



Vantage™ S2 Chromatography Process Columns

Sanitary, for development, pilot, or production purification

Vantage™ S2 columns are ideally suited for development, pilot, or production purification within the pharmaceutical and biotech industry. Sanitary design, ease of assembly and operation, use of solvent-resistant materials, and highly efficient flow distribution make these columns suitable for a wide range of chromatography techniques and applications.

Easy to Operate

- Improved action adjuster seal
- Visible flow cell and seal
- Transparent column tube
- Simple column assembly
- Single central, threaded adjuster

Extended Bed Height Range

- Column tubes can be linked to extend bed heights

Sanitary Design

- Zero dead space seals; no unswept volume
- All process wetted components are nonmetallic
- Hygienic surface finish

Solvent and Pressure Resistance

- Solvent-resistant
- 3 bar (43 psi) pressure rating

Benefits

- Easy to use
- Scale up from development, to pilot, to small-scale production
- Zero dead space eliminates unswept volume providing better cleanability



Comprehensive Range of Services and Support

Qualification Services

Our qualification services are designed to make the integration of our system into your process as seamless as possible and ensure your equipment is properly installed and functioning per your pre-defined requirements.

Preventive Maintenance (PM)

With our PM service, your equipment will be maintained and verified using established protocols to ensure documented compliance with quality requirements. Spare parts, which must be purchased separately, will be replaced as needed. Maintenance recommendations and a full report of the services performed will also be provided to ensure that the validated state of the equipment is maintained.

Corrective Maintenance (CM)

In the unlikely case your system does experience a problem, our engineers will provide on-site technical support to get you back up and running as quickly as possible.

Spare Parts

Purchasing spare parts directly from us is the only way we can guarantee that you get the right parts every time, with the same level of performance as the original.

Catalogue Number	Description	Comment
SSVIOQVAC	Vantage® SAT & IQ/OQ execution including protocol and travel	
SSVPRMVAC	Vantage® Preventive Maintenance execution including protocol and travel	Spare part kit to be ordered separately

Specifications

	VS 60 x 500 mm	VS 90 x 500 mm	VS 130 x 500 mm	VS 180 x 500 mm	VS 250 x 500 mm
Tube internal diameter (mm)	62	89	127	178	252
Cross-sectional area (cm ²)	31	62	125	250	500
Adjustable bed height (mm)	0–480	0–465	0–455	0–490	0–455
Adjustable capacity (L)	0–1.5	0–2.9	0–5.7	0–12.3	0–22.8
Adjustable bed height with extension tube (mm)	545–1030	525–1005	545–1020	590–1110	580–1065
Adjustable capacity with extension tube (L)	1.7–3.2	3.3–6.2	6.8–12.8	14.8–27.5	29.0–53.3
Adjustable bed height with extension tube and fixed cell extension (mm)	295–785	275–755	295–770	340–850	330–815
Adjustable capacity with extension tube and fixed cell extension (liters)	0.9–2.4	1.7–4.7	3.7–9.6	8.5–21.3	16.5–40.8
Pressure rating	3 bar (43 psi)				
Operating temperature	2–30 °C				
Materials of Construction	All materials used in the manufacture of the column, and which come into contact with the process stream, have been selected so as to either conform to the relevant sections of the FDA Code of Federal Regulations, Volume 21, Parts 170 to 199, or have passed USP <88> Class VI tests for <i>in-vivo</i> toxicity.				
Wetted Surfaces	Column tube: TPX® (Polymethylpentene) Flow cell: TPX® Support mesh: Polypropylene 15 µm Flow tube: Polypropylene Zero dead space adjuster seal: EPDM Ladish®/flow tube seal: Santoprene® Thermoplastic Elastomer				
External Surfaces	316 Stainless steel, Aluminum bronze, Polypropylene, Acetal				

Chemical Resistance

Substance	Concentration	Vantage™ S2
Acetic acid	<25%	✓
Acetone	100%	●
Acetonitrile	100%	●
Ethanol	100%	✓
Hydrochloric acid	1M	✓
Isopropanol	100%	✓
Methanol	100%	✓
Dichloromethane	100%	■
Peracetic acid	300 ppm	✓
Phosphate buffer	2M	✓
Potassium hydroxide	2M	✓
Sodium chloride	4M	✓
Sodium hydroxide	2M	✓
Sodium hypochlorite	200 ppm	✓
Sulfuric acid	1M	✓
Tributyl phosphate 5	%	✓
Triton® X100 Surfactant	100%	✓
Urea	6M	✓

- ✓ = Resistant
 ● = Limited resistance (dependent on contact temperature and time)
 ■ = Non resistant

Ordering Information

Model	Catalogue No.
Vantage™ Column (500 mm adjustable)	
VS 60 x 500 x 500	87906001
VS 90 x 500 x 500	87909001
VS 130 x 500 x 500	87913001
VS 180 x 500 x 500	87918001
VS 250 x 500 x 500	87925001
Column Tube Extension Kit	
VTKS 60 x 500	87906005
VTKS 90 x 500	87909005
VTKS 130 x 500	87913005
VTKS 180 x 500	87918005
VTKS 250 x 500	87925005
Model VTK includes column tube, seal and clamp, also for use as a filler tube.	
Casters for Column	
Casters FCS 180	87018025
Casters FCS 250	87025025
Bubble Trap Assembly	
BT 44 x 250	87004599
Bubble Trap Connection Kit	
PCK-BT	7004597
PCK-BT includes 4 SPV, 4 Ladish® adapters, 12 Ladish® clamps.	
Gauge Kit	
GK	87000007
GK includes gauge, T connector, 3 clamps, and seals.	
Sanitary Pinch Valve	
SPV 2-Way 6 mm	87000003
Flow Cell Kit	
DFC60	87006015
DFC90	87009015
DFC130	87013015
DFC180	87018015
DFC250	87025015
DFC kit includes 2 integrated flow cells with mesh support.	

Model	Catalogue No.
Ladish® Seal and Clamp Kit (6/Pack)	
LCK	87000006
Connector Kit (3/Pack)	
CK3 for 60, 90, 130	87000004
CK6 for 180, 250	87000005
Adjustable Seal Kit (2/Pack)	
ASV60	87006022
ASV90	87009022
ASV130	87013022
ASV180	87018022
ASV250	87025022
Routine Maintenance Kit	
RMKV60	87006019
RMKV90	87009019
RMKV130	87013019
RMKV180	87018019
RMKV250	87025019
RMK includes 2 Ladish® adapters, flow tubes, seals, 2 cell-clips and 1 thread washer.	
12 Month Service Kit	
SKVS60	87906023
SKVS90	87909023
SKVS130	87913023
SKVS180	87918023
SKVS250	87925023
The Service Kit includes DFC, AS, RMK Kits and additional seals and spare parts.	
Flexible Tube with Molded Ladish® Ends	
FT (1 meter)	87000008
FT (3 meter)	87000009
Includes 2 SPV, 2 flexible tubes, 6 clamps and seals.	
Starter Kit	
STK	87000012
STK includes 2 SPV, 2 flexible tubes, 6 clamps and seals.	

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For additional information,
please visit www.MerckMillipore.com

To place an order or receive technical assistance,
please visit www.MerckMillipore.com/contactPS

