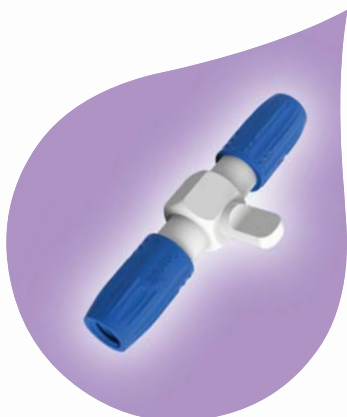




Chromatography



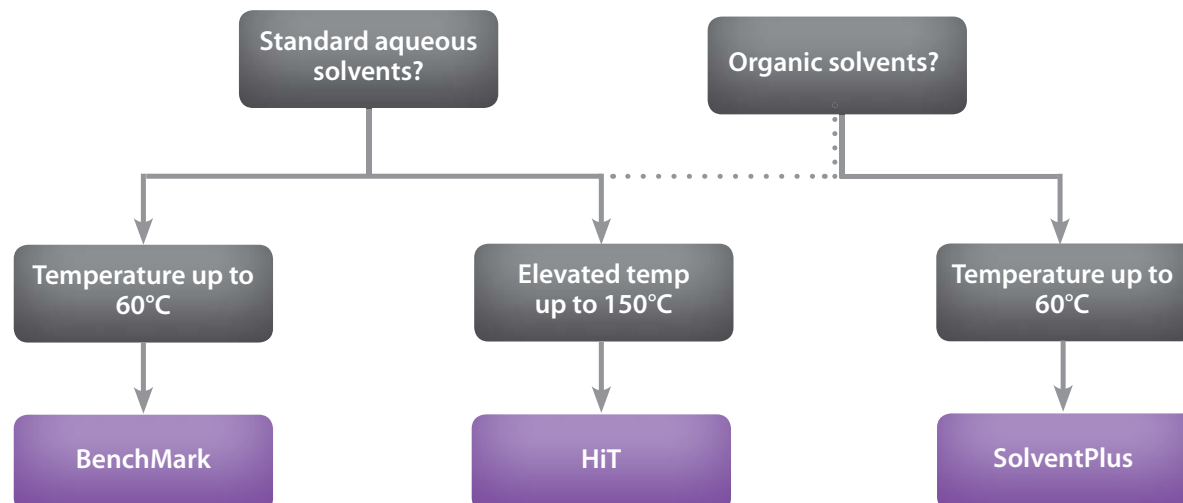
CHROMATechnik +61(0)3 9762 2034
ECH Pty Ltd
AUSTRALIAN Distributors www.chromtech.net.au

10

Selection guide

Omnifit Labware columns offer the maximum performance for low to mid pressure liquid chromatography or flow chemistry applications. Simple to assemble, pack and operate our columns are available in a variety of sizes and three ranges offering the highest pressure ratings, chemical compatibilities and temperature ratings on the market.

Use the selection guide below to determine the best range for your application.



BenchMark columns are designed to suit the majority of standard laboratory chromatography applications. They are ideal for aqueous systems and compatible with solvents used in common liquid chromatography applications such as protein purification.

- Economical modular columns for low pressure or gravity feed, providing even distribution of eluent to the medium bed, with or without flow adapters.
- Available in seven diameters and a variety of lengths.
- Compatible with a variety of bulk media.

BenchMark ordering information pages 4-6

HiT columns are designed for use at elevated temperature. Borosilicate glass and PEEK construction gives stability at temperatures up to 150°C. Ideal for use as reactor columns for flow chemistry applications as well as chromatographic separations.

- Durable, high-performance columns for reliable and reproducible performance at elevated temperature.
- Available in three diameters and two lengths.

HiT ordering information on page 7

SolventPlus columns are designed for maximum chemical compatibility. Borosilicate glass and PTFE construction, with Chemraz O-rings and PTFE frits, only the most inert materials are present in the fluid path. ETFE end caps and fitting nuts ensure a chemically inert connection into and out of the system.

- Designed for techniques using organic solvents such as reversed phase chromatography, but equally compatible with aqueous solvent systems.
- Available in six diameters and a variety of lengths.

SolventPlus ordering information pages 8-9

Technical specifications

	BenchMark	HiT	SolventPlus
Operating temperature	4-60°C	4-150°C	4-60°C
pH stability	1-14	1-14	1-14
Chemical stability	Resistant to aqueous solutions and solvents used in liquid chromatography. Not resistant to acetone, ketones, chlorinated hydrocarbons, aliphatic esters, phenol, NaOH, > 10% HCl, > 5% acetic acid, or strong mineral acid.	Resistant to aqueous solutions and solvents used in liquid chromatography. Not resistant to acetone, ketones, chlorinated hydrocarbons, aliphatic esters, phenol, NaOH, > 10% HCl, > 5% acetic acid, or strong mineral acid.	Resistant to aqueous solutions and most solvents used in liquid chromatography including ethanol, methanol, propanol, isobutanol, toluene, DMSO, pyridine, formamide, dimethyl formamide, ethylene dichloride, and chloroform.

Once you have decided on the range best suited to your application, you can choose a configuration from the page opposite, or go straight to the product pages to see full descriptions, technical and ordering information.

WW

Configurations

All Omnifit® Labware complete columns are supplied assembled and ready for use, with tubing and fittings to connect the column into an existing system. Three configurations are available:

- Non-adjustable with two fixed endpieces (-FF), a cost-effective option when height adjustment is not important. Note: 3mm columns are available as -FF configuration only.
- One fixed endpiece as a bed support and one adjustable endpiece (plunger) to adjust the bed height (-AF). The adjustable endpiece is designed to give the user fine control over the movement of the endpiece, minimizing the risk of disturbance to the packed bed and giving 80mm of height adjustment.
- Two adjustable endpieces (-AA) giving maximum flexibility in bed height. With an adjustable endpiece at both ends of the column, the user gains 160mm of adjustment, offering a wide range of bed lengths and volumes.

