



## Pilot Columns



# General

## Features

- Biocompatible
- Height adjustable plunger
- Solvent resistant version (optional)
- Heating/cooling jackets available (optional)
- Custom tailored for each application (optional)

Pilot columns are designed for use in pilot and production scale applications with organic solvents (version SR) or aqueous buffers (version AB), which makes them applicable for all common methods in chromatography including normal phase, reversed phase or bio-chromatography. High precision CNC manufacturing of plungers and distribution plates provides outstanding flow distribution for a linear flow distribution profile. Precise and reliable bed height adjustment is achieved by hand wheel adjusters on the plunger. Versatility of mounting includes fixed stand, wheeled trolley or direct into plant.



All materials are in compliance with FDA regulations. Certification and full documentation is available for validation purposes. The use of borosilicate glass and a completely metal-free construction guarantees top hygiene standards (no un-rinsed areas, no dead volumes).

---

## Characteristics

Column Body:	calibrated borosilicate glass or acrylic glass
Pressure limit:	1-16 bar
Temperature range:	aqueous buffer version (AB): up to 40 °C solvent resistant version (SR): up to 40 °C
Wetted parts:	borosilicate glass, stainless steel, PTFE or polyethylene EPDM, Viton® or Kalrez® seals, stainless steel or polyethylene frits
Diameter:	60 mm, 100 mm, 140 mm, 200 mm, 300 mm, 450 mm, 600 mm (others on demand)
Lengths:	500mm, 850mm (others on demand)
Connections:	stainless steel – SR version or polyethylene – AB version

## Applications

- Gel permeation
- Ion exchange
- Hydrophobic interaction
- Affinity
- Reversed phase
- Normal phase

**Areas of application:** *AB Series* columns are suitable for use with salts and detergents, ethanol and methanol, 6M urea, 7M guanidinium chloride, 2M NaCl and 3M ammonium sulphate.

The *SR Series* columns lend themselves to chromatography with silica gels and reversed phase materials as well as chiral stationary phases, which allows the use of solvents such as methylene chloride, acetone, toluene, THF etc.

Flow distributor for  
PILOT glass columns

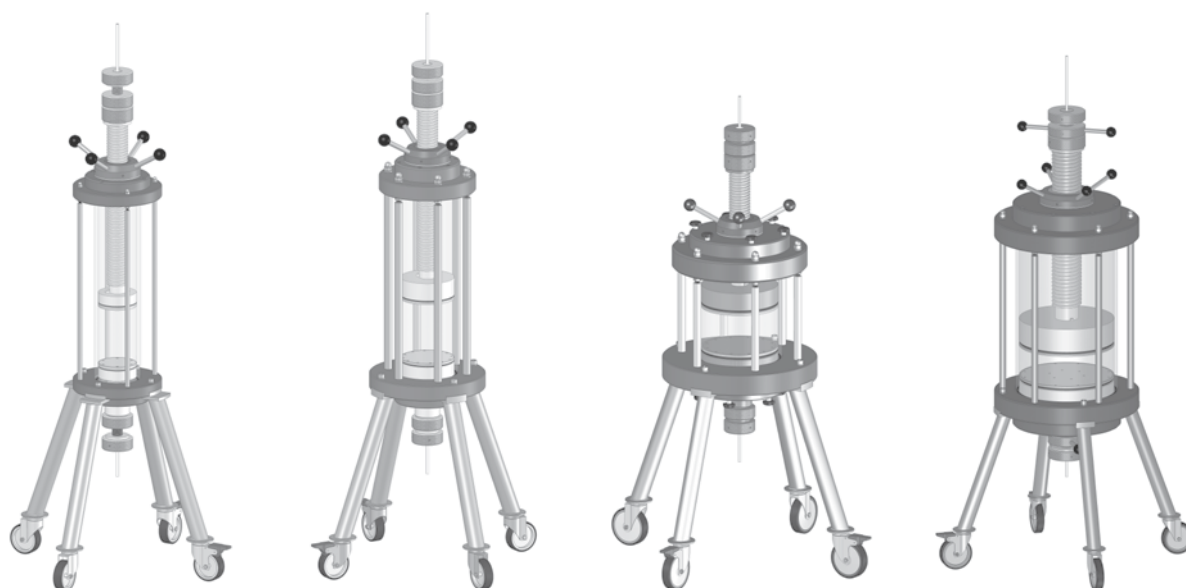


## Specifications

Model	ID [mm]	Bed height [mm]	Volume		Cross section [cm <sup>2</sup> ]	Max. pressure [bar]
			min	max		
PI100/500	100	50-430	0.39	3.38	78.5	10
PI100/850	100	400-780	3.14	6.13	78.5	10
PI140/500	140	55-420	0.85	6.47	154	7
PI140/850	140	405-770	6.23	11.9	154	7
PI200/500	200	70-435	2.20	13.7	314	5
PI200/850	200	420-785	13.2	24.7	314	5

## Components wetted by the media

Series	Capillary inlet	Frits	Seal	Column body	Temperature range
SR (Solvent Resistant)	Stainless steel 1/4"	Stainless steel	Kalrez®	KPG glass	4 - 40 °C
AB (Aqueous Buffer)	Polyethylene 1/4"	Polyethylene	EPDM	KPG glass	2 - 40 °C





# Questionnaire for YMC Pilot columns

For help in selecting your column in glass or steel, for dimensions which are not standard or for a pre-packed column, please fill in and send back to:

**FAX-No. +49 (0) 2064 427-115**

- inner diameter (mm): \_\_\_\_\_
- min. bed length (mm): \_\_\_\_\_
- max. bed length (mm): \_\_\_\_\_
- max. pressure (bar): \_\_\_\_\_
- material column body:      glass       acrylglass
- O-ring material:            EPDM             Viton®             Kalrez®
- biocompatibility:            yes             no
- frit material:                PE       stainless steel             Titanium
- porosity (µm): \_\_\_\_\_
- capillary connections:      PE             FEP             stainless steel
- capillary outer diameter:    1/8"             1/4"             1/2"
- capillary connection  
  with valves:                yes             no
- tempering jacket:            yes             no
- temperature range: \_\_\_\_\_
- packing device:                yes             no
- packing material: \_\_\_\_\_
- solvents: \_\_\_\_\_
- material:  
  certificates for wetted parts    yes             no

Company/Institute: \_\_\_\_\_

Name: \_\_\_\_\_ Department: \_\_\_\_\_

Street: \_\_\_\_\_ City: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_ Website: \_\_\_\_\_

Your local distributor:



**YMC Europe GmbH**

Schöttmannshof 19 · D-46539 Dinslaken

Phone: +49 (0) 2064 427-0 · Fax +49 (0) 2064 427-115

E-mail: [info@ymc.de](mailto:info@ymc.de) · [www.ymc.de](http://www.ymc.de)