

Instructions for using Omnifit Chromatography columns.

For 6.6, 10, 15, 25, 35 and 50.5mm bore columns



Precision glass chromatography columns designed for low to mid-pressure liquid chromatography.

1.0 Inventory list and specification

1.1 Inventory list

Item	Qty	Component	Material	Fluid contact
Glass column	1	Chromatographic tube	Borosilicate glass	Yes
Endpieces, fixed and/or adjustable depending on part number ordered	2	Plunger	PTFE	Yes
		'O'-ring	Viton	Yes
		Frit - 25µm	Polyethylene	Yes
		Retaining caps	Acetal-C	No
		Adjusting nut	Acetal-C	No
		Connection cap	Polypropylene	No
Frit kit	2	Frit 10µm	PTFE	Yes
		Frit 25µm	PTFE	Yes
		Frit 10µm	Polyethylene	Yes
Fittings kit 1/16"x0.8mm tube assembly 1 x 0.5m long 1 x 2.0m long	1	Gripper case	316 Stainless steel	No
		Gripper seal	PTFE	Yes
		Gripper fitting	Polypropylene	No
		Flexible tubing	PTFE	yes

1.2 Description - Please refer to the exploded diagram, numbers in parentheses in text relate to numbers in diagram.

1.2.1 Chromatographic tube (6)

The high-precision bore, borosilicate glass tube is available in the lengths and inner diameters described in the Table. It has ground glass threads (5) at each end ensuring secure connection of endpieces.

1.2.2 Column endpieces, fixed (12) and adjustable (1)

The plunger (2) fits into the glass chromatographic tube (6) and is secured by screwing the retaining cap (4) onto the ground glass threads that are integral to the chromatographic tube.

The endpiece seals against the chromatographic tube via an inert PTFE seal (10), backed up by a Viton 'O'-ring (11).

A 25µm PE frit (9) is supplied pre-fitted into the plunger. This frit supports the gel bed.

The endpiece also incorporates a connector cap (13) into which a standard 1/4"-28 UNF male tube end fitting can be connected. Ready assembled tube and fittings are supplied in the fittings kit included with this column.

1.2.3 Flexible tubing

Omnifit columns are supplied with PTFE capillary tubing pre-fitted with 1/4"-28 UNF type Gripper fittings and Grippers. Two lengths are supplied, 2m and 0.5m, which can be connected to either the fixed or adjustable endpieces.

1.3 Resistance

For highest chemical inertness, the PE frit supplied fitted, should be replaced with the PTFE version also supplied in the accessory frit kit. Care should be taken not to expose column components to materials that may cause damage or even failure. Components normally in fluid contact are described in the inventory list. The columns may be used at temperatures up to 60°C and at pressures as shown in the following table:

Bore size	Rating - Psi
6.6	900
10	600
15	300
25	150
35	150
50	150

2.0 Instructions for use

2.1 Unpacking

Omnifit columns are supplied assembled and ready for use, with all the tubing, fittings and connections needed to get started. Unpack the column carefully and check that all components are supplied complete and undamaged.

2.2 Cleaning

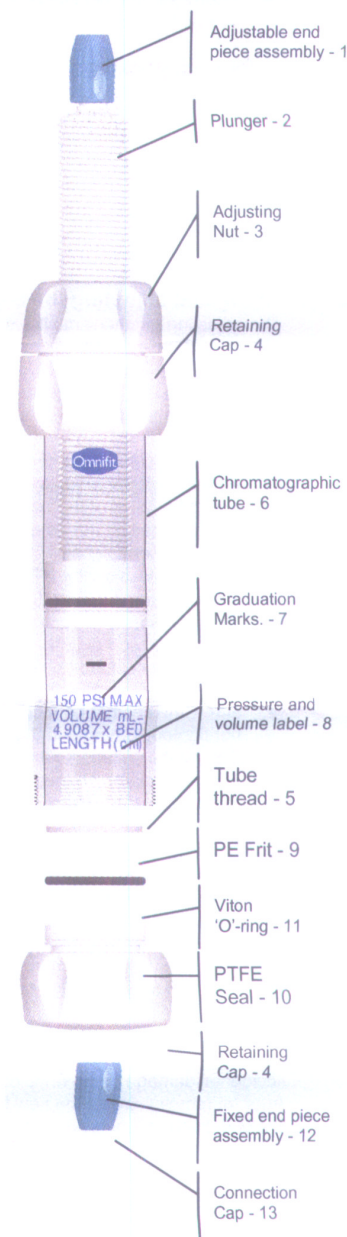
Although every effort is made to maintain the cleanliness of the chromatography components during manufacture, it cannot however, be guaranteed. It is suggested that the PTFE endpieces and glass column be washed before use to remove any possible contaminants. Suitable cleaning agents are soapy water or laboratory detergents. The PTFE column endpieces, 'O'-ring and the glass chromatographic tube are autoclavable.

2.3 Dismantling the column

1. Unscrew the retaining cap (4) to release it from the ground glass threads on the chromatographic tube.
2. Holding the chromatographic tube firmly, pull the endpiece out of the glass tube.
3. Repeat for the other end piece if required.

2.4 Assembling the column

When using a column with one fixed and one adjustable end piece, it is usual to insert the fixed endpiece first, fill the column and finally assemble and fit the adjustable endpiece.



Note: - columns must never be used under gas pressure. This may result in an explosion.
When applying pressure to the system, the column assembly must be adequately shielded

Note: under no circumstance should the retaining cap be screwed tightly onto the glass column. This may result in damage to the glass threads. Always screw the column connector onto the column until it stops, and then unscrew the connector 1/4 turn.