

# SALES LITERATURE

Revision 17-1

# SNAP<sup>®</sup>

## Laboratory Glass Columns

"Next Generation" technology for high-performance preparative chromatography



|   |   |
|---|---|
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**essentialLife Solutions**  
for preparative chromatography



Proudly Made in America

Helping You Succeed!

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## OUR MISSION STATEMENT

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*To be a “world class” provider of products and services to Life Sciences for the advancement of research, development, and production of materials for the good of mankind.*

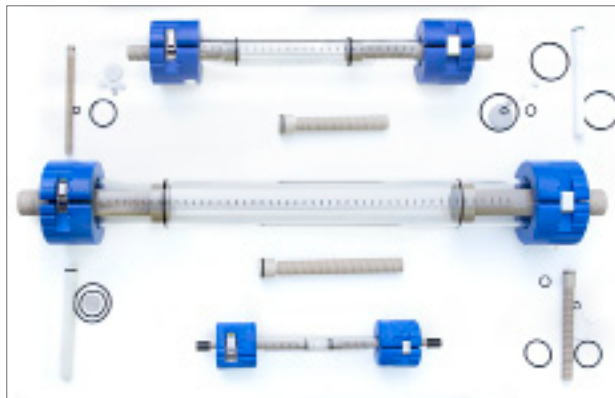
## Introducing the SNAP® Glass Column

Liquid preparative chromatography is a widely used downstream purification technique that can be used on a wide range of compounds. The common targeted molecules include proteins, peptides and/or nucleic acids. With the emergence of smaller particle, higher performance chromatography media, there has been an identified need for higher pressure column hardware that can handle the increased back pressure loading in a safe column configuration. Traditionally, this has been addressed with stainless steel hardware, which does not allow the scientist visibility of the column contents.

Essential Life Solutions designed a "Next Generation" column line to address these evolving demands. Drawing on its many years of experience, Essential Life is pleased to announce the most effective and user friendly preparative column on the market.

SNAP® columns have been designed to exceed what is currently available to the scientist for laboratory use. Essential Life understands the value that the scientist places on his or her results, and we have strived to help them achieve those goals.

Careful choice in materials of construction, combined with customer feedback, has driven the design such that biocompatibility can be achieved in virtually any circumstance. Essential Life proudly offers this new SNAP® column hardware line and appreciates your interest. We at Essential Life Solutions value your business.



The patented SNAP® closure mechanism provides a safe and reliable means to access the column contents.

## Advantages of SNAP® Glass Columns

### 1 HIGHER PRESSURE RATINGS INCORPORATING GLASS CONSTRUCTION

Pressures to 40 Bars (580 psig)  
Full view of bed unlike stainless steel  
Rugged construction for hard lab use  
Temps up to 80 °C

### 2 LINEAR MOTION OF PISTON

Due to the true linear motion of piston there is NO scraping of the bed surface or induced TORSIONAL load imposed on the packed bed assuring true linear compression.

### 3 CALIBRATED GLASS TUBING

Superior glass tolerance eliminates seal adjustment.  
True bore tubing reduces wall effect

### 4 TRUE FRITS

Columns are supplied with true sintered material frits assuring good flow distribution and minimizes dead volume.

### 5 ROBUST INLET AND OUTLET CONNECTIONS

Connections are made externally and are visible if any leakage should occur.

### 6 FINE THREAD ADJUSTMENT

Columns are provided with fine thread adjustment allowing better and more precise piston control.

### 7 DOUBLE PISTON ADJUSTMENT

Columns are provided with piston adjustment from both ends allowing greater flexibility of bed adjustments.

### 8 QUICK RELEASE ENDS

ELS (patented) column end closure design allows easy assembly and disassembly of columns even on large diameters. Inherently self-locking design ensures user safety.

### 9 GRADUATED GLASS – PATENTED

All columns are supplied with column graduations on the glass exterior to make bed measurements quick and simple.

### 10 CONFIGURABLE

Columns can be custom configured based on mobile phase conditions and meet the exact needs of the chromatographer.

# SNAP® Series Glass Columns Bed Length/Volume Selection Chart

NOTE: Actual lengths and volumes may vary slightly due to manufacturing tolerance of glass.

| Column ID (mm) | Bed Length (mm) | Short/Short (SS) Bed Length min-max (mm) | Short/Short (SS) Piston Volume min-max (ml) | Short/Long (SL) Bed Length min-max (mm) | Short/Long (SL) Piston Volume min-max (ml) | Long/Long (LL) Bed Length min-max (mm) | Long/Long (LL) Piston Volume min-max (ml) |
|----------------|-----------------|--|---|---|--|--|---|
| 10mm           | 125mm           | 0-125                                    | 0-9.8                                       | 0-125                                   | 0-9.8                                      | 0-125                                  | 0-9.8                                     |
|                | 250mm           | 125.9-250                                | 9.9-19.6                                    | 83.4-250                                | 6.5-19.6                                   | 40.9-250                               | 3.2-19.6                                  |
|                | 350mm           | 226.1-350                                | 17.8-27.5                                   | 183.6-350                               | 14.4-27.5                                  | 141.1-350                              | 11.1-27.5                                 |
|                | 500mm           | 375.9-500                                | 29.5-39.3                                   | 333.4-500                               | 26.2-39.3                                  | 290.9-500                              | 22.8-39.3                                 |
|                | 750mm           | 625.9-750                                | 49.1-58.9                                   | 583.4-750                               | 45.8-58.9                                  | 540.9-750                              | 42.5-58.9                                 |
| 15mm           | 1000mm          | 875.9-1000                               | 68.8-78.5                                   | 833.4-1000                              | 65.4-78.5                                  | 790.9-1000                             | 62.1-78.5                                 |
|                | 125mm           | 0-125                                    | 0-22.1                                      | 0-125                                   | 0-22.1                                     | 0-125                                  | 0-22.1                                    |
|                | 250mm           | 95.3-250                                 | 16.8-44.2                                   | 52.8-250                                | 9.3-44.2                                   | 10.3-250                               | 1.8-44.2                                  |
|                | 350mm           | 196.1-350                                | 34.6-68.8                                   | 153.6-350                               | 27.1-68.8                                  | 111.1-350                              | 19.6-68.8                                 |
|                | 500mm           | 345.3-500                                | 61-88.3                                     | 302.8-500                               | 53.5-88.3                                  | 260.3-500                              | 46-88.3                                   |
| 25mm           | 750mm           | 595.3-750                                | 105.1-132.5                                 | 552.8-750                               | 97.6-132.5                                 | 510.3-750                              | 90.1-132.5                                |
|                | 1000mm          | 845.3-1000                               | 149.3-176.6                                 | 802.8-1000                              | 141.8-176.6                                | 760.3-1000                             | 134.3-176.6                               |
|                | 125mm           | 0-125                                    | 0-61.3                                      | 0-125                                   | 0-61.3                                     | 0-125                                  | 0-61.3                                    |
|                | 250mm           | 108-250                                  | 53-122.7                                    | 65.5-250                                | 32.1-122.7                                 | 23-250                                 | 11.3-122.7                                |
|                | 350mm           | 208.9-350                                | 102.5-171.8                                 | 166.4-350                               | 81.7-171.8                                 | 123.9-350                              | 60.8-171.8                                |
| 35mm           | 500mm           | 358-500                                  | 175.6-245.3                                 | 315.5-500                               | 154.8-245.3                                | 273-500                                | 133.9-245.3                               |
|                | 750mm           | 608-750                                  | 298.3-368                                   | 565.5-750                               | 277.4-368                                  | 523-750                                | 256.6-368                                 |
|                | 1000mm          | 858-1000                                 | 420.9-490.6                                 | 815.5-1000                              | 400.1-490.6                                | 772-1000                               | 379.2-490.6                               |
|                | 125mm           | 0-125                                    | 0-120.2                                     | 0-125                                   | 0-120.2                                    | 0-125                                  | 0-120.2                                   |
|                | 250mm           | 110.1-250                                | 105.9-240.4                                 | 57.6-250                                | 55.4-240.4                                 | 25.1-250                               | 24.1-240.4                                |
| 50mm           | 350mm           | 209.5-350                                | 201.6-336.7                                 | 167-350                                 | 160.7-336.7                                | 124.5-350                              | 119.8-336.7                               |
|                | 500mm           | 360.1-500                                | 346.3-480.8                                 | 307.6-500                               | 295.8-480.8                                | 275.1-500                              | 264.5-480.8                               |
|                | 750mm           | 610.1-750                                | 586.7-721.2                                 | 557.6-750                               | 536.2-721.2                                | 525.1-750                              | 504.9-721.2                               |
|                | 1000mm          | 860.1-1000                               | 827.1-961.6                                 | 807.6-1000                              | 776.6-961.6                                | 775.1-1000                             | 745.4-961.6                               |
|                | 125mm           | 0-125                                    | 0-245.3                                     | 0-125                                   | 0-245.3                                    | 0-125                                  | 0-245.3                                   |
| 50mm           | 250mm           | 105.1-250                                | 206.3-490.6                                 | 62.6-250                                | 122.9-490.6                                | 20.1-250                               | 39.5-490.6                                |
|                | 350mm           | 208.9-350                                | 410.2-687.2                                 | 166.4-350                               | 326.7-687.2                                | 123.9-350                              | 243.3-687.2                               |
|                | 500mm           | 355.1-500                                | 696.9-981.3                                 | 312.6-500                               | 613.7-981.3                                | 270.1-500                              | 530.1-981.3                               |
|                | 750mm           | 605.1-750                                | 1246-1472                                   | 562.6-750                               | 1104-1472                                  | 520.1-750                              | 1021-1472                                 |
|                | 1000mm          | 855.1-1000                               | 1678-1963                                   | 812.6-1000                              | 1595-1963                                  | 770.1-1000                             | 1511-1963                                 |


