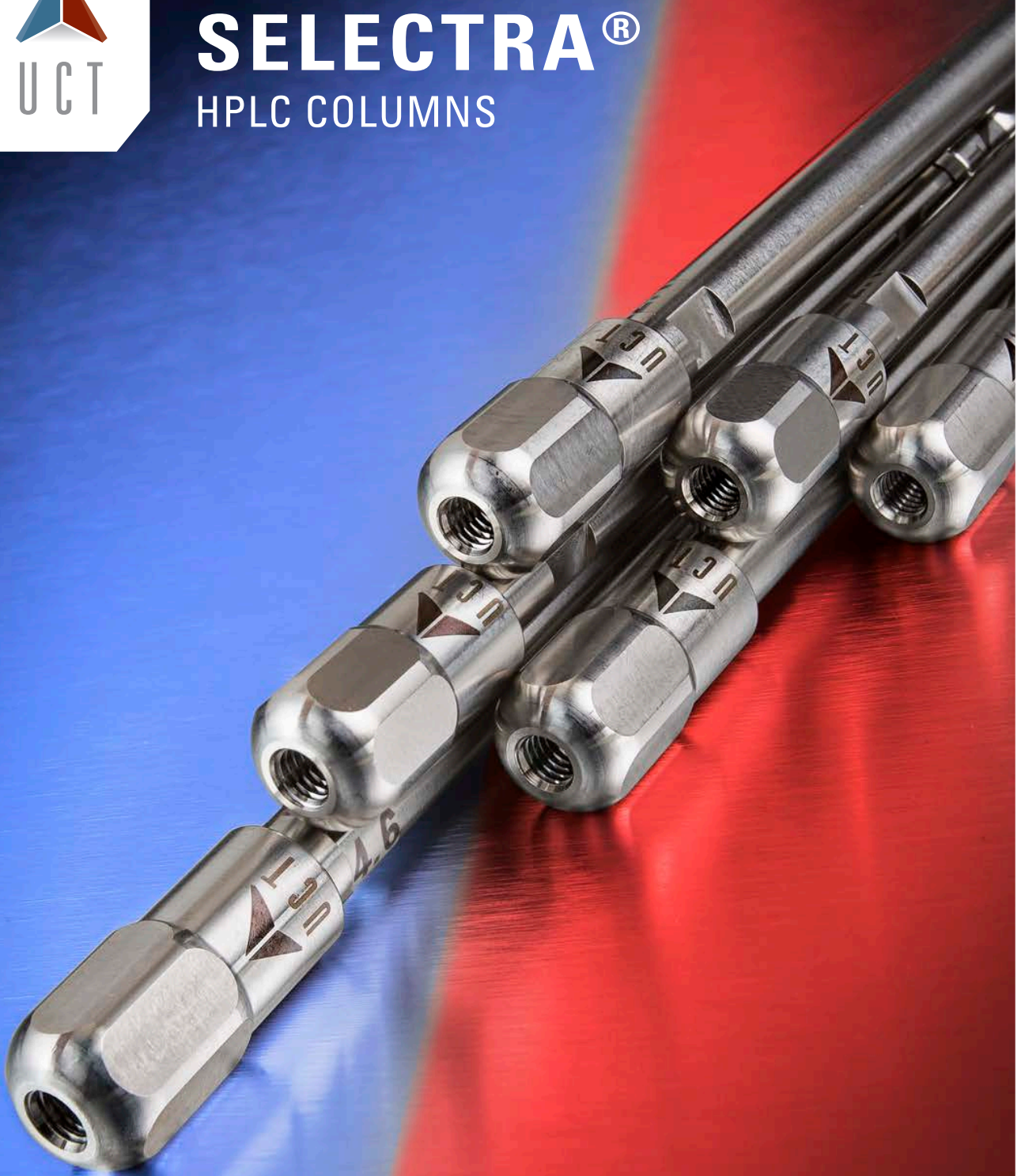




SELECTRA[®]

