



## Packed Columns

### Empty Glass Columns

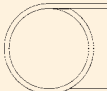
Silane Treated Empty Glass Columns  
(no fittings, all 1/4" OD)

COLUMN DIMENSIONS		CAT. NO.	PRICE
LENGTH	ID (mm)		
Agilent/HP 5880, 5890, 5987, 6890 Configuration A 9" span all detectors except TCD		X 11.02" 280mm Y 9.05" 230mm S 9" 229mm	

2'/0.61m	2	21638
3'/0.91m	2	21838
1.0m TS	2	21203-U
4'/1.22m	2	21776
6'/1.83m	2	21641
2.0m TS	2	21814
2.4m TS	2	21816
10'/3.05m	2	21683
4'/1.22m	4	21839
6'/1.83m	4	21681
2.0m TS	4	21815

Agilent/HP 5880, 5890, 5987, 6890 Configuration B TCD only		X 11.02" 280mm Y 7.09" 180mm S 9" 229mm	
---	---	---	--


6'/1.83m	2	20613
10'/3.05m	2	21642
6'/1.83m	4	20500-U

Perkin Elmer 1, 2, 3, 115, 300, 900, 910, 990, F30, 2000, 2100, 3920, Sigma Series (not on-column injection)		X 8 5/8" 219mm Y 8 5/8" 219mm S 8 3/4" 222mm	
---	--	--	--

4'/1.22m	2	21842
6'/1.83m	2	20487
2.0m TS	2	21817
10'/3.05m	2	20822
6'/1.83m	4	21654

Perkin Elmer 1, 2, 3, 300, 910, Sigma Series (heated on-column injection)		X 12 5/8" 321mm Y 7 1/8" 181mm S 8 3/4" 222mm	
---	---	---	--

1.0m TS	2	21214
2.0m TS	2	21823

Perkin Elmer 8300, 8400, 8700 Series (not on-column injection)		X 6 13/16" 173mm Y 6 13/16" 173mm S 6 1/2" 165mm	
---	---	--	--

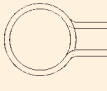
3'/0.91m	2	21802
1.0m TS	2	21206
6'/1.83m	2	21804
2.0m TS	2	21179-U
2.4m TS	2	21197-U
6'/1.83m	4	21806
2.0m TS	4	21189-U

Perkin Elmer 8300, 8400, 8500, 8600, 8700 Series (on-column injection)		X 12" 305mm Y 6 13/16" 173mm S 6 1/2" 165mm	
--	---	---	--

3'/0.91m	2	21739
6'/1.83m	2	21799
6'/1.83m	4	21801

x = length of injector arm  
y = length of detector arm  
s = span (injector to detector)  
TS = TightSpec column

Silane Treated Empty Glass Columns  
(no fittings, all 1/4" OD)

COLUMN DIMENSIONS			CAT. NO.	PRICE
LENGTH	OD	ID (mm)		
Shimadzu GC-4BM, 4CM, 4MG, GC-6A, 6AM, GC-7AG, 7A, 9A		X 13" 355mm Y 11" 282mm S 1.57" 40mm		

1.7m	5mm	3	20821-U
2.5m	5mm	3	21687

Shimadzu GC RIA, GC-8A8IF		X 9" 229mm Y 9" 229mm S 6" 152mm	
---------------------------	---	--	--

1.5m	5mm	3	21632
2.0m	5mm	3	21633

Shimadzu 14A, 15A, 16A		X 13" 335mm Y 11" 282mm S 1.57" 40mm	
------------------------	---	--	--

1.0m TS	5mm	2.6	21190-U
1.7m	5mm	2.6	21879-U
1.7m TS	5mm	2.6	21191-U
2.4m TS	5mm	2.6	21193-U
2.5m	5mm	2.6	21880-U
1.7m	5mm	3	21538
1.7m TS	5mm	3.0	21192-U

Shimadzu Mini-GC		X 7.48" 190mm Y 5.59" 142mm S 4.72" 120mm	
------------------	---	---	--

6'/1.83m	5mm	3.0	20609
----------	-----	-----	-------

#### Fittings

Ferrules: four graphite ferrules for Shimadzu columns, with metal spacers.