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## Pressure and Material Specifications

Maximum Operating Pressure

| Diameter (ID) | Pressure (BAR) | Pressure (PSIG) |
|---------------|----------------|-----------------|
| 10mm          | 40 BAR         | 580 PSIG        |
| 15mm          | 35 BAR         | 508 PSIG        |
| 25mm          | 24 BAR         | 348 PSIG        |
| 35mm          | 18 BAR         | 261 PSIG        |
| 50mm          | 13 BAR         | 188 PSIG        |



### Aqueous Buffer (AB) - version

|                   |  |
|-------------------|--|
| Temperature Range | 4-40 °C  |
| Piston            | Acetal   |
| Sealing           | O-Ring, EPDM (ethylene propylene diene monomer rubber)           |
| Frit              | Polyethylene (PE)  |
| Height Adjustment | Short/Short, Short/Long, Long/Long pistons (see table on page 3) |
| Connections       | 1/4"-28 female screw thread                                      |

### Solvent Resistant (SR) - version

|                   |  |
|-------------------|--|
| Temperature Range | 4-80 °C  |
| Piston            | PEEK (polyether ether ketone)                                    |
| Sealing           | O-Ring, Viton or Kalrez®   |
| Frit              | Stainless Steel  |
| Height Adjustment | Short/Short, Short/Long, Long/Long pistons (see table on page 3) |
| Connections       | 1/4"-28 female screw thread                                      |



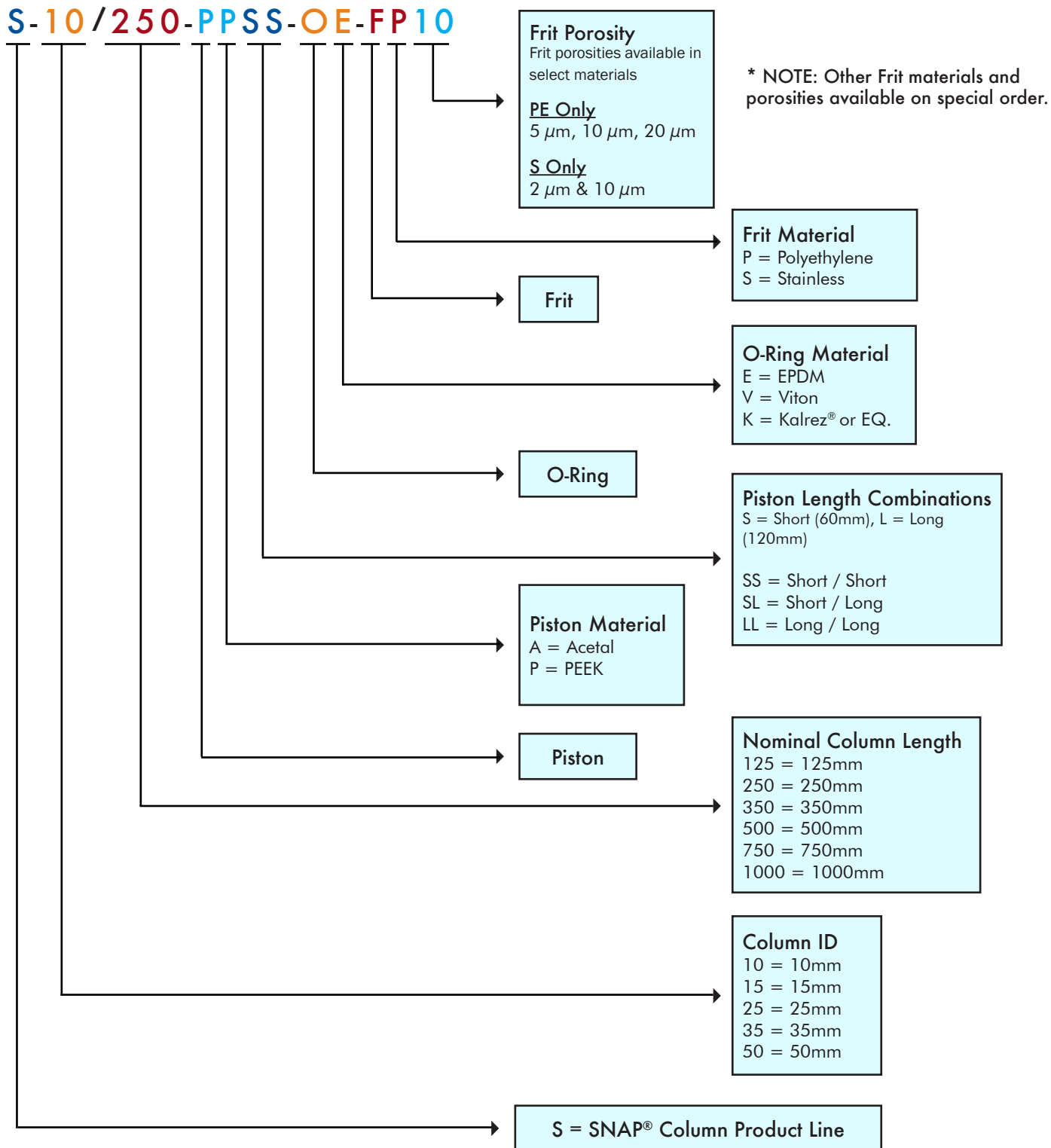
# SNAP® Series Glass Columns Part Numbering System

S-10/250-PPSS-OE-FP10

This is an example of a typical part number description based on the following specifications:

Snap Column, 10mm ID, 250mm Max Bed Length, Peek Piston, Short/Short Piston Combination, EPDM "O" Ring, Polyethylene Frit, 10 µm Frit Porosity

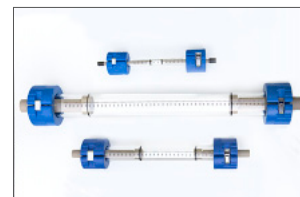
**S - 10 / 250 - PPSS - OE - FP 10**



# SNAP® Series Glass Columns, AB-Version, Short/Short Pistons

Length and volume may vary slightly based on glass tolerance.

|                      |   |
|----------------------|---|
| Temperature range    | 4 - 40 °C   |
| Pistons              | A (Acetal)  |
| Sealings             | O-Ring, EPDM  |
| Frits                | *ID 10 - 50 mm: Polyethylene (5 µm, 10 µm or 20 µm) |
| Piston Configuration | Short / Short pistons                               |



