

Clone LC Columns

Legacy methods, by their very nature, often use older column technologies. These older phases can be accompanied by larger variations in batch to batch performance which can lead to inconsistent results and cause out of specification (OOS) occurrences. With routine analysis, often completed with compliant procedures, any unplanned down to investigate OOS instances can impact productivity. Our range of clone phases offer a cost-effective comparable alternative to many of the older leading brands, whilst ensuring consistency and stability in analysis.

Our product line is fully scalable from analytical to preparative columns, please enquire for more information.



Features and Benefits

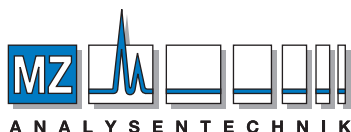
- Cost effective and comparable alternative to older leading brands to support legacy methods
- Better lot-to-lot reproducibility due to more stable production methods, especially when compared to very old brands

Material Characteristics

Brand*	Phase**	Third Party Equivalent	Particle Size (µm)	USP Code
Aviator™	C18	Avantor ACE®	3, 5	L1
Chromega Z™	C18	Agilent Zorbax® RX	3, 5	L1
Chromegabond® HC	C18 C8	Nouryon Kromasil®	3, 5, 7, 10 3, 5, 7, 10	L1 L7
Chromegabond® Ultra	C18 C8	Beckman Ultrasphere®	3, 5 3, 5	L1 L7
DeactiSil™	ODS2 ODS3	GL Sciences Inertsil®	5, 10 3, 5	L1 L1
Harmony™	C18	Waters Symmetry®	3.5, 5, 10	L1
HarmonySecure™	RP18	Waters SymmetryShield™	3.5, 5	L1
HyperSelect™ BDS	C18	Thermo Hypersil®	3, 5	L1
HyperSelect™	ODS C18 ODS2 C18	Thermo Hypersil®	3, 5, 10 3, 5	L1 L1
Micropak™	C18	Waters µBondapak®	5, 10	L1
Neptune™	dC18	Waters Atlantis™	3, 5	L1
Partisep™	ODS3	Whatman Partisil™	5, 10	L1
Sonoma™	C18(2)	Phenomenex Luna®	3, 5, 10, 15	L1
Spherisep™	ODS1 ODS2	Waters Spherisorb®	3, 5, 10 3, 5, 10	L1 L1
StarRise™	C18	Waters SunFire™	2.5, 3.5, 5, 10	L1

*Other brand alternatives are also available including HyperSelect Gold (Hypersil Gold alternative) and HyperSelect HiPurity (Hypersil HyPurity alternative), etc. Please enquire for more details at LCA.TechSupport@perkinelmer.com

**Preparative columns of these phases are also available. Please enquire for more details at LCA.TechSupport@perkinelmer.com



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Aviator C18 Columns

The Aviator line exhibits equivalent selectivity to Avantor ACE® HPLC columns. Aviator C18 provides a rugged, reproducible starting point for method development and applications with analytes differing in hydrophobicity, polar, moderately polar and non-polar analytes, uncharged acids and bases, ionized acids or bases using ion-pairing. Other Aviator phases are also available including AQ, C8, C4, Cyano and Phenyl. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Pore Size (Å)	Part No.
Aviator C18	30	2.1	3	100	182121-AVI-C18
Aviator C18	30	4.6	3	300	185131-AVI-C18
Aviator C18	50	2.1	3	100	112121-AVI-C18
Aviator C18	50	2.1	5	100	112221-AVI-C18
Aviator C18	50	4.6	3	100	115121-AVI-C18
Aviator C18	75	3.0	3	100	193121-AVI-C18
Aviator C18	75	4.6	3	100	195121-AVI-C18
Aviator C18	100	4.6	3	100	125121-AVI-C18
Aviator C18	100	4.6	3	300	125131-AVI-C18
Aviator C18	100	4.6	5	100	125221-AVI-C18
Aviator C18	100	4.6	5	300	125231-AVI-C18
Aviator C18	150	2.1	5	100	132221-AVI-C18
Aviator C18	150	3.0	3	100	133121-AVI-C18
Aviator C18	150	3.0	5	300	133231-AVI-C18
Aviator C18	150	4.6	3	100	135121-AVI-C18
Aviator C18	150	4.6	3	300	135131-AVI-C18
Aviator C18	150	4.6	5	100	135221-AVI-C18
Aviator C18	150	4.6	5	300	135231-AVI-C18
Aviator C18	250	3.0	5	300	153231-AVI-C18
Aviator C18	250	4.0	5	100	154221-AVI-C18
Aviator C18	250	4.6	5	100	155221-AVI-C18
Aviator C18	250	4.6	5	300	155231-AVI-C18
Aviator C18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	100	500101-AVI-C18
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	–	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromega Z C18 Columns

Chromega Z C18 HPLC Columns exhibit equivalent selectivity and peak symmetry to Agilent Zorbax RX C18 HPLC columns. Other Chromega Z phases are also available including C8 and Phenyl. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromega Z C18	50	4.6	3	115171-ZC18
Chromega Z C18	100	4.6	3	125171-ZC18
Chromega Z C18	100	4.6	5	125271-ZC18
Chromega Z C18	150	4.6	3	135171-ZC18
Chromega Z C18	150	4.6	5	135271-ZC18
Chromega Z C18	250	4.6	5	155271-ZC18