HPLC COLUMNS



INNOVATION THROUGH CHEMISTRY

SELECTRA® HPLC COLUMNS

PFPP

EtG

DA C18

AQC

C8

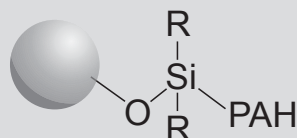


18

After more than 30 years, the UCT name continues to carry with it the same commitment to quality as it did when initially launching into the solid phase extraction market. The tradition continues with the release of the Selectra® HPLC column line. Manufacturing our own ultra-pure and highly reproducible silanes within an ISO 9001:2008 accredited facility, UCT then bonds these to the type B, spherical silica support to create stationary phases of unmatched quality. Currently, 1.8, 3 and 5 µm particle sizes are available. UCT continues to extend the range and capabilities of the Selectra family of columns with a growing number of chemistries, dimensions, and hardware formats to sustain the challenges of modern day chromatography.

All Selectra® HPLC columns are individually packed and QC tested to meet high standards for theoretical plate count and peak symmetry under Statistical Process Control. No batch column testing is ever executed, and each shipment comes with an individualized CoA containing data from the test mix run on that column.





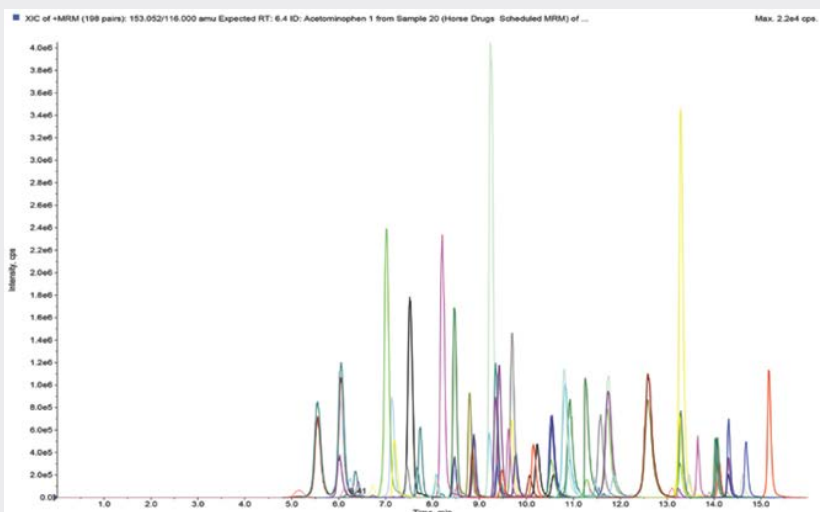
Stationary Phase Category: Polyaromatic
Particle Size: 1.8, 3, 5 μm
Pore Size: 100 \AA
Surface Area: 300 m^2/g
Carbon Load: 13%
USP: L11

Recommended Usage
pH Range: 2-8
Maximum Temperature: 60°C
Maximum Pressure: 1030 bar/15,000 psi (1.8-3 μm)
 or 275 bar/4,000 psi (5 μm)

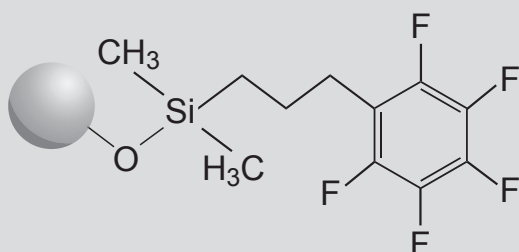
Product Benefits

- Unique polyaromatic stationary phase
- High degree of retention and selectivity for aromatic and moderately polar analytes that are difficult to resolve or elute early on standard C18 phases
- Typical compound classes include:
 - Therapeutic Drugs
 - Drugs of Abuse
 - Pesticides
 - Mycotoxins

Drug of Abuse Panel



Column: Selectra® DA 3 μm , 100 x 2.1 mm
Mobile Phase A: 0.1% Formic Acid in H_2O
Mobile phase B: 0.1% Formic Acid in MeOH
Gradient: 5-60% B in 5 minutes
 60% B hold 5 minutes
 100% B hold 0.1 minutes
Flow: 0.3mL/min
Detection: AB Sciex 4000 Qtrap
Analytes: Amphetamines/Sympaths
 Analgesics
 Benzodiazepines
 Cardiac Drugs
 Diuretics
 Muscle Relaxers
 NSAIDS
 Opiates
 TCA's