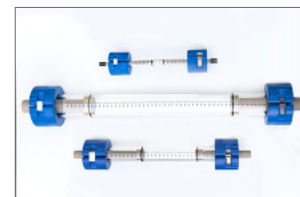
|          | Part No.              | ID [mm] | Pressure limit [bar] | Bed length [mm] | Volume [ml]   | Frit material | Frit porosity [µm] |
|----------|-----------------------|---------|----------------------|-----------------|---------------|---------------|--------------------|
| 10 mm ID | S-10/125-PASS-OE-FP*  | 10      | 40                   | 0 - 125         | 0 - 9.8       | Polyethylene  | *5, 10, 20         |
|          | S-10/250-PASS-OE-FP*  | 10      | 40                   | 125.9 - 250     | 9.9 - 19.6    | Polyethylene  | *5, 10, 20         |
|          | S-10/350-PASS-OE-FP*  | 10      | 40                   | 226.1 - 350     | 17.8 - 27.5   | Polyethylene  | *5, 10, 20         |
|          | S-10/500-PASS-OE-FP*  | 10      | 40                   | 375.9 - 500     | 29.5 - 39.3   | Polyethylene  | *5, 10, 20         |
|          | S-10/750-PASS-OE-FP*  | 10      | 40                   | 625.9 - 750     | 49.1 - 58.9   | Polyethylene  | *5, 10, 20         |
|          | S-10/1000-PASS-OE-FP* | 10      | 40                   | 875.9 - 1000    | 68.8 - 78.5   | Polyethylene  | *5, 10, 20         |
| 15 mm ID | S-15/125-PASS-OE-FP*  | 15      | 35                   | 0 - 125         | 0 - 22.1      | Polyethylene  | *5, 10, 20         |
|          | S-15/250-PASS-OE-FP*  | 15      | 35                   | 95.3 - 250      | 16.8 - 44.2   | Polyethylene  | *5, 10, 20         |
|          | S-15/350-PASS-OE-FP*  | 15      | 35                   | 196.1 - 350     | 34.6 - 68.8   | Polyethylene  | *5, 10, 20         |
|          | S-15/500-PASS-OE-FP*  | 15      | 35                   | 345.3 - 500     | 61 - 88.3     | Polyethylene  | *5, 10, 20         |
|          | S-15/750-PASS-OE-FP*  | 15      | 35                   | 595.3 - 750     | 105.1 - 132.5 | Polyethylene  | *5, 10, 20         |
|          | S-15/1000-PASS-OE-FP* | 15      | 35                   | 845.3 - 1000    | 149.3 - 176.6 | Polyethylene  | *5, 10, 20         |
| 25 mm ID | S-25/125-PASS-OE-FP*  | 25      | 24                   | 0 - 125         | 0 - 61.3      | Polyethylene  | *5, 10, 20         |
|          | S-25/250-PASS-OE-FP*  | 25      | 24                   | 108 - 250       | 53 - 122.7    | Polyethylene  | *5, 10, 20         |
|          | S-25/350-PASS-OE-FP*  | 25      | 24                   | 208.9 - 350     | 102.5 - 171.8 | Polyethylene  | *5, 10, 20         |
|          | S-25/500-PASS-OE-FP*  | 25      | 24                   | 358 - 500       | 175.6 - 245.3 | Polyethylene  | *5, 10, 20         |
|          | S-25/750-PASS-OE-FP*  | 25      | 24                   | 608 - 750       | 298.3 - 368   | Polyethylene  | *5, 10, 20         |
|          | S-25/1000-PASS-OE-FP* | 25      | 24                   | 858 - 1000      | 420.9 - 490.6 | Polyethylene  | *5, 10, 20         |
| 35 mm ID | S-35/125-PASS-OE-FP*  | 35      | 18                   | 0 - 125         | 0 - 120.2     | Polyethylene  | *5, 10, 20         |
|          | S-35/250-PASS-OE-FP*  | 35      | 18                   | 110.1 - 250     | 105.9 - 240.4 | Polyethylene  | *5, 10, 20         |
|          | S-35/350-PASS-OE-FP*  | 35      | 18                   | 209.5 - 350     | 201.6 - 336.7 | Polyethylene  | *5, 10, 20         |
|          | S-35/500-PASS-OE-FP*  | 35      | 18                   | 360.1 - 500     | 346.3 - 480.8 | Polyethylene  | *5, 10, 20         |
|          | S-35/750-PASS-OE-FP*  | 35      | 18                   | 610.1 - 750     | 586.7 - 721.2 | Polyethylene  | *5, 10, 20         |
|          | S-35/1000-PASS-OE-FP* | 35      | 18                   | 860.1 - 1000    | 827.1 - 961.6 | Polyethylene  | *5, 10, 20         |
| 50 mm ID | S-50/125-PASS-OE-FP*  | 50      | 13                   | 0 - 125         | 0 - 245.3     | Polyethylene  | *5, 10, 20         |
|          | S-50/250-PASS-OE-FP*  | 50      | 13                   | 105.1 - 250     | 206.3 - 490.6 | Polyethylene  | *5, 10, 20         |
|          | S-50/350-PASS-OE-FP*  | 50      | 13                   | 208.9 - 350     | 410.2 - 687.2 | Polyethylene  | *5, 10, 20         |
|          | S-50/500-PASS-OE-FP*  | 50      | 13                   | 355.1 - 500     | 696.9 - 981.3 | Polyethylene  | *5, 10, 20         |
|          | S-50/750-PASS-OE-FP*  | 50      | 13                   | 605.1 - 750     | 1246 - 1472   | Polyethylene  | *5, 10, 20         |
|          | S-50/1000-PASS-OE-FP* | 50      | 13                   | 855.1 - 1000    | 1678 - 1963   | Polyethylene  | *5, 10, 20         |



# SNAP® Series Glass Columns, AB-Version, Short/Long Pistons

Length and volume may vary slightly based on glass tolerance.

|                      |   |
|----------------------|---|
| Temperature range    | 4 - 40 °C   |
| Pistons              | A (Acetal)  |
| Sealings             | O-Ring, EPDM  |
| Frits                | *ID 10 - 50 mm: Polyethylene (5 µm, 10 µm or 20 µm) |
| Piston Configuration | Short / Long pistons                                |