Complete columns

All complete Omnifit® Labware columns are supplied ready-assembled in -FF, -AF or -AA configuration. Accessories included are a frit kit comprising spare PE and PTFE frits and a fittings kit comprising two lengths of ready-assembled tube and fittings to enable immediate connection to the column.

Replacement parts and accessories

All column components are available to buy separately giving the user complete flexibility to replace lost or worn parts, or to utilize columns across a number of applications. This modular approach gives Omnifit® Labware columns an extremely long life and great flexibility in use.

An additional adjustable endpiece enables conversion of an existing fixed column to adjustable, or increased adjustability of an -AF column. Buying a second glass tube of different length, alongside a complete column, would enable the user to mix and match components for a wide range of different applications.

Bed heights & volumes

	COLUMN SIZE		-FF		-AF		-AA	
	ID (mm)	Length (cm)	Bed height (cm)	Volume (ml)	Bed height (cm)	Volume (ml)	Bed height (cm)	Volume (ml)
Column assembly 6.6mm/50mm	6.6	5	2	0.7	0.24 - 2	0.1 - 0.7	0.24 - 2	0.1 - 0.7
Column assembly 6.6mm/100mm	6.6	10	7	2.4	0.24 - 7	0.1 - 2.4	0.24 - 7	0.1 - 2.4
Column assembly 6.6mm/150mm	6.6	15	12	4.1	4 - 12	1.4 - 4.1	0.24 - 12	0.1 - 4.1
Column assembly 6.6mm/250mm	6.6	25	22	7.5	14 - 22	4.8 - 7.5	6 - 22	2.1 - 7.5
Column assembly 6.6mm/400mm	6.6	40	37	12.7	29 - 37	9.9 - 12.7	21 - 37	7.2 - 12.7
Column assembly 10mm/100mm	10	10	7	5.5	0.24 - 7	0.2 - 5.5	0.24 - 7	0.2 - 5.5
Column assembly 10mm/150mm	10	15	12	9.4	4 - 12	3.1 - 9.4	0.24 - 12	0.2 - 9.4
Column assembly 10mm/250mm	10	25	22	17.3	14 - 22	11.0 - 17.3	4 - 22	3.1 - 17.3
Column assembly 10mm/400mm	10	40	37	29.1	29 - 37	22.8 - 29.1	21 - 37	16.5 - 29.1
Column assembly 10mm/500mm	10	50	47	36.9	39 - 47	30.6 - 36.9	31 - 47	24.3 - 36.9
Column assembly 15mm/100mm	15	10	7	12.4	0.24 - 7	0.4 - 12.4	0.24 - 7	0.4 - 12.4
Column assembly 15mm/150mm	15	15	12	21.2	4 - 12	7.1 - 21.2	0.24 - 12	0.4 - 21.2
Column assembly 15mm/250mm	15	25	22	38.9	14 - 22	24.7 - 38.9	6 - 22	10.6 - 38.9
Column assembly 15mm/400mm	15	40	37	65.4	29 - 37	51.2 - 65.4	21 - 37	37.1 - 65.4
Column assembly 15mm/500mm	15	50	47	83.0	39 - 47	68.9 - 83.0	31 - 47	54.8 - 83.0
Column assembly 25mm/100mm	25	10	7	34.4	0.24 - 7	1.2 - 34.4	0.24 - 7	1.2 - 34.4
Column assembly 25mm/150mm	25	15	12	58.9	4 - 12	19.6 - 58.9	0.24 - 12	1.2 - 58.9
Column assembly 25mm/250mm	25	25	22	108.0	14 - 22	68.7 - 108.0	6 - 22	29.4 - 108.0
Column assembly 25mm/400mm	25	40	37	181.6	29 - 37	142.3 - 181.6	21 - 37	103.1 - 181.6
Column assembly 25mm/500mm	25	50	47	230.7	39 - 47	191.4 - 230.7	31 - 47	152.1 - 230.7
Column assembly 35mm/150mm	35	15	12	115.4	4 - 12	38.5 - 115.4	0.24 - 12	2.3 - 115.4
Column assembly 35mm/250mm	35	25	22	211.6	14 - 22	134.7 - 211.6	6 - 22	57.7 - 211.6
Column assembly 35mm/400mm	35	35	37	355.9	29 - 37	279.0 - 355.9	21 - 37	202.0 - 355.9
Column assembly 50mm/250mm	50	25	22	440.6	14 - 22	280.4 - 440.6	6 - 22	120.2 - 440.6
Column assembly 50mm/400mm	50	40	37	741.0	29 - 37	580.7 - 741.0	21 - 37	420.5 - 741.0
Column assembly 50mm/500mm	50	50	47	941.2	39 - 47	781.0 - 941.2	31 - 47	620.8 - 941.2

BenchMark

BenchMark columns are designed to suit the majority of standard laboratory chromatography applications. They are ideal for aqueous systems and compatible with solvents used in common liquid chromatography applications such as protein purification.

- Economical modular columns for low pressure or gravity feed, providing even distribution of eluent to the medium bed, with or without flow adapters.
- Available in seven diameters and a variety of lengths.
- Compatible with a variety of bulk media.

Complete columns inventory

When you buy a complete BenchMark column, you will receive:

Column assembly:

A ready-assembled column of -FF, -AF or -AA configuration, comprising a glass tube of the required dimensions and the 2 endpieces of your choice.