Stationary Phase Category: Pentafluorophenylpropyl

Particle Size: 1.8, 3, 5 μm

Pore Size: 100 \AA

Surface Area: 300 m^2/g

Carbon Load: 11%

USP: L43

Recommended Usage

pH Range: 2-8

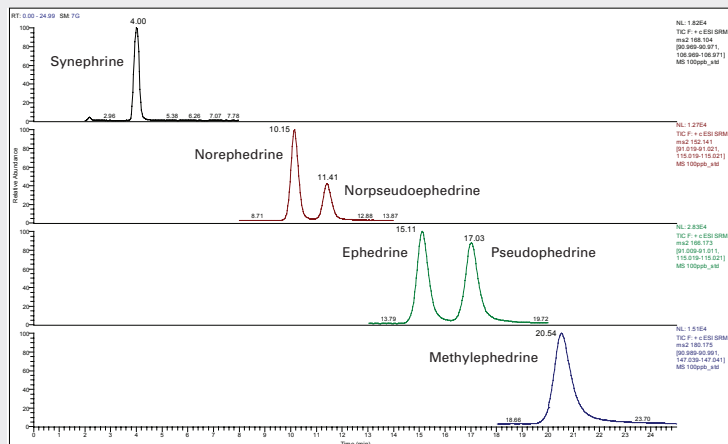
Maximum Temperature: 60°C

Maximum Pressure: 1030 bar/15,000 psi
(1.8-3 μm) or 275 bar/4,000 psi (5 μm)

Product Benefits

- Can be used for Reverse Phase, Normal Phase, or HILIC separations
- Exhibits multiple selectivity mechanisms including hydrogen bonding, dipole dipole, pi-pi overlap, hydrophilic (HILIC), and hydrophobic interactions
- Typical compound classes include:
 - Beta-blockers
 - Tricyclic -antidepressants
 - Benzodiazepines
 - Catecholamines

Ephedra Alkaloids



Column: Selectra® PFPP 3 μm , 100 x 2.1 mm

Mobile Phase A: 100 mM Ammonium Acetate

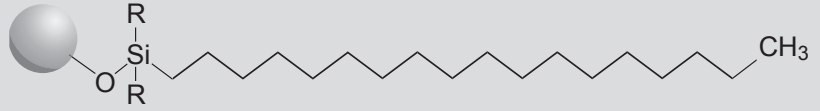
Mobile phase B: MeOH

Isocratic: 20%B

Flow: 0.3mL/min

Detection: Thermo Scientific TSQ Vantage

SELECTRA® C18



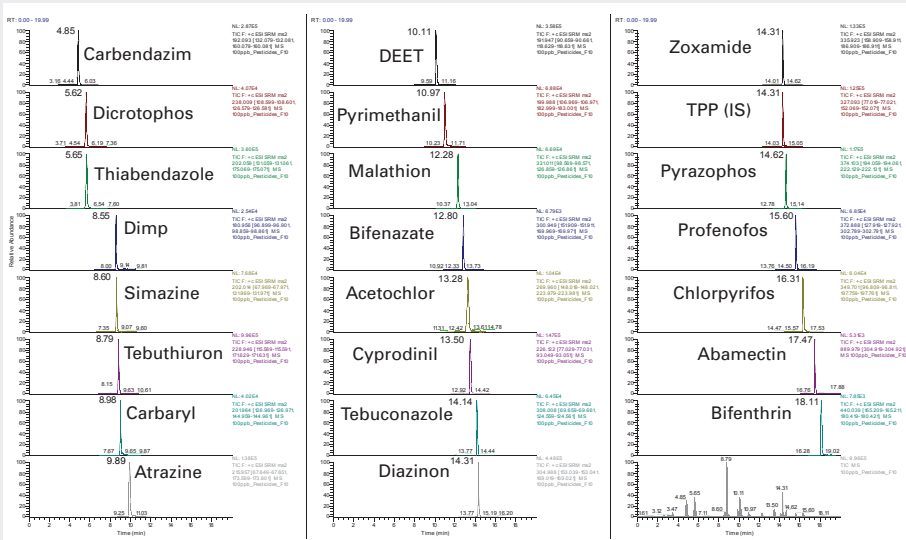
Stationary Phase Category: Octadecylsilane
Particle Size: 1.8, 3, 5 µm
Pore Size: 100 Å
Surface Area: 300 m²/g
Carbon Load: 20%
USP: L1