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromegabond HC C18 Columns

Chromegabond HC C18 is a non-end capped C18 stationary phase with 22% monomerically bonded carbon, producing a highly retentive column. The dense high carbon coverage forms a hydrophobic shield and prevent underlying silica support interactions with solutes. The Chromegabond HC phases are the commercial equivalent of Nouryon Kromasil®. Other Chromegabond HC phases are also available including C8 and Phenyl. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond HC C18	100	4.0	5	124221-HC-C18
Chromegabond HC C18	100	4.6	3	125121-HC-C18
Chromegabond HC C18	100	4.6	5	125221-HC-C18
Chromegabond HC C18	125	4.0	7	104421-HC-C18
Chromegabond HC C18	125	4.6	7	105421-HC-C18
Chromegabond HC C18	150	4.0	3	134121-HC-C18
Chromegabond HC C18	150	4.0	5	134221-HC-C18
Chromegabond HC C18	150	4.6	3	135121-HC-C18
Chromegabond HC C18	150	4.6	5	135221-HC-C18
Chromegabond HC C18	250	2.1	3	152121-HC-C18
Chromegabond HC C18	250	4.6	3	155121-HC-C18
Chromegabond HC C18	250	4.6	5	155221-HC-C18
Chromegabond HC C18	300	4.0	7	164421-HC-C18
Chromegabond HC C18 Prep	250	10	5	157221-HC-C18
Chromegabond HC C18 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-HC-C18
Chromegabond HC C18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-HC-C18
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromegabond HC C8 Columns

Chromegabond HC C8 is a C8 stationary phase with high % bonded carbon. The Chromegabond HC phases are the commercial equivalent of Nouryon Kromasil®. Other Chromegabond HC phases are also available including C18 and Phenyl. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond HC C8	100	4.6	3	125121-HC-C8
Chromegabond HC C8	100	4.6	5	125221-HC-C8
Chromegabond HC C8	150	4.6	3	135121-HC-C8
Chromegabond HC C8	150	4.6	5	135221-HC-C8
Chromegabond HC C8	250	4.6	10	155321-HC-C8
Chromegabond HC C8	250	4.6	5	155221-HC-C8
Chromegabond HC C8 Prep	250	50	10	15F321-HC-C8
Chromegabond HC C8 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-HC-C8
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromegabond Ultra C18 Columns

The Chromegabond Ultra™ line is an equivalent to the Beckman Ultrasphere® columns. The most popular material, Ultra C18, is a 12% carbon load material. Excellent efficiencies, peak shape and resolution are obtained for virtually all Ultrasphere® HPLC applications. Other Chromegabond Ultra phases are also available including C8, cyano and silica. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond Ultra C18	75	4.6	3	195171-ULC18
Chromegabond Ultra C18	100	4.6	3	125171-ULC18
Chromegabond Ultra C18	100	4.6	5	125271-ULC18
Chromegabond Ultra C18	150	2.1	5	132271-ULC18
Chromegabond Ultra C18	150	4.6	3	135171-ULC18
Chromegabond Ultra C18	150	4.6	5	135271-ULC18
Chromegabond Ultra C18	250	4.6	5	155271-ULC18
Chromegabond Ultra C18 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-ULC18
Chromegabond Ultra C18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-ULC18
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	E5500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Chromegabond Ultra C8 Columns

The Chromegabond Ultra™ line is an equivalent to the Beckman Ultrasphere® columns. Chromegabond Ultra C8 is exhaustively endcapped. Excellent efficiencies, peak shape and resolution are obtained for virtually all Ultrasphere® HPLC applications. Other Chromegabond Ultra phases are also available including C18, cyano and silica. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Chromegabond Ultra C8	75	4.6	3	195171-ULC8
Chromegabond Ultra C8	150	3.0	3	133171-ULC8
Chromegabond Ultra C8	150	4.6	5	135271-ULC8
Chromegabond Ultra C8	250	4.6	5	155271-ULC8
Chromegabond Ultra C8 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-ULC8
Chromegabond Ultra C8 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-ULC8
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	E5500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

DeactiSil ODS2 Columns

DeactiSil™ is an equivalent selectivity to the GL Sciences Inertsil® HPLC column. Many chromatographers use DeactiSil when looking for an Inertsil® alternative. DeactiSil will offer long column lifetime and excellent reproducibility. DeactiSil is engineered to the tightest specification and is available in large scale bulk. DeactiSil phases are available in ODS3 (C18), ODS2 (C18), ODS (C18), C8, and phenyl. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
DeactiSil ODS2	150	3.0	5	1332D1-DS-ODS2
DeactiSil ODS2	150	4.0	10	1343D1-DS-ODS2
DeactiSil ODS2	150	4.6	5	1352D1-DS-ODS2
DeactiSil ODS2	250	4.6	5	1552D1-DS-ODS2
DeactiSil ODS2 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-DS-ODS2
DeactiSil ODS2 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-DS-ODS2
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

DeactiSil ODS3 Columns

DeactiSil™ is an equivalent selectivity to the GL Sciences Inertsil® HPLC column. Many chromatographers use DeactiSil when looking for an Inertsil® alternative. DeactiSil will offer long column lifetime and excellent reproducibility. DeactiSil is engineered to the tightest specification and is available in large scale bulk. DeactiSil phases are available in ODS3 (C18), ODS2 (C18), ODS (C18), C8, and phenyl. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
DeactiSil ODS3	50	3.0	3	113121-DS-ODS3
DeactiSil ODS3	50	4.6	5	115221-DS-ODS3
DeactiSil ODS3	100	4.0	3	124121-DS-ODS3
DeactiSil ODS3	100	4.6	3	125121-DS-ODS3
DeactiSil ODS3	150	4.0	5	134221-DS-ODS3
DeactiSil ODS3	150	4.6	3	135121-DS-ODS3
DeactiSil ODS3	150	4.6	5	135221-DS-ODS3
DeactiSil ODS3	250	4.6	5	155221-DS-ODS3
DeactiSil ODS3 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-DS-ODS3
DeactiSil ODS3 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-DS-ODS3
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	ES500100

