

















# PerkinElmer Brownlee™ Cartridge Holders

## Ordering Your First Cartridge Column?

If you are ordering a cartridge for the first time, you also need to order a holder of the same length. A holder includes all parts necessary for use: two end fittings, body, and two sets of nuts and ferrules.

The Universal Holder Kit is a cost effective way of having one complete holder or system holder of any size with a coupled guard cartridge.



	Cat. No.	Description
	<b>0715-0025</b>	Universal Holder Kit, Includes: 3, 10, and 22cm Bodies; 2 End assemblies, 1 union, and 1 NewGuard end assembly
	<b>0715-0001</b>	NewGuard™ Holder, Holds a single NewGuard cartridge for use with conventional HPLC columns
	<b>0715-0013</b>	3cm Holder Holds a single 3cm cartridge
	<b>0715-0014</b>	10cm Holder Holds a single 10cm cartridge
	<b>0715-0015</b>	22cm Holder Holds a single 22cm cartridge
	<b>0715-0016</b>	10cm NewGuard System Holder For direct coupling of NewGuard and 10cm cartridge
	<b>0715-0017</b>	22cm NewGuard System Holder For direct coupling of NewGuard and 22cm cartridge
	<b>0715-0018</b>	Union, For direct coupling of two cartridges. (2 Holder bodies and 2 end assemblies also required)
	<b>0715-0002</b>	NewGuard End Assembly Upgrades 3cm guard holder to NewGuard Holder
	<b>0715-0019</b>	End Assembly Holder component
	<b>0715-0020</b>	3cm Holder Body Holder component
	<b>0715-0021</b>	10cm Holder Body Holder component
	<b>0715-0022</b>	22cm Holder Body Holder component
	<b>0715-0023</b>	Seal Replacement Kit, Tools and two 7000 psi seals. <i>Not needed first year.</i>
	<b>0715-0024</b>	Two 7000 psi seals (Seal replacement kit required.) <i>Not needed first year.</i>
	<b>0715-0004</b>	3cm Prep-10 Holder Includes end assemblies and body
	<b>0715-0005</b>	10cm Prep-10 Holder Includes end assemblies and body
	<b>0715-0006</b>	25cm Prep-10 Holder Includes end assemblies and body
	<b>0715-0011</b>	Prep-10 Seal Replacement Kit, tools only, seals not included
	<b>0715-0012</b>	Prep-10 Inlet Seal, 1 each
	<b>0715-0026</b>	Prep-10 Outlet Seal, 1 each

# PerkinElmer Brownlee™ Cartridges



**Aquapore®** is a wide-pore (300Å, 7µm), silica based support suitable for the separation of large biopolymers.

**Spheri-5®** is a small pore (80Å, 5µm), silica based sorbent for separating small molecules. Both monofunctional and polyfunctional C8 and C18 sorbents are available.

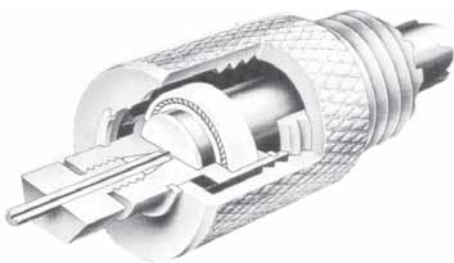
**Polypore®** packings are derivatized polystyrene divinylbenzene copolymer resins. The Polypore H cartridges are optimized for organic acid separations and the Polypore CA cartridges are for saccharide separations.

## Specifications

Product	Functionality	Pore Diameter	Surface Area	% Carbon	End Cap
Spheri-5, RP-8	Octyl (C8) monofunctional	80Å	180m <sup>2</sup> /g	6%	yes
Spheri-5, RP-18	Octyl (C18) monofunctional	80Å	180m <sup>2</sup> /g	11%	yes
Spheri-5, ODS	Octyl (C18) polyfunctional	80Å	180m <sup>2</sup> /g	14%	yes
Spheri-5, Phenyl	Phenyl	80Å	180m <sup>2</sup> /g	6%	yes
Spheri-5, Silica	Hydroxyl	80Å	180m <sup>2</sup> /g	N/A	N/A
Spheri-5, Amino	Aminopropyl	80Å	180m <sup>2</sup> /g	3%	no
Spheri-5, Cyano	Cyanopropyl	80Å	180m <sup>2</sup> /g	4%	no
Aquapore ODS, OD-300	Octadecyl (C18)	300Å	100m <sup>2</sup> /g	10%	yes
Aquapore Octyl, RP-300	Octyl (C8)	300Å	100m <sup>2</sup> /g	5%	yes
Aquapore Butyl, BU-300	Butyl (C4)	300Å	100m <sup>2</sup> /g	3%	yes
Aquapore weak anion, AX-300	Polyethyleneimine	300Å	100m <sup>2</sup> /g	N/A	N/A
Product	Functionality	Pore Diameter			
Polypore H for organic acid separation	Hydrogen form	microporous			
Polypore CA for organic acid separation	Calcium form	microporous			