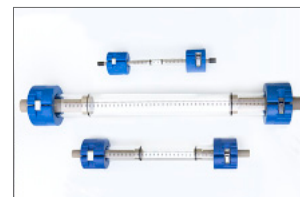


|          | Part No.              | ID [mm] | Pressure limit [bar] | Bed length [mm] | Volume [ml]   | Frit material | Frit porosity [µm] |
|----------|-----------------------|---------|----------------------|-----------------|---------------|---------------|--------------------|
| 10 mm ID | S-10/125-PASL-OE-FP*  | 10      | 40                   | 0 - 125         | 0 - 9.8       | Polyethylene  | *5, 10, 20         |
|          | S-10/250-PASL-OE-FP*  | 10      | 40                   | 83.4 - 250      | 6.5 - 19.6    | Polyethylene  | *5, 10, 20         |
|          | S-10/350-PASL-OE-FP*  | 10      | 40                   | 183.6 - 350     | 14.4 - 27.5   | Polyethylene  | *5, 10, 20         |
|          | S-10/500-PASL-OE-FP*  | 10      | 40                   | 333.4 - 500     | 26.2 - 39.3   | Polyethylene  | *5, 10, 20         |
|          | S-10/750-PASL-OE-FP*  | 10      | 40                   | 583.4 - 750     | 45.8 - 58.9   | Polyethylene  | *5, 10, 20         |
|          | S-10/1000-PASL-OE-FP* | 10      | 40                   | 833.4 - 1000    | 65.4 - 78.5   | Polyethylene  | *5, 10, 20         |
| 15 mm ID | S-15/125-PASL-OE-FP*  | 15      | 35                   | 0 - 125         | 0 - 22.1      | Polyethylene  | *5, 10, 20         |
|          | S-15/250-PASL-OE-FP*  | 15      | 35                   | 52.8 - 250      | 9.3 - 44.2    | Polyethylene  | *5, 10, 20         |
|          | S-15/350-PASL-OE-FP*  | 15      | 35                   | 153.6 - 350     | 27.1 - 68.8   | Polyethylene  | *5, 10, 20         |
|          | S-15/500-PASL-OE-FP*  | 15      | 35                   | 302.8 - 500     | 53.5 - 88.3   | Polyethylene  | *5, 10, 20         |
|          | S-15/750-PASL-OE-FP*  | 15      | 35                   | 552.8 - 750     | 97.6 - 132.5  | Polyethylene  | *5, 10, 20         |
|          | S-15/1000-PASL-OE-FP* | 15      | 35                   | 802.8 - 1000    | 141.8 - 176.6 | Polyethylene  | *5, 10, 20         |
| 25 mm ID | S-25/125-PASL-OE-FP*  | 25      | 24                   | 0 - 125         | 0 - 61.3      | Polyethylene  | *5, 10, 20         |
|          | S-25/250-PASL-OE-FP*  | 25      | 24                   | 65.5 - 250      | 32.1 - 122.7  | Polyethylene  | *5, 10, 20         |
|          | S-25/350-PASL-OE-FP*  | 25      | 24                   | 166.4 - 350     | 81.7 - 171.8  | Polyethylene  | *5, 10, 20         |
|          | S-25/500-PASL-OE-FP*  | 25      | 24                   | 315.5 - 500     | 154.8 - 245.3 | Polyethylene  | *5, 10, 20         |
|          | S-25/750-PASL-OE-FP*  | 25      | 24                   | 565.5 - 750     | 277.4 - 368   | Polyethylene  | *5, 10, 20         |
|          | S-25/1000-PASL-OE-FP* | 25      | 24                   | 815.5 - 1000    | 400.1 - 490.6 | Polyethylene  | *5, 10, 20         |
| 35 mm ID | S-35/125-PASL-OE-FP*  | 35      | 18                   | 0 - 125         | 0 - 120.2     | Polyethylene  | *5, 10, 20         |
|          | S-35/250-PASL-OE-FP*  | 35      | 18                   | 57.6 - 250      | 55.4 - 240.4  | Polyethylene  | *5, 10, 20         |
|          | S-35/350-PASL-OE-FP*  | 35      | 18                   | 167 - 350       | 160.7 - 336.7 | Polyethylene  | *5, 10, 20         |
|          | S-35/500-PASL-OE-FP*  | 35      | 18                   | 307.6 - 500     | 295.8 - 480.8 | Polyethylene  | *5, 10, 20         |
|          | S-35/750-PASL-OE-FP*  | 35      | 18                   | 557.6 - 750     | 536.2 - 721.2 | Polyethylene  | *5, 10, 20         |
|          | S-35/1000-PASL-OE-FP* | 35      | 18                   | 807.6 - 1000    | 776.6 - 961.6 | Polyethylene  | *5, 10, 20         |
| 50 mm ID | S-50/125-PASL-OE-FP*  | 50      | 13                   | 0 - 125         | 0 - 245.3     | Polyethylene  | *5, 10, 20         |
|          | S-50/250-PASL-OE-FP*  | 50      | 13                   | 62.6 - 250      | 122.9 - 490.6 | Polyethylene  | *5, 10, 20         |
|          | S-50/350-PASL-OE-FP*  | 50      | 13                   | 166.4 - 350     | 326.7 - 687.2 | Polyethylene  | *5, 10, 20         |
|          | S-50/500-PASL-OE-FP*  | 50      | 13                   | 312.6 - 500     | 613.7 - 981.3 | Polyethylene  | *5, 10, 20         |
|          | S-50/750-PASL-OE-FP*  | 50      | 13                   | 562.6 - 750     | 1104 - 1472   | Polyethylene  | *5, 10, 20         |
|          | S-50/1000-PASL-OE-FP* | 50      | 13                   | 812.6 - 1000    | 1595 - 1963   | Polyethylene  | *5, 10, 20         |

# SNAP® Series Glass Columns, AB-Version, Long/Long Pistons

Length and volume may vary slightly based on glass tolerance.

|                      |   |
|----------------------|---|
| Temperature range    | 4 - 40 °C   |
| Pistons              | A (Acetal)  |
| Sealings             | O-Ring, EPDM  |
| Frits                | *ID 10 - 50 mm: Polyethylene (5 µm, 10 µm or 20 µm) |
| Piston Configuration | Long / Long pistons                                 |

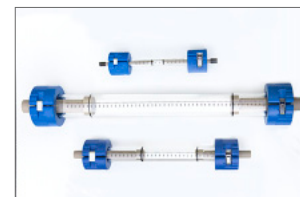


|          | Part No.              | ID [mm] | Pressure limit [bar] | Bed length [mm] | Volume [ml]   | Frit material | Frit porosity [µm] |
|----------|-----------------------|---------|----------------------|-----------------|---------------|---------------|--------------------|
| 10 mm ID | S-10/125-PALL-OE-FP*  | 10      | 40                   | 0 - 125         | 0 - 9.8       | Polyethylene  | *5, 10, 20         |
|          | S-10/250-PALL-OE-FP*  | 10      | 40                   | 40.9 - 250      | 3.2 - 19.6    | Polyethylene  | *5, 10, 20         |
|          | S-10/350-PALL-OE-FP*  | 10      | 40                   | 141.1 - 350     | 11.1 - 27.5   | Polyethylene  | *5, 10, 20         |
|          | S-10/500-PALL-OE-FP*  | 10      | 40                   | 290.9 - 500     | 22.8 - 39.3   | Polyethylene  | *5, 10, 20         |
|          | S-10/750-PALL-OE-FP*  | 10      | 40                   | 540.9 - 750     | 42.5 - 58.9   | Polyethylene  | *5, 10, 20         |
|          | S-10/1000-PALL-OE-FP* | 10      | 40                   | 790.9 - 1000    | 62.1 - 78.5   | Polyethylene  | *5, 10, 20         |
| 15 mm ID | S-15/125-PALL-OE-FP*  | 15      | 35                   | 0 - 125         | 0 - 22.1      | Polyethylene  | *5, 10, 20         |
|          | S-15/250-PALL-OE-FP*  | 15      | 35                   | 10.3 - 250      | 1.8 - 44.2    | Polyethylene  | *5, 10, 20         |
|          | S-15/350-PALL-OE-FP*  | 15      | 35                   | 111.1 - 350     | 19.6 - 68.8   | Polyethylene  | *5, 10, 20         |
|          | S-15/500-PALL-OE-FP*  | 15      | 35                   | 260.3 - 500     | 46 - 88.3     | Polyethylene  | *5, 10, 20         |
|          | S-15/750-PALL-OE-FP*  | 15      | 35                   | 510.3 - 750     | 90.1 - 132.5  | Polyethylene  | *5, 10, 20         |
|          | S-15/1000-PALL-OE-FP* | 15      | 35                   | 760.3 - 1000    | 134.3 - 176.6 | Polyethylene  | *5, 10, 20         |
| 25 mm ID | S-25/125-PALL-OE-FP*  | 25      | 24                   | 0 - 125         | 0 - 61.3      | Polyethylene  | *5, 10, 20         |
|          | S-25/250-PALL-OE-FP*  | 25      | 24                   | 23 - 250        | 11.3 - 122.7  | Polyethylene  | *5, 10, 20         |
|          | S-25/350-PALL-OE-FP*  | 25      | 24                   | 123.9 - 350     | 60.8 - 171.8  | Polyethylene  | *5, 10, 20         |
|          | S-25/500-PALL-OE-FP*  | 25      | 24                   | 273 - 500       | 133.9 - 245.3 | Polyethylene  | *5, 10, 20         |
|          | S-25/750-PALL-OE-FP*  | 25      | 24                   | 523 - 750       | 256.6 - 368   | Polyethylene  | *5, 10, 20         |
|          | S-25/1000-PALL-OE-FP* | 25      | 24                   | 773 - 1000      | 379.2 - 490.6 | Polyethylene  | *5, 10, 20         |
| 35 mm ID | S-35/125-PALL-OE-FP*  | 35      | 18                   | 0 - 125         | 0 - 120.2     | Polyethylene  | *5, 10, 20         |
|          | S-35/250-PALL-OE-FP*  | 35      | 18                   | 25.1 - 250      | 24.1 - 240.4  | Polyethylene  | *5, 10, 20         |
|          | S-35/350-PALL-OE-FP*  | 35      | 18                   | 124.5 - 350     | 119.8 - 336.7 | Polyethylene  | *5, 10, 20         |
|          | S-35/500-PALL-OE-FP*  | 35      | 18                   | 275.1 - 500     | 264.5 - 480.8 | Polyethylene  | *5, 10, 20         |
|          | S-35/750-PALL-OE-FP*  | 35      | 18                   | 540.9 - 750     | 520.4 - 721.6 | Polyethylene  | *5, 10, 20         |
|          | S-35/1000-PALL-OE-FP* | 35      | 18                   | 775.1 - 1000    | 745.4 - 961.6 | Polyethylene  | *5, 10, 20         |
| 50 mm ID | S-50/125-PALL-OE-FP*  | 50      | 13                   | 0 - 125         | 0 - 245.3     | Polyethylene  | *5, 10, 20         |
|          | S-50/250-PALL-OE-FP*  | 50      | 13                   | 20.1 - 250      | 39.5 - 490.6  | Polyethylene  | *5, 10, 20         |
|          | S-50/350-PALL-OE-FP*  | 50      | 13                   | 123.9 - 350     | 243.3 - 687.2 | Polyethylene  | *5, 10, 20         |
|          | S-50/500-PALL-OE-FP*  | 50      | 13                   | 270.1 - 500     | 530.1 - 981.3 | Polyethylene  | *5, 10, 20         |
|          | S-50/750-PALL-OE-FP*  | 50      | 13                   | 520.1 - 750     | 1021 - 1472   | Polyethylene  | *5, 10, 20         |
|          | S-50/1000-PALL-OE-FP* | 50      | 13                   | 775.1 - 1000    | 1511 - 1963   | Polyethylene  | *5, 10, 20         |

