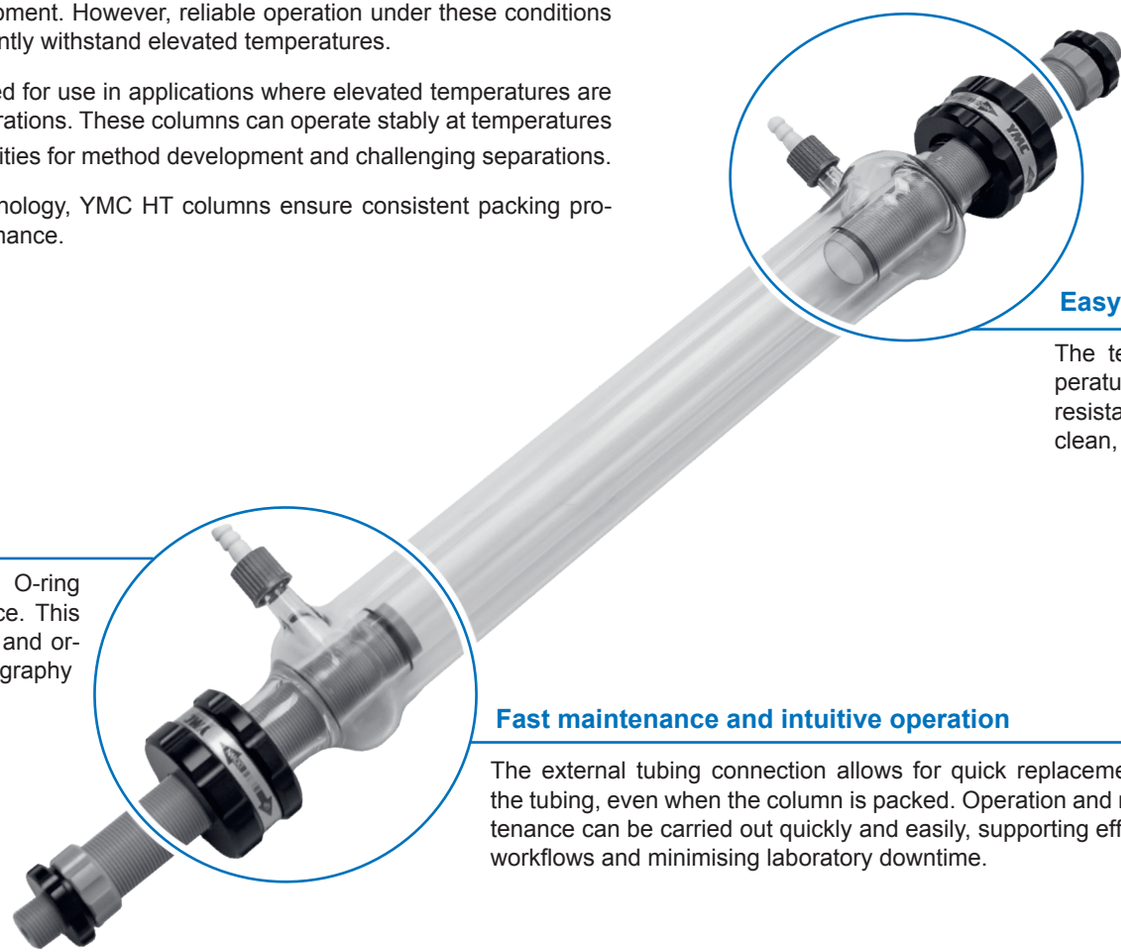
YMC HT Glass Columns | Overview

YMC HT - Temperature-stable glass columns up to 70 °C

New degrees of freedom in method optimisation – The use of elevated temperatures in liquid chromatography can accelerate separations, improve separation efficiency and reduce system pressure due to lower eluent viscosity. At the same time, the solubility of poorly soluble compounds can be improved, enabling greater flexibility in method development. However, reliable operation under these conditions requires column hardware that can permanently withstand elevated temperatures.

YMC HT glass columns have been developed for use in applications where elevated temperatures are employed to optimise chromatographic separations. These columns can operate stably at temperatures of up to 70 °C, opening up additional possibilities for method development and challenging separations.

Combined with YMC's proven packing technology, YMC HT columns ensure consistent packing processes and reliable chromatographic performance.



Easy and reliable temperature control

The temperature jacket enables operation at temperatures between 4 and 70 °C. Made of chemically resistant, durable borosilicate glass 3.3, it is easy to clean, even when organic solvents are used.

Reliability in every application

A PEEK piston, a glass frit and an FFKM O-ring provide high chemical and thermal resistance. This makes the column compatible with aqueous and organic solvents, as well as various chromatography media.

Fast maintenance and intuitive operation

The external tubing connection allows for quick replacement of the tubing, even when the column is packed. Operation and maintenance can be carried out quickly and easily, supporting efficient workflows and minimising laboratory downtime.

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YMC HT Glass Columns | Specifications

Specifications	
Inner diamter (ID)	10, 15, 26, 50 mm
Maximum bed length	200, 300, 500, 700 mm
Temperature range	4–70 °C
Column stand	available for 25, 50 mm ID

ID (mm)	Pressure limit (bar)	Bed length range (mm)	Volume range (mL)
10	30	100–200	8.2–16
		200–300	16–24
		400–500	33–40
		600–700	50–57
15	25	100–200	18–35
		200–300	35–53
		400–500	71–88
		600–700	107–123
26	15	100–200	55–109
		200–300	109–164
		400–500	219–273
		600–700	329–383
50	10	100–200	210–418
		200–300	418–627
		400–500	837–1045
		600–700	1255–1463

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 %)	o	+	+	+	o	+
THF	+	+	+	+	+	+
Toluene	+	+	+	+	+	+
2 M NaOH (8 %)	+	+	+	+	+	+
1 M HCl (4 %)	+	+	+	+	+	+
8 M Urea (36 %)	+	+	+	+	+	+
1 M NaCl	+	+	+	+	+	+
0.5 M Na_2SO_4	+	+	+	+	+	+

** The stated chemical resistances apply to temperatures up to 70 °C.*
Lower temperatures and concentrations generally improve chemical resistance.

o: Limited resistant
+: Resistant

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