

Grace® VisionHT™ Ultra High-Pressure Columns

See Separations with Speed and Clarity

- Ultra-fast separations with superior efficiency, sensitivity, and resolution
- Exceptional stability for long column lifetimes
- Comprehensive sub 2µm stationary phase offering
- 12,000psig pressure rating compatible with all ultra high-pressure LC systems



NEW!

- New Phases
- Method Development Kits
- Guard Columns

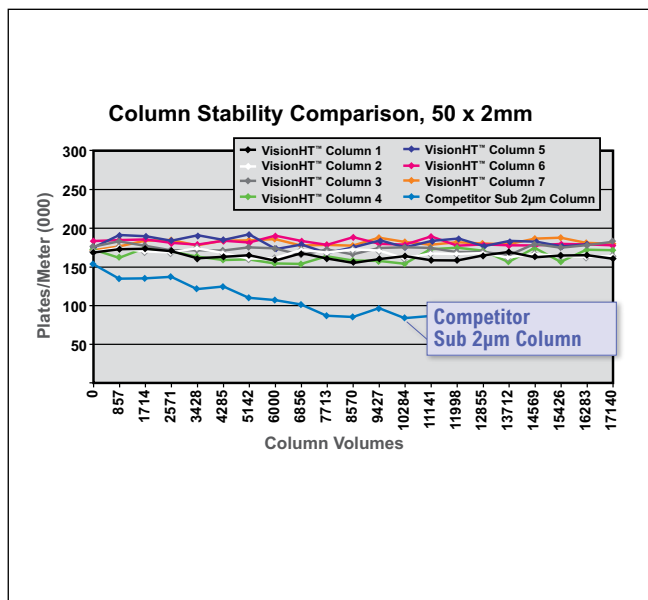
Grace® VisionHT™ columns offer a new level of performance in HPLC. The powerful combination of high-strength 1.5µm media with ultra-low volume hardware, delivers new clarity to your separations and maintains exceptional column lifetime. Complex samples resolve 95% faster with 4x greater sensitivity when compared to traditional 2.1 x 150mm, 5µm columns. And with a wide variety of phases available, the possibilities are endless.



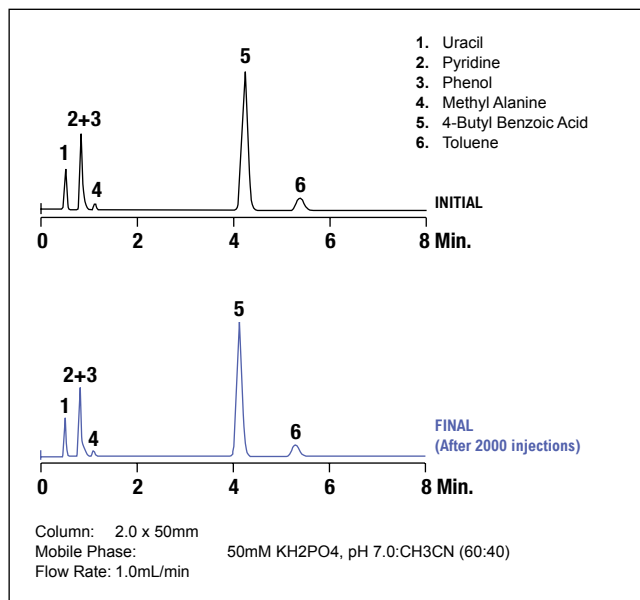
VisionHT™ Column Hardware

Dead Volume:	<15nL
Wetted Materials:	316 Stainless Steel, PTFE
Port Geometry:	10-32, Industry Standard
Pressure Rating (hardware alone):	18,000psi (1,250bar)
Pressure Rating (packed column):	12,000psi (830bar)
i.d.:	1.0mm, 2.0mm
Length:	20mm, 30mm, 50mm, 100mm

Efficiency and Retention Times Remain Constant after Exposure to 12,000psig and 2000 Injections



High-pressure competitor sub 2µm column lost efficiency at routine 12,000psig pressures. VisionHT™ columns remain stable.