# SNAP® Series Glass Columns, SR-Version, Short/Short Pistons

Length and volume may vary slightly based on glass tolerance.

Temperature range 4 - 80 °C  
 Pistons PEEK  
 Sealings Viton or Kalrez®  
 Frits \*ID 10 - 50 mm: Stainless Steel (2 µm or 10 µm)  
 Piston Configuration Short / Short pistons



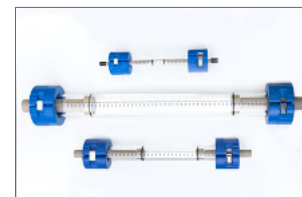
◆=Substitute V for Viton or K for Kalrez®

|          | Part No.              | ID [mm] | Pressure limit [bar] | Bed length [mm] | Volume [ml]   | Frit material   | Frit porosity [µm] |
|----------|-----------------------|---------|----------------------|-----------------|---------------|-----------------|--------------------|
| 10 mm ID | S-10/125-PPSS-O◆-FS*  | 10      | 40                   | 0 - 125         | 0 - 9.8       | Stainless Steel | *2, 10             |
|          | S-10/250-PPSS-O◆-FS*  | 10      | 40                   | 125.9 - 250     | 9.9 - 19.6    | Stainless Steel | *2, 10             |
|          | S-10/350-PPSS-O◆-FS*  | 10      | 40                   | 226.1 - 350     | 17.8 - 27.5   | Stainless Steel | *2, 10             |
|          | S-10/500-PPSS-O◆-FS*  | 10      | 40                   | 375.9 - 500     | 29.5 - 39.3   | Stainless Steel | *2, 10             |
|          | S-10/750-PPSS-O◆-FS*  | 10      | 40                   | 625.9 - 750     | 49.1 - 58.9   | Stainless Steel | *2, 10             |
|          | S-10/1000-PPSS-O◆-FS* | 10      | 40                   | 875.9 - 1000    | 68.8 - 78.5   | Stainless Steel | *2, 10             |
| 15 mm ID | S-15/125-PPSS-O◆-FS*  | 15      | 35                   | 0 - 125         | 0 - 22.1      | Stainless Steel | *2, 10             |
|          | S-15/250-PPSS-O◆-FS*  | 15      | 35                   | 95.3 - 250      | 16.8 - 44.2   | Stainless Steel | *2, 10             |
|          | S-15/350-PPSS-O◆-FS*  | 15      | 35                   | 196.1 - 350     | 34.6 - 68.8   | Stainless Steel | *2, 10             |
|          | S-15/500-PPSS-O◆-FS*  | 15      | 35                   | 345.3 - 500     | 61 - 88.3     | Stainless Steel | *2, 10             |
|          | S-15/750-PPSS-O◆-FS*  | 15      | 35                   | 595.3 - 750     | 105.1 - 132.5 | Stainless Steel | *2, 10             |
|          | S-15/1000-PPSS-O◆-FS* | 15      | 35                   | 845.3 - 1000    | 149.3 - 176.6 | Stainless Steel | *2, 10             |
| 25 mm ID | S-25/125-PPSS-O◆-FS*  | 25      | 24                   | 0 - 125         | 0 - 61.3      | Stainless Steel | *2, 10             |
|          | S-25/250-PPSS-O◆-FS*  | 25      | 24                   | 108 - 250       | 53 - 122.7    | Stainless Steel | *2, 10             |
|          | S-25/350-PPSS-O◆-FS*  | 25      | 24                   | 208.9 - 350     | 102.5 - 171.8 | Stainless Steel | *2, 10             |
|          | S-25/500-PPSS-O◆-FS*  | 25      | 24                   | 358 - 500       | 175.6 - 245.3 | Stainless Steel | *2, 10             |
|          | S-25/750-PPSS-O◆-FS*  | 25      | 24                   | 608 - 750       | 298.3 - 368   | Stainless Steel | *2, 10             |
|          | S-25/1000-PPSS-O◆-FS* | 25      | 24                   | 858 - 1000      | 420.9 - 490.6 | Stainless Steel | *2, 10             |
| 35 mm ID | S-35/125-PPSS-O◆-FS*  | 35      | 18                   | 0 - 125         | 0 - 120.2     | Stainless Steel | *2, 10             |
|          | S-35/250-PPSS-O◆-FS*  | 35      | 18                   | 110.1 - 250     | 105.9 - 240.4 | Stainless Steel | *2, 10             |
|          | S-35/350-PPSS-O◆-FS*  | 35      | 18                   | 209.5 - 350     | 201.6 - 336.7 | Stainless Steel | *2, 10             |
|          | S-35/500-PPSS-O◆-FS*  | 35      | 18                   | 360.1 - 500     | 346.3 - 480.8 | Stainless Steel | *2, 10             |
|          | S-35/750-PPSS-O◆-FS*  | 35      | 18                   | 610.1 - 750     | 586.7 - 721.2 | Stainless Steel | *2, 10             |
|          | S-35/1000-PPSS-O◆-FS* | 35      | 18                   | 860.1 - 1000    | 827.1 - 961.6 | Stainless Steel | *2, 10             |
| 50 mm ID | S-50/125-PPSS-O◆-FS*  | 50      | 13                   | 0 - 125         | 0 - 245.3     | Stainless Steel | *2, 10             |
|          | S-50/250-PPSS-O◆-FS*  | 50      | 13                   | 105.1 - 250     | 206.3 - 490.6 | Stainless Steel | *2, 10             |
|          | S-50/350-PPSS-O◆-FS*  | 50      | 13                   | 208.9 - 350     | 410.2 - 687.2 | Stainless Steel | *2, 10             |
|          | S-50/500-PPSS-O◆-FS*  | 50      | 13                   | 355.1 - 500     | 696.9 - 981.3 | Stainless Steel | *2, 10             |
|          | S-50/750-PPSS-O◆-FS*  | 50      | 13                   | 605.1 - 750     | 1246 - 1472   | Stainless Steel | *2, 10             |
|          | S-50/1000-PPSS-O◆-FS* | 50      | 13                   | 855.1 - 1000    | 1678 - 1963   | Stainless Steel | *2, 10             |

# SNAP® Series Glass Columns, SR-Version, Short/Long Pistons

Length and volume may vary slightly based on glass tolerance.