Recommended Usage
pH Range: 2-9.5
Maximum Temperature: 80°C
Maximum Pressure: 1030 bar/15,000 psi (1.8-3µm)
or 275 bar/4,000 psi (5µm)

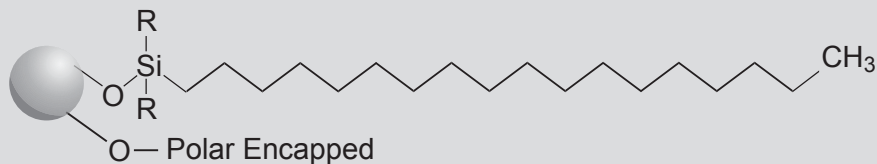
Product Benefits

- Optimum retention for traditional reverse phase analyses
- Highest hydrophobic interactions in the Selectra® column line
- Excellent carbon loading
- Fully endcapped.

Pesticide Panel



Column: Selectra® C18 3 µm, 100 x 2.1 mm
Mobile phase a: 0.3% Formic Acid and 0.1% Ammonium Formate
Mobile phase b: 0.1% Formic Acid in MeOH
Gradient: 5-30% B in 1 minute
30-60% B in 1 minute
60-100% B in 8 minutes
Flow: 0.3 mL/min
Detection: AB Sciex 4000 QTRAP



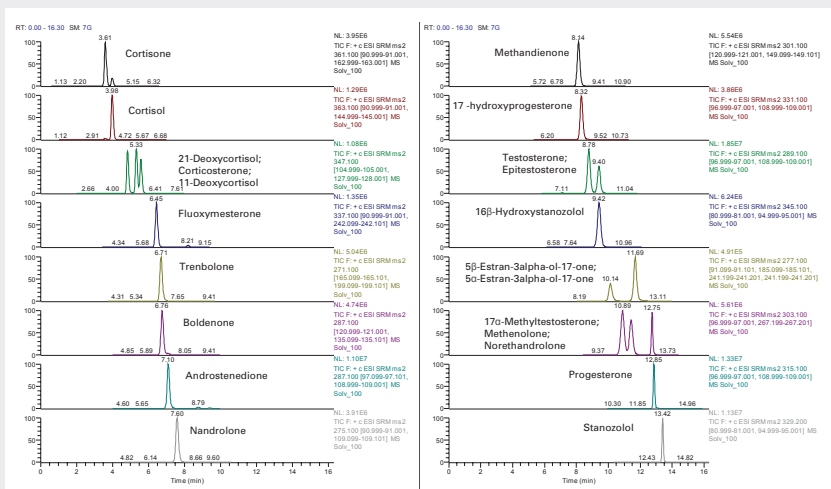
Stationary Phase Category: Polar Modified
 Octadecylsilane
Particle Size: 1.8, 3, 5 µm
Pore Size: 100 Å
Surface Area: 300 m²/g
Carbon Load: 11%
USP: L1

Recommended Usage
pH Range: 2-8
Maximum Temperature: 60°C
Maximum Pressure: 1030 bar/15,000 psi (1.8-3µm)
 or 275 bar/4,000 psi (5µm)

Product Benefits

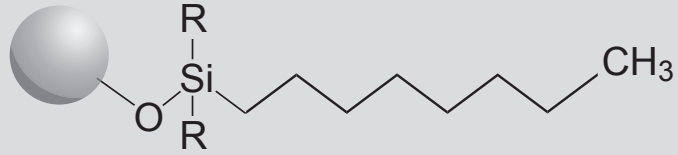
- Similar non-polar retention to traditional C18
- Enhanced selectivity and retention for difficult to retain polar analytes
- Suitable in up to 100% aqueous mobile phases
- Greater range of mobile phase options