Description	3cm Cartridges (2/pk) <i>(Holder 0715-0013)</i>		10cm Cartridges <i>(Holder 0715-0014 or 0715-0016)</i>		22cm Cartridges <i>(Holder 0715-0015 or 0715-0017)</i>		
	4.6mm ID Cat. No. / \$	2.1mm ID Cat. No. / \$	4.6mm ID Cat. No. / \$	2.1mm ID Cat. No. / \$	4.6mm ID Cat. No. / \$	2.1mm ID Cat. No. / \$	
Reverse Phase	RP-8 Spheri-5, C-8 5µm, monofunctional	0711-0001	0711-0002	0711-0003	0711-0004	0711-0005	0711-0006
	RP-8 Spheri-10, C-8 10µm, monofunctional	0711-0121		0711-0123			
	RP-18 Spheri-5, C-18 5µm, monofunctional	0711-0013	0711-0014	0711-0015	0711-0016	0711-0017	0711-0018
	RP-18 Spheri-10, C-18 10µm, monofunctional	0711-0115		0711-0117		0711-0119	
	ODS Spheri-5, C-18 5µm, polyfunctional	0711-0019	0711-0020	0711-0021	0711-0022	0711-0023	0711-0024
	PHENYL Spheri-5 5µm	0711-0025		0711-0027		0711-0029	
	CYANO Spheri-5 5µm, Cyanopropyl	0711-0043		0711-0045		0711-0047	
	OD-300 Aquapore ODS 7µm, 300Å pore size	0711-0235	0711-0234	0711-0232	0711-0233	0711-0231	0711-0236
	RP-300 Aquapore Octyl 7µm, 300Å pore size	0711-0055	0711-0056	0711-0057	0711-0058	0711-0059	0711-0060
	BU-300 Aquapore Butyl 7µm, 300Å pore size	0711-0061	0711-0062		0711-0064		
Polar Phase	SILICA Spheri-5 5µm, 80Å pore size	0711-0031		0711-0033		0711-0035	
	SILICA Spheri-10 10µm, 80Å pore size	0711-0145					
	AMINO Spheri-5 5µm, Aminopropyl	0711-0037		0711-0039		0711-0041	
	CYANO Spheri-5 Cyanopropyl	0711-0043		0711-0045		0711-0047	
Ion Exchange Ion Exclusion	AX-300 Aquapore Weak Anion 300Å, 7µm	0711-0073	0711-0074	0711-0075		0711-0077	
	HYDROGEN form Polypore H, 10µm	0711-0085		0711-0087		0711-0089	
	CALCIUM form Polypore CA, 10µm	0711-0091		0711-0093		0711-0095	

# PerkinElmer Brownlee™ Cartridge Columns



## NewGuard™

- **Prolong column life without loss of resolution**

Let's face it – HPLC columns die from the head down. Particulate matter, contaminants, and strongly bound sample components all stick at the head of the column. The ability to replace the top centimeter or so of packing material without losing efficiency could significantly prolong column lifetime. Think of a NewGuard cartridge as a replaceable, disposable inlet end for your HPLC column.

NewGuard cartridges are ideal for:

- **Protecting analytical columns.** The wide range of NewGuard packing materials provides compatibility with virtually any analytical column – with negligible effects on retention and resolution. Our large diameter inlet frit is resistant to clogging by particles in the sample. In many cases, cartridges can be cleaned by simple backflushing.

- **On-line sample concentration.** A NewGuard cartridge can be mounted in place of the sample loop on an injection valve and used for on-line sample extraction, concentration, and clean-up.