Frit Kit comprising:

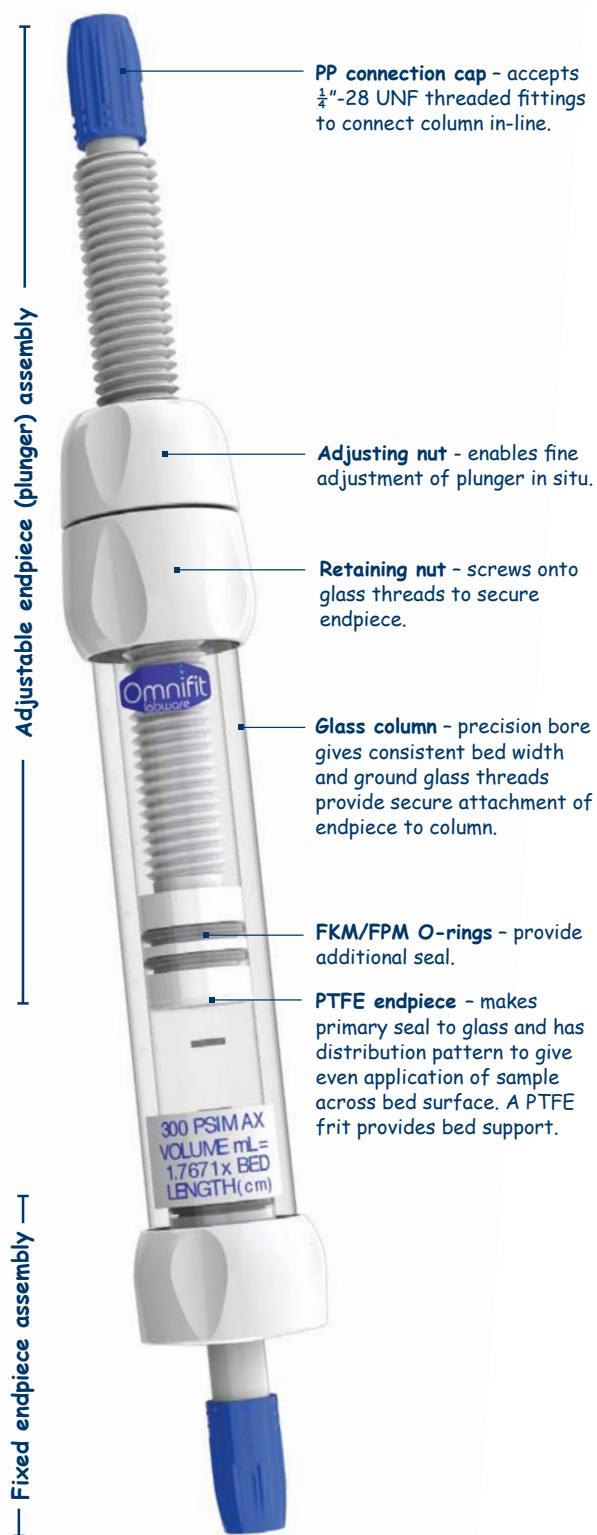
- 2 x 25µm PTFE frits
- 2 x 10µm PTFE frits
- 2 x 10µm PE frits

Fittings Kit comprising:

- 2m x 1/8" OD PTFE tubing with 1/4-28 UNF fitting (PP) at one end
- 0.5m x 1/8" OD PTFE tubing with 1/4-28 UNF fitting (PP) at one end

Technical Specifications

Operating temperature:	4-60°C
pH stability:	1-14
Chemical stability:	Resistant to aqueous solutions and solvents used in liquid chromatography. Not resistant to acetone, ketones, chlorinated hydrocarbons, aliphatic esters, phenol, NaOH, > 10% HCl, > 5% acetic acid, or strong mineral acid.
Materials:	
Glass column	Borosilicate glass
Endpiece	PTFE
Frit (bed support)	PE
O-ring	FKM/FPM
Adjusting nut	Acetal
Retaining cap	Acetal
Connection cap	Glass-filled PP
Fitting nuts	Glass-filled PP
Operating pressures:	
6.6mm	900 psi (60 bar)
10mm	600 psi (60 bar)
15mm	300 psi (20 bar)
25mm	
35mm	150 psi (10 bar)
50mm	



Ordering information

COMPLETE COLUMN WITH 2 x FIXED ENDPieces

LENGTH / BORE	6.6MM	10MM	15MM	25MM	35MM	50MM
50mm	006BCC-06-05-FF					
100mm	006BCC-06-10-FF	006BCC-10-10-FF	006BCC-15-10-FF	006BCC-25-10-FF		
150mm	006BCC-06-15-FF	006BCC-10-15-FF	006BCC-15-15-FF	006BCC-25-15-FF	006BCC-35-15-FF	
250mm	006BCC-06-25-FF	006BCC-10-25-FF	006BCC-15-25-FF	006BCC-25-25-FF	006BCC-35-25-FF	006BCC-50-25-FF
400mm	006BCC-06-40-FF	006BCC-10-40-FF	006BCC-15-40-FF	006BCC-25-40-FF	006BCC-35-40-FF	006BCC-50-40-FF
500mm		006BCC-10-50-FF	006BCC-15-50-FF	006BCC-25-50-FF		006BCC-50-50-FF