Anabolic Steroids



Column: Selectra® Aqueous C18 3 µm, 100 x 2.1 mm
Mobile Phase A: 20 mM Ammonium Formate
Mobile phase B: 0.1% Formic Acid in MeOH
Gradient: 50-60% B in 2 minutes
 60% B in 7 minutes
 60-100% B in 3 minutes
Flow: 0.3mL/min
Detection: Thermo Scientific TSQ Vantage

SELECTRA® C8



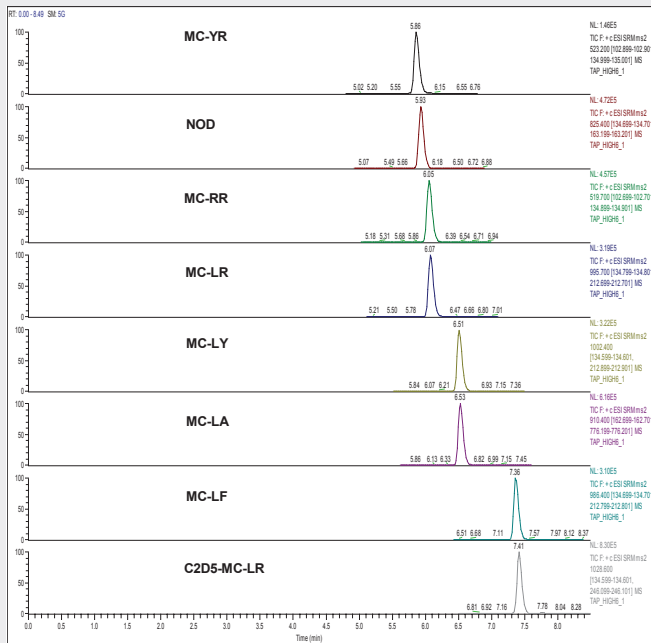
Stationary Phase Category: Octyl
Particle Size: 1.8, 3, 5 μm
Pore Size: 100 \AA
Surface Area: 300 m^2/g
Carbon Load: 12%
USP: L7

Recommended Usage
Ph Range: 2-8
Maximum Temperature: 60°C
Maximum Pressure: 1030 bar/15,000 psi (1.8-3 μm)
or 275 bar/4,000 psi (5 μm)

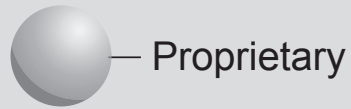
Product Benefits

- Selectivity similar to C18 for non-polar compounds
- Less retentive, less hydrophobic than standard C18 column
- Excellent carbon loading
- Fully endcapped

EPA Method 544: Determination of Microcystins and Nodularin (Hepatotoxins) in Drinking Water



Column: Selectra® C8 3 μm , 100 \times 2.1 mm
Mobile Phase A: 20 mM Ammonium Formate
Mobile Phase B: MeOH
Gradient: 10% B for 1 minute
60% B in 0.5 minutes; Hold for 1 minute
90% B in 4 minutes; Hold for 1.5 minutes
10% B in 0.1 minutes
Flow: 0.3 mL/min
Detection: Thermo Scientific TSQ Vantage



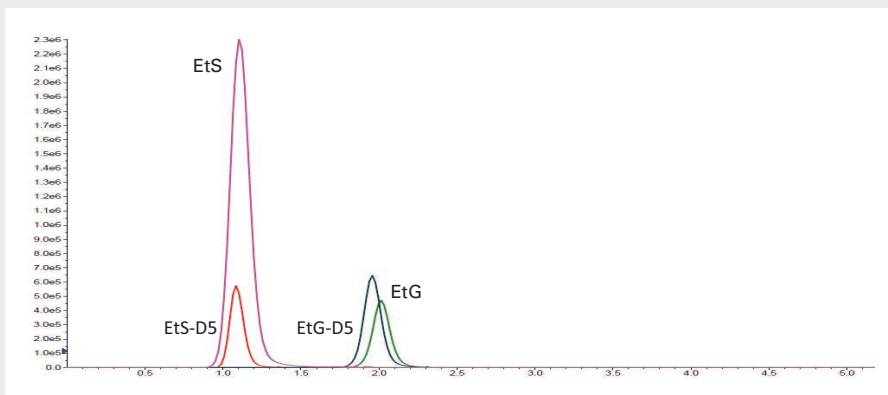
Stationary Phase Category: Proprietary
Particle Size: 1.8, 3, 5 μm
Pore Size: 100 \AA
Surface Area: 300 m^2/g
Carbon Load: 11%
USP: L1