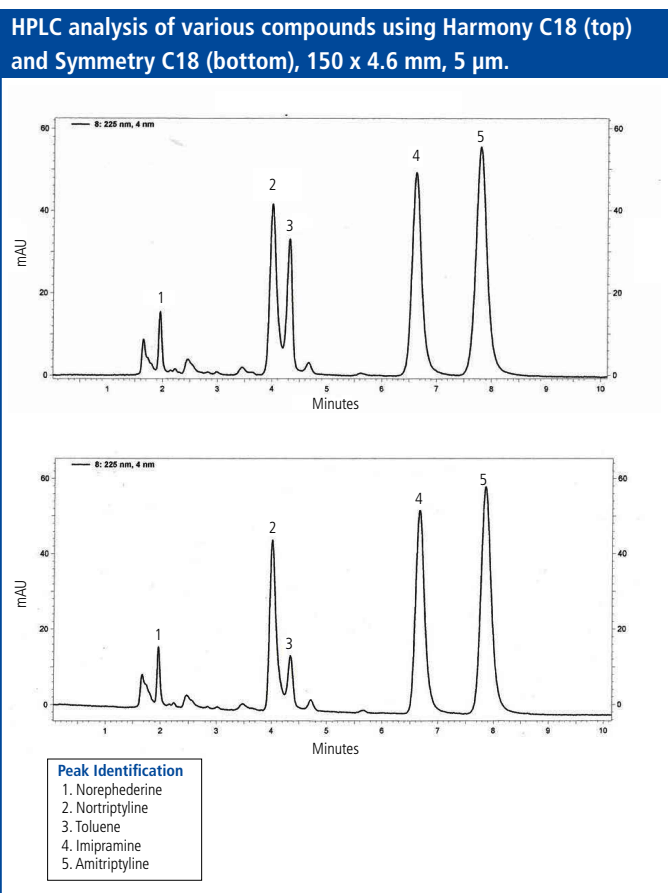
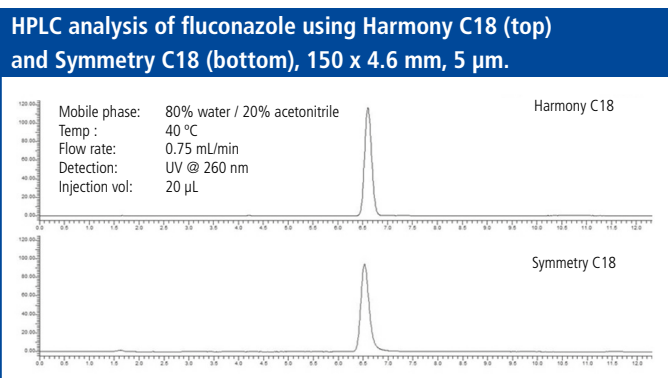
Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Harmony C18 Columns

Harmony™ C18 is an identical selectivity to the Waters Symmetry® C18 HPLC column. Many chromatographers use Harmony when looking for a Symmetry equivalent. Harmony will offer long column lifetime, provide excellent reproducibility, and is engineered to the tightest specifications. It is also available in large scale bulk. Other Harmony phases are also available including C8 and C4. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Pore Size (Å)	Part No.
Harmony C18	50	2.1	3.5	100	112121-HRM-C18
Harmony C18	50	4.0	3.5	100	114121-HRM-C18
Harmony C18	50	4.6	3.5	100	115121-HRM-C18
Harmony C18	50	4.6	5	300	115231-HRM-C18
Harmony C18	75	4.0	5	100	194221-HRM-C18
Harmony C18	75	4.6	3.5	100	195121-HRM-C18
Harmony C18	75	4.6	5	100	195221-HRM-C18
Harmony C18	100	3.0	3.5	100	123121-HRM-C18
Harmony C18	100	4.0	3.5	100	124121-HRM-C18
Harmony C18	100	4.6	3.5	100	125121-HRM-C18
Harmony C18	100	4.6	3.5	300	125131-HRM-C18
Harmony C18	100	4.6	5	100	125221-HRM-C18
Harmony C18	100	4.6	5	300	125231-HRM-C18
Harmony C18	150	2.1	3.5	300	132131-HRM-C18
Harmony C18	150	2.1	5	100	132221-HRM-C18
Harmony C18	150	3.0	3.5	100	133121-HRM-C18
Harmony C18	150	3.0	5	100	133221-HRM-C18
Harmony C18	150	3.9	5	100	13e221-HRM-C18
Harmony C18	150	4.0	5	100	134221-HRM-C18
Harmony C18	150	4.0	5	300	134231-HRM-C18
Harmony C18	150	4.6	3.5	100	135121-HRM-C18
Harmony C18	150	4.6	3.5	300	135131-HRM-C18
Harmony C18	150	4.6	5	100	135221-HRM-C18
Harmony C18	150	4.6	5	300	135231-HRM-C18
Harmony C18	250	2.1	5	300	152231-HRM-C18
Harmony C18	250	4.6	5	100	155221-HRM-C18
Harmony C18	250	4.6	5	300	155231-HRM-C18
Harmony C18 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	100	500103-HRM-C18
Harmony C18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	100	500101-HRM-C18
Analytical Guard Cartridge Holder with integrated coupler	-	-	-	-	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com



