

YMC ECO^{PLUS} Glass Columns | Overview



YMC ECO^{PLUS} - Pressure-stable glass columns

Achieve maximum performance with modern chromatography media – Using small particle sizes can significantly improve separation efficiency, enabling faster and more powerful chromatographic processes. However, smaller particles often lead to higher system pressures, which many column hardware systems can only tolerate to a limited extent.

YMC ECO^{PLUS} glass columns have been specially developed for applications where high pressure stability and consistent separation performance are essential. They allow the reliable use of modern chromatography media with small particle sizes, thereby supporting efficient chromatographic processes.

Thanks to their robust construction, the columns are ideal for reversed-phase (RP) and normal-phase (NP) applications. In combination with proven YMC packing technology, they ensure high reproducibility and stable chromatographic performance.

Designed for increased system pressures

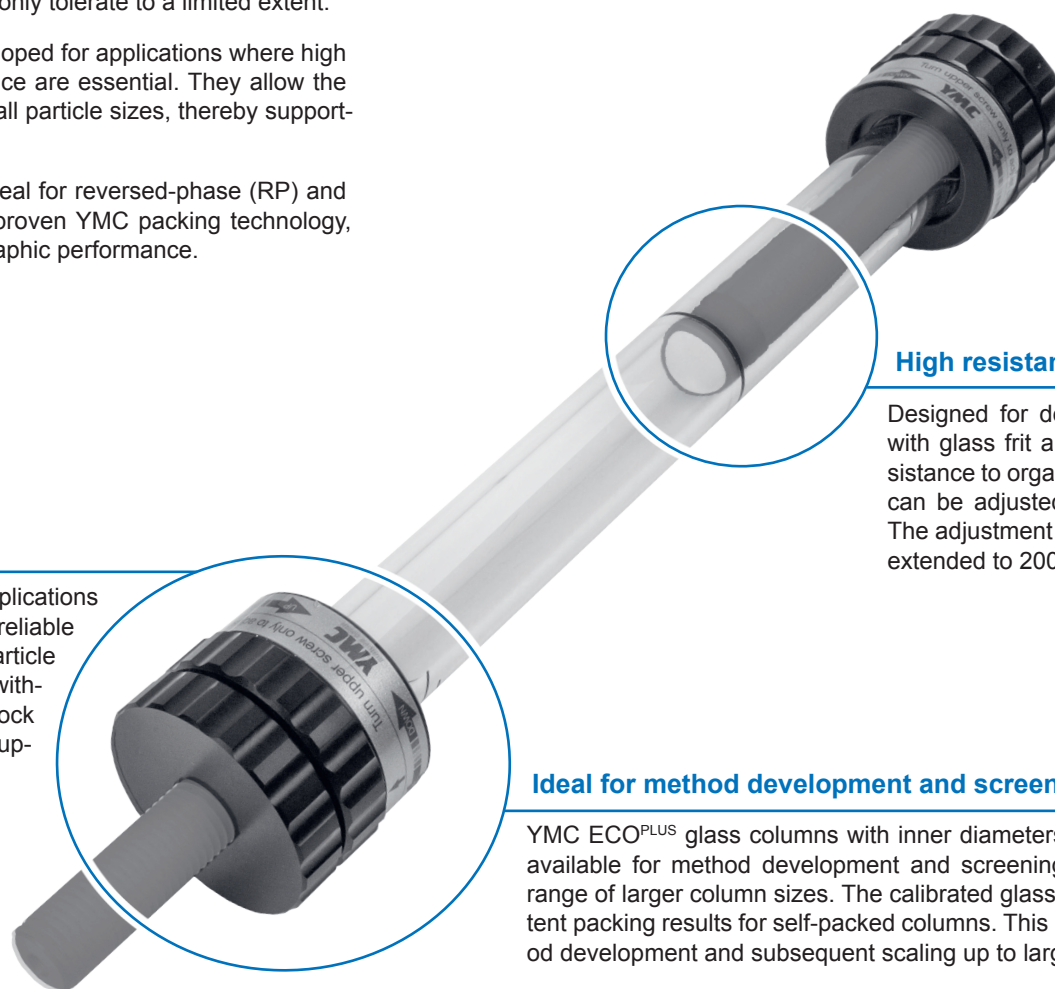
YMC ECO^{PLUS} glass columns are designed for use in applications involving increased system pressures, enabling the reliable use of modern chromatography media with small particle sizes. Depending on their diameter, the columns can withstand pressures ranging from 80 to 30 bar. The Quick-Lock closure system provides a secure and stable seal and supports the columns' durable construction.

Ideal for method development and screening

YMC ECO^{PLUS} glass columns with inner diameters of 5 and 10 mm are available for method development and screening, complementing the range of larger column sizes. The calibrated glass body ensures consistent packing results for self-packed columns. This enables reliable method development and subsequent scaling up to larger columns.

High resistance and maximum flexibility

Designed for demanding applications, the PEEK piston with glass frit and FFKM O-ring offers high chemical resistance to organic solvents. The length of the column bed can be adjusted to accommodate different applications. The adjustment range is 100 mm, which can be optionally extended to 200 mm for even greater flexibility.



YMC ECO^{PLUS} Glass Columns | Specifications



Specifications	
Inner diameter (ID)	5, 10, 15, 25, 35, 50 mm
Maximum bed length	125, 250, 500 mm
Temperature range	4-40°C

ID (mm)	Pressure limit (bar)	Bed length range (mm)	Volume range (mL)
5	80	25-125	0.5-2.4
		150-250	3.0-4.9
		400-500	7.9-9.8
10	80	25-125	2.0-9.8
		150-250	12-19
		400-500	32-39
15	70	25-125	4.5-22
		150-250	27-44
		400-500	71-88
25	50	25-125	13-61
		150-250	74-122
		400-500	197-245
35	40	25-125	25-120
		150-250	145-240
		400-500	385-481
50	30	25-125	50-245
		150-250	295-490
		400-500	786-981

* Informations on the achievable ranges with a second long piston is available from YMC upon request.

Solvents	Complete column					
	Glass body	Frit	O-ring	Piston	Tubing	
Acetone	+	+	+	+	+	+
Acetonitrile	+	+	+	+	+	+
Ammonium dihydrogen phosphate	+	+	+	+	+	+
Ammonium hydroxide (30%)	+	+	+	+	+	+
Cyclohexane	+	+	+	+	+	+
Dichloromethane	o	+	+	+	o	+
0,1 M EDTA (3%)	+	+	+	+	+	+
1 M Acetic acid (6%)	+	+	+	+	+	+
Ethanol	+	+	+	+	+	+
Ethyl acetate	+	+	+	+	+	+
n-Hexane	+	+	+	+	+	+
Isopropanol	+	+	+	+	+	+
Methanol	+	+	+	+	+	+
Phosphoric acid (5%)	+	+	+	+	+	+
Sulfuric acid (6%)	+	+	+	+	+	+
THF	+	+	+	+	+	+
Toluene	+	+	+	+	+	+
2 M NaOH (8%)	+	+	+	+	+	+
1 M HCl (4%)	+	+	+	+	+	+
8 M Urea (36%)	+	+	+	+	+	+
1 M NaCl	+	+	+	+	+	+
0.5 M Na ₂ SO ₄	+	+	+	+	+	+

* The stated chemical resistances apply to temperatures up to 40 °C. Lower temperatures and concentrations generally improve chemical resistance.

o: Limited resistant
+: Resistant