Recommended Usage
pH Range: 2-8
Maximum Temperature: 60°C
Maximum Pressure: 1030 bar/15,000 psi (1.8-3 μm)
or 275 bar/4,000 psi (5 μm)

Product Benefits

- Proprietary phase designed to maximize retention for polar EtG/EtS alcohol metabolites
- Baseline resolution differentiating EtG and EtS
- Suitable in up to 100% aqueous mobile phases

EtG/EtS Analysis



Column: Selectra® EtG 3 μm , 100 x 2.1 mm

Mobile Phase A: 0.1% Formic Acid in H_2O

Mobile phase B: 0.1% Formic Acid in ACN

Gradient: 0% B for 1.5 minutes

100% B in 0.2 minutes

Flow: 0.3mL/min

Detection: AB Sciex 4000 Qtrap

EQUIVALENCY CHART

VENDOR	COLUMNS	UCT
Agilent	Zorbax C8	SELECTRA® C8
Agilent	Polaris C18-A	SELECTRA® AQ
Agilent	Zorbax C18	SELECTRA® C18
Alltech	Alltima C18	SELECTRA® C18
GL Sciences	Inertsil C8	SELECTRA® C8
GL Sciences	Inertsil ODS3	SELECTRA® C18
Machery-Nagel	Nucleosil C8	SELECTRA® C8
Machery-Nagel	Nucleosil C18	SELECTRA® C18
Merck	Lichrosorb RP C18	SELECTRA® C18
Perkin Elmer	Brownlee Validated Aqueous C18	SELECTRA® AQ
Perkin Elmer	Choice PFPP	SELECTRA® PFPP
Phenomenex	Luna C8	SELECTRA® C8
Phenomenex	Luna C18	SELECTRA® C18
Phenomenex	Luna PFP(2)	SELECTRA® PFPP
Restek	Ultra C8	SELECTRA® C8
Restek	Ultra C18	SELECTRA® C18
Restek	Pinnacle DB Biphenyl	SELECTRA® DA
Restek	Pinnacle DB PFPP	SELECTRA® PFPP
Restek	ULTRA PFPP	SELECTRA® PFPP
Supelco	Ascentis C8	SELECTRA® C8
Supelco	Discovery HS F5	SELECTRA® PFPP
Thermo-Fisher	Hypersil GOLD C8	SELECTRA® C8
Thermo-Fisher	BDS Hypersil C18	SELECTRA® C18
Thermo-Fisher	Betasil C18	SELECTRA® C18
Thermo-Fisher	Hypersil Gold C18	SELECTRA® C18
Waters	Symmetry C8	SELECTRA® C8
Waters	Xttera C18 RP	SELECTRA® C18
YMC	YMC ODS-AQ	SELECTRA® AQ

ORDERING INFO

HPLC Guard Holder	Part Numbers
HPLC Guard Cartridge Holder	SLGRDHLDR
UHPLC Guard Cartridge Holder	SLGRDHLDR-HP
Replacement Peek Tip for Holder	SLGRDHLDR-TIP (2/pk)

SELECTRA® DA HPLC Columns

Dimensions	Particle Size	Part Numbers
50 x 2.1 mm	1.8 µm	SLDA50ID21-18UM
100 x 2.1 mm	1.8 µm	SLDA100ID21-18UM
50 x 4.6 mm	1.8 µm	SLDA50ID46-18UM
100 x 4.6 mm	1.8 µm	SLDA100ID46-18UM
10 x 2.1 mm guard (sold as a 2 pack)	1.8 µm	SLDAGDC20-18UM
10 x 4.6 mm guard (sold as a 2 pack)	1.8 µm	SLDAGDC46-18UM
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50 x 2.1 mm	3 µm	SLDA50ID21-3UM
100 x 2.1 mm	3 µm	SLDA100ID21-3UM
50 x 4.6 mm	3 µm	SLDA50ID46-3UM
100 x 4.6 mm	3 µm	SLDA100ID46-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLDAGDC21-3UM
10 x 4.6 mm guard (sold as a 2 pack)	3 µm	SLDAGDC46-3UM
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50 x 2.1 mm	5 µm	SLDA50ID21-5UM
100 x 2.1 mm	5 µm	SLDA100ID21-5UM
50 x 4.6 mm	5 µm	SLDA50ID46-5UM
100 x 4.6 mm	5 µm	SLDA100ID46-5UM
150 x 4.6 mm	5 µm	SLDA150ID46-5UM
250 x 4.6 mm	5 µm	SLDA250ID46-5UM
10 x 2.1 mm guard (sold as a 2 pack)	5 µm	SLDAGDC21-5UM
10 x 4.6 mm guard (sold as a 2 pack)	5 µm	SLDAGDC46-5UM