HarmonySecure RP18 Columns

HarmonySecure™ is an equivalent to Waters SymmetryShield™ HPLC column. HarmonySecure RP18 utilizes polar embedded technology for superior HPLC analysis. The structure of polar embedded phases inherently incorporates a hydrophilic layer between the silica surface and the reversed-phase layer. The generated hydrophilic layer delivers outstanding peak shape performance and unique selectivity for many separations. Other HarmonySecure phases are also available including RP8. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
HarmonySecure RP18	50	2.1	3.5	112121-HRS-RP18
HarmonySecure RP18	50	2.1	5	112221-HRS-RP18
HarmonySecure RP18	50	4.6	3.5	115121-HRS-RP18
HarmonySecure RP18	50	4.6	5	115221-HRS-RP18
HarmonySecure RP18	75	4.6	3.5	195121-HRS-RP18
HarmonySecure RP18	100	2.1	3.5	122121-HRS-RP18
HarmonySecure RP18	100	4.6	3.5	125121-HRS-RP18
HarmonySecure RP18	150	2.1	3.5	132121-HRS-RP18
HarmonySecure RP18	150	2.1	5	132221-HRS-RP18
HarmonySecure RP18	150	3.0	3.5	133121-HRS-RP18
HarmonySecure RP18	150	3.0	5	133221-HRS-RP18
HarmonySecure RP18	150	3.9	5	13e221-HRS-RP18
HarmonySecure RP18	150	4.6	3.5	135121-HRS-RP18
HarmonySecure RP18	150	4.6	5	135221-HRS-RP18
HarmonySecure RP18	250	4.0	5	154221-HRS-RP18
HarmonySecure RP18	250	4.6	5	155221-HRS-RP18
HarmonySecure RP18 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-HRS-RP18
HarmonySecure RP18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-HRS-RP18
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	E5500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

HyperSelect ODS C18 Columns

The HyperSelect line is an equivalent to Thermo Fisher Hypersil™. Excellent efficiencies, peak shape and resolution are obtained for virtually all Hypersil HPLC applications from high quality HyperSelect HPLC columns. The Hyperselect ODS C18 is a non-encapped octadecyl material.

In addition to the ODS C18, HyperSelect is available as BDS-C18, BDS-C8, encapped C8, non-encapped C8, encapped phenyl, non-encapped phenyl, silica, TMS, amino, non-encapped cyano, encapped cyano, SAX and SCX. Other brand alternatives are also available including HyperSelect Gold (Hypersil Gold alternative) and HyperSelect HiPurity (Hypersil HiPurity alternative). Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
HyperSelect ODS	75	4.0	5	194291-HPC-ODS
HyperSelect ODS	100	2.1	3	122191-HPC-ODS
HyperSelect ODS	100	2.1	5	122291-HPC-ODS
HyperSelect ODS	100	4.0	3	124191-HPC-ODS
HyperSelect ODS	100	4.0	5	124291-HPC-ODS
HyperSelect ODS	100	4.6	3	125191-HPC-ODS
HyperSelect ODS	100	4.6	5	125291-HPC-ODS
HyperSelect ODS	120	4.0	5	1D4291-HPC-ODS
HyperSelect ODS	125	4.0	5	104291-HPC-ODS
HyperSelect ODS	125	4.6	5	105291-HPC-ODS
HyperSelect ODS	150	2.1	3	132191-HPC-ODS
HyperSelect ODS	150	2.1	5	132291-HPC-ODS
HyperSelect ODS	150	3.9	5	13e291-HPC-ODS
HyperSelect ODS	150	4.0	5	134291-HPC-ODS
HyperSelect ODS	150	4.6	3	135191-HPC-ODS
HyperSelect ODS	150	4.6	5	135291-HPC-ODS
HyperSelect ODS	200	4.6	10	145391-HPC-ODS
HyperSelect ODS	200	4.6	5	145291-HPC-ODS
HyperSelect ODS	250	4.0	5	154291-HPC-ODS
HyperSelect ODS	250	4.6	3	155191-HPC-ODS
HyperSelect ODS	250	4.6	5	155291-HPC-ODS
HyperSelect ODS	300	3.9	5	16e291-HPC-ODS
HyperSelect ODS	300	4.0	10	164391-HPC-ODS
HyperSelect ODS	300	4.0	5	164291-HPC-ODS
HyperSelect ODS Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-HPC-ODS
HyperSelect ODS Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-HPC-ODS
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	E5500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

HyperSelect ODS2 C18 Columns

The HyperSelect line is an equivalent to Thermo Fisher Hypersil. The Hyperselect ODS2 C18 is an endcapped octadecyl material. Excellent efficiencies, peak shape and resolution are obtained for virtually all Hypersil HPLC applications from high quality HyperSelect HPLC columns. Range of particle sizes offers versatility for capillary and LC/MS to prep and process scale applications.