The best part about NewGuard cartridges is how easy they are to use. Cartridges can be coupled directly to Brownlee cartridge columns or used with conventional HPLC columns. NewGuard cartridges can be changed in less than a minute without tools.

**Ordering a NewGuard upgrade is cost effective.** If you are presently using Brownlee 3cm guard cartridges, you can upgrade to NewGuard cartridges with just a NewGuard end assembly. Because NewGuard cartridges are three to a package (instead of two) the upgrade will pay for itself after the first package.

### NewGuard™ Ordering Information, 3.2mm ID x 1.5cm

Cat. No.	Description	Type	(3/pk)
0711-0086	Aquapore Dimethyl, 7µm	RP-2	
0711-0088	Aquapore Butyl, 7µm	RP-4	
0711-0090	Aquapore Octyl, 7µm	RP-8	
0711-0092	Aquapore ODS, 7µm	RP-18	
0711-0096	Aquapore Phenyl, 7µm	Phenyl	
0711-0098	Aquapore Amino, 7µm	Amino	
0711-0100	Aquapore Cyano, 7µm	Cyano	
0711-0102	Aquapore AX-300, 7µm	Anion	
0711-0104	Aquapore CX-300, 7µm	Cation	
0711-0105	Aquapore Diol, 7µm	Diol	
0711-0106	Aquapore Silica, 7µm	Silica	
402-237	Validated C18, 5µm	C18	

### NewGuard™ Holders and Components

Cat. No.	Description
0715-0001	<b>NewGuard Holder</b> , Holds a single Newguard cartridge for use with conventional HPLC columns
0715-0002	<b>NewGuard End Assembly</b> Upgrades 3cm guard holder to NewGuard Holder
0715-0018	<b>Union</b> , Directly couples a NewGuard cartridge to a Brownlee cartridge column (Requires a NewGuard End assembly)

## Peco™ Columns

**Pecosphere** is a small pore, extremely rugged (80Å, 3, and 5µm, C18) sorbent for HPLC of small molecules.

Peco cartridges are available in 4.6mm ID and three cartridge lengths (30, 80, and 150mm).

### Pecosphere™ Ordering Information

Cat. No.	Description	Qty.
0258-0164	Pecosphere 3 C18, 3µm, 4.6 x 33mm <i>Requires holder 0715-0028</i>	5
0258-0166	Pecosphere 3 C18, 3µm, 4.6 x 83mm <i>Requires holder 0715-0029</i>	1
0258-0169	Pecosphere 5 C18, 5µm, 4.6 x 150mm <i>Requires holder 0715-0030</i>	1

### Holders for Pecosphere™ Cartridges

Cat. No.	Description
0715-0028	3cm Peco holder
0715-0029	8cm Peco holder
0715-0030	15cm Peco holder

## VeloSep® Cartridge Columns

### 3.2mm ID x 4cm, (3µm, spherical)

*Requires holder 0715-0013*

Cat. No.	Description
0711-0189	VeloSep RP-8, 2/pk
0711-0191	VeloSep RP-18, 2/pk

### 3.2mm ID x 10cm, (3µm, spherical)

*Requires holder 0715-0014*

0711-0190	VeloSep RP-8, C-8, each
0711-0192	VeloSep RP-18, C-18, each

### Holders for VeloSep Cartridges

0715-0013	3cm Cartridge holder ( <i>fits 4cm VeloSep</i> )
0715-0014	10cm Cartridge holder

## Prep-10 Cartridge Columns

### Prep-10 Cartridges, 20µm, 300Å

Cat. No.	Description
0711-0164	Octyl, 10mm ID x 3cm
0711-0165	Octyl, 10mm ID x 10cm
0711-0166	Octyl, 10mm ID x 25cm
0711-0108	ODS, 10mm ID x 3cm
0711-0114	ODS, 10mm ID x 10cm
0711-0163	ODS, 10mm ID x 25cm

### Prep Holders and Components

0715-0004	3cm Prep-10 Holder <i>Includes end assemblies and body</i>
0715-0005	10cm Prep-10 Holder <i>Includes end assemblies and body</i>
0715-0006	25cm Prep-10 Holder <i>Includes end assemblies and body</i>
0715-0011	Prep-10 Seal Replacement Kit <i>Tools only, Seals not included</i>
0715-0012	Prep-10 Inlet Seal, 1 each
0715-0026	Prep-10 Outlet Seal, 1 each