COMPLETE COLUMN WITH 1 x ADJUSTABLE & 1 x FIXED ENDPiece

50mm	006BCC-06-05-AF					
100mm	006BCC-06-10-AF	006BCC-10-10-AF	006BCC-15-10-AF	006BCC-25-10-AF		
150mm	006BCC-06-15-AF	006BCC-10-15-AF	006BCC-15-15-AF	006BCC-25-15-AF	006BCC-35-15-AF	
250mm	006BCC-06-25-AF	006BCC-10-25-AF	006BCC-15-25-AF	006BCC-25-25-AF	006BCC-35-25-AF	006BCC-50-25-AF
400mm	006BCC-06-40-AF	006BCC-10-40-AF	006BCC-15-40-AF	006BCC-25-40-AF	006BCC-35-40-AF	006BCC-50-40-AF
500mm		006BCC-10-50-AF	006BCC-15-50-AF	006BCC-25-50-AF		006BCC-50-50-AF

COMPLETE COLUMN WITH 2 x ADJUSTABLE ENDPieces

50mm	006BCC-06-05-AA					
100mm	006BCC-06-10-AA	006BCC-10-10-AA	006BCC-15-10-AA	006BCC-25-10-AA		
150mm	006BCC-06-15-AA	006BCC-10-15-AA	006BCC-15-15-AA	006BCC-25-15-AA	006BCC-35-15-AA	
250mm	006BCC-06-25-AA	006BCC-10-25-AA	006BCC-15-25-AA	006BCC-25-25-AA	006BCC-35-25-AA	006BCC-50-25-AA
400mm	006BCC-06-40-AA	006BCC-10-40-AA	006BCC-15-40-AA	006BCC-25-40-AA	006BCC-35-40-AA	006BCC-50-40-AA
500mm		006BCC-10-50-AA	006BCC-15-50-AA	006BCC-25-50-AA		006BCC-50-50-AA

REPLACEMENT ENDPieces

Adjustable	006BAE-06	006BAE-10	006BAE-15	006BAE-25	006BAE-35	006BAE-50
Fixed	006BFE-06	006BFE-10	006BFE-15	006BFE-25	006BFE-35	006BFE-50

REPLACEMENT O-RINGS

FKM/FPM (PK 10)	006OR-06-V	006OR-10-V	006OR-15-V	006OR-25-V	006OR-35-V	006OR-50-V
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For replacement glass tubes, frits & O-rings, see page 10.

BenchMark Microbore

BenchMark Microbore columns are designed for applications requiring the smallest bed volumes. They are ideal for aqueous systems and compatible with solvents used in common liquid chromatography applications such as protein purification.

- Economical, non-adjustable columns for low pressure or gravity feed.
- 3mm diameter and a variety of lengths.
- Compatible with a variety of bulk media.

Complete columns inventory

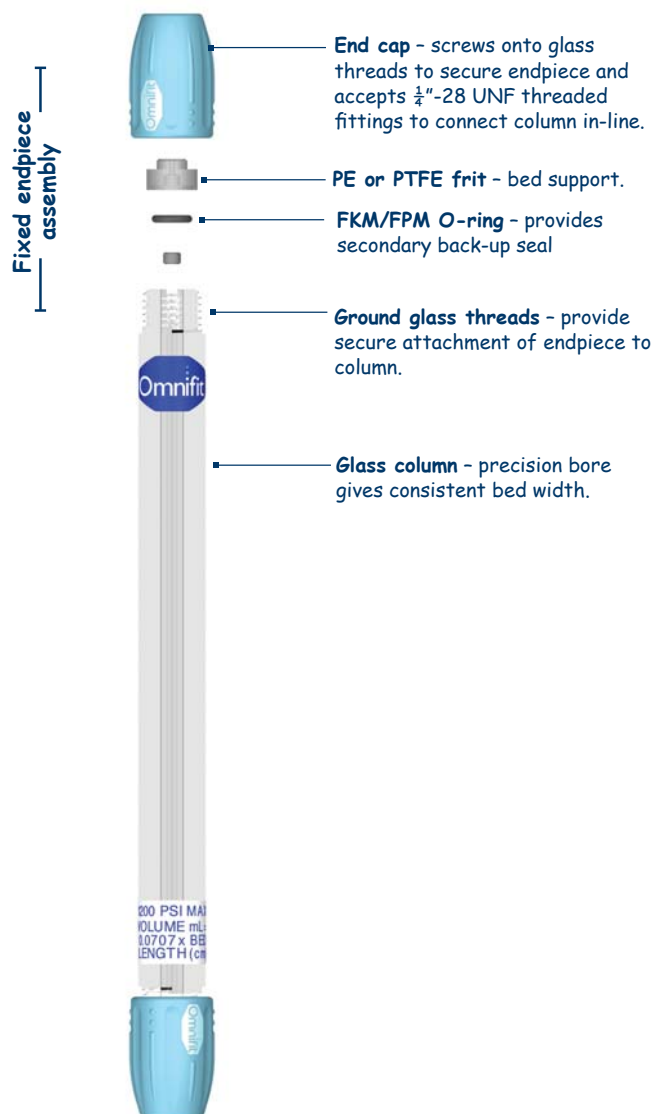
When you buy a complete BenchMark Microbore column, you will receive:

Column assembly:

A ready-assembled column comprising a glass tube of the required length and the two fixed endpieces.