In addition to the ODS2 C18, HyperSelect is available as ODS1 C18, BDS-C18, BDS-C8, endcapped C8, non-endcapped C8, endcapped phenyl, non- endcapped phenyl, silica, TMS, amino, non-endcapped cyano, endcapped cyano, SAX and SCX. Other brand alternatives are also available including HyperSelect Gold (Hypersil Gold alternative) and HyperSelect HiPurity (Hypersil HiPurity alternative). Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
HyperSelect ODS2	50	4.6	5	115291-HPC-ODS2
HyperSelect ODS2	100	4.6	5	125291-HPC-ODS2
HyperSelect ODS2	150	4.6	5	135271-HPC-ODS2
HyperSelect ODS2	150	4.6	5	135271-HPC-ODS2
HyperSelect ODS2	250	2.1	5	152291-HPC-ODS2
HyperSelect ODS2	250	4.6	3	155171-HPC-ODS2
HyperSelect ODS2	250	4.6	5	155271-HPC-ODS2
HyperSelect ODS2	250	4.6	5	155271-HPC-ODS2
HyperSelect ODS2 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-HPC-ODS2
HyperSelect ODS2 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-HPC-ODS2
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

HyperSelect BDS C18 Columns

The HyperSelect line is an alternative to Thermo Fisher Hypersil. The Hyperselect BDS C18 is a base deactivated C18 material. Excellent efficiencies, peak shape and resolution are obtained for virtually all Hypersil HPLC applications from high quality HyperSelect HPLC columns.

In addition to the BDS C18, HyperSelect is available as ODS C18, ODS2 C18, BDS-C8, endcapped C8, non-endcapped C8, endcapped phenyl, non- endcapped phenyl, silica, TMS, amino, non-endcapped cyano, endcapped cyano, SAX and SCX. Other brand alternatives are also available including HyperSelect Gold (Hypersil Gold alternative) and HyperSelect HiPurity (Hypersil HiPurity alternative). Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
HyperSelect BDS C18	50	2.1	3	112191-HPC-BDSC18
HyperSelect BDS C18	50	4.6	3	115191-HPC-BDSC18
HyperSelect BDS C18	100	4.0	3	124191-HPC-BDSC18
HyperSelect BDS C18	100	4.6	3	125191-HPC-BDSC18
HyperSelect BDS C18	100	4.6	5	125291-HPC-BDSC18
HyperSelect BDS C18	150	2.1	3	132191-HPC-BDSC18
HyperSelect BDS C18	150	4.6	3	135191-HPC-BDSC18
HyperSelect BDS C18	150	4.6	5	135291-HPC-BDSC18
HyperSelect BDS C18	250	4.0	5	154291-HPC-BDSC18
HyperSelect BDS C18	250	4.6	3	155191-HPC-BDSC18
HyperSelect BDS C18	250	4.6	5	155291-HPC-BDSC18
HyperSelect BDS C18 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-HPC-BDSC18
HyperSelect BDS C18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-HPC-BDSC18
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Micropak C18 Columns

Micropak columns closely match the performance of Waters μ Bondapak columns with equivalent selectivity and peak symmetry. These materials are available in both the standard μ Bondapak 10 μ m particle size as well as a 5 μ m size for both shorter run times and higher efficiencies. Most methodologies on μ Bondapak HPLC columns can be transferred to these products without modification, including USP applications. Other Micropak phases are also available including C8, cyano, amino (NH₂), phenyl and silica. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (μ m)	Part No.
Micropak C18	100	8.0	5	129291-MPK-C18
Micropak C18	150	3.9	10	134391-MPK-C18
Micropak C18	150	3.9	5	13e291-MPK-C18
Micropak C18	150	4.0	5	134291-MPK-C18
Micropak C18	150	4.6	10	135391-MPK-C18
Micropak C18	150	4.6	5	135291-MPK-C18
Micropak C18	250	4.6	10	155391-MPK-C18
Micropak C18	250	4.6	5	155291-MPK-C18
Micropak C18	300	3.9	10	16e391-MPK-C18
Micropak C18	300	3.9	5	16e291-MPK-C18
Micropak C18	300	4.0	10	164391-MPK-C18
Micropak C18	300	4.0	5	164291-MPK-C18
Micropak C18	300	4.6	10	165391-MPK-C18
Micropak C18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-MPK-C18
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Neptune dC18 Columns

The Neptune™ line is an alternative to Waters Atlantis®. Neptune dC18 is an alternative to the Waters Atlantis® dC18 material for reverse phase chromatography. In many cases Neptune has shown better retention and a longer column lifetime than the Atlantis. Enhanced polar compounds will be retained with complete compatibility with aqueous mobile phases. Excellent for LC/MS and gradient research. Other Neptune phases are also available including T3 and HILIC Silica. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (μ m)	Part No.
Neptune dC18	50	2.1	3	112121-NPN-dC18
Neptune dC18	75	4.6	5	195221-NPN-dC18
Neptune dC18	100	2.1	3	122121-NPN-dC18
Neptune dC18	100	4.6	5	125221-NPN-dC18
Neptune dC18	150	2.1	3	132121-NPN-dC18
Neptune dC18	150	2.1	5	132221-NPN-dC18
Neptune dC18	150	4.6	3	135121-NPN-dC18
Neptune dC18	150	4.6	5	135221-NPN-dC18
Neptune dC18	250	4.0	5	154221-NPN-dC18
Neptune dC18	250	4.6	5	155221-NPN-dC18
Neptune dC18 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-NPN-dC18
Neptune dC18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-NPN-dC18
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Partisep ODS3 Columns

Partisep columns closely match the selectivity and performance of GE Whatman Partisil® columns. Most methodologies on Partisil HPLC columns can be transferred to Partisep products without modification, including USP applications. Partisep ODS3 closely matches the selectivity and performance of Partisil ODS3 columns. Other Partisep phases are also available including ODS, ODS2, C8, PAC, SAX and silica. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (μ m)	Part No.
Partisep ODS3	100	4.6	5	125271-PSP-ODS3
Partisep ODS3	150	4.6	5	135271-PSP-ODS3
Partisep ODS3	250	4.6	10	155371-PSP-ODS3
Partisep ODS3	250	4.6	5	155271-PSP-ODS3
Partisep ODS3 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-PSP-ODS3
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	ES500100