Nut Assembly: stainless steel nut, spring, stainless steel front ferrule, metal back spacer.

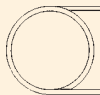
DESCRIPTION	CAT. NO.	PRICE
Ferrules	23311	
Nut Assembly	23312	
(2 assemblies needed per Shimadzu column)		

Order: 1.800.325.3010 Technical Service: 1.800.359.3041 Web: www.sigma-aldrich.com/supelco

## Packed Columns Empty Glass Columns

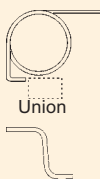
### Silane Treated Empty Glass Columns (no fittings, all 1/4" OD)

COLUMN DIMENSIONS		CAT. NO.	PRICE
LENGTH	ID (mm)		
Tremetrics (Tracor) 560, 565, 570, 585		X 8" 203.2mm Y 8" 203.2mm S 6" 152.4mm	



6'/1.83m	2	21588
10'/3.05m	2	21780-U

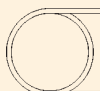
COLUMN DIMENSIONS		CAT. NO.	PRICE
LENGTH	ID (mm)		
Varian Universal 3000, 3300, 3400, 3600, 3700, 4400, 4600, 6000, Vista Series		X 9 1/4" 235mm Y 5 7/8" 149mm with adapter S 9" FID* X 9 1/4" 235mm Y 7 7/8" 200mm S 2 5/8"	



6'/1.83m	2	20845
2m	2	21882-U
6'/1.83m	4	20847

Union: A special bored-through union is required to join the two-piece column. This union is not supplied with columns - order separately. We furnish graphite ferrules with the union.  
21495-U

COLUMN DIMENSIONS		CAT. NO.	PRICE
LENGTH	ID (mm)		
Varian 3300/3400 FID (injector A to detector A)		X 9 5/16" 236.5mm Y 8" 203.2mm S 5 1/2" 139.7mm	



3'/0.91m	2	21720-U
1.0m TS	2	21207
6'/1.83m	2	21721
2.0m TS	2	21181-U
2.4m TS	2	21199-U
6'/1.83m	4	21722
2.0m TS	4	21194-U

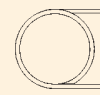
COLUMN DIMENSIONS		CAT. NO.	PRICE
LENGTH	ID (mm)		
Varian 3300/3400 FID (Injector B to detector B)		X 9 5/16" 236.5mm Y 8" 203.2mm S 6.82" 173.2mm	



3'/0.91m	2	20840-U
6'/1.83m	2	20841
6'/1.83m	4	20843

### Silane Treated Empty Glass Columns (no fittings, all 1/4" OD)

COLUMN DIMENSIONS		CAT. NO.	PRICE
LENGTH	ID (mm)		
Varian 3600, 3700, 4400, 4600, 6000, Vista series FID ECD TSD FPD		X 9 5/16" 236.5mm Y 8" 203.2mm S 5 1/2" 139.7mm	



2'/0.61m	2	21784
1.0m TS	2	21208
3'/0.91m	2	21720-U
4'/1.22m	2	21847
6'/1.83m	2	21721
2m	2	21853-U
2.0m TS	2	21829
8'/2.44m	2	21765
2.4m TS	2	21831
10'/3.05m	2	23738
12'/3.66m	2	21849
1m	4	21852-U
6'/1.83m	4	21722

#### HELPFUL HINTS

TightSpec metric length columns conform to within  $\pm 6$ mm of their stated lengths. If you are developing a new method, and you might be using several instruments, we recommend TightSpec columns.

Supelco nominal length columns conform to instrument manufacturers' length specifications, in feet or meters, to within 1.5%. We recommend using nominal length columns only when you are trying to duplicate a method on the same model of instrument as was originally used to develop the method.

\* One long adapter and one short adapter supplied with each column.

x = length of injector arm

y = length of detector arm

s = span (injector to detector)

TS = TightSpec column