Fittings Kit comprising:

- 2m x 1/16" OD PTFE tubing with 1/4-28 UNF fitting (PP) at one end
- 0.5m x 1/16" OD PTFE tubing with 1/4-28 UNF fitting (PP) at one end



Technical Specifications

Operating temperature:	4-60°C
pH stability:	1-14
Chemical stability:	Resistant to aqueous solutions and solvents used in liquid chromatography. Not resistant to acetone, ketones, chlorinated hydrocarbons, aliphatic esters, phenol, NaOH, > 10% HCl, > 5% acetic acid, or strong mineral acid.
Materials:	
Glass column	Borosilicate glass
Endpiece	PTFE
Frit (bed support)	PE
O-ring	FKM/FPM
Adjusting nut	Acetal
Retaining cap	Acetal
Connection cap	Glass-filled PP
Fitting nuts	Glass-filled PP
Operating pressure:	1200 psi (80 bar)

Ordering Information

COMPLETE COLUMN WITH 2 x FIXED ENDPieces

DESCRIPTION	PART #
Column assembly 3mm/25mm 2xF	006BCC-03-02-FF
Column assembly 3mm/50mm 2xF	006BCC-03-05-FF
Column assembly 3mm/100mm 2xF	006BCC-03-10-FF
Column assembly 3mm/150mm 2xF	006BCC-03-15-FF

REPLACEMENT ENDPieces

Complete 3mm endpiece with 5um PTFE frit	006BFE-03-05
Complete 3mm endpiece with 10um PTFE frit	006BFE-03-10
Complete 3mm endpiece with 20um PTFE frit	006BFE-03-20
Complete 3mm endpiece with 30um PTFE frit	006BFE-03-30
Complete 3mm endpiece with 50um PTFE frit	006BFE-06-50
Complete 3mm endpiece with 25um PE frit	006BFE-06-PE
Complete 3mm end piece with 0.2um SS frit	006BFE-06-SS

REPLACEMENT GLASS

Replacement glass column 3mm/25mm	006RG-03-02
Replacement glass column 3mm/50mm	006RG-03-05
Replacement glass column 3mm/100mm	006RG-03-10
Replacement glass column 3mm/150mm	006RG-03-15

ACCESSORIES

FKM/FPM O-rings for 3mm columns (PK 10)	006OR-03-V
Column packing sleeve 3mm column	006PS-03

HiT

HiT columns are designed for use at elevated temperature. Borosilicate glass and PEEK construction gives stability at temperatures up to 150°C. Ideal for use as reactor columns for flow chemistry applications as well as chromatographic separations.

- Durable, high-performance columns for reliable and reproducible performance at elevated temperature.

Complete columns inventory

When you buy a complete BenchMark column, you will receive:

Column assembly:

A ready-assembled column of -FF, -AF or -AA configuration, comprising a glass tube of the required dimensions and the 2 endpieces of your choice.

Frit Kit comprising:

- 2 x 25µm PTFE frits
- 2 x 10µm PTFE frits
- 2 x 10µm PE frits

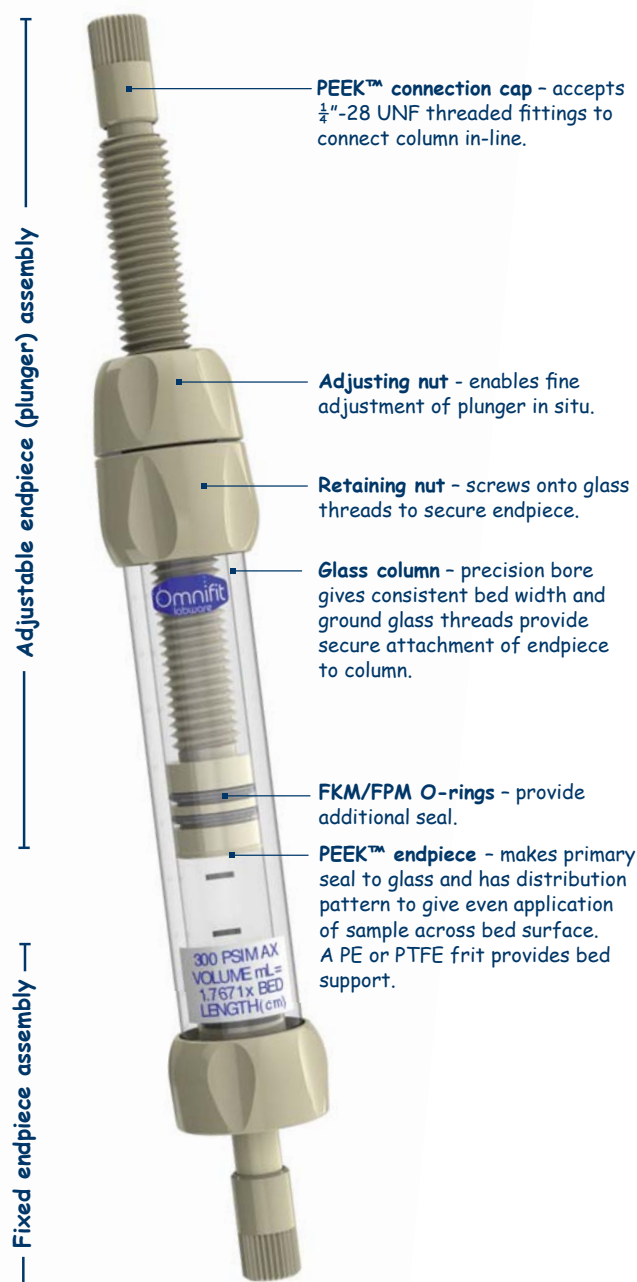
Fittings Kit comprising:

- 2m x 1/8" OD PTFE tubing with 1/4-28 UNF fitting (ETFE) at one end
- 0.5m x 1/8" OD PTFE tubing with 1/4-28 UNF fitting (ETFE) at one end

Technical Specifications

Operating temperature:	4-150°C
pH stability:	1-14
Chemical stability:	Resistant to aqueous solutions and solvents used in liquid chromatography. Not resistant to acetone, ketones, chlorinated hydrocarbons, aliphatic esters, phenol, NaOH, > 10% HCl, > 5% acetic acid, or strong mineral acid.
Materials:	
Glass column	Borosilicate glass
Endpiece	PEEK™
Frit (bed support)	PTFE
O-ring	FKM/FPM
Adjusting nut	PEEK™
Retaining cap	PEEK™
Connection cap	PEEK™
Fitting nuts	ETFE
Operating pressures:	
6.6mm	900 psi (60 bar)
10mm	600 psi (60 bar)
15mm	300 psi (20 bar)
25mm	
35mm	150 psi (10 bar)
50mm	

For replacement glass tubes, frits & O-rings, see page 10.