SELECTRA® PFPP HPLC Columns

Dimensions	Particle Size	Part Numbers
50 x 2.1 mm	1.8 µm	SLPFPP50ID21-18UM
100 x 2.1 mm	1.8 µm	SLPFPP100ID21-18UM
50 x 4.6 mm	1.8 µm	SLPFPP50ID46-18UM
100 x 4.6 mm	1.8 µm	SLPFPP100ID46-18UM
10 x 2.1 mm guard (sold as a 2 pack)	1.8 µm	SLPFPPGDC20-18UM
10 x 4.6 mm guard (sold as a 2 pack)	1.8 µm	SLPFPPGDC46-18UM
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50 x 2.1 mm	3 µm	SLPFPP50ID21-3UM
100 x 2.1 mm	3 µm	SLPFPP100ID21-3UM
50 x 4.6 mm	3 µm	SLPFPP50ID46-3UM
100 x 4.6 mm	3 µm	SLPFPP100ID46-3UM
150 x 4.6 mm	3 µm	SLPFPP150ID46-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLPFPPGDC20-3UM
10 x 4.6 mm guard (sold as a 2 pack)	3 µm	SLPFPPGDC46-3UM
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50 x 2.1 mm	5 µm	SLPFPP50ID21-5UM
100 x 2.1 mm	5 µm	SLPFPP100ID21-5UM
50 x 4.6 mm	5 µm	SLPFPP50ID46-5UM
100 x 4.6 mm	5 µm	SLPFPP100ID46-5UM
150 x 4.6 mm	5 µm	SLPFPP150ID46-5UM
250 x 4.6 mm	5 µm	SLPFPP250ID46-5UM
10 x 2.1 mm guard (sold as a 2 pack)	5 µm	SLPFPPGDC20-5UM
10 x 4.6 mm guard (sold as a 2 pack)	5 µm	SLPFPPGDC46-5UM

SELECTRA® C18 HPLC Columns

Dimensions	Particle Size	Part Numbers
50 x 2.1 mm	1.8 µm	SLC-1850ID21-18UM
100 x 2.1 mm	1.8 µm	SLC-18100ID21-18UM
50 x 4.6 mm	1.8 µm	SLC-1850ID46-18UM
100 x 4.6 mm	1.8 µm	SLC-18100ID46-18UM
10 x 2.1 mm guard (sold as a 2 pack)	1.8 µm	SLC-18GDC20-18UM
10 x 4.6 mm guard (sold as a 2 pack)	1.8 µm	SLC-18GDC46-18UM
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50 x 2.1 mm	3 µm	SLC-1850ID21-3UM
100 x 2.1 mm	3 µm	SLC-18100ID21-3UM
50 x 4.6 mm	3 µm	SLC-1850ID46-3UM
100 x 4.6 mm	3 µm	SLC-18100ID46-3UM
150 x 4.6 mm	3 µm	SLC-18150ID46-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLC-18GDC20-3UM
10 x 4.6 mm guard (sold as a 2 pack)	3 µm	SLC-18GDC46-3UM
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50 x 2.1 mm	5 µm	SLC-1850ID21-5UM
100 x 2.1 mm	5 µm	SLC-18100ID21-5UM
50 x 4.6 mm	5 µm	SLC-1850ID46-5UM
100 x 4.6 mm	5 µm	SLC-18100ID46-5UM
150 x 4.6 mm	5 µm	SLC-18150ID46-5UM
250 x 4.6 mm	5 µm	SLC-18250ID46-5UM
10 x 2.1 mm guard (sold as a 2 pack)	5 µm	SLC-18GDC20-5UM
10 x 4.6 mm guard (sold as a 2 pack)	5 µm	SLC-18GDC46-5UM

