Sodium hypochlorite	200 ppm	✓
Sulfuric acid	1 M	✓
Tributyl phosphate	5%	✓
Triton® x100 Surfactant	100%	✓
Urea	6 M	✓

Column Components

Cat. No.	Model Dia x Length mm	Adjustable Height mm	Cross Section cm ²	Adjustable Volume mL	Pressure Rating		Operating Temperature °C	Flow Tube		Internal Diameter of tube (mm)
					bar	psi		I.D., mm	O.D., mm	
96100250	VL11 x 250	0–250		0–25						
96100500	VL11 x 500	250–500	1.0	25–50	7	100	2–40	1	1.6	11.50–11.60
96101000	VL11 x 1000	750–1000		75–100						
96160250	VL16 x 250	0–250		0–50						
96160500	VL16 x 500	250–500	2.0	50–100	7	100	2–40	1	1.6	16.00–16.10
96161000	VL16 x 1000	750–1000		150–200						
96220250	VL22 x 250	0–250		0–95						
96220500	VL22 x 500	250–500	3.8	95–190	7	100	2–40	1	1.6	22.00–22.10
96221000	VL22 x 1000	750–1000		285–380						
96320250	VL32 x 250	0–250		0–200						
96320500	VL32 x 500	250–500	8.0	200–400	7	100	2–40	2	3.2	32.00–32.10
96321000	VL32 x 1000	750–1000		600–800						
96440250	VL44 x 250	0–250		0–380						
96440500	VL44 x 500	250–500	15.2	380–760	7	100	2–40	2	3.2	44.00–44.10
96441000	VL44 x 1000	750–1000		1140–1520						

Bed support: 12 micron polypropylene single layer.

Connections: Flangeless 1/4- 28 nuts and ferrules.

The column is shipped complete with a total of 5 bed supports (3 spares), one in-line union for connection of inlet and outlet for storage and 3 M of polypropylene tubing.

Accessories

Description	Quantity	11 mm	16 mm	22 mm	32 mm	44 mm
Column tube kit 250 mm	1	96100041	96100044	96100047	96100050	96100053
Column tube kit 500 mm	1	96100042	96100045	96100048	96100051	96100054
Column tube kit 1000 mm	1	96100043	96100046	96100049	96100052	96100055
Extension kit (ring and seal)	1 each	96100006	96100007	96100008	96100009	96100010
Seal/Bed support kit	4	96100014	96100015	96100016	96100017	96100018
4-way valve	1	96100020	96100020	96100020	96100019	96100019
2-way valve	1	96100022	96100022	96100022	96100021	96100021
Adjuster housing kit	1	96100023	96100024	96100025	96100026	96100027
Maintenance kit	a	96100033	96100034	96100035	96100036	96100037
Adjuster tube kit	1	96100028	96100029	96100030	96100031	96100032
Connector kit HPLC	b	96100039	96100039	96100039	96100039	96100039
Connector kit MPLC	c	96100040	96100040	96100040	96100040	96100040
Luer adapter kit	4	96100038	96100038	96100038	96100038	96100038

a) Maintenance kit includes: 1 flow tube adapter, seal adjust knob, union, 2 flangeless nuts, 4 ferrules, and 3 M tubing.

b) Connector kit HPLC includes: 2 x 1/4.28 to 10.32 female union.

c) Connector kit MPLC includes: 2 x 1/4.28 to M6 female union (for connection to FPLC® systems).

MilliporeSigma
400 Summit Drive
Burlington, MA 01803

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