Ordering Information

COMPLETE COLUMN WITH 1 x FIXED; 1 x ADJUSTABLE ENDPiece

LENGTH / BORE	6.6MM	10MM	15MM
100mm	006CC-06-10-AF	006CC-10-10-AF	006CC-15-10-AF
150mm	006CC-06-15-AF	006CC-10-15-AF	006CC-15-15-AF

REPLACEMENT ENDPieces

Adjustable	006HAE-06	006HAE-10	006HAE-15
Fixed	006HFE-06	006HFE-10	006HFE-15

REPLACEMENT O-RINGS

FKM/FPM (PK 10)	006OR-06-V	006OR-10-V	006OR-15-V
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SolventPlus

SolventPlus columns are designed for maximum chemical compatibility. Borosilicate glass and PTFE construction, with Chemraz® O-rings and PTFE frits, only the most inert materials are present in the fluid path. ETFE end caps and fitting nuts ensure a chemically inert connection into and out of the system.

- Designed for techniques using organic solvents such as reversed phase chromatography, but equally compatible with aqueous solvent systems.
- Available in six diameters and a variety of lengths.

Complete columns inventory

When you buy a complete SolventPlus column, you will receive:

Column assembly:

A ready-assembled column of -FF, -AF or -AA configuration, comprising a glass tube of the required dimensions and the two endpieces of your choice.

Frit Kit comprising:

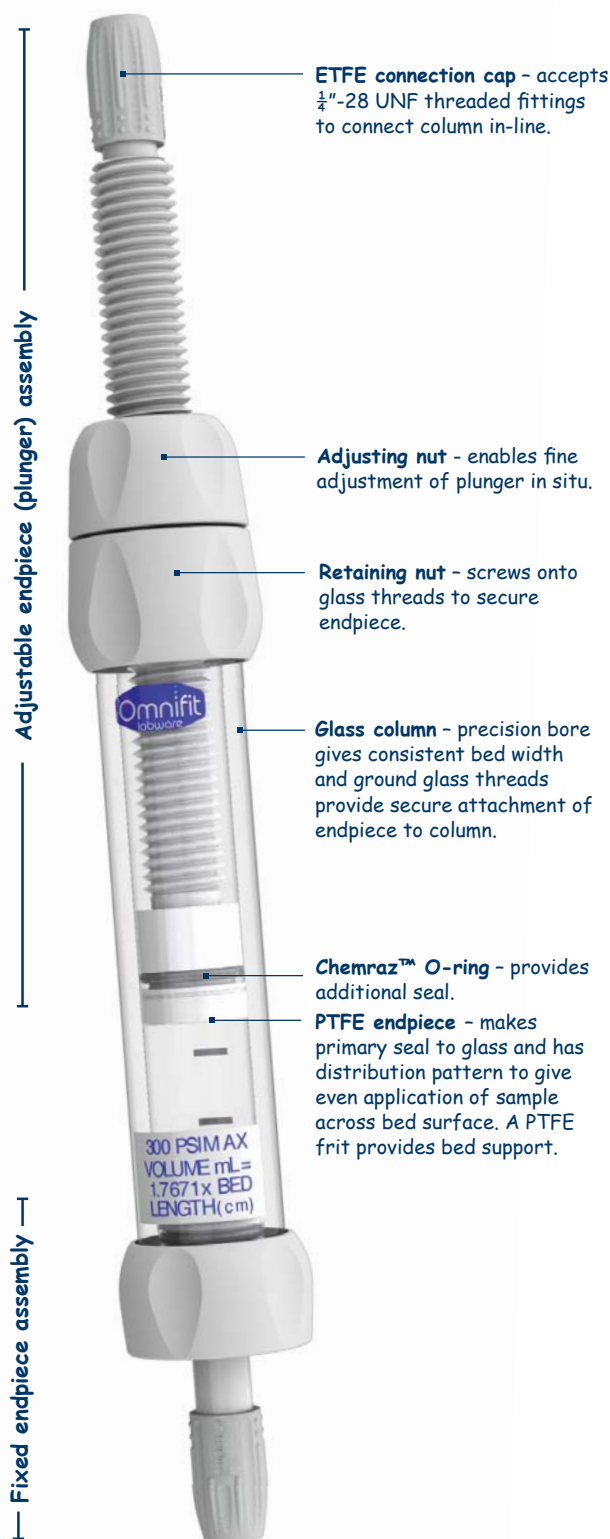
- 2 x 25µm PTFE frits
- 2 x 10µm PTFE frits
- 2 x 10µm PE frits

Fittings Kit comprising:

- 2m x 1/8" OD PTFE tubing with 1/4-28 UNF fitting (ETFE) at one end
- 0.5m x 1/8" OD PTFE tubing with 1/4-28 UNF fitting (ETFE) at one end

Technical specifications

Operating temperature:	4-60°C
pH stability:	1-14
Chemical stability:	Resistant to aqueous solutions and most solvents used in liquid chromatography including ethanol, methanol, propanol, isobutanol, toluene, DMSO, pyridine, formamide, dimethyl formamide, ethylene dichloride, and chloroform.
Materials:	
Glass column	Borosilicate glass
Endpiece	PTFE
Frit (bed support)	PTFE
O-ring	Chemraz®
Adjusting nut	Acetal
Retaining cap	Acetal
Connection cap	ETFE
Fitting nuts	ETFE
Operating pressures:	
6.6mm	900 psi (60 bar)
10mm	600 psi (60 bar)
15mm	300 psi (20 bar)
25mm	
35mm	150 psi (10 bar)
50mm	