Temperature range 4 - 80 °C  
 Pistons PEEK  
 Sealings Viton or Kalrez®  
 Frits \*ID 10 - 50 mm: Stainless Steel (2 µm or 10 µm)  
 Piston Configuration Short / Long pistons



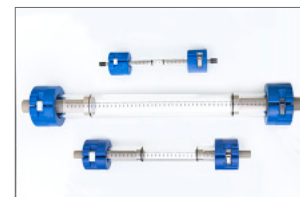
◆ = Substitute V for Viton or K for Kalrez®

|          | Part No.              | ID [mm] | Pressure limit [bar] | Bed length [mm] | Volume [ml]   | Frit material   | Frit porosity [µm] |
|----------|-----------------------|---------|----------------------|-----------------|---------------|-----------------|--------------------|
| 10 mm ID | S-10/125-PPSL-O◆-FS*  | 10      | 40                   | 0 - 125         | 0 - 9.8       | Stainless Steel | *2, 10             |
|          | S-10/250-PPSL-O◆-FS*  | 10      | 40                   | 83.4 - 250      | 6.5 - 19.6    | Stainless Steel | *2, 10             |
|          | S-10/350-PPSL-O◆-FS*  | 10      | 40                   | 183.6 - 350     | 14.4 - 27.5   | Stainless Steel | *2, 10             |
|          | S-10/500-PPSL-O◆-FS*  | 10      | 40                   | 333.4 - 500     | 26.2 - 39.3   | Stainless Steel | *2, 10             |
|          | S-10/750-PPSL-O◆-FS*  | 10      | 40                   | 583.4 - 750     | 45.8 - 58.9   | Stainless Steel | *2, 10             |
|          | S-10/1000-PPSL-O◆-FS* | 10      | 40                   | 833.4 - 1000    | 65.4 - 78.5   | Stainless Steel | *2, 10             |
| 15 mm ID | S-15/125-PPSL-O◆-FS*  | 15      | 35                   | 0 - 125         | 0 - 22.1      | Stainless Steel | *2, 10             |
|          | S-15/250-PPSL-O◆-FS*  | 15      | 35                   | 52.8 - 250      | 9.3 - 44.2    | Stainless Steel | *2, 10             |
|          | S-15/350-PPSL-O◆-FS*  | 15      | 35                   | 153.6 - 350     | 27.1 - 68.8   | Stainless Steel | *2, 10             |
|          | S-15/500-PPSL-O◆-FS*  | 15      | 35                   | 302.8 - 500     | 53.5 - 88.3   | Stainless Steel | *2, 10             |
|          | S-15/750-PPSL-O◆-FS*  | 15      | 35                   | 552.8 - 750     | 97.6 - 132.5  | Stainless Steel | *2, 10             |
|          | S-15/1000-PPSL-O◆-FS* | 15      | 35                   | 802.8 - 1000    | 141.8 - 176.6 | Stainless Steel | *2, 10             |
| 25 mm ID | S-25/125-PPSL-O◆-FS*  | 25      | 24                   | 0 - 125         | 0 - 61.3      | Stainless Steel | *2, 10             |
|          | S-25/250-PPSL-O◆-FS*  | 25      | 24                   | 65.5 - 250      | 32.1 - 122.7  | Stainless Steel | *2, 10             |
|          | S-25/350-PPSL-O◆-FS*  | 25      | 24                   | 166.4 - 350     | 81.7 - 171.8  | Stainless Steel | *2, 10             |
|          | S-25/500-PPSL-O◆-FS*  | 25      | 24                   | 315.5 - 500     | 154.8 - 245.3 | Stainless Steel | *2, 10             |
|          | S-25/750-PPSL-O◆-FS*  | 25      | 24                   | 565.5 - 750     | 277.4 - 368   | Stainless Steel | *2, 10             |
|          | S-25/1000-PPSL-O◆-FS* | 25      | 24                   | 815.5 - 1000    | 400.1 - 490.6 | Stainless Steel | *2, 10             |
| 35 mm ID | S-35/125-PPSL-O◆-FS*  | 35      | 18                   | 0 - 125         | 0 - 120.2     | Stainless Steel | *2, 10             |
|          | S-35/250-PPSL-O◆-FS*  | 35      | 18                   | 57.6 - 250      | 55.4 - 240.4  | Stainless Steel | *2, 10             |
|          | S-35/350-PPSL-O◆-FS*  | 35      | 18                   | 167 - 350       | 160.7 - 336.7 | Stainless Steel | *2, 10             |
|          | S-35/500-PPSL-O◆-FS*  | 35      | 18                   | 307.6 - 500     | 295.8 - 480.8 | Stainless Steel | *2, 10             |
|          | S-35/750-PPSL-O◆-FS*  | 35      | 18                   | 557.6 - 750     | 536.2 - 721.2 | Stainless Steel | *2, 10             |
|          | S-35/1000-PPSL-O◆-FS* | 35      | 18                   | 807.6 - 1000    | 776.6 - 961.6 | Stainless Steel | *2, 10             |
| 50 mm ID | S-50/125-PPSL-O◆-FS*  | 50      | 13                   | 0 - 125         | 0 - 245.3     | Stainless Steel | *2, 10             |
|          | S-50/250-PPSL-O◆-FS*  | 50      | 13                   | 62.6 - 250      | 122.9 - 490.6 | Stainless Steel | *2, 10             |
|          | S-50/350-PPSL-O◆-FS*  | 50      | 13                   | 166.4 - 350     | 326.7 - 687.2 | Stainless Steel | *2, 10             |
|          | S-50/500-PPSL-O◆-FS*  | 50      | 13                   | 312.6 - 500     | 613.7 - 981.3 | Stainless Steel | *2, 10             |
|          | S-50/750-PPSL-O◆-FS*  | 50      | 13                   | 562.6 - 750     | 1104 - 1472   | Stainless Steel | *2, 10             |
|          | S-50/1000-PPSL-O◆-FS* | 50      | 13                   | 812.6 - 1000    | 1595 - 1963   | Stainless Steel | *2, 10             |

# SNAP® Series Glass Columns, SR-Version, Long/Long Pistons

Length and volume may vary slightly based on glass tolerance.

Temperature range 4 - 80 °C  
 Pistons PEEK  
 Sealings Viton or Kalrez®  
 Frits \*ID 10 - 50 mm: Stainless Steel (2 µm or 10 µm)  
 Piston Configuration Long / Long pistons