SELECTRA® Aqueous C18 HPLC Columns

Dimensions	Particle Size	Part Numbers
50 x 2.1 mm	1.8 µm	SLAQ50ID21-18UM
100 x 2.1 mm	1.8 µm	SLAQ100ID21-18UM
50 x 4.6 mm	1.8 µm	SLAQ50ID46-18UM
100 x 4.6 mm	1.8 µm	SLAQ100ID46-18UM
10 x 2.1 mm guard (sold as a 2 pack)	1.8 µm	SLAQGDC20-18UM
10 x 4.6 mm guard (sold as a 2 pack)	1.8 µm	SLAQGDC46-18UM

50 x 2.1 mm	3 µm	SLAQ50ID21-3UM
100 x 2.1 mm	3 µm	SLAQ100ID21-3UM
50 x 4.6 mm	3 µm	SLAQ50ID46-3UM
100 x 4.6 mm	3 µm	SLAQ100ID46-3UM
150 x 4.6 mm	3 µm	SLAQ150ID46-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLAQGDC20-3UM
10 x 4.6 mm guard (sold as a 2 pack)	3 µm	SLAQGDC46-3UM

50 x 2.1 mm	5 µm	SLAQ50ID21-5UM
100 x 2.1 mm	5 µm	SLAQ100ID21-5UM
50 x 4.6 mm	5 µm	SLAQ50ID46-5UM
100 x 4.6 mm	5 µm	SLAQ100ID46-5UM
150 x 4.6 mm	5 µm	SLAQ150ID46-5UM
250 x 4.6 mm	5 µm	SLAQ250ID46-5UM
10 x 2.1 mm guard (sold as a 2 pack)	5 µm	SLAQGDC20-5UM
10 x 4.6 mm guard (sold as a 2 pack)	5 µm	SLAQGDC46-5UM

SELECTRA® EtG HPLC Columns

Dimensions	Particle Size	Part Numbers
100 x 2.1 mm	3 µm	SLETG100ID21-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLETGGDC20-3UM

SELECTRA® C8 HPLC Columns

Dimensions	Particle Size	Part Numbers
50 x 2.1 mm	1.8 µm	SLC-850ID21-18UM
100 x 2.1 mm	1.8 µm	SLC-8100ID21-18UM
50 x 4.6 mm	1.8 µm	SLC-850ID46-18UM
100 x 4.6 mm	1.8 µm	SLC-8100ID46-18UM
10 x 2.1 mm guard (sold as a 2 pack)	1.8 µm	SLC-8GDC21-18UM
10 x 4.6 mm guard (sold as a 2 pack)	1.8 µm	SLC-8GDC46-18UM
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50 x 2.1 mm	3 µm	SLC-850ID21-3UM
100 x 2.1 mm	3 µm	SLC-8100ID21-3UM
50 x 4.6 mm	3 µm	SLC-850ID46-3UM
100 x 4.6 mm	3 µm	SLC-8100ID46-3UM
150 x 4.6 mm	3 µm	SLC-8150ID46-3UM
10 x 2.1 mm guard (sold as a 2 pack)	3 µm	SLC-8GDC21-3UM
10 x 4.6 mm guard (sold as a 2 pack)	3 µm	SLC-8GDC46-3UM
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50 x 2.1 mm	5 µm	SLC-850ID21-5UM
100 x 2.1 mm	5 µm	SLC-8100ID21-5UM
50 x 4.6 mm	5 µm	SLC-850ID46-5UM
100 x 4.6 mm	5 µm	SLC-8100ID46-5UM
150 x 4.6 mm	5 µm	SLC-8150ID46-5UM
250 x 4.6 mm	5 µm	SLC-8250ID46-5UM
10 x 2.1 mm guard (sold as a 2 pack)	5 µm	SLC-8GDC21-5UM
10 x 4.6 mm guard (sold as a 2 pack)	5 µm	SLC-8GDC46-5UM