VisionHT™ columns demonstrate a constant level of performance even after 2000 injections.

www.discoverysciences.com

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Grace Davison Discovery Sciences Regional Headquarters:

In the Americas:

2051 Waukegan Rd.
Deerfield, IL 60015
Tel: +1 847 948 8600
Email: discoverysciences@grace.com

In Europe:

Brandstraat 12
B-9160 Lokeren, Belgium
Tel: +32 09 340 65 65
Email: discoverysciences.BE@grace.com

In Asia:

19th Floor, K.Wah Center
1010 Huai Hai Zhong Road
Shanghai 200031 PRC
Tel: 86 21 54674678
Email: dsbiz.asia@grace.com

In Australia/New Zealand:

PO Box 6005
Baulkham Hills Business Center
New South Wales 2153, Australia
Tel: +61 2 9865 7177
Email: custcare-syd.discoverysciences@grace.com

VisionHT™ Phase Specifications

Packing	Base Material	Particle Size	Carbon Load	Pore Size	Surface Area	Endcapped	pH Range*	Feature	Application
C18-HL	Spherical Silica	1.5µm	10%	120Å	220m ² /g	Yes	1 – 10	Fully bonded silica, ultra high purity silica.	High capacity for hydrophobic compounds. Good peak symmetry.
C18-B	Spherical Silica	1.5µm	5%	120Å	220m ² /g	Proprietary	1 – 10	High purity silica and unique endcapping.	Improved performance of basic compounds at neutral pH. Better sensitivity and peak shape by mass spec for basic compounds, without the need of acidified mobile phases.
C18	Spherical Silica	1.5µm	6%	100Å	200m ² /g	Yes	1 – 10	Moderate silica exposure.	Classic reversed-phase selectivity. Reduced bonding is optimized for speed and sensitivity.
C18-P	Spherical Silica	1.5µm	5%	100Å	200m ² /g	No	1 – 10	High silica exposure, low carbon load.	Unique polar selectivity. Low carbon load gives fastest reversed-phase elution times while retaining polar compound longer.
HILIC	Spherical Silica	1.5µm	NA	120Å	220m ² /g	No	2 – 8	Polar phase with shorter equilibration times. Shipped in ACN/Water.	Peak reversal compared to reversed-phase. Ideal for very polar compounds with high organic mobile phases for improved sensitivity by MS.
Silica	Spherical Silica	1.5µm	NA	120Å	220m ² /g	No	2 – 8	Traditional normal phase for use in 100% organic mobile phases.	For isomeric separation of non-aqueous compatible compounds by absorption chromatography.

*Choice of buffer is critical at pH>8.

Method Development UltraMD Kits — Best Value for Ultra High-Pressure Method Development

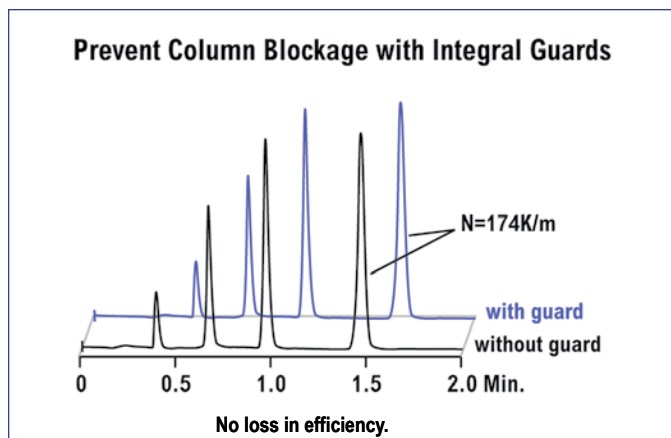
Whether developing a new method, or improving an existing analysis, the VisionHT™ UltraMD kits can help optimize your separation. Get four reversed-phase columns with varying selectivity for the price of three, and develop your fast LC method fast!

VisionHT™ UltraMD Kits			
Description	Phases	Dimensions	Part No.
UltraMD Kit 1	C18, C18-P, C18-HL, C18-B	2 x 100mm	5142692
UltraMD Kit 2	C18, C18-P, C18-HL, C18-B	2 x 50mm	5142693
UltraMD Kit 3	C18, C18-P, C18-HL, C18-B	1 x 50mm	5142691

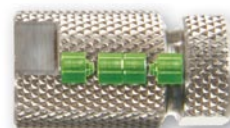
Guard System — Protect Your UHPLC Column Investment

The small diameters and finer porosity frits required in UHPLC creates a higher likelihood of column and system blockage. Trace contaminants not normally problematic for traditional LC, may now pose backpressure issues. VisionHT™ guards protect your column to minimize down time and reduce cost.

Two guard formats available: integral and stand-alone. Couple the zero-dead volume integral guard directly to any VisionHT™ column, and realize absolutely no loss in efficiency. Use the stand-alone version to protect other manufactures' UHPLC columns, or as an on-line enrichment device.



Replace existing endfitting with the integral guard endfitting. Change guard cartridges as necessary.



In-line guard system expands applications beyond column protection. Use as a sample enrichment device or to protect any UHPLC column.