◆ = Substitute V for Viton or K for Kalrez®

|          | Part No.              | ID [mm] | Pressure limit [bar] | Bed length [mm] | Volume [ml]   | Frit material   | Frit porosity [µm] |
|----------|-----------------------|---------|----------------------|-----------------|---------------|-----------------|--------------------|
| 10 mm ID | S-10/125-PPLL-O◆-FS*  | 10      | 40                   | 0 - 125         | 0 - 9.8       | Stainless Steel | *2, 10             |
|          | S-10/250-PPLL-O◆-FS*  | 10      | 40                   | 40.9 - 250      | 3.2 - 19.6    | Stainless Steel | *2, 10             |
|          | S-10/350-PPLL-O◆-FS*  | 10      | 40                   | 141.1 - 350     | 11.1 - 27.5   | Stainless Steel | *2, 10             |
|          | S-10/500-PPLL-O◆-FS*  | 10      | 40                   | 290.9 - 500     | 22.8 - 39.3   | Stainless Steel | *2, 10             |
|          | S-10/750-PPLL-O◆-FS*  | 10      | 40                   | 540.9 - 750     | 42.5 - 58.9   | Stainless Steel | *2, 10             |
|          | S-10/1000-PPLL-O◆-FS* | 10      | 40                   | 790.9 - 1000    | 62.08 - 78.5  | Stainless Steel | *2, 10             |
| 15 mm ID | S-15/125-PPLL-O◆-FS*  | 15      | 35                   | 0 - 125         | 0 - 22.1      | Stainless Steel | *2, 10             |
|          | S-15/250-PPLL-O◆-FS*  | 15      | 35                   | 10.3 - 250      | 1.8 - 44.2    | Stainless Steel | *2, 10             |
|          | S-15/350-PPLL-O◆-FS*  | 15      | 35                   | 111.1 - 350     | 19.6 - 68.8   | Stainless Steel | *2, 10             |
|          | S-15/500-PPLL-O◆-FS*  | 15      | 35                   | 260.3 - 500     | 46 - 88.3     | Stainless Steel | *2, 10             |
|          | S-15/750-PPLL-O◆-FS*  | 15      | 35                   | 510.3 - 750     | 90.1 - 132.5  | Stainless Steel | *2, 10             |
|          | S-15/1000-PPLL-O◆-FS* | 15      | 35                   | 760.3 - 1000    | 134.3 - 176.6 | Stainless Steel | *2, 10             |
| 25 mm ID | S-25/125-PPLL-O◆-FS*  | 25      | 24                   | 0 - 125         | 0 - 61.3      | Stainless Steel | *2, 10             |
|          | S-25/250-PPLL-O◆-FS*  | 25      | 24                   | 23 - 250        | 11.3 - 122.7  | Stainless Steel | *2, 10             |
|          | S-25/350-PPLL-O◆-FS*  | 25      | 24                   | 123.9 - 350     | 60.8 - 171.8  | Stainless Steel | *2, 10             |
|          | S-25/500-PPLL-O◆-FS*  | 25      | 24                   | 273 - 500       | 133.9 - 245.3 | Stainless Steel | *2, 10             |
|          | S-25/750-PPLL-O◆-FS*  | 25      | 24                   | 523 - 750       | 256.6 - 368   | Stainless Steel | *2, 10             |
|          | S-25/1000-PPLL-O◆-FS* | 25      | 24                   | 773 - 1000      | 379.2 - 490.6 | Stainless Steel | *2, 10             |
| 35 mm ID | S-35/125-PPLL-O◆-FS*  | 35      | 18                   | 0 - 125         | 0 - 120.2     | Stainless Steel | *2, 10             |
|          | S-35/250-PPLL-O◆-FS*  | 35      | 18                   | 25.1 - 250      | 24.1 - 240.4  | Stainless Steel | *2, 10             |
|          | S-35/350-PPLL-O◆-FS*  | 35      | 18                   | 124.5 - 350     | 119.8 - 336.7 | Stainless Steel | *2, 10             |
|          | S-35/500-PPLL-O◆-FS*  | 35      | 18                   | 275.1 - 500     | 264.5 - 480.8 | Stainless Steel | *2, 10             |
|          | S-35/750-PPLL-O◆-FS*  | 35      | 18                   | 540.9 - 750     | 520.4 - 721.6 | Stainless Steel | *2, 10             |
|          | S-35/1000-PPLL-O◆-FS* | 35      | 18                   | 775.1 - 1000    | 745.4 - 961.6 | Stainless Steel | *2, 10             |
| 50 mm ID | S-50/125-PPLL-O◆-FS*  | 50      | 13                   | 0 - 125         | 0 - 245.3     | Stainless Steel | *2, 10             |
|          | S-50/250-PPLL-O◆-FS*  | 50      | 13                   | 20.1 - 250      | 39.5 - 490.6  | Stainless Steel | *2, 10             |
|          | S-50/350-PPLL-O◆-FS*  | 50      | 13                   | 123.9 - 350     | 243.3 - 687.2 | Stainless Steel | *2, 10             |
|          | S-50/500-PPLL-O◆-FS*  | 50      | 13                   | 270.1 - 500     | 530.1 - 981.3 | Stainless Steel | *2, 10             |
|          | S-50/750-PPLL-O◆-FS*  | 50      | 13                   | 520.1 - 750     | 1021 - 1472   | Stainless Steel | *2, 10             |
|          | S-50/1000-PPLL-O◆-FS* | 50      | 13                   | 775.1 - 1000    | 1511 - 1963   | Stainless Steel | *2, 10             |

## Packing Adaptors

Since most columns will be wet or slurry packed, a packing adaptor should be used. SNAP® column packing adaptors have a number of advantages. The first is that they are easy to install and remove. Secondly, the packing adaptors have a sufficient pressure rating, appropriate for the columns they are mounted on, allowing for adequate flow conditions. Third, they are the same diameter as the column they are mounted on avoiding issues with turbulent flow at the interface or joining point. All this adds up to ease of use, safe operations and good results!

These consist of a coupling unit and glass body of same column ID as column to be packed.

Packing Adaptor consisting of:

- SNAP® coupling unit (cast resin) with seal ring insert (PTFE)
- AB-Version with two Viton O-Rings
- SR-Version with two Kalrez® or Viton O-Rings



### Packing Adaptors AB-Version

| Part No.         | Column ID (mm) | Pressure Rating (bars) |
|------------------|----------------|------------------------|
| S-10/125-PAK-AB  | 10             | 20                     |
| S-10/250-PAK-AB  | 10             | 20                     |
| S-10/350-PAK-AB  | 10             | 20                     |
| S-10/500-PAK-AB  | 10             | 20                     |
| S-10/750-PAK-AB  | 10             | 20                     |
| S-10/1000-PAK-AB | 10             | 20                     |
| S-15/125-PAK-AB  | 15             | 17                     |
| S-15/250-PAK-AB  | 15             | 17                     |
| S-15/350-PAK-AB  | 15             | 17                     |
| S-15/500-PAK-AB  | 15             | 17                     |
| S-15/750-PAK-AB  | 15             | 17                     |
| S-15/1000-PAK-AB | 15             | 17                     |
| S-25/125-PAK-AB  | 25             | 12                     |
| S-25/250-PAK-AB  | 25             | 12                     |
| S-25/350-PAK-AB  | 25             | 12                     |
| S-25/500-PAK-AB  | 25             | 12                     |
| S-25/750-PAK-AB  | 25             | 12                     |
| S-25/1000-PAK-AB | 25             | 12                     |
| S-35/125-PAK-AB  | 35             | 9                      |
| S-35/250-PAK-AB  | 35             | 9                      |
| S-35/350-PAK-AB  | 35             | 9                      |
| S-35/500-PAK-AB  | 35             | 9                      |
| S-35/750-PAK-AB  | 35             | 9                      |
| S-35/1000-PAK-AB | 35             | 9                      |
| S-50/125-PAK-AB  | 50             | 6                      |
| S-50/250-PAK-AB  | 50             | 6                      |
| S-50/350-PAK-AB  | 50             | 6                      |
| S-50/500-PAK-AB  | 50             | 6                      |
| S-50/750-PAK-AB  | 50             | 6                      |
| S-50/1000-PAK-AB | 50             | 6                      |

### Packing Adaptors SR-Version

◆ = Substitute V for Viton or K for Kalrez®

| Part No.           | Column ID (mm) | Pressure Rating (bars) |
|--------------------|----------------|------------------------|
| S-10/125-PAK-SR-◆  | 10             | 20                     |
| S-10/250-PAK-SR-◆  | 10             | 20                     |
| S-10/350-PAK-SR-◆  | 10             | 20                     |
| S-10/500-PAK-SR-◆  | 10             | 20                     |
| S-10/750-PAK-SR-◆  | 10             | 20                     |
| S-10/1000-PAK-SR-◆ | 10             | 20                     |
| S-15/125-PAK-SR-◆  | 15             | 17                     |
| S-15/250-PAK-SR-◆  | 15             | 17                     |
| S-15/350-PAK-SR-◆  | 15             | 17                     |
| S-15/500-PAK-SR-◆  | 15             | 17                     |
| S-15/750-PAK-SR-◆  | 15             | 17                     |
| S-15/1000-PAK-SR-◆ | 15             | 17                     |
| S-25/125-PAK-SR-◆  | 25             | 12                     |
| S-25/250-PAK-SR-◆  | 25             | 12                     |
| S-25/350-PAK-SR-◆  | 25             | 12                     |
| S-25/500-PAK-SR-◆  | 25             | 12                     |
| S-25/750-PAK-SR-◆  | 25             | 12                     |
| S-25/1000-PAK-SR-◆ | 25             | 12                     |
| S-35/125-PAK-SR-◆  | 35             | 9                      |
| S-35/250-PAK-SR-◆  | 35             | 9                      |
| S-35/350-PAK-SR-◆  | 35             | 9                      |
| S-35/500-PAK-SR-◆  | 35             | 9                      |
| S-35/750-PAK-SR-◆  | 35             | 9                      |
| S-35/1000-PAK-SR-◆ | 35             | 9                      |
| S-50/125-PAK-SR-◆  | 50             | 6                      |
| S-50/250-PAK-SR-◆  | 50             | 6                      |
| S-50/350-PAK-SR-◆  | 50             | 6                      |
| S-50/500-PAK-SR-◆  | 50             | 6                      |
| S-50/750-PAK-SR-◆  | 50             | 6                      |
| S-50/1000-PAK-SR-◆ | 50             | 6                      |