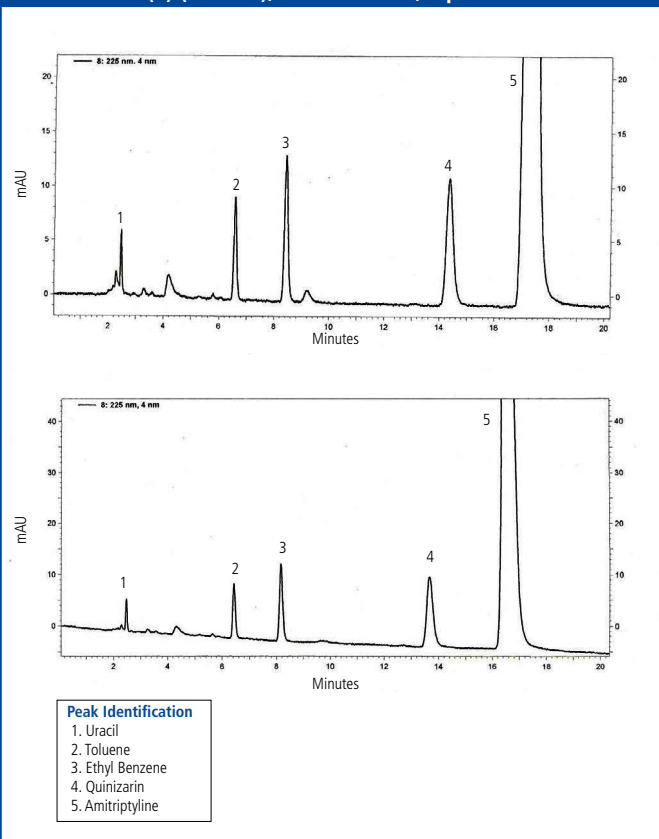
Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

Sonoma C18(2) Columns

The Sonoma line is an equivalent to Phenomenex Luna™. Excellent efficiencies, peak shape and resolution are obtained for virtually all Luna™ HPLC applications from high quality Sonoma HPLC columns. A range of particle sizes offers versatility for capillary and LC/MS to prep and process scale applications. Sonoma C18(2), the most popular phase, is equivalent to Luna C18(2). Available in 3µm and 5µm particle sizes, with bulk and preparative material available. Other Sonoma phases are also available including C18, C5, C8, C8(2), Cyano, HILIC, NH2 (amino), PFP(2), Phenyl-Hexyl and Silica(2). Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Sonoma C18(2)	30	2.1	3	182121-SMA-C18(2)
Sonoma C18(2)	50	2.1	10	112321-SMA-C18(2)
Sonoma C18(2)	50	2.1	3	112121-SMA-C18(2)
Sonoma C18(2)	50	2.1	5	112221-SMA-C18(2)
Sonoma C18(2)	50	3.0	3	113121-SMA-C18(2)
Sonoma C18(2)	50	3.0	5	113221-SMA-C18(2)
Sonoma C18(2)	50	4.6	3	115121-SMA-C18(2)
Sonoma C18(2)	50	4.6	5	115221-SMA-C18(2)
Sonoma C18(2)	75	4.0	3	194121-SMA-C18(2)
Sonoma C18(2)	75	4.0	5	194221-SMA-C18(2)
Sonoma C18(2)	75	4.6	3	195121-SMA-C18(2)
Sonoma C18(2)	75	4.6	5	195221-SMA-C18(2)
Sonoma C18(2)	100	2.1	3	122121-SMA-C18(2)
Sonoma C18(2)	100	2.1	5	122221-SMA-C18(2)
Sonoma C18(2)	100	4.6	3	125121-SMA-C18(2)
Sonoma C18(2)	100	4.6	5	125221-SMA-C18(2)
Sonoma C18(2)	150	2.1	3	132121-SMA-C18(2)
Sonoma C18(2)	150	2.1	5	132221-SMA-C18(2)
Sonoma C18(2)	150	3.0	5	133221-SMA-C18(2)
Sonoma C18(2)	150	4.0	10	134321-SMA-C18(2)
Sonoma C18(2)	150	4.0	3	134121-SMA-C18(2)
Sonoma C18(2)	150	4.0	5	134221-SMA-C18(2)
Sonoma C18(2)	150	4.6	15	135B21-SMA-C18(2)
Sonoma C18(2)	150	4.6	3	135121-SMA-C18(2)
Sonoma C18(2)	150	4.6	5	135221-SMA-C18(2)
Sonoma C18(2)	200	4.6	5	145221-SMA-C18(2)
Sonoma C18(2)	250	2.1	10	152321-SMA-C18(2)
Sonoma C18(2)	250	2.1	5	152221-SMA-C18(2)
Sonoma C18(2)	250	4.0	10	154321-SMA-C18(2)
Sonoma C18(2)	250	4.0	5	154221-SMA-C18(2)
Sonoma C18(2)	250	4.6	10	155321-SMA-C18(2)

HPLC analysis of a test mix using Sonoma C18(2) (top) and Luna C18(2) (bottom), 250 x 4.6 mm, 5 µm.



Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Sonoma C18(2)	250	4.6	15	155B21-SMA-C18(2)
Sonoma C18(2)	250	4.6	3	155121-SMA-C18(2)
Sonoma C18(2)	250	4.6	5	155221-SMA-C18(2)
Sonoma C18(2)	300	3.9	10	16e321-SMA-C18(2)
Sonoma C18(2)	300	4.0	10	164321-SMA-C18(2)
Sonoma C18(2)	300	4.0	15	164B21-SMA-C18(2)
Sonoma C18(2)	300	4.6	15	165B21-SMA-C18(2)
Sonoma C18(2) Prep	150	20	5	138221-SMA-C18(2)
Sonoma C18(2) Prep	250	10	10	157321-SMA-C18(2)
Sonoma C18(2) Prep	250	10	5	157221-SMA-C18(2)
Sonoma C18(2) Prep	250	20	5	158221-SMA-C18(2)
Sonoma C18(2) Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-SMA-C18(2)
Sonoma C18(2) Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-SMA-C18(2)
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

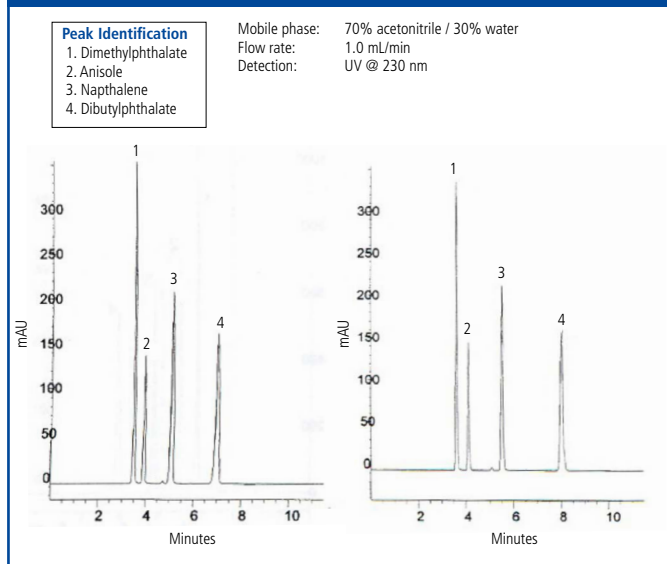
Spherisep ODS1 Columns

The Spherisep line is an equivalent to Waters Spherisorb®. The Spherisep ODS1 is an equivalent to Waters Spherisorb® ODS1. Excellent efficiencies, peak shape and resolution are obtained for virtually all Waters Spherisorb® HPLC applications from high quality Spherisep HPLC columns. Range of particle sizes offers versatility for capillary and LC/MS to prep and process scale applications. Other Spherisep phases are also available including C1, C6, C8, cyano, NH2, ODS2, ODSB, Phenyl, SAX and Silica. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Spherisep ODS1	100	4.6	5	125271-SSP-ODS1
Spherisep ODS1	125	4.0	3	104171-SSP-ODS1
Spherisep ODS1	125	4.6	5	105271-SSP-ODS1
Spherisep ODS1	150	4.0	5	134271-SSP-ODS1
Spherisep ODS1	150	4.6	3	135171-SSP-ODS1
Spherisep ODS1	150	4.6	5	135271-SSP-ODS1
Spherisep ODS1	200	4.6	10	145371-SSP-ODS1
Spherisep ODS1	250	3.0	4	153871-SSP-ODS1
Spherisep ODS1	250	4.0	10	154371-SSP-ODS1
Spherisep ODS1	250	4.0	5	154271-SSP-ODS1
Spherisep ODS1	250	4.6	5	155271-SSP-ODS1
Spherisep ODS1	300	4.0	5	164271-SSP-ODS1
Spherisep ODS1 Analytical Guard Cartridges (Pkg. 5)	10	2.0	5	500103-SSP-ODS1
Spherisep ODS1 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-SSP-ODS1
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

HPLC analysis of phthalates and other organics using Spherisep ODS1 (left) and Spherisorb ODS1 (right), 250 x 4.6 mm, 5 µm.



Spherisep ODS2 Columns

Our Spherisep™ line is an equivalent to Waters Spherisorb®. The most popular phase is the ODS2. PerkinElmer offer the Spherisep ODS2 column with equivalent selectivity in 3, 5 or 10 µm particles. Other Spherisep phases are also available including C1, C6, C8, cyano, NH2, ODS1, ODSB, Phenyl, SAX and Silica. Please enquire for more information.

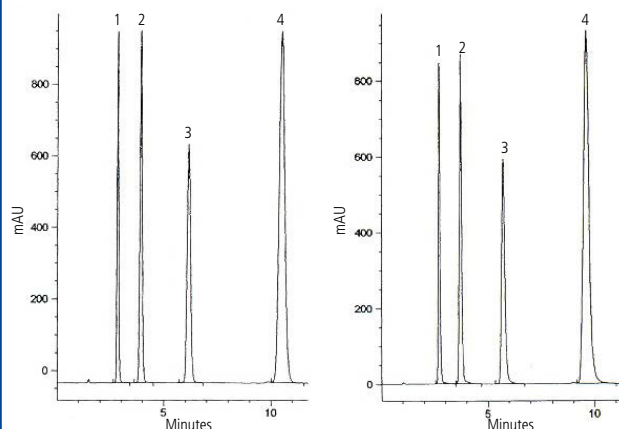
Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
Spherisep ODS2	30	4.6	5	185271-SSP-ODS2
Spherisep ODS2	50	4.6	3	115171-SSP-ODS2
Spherisep ODS2	50	4.6	5	115271-SSP-ODS2
Spherisep ODS2	100	2.1	3	122171-SSP-ODS2
Spherisep ODS2	100	4.0	10	124371-SSP-ODS2
Spherisep ODS2	100	4.6	3	125171-SSP-ODS2
Spherisep ODS2	100	4.6	5	125271-SSP-ODS2
Spherisep ODS2	120	4.6	3	1D5171-SSP-ODS2
Spherisep ODS2	125	3.0	3	103171-SSP-ODS2
Spherisep ODS2	125	4.0	5	104271-SSP-ODS2
Spherisep ODS2	125	4.6	3	105171-SSP-ODS2
Spherisep ODS2	150	4.0	3	134171-SSP-ODS2
Spherisep ODS2	150	4.0	5	134271-SSP-ODS2
Spherisep ODS2	150	4.6	3	135171-SSP-ODS2
Spherisep ODS2	150	4.6	5	135271-SSP-ODS2
Spherisep ODS2	250	4.0	5	154271-SSP-ODS2
Spherisep ODS2	250	4.6	10	155371-SSP-ODS2
Spherisep ODS2	250	4.6	3	155171-SSP-ODS2
Spherisep ODS2	250	4.6	5	155271-SSP-ODS2
Spherisep ODS2	300	3.9	5	16e271-SSP-ODS2
Spherisep ODS2 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-SSP-ODS2
Analytical Guard Cartridge Holder with integrated coupler	—	—	—	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com