## ValueLine™ HPLC Cartridge Columns

- Batch tested reduced price columns

### Specifications:

<b>Spheri-5 VL C8</b>	5µm, 80Å, 180M <sup>2</sup> /G, 6% Carbon, end-cap
<b>Spheri-5 VL C18</b>	5µm, 80Å, 180M <sup>2</sup> /G, 11% Carbon, end-cap
<b>Aquapore VL C8</b>	7µm, 300Å, 100M <sup>2</sup> /G, 5% Carbon, end-cap

### ValueLine HPLC Columns

Cat. No.	Description
402-259	Spheri-5 VL C18, 220 x 4.6mm <i>(requires 22cm Holder 0715-0015)</i>
402-263	Spheri-5 VL C18, 100 x 4.6mm <i>(requires 10cm Holder 0715-0014)</i>
402-237	Validated C18, NewGuard, 15 x 3.2mm <i>(requires NewGuard holder 0715-0001)</i>

### Holders for Cartridges

<b>0715-0015</b>	22cm Holder
<b>0715-0014</b>	10cm Holder
<b>0715-0001</b>	NewGuard holder
<b>0715-0017</b>	22cm NewGuard system holder For coupling of NewGuard & 22cm cartridge
<b>0715-0016</b>	10cm NewGuard system holder For coupling of NewGuard & 10cm cartridge
<b>0715-0018</b>	Union, (for direct coupling of two cartridges)

## Validated™ HPLC Cartridge Columns

- Batch-to-batch reproducibility

### Important Features of Validated Columns:

- Guaranteed batch-to-batch reproducibility
- Test Chromatogram and Certification of Compliance shipped with each column
- Packed with a 5µm reduced activity monofunctional C18 sorbent
- Compatibility with acidic, neutral, and basic analytes
- Excellent column lifetime
- Lot history tracking system

### Validated Column Ordering Information

Cat. No.	Description
402-241	Validated C18, 100 x 4.6mm, 5µm <i>(requires 10cm Holder 0715-0014)</i>
402-240	Validated C18, 100 x 2.1mm, 5µm <i>(requires 10cm Holder 0715-0014)</i>
402-239	Validated C18, 30 x 4.6mm, 5µm <i>(requires 3cm Holder 0715-0013)</i>
402-237	Validated C18, NewGuard 15 x 3.2mm, 5µm <i>(requires NewGuard Holder 0715-0001)</i>

### Holders for Cartridges

<b>0715-0014</b>	10cm Holder
<b>0715-0013</b>	3cm Holder
<b>0715-0001</b>	NewGuard holder
<b>0715-0016</b>	10cm NewGuard system holder <i>For coupling of NewGuard &amp; 10cm cartridge</i>
<b>0715-0018</b>	Union, (for direct coupling of two cartridges)

## PerkinElmer Brownlee™ Conventional Columns



- Individually tested columns
- Use with NewGuard for longer life
- Male nut compression fittings

	Description	250mm Column	100mm Column	250mm Column
		4.6mm ID Cat. No.	1.0mm ID Cat. No. Price	1.0mm ID Cat. No. Price
Reverse Phase	<b>RP-2</b> Spheri-10, C2 10µm spherical, 80Å	0712-0005		
	<b>RP-8</b> Spheri-5, C8 5µm spherical, 80Å	0712-0012		
	<b>RP-18</b> Spheri-5, C18 monofunctional, 5µm spherical, 80Å	0712-0016		
	<b>ODS</b> Spheri-5, C18 polyfunctional, 5µm spherical, 80Å	0712-0019		
	<b>OD-300</b> Aquapore ODS 300Å pore size, 7µm spherical	0712-0073	0712-0099	
	<b>RP-300</b> Aquapore Octyl 300Å pore size, 7µm spherical	0712-0033	0712-0096	0712-0097
Polar Phase	<b>SILICA</b> Spheri-5 80Å pore size, 5µm spherical	0712-0023		
Ion Exchange	<b>AX-300</b> Aquapore weak anion 300Å pore size, 7µm spherical	0712-0040		