## Column Stands



### Features and Benefits:

1. Lightweight
2. Made from chemical resistant materials
3. Provided with (4) adjustable leveling pads
4. Universally adjustable for all diameters and lengths of columns (10mm to 50mm)

| PART                           | ELS PN                    | Dimensions (wxdxh) | Included Brackets | For ELS Column Diameter (max) | For ELS Column Length (max) |
|--------------------------------|---------------------------|--------------------|-------------------|-------------------------------|-----------------------------|
| Universal Column Stand (small) | ELS-UCS-SMALL             | 10" x 8" x 24"     | 1                 | 10mm - 50mm                   | 350mm                       |
| Universal Column Stand (large) | ELS-UCS-LARGE             | 15" x 12" x 48"    | 2                 | 10mm - 50mm                   | 1000mm                      |
| Column Stand Extender (small)  | ELS-UCS-SMALL-EXT         | 24" EXT            | 1                 | 10mm - 50mm                   | 350mm/<br>Packing Adapter   |
| Column Stand Extender (large)  | ELS-UCS-LARGE-EXT         | 48" EXT            | 2                 | 10mm - 50mm                   | 1000mm/<br>Packing Adapter  |
| Additional Column Brackets     | ELS-COLUMNBRACKETASSY-001 | N/A                | N/A               | All                           | All                         |

## Peek Piston / Stainless Steel Frit Assemblies (O-Ring not included)



| Column ID | Piston Length | Piston Assembly Part No. |
|-----------|---------------|--------------------------|
| 10        | Short         | ELS-10-PPS-FS-(2 or 10)  |
| 10        | Long          | ELS-10-PPL-FS-(2 or 10)  |
| 15        | Short         | ELS-15-PPS-FS-(2 or 10)  |
| 15        | Long          | ELS-15-PPL-FS-(2 or 10)  |
| 25        | Short         | ELS-25-PPS-FS-(2 or 10)  |
| 25        | Long          | ELS-25-PPL-FS-(2 or 10)  |
| 35        | Short         | ELS-35-PPS-FS-(2 or 10)  |
| 35        | Long          | ELS-35-PPL-FS-(2 or 10)  |
| 50        | Short         | ELS-50-PPS-FS-(2 or 10)  |
| 50        | Long          | ELS-50-PPL-FS-(2 or 10)  |

## Supplied Accessories

### Parts Kit (1/16")

PN: ELS-1/16-KIT

|                   |     |                   |
|-------------------|-----|-------------------|
| ELS-BLUENUT-1/16  | [2] | Blue Nuts, 1/16"  |
| ELS-BLACKNUT-1/16 | [2] | Black Nuts, 1/16" |
| ELS-FERRULE-1/16  | [4] | Ferrules, 1/16"   |
| ELS-FRT           | [1] | Frit Ejector      |

### Parts Kit (1/8")

PN: ELS-1/8-KIT

|                  |     |                  |
|------------------|-----|------------------|
| ELS-BLUENUT-1/8  | [2] | Blue Nuts, 1/8"  |
| ELS-BLACKNUT-1/8 | [2] | Black Nuts, 1/8" |
| ELS-FERRULE-1/8  | [4] | Ferrules, 1/8"   |
| ELS-FRT          | [1] | Frit Ejector     |

Tubing should be connected to the SNAP Glass Columns with the following screws:

For tubing with 1/16" outer diameter:

|                   |                            |
|-------------------|----------------------------|
| ELS-BLUENUT-1/16  | Blue Nuts, 1/16" (1/4"-28) |
| ELS-BLACKNUT-1/16 | Black Nuts, 1/16" (M6)     |
| ELS-FERRULE-1/16  | Ferrules, 1/16"            |
| ELS-FEPTUBE-1/16  | Tubing, 1/16"              |

For tubing with 1/8" outer diameter:

|                  |                           |
|------------------|---------------------------|
| ELS-BLUENUT-1/8  | Blue Nuts, 1/8" (1/4"-28) |
| ELS-BLACKNUT-1/8 | Black Nuts, 1/8" (M6)     |
| ELS-FERRULE-1/8  | Ferrules, 1/8"            |
| ELS-FEPTUBE-1/8  | Tubing, 1/8"              |

Examples:

M6 to System (Black Nut + Ferrule)



1/4"-28 to Column (Blue Nut + Ferrule)



Recommended to be purchased with column:

|                   |                                      |
|-------------------|--------------------------------------|
| ELS-COLUMNPLUG    | 1/4" - 28 Column Plug (Rec. 2 pcs)   |
| ELS-FEPTUBE -1/16 | 1/16" FEP Tubing x 1 ft (Rec. 10 ft) |
| ELS-FEPTUBE -1/8  | 1/8" FEP Tubing x 1 ft (Rec. 10 ft)  |

## Spare Parts

### Frits [Polyethylene (PE)] for AB Version

| Part No.        | Column ID (mm) | Porosity (µm) |
|-----------------|----------------|---------------|
| ELS-10-FR-PE-05 | 10             | 5             |
| ELS-10-FR-PE-10 | 10             | 10            |
| ELS-10-FR-PE-20 | 10             | 20            |
| ELS-15-FR-PE-05 | 15             | 5             |
| ELS-15-FR-PE-10 | 15             | 10            |
| ELS-15-FR-PE-20 | 15             | 20            |
| ELS-25-FR-PE-05 | 25             | 5             |
| ELS-25-FR-PE-10 | 25             | 10            |
| ELS-25-FR-PE-20 | 25             | 20            |
| ELS-35-FR-PE-05 | 35             | 5             |
| ELS-35-FR-PE-10 | 35             | 10            |
| ELS-35-FR-PE-20 | 35             | 20            |
| ELS-50-FR-PE-05 | 50             | 5             |
| ELS-50-FR-PE-10 | 50             | 10            |
| ELS-50-FR-PE-20 | 50             | 20            |



Frits

### O-Rings [EDPM] for Pistons AB Version

| Part No.       | Column ID (mm) |
|----------------|----------------|
| ELS-OR-010-E   | 10             |
| ELS-OR-013-E   | 15             |
| ELS-OR-116.5-E | 25             |
| ELS-OR-123-E   | 35             |
| ELS-OR-132-E   | 50             |



O-Rings

### O-Rings [Viton] for Pistons SR Version

| Part No.       | Column ID (mm) |
|----------------|----------------|
| ELS-OR-010-V   | 10             |
| ELS-OR-013-V   | 15             |
| ELS-OR-116.5-V | 25             |
| ELS-OR-123-V   | 35             |
| ELS-OR-132-V   | 50             |

### O-Rings [Kalrez® or EQ.] for Pistons SR Version

| Part No.       | Column ID (mm) |
|----------------|----------------|
| ELS-OR-010-K   | 10             |
| ELS-OR-013-K   | 15             |
| ELS-OR-116.5-K | 25             |
| ELS-OR-123-K   | 35             |
| ELS-OR-132-K   | 50             |

# Customized Solutions for SNAP® Series Glass Columns

## Cartridge Configuration

The column requires two clamps while in use but not for column storage. The advantage is that the scientist can buy many cartridges and a few clamps. This reduces the overall cost to equip the lab with multiple columns. The cartridges can be stored in the packed and plugged condition and the clamps can then be installed on another column and run immediately.



## Customized Solutions

SNAP® columns can be provided with many customizations that the scientist may require including but not limited to:

- Custom column lengths
- Customized material configurations
- Heating and cooling jackets
- Custom end connections
- Any unique specifications upon request



## LIMITED WARRANTY

Essential Life Solutions offers a one-year limited guarantee on these columns covering defects in material and workmanship if used under conditions detailed in the instruction manual provided with the column. This guarantee does not include frits, O-Rings and glass tube.

Essential Life Solutions makes no other representation or warranty, express or implied with respect to these columns, and it disclaims all implied warranties of merchantability or fitness for a particular purpose. In no event shall Essential Life Solutions be liable for any special, indirect or consequential damages.



Proudly Made in America

## SNAP<sup>®</sup> Laboratory Glass Columns Available From:



|  |   |
|--|---|
|  <b>HROMalytic</b> +61(0)3 9762 2034<br> <b>ECHnology</b> Pty Ltd | <b>Australian Distributors</b><br>Importers & Manufacturers<br><a href="http://www.chromtech.net.au">www.chromtech.net.au</a> |
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**essentialLife Solutions**  
for preparative chromatography