Ordering information

COMPLETE COLUMN WITH 2 x FIXED ENDPieces

LENGTH / BORE	6.6MM	10MM	15MM	25MM	35MM	50MM
50mm	006SCC-06-05-FF					
100mm	006SCC-06-10-FF	006SCC-10-10-FF	006SCC-15-10-FF	006SCC-25-10-FF		
150mm	006SCC-06-15-FF	006SCC-10-15-FF	006SCC-15-15-FF	006SCC-25-15-FF	006SCC-35-15-FF	
250mm	006SCC-06-25-FF	006SCC-10-25-FF	006SCC-15-25-FF	006SCC-25-25-FF	006SCC-35-25-FF	006SCC-50-25-FF
400mm	006SCC-06-40-FF	006SCC-10-40-FF	006SCC-15-40-FF	006SCC-25-40-FF	006SCC-35-40-FF	006SCC-50-40-FF
500mm		006SCC-10-50-FF	006SCC-15-50-FF	006SCC-25-50-FF		006SCC-50-50-FF

COMPLETE COLUMN WITH 1 x ADJUSTABLE & 1 x FIXED ENDPiece

50mm	006SCC-06-05-AF					
100mm	006SCC-06-10-AF	006SCC-10-10-AF	006SCC-15-10-AF	006SCC-25-10-AF		
150mm	006SCC-06-15-AF	006SCC-10-15-AF	006SCC-15-15-AF	006SCC-25-15-AF	006SCC-35-15-AF	
250mm	006SCC-06-25-AF	006SCC-10-25-AF	006SCC-15-25-AF	006SCC-25-25-AF	006SCC-35-25-AF	006SCC-50-25-AF
400mm	006SCC-06-40-AF	006SCC-10-40-AF	006SCC-15-40-AF	006SCC-25-40-AF	006SCC-35-40-AF	006SCC-50-40-AF
500mm		006SCC-10-50-AF	006SCC-15-50-AF	006SCC-25-50-AF		006SCC-50-50-AF

COMPLETE COLUMN WITH 2 x ADJUSTABLE ENDPieces

50mm	006SCC-06-05-AA					
100mm	006SCC-06-10-AA	006SCC-10-10-AA	006SCC-15-10-AA	006SCC-25-10-AA		
150mm	006SCC-06-15-AA	006SCC-10-15-AA	006SCC-15-15-AA	006SCC-25-15-AA	006SCC-35-15-AA	
250mm	006SCC-06-25-AA	006SCC-10-25-AA	006SCC-15-25-AA	006SCC-25-25-AA	006SCC-35-25-AA	006SCC-50-25-AA
400mm	006SCC-06-40-AA	006SCC-10-40-AA	006SCC-15-40-AA	006SCC-25-40-AA	006SCC-35-40-AA	006SCC-50-40-AA
500mm		006SCC-10-50-AA	006SCC-15-50-AA	006SCC-25-50-AA		006SCC-50-50-AA

REPLACEMENT ENDPieces

Adjustable	006SAE-06	006SAE-10	006SAE-15	006SAE-25	006SAE-35	006SAE-50
Fixed	006SFE-06	006SFE-10	006SFE-15	006SFE-25	006SFE-35	006SFE-50

REPLACEMENT O-RINGS

Chemraz® (PK 2)	006OR-06-C	006OR-10-C	006OR-15-C	006OR-25-C	006OR-35-C	006OR-50-C
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For replacement glass columns, frits & O-rings, see page 10.

Universal replacement parts

All Omnifit® Labware column components are available to buy separately giving the user complete flexibility to replace lost or worn parts, or to utilize columns across a number of applications. This modular approach gives Omnifit® Labware columns an extremely long life and great flexibility in use.

The glass tubes, frits, o-rings and accessories listed below are compatible with all three column ranges - BenchMark, SolventPlus or HiT. Simply locate the column size you require to identify the correct part numbers for ordering.

Ordering information

REPLACEMENT GLASS COLUMNS

LENGTH / BORE	6.6MM	10MM	15MM	25MM	35MM	50MM
50mm	006RG-06-05					
100mm	006RG-06-10	006RG-10-10	006RG-15-10	006RG-25-10		
150mm	006RG-06-15	006RG-10-15	006RG-15-15	006RG-25-15	006RG-35-15	
250mm	006RG-06-25	006RG-10-25	006RG-15-25	006RG-25-25	006RG-35-25	006RG-50-25
400mm	006RG-06-40	006RG-10-40	006RG-15-40	006RG-25-40	006RG-35-40	006RG-50-40
500mm		006RG-10-50	006RG-15-50	006RG-25-50		006RG-50-50

REPLACEMENT FRITS

5um	006FR-06-05	006FR-10-05	006FR-15-05	006FR-25-05	006FR-35-05	006FR-50-05
10um	006FR-06-10	006FR-10-10	006FR-15-10	006FR-25-10	006FR-35-10	006FR-50-10
25um	006FR-06-25	006FR-10-25	006FR-15-25	006FR-25-25	006FR-35-25	006FR-50-25
40um	006FR-06-40	006FR-10-40	006FR-15-40	006FR-25-40	006FR-35-40	006FR-50-40
70um	006FR-06-70	006FR-10-70	006FR-15-70	006FR-25-70	006FR-35-70	006FR-50-70
100um	006FR-06-100	006FR-10-100	006FR-15-100	006FR-25-100	006FR-35-100	006FR-50-100

REPLACEMENT O-RINGS

FKM/FPM (pk 10)	006OR-06-V	006OR-10-V	006OR-15-V	006OR-25-V	006OR-35-V	006OR-50-V
Chemraz® (pk 2)	006OR-06-C	006OR-10-C	006OR-15-C	006OR-25-C	006OR-35-C	006OR-50-C

ACCESSORIES

Packing sleeves	006PS-06	006PS-10	006PS-15	006PS-25	006PS-35	006PS-50
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Guidelines for use

Omnifit® Labware columns are supplied assembled and ready for use, with all the tubing, fittings and connections needed to get started, and full instructions for use. The following is a guide to the basic use of the column and is not intended to replace the full instruction manual.