HPLC analysis of 4-hydroxybenzoates using Spherisep ODS2 (left) and Spherisorb ODS2 (right), 150 x 4.6 mm, 5 µm.

- Peak Identification**
1. Methyl 4-hydroxybenzoate
 2. Ethyl 4-hydroxybenzoate
 3. Propyl 4-hydroxybenzoate
 4. Butyl 4-hydroxybenzoate

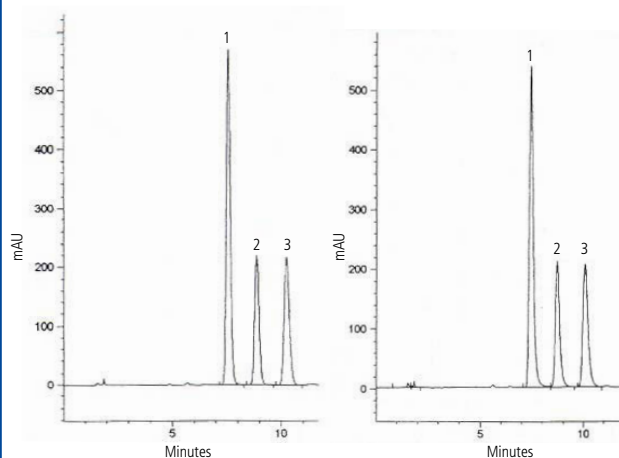
Mobile phase: 40% water / 60% acetonitrile
 Flow rate: 1.0 mL/min
 Detection: UV @ 254 nm



HPLC analysis of tocopherols using Spherisep ODS2 (left) and Spherisorb ODS2 (right), 150 x 4.6 mm, 5 µm.

- Peak Identification**
1. δ-Tocopherol
 2. γ-Tocopherol
 3. α-Tocopherol

Mobile phase: 85% acetonitrile / 15% methanol
 Flow rate: 1.0 mL/min
 Detection: UV @ 295 nm

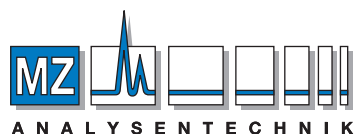


StarRise C18 Columns

The StarRise™ line shows equivalent selectivity to the Waters SunFire™ and has a long column lifetime and excellent reproducibility. The StarRise C18 provides equivalent selectivity to the SunFire C18. StarRise columns provide symmetrical peaks for improved resolution and quantization of acidic neutral and basic compounds a low and intermediate pH range. It is available in many particle sizes as well as preparative bulk. Other StarRise phases are also available including C8. Please enquire for more information.

Phase	Length (mm)	ID (mm)	Particle Size (µm)	Part No.
StarRise C18	50	2.1	3.5	112121-SNR-C18
StarRise C18	50	2.1	5	112221-SNR-C18
StarRise C18	50	3.0	5	113221-SNR-C18
StarRise C18	50	4.6	3.5	115121-SNR-C18
StarRise C18	75	4.6	3.5	195121-SNR-C18
StarRise C18	100	2.0	2.5	522H21-SNR-C18
StarRise C18	100	2.1	3.5	122121-SNR-C18
StarRise C18	100	4.6	3.5	125121-SNR-C18
StarRise C18	100	4.6	5	125221-SNR-C18
StarRise C18	150	2.1	3.5	132121-SNR-C18
StarRise C18	150	3.0	3.5	133121-SNR-C18
StarRise C18	150	4.0	3.5	134121-SNR-C18
StarRise C18	150	4.0	5	134221-SNR-C18
StarRise C18	150	4.6	3.5	135121-SNR-C18
StarRise C18	150	4.6	5	135221-SNR-C18
StarRise C18	250	4.6	5	155221-SNR-C18
StarRise C18 Prep	150	20	3.5	138121-SNR-C18
StarRise C18 Prep	150	30	5	13N221-SNR-C18
StarRise C18 Prep	250	10	5	157221-SNR-C18
StarRise C18 Prep	250	20	5	158221-SNR-C18
StarRise C18 Analytical Guard Cartridges (Pkg. 5)	10	3.0	5	500101-SNR-C18
Analytical Guard Cartridge Holder with integrated coupler	–	–	–	ES500100

Other phases, column dimensions, particle sizes, and guard cartridges are available. Please enquire for more details at LCA.TechSupport@perkinelmer.com



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