Cleaning

Endpieces and glass column should be washed before the first use to remove any possible contaminants. Suitable cleaning agents are soapy water or laboratory detergents. Glass columns, endpieces and O-rings are also autoclavable.

Dismantling the column

The column is dismantled by first unscrewing the retaining cap from the ground glass threads on the glass column in order to release the endpiece, which can then be carefully pulled out of the glass tube.

Assembling the column

The most common format for column chromatography is to use a column with one fixed and one adjustable end piece, in which case it is usual to insert the fixed endpiece first, fill the column and then fit and adjust the adjustable endpiece (plunger). The following guidelines are for an -AF configuration, but can be easily applied to other configurations.

First fit the fixed end piece which will act as the bed support. The threads on both the glass column and the retaining cap must be free from debris in order to prevent possible damage to threads. Wet the O-rings using the mobile phase or other suitable solvent. Carefully position the endpiece into the end of the column and slowly push the endpiece into the column until a stop is felt. Always keep the endpiece in line with the column; do not insert at an angle or apply an angled pressure, as this may damage the seal or the glass threads. Once in place, the retaining cap can be screwed onto the ground glass threads to fix it in place.

Filling and packing the column

The column can now be filled and packed with the chosen medium, using appropriate methods. Because of the diversity of chromatographic media on the market and the variety of methods and applications used, we recommend that media preparation and column packing is carried out as directed by the media manufacturer.

The glass column has graduations printed on the external surface which are intended to help the user fill the column to a specific bed height. The distance between each graduation is 10mm. Also printed on the column is a pressure and volume label. The equation on the label allows simple calculation of the bed volume when used in conjunction with the graduations. The graduation marks are provided as a guide only.

Fitting and adjusting the adjustable endpiece

The adjusting mechanism allows the endpiece to be set in position in the chromatographic tube to give a variety of bed lengths and enables the endpiece to be finely adjusted to sit on the surface of the packed bed with minimum disturbance to the medium.

First ensure the threads on both the glass and retaining cap are free from debris. Close the column outlet (not part of column kit) to ensure that the column does not run dry. Adjust the level of liquid in the column such that 1-2 cm of liquid is above the level of the bed.

Screw the adjusting nut and retaining nut until they are positioned such that they will sit close to the bed surface when in place. Wet the O-rings using the mobile phase or other suitable solvent. Carefully position the endpiece into the end of the column and slowly push the endpiece into the column until a stop is felt. Always keep the endpiece in line with the column; do not insert at an angle or apply an angled pressure, as this may damage the seal or the glass threads. Ensure no air is trapped below the frit. Once in place, the retaining cap can be screwed onto the ground glass threads to fix it in place, ensuring that the retaining nut is not over-tightened. Holding the retaining nut, slowly turn the adjusting nut clockwise to move the plunger to the desired position in the tube.

Connecting tubing to the column

Omni-Lok™ fittings enable quick connection and disconnection whether the columns are dismantled, assembled or even already packed. Using the pre-assembled tubing sets supplied, screw the fitting nut into the tubing connection cap until finger-tight. Connect open ends of tube into ¼"-28 UNF ports of required system.

The column can now be packed using the required solvents and an appropriate flow rate and/or pressure as recommended by the media manufacturer. As the column is packed, the bed height may reduce. If necessary, the adjustable endpiece can be lowered onto the final bed surface following the instructions for fine adjustment previously described.

Glossary of terms

Different manufacturers use different terms for column components. To enable easy cross-reference, the following glossary lists the names used for Omnifit® Labware column parts and other commonly used terms.

- Adjustable endpiece - flow adaptor; plunger; piston
- Glass column - chromatographic tube
- Frit - bed support

Plastics:	ETFE = ethylene tetrafluoroethylene FKM/FPM = fluoroelastomer PTFE = polytetrafluoroethylene PEEK™ = polyetheretherketone	PP = polypropylene PC = polycarbonate PCTFE = polychlorotrifluoroethylene
Trademarks:	Chemraz® is a registered trademark of Greene, Tweed & Co. PEEK™ is a registered trademark of Victrex plc. Omnifit®, Omni-Lok™ are trademarks of Diba Industries Ltd.	

Download the full range of Omnifit® Labware brochures at www.omnifit.com or contact your local sales office



At Diba our focus is fluid handling. Diba is the only company that provides solutions over an entire systems's fluid path through our three core brands:



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- Chromatography Columns
- Solvent Safety Bottle Caps
- Bubble Traps & Filters
- Connectors & Adaptors



Providing standard components and products for fluid handling applications:

- Click-N-Seal®
- Omni-Lok™
- Omnifit® Gripper
- MicroBarb™



Providing custom designed fluid path solutions optimized to each customer's application:

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- Probes
- Level Sensors
- Bottle Assemblies
- Fluid Heaters
- System Fluidic Kits

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